Nations and Regions Tracker

Small Business Finance Markets 2023

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Foreword

To drive sustainable growth and prosperity, businesses in every nation and region of the UK need to thrive. The purpose of the British Business Bank is to break down barriers to finance for smaller businesses so that access to finance is a level playing field for all entrepreneurs – whomever they are, wherever they're from.

The British Business Bank's third Nations and Regions Tracker provides a snapshot of the UK's small business finance markets, covering the supply and demand of finance and the Bank's own regional activity.

The proportion of smaller businesses using external finance declined last year, but there are signs this is recovering across the UK in 2023. In 2022 the UK Nations and regions outside London collectively saw their first year-on-year decline in equity finance in 10 years, with both deals and investment value falling compared with 2021. We will monitor closely how this development continues in the current challenging market conditions.

The insights gained from our Nations and Regions Tracker, alongside the results of our Small Business Finance Markets and Small Business Equity Tracker reports, are fundamental to delivering our strategy.

Our strategic objectives include a renewed focus on Unlocking Potential – ensuring that entrepreneurs and small businesses have fair access to finance, no matter who they are or where in the UK they are based. In pursuing this objective, we have developed a programme of research to inform our understanding of how location might impact smaller businesses' ability to use finance to grow. The two thematic chapters in this report look at the state of smaller business finance markets in two different scenarios where location is a key factor.

The first explores innovation-based clusters, representing places of the UK that show a high concentration of technology-intensive equity investment. This illustrates the significant contribution made by university spinouts to emerging clusters throughout the UK, across a variety of technology-intensive sectors. The chapter calls out clusters located outside the traditional strongholds of London, Cambridge and Oxford.

The second dives into the access to finance challenges confronting smaller businesses in the UK's coastal towns and cities. They are less willing to use finance to grow and show lower ambition for growth and investment. Many individual coastal towns and cities do, however, show examples of investment in technologies including some related to net zero transition.

In response, the British Business Bank is helping smaller businesses in innovation-led clusters and coastal areas in a number of ways. Our existing regional funds in the North of England, Midlands and Cornwall are continuing to perform very well, as evidenced by recent evaluation reports. Working in synergy with other Bank programmes - particularly the Regional Angels programme - these funds are facilitating considerable investment flows in a number of coastal towns, and in the majority of innovation-led clusters throughout the UK. The Start Up Loans programme also continues to be hugely impactful in helping to break down barriers to finance faced by entrepreneurs, which can make a big difference in coastal towns and cities affected by weak growth, including through employment and business creation.

The Bank is launching a series of new Nations and Regions Investment Funds which will deliver a £1.6bn commitment of new funding to drive sustainable economic growth. The new funds will increase the supply and diversity of early-stage finance for UK smaller businesses, providing finance to firms that might otherwise not receive investment. The additional funding that the Government is providing for these new Funds is an endorsement of our approach to the Nations and regions, and a recognition of the continuing success of our existing regional funds in supporting businesses in the areas in which they operate.

In addition, the steps we are taking to incorporate Environmental, Social and Governance considerations into our decision-making across the Bank will strengthen our ability to support businesses taking positive action with a social and environmental sustainability perspective.

I hope this report will stimulate further thinking and feedback from businesses, the finance community and all those with a stake in the UK economy. Through our UK Network, we look forward to discussing how we can provide further support in tackling regional and national imbalances in access to finance and enabling the transition to a net zero economy.

Louis Taylor
Chief Executive Officer

Executive Summary

Ensuring that businesses across the UK benefit from access to external finance is crucial to supporting business investment, resilience and productivity in the overall economy. External finance enables businesses to be created, to innovate and grow, or simply to manage the challenges of uncertain trading conditions. As such, it can give entrepreneurs and businesses options they wouldn't otherwise have.

External finance use shows signs of recovery in early 2023, after declining last year

This year's report highlights that 36% of SMEs were using external finance in 2022, down from 43% a year earlier. This proportion was highest in the East of England (41%) and lowest in London, the South East and East Midlands (34%).

Usage fell in all UK nations and regions between 2021 and 2022, largely driven by the phasing out and repayment of pandemic support. It dropped more markedly in some areas of the UK, most notably in Wales, (-13 percentage points), the North West, the South West and the West Midlands (all declining 10 percentage points), than in others.

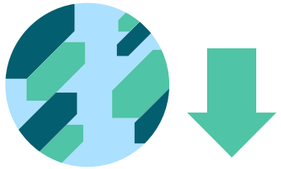
The quarterly data also points at a continuing decline in external finance use among smaller businesses in late 2022 since the second half of 2020 About a third (34%) were utilising external finance in Q4 2022 – a decline of 7 percentage points from Q4 2021 and 10 percentage points from the same period in 2020.

Eight out of ten types of finance sources experienced a reduction in usage in 2022 compared to 2021. The two exceptions were loans from friends or family, which remained stable at 5%, and credit cards, which saw a marginal uptick of one percentage point. Grants and bank loans saw the largest fall in usage, experiencing a 6 and 5 percentage point decrease (respectively) from 2021 to 2022.

The first half of 2023 has however brought some signs of recovery, with levels of external finance use returning to 2021 levels (43%). While success rates in finance applications remained below the pandemic 'peak' and pre-pandemic levels, these improved in the first half of 2023 (53%) compared to 2022 (44%).

Meanwhile, evidence from the Bank's portfolio suggests that asset finance, the most widely used alternative finance type and a key capital source for business investment, remained geographically diverse in 2022.

On the other hand, regional differences persist on some aspects of smaller businesses' awareness of external finance, such as knowledge of how to access to information about various finance types and providers. In the UK as a whole, 58% of smaller businesses agreed that they knew how to obtain this information in 2022, down from 63% in 2021, but this share varied from 73% in the East Midlands to about half in the North West and Yorkshire and the Humber.



The slowdown in equity finance activity affected most UK nations and regions in 2022, but was beginning to level out in the first half of this year

In 2022, the combined nations and regions outside of London recorded their first year-on-year decline in the number of equity deals since Beauhurst's data collection began in 2011 (-10%), with the total investment value in these areas also falling (-11%). Only the South West, Yorkshire and The Humber and Wales saw an increase in deal numbers compared to 2021.

Overall, 2022 was a contrasting year for the equity finance market in all UK nations and regions. Following record levels of investment over the first two quarters of the year, concerns about potential over-valuations and a

lack of exit opportunities, as well as rising inflation and interest rates, led to a 47% reduction in equity finance in the second half of the year.

Nations and regions outside of London saw deal values and numbers fall from July 2022 onwards, albeit less markedly than in the capital. On the other hand, these areas of the UK had seen lower growth in equity activity prior to 2022, and our analysis highlights how companies based outside London continue to face greater challenges in attracting follow-on funding.

In contrast, H1 2023 data suggests that the rate of decline is beginning to slow. Deal numbers outside London were down by just 2% from H2 2022, compared to a decline of 24% between the first and second half of last year. Following a year and a half of exceptional activity, levels of investment are thus returning close to the levels seen in the years up to H1 2020. Equity markets have a volatile history but the broader, deeper nature of UK equity investment in recent years gives reason to think that they have become more resilient to uncertain economic conditions.

Academic spinouts play a crucial role in supporting emerging innovation-led clusters throughout the UK

Universities contribute substantially to the creation of innovation-led clusters across the UK, including by generating spinouts that attract equity investment.

Our report identifies 33 clusters which span all UK nations and regions. Academic spinouts make up 23% of Technology/IP-related deals across these clusters, but their share of deal activity is even greater in a variety of innovative sectors such as materials technology, where they are responsible for 53% of deals between 2011 and Q2 2023; nanotechnology (63%); life sciences (50%); medical technology (41%); and hardware (27%).

While their large contribution to the success of clusters in the Golden Triangle (encompassing Cambridge, London and Oxford) is well known, it is as substantial in clusters located in the rest of the UK. These include (among others) Greater Glasgow and Aberdeen, where spinouts represent 47% and 46% of deals respectively; Swansea (45%); Belfast (37%); Coventry & Warwickshire (34%).

However, our analysis shows that academic spinouts located in clusters outside of the Golden Triangle do face a more challenging equity environment in a number of ways. In these clusters, average spinout deal sizes are considerably smaller the Golden Triangle's £9.1m average (2011-Q2 2023), from £1.3m in the Northern Ireland cluster (Greater Belfast) to £5.3m in other South and East of England cluster groupings. Another trend we observe is that spinouts in these clusters generally secure their first investment later in life – on average, around 4 years after they were set up - than their Golden Triangle counterparts (2.8 years), based on announced deals. Clusters based in the North of England, Midlands and the devolved nations also rely more on government investors to sustain local spinout deal activity; the share of Technology/IP-related spinout deals in these locations ranges from 84% in the Welsh clusters to 28% in the West Midlands, whereas it falls below 10% in the Golden Triangle and in the rest of the South and East of England.

The success of innovation-led clusters and their impact on the local economy demonstrates the ongoing need to nurture these ecosystems, including by focusing on growing the local angel investor base and the spinout creation performance of local universities.

Smaller businesses in coastal towns face multidimensional challenges that impact their success, as well as their appetite for external finance

UK coastal towns make up a diverse set of locations with their own distinctive economic features, ranging from mostly residential areas to regional employment hubs, and from affluent to highly deprived localities. Whether they historically built their prosperity as seaside tourist resorts or thriving industrial hubs or ports which have since declined, coastal towns across the UK contend with a variety of challenges that can make it harder for local businesses to thrive and attract investment, indirectly impacting their access to finance. These challenges include low productivity, greater 'distance from market' due to limited transport links, skills gaps and shortages, and lower business growth. The pandemic further exacerbated these challenges , having a disproportionate effect on towns that rely heavily on tourism and hospitality.

Our analysis shows that appetite for external finance among coastal town-based smaller businesses is generally lower than elsewhere in the UK, with a lower share (26%) reporting that they were happy to borrow in order to grow in 2022 (compared to 31%) and a higher share (82%) self-describing as happy non-seekers of finance (compared to 77%). Coastal towns are also underrepresented in UK equity investment (making up 4% of deals between 2011 and Q2 2023), an often-important ingredient for growth, compared to their share of the UK's resident population (12%). This overall picture is likely to mask significant variations in performance across individual towns, which we further explore in this report with the help of case studies from 10 different coastal towns across the UK.

Their more limited appetite for seeking finance to support future growth is linked to a lower propensity by these businesses to pursue ambitious investment and innovation plans. For example, in 2022 only 34% agreed that they had a long term ambition to be a significantly bigger business, a much lower share than their counterparts elsewhere in the UK (40%), and only 41% agreed that they were prepared to take risks to be successful (relative to 46% in the comparator group). While risk aversion is a predictable response to the economic turbulence faced by coastal towns in recent years, it is also linked to the health of the local economy. It therefore highlights the importance of reinvigorating local businesses' resilience and growth ambitions which would allow a greater number of firms based in these localities to take advantage of the opportunities that access to external finance can provide and thereby boost local economic growth.

Part of the solution requires identifying growth and investment opportunities that coastal towns are well placed to exploit. One such opportunity could be green innovation, as coastal towns are attracting an above average share of equity deals in net zero-related sectors. These make up 14% of all equity deals completed in coastal towns between 2011 and Q2 2023, equivalent to double the share seen in the UK overall (7%).

Reducing regional imbalances remains a core objective for the Bank as it launches its new Nations and Regions Investment Funds

The Bank's mission includes driving sustainable growth and backing innovation across the UK by ensuring smaller businesses can access the right capital to start and scale. Reducing geographic finance disparities such as those found in coastal towns remains a core objective for the Bank, driven by the impact of CIoSIF, MEIF and NPIF*– its first-generation regional funds – the Regional Angels programme as well as the new Nations and Regions Investment Funds (NRIF) it is launching in the coming months.

CIoSIF, MEIF and NPIF had facilitated a combined total investment of over £1.6bn up to March 2023, benefitting nearly 1,900 smaller businesses and supporting the growth of most innovation-led clusters and coastal towns throughout the UK. Independent interim evaluations of the programmes suggest these had a positive impact on the finance gaps experienced by smaller businesses in the North, Midlands and Cornwall and Isles of Scilly, particularly in terms of equity finance. Overall, the programmes delivered finance to SMEs that – for the large majority – would not otherwise have been accessed at all, would have been smaller in scale or taken longer to secure.

When deployed, the new NRIF will further strengthen the Bank's ability to support SMEs in less-developed ecosystems access the finance they need to grow, working in synergy with other UK-wide Bank programmes.

* The Northern Powerhouse Investment Fund (NPIF), the Midlands Engine Investment Fund (MEIF) and the Cornwall and Isles of Scilly Investment Fund (CIoSIF).

Introduction

This is the Bank's third annual Nations and Regions Tracker, designed to complement our flagship Small Business Finance Markets[1] report by exploring the geographic patterns seen in UK smaller business finance.

Our understanding of smaller business finance markets across the UK draws on both the latest available data and the intelligence we obtain through our UK Network and as an active participant in finance markets.

This knowledge base is central to delivering on our objective to be the centre of expertise on smaller business finance markets for government. It is also used to shape our business plan and in the design of our programmes and products, particularly those that aim to reduce imbalances in access to finance for smaller businesses across the UK.

Structure of the Report

The report is divided into three chapters. **Chapter 1** presents an overview of finance markets in the nations and regions of the UK, utilising industry data and our own management information to give as complete a picture as possible. The overview explains which forms of finance are most used across the UK and delves into some of the geographic imbalances and latest trends in usage.

Chapters 2 and 3 provide in-depth analysis on two important topics facing the UK and for which the Bank has a role to play.

In thinking about how to maximise impact across all UK nations and regions, the Bank aims to deepen its understanding of local variations in smaller business access to finance. These local variations are often rooted in the structural characteristics of different localities, such as the strength of local innovation ecosystems (especially for equity finance) or the sectoral composition of local companies. Therefore, in this year's Nations and Regions Tracker we focus on two themes that we have identified as important for a better understanding of finance gaps across the UK.

First, in **Chapter 2** we look at finance market dynamics within innovation-led business clusters across the UK, using the Beauhurst dataset to untangle the role of academic spinouts in those clusters.

Second, in **Chapter 3** we look at finance market dynamics within coastal towns to further explore the links between finance use and the wider social, economic and environmental challenges confronting smaller businesses in these areas.

To complement this report, we have produced bespoke briefing notes summarising the key insights of our analysis on each devolved nation of the UK. Further, we provide regional factsheets for each of the nine English regions. These set out for each nation and region in the UK the data points needed to understand finance markets in that location and give an idea of how many of these have changed since our second report.

Chapter 1

Nations and regions market overview

- External finance use shows signs of recovery in early 2023, after declining in all UK nations and regions last year
- The largest declines in the use of external finance for 2022 were observed in grants and bank loans
- Use of asset finance remains well spread across the UK nations and regions based on the Bank's programme data
- Equity finance activity fell in most UK nations and regions in 2022, but the rate of decline was beginning to ease in early 2023
- Reducing regional imbalances remains a core objective for the Bank as it prepares to launch its new Nations and Regions Investment Funds

Ensuring that businesses across the UK benefit from access to external finance is crucial to supporting business investment, resilience and productivity in the overall economy.

External finance enables businesses to be created, to innovate and grow, or simply to manage the challenges of uncertain trading conditions. As such, it can give entrepreneurs and businesses options they wouldn't otherwise have. Despite this, in the second quarter (Q2) of 2023, 35% of SMEs were permanent non-borrowers (PNBs),[2] which are defined as firms that do not use external finance and show no inclination to do so. This marks an improvement from Q2 2022 (46%), but still points at a considerable share of smaller businesses with limited exposure to the opportunities external finance can provide.

External finance use shows signs of recovery in early 2023, after declining in all UK nations and regions last year

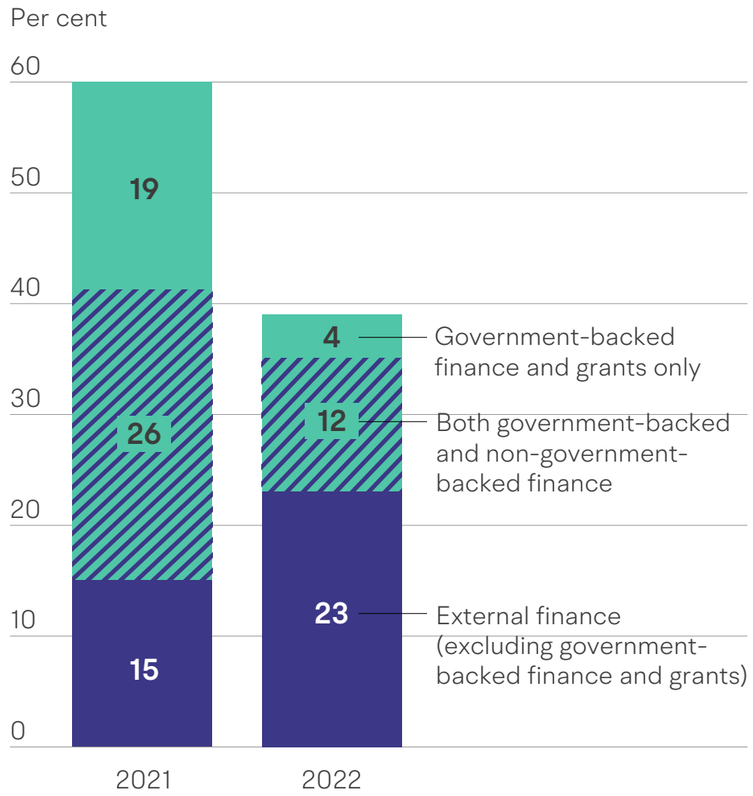
The share of smaller businesses seeking finance declined between 2021 and 2022, as many of the government-backed finance schemes deployed during the pandemic came to an end and some businesses fully repaid their loans. In 2022, a total of 39% of SMEs sought some type of external financial support (Figure 1.1), down from 59% in 2021. This is largely due to a decline in the share of SMEs seeking government-backed finance and grants only (from 19% to 4%) or a combination of government and non-government backed finance sources (from 26% to 12%). In contrast, proportionally more SMEs were seeking non-government backed finance options in 2022 (23%) than the previous year (15%).

The phasing out of pandemic-related funding clearly had a large impact on new external finance applications, but it did not supplant its continuing relevance among the finance sources currently used

Figure 1.1

SME demand for external financial support

Source: British Business Bank Business Finance Survey 2021 (n=2,804) and 2022 (n=2,213)*



*Totals may not equal sums shown due to rounding

by SMEs. The latest SME Finance Monitor data suggests that in the first half of 2023, there were still 18% of SMEs that had taken, and were still repaying, pandemic-related funding.[3]

In 2022 as a whole, all nations and regions of the UK experienced a fall in external finance use, from 43% in 2021 to 36%.

Figure 1.2 shows external finance use data on a quarterly basis, from Q3 2020 onwards. Taking the last quarter of 2022 (Q4) as a reference, 34% of small businesses were utilising external finance then – a decline of 7 percentage points from Q4 2021 and 10 percentage points from the same period in 2020.

The regional trends show slight variations. In the second half of 2020, the East of England reported the lowest utilisation of external finance. However, by 2022, this had become the region with the highest reported external finance use (41%), while London, the South East and the East Midlands (34%) had the lowest. Conversely, Wales, which ranked first on the share of SMEs

Figure 1.2

Proportion of SMEs currently using external finance

Source: UK Finance/BVA BDRC SME Finance Monitor, four quarter averages (n=592)

using external finance in 2021, saw the biggest drop (-13 percentage points), followed by the North West, South West and West Midlands (-10 percentage points). This divergence is reflective of distinct business demographic attributes inherent to different nations and regions, but it could also, in some instances, be influenced by the varying availability of different finance options and uneven business recovery across the UK.

The UK-level SME Finance monitor results in H1 2023 show promising signs of recovery. This year, the survey introduced changes in the external finance use question and related definitions,[4] informed by a better understanding of the impact of pandemic-related funding on response patterns. According to this more recent data, external finance use was picking up again among SMEs in early 2023, returning closer to the levels seen in 2021. Overall, 43% of SMEs were using external finance in the first half of 2023, with increased use of 'traditional' (i.e. non pandemic-related) finance sources at 38%.[5]

Success rates remained below the pandemic 'peak' and pre-pandemic levels in 2023 with smaller, newer SMEs and loan applicants more likely to be declined. Whilst appetite for finance remains limited, there were still signs of improved success rates for 2023 (53%) compared to 2022 (44%).

The largest declines in the use of external finance for 2022 were observed in grants and bank loans

Most finance types saw a decrease in demand throughout the UK over the period considered. This is illustrated in Figure 1.3, which shows that eight out of ten finance sources experienced a reduction in demand in 2022 compared to 2021. The two exceptions were loans from friends or family, which remained stable at 5%, and credit cards, which saw a marginal uptick of 1 percentage point. The most pronounced drops in the use of finance were observed in grants and bank loans, experiencing a 6 and 5 percentage point decrease across the UK respectively from 2021 to 2022.

Nevertheless, in 2022 core debt products (including credit cards, bank loans and overdrafts) continued to be the most used finance forms among SMEs in all UK nations and regions. Wales had the highest share of SMEs reporting they used bank loans (15%) and leasing/hire purchase/vehicle finance (11%) in 2022, whereas the greatest use of bank overdrafts and credit cards were recorded in Northern Ireland (12%) and the East of England (14%) respectively. In Q2 2023, all SMEs were more likely to be using 'traditional' (i.e. non pandemic-related) external finance than in 2022, driven by increased use of credit cards and leasing/hire purchase/vehicle products.

The Bank's latest Business Finance Survey (conducted in late 2022) also suggests location continues to affect some aspects of smaller businesses' knowledge and awareness of external finance. One of these is their access to information about various finance types and providers. In the UK as a whole, just under 6 in 10 of its

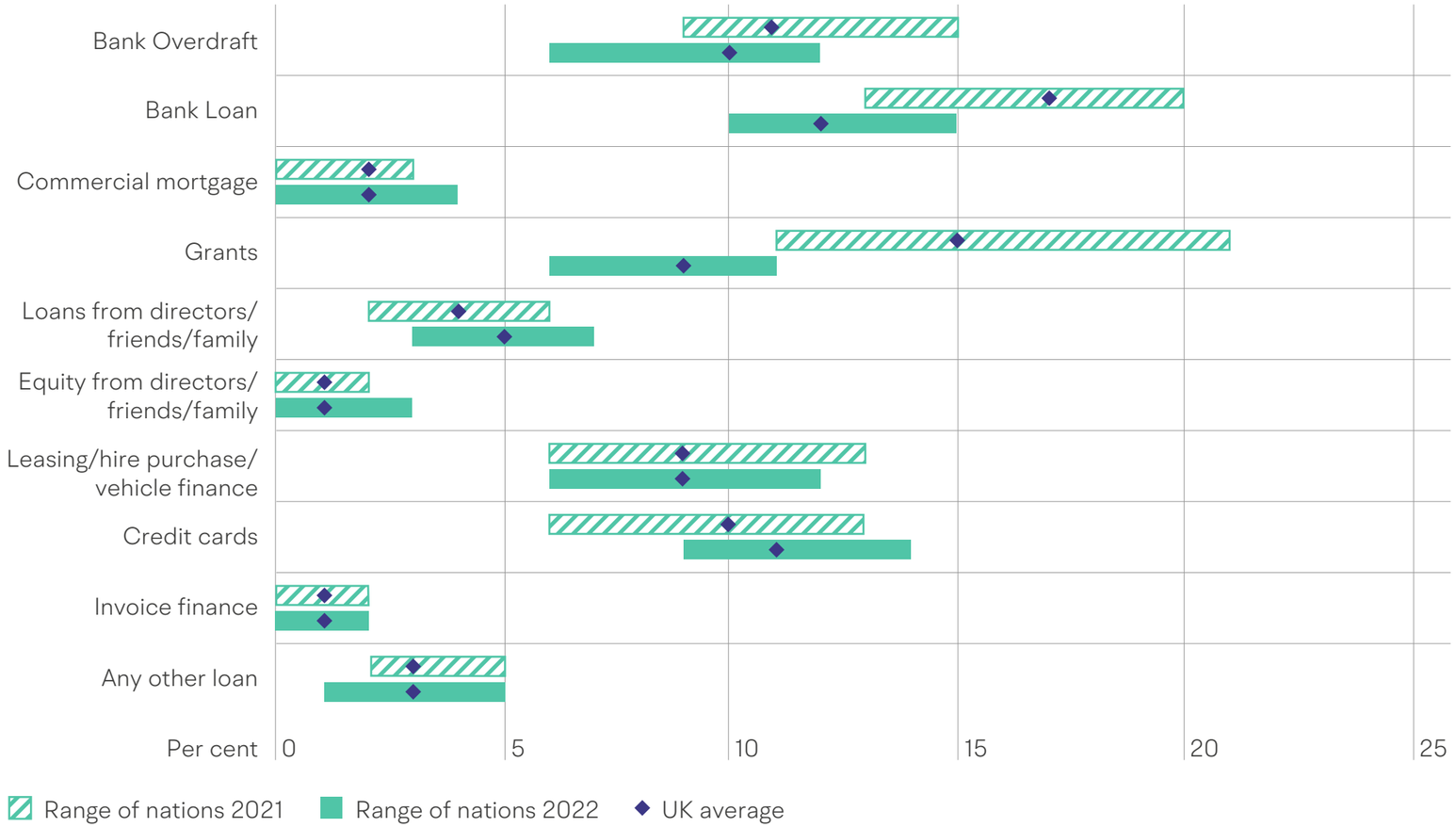
SMEs (58%) said they knew how to access information concerning external sources of finance, down from 63% in 2021. Yet, awareness levels varied across the UK.

The East Midlands had the highest proportion (73%) of SMEs agreeing with this statement (Figure 1.4). In contrast, SMEs in Wales were notably more inclined to disagree (28%), while other regions such as Yorkshire and The Humber and the North West also had a low share (about half) of SMEs expressing agreement. These results underscore persisting regional disparities in awareness concerning available finance resources and providers.

Figure 1.3

Use of external finance by type, 2021-2022

Source: UK Finance/BVA BDRC SME Finance Monitor (n=2,368)



Use of asset finance remains well spread across the UK nations and regions based on the Bank's programme data

Whilst the regional distribution of bank lending mostly matches that of SMEs, this is not the case for other types of finance. On the debt side, it is important to monitor the geographical distribution of alternative finance too, and particularly asset finance, its most used type.

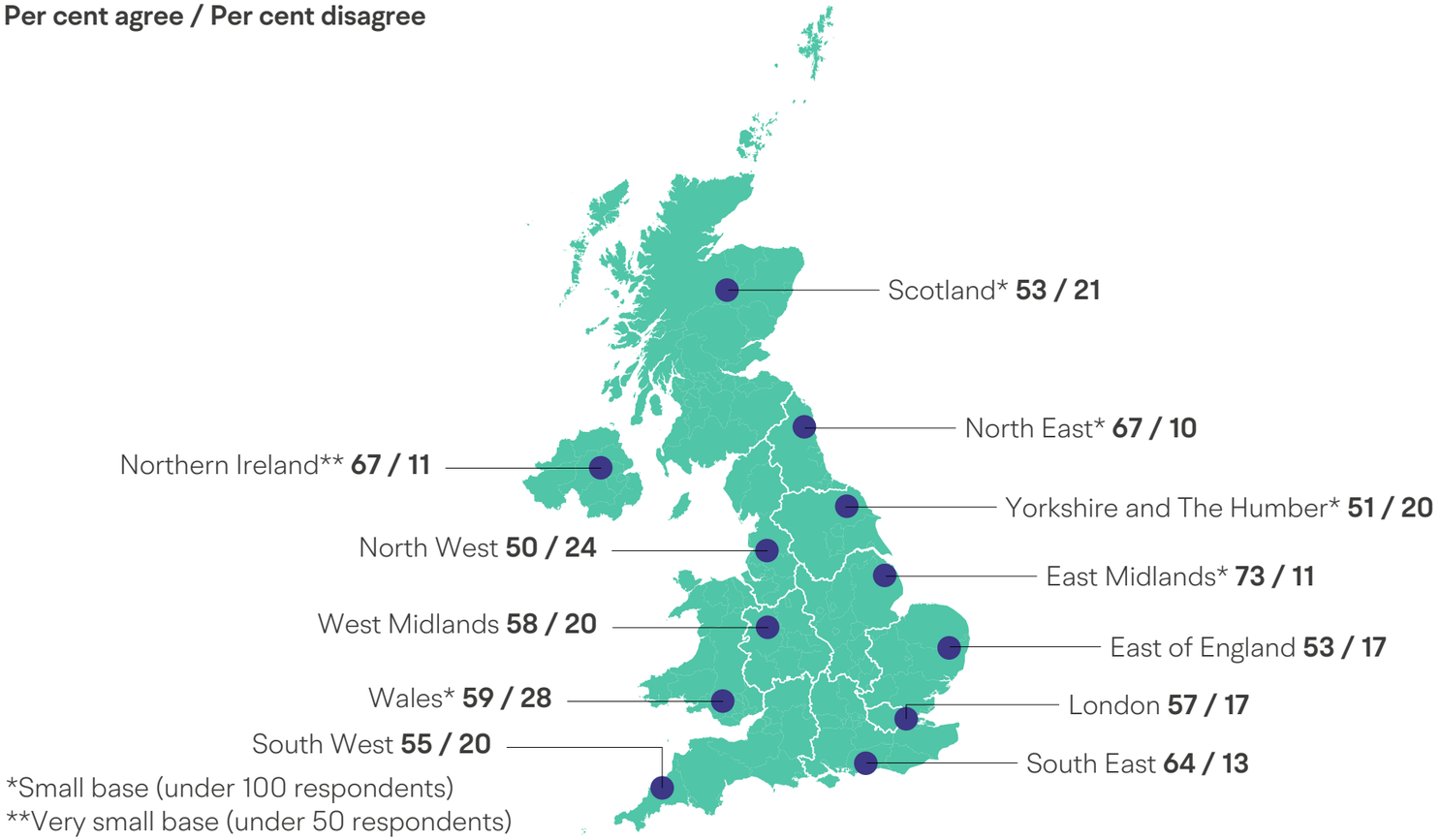
In the absence of industry figures, the best proxy we have for the reach of asset is via our own activities.[6]

This evidence suggests that asset finance facilitated via British Business Bank and British Business Investments programmes continues to be well spread around the UK in 2022 (Figure 1.5). Eight of the 12 nations and regions receive a higher percentage of asset finance than their share of the SME population published in the 2022 UK business population estimates.

Figure 1.4

SMEs awareness of where to obtain information on the types of finance and specific providers

Source: British Business Bank Finance Survey 2022, (n=1,169)

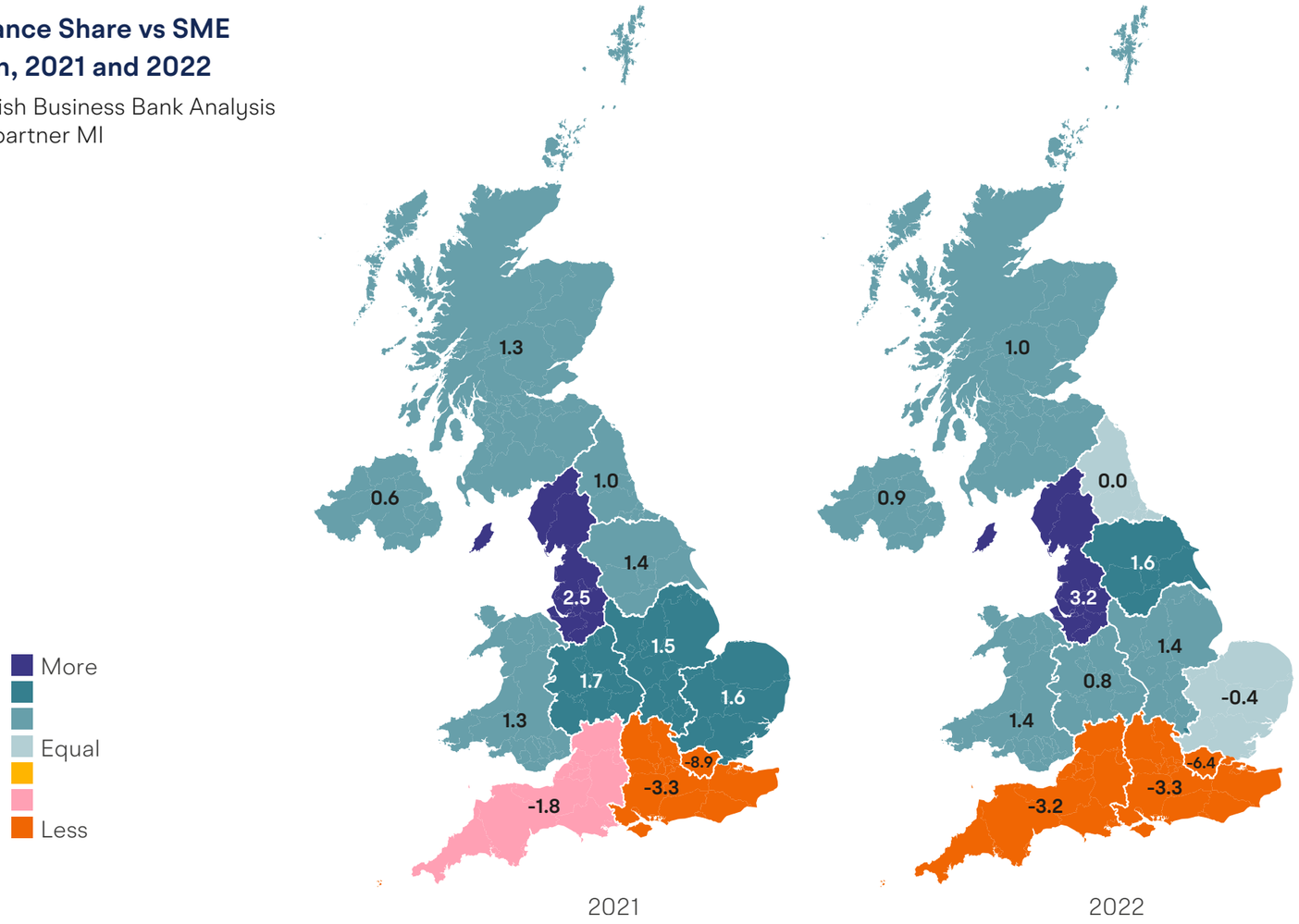


The three regions which received a lower share of asset finance, London, the South East and South West, have done so throughout the last five years. London received 12% of asset finance facilitated in 2022, up from 10% in 2021. This was the biggest increase in share seen across the 12 UK nations and regions. Despite this, London remains the most underweight as it is home to an estimated 19% of the UK SME population. This is likely to result of structural factors including the sectoral composition of those SMEs, the greater diversity of finance available within London and 'headquarter" effects (whereby the data is skewed by companies that are registered in London, but mainly operate in other places). Likewise, regional differences in the rate of growth of asset finance facilitated could reflect the uneven nature of the economic recovery across the UK with the capital returning to growth and investment sooner than many other places.

Figure 1.5

Asset Finance Share vs SME population, 2021 and 2022

Source: British Business Bank Analysis of delivery partner MI



Equity finance activity fell in most UK nations and regions in 2022, but the rate of decline was beginning to ease in early 2023

Equity funding is much more concentrated in some regions compared to others. London historically attracts by far the largest share of equity investment both in terms of deal numbers and values. Combined, regions and nations outside of London tend to capture a similar number of deals as the capital, however the average size of those deals tends to be much smaller.

The Bank's latest Small Business Equity Tracker report revealed that, in 2022, a total of 1,357 announced[7] equity deals worth £10.8bn took place in London. This represented 50% of the UK's overall deal count and 65% of the total investment value for the year. London's share of deals increased by one percentage point while its share of investment remained the same as in 2021. This was largely driven by a greater decline in equity finance in other nations and regions compared to London.

Following a year of exceptional growth, in 2022 the combined nations and regions outside London recorded their first year-on-year decline in the number of deals since Beauhurst's data collection began in 2011. The number of deals in 2022 fell by 10% to 1,337. The total investment value in these areas also fell by 11% to £5.8bn. Only the South West, Yorkshire and The Humber, and Wales saw an increase in deal numbers compared to 2021 (Figure 1.6). Investment value increased in four regions, largely due to a handful of high value deals in each of them. Yorkshire and The Humber was the only region that saw an increase in both the number and the value of deals in 2022 compared to the year before.

Looking at seed stage deals, London saw a 3% increase in the number of deals and a 28% increase in deal value in 2022. On the other hand, nations and regions outside of London saw the number of seed deals fall by 3% and the value of these deals fall by 9%. London's share of total seed stage deal value reached 59% in 2022, seven percentage points higher than in 2021. While London's share of seed stage deals has stayed relatively consistent over recent years, its share of seed stage deal value has been consistently increasing since 2017.

In 2022 the number of growth stage deals fell by 12% in the London region to 220, and by 20% across the rest of the UK to 215. London captured 70% of the total UK growth stage deal value in 2022, a two percentage point decrease compared to the year before. The value of all growth stage deals in London was equal to £5.7bn, 27% less than the £7.8bn in 2021.

Figure 1.7 demonstrates that 2022 was a year of two halves for the equity finance market, with the favourable conditions experienced by SMEs during the first half of the year deteriorating considerably from July onwards.[8] Following record levels of investment during Q1 and Q2, concerns about potential over-valuations and a lack of exit opportunities, as well as rising inflation and interest rates, led to a 47% reduction in equity finance between the first and second half of the year.

Analysing these two halves in more detail, smaller businesses in the London region raised 61% less equity finance in the second half of 2022 compared to the first, and completed 26% fewer deals. Nations and regions outside of London saw deal values and numbers fall by 24% and 11%, respectively; their trajectory since 2021 suggests that these started experiencing a slowdown in equity activity slightly earlier than the capital. London saw a larger percentage decline in funding compared to other nations and regions, in part because the area experienced very high growth from mid-2020 onwards. Figure 1.7 shows that the value of announced deals in the London region increased by over 220% between the first half of 2020 and 2022, rising from £2.4bn to £7.8bn. The total deal value outside of London increased by 137%, from £1.3bn to £3.1bn during the same timeframe. The distribution of deals between London and the rest of the country remained more stable throughout the entire period.

Figure 1.6

Number and value of announced equity deals by UK nation and English region

Source: British Business Bank analysis of Beauhurst data (2021-2022)

UK nation/region	Number of deals (2022)	% change vs 2021	Investment value £bn (2022)	% change vs 2021
London	1,357	-5%	10.84	-12%
South East	238	-20%	1.68	3%
Scotland	190	-22%	0.76	37%
East of England	185	-6%	1.16	-15%
North West	162	-7%	0.69	-22%
South West	155	4%	0.54	-32%
Yorkshire and The Humber	94	4%	0.26	48%
North East	76	-15%	0.17	-60%
West Midlands	76	-10%	0.28	-22%
Wales	70	19%	0.08	-10%
East Midlands	58	-3%	0.10	-37%
Northern Ireland	34	-17%	0.09	39%

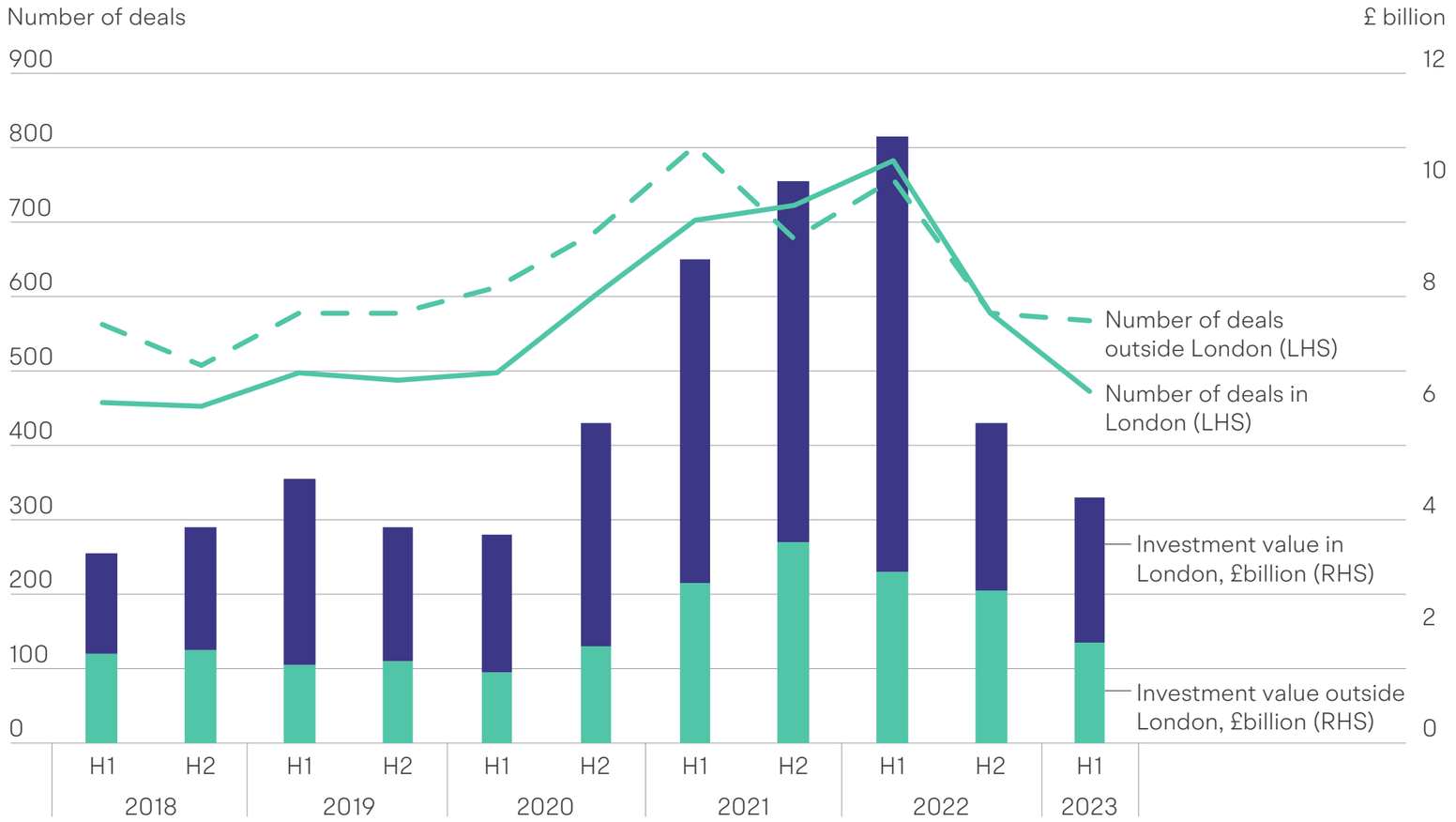
Early 2023 data suggests that the rate of decline in equity deals observed since the middle of 2022 is beginning to ease. Deal numbers outside London were down by just 2% from H2 2022, compared to a decline of 24% between the first and second half of last year. Following a year and a half of exceptional activity, levels of investment are thus returning close to the levels seen in the years up to H1 2020. Equity markets have a volatile history but the broader, deeper nature of UK equity investment in recent years gives reason to think that they have become more resilient.

The number of first-time equity deals can be used as a good indicator of the strength of the overall "pipeline". In 2022, nations and regions outside of London saw more first-time deals than the capital, with 638 deals compared to London's 605. While the number of first-time deals has dropped across the UK in the first half of 2023, the number of first-time deals in nations and regions outside of London remained higher than in the capital.

Figure 1.7

Number and value of announced equity deals in London compared to other English regions and UK nations

Source: British Business Bank analysis of Beauhurst data (H1 2018-H1 2023)



There is evidence to suggest that companies in nations and regions outside of London find it more challenging to attract follow-on funding. As illustrated in Figure 1.8, for companies raising their first funding round between 2012-2014, 50% of those based in London went on to raise a second round of funding, compared to 42% of companies in other nations and regions of the UK. However, this gap narrows gradually with each subsequent round, and essentially disappears for companies raising their fifth and sixth rounds of funding.

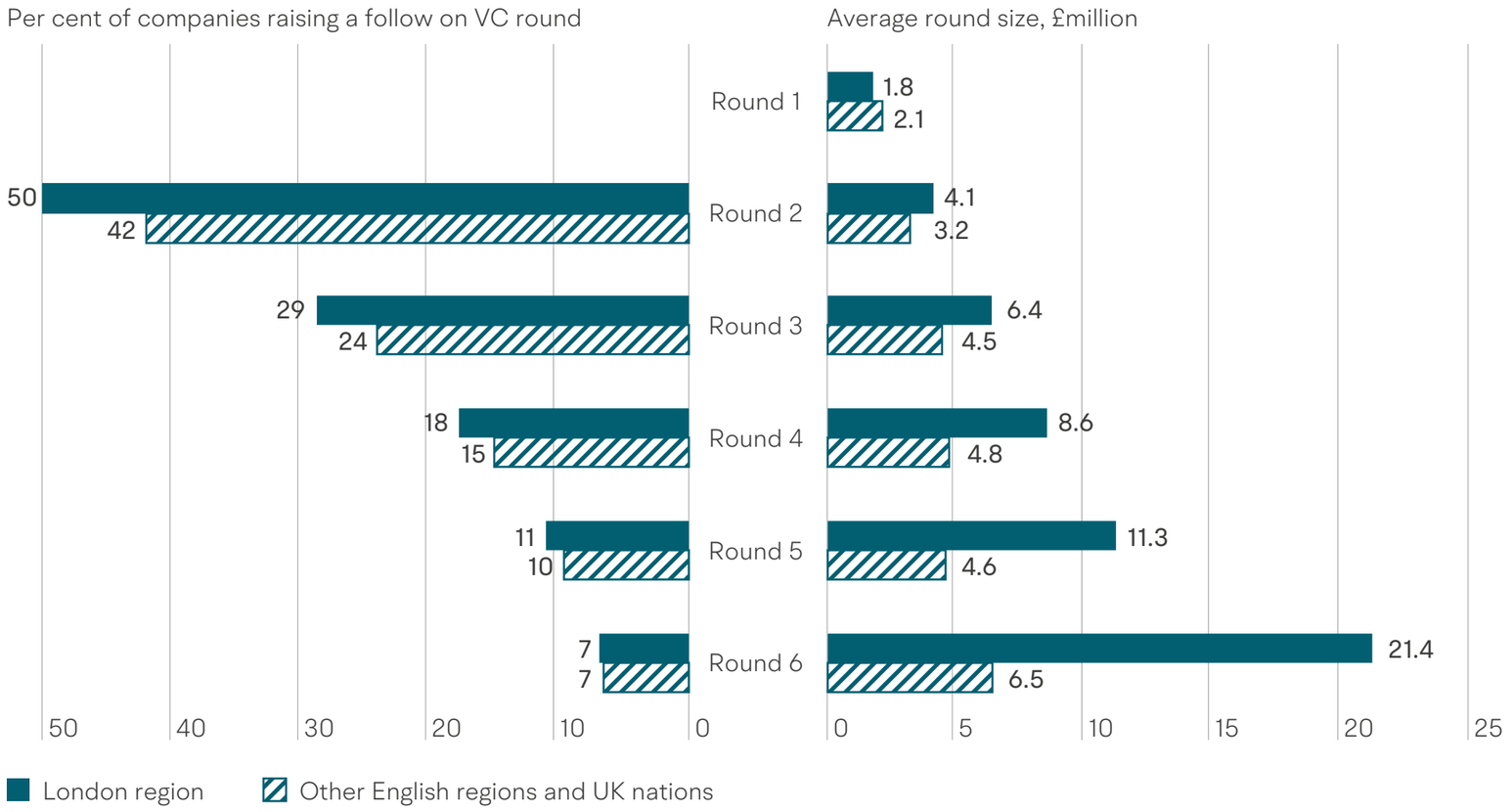
The gap in the average amount of funding raised in London compared to other nations and regions follows a different trend. While companies in regions outside of London raised more on average in their first round, they only raised about 78% as much in their second round of funding. By their sixth round, companies in regions outside London only raise about 30% of the amount raised by companies in London.

In a more recent sample of companies raising their first round of funding between 2017-2018, the gap has become even wider. The average first round deal size was £2.2m, 79% less than in London, and by round three non London based-companies raised £4.9m, only 25% the average amount raised by companies in the capital.

Figure 1.8

Share of companies raising follow-on funding and average round size in London and other English regions and UK nations

Source: British Business Bank analysis of Beauhurst data (2012-Q2 2023)



Box 1: Small businesses' access to equity finance across Combined Authority Areas in England

The creation of combined authorities (CAs) across England with directly elected mayors is a significant step in devolution policy in the UK. Despite this, the available data on finance access at the CA level is extremely limited. One aspect of the CA finance landscape that we can explore is equity finance use, thanks to the geographic location data embedded in the Beauhurst database. Another characteristic that makes CAs difficult to analyse and compare is size. The ten CAs cover territories that vary significantly in terms of spatial and population size, with the West Midlands and Greater Manchester CAs leading the other eight by a large distance on this. For this reason, we standardise the equity data using the number of high-growth enterprises located in each CA area, so that we can compare like with like.

The CAs encompassing London (542 deals; £4.3bn) and Cambridgeshire (500 deals; £3.3bn) saw a much larger number of deals and investment value per 1,000 high-growth enterprises, reflecting the historically higher performance of the capital and Cambridge in securing equity finance compared with the rest of the UK.

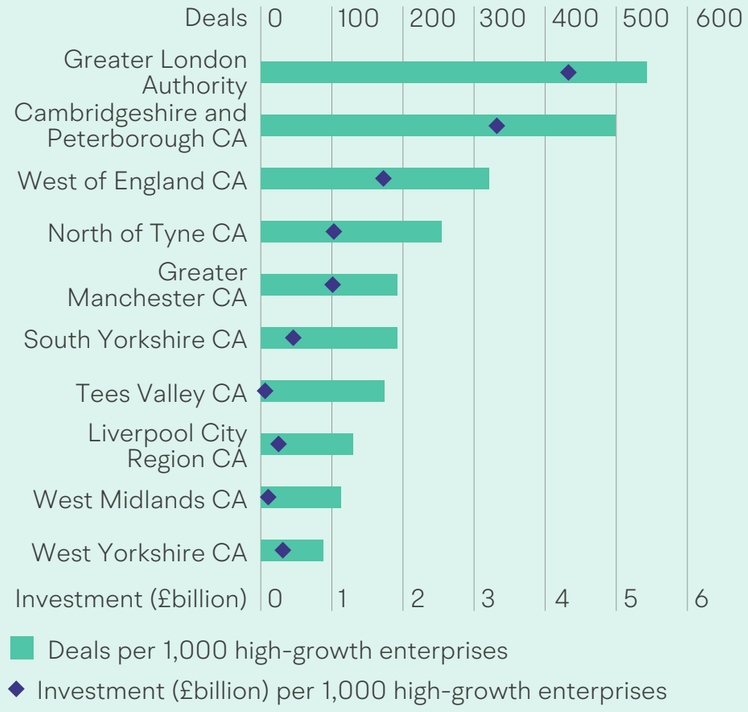
However, alongside these predictable leaders, there are also a couple of CA areas – namely, the West of England (322 deals; £1.7bn), North of Tyne (256 deals; £1.0bn) and Greater Manchester (193 deals; £1.0bn) CAs, that also showed high concentration of equity deals and investment value per 1,000 high-growth enterprises. Still, even these high-performing CA areas lag significantly behind the top two, particularly in terms of investment value.

By contrast, two CA areas show particularly low volumes of both equity deals and investment value compared with the rest: the West Midlands (115 deals; £0.1bn) and West Yorkshire (89 deals; £0.3bn) CAs. Overall, this confirms the extent of the untapped potential that many combined authorities must facilitate to access equity finance for their local high-growth businesses.

Figure 1.9

Equity deals and values In English Combined Authority areas per 1,000 high-growth enterprises

Source: British Business Bank analysis of Beauhurst data (2022); ONS Business Demography (2021)



Reducing regional imbalances remains a core objective for the Bank as it starts launching its new Nations and Regions Investment Funds

The British Business Bank seeks to unlock the potential of entrepreneurs regardless of where they are located, and it has a long-standing objective to reduce regional imbalances in access to finance. These are tackled by geographically targeted programmes that make both equity and debt investments, alongside other UK-wide programmes that aim to reduce market inefficiencies in small business equity finance more generally (for example, Enterprise Capital Funds and British Patient Capital). The latest Small Business Equity Tracker showed that the Bank invested a higher proportion of its equity deals in eight of the 12 UK nations and regions between 2020 and 2022 compared to the overall market (averaging at 13% of equity deals at the UK level).[9]

The geographically targeted programmes set up in 2018 included the Northern Powerhouse Investment Fund (NPIF), the Midlands Engine Investment Fund (MEIF) and the Cornwall and Isles of Scilly Investment Fund (CIoSIF). At the Spending Review 2021 the government announced £1.6bn of new funding for continuing and expanding the coverage of these programmes, as well as setting up three additional investment funds in Scotland, Wales and Northern Ireland. These programmes are also supplemented by the Regional Angels Programme, which focusses on helping reduce regional imbalances in access to equity finance at the early stage.

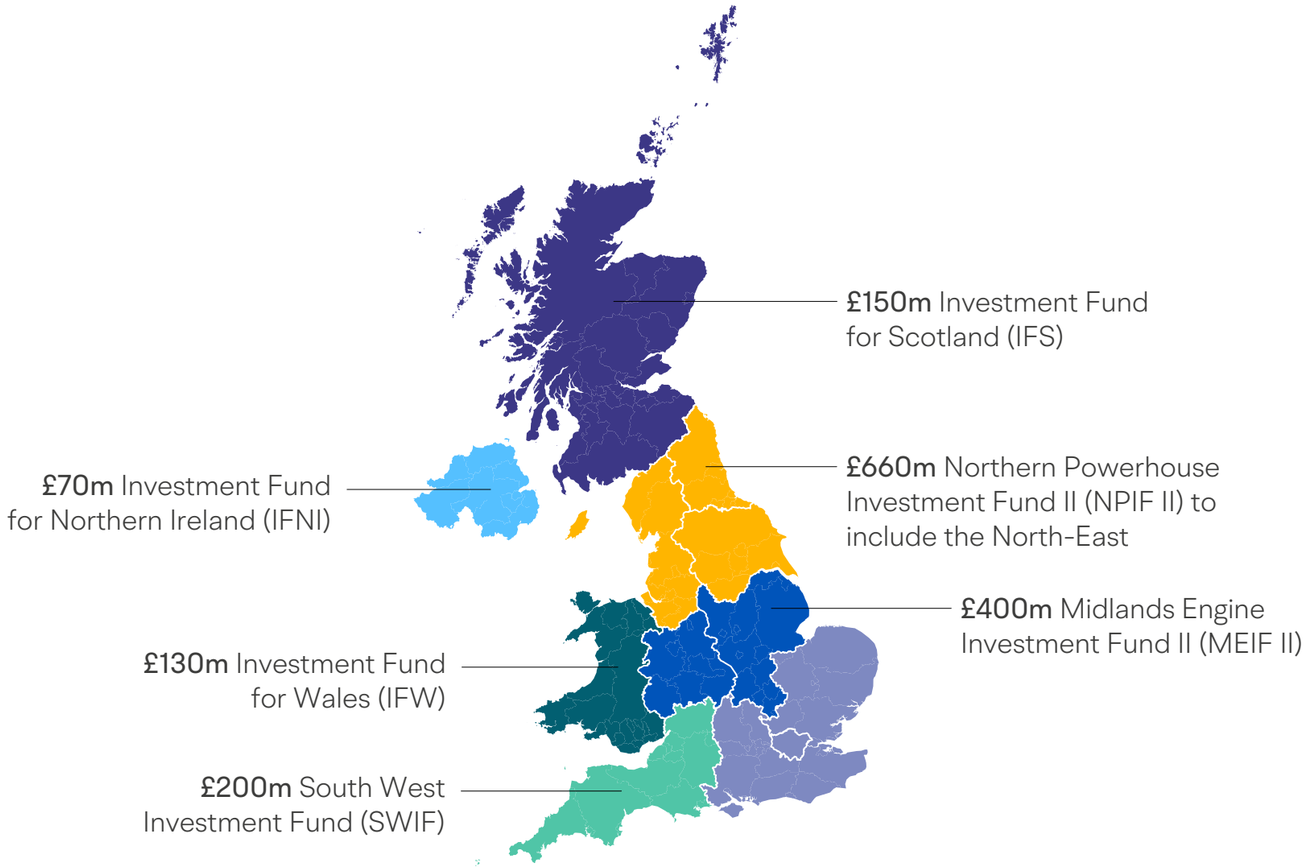
In early 2023, the British Business Bank published the results of the independent interim evaluations of the CIoSIF, MEIF and NPIF programmes.[10] These suggest the programmes had a positive impact on the finance gaps experienced by smaller businesses in the North, Midlands and Cornwall and Isles of Scilly, particularly in terms of equity finance. Overall, the programmes delivered finance to SMEs that – for the large majority – would not otherwise have been accessed at all, would have been smaller in scale or taken longer to secure.

Up to March 2023, CIoSIF, MEIF and NPIF had facilitated a combined total investment of over £1.6bn, benefitting nearly 1,900 smaller businesses in these areas. As this first generation of regional funds comes to an end, the Bank is now in starting to launch the new Nations and Regions Investment Funds, illustrated in Figure 1.10.

Figure 1.10

Overview of the British Business Bank's new Nations and Regions Investment Funds

Source: British Business Bank



Chapter 2

Supporting equity investment in innovation-led clusters across the UK

- Every nation and region of the UK is home to one or more innovation-led clusters
- Academic spinouts play a crucial role in supporting emerging innovation-led clusters throughout the UK
- However, spinouts based outside of the Golden Triangle face a more challenging environment in a number of ways
- There is more to be done to promote gender diversity in spinout founder teams
- Encouraging interconnectedness among clusters is important for attracting spinout investors and strengthening the local pipeline of spinout deals
- The distribution of the Bank's academic spinout investment across the UK reflects the importance and broad geographical spread of these companies

Innovation-led clusters are key drivers of growth and technological progress in advanced economies. As such, they remain a central focus of various UK government policies and strategies spanning business and trade, science and technology and levelling up.[11]

When innovative companies and research institutions, such as universities or public/private research centres, establish themselves in close proximity to one another, they cultivate the social capital, knowledge networks and infrastructure that boost an area's capacity to generate innovative business ideas and attract investment.[12] Innovation-led clusters are thus ideally positioned to support economic growth and foster a strong local finance ecosystem. Their role is particularly important in facilitating access to equity finance throughout the UK nations and regions, as areas offering a critical mass of high-quality technological investment can more easily attract equity investors.

The cluster analysis presented in this chapter focusses on identifying and exploring patterns of equity investment within innovation-led clusters. We define these as areas of the UK that demonstrated a high concentration of Technology/IP-related equity activity over the last decade or so. Our formal definition and detailed methodology are outlined in Annex A.

The objective of this analysis is not to re-draw existing maps of innovation-led clusters in the UK, but rather to complement them by adding an equity finance-focused perspective to the evidence base. Our analytical approach enables us to more accurately show the location of emerging clusters in parts of the UK that suffer from an equity investment gap relative to London and the greater South and East of England, compared with regional level analyses. By harnessing the Beauhurst database's detailed Technology/IP-based businesses sector taxonomy, our analysis can provide a more granular picture of these clusters' sectoral composition relative to traditional analyses based on the 2007 Standard Industrial Classification (SIC).[13] Additionally, our approach allows for further exploration of the role of academic spinouts and other university research commercialisation activities in nurturing the development of innovation-led clusters, particularly from an equity investment standpoint.

The next sections of this chapter present findings on finance trends within each of the 33 clusters when the datasets offer sufficient sample size to draw robust conclusions. Otherwise, we group these clusters into 10 categories based on their broad geographical location (as detailed in Annex A).

Every nation and region of the UK is home to at least one innovation-led cluster

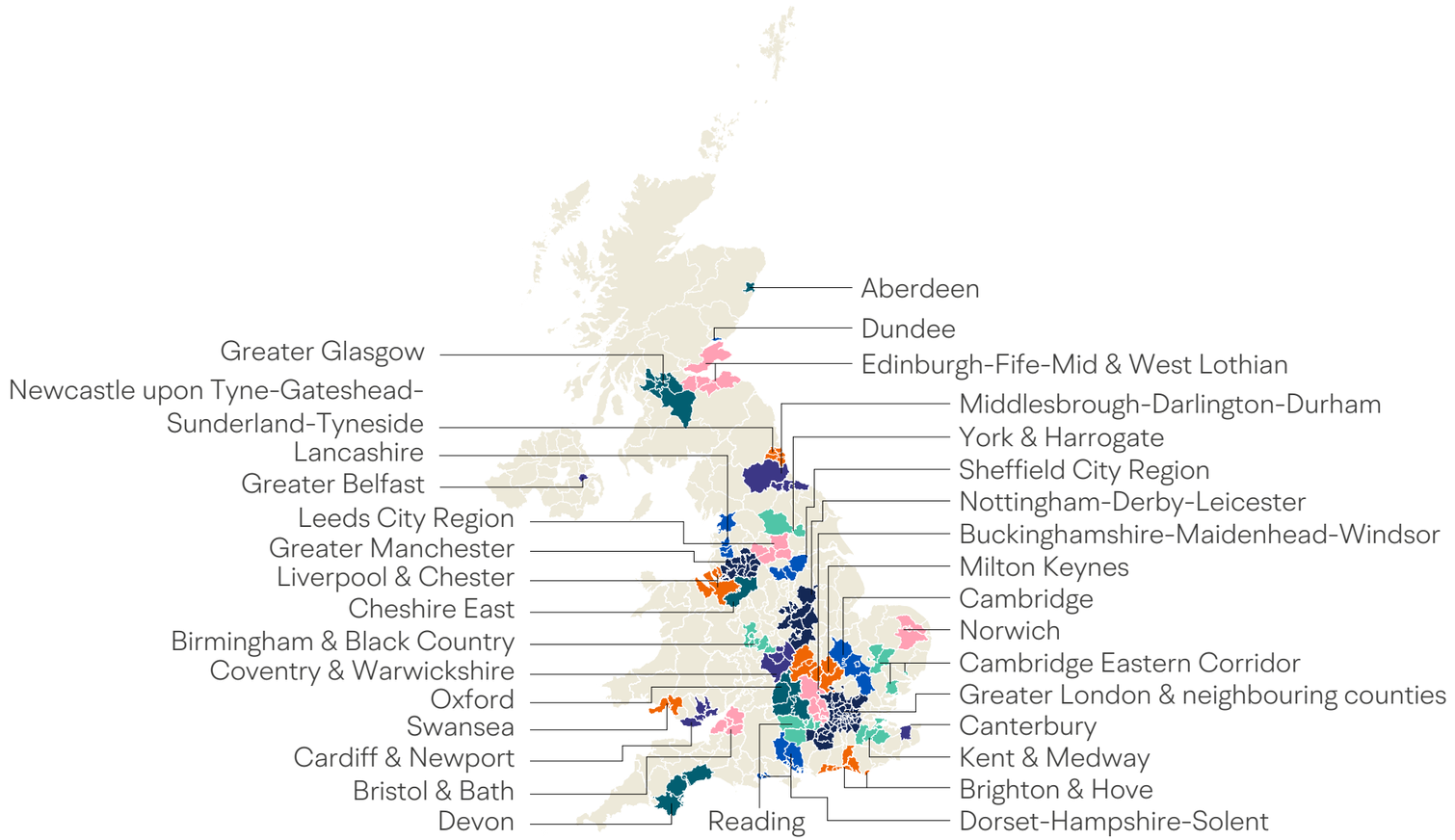
The 33 clusters identified by our analysis span across all UK nations and regions (Figure 2.1). Taken together, they represent 93% of Technology/IP-related equity deals and 96% of the total investment value between 2011 and the second quarter (Q2) of 2023.

These clusters encompass 196[14] Local Authority Districts that are predominantly urban and middle or low-ranking on income deprivation measures. Twenty-two of the 33 clusters have some Technology/IP-related deals involving companies located the 10% most income deprived areas in each nation. Similarly, most clusters have less than a quarter of local Technology/IP-related deal activity in rural areas,[15] but there are some notable exceptions. Cheshire East has 61% of its deal activity in rural areas, followed by Milton Keynes (36%); Cambridge (34%); Middlesbrough-Darlington-Durham (31%); and Oxford (25%).

Figure 2.1

Location of innovation-led equity investment clusters across the UK

Source: British Business Bank analysis of Beauhurst data (2011-Q2 2023)



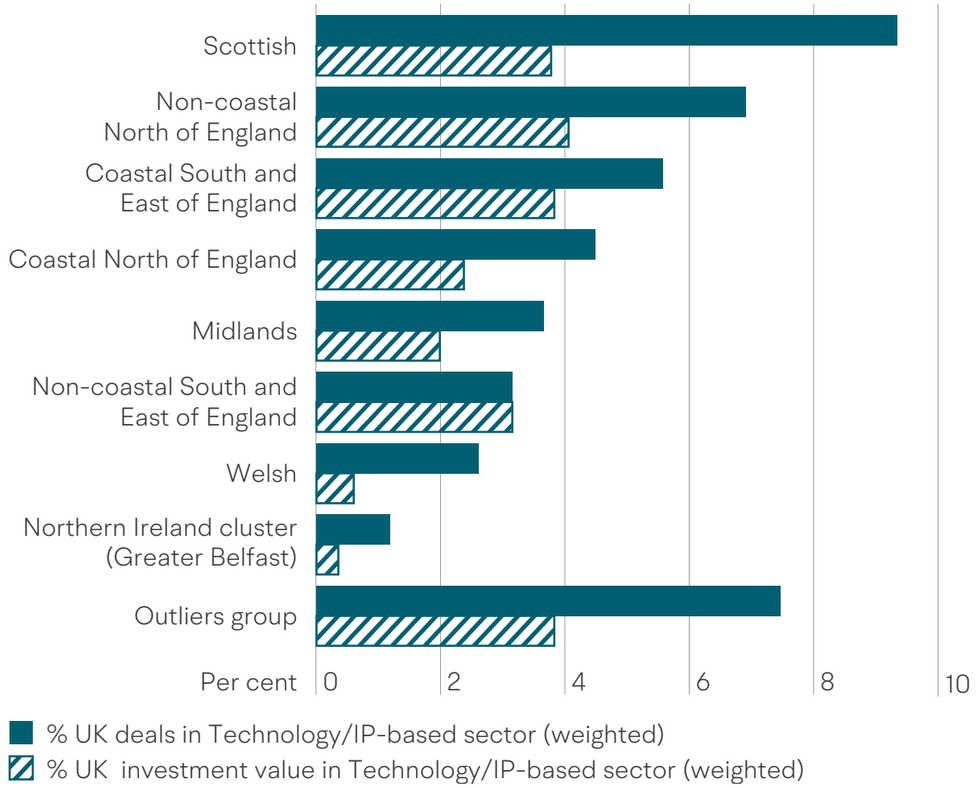
The distribution of Technology/IP-related equity activity across different cluster groupings (Figure 2.2.) highlights the significant concentration of investment in the Golden Triangle, which includes the Greater London, Cambridge and Oxford clusters. The rest of the UK represents only 44% of Technology/IP-related equity deals and 24% of the investment value between 2011 and Q2 2023. However, Figure 2.2 also shows there are smaller yet significant hotspots scattered across the UK nations and regions. In particular, the Scottish clusters capture the largest volumes of Technology/IP-related equity activity outside the Golden Triangle, with the Edinburgh and Glasgow clusters ranking among the five largest. The non-coastal North of England grouping, led by the Greater Manchester cluster, and the Coastal South and East of England grouping, featuring large clusters like Bristol & Bath, also account for sizeable shares of Technology/IP-related equity activity. The coastal North of England grouping is the next most significant, with Newcastle-upon-Tyne, its largest cluster, ranking fifth based on deal numbers. Annex B discusses the key insights that can be drawn from our Business Finance survey on the general finance attitudes of smaller businesses based in a cluster, compared with those that are not.

Figure 2.2

Top five UK innovation-led clusters outside the Golden Triangle, based on their volume of Technology/IP-related deals and investment value (left); UK share of Technology/IP-related deals and investment value for all cluster groupings except the Golden Triangle (right)

Source: British Business Bank analysis of Beauhurst data (2011-Q2 2023)

Cluster	Deals	Investment value (£billion)
Edinburgh-Fife-Mid & West Lothian	475	0.7
Greater Manchester	342	1.1
Greater Glasgow	257	0.4
Bristol & Bath	219	0.9
Newcastle upon Tyne-Gateshead-Sunderland-Tyneside	179	0.3



Universities play a crucial role in supporting emerging innovation-led clusters across the UK, including by generating spinouts that attract equity investment

Innovation-led clusters are a dynamic unit of analysis, which creates a 'chicken and egg' problem when we try to disentangle causes from effects using static data. This is mainly due to 'sorting effects',[16] whereby businesses, workers and investors are able to choose where to locate based on the potential agglomeration benefits (e.g. in terms of economies of scale, proximity to employers/suppliers/customers etc.) offered by different locations. If these benefits change, so can these actors' location decisions, reinforcing a cluster's growth or decline over time.

Focusing on the contribution of companies whose Intellectual Property (IP) is derived (directly or indirectly) from universities[17] is helpful from this perspective, for two reasons. One is that a substantial body of research shows universities can play a key role in the formation of innovative clusters.[18] They not only provide a valuable source of knowledge, expertise and highly-skilled human capital but also function as local catalysts for collaboration, innovation and investment. In addition, universities very rarely (if ever) relocate, even though they may choose to relocate specific departments or expand into new areas. In this respect, they provide a long-lasting "anchor" for the identification and development of innovation-led clusters across the UK.[19]

The creation of academic spinout companies is a particularly important avenue through which founders and universities can commercialise cutting-edge academic research, contributing to the pipeline of investable innovative businesses within each cluster.

Beauhurst define an academic spinout as a company that was set up to exploit intellectual property (IP) developed by a recognised UK university and then either licences the IP from the university, or the university owns or has the option to purchase shares in the company.[20]

These spinout companies often raise significant amounts of funding, with their average deal size (£8.9m in 2022) being 33% larger than the overall UK market average.[21]

The following sections explore the role and performance of spinouts in innovation-led clusters across the UK, using data produced by Beauhurst. It is important to note that creating spinout companies is not the only way in which universities support innovation-led clusters, and their performance on spinout creation is not necessarily indicative of their performance on other activities that contribute to cluster development, such as encouraging staff or student-led start-ups (neither of which meets the Beauhurst definition of spinout company). To provide some wider context around the spinout deal data discussed below, we cover some of these other activities in Annex C.

Academic spinouts make a large contribution to equity activity in many clusters and technology areas beyond just the Golden Triangle or the Life Sciences and Medical technology

Academic spinouts are more widely represented in Technology/IP-related deals than they are across other sectors. They make up 18% of UK deals and 23% of investment value in this sector between 2011 and the first half of 2023, against an all-sector average of 10% and 13% (respectively).

These companies are also more prevalent in clusters than in lower density areas (Figure 2.3). In the outliers group (representing deals that do not meet our criteria for inclusion in a cluster), academic spinouts only represent 5% of the total Technology/IP-related deals and 6% of the related investment value, a much lower share than the cross-cluster average of 23% and 28%.

Further, Figure 2.3 shows that the importance of academic spinouts can differ markedly from cluster to cluster, including those making up the Golden Triangle. Of the three, Oxford has the greatest reliance on spinouts, with nearly 60% of Technology/IP-related deals and 74% of their investment value between 2011 and Q2 2023 involving this type of companies. Cambridge ranks second, but at a considerable lag from Oxford, whereas the Greater London cluster ranks towards the bottom.

Academic spinouts are also a prominent part of the equity landscape in the devolved nations. Greater Belfast has the sixth-highest share of local Technology/IP-related equity deals and investment value (at 37% and 35% respectively) generated by spinouts outside the Golden Triangle. Glasgow is the top Scottish cluster and second overall on these indicators with 47% of Technology/IP-related deals and 50% of investment value captured by spinouts. Wales has high representation of spinouts in the Swansea cluster (45% based on deals and 43% based on investment value), and much less in the Cardiff & Newport one (18% and 22%, broadly in line with the corresponding UK averages).

In England, Midlands-based clusters consistently show higher representation of academic spinouts in local Technology/IP-related deals, peaking in the Coventry & Warwickshire cluster (with spinouts making up 34% of Technology/IP-related deals and 15% of investment value). As for other parts of the nation, the picture is more mixed. The North and the South and East of England both show a split between clusters with high spinout deal concentration, like Sheffield or Bristol & Bath, and others with much lower concentration, like Leeds or Canterbury.

It is often assumed that life sciences and medical technology are by far the largest Technology/IP-related sub-sectors for academic spinout deals, but this isn't necessarily the case in each cluster (Figure 2.4). At the UK level and in most clusters (including all of those based in the devolved nations), life sciences and medical technology have indeed dominated Technology/IP-related academic spinout deals and investment value since 2011. This makes intuitive sense, as innovation in these sub-sectors relies heavily on basic research, the majority of which is conducted by universities.[22]

However, there are clusters in England where other sub-sectors take the lead in terms of deal numbers and/or investment value. For instance, hardware makes up the largest share of Technology/IP-related spinout deals and investment value in the Dorset-Hampshire-Solent cluster. Similarly, software is the most prevalent spinout deal sector in the Birmingham and Bristol & Bath clusters, while the Lancashire cluster is dominated by both clean technology and software.

The sub sectoral-level data further highlights the significant contribution of spinouts from all parts of the UK to encouraging equity investment in technology areas that may be small, but strategically important for the country. For example, materials technology only made up around 4% of the total Technology/IP-related deals between 2011 and the first half of 2023, but spinouts were responsible for 53% of all deals in this sub-sector over the same period. Spinouts' contribution to equity deal activity is also significant in nanotechnology (equating to 63% of UK Technology/IP deals between 2011 and Q2 2023), alongside hardware (27%), life sciences (50%) and medical technology (41%).

Figure 2.3

Share of Technology/IP-related deals and investment value in each cluster that involve academic spinouts

Source: British Business Bank analysis of Beauhurst data (2011-Q2 2023)

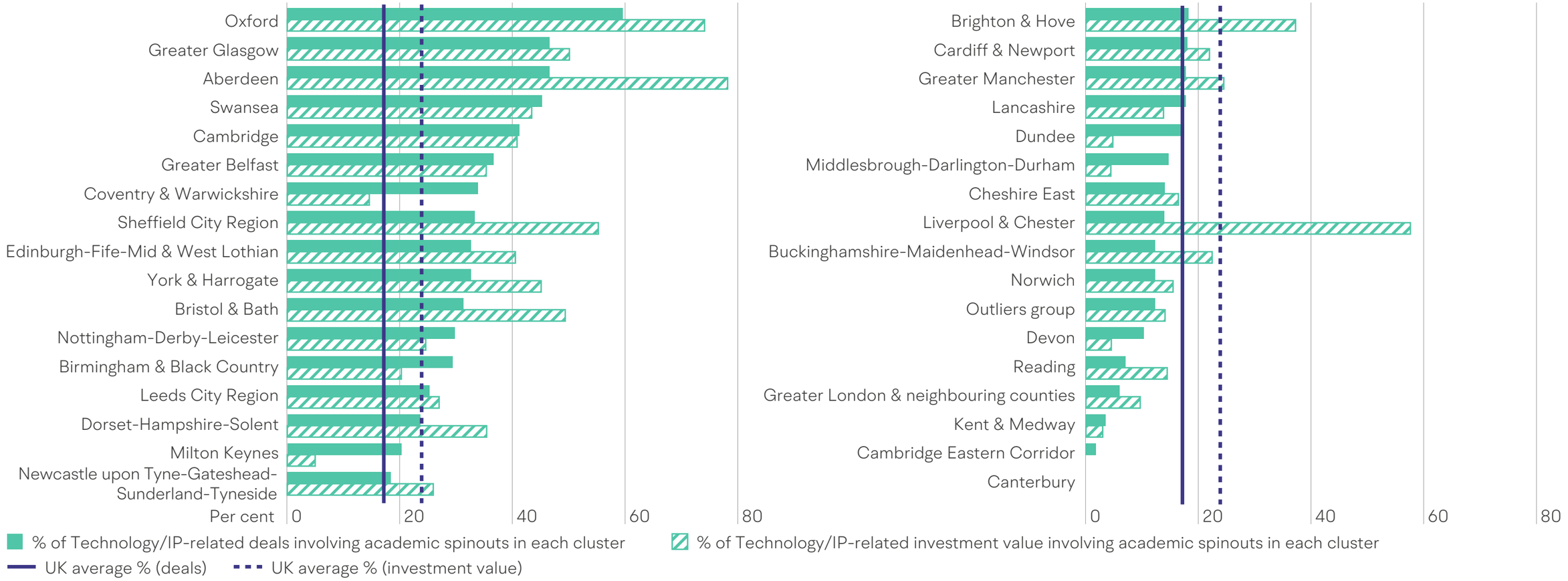


Figure 2.4

Largest Technology/IP academic spinout sub-sector in each cluster based on deals and investment value (2011-Q2 2023)*

Source: British Business Bank analysis of Beauhurst data (2011-Q2 2023)

Key
Materials technology
Other technology/IP-related
Life Sciences
Medical technology
Hardware
Software
Clean technology

North of England	Largest spinout sub-sector based on deals	Largest spinout sub-sector based on inv.value
Cheshire East	Materials technology	Materials technology
Greater Manchester	Medical technology	Life Sciences
Lancashire	Software	Software
Liverpool & Chester	Medical technology	Life Sciences
Leeds City Region	Medical technology	Medical technology
Middlesbrough-Darlington-Durham	Life Sciences	Life Sciences
Newcastle-Gateshead-Sunderland-Tyneside	Life Sciences	Life Sciences
York & Harrogate	Life Sciences	Life Sciences
Sheffield City Region	Hardware	Other technology/IP-related

South and East of England	Largest spinout sub-sector based on deals	Largest spinout sub-sector based on inv.value
Brighton & Hove	Life Sciences	Life Sciences
Bristol & Bath	Software	Software
Buckinghamshire-Maidenhead-Windsor	Life Sciences	Life Sciences
Cambridge	Life Sciences	Life Sciences
Devon	Other technology/IP-related	Other technology/IP-related
Dorset-Hampshire-Solent	Hardware	Hardware
Greater London & neighbouring counties	Life Sciences	Life Sciences
Milton Keynes	Medical technology	Medical technology
Norwich	Clean technology	Clean technology
Oxford	Life Sciences	Life Sciences
Reading	Software	Other technology/IP-related

* the diagram excludes clusters with fewer than 3 academic spinout deals over the period considered

Figure 2.4 (continued)

Largest Technology/IP academic spinout sub-sector in each cluster based on deals and investment value (2011-Q2 2023)*

Source: British Business Bank analysis of Beauhurst data (2011-Q2 2023)

Key
Materials technology
Other technology/IP-related
Life Sciences
Medical technology
Hardware
Software
Clean technology

Midlands	Largest spinout sub-sector based on deals	Largest spinout sub-sector based on inv.value
Birmingham & Black Country		
Coventry & Warwickshire		
Nottingham-Derby-Leicester		

Northern Ireland	Largest spinout sub-sector based on deals	Largest spinout sub-sector based on inv.value
Greater Belfast		

Scotland	Largest spinout sub-sector based on deals	Largest spinout sub-sector based on inv.value
Aberdeen		
Dundee		
Edinburgh-Fife-Mid & West Lothian		
Greater Glasgow		

Wales	Largest spinout sub-sector based on deals	Largest spinout sub-sector based on inv.value
Cardiff & Newport		
Swansea		

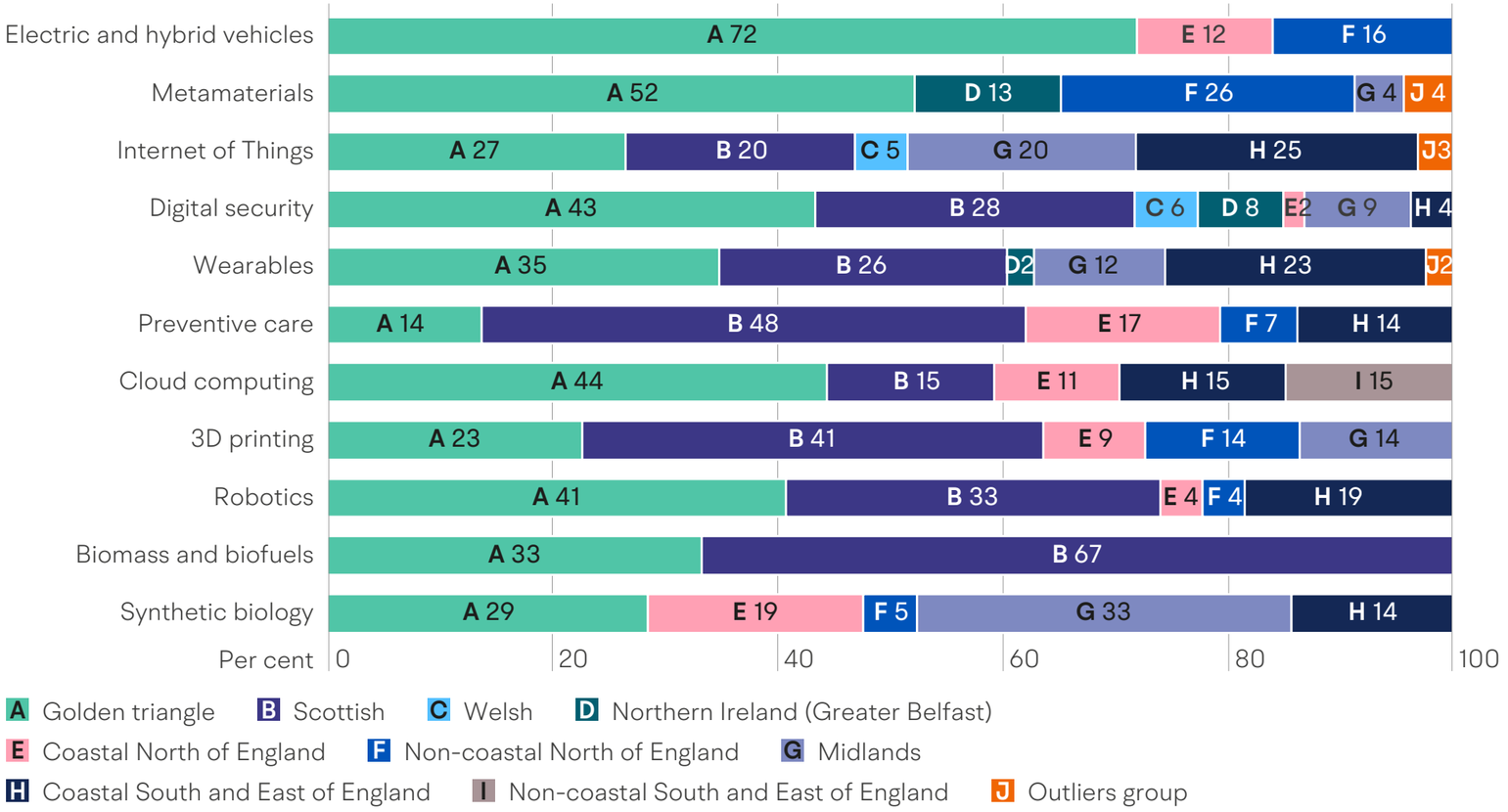
* the diagram excludes clusters with fewer than 3 academic spinout deals over the period considered

Additionally, when looking at selected "buzzwords" associated with spinout deals, we find that there are several emerging technology areas where Golden Triangle-based clusters have the largest share of the overall market (based on deals) but do not necessarily dominate the spinout deal total (Figure 2.5). For example, the Golden Triangle had the largest share of UK deals in biomass and biofuels between 2011 and Q2 2023 (39%); yet it is the Scottish clusters that capture the largest share of academic spinout deals in this area (67%). The same applies to other areas such as preventive care and 3D printing, where the Scottish clusters have an equal or higher share of academic spinout deals compared to the Golden Triangle. Clusters in the North of England are also well represented in spinout deals related to metamaterials (alongside Northern Ireland), synthetic biology, electric and hybrid vehicles and preventive care, whereas spinout deals in cloud computing, Internet of Things, digital technology, and wearables have wide representation from clusters based in all areas of the UK. These examples help illustrate how spinouts from all over the UK are generating equity funding and expertise in ground-breaking technological areas where other businesses may be more reluctant to lead the way.

Figure 2.5

Share of the total UK academic spinout deals tagged with selected Technology/IP-related buzzwords, by cluster grouping

Source: British Business Bank analysis of Beauhurst data (2011-Q2 2023)



Case Study
Aberdeen (Scotland)

Aberdeen's cluster is concentrated in life sciences spinouts from the University of Aberdeen, which are a vital part of the equity landscape in the city.

Academic spinouts generated 46% of Technology/IP-related deals and 78% of investment value in the Aberdeen cluster between 2011 and the first half of 2023. Life sciences are the dominant spinout sector locally, with 81% , followed at a large distance by medical technology (17%) and other technology/IP-based businesses (2%).

21 of the 24 Technology/IP-related spinout deals that took place in this cluster between 2011 and Q2 2023 originated from the University of Aberdeen, including three that were above £10m. The other spinouts were generated by Robert Gordon University and by a collaboration between the Aberdeen-based Rowett Research Institute and the University of Glasgow.

The cluster is set in an urban and relatively affluent coastal economy with a high concentration of Technology/IP-related equity deals relative to its number of high-growth enterprises (2).[23] It ranks 10th in the UK on this measure.

Case Study
Swansea (Wales)

Medical technology spinouts are key players in Swansea's equity ecosystem and largely attributable to Swansea University

Medical technology is Swansea's largest Technology/IP-related spinout deal sub-sector (63%), but the cluster also has above-average representation of spinout deals relating to materials technology (13%) and clean technology (11%). Conversely, the usually dominant life sciences sub-sector represents only 5% of Technology/IP-related spinout deals in Swansea.

Despite the relatively low local representation of research institutions, the Swansea cluster depends on academic spinouts for 45% of Technology/IP-related deals and 43% of investment value between 2011 and Q2 2023. All but one of these deals involved Swansea University.

The cluster covers the mostly urban county council areas of Swansea and Neath Port Talbot, and has a sizeable share of Technology/IP-related deal activity (19% between 2011 and Q2 2023) involving businesses based within the 10% most income deprived areas in Wales. Similarly to Aberdeen, Swansea has a high number of Technology/IP-related equity deals per high growth enterprise (2.1, the 9th highest in the UK).

Case Study
Greater Belfast (Northern Ireland)

Life Sciences spinouts make a large contribution to Belfast's Technology/IP-based equity activity, with the vast majority generated by Queen's University Belfast

Academic spinouts' representation in this cluster's Technology/IP-related equity deals between 2011 and Q2 2023 is very significant. At 37% of deals and 35% of investment value over this period, it is nearly double the respective average shares at UK level (18% and 23%).

The largest Technology/IP-related spinout sub-sectors based on deal numbers is the life sciences sub-sector (41%), but the concentration of deals related to the software subsector (37%) in this cluster is nearly as significant.

The Greater Belfast cluster benefits from the presence of two large universities: Queen's University Belfast, which generated 45 of the 48 local Technology/IP-related spinout deals between 2011 and Q2 2023, and the University of Ulster, responsible for the remaining three deals.

In this cluster, consisting of the Belfast Local Government District, a relatively large proportion (22%) of Technology/IP-related equity deals between 2011 and Q2 2023 were completed by businesses based within the 10% most income-deprived areas in Northern Ireland. Belfast punches well above its weight in terms of Technology/IP-related equity deals per high-growth business; at 2.7, this is only exceeded by Dundee, Edinburgh, and the Golden Triangle clusters (ranking 6th overall).

Case Study
Sheffield City Region (Yorkshire and The Humber)

Sheffield's large spinout community is more concentrated in hardware and software than the life sciences, with the University of Sheffield dominating the ecosystem

Spinouts make up a third of Sheffield's Technology/IP-related deals and 55% of the investment value between 2011 and Q2 2023.

Unusually, hardware (26%) and software (21%) are Sheffield's largest Technology/IP sub-sectors based on spinout deal numbers, while life sciences (19%) only ranks third in this cluster alongside other Technology/IP based businesses. The cluster also had about 10% of deals with relevance to clean technology, and none relating to medical technology over the period.

The digital technology-focused profile of this cluster's spinouts is likely linked to the local presence of high-profile engineering and manufacturing research hubs like the University of Sheffield and a High Value Manufacturing Catapult centre (part of the UKRI Catapult Network). The former is responsible for 27 of the 34 total Technology/IP-related spinout deals in this cluster over the period considered. A further seven can be attributed to universities based in other clusters.

This cluster is delimited by the Sheffield, Doncaster and Rotherham Local Authority Districts. None of its Technology/IP-related equity activity between 2011 and the first half of 2023 took place in highly income-deprived areas. Sheffield City Region has a lower middle ranking (20th out of the 33 clusters) in terms of the Technology/IP-related deals it generates per high-growth business. This is only 0.8, well below the cross-cluster average of 1.6 deals.

Case Study
Derby-Leicester-Nottingham (East Midlands)

The Derby-Leicester-Nottingham cluster shows a moderate but significant contribution of life sciences spinouts to local equity activity, led by the University of Nottingham

The representation of spinouts in this cluster's Technology/IP-related deals and investment value does not rank among the top 10 highest, but is still significantly above the UK average, at 30% and 25% respectively over the period 2011-Q2 2023.

The composition of these deals is strongly skewed towards the life sciences (63%), whereas other sub-sectors account for less than 10% each.

The cluster can count on six research-active higher education institutions. The largest in terms of Technology/IP-related spinout activity is the University of Nottingham; which generated 30 of the local 42 deals over the period considered, including one in collaboration with Cranfield University.

The Derby-Leicester-Nottingham cluster comprises of the three Local Authority Districts demarcating these cities and nine neighbouring ones.[24] It shows a limited share (10%) of Technology/IP-related equity activity involving businesses in the 10% most income deprived areas. The cluster ranks at the bottom of the distribution based on its local number of Technology/IP-related deals per high-growth business (0.6).

Case Study
Bristol & Bath (South West)

Bristol & Bath are key spinout hubs, with a balanced mix of equity deals in software, life sciences, and medical technology dominated by the University of Bristol

Academic spinouts made up 31% of local Technology/IP-related deals and 49% of investment value over the period 2011-Q2 2023, the 11th highest share across all clusters.

Their sub-sectoral composition is relatively balanced, with software (22%), life sciences (21%), other Technology/IP-based businesses, and medical technology (18%) capturing around one fifth of deals each. Around 2%-3% of deals also related to materials technology, nanotechnology and clean technology.

Of the 84 Technology/IP-related spinout deals completed there between 2011 and Q2 2023, 65 were led by the University of Bristol (including two in collaboration with University College London) and 3 by the University of Bath. A further 16 were backed by institutions with a diverse geographical spread, showing the cluster's interconnectedness with other areas.

Situated within the Local Authority Districts of City of Bristol, Bath and North East Somerset, North Somerset and Gloucestershire, this cluster has just 7% of Technology/IP-related equity deals involving businesses in areas among the 10% most income-deprived in England. The ratio between Technology/IP-related deals and high growth enterprises in this cluster aligns with the UK average of 1.6.

Academic spinouts based outside the Golden Triangle face a more challenging environment in a number of ways

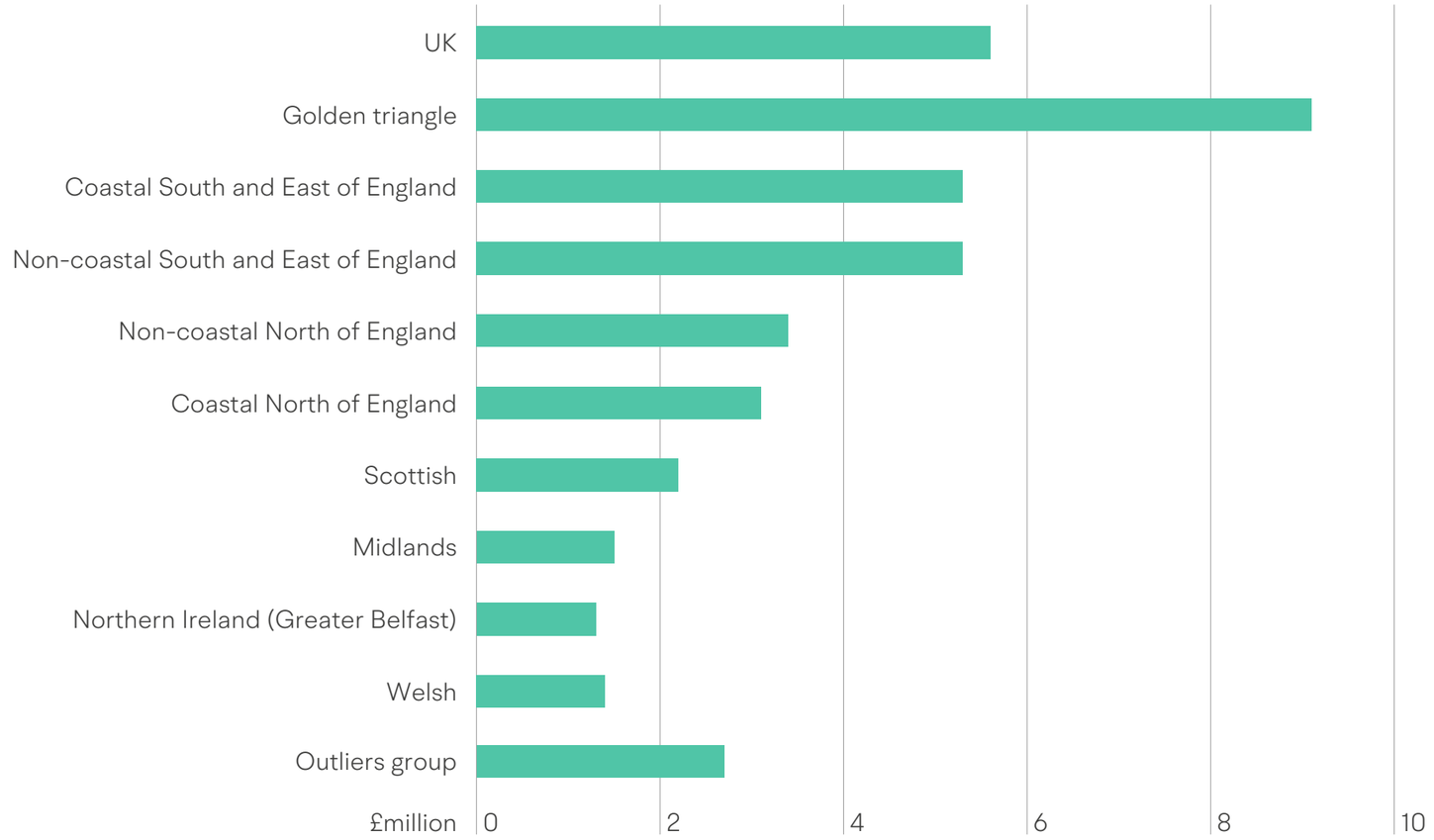
As noted earlier, the UK's leading equity investment clusters stand out from the rest for their larger deal sizes. This is shown in Figure 2.6, which confirms that the mean deal value of academic spinouts is generally highest in the Golden Triangle and other cluster groupings located in the South and East of England. All other clusters show a considerable lag in mean academic spinout deal values, with the devolved nations all represented in the tail of the distribution, alongside the North of England and Midlands-based clusters.

A comparison of average academic spinout deal sizes across Technology/IP-related sub-sectors highlights further differences on this dimension (Figure 2.7). The Golden Triangle again stands out in the Life sciences with significantly larger mean deal values compared to any other cluster, but differences with clusters in the rest of the UK are not as significant in other Technology/IP-related subsectors.

Figure 2.6

Average size of Technology/IP-related deals involving academic spinouts, by cluster grouping

Source: British Business Bank analysis of Beauhurst data (2011-Q2 2023)



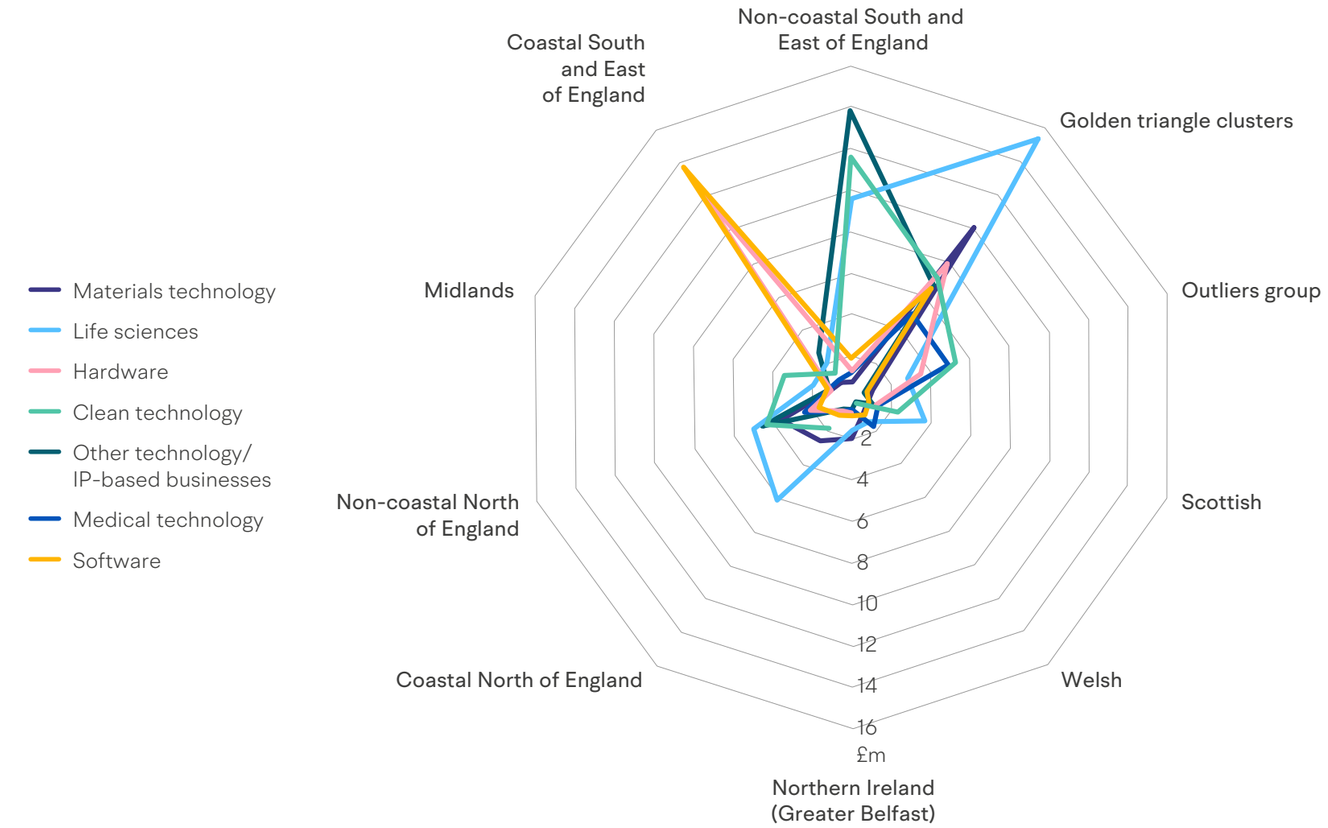
This confirms that the gap in investment between spinouts in the Golden Triangle and the rest of the UK depends heavily on the higher performance of local spinouts in terms of securing larger deals in the life sciences. Conversely, clusters in Northern Ireland, the North of England and the Midlands show a fairly consistent pattern of smaller-than-average academic spinout deals across most Technology/IP-related sub-sectors, suggesting that spinouts in these clusters could face greater challenges in securing larger deals in any technology area compared to their counterparts in other clusters.

When a need for external finance arises, securing an investor quickly can make or break the prospects of a businesses. This applies to innovative companies all stages, but can be particularly difficult in their early years, when they generally do not have much of a track record to prove their potential.

Figure 2.7

Average size of UK academic spinout deals across Technology/IP-related deal sub-sectors*, by cluster grouping

Source: British Business Bank analysis of Beauhurst data (2011-Q2 2023)



* We exclude the nanotechnology sub-sector due to insufficient sample sizes.

The average age of academic spinouts at the time of their first announced equity deal varies significantly across cluster groupings (Figure 2.8). The Golden Triangle is again the best performing grouping on this dimension, with an average company age at first investment of just below 3 years for academic spinouts and 3 years for other types of companies.

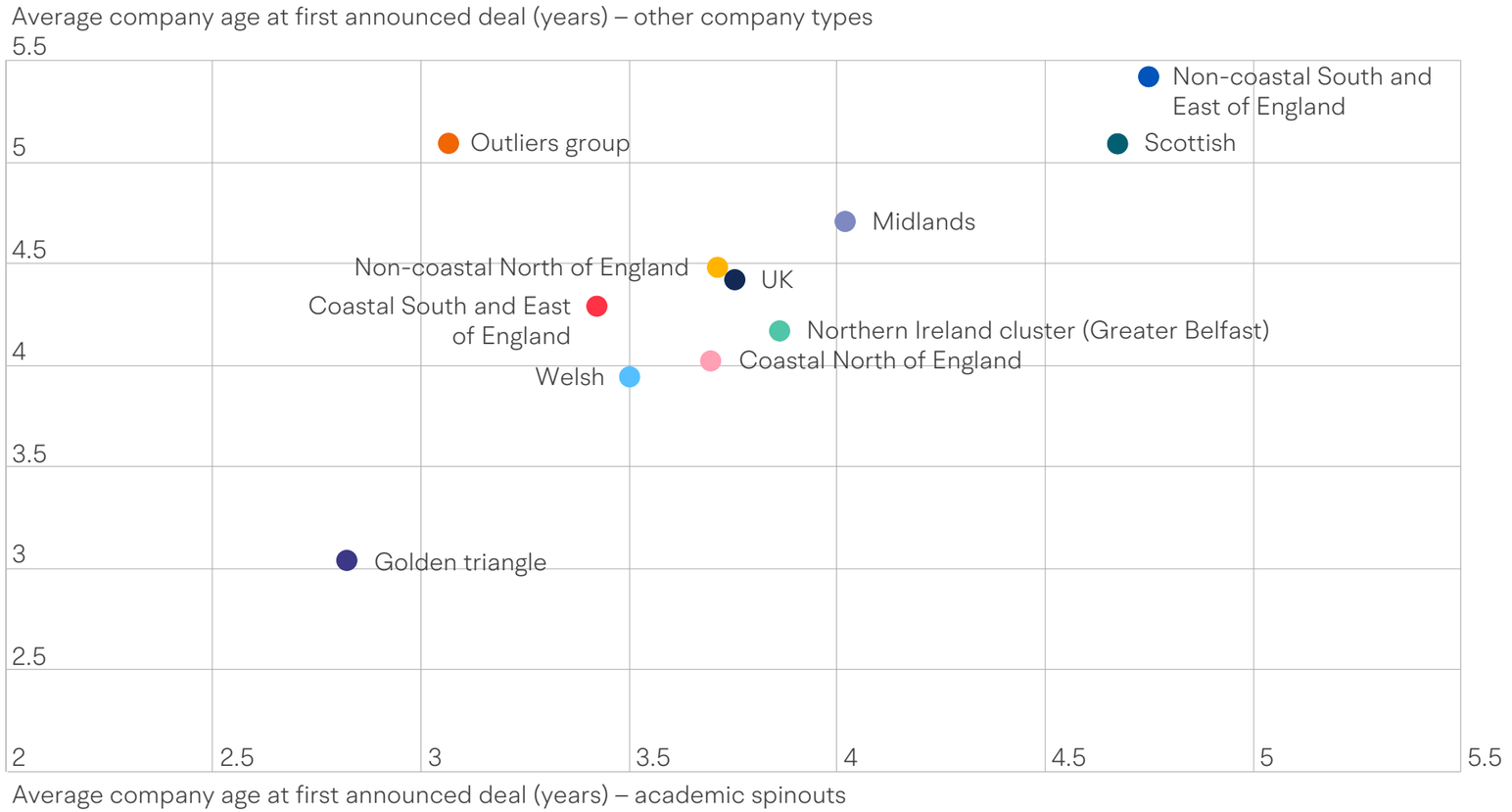
This data should be treated with caution, as it assumes that the first deal completed by spinout companies coincides with their first announced deal; this is generally correct, but there could be companies whose very first deal was an unannounced one. With this caveat in mind, the main finding from this analysis is academic spinouts outside the Golden Triangle generally take longer to secure their first deal.

One notable example of this is the Scottish and mainland South and East of England clusters , where academic spinouts are about 2 years older on average than their Golden Triangle-based counterparts when they secure their first investment. Spinout companies located in the Midlands clusters also have a much higher average age at first investment relative to those based elsewhere. These differences are not necessarily indicative of cluster-specific issues in the finance

Figure 2.8

Average age of academic spinouts and other companies at their first announced Technology/IP-related deal (in years), by cluster grouping

Source: British Business Bank analysis of Beauhurst data (2011-Q2 2023)



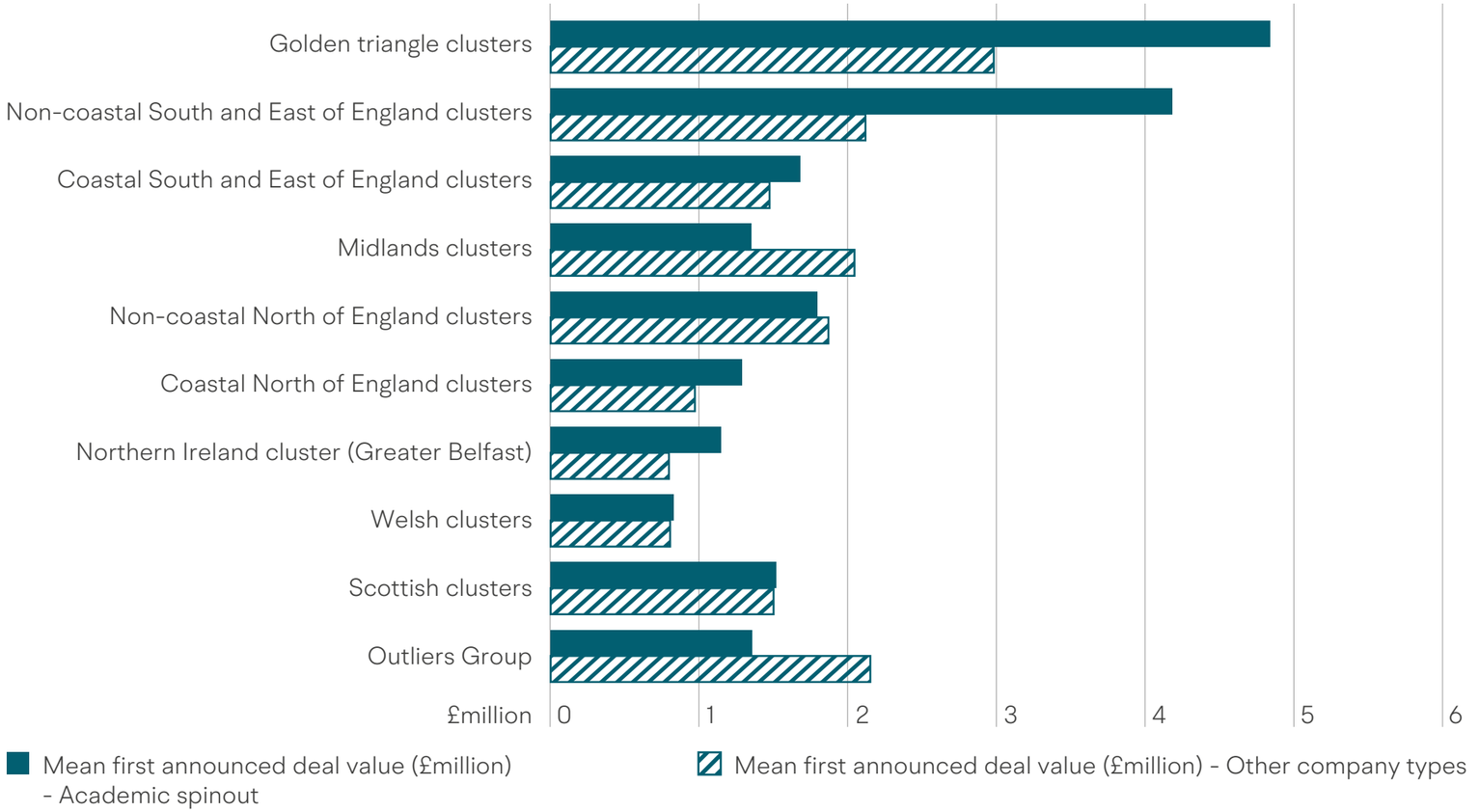
environment for spinouts. One possibility is that spinouts in certain locations reply more on other types of finance, such as grants, in their early years. On the other hand, without further investigation we cannot rule out the possibility that this is related to academic spinouts struggling more in securing their first investor in some clusters than in others.

In terms of the average size of these first-time announced deals (Figure 2.9), values are consistently larger for deals involving spinouts than those involving other businesses, except in the Midlands clusters and in the outliers group. The most significant geographical divide on this dimension is between the Golden Triangle and South and East of England clusters on the one hand, where mean spinout deal sizes significantly exceed the UK average, and the remaining cluster groupings on the other, where these are well below that average. The Northern Irish and the Welsh clusters have the smallest average deal values for first-time equity investments, even when compared to the outlier group, whereas the Midlands and Coastal North of England clusters only narrowly outperform these groups. These findings are not surprising considering the similar gap observed in average deal sizes in general. They confirm that location is a significant factor influencing the size of deals for spinouts at their

Figure 2.9

Average investment value of first announced Technology/IP-related deals involving spinouts and other companies, by cluster grouping

Source: British Business Bank analysis of Beauhurst data (2011-Q2 2023)



first investment, just as it is for businesses with prior experience in raising equity finance.

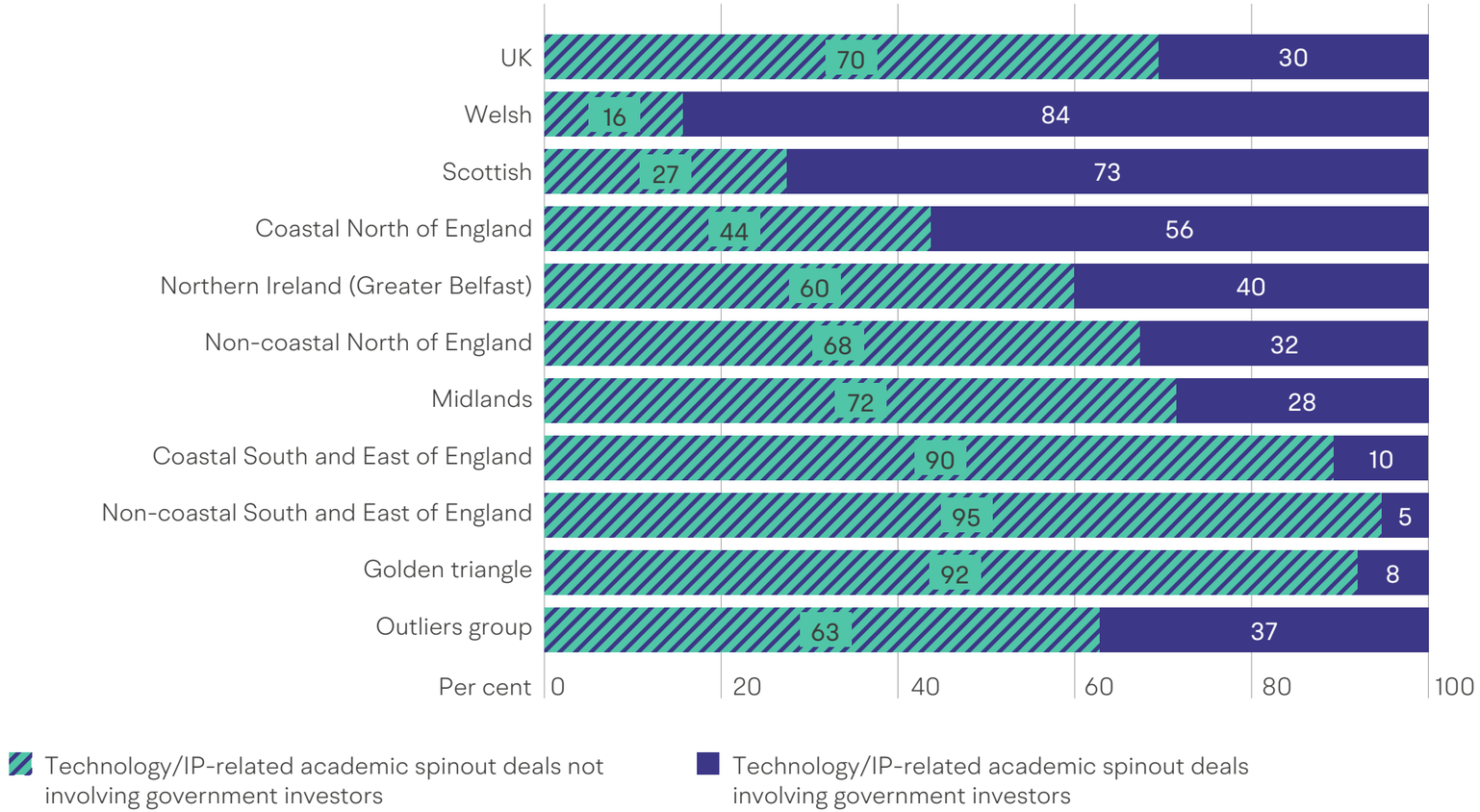
Government investment can be a catalyst for developing thriving academic spinout finance ecosystems in all clusters, but its importance and contribution vary across different parts of the UK. For instance, Figure 2.10 highlights the significant involvement of government investors in the high-performing Scottish clusters. This puts this cluster grouping in stark contrast with the Golden Triangle and the South and East of England-based groups, which show comparable levels of success in spinout investment but have a much lower share of deals involving government investors. A key takeaway from this chart is that government investment is also crucial in supporting academic spinout deal activity across most of the smaller cluster groupings. This is particularly evident in the coastal North of England clusters, where most academic spinout deals (56%) involve government investors – and to a smaller but still significant extent, also in the Northern Ireland and the non-coastal North of England-based clusters.

Compared to those cluster groupings, government investors' involvement in clusters located in the coastal South and East of England is relatively low as a share of

Figure 2.10

Technology/IP-related spinout deals involving government investors, by cluster grouping

Source: British Business Bank analysis of Beauhurst data (2011-Q2 2023)



academic spinout deals. This doesn't necessarily mean that government investment has less of a role in supporting the local academic spinout landscape in those clusters. For example, government investment might enable local companies to complete deals that would not otherwise be possible or would be much smaller in size without it. These contributions are not evident from an examination of the volume of local deals involving government investors.

There is more to be done to promote gender diversity in spinout founder teams

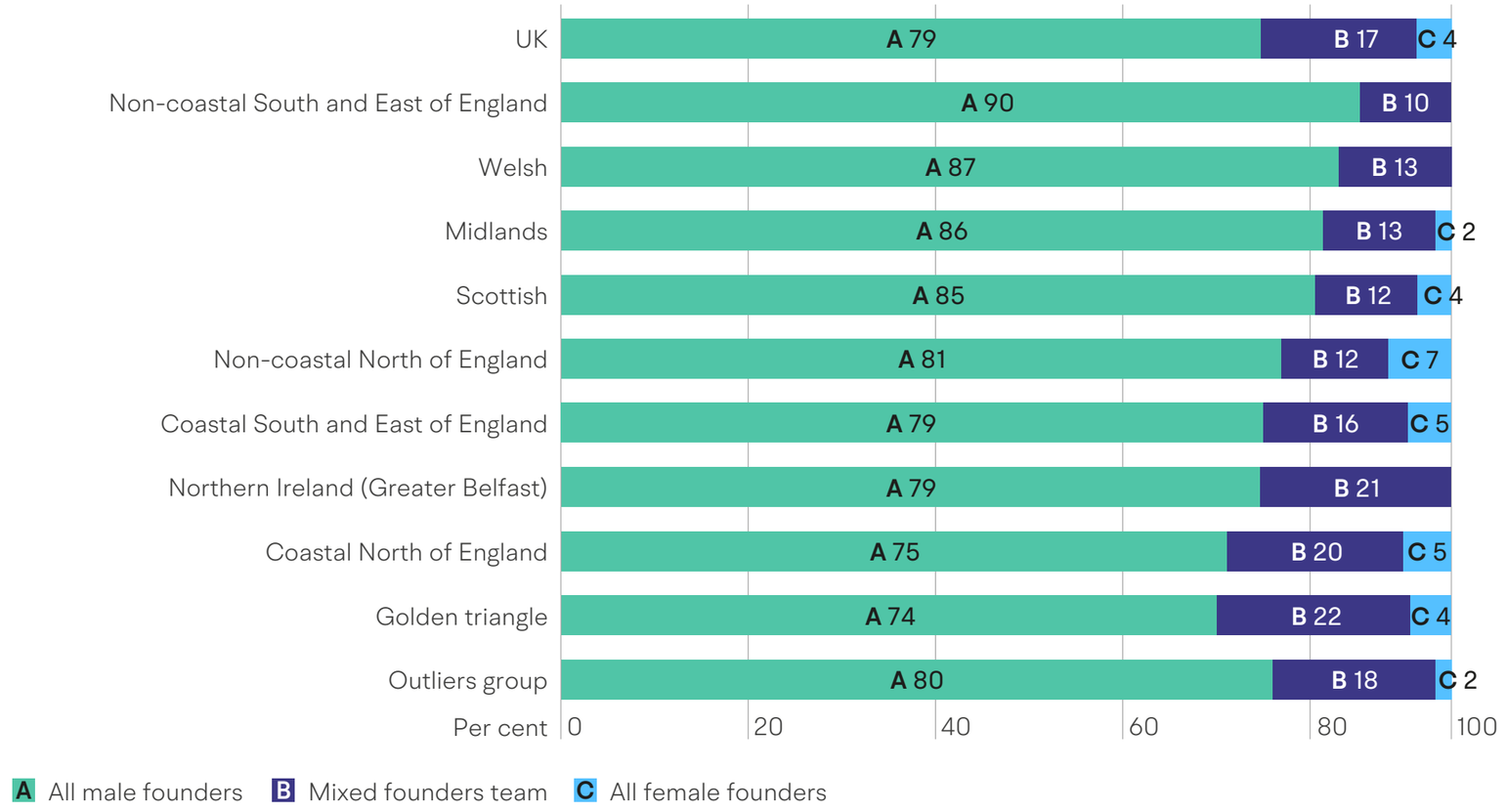
Equality and diversity in equity finance remains a key objective for the Bank, complementing the public and private sector initiatives that are working towards this goal across the investment landscape. Recent Bank-commissioned research reaffirms the importance of supporting all-female founder teams in the venture capital market, highlighting the general lack of improvement in this area since 2011, and identifying best practices that could facilitate a step change.[25]

When it comes to the representation of female founders, the data in Figure 2.11 shows that more needs to be done to achieve progress in the academic spinout space too,

Figure 2.11

Gender diversity of founders of academic spinouts involved in Technology/IP-related equity deals, by cluster grouping

Source: British Business Bank analysis of Beauhurst data (2011-Q2 2023)



particularly in clusters based outside of the Golden Triangle. London, Cambridge, and Oxford have the largest female representation among academic spinout founders (based on their share of all female and mixed gender founding teams). The Scottish, Midlands and non-coastal North of England clusters instead show a statistically significant gap with the Golden Triangle in terms of spinout founder teams' gender diversity. This emphasises how vital it is to incorporate ESG into any efforts to increase equity investment throughout the UK.

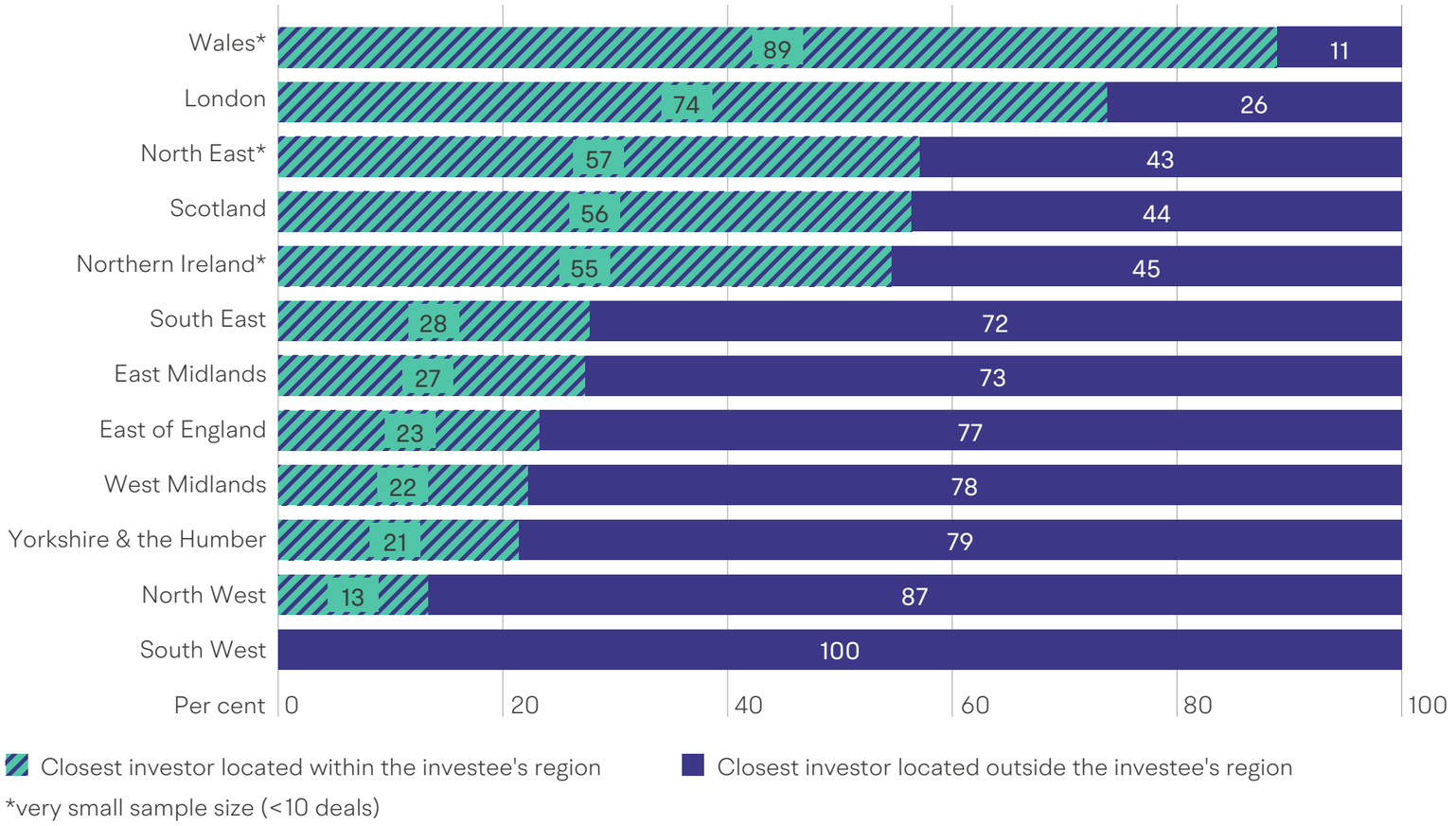
Encouraging interconnectedness among clusters is important for attracting spinout investors and strengthening the local pipeline of spinout deals

Previous Bank publications have highlighted the influence of proximity to investors on companies' likelihood of securing equity deals, and the different extent to which volumes of equity activity in each UK nation and region relies on locally-based investors.[26] These general findings are likely to extend to academic spinouts as well.

Figure 2.12

Locations of academic spinout investor-investee pairings, by UK nation and region (2022)

Source: British Business Bank analysis of Beauhurst data (2022)



Small sample sizes limit our ability to replicate the same analysis for spinout deals at the cluster or cluster grouping level. That said, the regional distribution of investor-investee pairings for spinout deals completed in 2022 (excluding investors based overseas) can provide a broad indication of geographical patterns in this context, bearing in mind that sample sizes are also small at this level for some regions.

This is shown in Figure 2.12, which suggests that London and the devolved nations have the lowest reliance on investors based elsewhere in the UK when it comes to academic spinout deal activity. These are also the only regions where half of more of the pairings involve investors within the same region as the investees. As for the remaining regions, their local academic spinout activity depends more significantly on investors from other parts of the UK. Two main insights can be drawn from this. Firstly, spinouts make a vital contribution to attracting investment to a cluster from other areas, which aligns with existing research demonstrating the importance of universities in this regard. Secondly, to strengthen the pipeline of academic spinout deals in a cluster, it is essential to engage with investors from all parts of the UK, as well as encourage greater interconnectedness across neighbouring clusters.

A similar conclusion can be drawn by looking at the location of spinouts involved in equity deals and that of the universities that generated them. Universities are more inclined to develop and support spinouts that are established locally (i.e., within the same region), as these companies benefit from proximity to their originating institution in many ways – including, for instance, through easier access to subsidised office or lab space, university research networks, equipment and infrastructure.

However, as shown in Figure 2.13, this is not a hard and fast rule. Spinouts can sometimes be located in different regions from the originating institutions, for reasons that may be related to the specific needs of the business, the location of the founding teams, and/or any alliance the institution may have entered for the spinout deal it is backing. This is most often the case for regions that have better integrated finance ecosystems – most notably, those located in London and the South and East of England – and less often for other parts of the UK, like the North East and Northern Ireland. These instances demonstrate that, while it is important for each cluster to nurture the spinout creation potential of its local universities, there are also opportunities for clusters to encourage more investment by forging connections with and leveraging the strengths of universities beyond their immediate vicinity.

The distribution of the Bank's academic spinout investment across the UK reflects the importance and broad geographical spread of these companies

The Bank funded 168 spinout companies up to March 2023, of which 93% had been involved in at least one Technology/IP-related deal.[27] These investments covered 26 (79%) of the 33 clusters we identified above.

Our internal data shows the spinout companies supported by the Bank have a broad geographical spread, which aligns with the more regionally balanced distribution of this type of companies. Crucially, this data also highlights the tangible impact that the Bank's regional programmes are making in terms of helping spinouts access equity finance, no matter where they are based. The finance facilitated by the Bank since its inception has disproportionally benefitted spinout companies in the Midlands and North of England clusters (relative to the UK share of spinout companies these areas represent), which fall within the geographical scope of MEIF I and NPIF I. This substantial impact will be further enhanced with the deployment of the new NRIF.

Figure 2.13

Location of deals* involving academic spinouts and their originating institutions, by UK region or nation

Source: British Business Bank analysis of Beauhurst data (2011-Q2 2023)

Nation/region of spinout deal	London	South East	East of England	North West	Yorkshire and The Humber	South West	Wales	North East	West Midlands	East Midlands	Scotland	Northern Ireland	% of deals involving spinouts from institutions located in other regions
Yorkshire and The Humber	3	3	10	6	66	0	0	0	8	0	3	0	42%
North East	2	0	6	0	0	5	0	52	0	7	0	0	34%
Scotland	12	0	1	0	1	0	2	0	0	0	417	0	33%
East of England	42	2	249	0	0	11	0	1	9	9	0	0	32%
Wales	3	3	0	7	11	3	60	0	0	0	1	0	28%
London	192	30	38	14	2	3	0	0	8	4	1	0	27%
Northern Ireland	0	0	0	0	0	0	0	0	0	0	0	57	23%
East Midlands	1	0	6	1	0	0	0	0	4	50	3	0	23%
North West	20	2	0	73	19	1	0	0	8	0	2	1	19%
South East	39	345	5	0	0	26	0	2	2	3	6	0	18%
South West	5	7	7	1	0	87	0	0	12	0	0	0	4%
West Midlands	1	12	0	0	0	0	0	0	83	5	0	0	0%

*Deals associated with more than one institution have been matched to the nearest one.

Chapter 3

Challenges in smaller business access to external finance in coastal towns

- Smaller businesses in coastal towns face multidimensional challenges to their resilience and growth
- Smaller businesses' attitudes to external finance in coastal towns reflect local economic conditions and business ambitions
- Coastal towns are underrepresented in equity investment relative to their population size, but have high deal concentration in opportunity areas like net zero
- The British Business Bank facilitated significant investment in coastal towns, particularly through the Regional Funds and the Regional Angels Programme

Last year's Nations and Regions tracker showed how smaller businesses in deprived areas face particularly significant challenges in accessing external finance. However, just like we cannot better understand how to support access to finance in innovation-led clusters unless we explore those clusters' characteristics, we cannot fully grasp the impact of complex challenges like deprivation on local finance access without investigating how different areas became affected, and the specific challenges and inequalities they are facing, especially when these do not follow a "north-south divide" narrative.

To this end, in this year's edition we focus on coastal towns across the UK. Previous research shows coastal towns are more likely to be deprived than non-coastal towns.[28] While not all these towns are deprived and most have shown remarkable resilience to economic changes, they have a shared heritage and economic history that contributed significantly to entrenching high deprivation levels across many of them. Moreover, these towns continue to have many challenges in common, dictated (if not by deprivation) by geography and a lack of long-term investment, which still prevent them from achieving their full economic potential.

In this chapter we explore the wider evidence on SME access to finance in UK coastal towns using data that has been specifically matched to our definition. Our approach to this data matching – including the definition of 'coastal towns' we use in this analysis – are further discussed in Box 2.

Box 2: Defining and matching coastal towns to existing datasets

Due to different statistical conventions across the UK nations, we use three distinct approaches to define coastal towns in each, with the aim of ensuring as much consistency as possible.

For England and Wales, we use the definition developed by the Office for National Statistics, which describes them as coastal urban areas with a population between 5,000 and 225,000 in 2011 delimited by built-up area or built-up area subdivision boundaries.[29] This definition generates a total of 169 coastal towns in England, encompassing both 'seaside towns' (those with a tourist beach and associated visitor attractions) and 'other coastal towns' (which include those focused on other activities such as being a port town or industrial town.[30]

Coastal towns in Scotland were identified using the National Records of Scotland's 2020 Settlement classification.[31] This describes settlements as s a contiguous group of postcode areas with a high population density and whose combined population rounds to 500 people or more; from this, we only selected settlements with coastal boundaries. To align with the definition used for England, also we excluded coastal settlements with a population above 225,000.

Due to the lack of a comparable definition to England/ Wales's 'towns' and Scotland's settlement, in Northern Ireland we define coastal towns using NISRA's 2021 Super Data Zones (SDZ) with coastal boundaries.[32]

Since this analysis focuses on towns, it does not include some of the largest coastal cities in England such as Brighton and Hove, Southampton, Portsmouth, Plymouth; Liverpool. It also excludes major coastal cities in the devolved nations like the three capitals and Glasgow.

Importantly, the criteria we use to define coastal towns result in a very diverse range of locations falling under this category. These locations all have their own distinctive economic features ranging from mostly residential areas to regional employment hubs, and from affluent to highly deprived localities. Therefore, the overall picture presented by our survey-based analysis is likely to mask significant variations in performance across individual towns. Since small sample sizes limit our ability to explore intra-group differences, we use case studies to illustrate the variety of local economies and business ecosystems that can be found across these towns.

Smaller businesses in coastal towns face multidimensional challenges to their resilience and growth

Historically, the prosperity of towns in coastal areas of the UK is deeply rooted in seaside tourism or in activities linked to manufacturing, fishing and maritime trade. Despite these differences, many coastal towns across England grapple with similar and multidimensional challenges. These include an aging and declining population, a shortage of affordable housing, decaying infrastructure and large inequalities in health, employment, and educational attainment, which constrain local business creation and employers' ability to find skilled workers locally. Poor transport and digital connectivity and heavy reliance on declining and low-productivity industries also left many of these towns struggling to attract investment and create new jobs, particularly in highly-qualified, high-paying occupations.[33]

Figure 3.1 shows the significant productivity gap dividing coastal towns from other towns and cities in the UK; between 2009 and 2020, this gap has grown even larger due slower productivity growth in coastal towns (22%) relative to the comparator group (24%). Inequalities

further widened during the Covid-19 crisis, which disproportionately affected coastal economies and communities.[34]

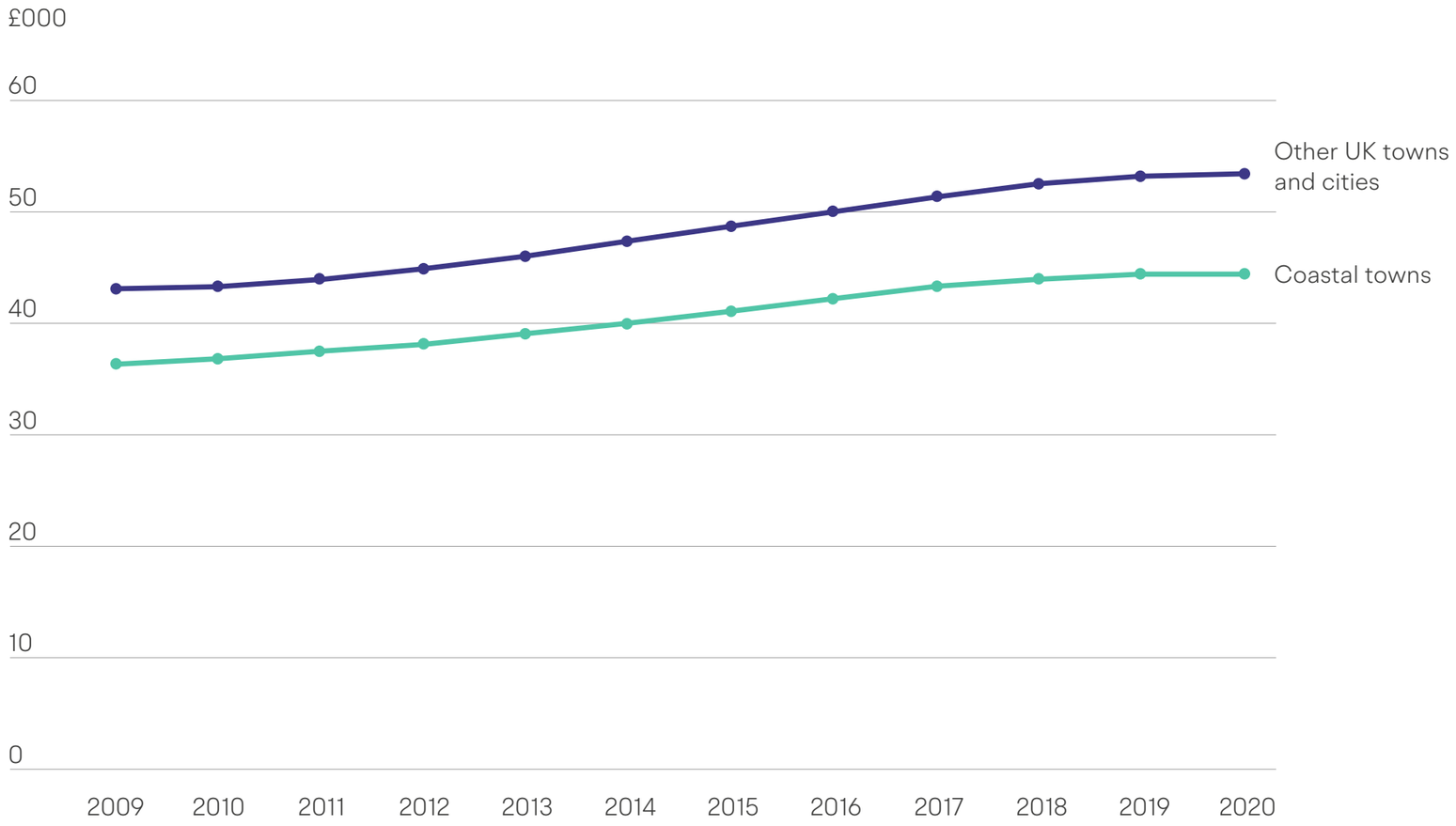
On top of these socio-economic challenges, coastal towns must contend with pressing environmental challenges too, such as those deriving from the risks of flooding, coastal erosion, and declining marine biodiversity. While environmental risks are a threat to the future of all communities across the UK, the kinds of risks confronting coastal towns often have a more visible and immediate impact on the lives of businesses and residents alike.

All these structural challenges facing coastal towns may well have an impact on local businesses' access and attitudes to external finance; at the same time, these challenges can be turned into opportunities if managed effectively. For instance, some of the equity investment analysis we present later in this chapter suggests many local businesses are already trying to capitalise on the opportunities emerging from the transition to net zero. However, repositioning coastal towns' economies towards these high-potential sectors requires effective business support on many aspects, including external finance.

Figure 3.1

Average smoothed GVA per job filled, £m – coastal towns v. other UK towns (2009-2020)

Source: ONS Experimental GVA and productivity estimates for travel to work areas, towns and cities and other geographies, 2023



Case Study
Ayr (Scotland)

Ayr is the second largest town in Ayrshire, located on the southwest coast of Scotland on the mouth of the river Ayr. The corresponding settlement has an estimated population of 62,000.[35]

Ayr developed as the central retail hub in the south-west of Scotland since the late 19th century. The opening of national retailer stores such as Marks and Spencer's and Ayr's first shopping centre, the Kyle Centre, encouraged an expansion of the local economy in the 70s and 80s. The area is also known as a seaside resort, with popular holiday parks like Craig Tara and Haven as well as close proximity to golf courses and the Glasgow Prestwick Airport.

Like many other tourism-dependent economies, Ayr was deeply affected by the pandemic. However, even before 2020, the local economy had suffered prolonged stagnation. By that time, Ayr's GVA per head of population was already much lower (£16k) than the UK average (£28k), and overall GVA growth in the town had stalled.[36] This can be attributed in part to a higher concentration of low productivity sectors (such as hospitality, food, and accommodation as well as wholesale, retail and residential care). Wider data from the South Ayrshire council area flags additional

challenges, including low business and labour market dynamism. South Ayrshire's business birth rate in 2021 has remained virtually unchanged from 2004 and the proportion of residents in employment (65%) is much lower than the Scotland and UK averages (75%).[37] Moreover, inadequate transport links and connectivity are key drivers for working age-residents to move elsewhere in search of better education and employment opportunities, potentially exacerbating the expected decline in Ayr's resident population (projected at -2% between 2018 and 2028).[38]

Despite these difficulties, there are efforts to revitalise the economy by focussing on high-value sectors. For instance, plans are underway to establish an NHS Ayrshire & Arran National Treatment Centre in 2025, specialising in orthopaedics.[39]

Ayr has seen only two equity deals between 2011 and Q2 2023, with one worth £500k and another deal of undisclosed value. However, it has a more considerable volume of lending to SMEs. This was worth £55.5 million on average across the four quarters of 2022, marking a 4% increase from 2019. On a per million pound of GVA basis,[40] this means Ayr's value of lending to SMEs (£56k) aligned with the UK average (£58k) in 2022.

Case Study
Barrow-in-Furness (North West)

Barrow-in-Furness is a post-industrial port town on the coast of Cumbria , and the largest urban area within the county, with a resident population of around 55,000.[41] The town has a rich history rooted in iron and steel production and a thriving shipbuilding industry since the 19th century. The local shipyard, originally set up by the Barrow Shipbuilding Company in the 1870s,[42] is still active and is now owned by BAE Systems, currently the town's largest employer (employing around 9,500 people in 2022).[43]

Barrow's population is declining and among the most deprived in the UK. Census 2021 data shows the Barrow-in-Furness Local Authority district saw a 2% fall in residents compared to 2011 (among the largest drops recorded) whereas England's overall population grew by nearly 7% over the same period.[44] Even though a higher share of residents are economically active (42%) than in England overall (39%),[45] in 2019 the local authority ranked 58th out of 316 based on income deprivation (with the first being the most deprived).[46]

Unlike many other coastal towns, Barrow has productivity levels (in terms of GVA per job filled) comparable to the average across UK towns and cities.[47] Despite this, the lack of diversification of the local economy remains an issue and is also one of the factors behind its declining population, combined with the town's remote location and poor transport connectivity. Manufacturing still accounts for 18% of jobs in the town, according to ONS figures, much higher than the 8% national average.[48]

While Barrow's shipyard is still thriving and helping attract investment and jobs, after securing a key role in nuclear-powered submarine build programmes such as Dreadnought and AUKUS, the town is trying to reinvigorate and diversify the economy to reduce reliance on a single employer and attract and retain highly-skilled young professionals.

The initiatives put in place to achieve this include creating a Barrow Learning Quarter that will house a university campus and a technical skills hub, improvements to the local walking and cycling infrastructure, and the transformation of a stretch of its dockside into a high-quality residential housing community (the Marina Village).[49]

Barrow has a relatively stagnant finance environment. The town had no equity investment between 2011 and Q2 2023 and the value of lending to local SMEs reached £30.8m on average in 2022, a level significantly below that seen the year before the pandemic (-20%). This also corresponds to a much lower value of SME lending per million pound of GVA (£12k) relative to the UK average (£58k).

Case Study
Clacton-on-Sea (East of England)

Located in the Tendring district of Essex , Clacton-on-Sea has a population of around 53,000.[50] Once a bustling seaside resort that thrived on high levels of domestic tourism, the town experienced a decline in visitor flows since the 70s and 80s. Even so Clacton remains a popular destination for domestic day-time visitors and businesses connected to port logistics, bolstered by its annual Air Show, and the establishment of a freeport (known as Freeport East) in nearby Harwich in 2021.

Tendring Council aims to make Clacton a "Strong Service Centre," blending a strong visitor economy with more high-value service jobs in quality office space.[51] Nevertheless the town must still contend with the familiar signs of decline seen across many other UK coastal towns.

Clacton's productivity (as measured by GVA per job filled) has been on a downward trajectory since 2017, placing the town within the 15 lowest-performing on this dimension.[52] Most jobs in Tendring's economy are generated by retail, health and care, tourism, and education, which contributes to low productivity levels in the area. Business growth is slow, with only a 16% increase in the number of firms in 2022 relative to 2020, in contrast with the UK average of 32%.[53] Clacton was severely hit by the Covid-19 crisis too, resulting in a 27% reduction in local spending during the pandemic.[54]

Clacton's socio-demographic trends present additional challenges for the local economy. Population growth was a modest 6% between 2009 and 2018,[55] while employment declined by 4% over the same period. Beyond the tourist areas, Clacton harbours pockets of high deprivation.[56] The town has an aging population with high rates of disability and long-term sickness, while its employment rate (68%) is significantly lower than the UK average (75%).[57] Even though Clacton has regular transport to London and Colchester from its central train station, limited connectivity within the town itself and with neighbouring areas hinders the local private sector's growth.[58] Digital infrastructure is also lacking with only 7% of Clacton covered by ultrafast broadband, compared to 58% of the UK.[59]

Clacton has a rather static equity finance market, with a more considerable volume of activity in the SME lending market. Between 2011 and Q2 2023, Clacton recorded only one equity deal with an investment value of £0.9m, while the value of lending to local SMEs amounted to £39m on average in 2022, a 41% increase from 2019. On a per million pound of GVA basis, the town had a slightly larger value of SME lending in 2022 (£61k) than the UK average (£58k).

Case Study
Deal (South East)

Deal is a port town located north of Dover on the coast of Kent. It is home to around 29,000 residents. In the 19th century, it became a key port for international shipping routes, serving as a hub for resupplying ships and for smuggling activities. This helped establish a flourishing local industry focused on shipping support services like re-supply, rescue and salvage, mostly provided by Deal's legendary "boatmen".[60] As the introduction of steam power reduced its maritime trade flows, Deal re-positioned itself to focus more on tourism.

Even today, Deal consistently ranks among the top seaside resorts and best places to live in England, benefitting from a more dynamic economy relative to many other coastal towns across the UK. Nevertheless, the town has some pockets of significant inequality as well as socio-demographic challenges that hinder its economic potential.

Between 2009 and 2018, Deal experienced a population growth of only 5%, mainly concentrated in the 65 and over age group; in contrast, employment declined by 4% over the same period. Only half of Deal's population is economically active and in employment which compares unfavourably with the England average (57%), and 55% of households experience some type of deprivation.[61] Deal also lags behind the UK towns and cities average in terms of productivity levels (measured as GVA per job filled); this gap was relatively small in 2009 but widened over time. Deal's excellent transport links with the capital make it a popular relocation spot for London professionals, contributing to the area's affluence but also putting pressure on the local supply of affordable housing.

Tourism remains Deal's key strategic asset for future growth, to be boosted by investing in its town centre and the further development of visitor attractions like the pier and the Timeball Tower. There is a recognised need to further diversify the visitor economy to increase the local economy's resilience.

The SME finance environment in Deal shows limited activity on the equity front, but a considerable volume of SME lending. Deal saw three equity deals take place between 2011 and Q2 2023, worth nearly £1.9m altogether. The value of bank lending to local SMEs amounted to £30.2m on average in 2022, 41% above its 2019 value. This is equivalent to £122k of SME lending per million pound of GVA in 2022, showing Deal has a very large market relative to its size even when compared with the UK average (£58k).

Case Study
Scarborough (Yorkshire and The Humber)

Located on the coast of North Yorkshire, Scarborough is home to around 109,000 residents.[62] Once a thriving maritime centre and seaside resort in the 18th century, Scarborough's popularity started to wane after the 1950s. This left the town struggling to attract businesses and investment due to its remote location and negative perceptions.[63]

Scarborough experienced no population growth and 4% decline in employment between 2009 and 2018.[64] The proportion of residents aged over 65 increased from 23% in 2011 to 27% in 2021,[65] surpassing the UK average (19%). Conversely, the local business count only grew by 11% , significantly lower than the growth rates seen in Yorkshire (30%) and in the UK overall (32%) . A 2020 report[66] found a 54% reduction in local spending during the pandemic which was the 8th largest across towns in the UK. The town also has one of the lowest average pay levels in the country[67] and has consistently lagged behind the UK towns and cities average on productivity for over a decade, with this productivity gap widening between 2009 and 2020.[68] In 2019, Scarborough ranked 80th out of 316 local authorities in England based on its share of population experiencing income deprivation (14.5%).[69]

Scarborough has been working towards enhancing its appeal to investors and entrepreneurs, leading to its securing of the "most enterprising town" title in Britain in 2008 and then in Europe in 2009. The local economy has benefitted from the opportunities created by the construction of the Dogger Bank offshore wind farm, located in the open sea north east of Scarborough. The town also has an ambition to create strong outdoor sports industry[70] and secured investment from the Coastal communities Fund to refurbish the Scarborough Market Hall, supporting the growth of the local retail and leisure sectors.

Scarborough shows steady local SME demand and supply for both equity and debt. There were nine equity deals in the town between 2011 and Q2 2023, reaching a combined value of over £33 million. Local SMEs' outstanding borrowing was worth £92 million on average throughout 2022, corresponding to 13% less than the year prior to the pandemic (2019) but still exceeding the UK average in terms of SME lending per million pound of GVA; this was £76k in Scarborough, compared to £58k in the UK in 2022.

Case Study
Weymouth (South West)

Weymouth is a seaside town with a population of 55,300,[71] located on the coast of Dorset. Known as a popular seaside resort since the Georgian era, for decades Weymouth was also a strategically important port for military, commercial and passenger transport purposes. Tourism flows began to fall from the 1970s with the advent of cheaper air travel and overseas holiday packages. A few decades after, the port also began declining with the closure of the local Portland naval base and two Defence Research agency sites in 1995, followed by the closure of the Mere air force base two years later. These events led to a substantial contraction of the local economy, where 41% of local jobs and much of the turnover of local engineering -focused companies depended on the business generated by these military and defence sites.[72]

The town has reinvented itself as a seaside leisure destination, but still experiences challenges in revitalising the local economy. Weymouth's productivity levels (based on GVA per job filled) were 33% lower than the average for all UK towns and cities in 2020; this gap has remained constant since 2009.[73] Its isolation and poor transport connectivity are a barrier to business growth, leading retailer New Look to relocate its Weymouth depot to another town with easier access to the motorway in 2005. Its challenges further include demographic decline; the town experienced minimal population growth (2%) between 2009 and 2018,[74] along with a 18% decline in employment over the same period, although the local employment rate remains slightly higher than the UK average.[75]

Weymouth has had limited local SME equity activity in recent years, with no Technology/IP-related equity deals completed between 2011 and Q2 2023. At £74.4 million, the value of lending to local SMEs was slightly above (+4%) its 2019 level, but considerably larger than the UK average when measured on a per million pound of GVA basis (£102k v. £58k in the UK).

Case Study
Rhyl & Prestatyn (Wales)

Rhyl is the principal conurbation in Denbighshire with a population of around 26,500. Situated just north of Rhyl is the smaller Denbighshire town of Prestatyn, counting around 16,800 residents.[76]

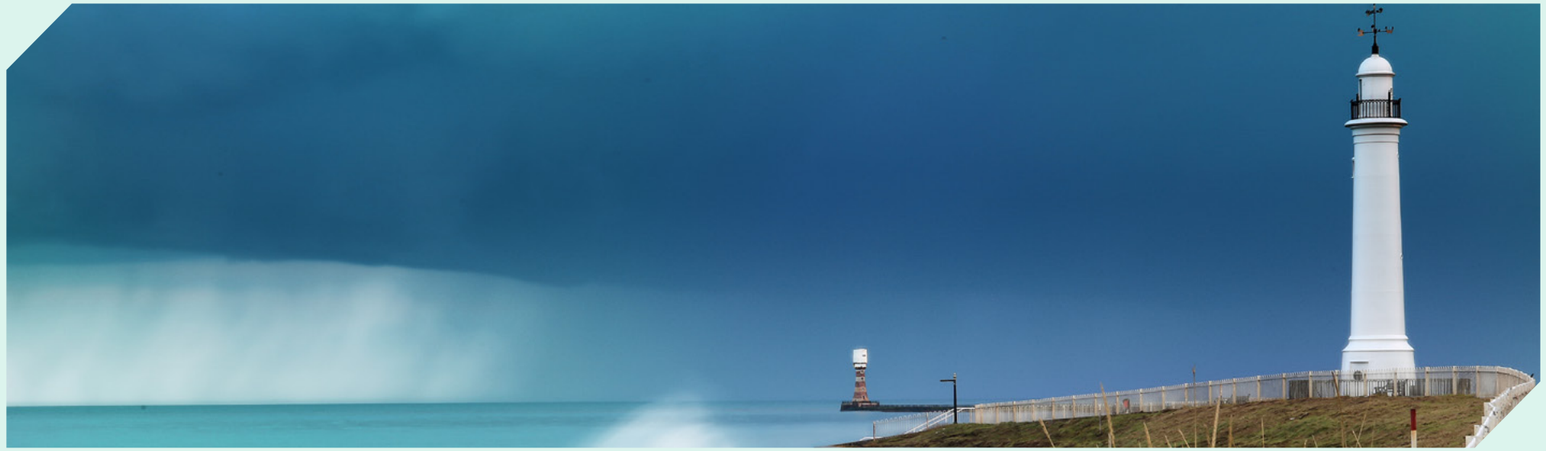
Rhyl experienced steady growth in the 19th century, particularly after the opening of the Stephenson's railway from Chester to Holyhead in 1848.[77] Much of its sea front activities are still focussed on the tourist trade, but the town has diversified its economy with increasing contributions from commerce and industry. Tourism has a strategic significance in Prestatyn's economy too, bringing revenue and jobs to the area through retail trade, accommodation and food spend.[78] Its long-standing tourism assets include the beaches, golf courses, walking and cycling opportunities, and accommodation and holiday parks at Presthaven Sands and Pontins.

Economic activity and employment rates in the wider Denbighshire County are comparable to the Wales average, but lower than the UK average; however, the district's productivity levels are 25% lower than the UK's in terms of GVA per job filled. Additionally, Rhyl has pockets of significant economic inactivity and deprivation, with multiple neighbourhoods ranking among the 10% most deprived in Wales.[79] These areas generally have elevated levels of unemployment and economic inactivity, high proportions of low or no qualifications, low participation in education or training and limited connectivity with the largest local employment hotspots.

Despite these challenges, a range of opportunities were identified to strengthen the local economies of Rhyl and Prestatyn. The two towns' leisure and tourism facilities have benefitted from recent investments, including a new water park in Rhyl (SC2) and the redevelopment of the Parc Prestatyn retail park and the NOVA leisure centre. Rhyl and Prestatyn also saw expanded employment opportunities with the opening of the North Hoyle and Rhyl Flats offshore wind farms, and are well placed to further develop their marine economy and leverage natural assets and infrastructure to attract visitors interested in sustainable tourism, leisure and outdoor sports (such as walking and cycling).

The local SME finance environment shows limited dynamism. Neither town saw any equity activity between 2011 and Q2 2023 and the value of lending to local SMEs was only £16.9 million on average in 2022, slightly below (-7%) the levels seen the year before the pandemic (2019). This equates to around £38k of SME lending per million pound of GVA, much lower than the average seen at the UK level (£58k).

Case Study
Sunderland (North East)



Sunderland is a port city and the main settlement of the City of Sunderland, situated 12 miles north-east of Durham and 10 miles south-east of Newcastle upon Tyne. Its population is estimated at 174,800.[80]

By the mid-18th century, Sunderland was one of the largest shipbuilding hubs in the UK, and enjoyed fast growth fuelled by coal trade. Following the decline of the city's traditional industries in the late 20th century, the area grew into a commercial centre for the automotive industry, science and technology and the service sector.[81]

Sunderland's economy demonstrates strengths in certain areas, thanks to the contribution of its high value-added sectors, while it lags behind in others. Sunderland's productivity levels (proxied by GVA per job filled) exceeded the average for UK towns and cities until 2015, but have fallen behind since then.[82] Population growth was stagnant over the last decade or so. The number of residents in employment also fell by 7% between 2009 and 2018[83] and the employment rate remains below the UK average.[84] In the 2021 Census, the wider Sunderland district had 59% of homes classed as deprived by at least one measure the highest rate among all districts in the North East,[85] and ranked 23rd out of 316 local authorities in England for its share of the population experiencing income deprivation in 2019.[86]

On top of its socio-economic challenges, the area is highly exposed to environmental risks such as costal erosion. This threat has already impacted the local housing and road infrastructure leading to the repositioning of the coast road between South Shields and Whitburn.

Sunderland has a relatively large finance market, due to its size. Forty-six equity deals were completed in the town between 2011 and Q2 2023, for a combined investment value of £51.8 million. In 2022, the value of lending to SMEs totalled £100 million on average, marking a 26% increase relative to 2019. However, when measured in proportion to the size of the local economy, the value of SME lending in Sunderland in 2022 (£29k per million pound of GVA) was significantly below the UK average (£58k).

Case Study
Skegness (East Midlands)

Skegness has a resident population of 25,600[87] and is the principal tourist destination in Lincolnshire, with tourism-related industries supporting much of the area's GDP and jobs since the late 19th century.

The town is situated in East Lindsey, one of Lincolnshire's most deprived areas, ranking 56th in England overall in terms of income deprivation[88] and with productivity levels (measured as GVA per job filled) falling 19% short of the average for UK towns in 2020 . Skegness also suffers the traditional problems of a coastal resort with a 180-degree hinterland including limited access to markets, few professional jobs, low quality urban environment and lifestyle. Its local population grew by only 2%, whereas employment grew by 5% between 2009 and 2018.[89] The town benefits from a railway station but even so, it has generally poor public transport links with a poor road infrastructure.

Skegness still relies heavily on tourism, remaining a very popular holiday and visitor destination attracting mainly visitors from the East Midlands and Yorkshire and

Humberside areas of the UK (particularly families). The town is however working towards diversifying its offer to attract a wider range of visitors[90] and in 2021, it secured £24.5 million in Town Deal funding from the government to deliver some of the investments needed.[91]

Skegness has a rather small equity finance ecosystem, with no Technology/IP-related equity deals between 2011 and Q2 2023. The average value of lending to local SMEs fell considerably (-22%) between 2019 and 2022, from £36 to £28 million; even so, the town still has a rather large lending market compared to its size, with an average value of £65k per million pound of GVA (slightly higher than the UK average of £58k).

Case Study
Derry-Londonderry (Northern Ireland)

Derry-Londonderry is situated on Northern Ireland's north west coast and is its largest city (with 85,300 residents)[92] outside Belfast.

Its economy was originally built on the shirt making industry, which thrived in the early 20th century with more than 40 factories employing thousands of workers. However, the city's dependence on this industry also left it vulnerable to the decline of Northern Ireland's textile production in the 1950s and the 60s.

Derry-Londonderry continues to struggle with a productivity gap (based on GVA per job filled) compared to the rest of the UK, which is larger than Belfast's. The wider Derry and Strabane council area where it is located has lower employment, median earnings and GVA and disposable income per head that the Northern Ireland average.[93] Another area of historic neglect has been poor transport connections, especially with Belfast. These factors negatively affected the availability of high-skilled, well-paid jobs in Derry-Londonderry, as well as the city's overall economic performance.

In more recent times, Derry-Londonderry had some success in preserving local jobs that were at risk, for example by securing inward investment in a new gas-fired power station to replace the old oil-powered one (Coolkeeragh). The city also had some success in securing inward investment into ICT (particularly hardware) and service support jobs such as call centres. However, these local industries have faced uncertainties due to the changing economic context and company restructuring.

Derry-Londonderry has considerable local activity in the lending market and, to a smaller extent, also in the equity market. There were 5 Technology/IP-related deals in the city between 2011 and the first half of 2023, of which only two had a known investment value totalling £1.3m. The value of lending to local SMEs was still significant in 2022 (£171.4m), albeit 20% lower than in 2019, and much larger than the UK average when measured as a proportion of local economic activity (£79k per million pound of GVA, compared to £58k at the UK level).

Smaller businesses' attitudes to external finance in coastal towns reflect local economic conditions and business ambitions

The SME Finance Monitor data highlights coastal towns' less dynamic finance ecosystem, with SMEs generally showing lower appetite for using external finance than their counterparts elsewhere in the UK.

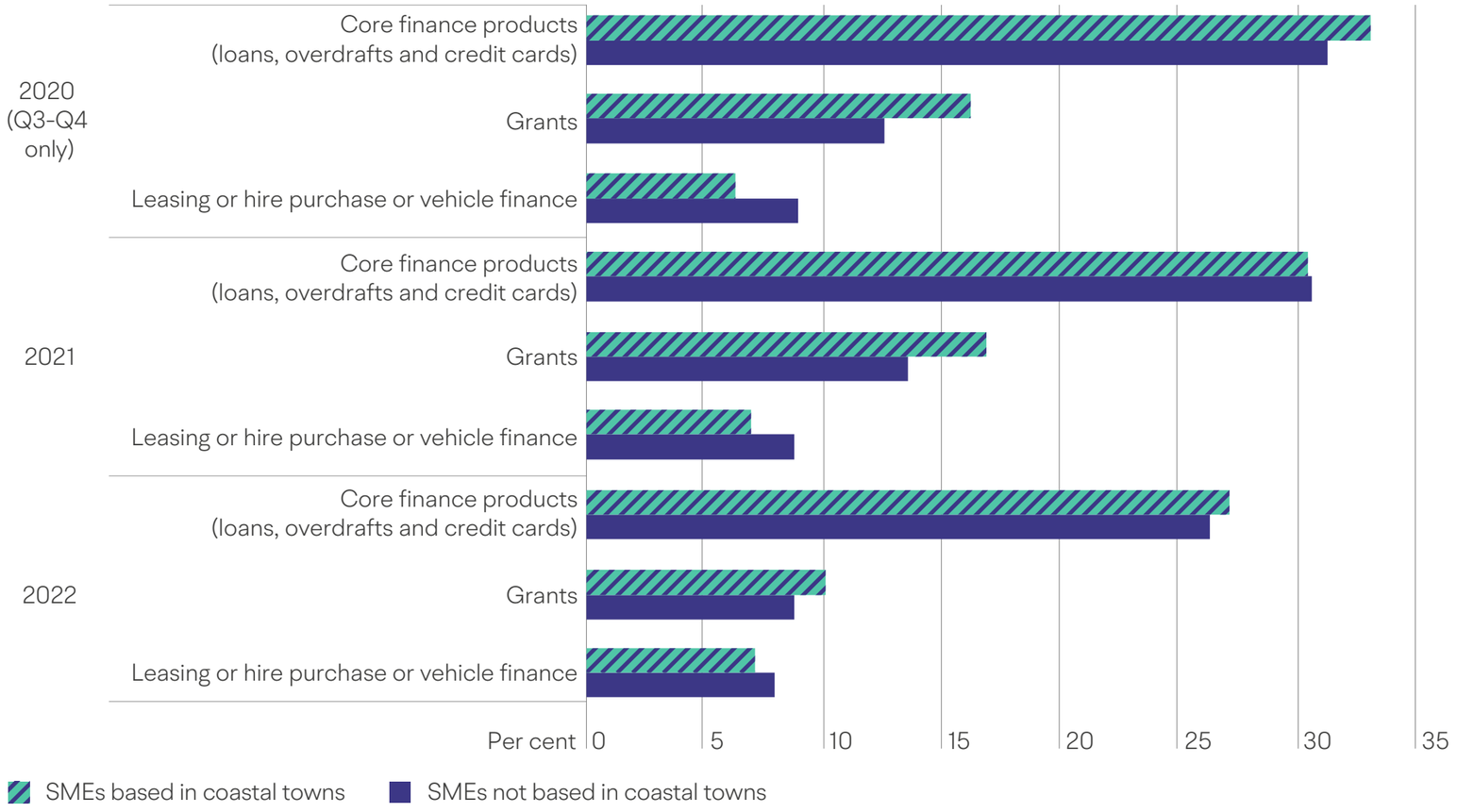
The proportion of coastal town-based SMEs that reported currently using external finance remained stable at 43% during 2020 and 2021 but dropped to 35% in 2022. This follows closely the UK-level trend. Usage of core debt products (loans, overdrafts, and credit cards) was similar to the rest of the UK, but coastal SMEs were more likely to be using grants and less likely to use leasing/hire purchase/vehicle finance (Figure 3.2).

Greater usage of grants somewhat reflects coastal town-based SMEs' more cautious attitude to external finance relative to the rest of the UK. PNBs now make up half of these SMEs, a slightly higher proportion that in other parts of the country.

Figure 3.2

Current use of 'core' and other forms of finance, SMEs in coastal towns vs. SMEs not based in coastal towns

Source: UK Finance/BVA BDRC SME FM, Q3 2020-Q4 2022 (2020 n=1,184; 2021 and 2022 n=2,368)



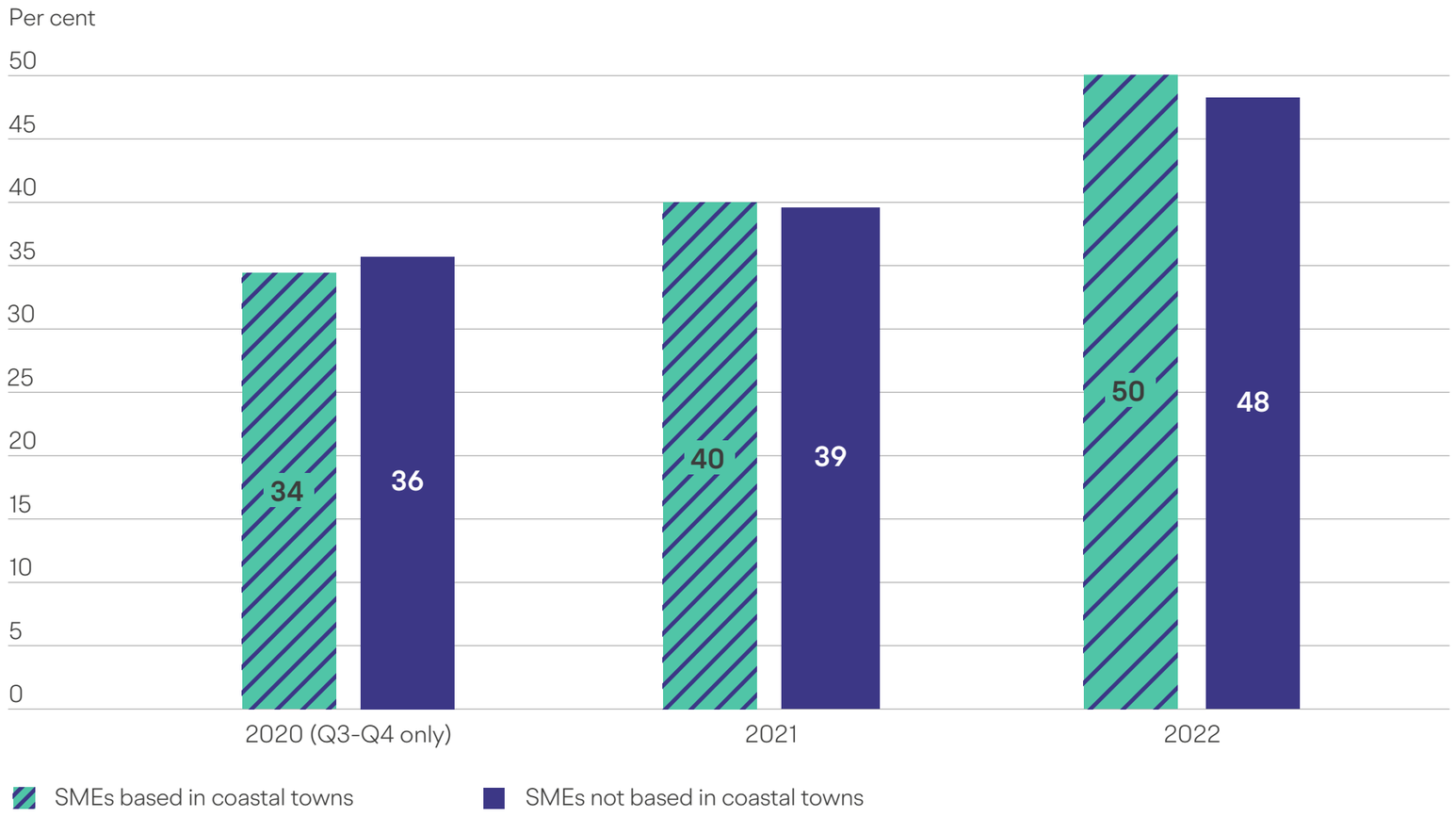
This wasn't always the case. Figure 3.3 shows that SMEs based in coastal towns had a slightly lower proportion of PNBs relative to the rest of the UK in the second half of 2020, but the situation reversed in 2022 due to coastal towns experiencing a more significant rise.

Coastal town-based SMEs' lower inclination to consider using external finance does not seem to be motivated by a fear of being rejected. Evidence from the SME Finance Monitor shows that 57% would feel confident in applying for finance in 2022, a much higher proportion that the 51% seen elsewhere in the UK. Meanwhile, DBT's Longitudinal Small Business Survey (LSBS) data shows that a higher share of coastal SMEs that had applied for finance between 2011 and 2021 had been rejected at least once (7% v. 5%).[94] The most common reasons for being rejected among coastal businesses were that they did not meet minimum criteria or were not considered commercially viable insufficient security; the credit crunch/economic conditions. This is similar to how UK businesses generally rank reasons for rejection, but a much greater share of coastal town-based businesses reported failure to meet minimum criteria and insufficient security as key motivations in 2021.

Figure 3.3

Share of permanent non-borrowers, SMEs in coastal towns vs. SMEs not based in coastal towns

Source: UK Finance/BVA BDRC SME FM, Q3 2020-Q4 2022 (2020 n=1,184; 2021 and 2022 n=2,368)



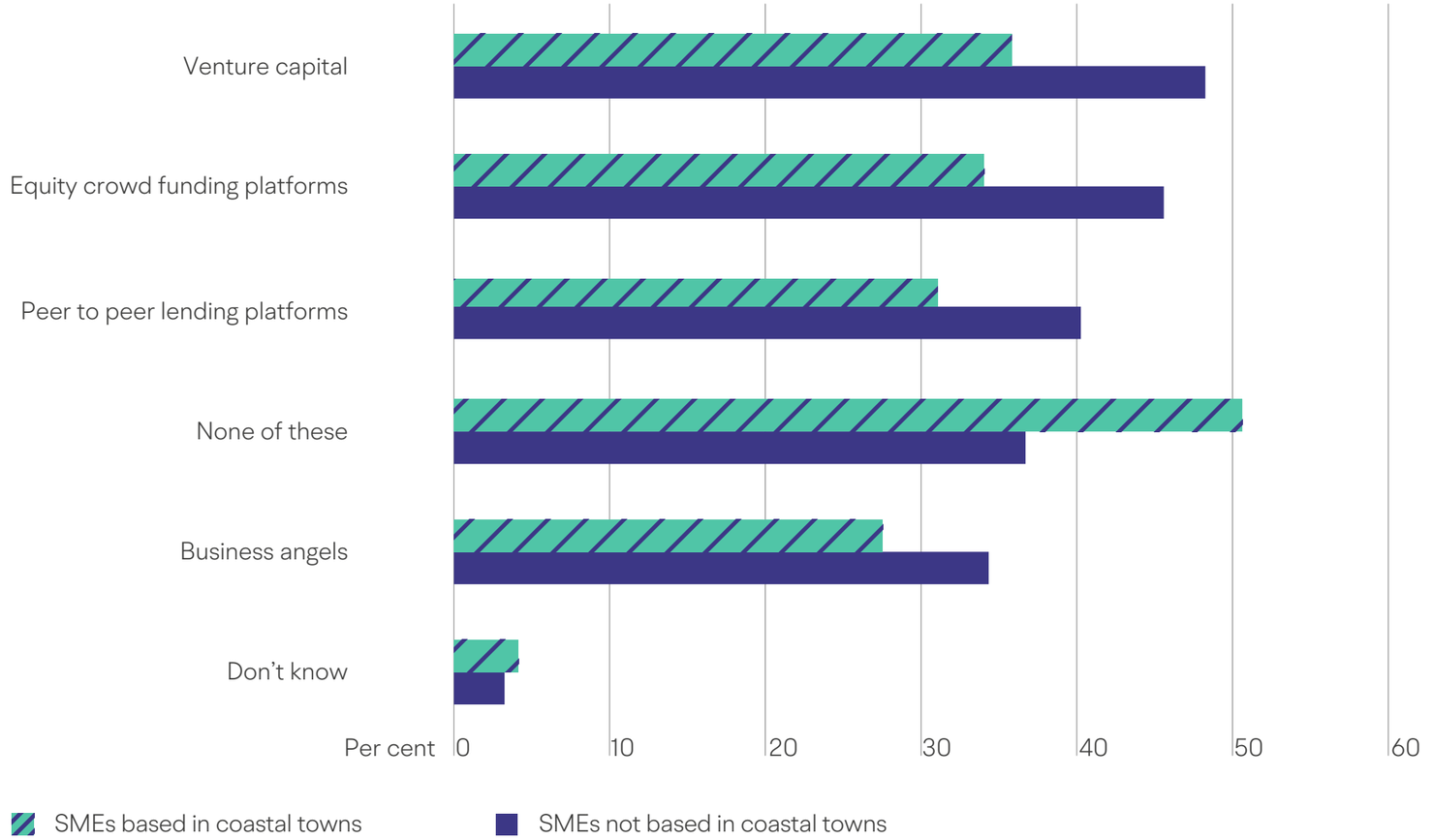
According to the SME Finance Monitor, the main declared reason behind coastal SMEs' lower propensity to access finance is that they don't need to (86% in 2022). This can have many interpretations. One is that these businesses may find it easier to secure funds in other ways, for example by tapping on internal reserves generated by business profits. The SME Finance Monitor data however indicates that the proportion of SMEs reporting they had made a profit was only slightly higher in coastal towns in 2022, while it was just below that seen elsewhere in the UK between Q3-Q4 2020 and 2021. Moreover, none of these respondents reported a preference for (or ability to) raise funds from other sources as a reason for not wanting to apply for external finance, when prompted.

Another potential explanation is that SMEs in coastal towns may be less aware of how different forms of external finance can help their business succeed. This finds some support in the data, as SMEs in coastal towns show systematically lower awareness of non-traditional finance forms (Figure 3.4). The LSBS also highlights that coastal SMEs tend to show higher exclusion from business support, which may exacerbate the generalised lack of awareness of different finance options. Only 13% per cent of businesses in coastal

Figure 3.4

Awareness of different finance forms, SMEs in coastal towns vs. SMEs not based in coastal towns

Source: UK Finance/BVA BDRC SME FM Q4 2022 (n=592)



towns reported having sought any information or advice in 2021, compared with a UK average of 18%.

Finally, their low declared need to access finance may reflect a lack of ambition in improving or expanding their businesses; in this scenario, businesses are not expecting to make the potentially large investments that would be needed to pursue this goal, eliminating the requirement for external finance.

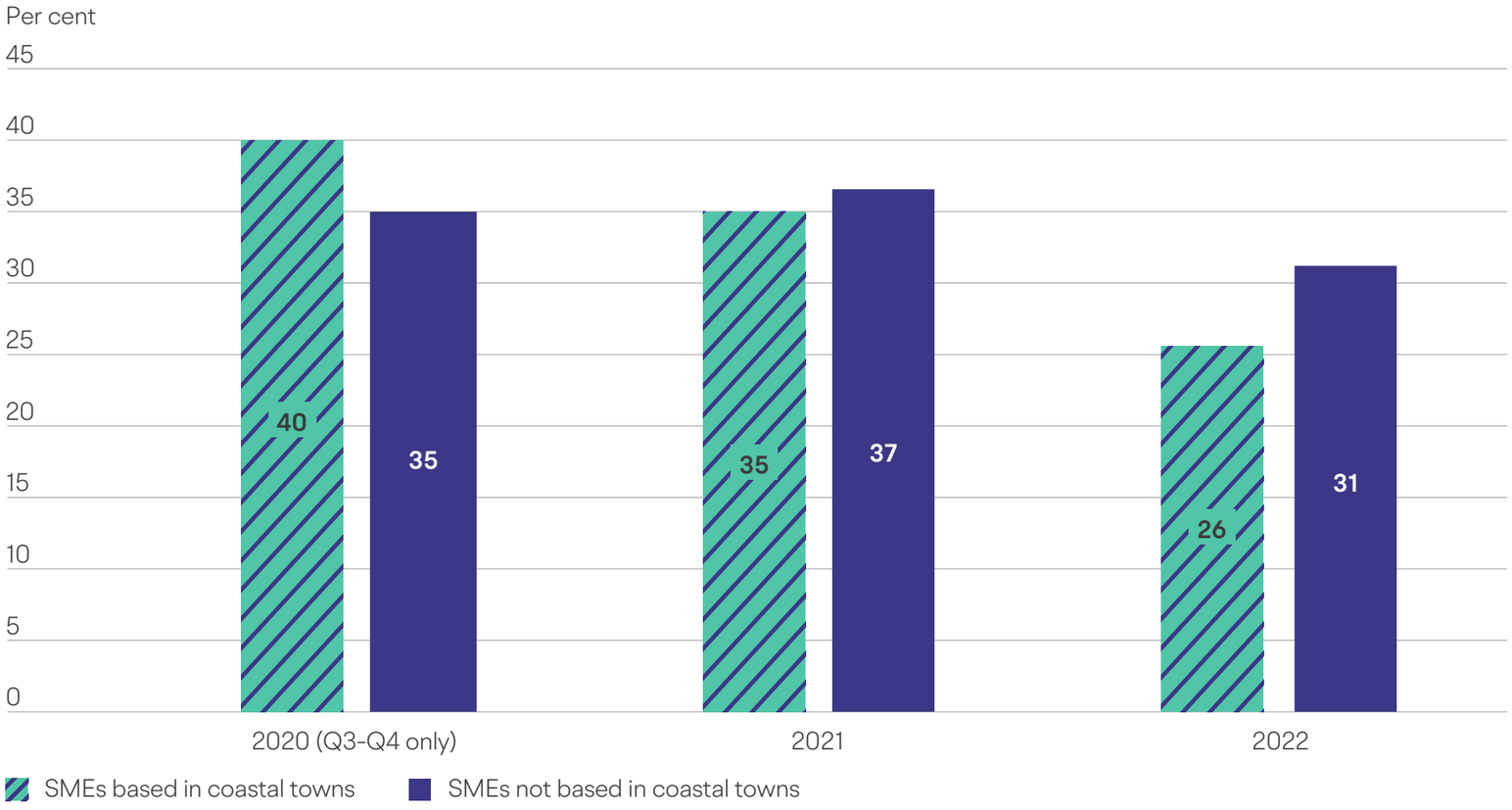
Looking towards the future, the general trend for SMEs in coastal areas do suggest this might be the case. SMEs in coastal towns are more reluctant to borrow in order to grow (26%) than their counterparts elsewhere in the UK (31%) according to 2022 data (Figure 3.5).

As shown in Figure 3.6, they are also more likely to describe themselves as happy non-seekers of finance.

Figure 3.5

Share of SMEs that would be happy to use external finance to grow; SMEs in coastal towns vs. SMEs not based in coastal towns

Source: UK Finance/BVA BDRC SME FM, Q3 2020-Q4 2022 (2020 n=1,184; 2021 and 2022 n=2,368)



It is important to place this in the wider context. As noted above, the pandemic has brought to the fore the vulnerability of many industries that dominate coastal towns' economies in the face of large economic shocks. The reluctance of coastal town-based SMEs in driving ambitious growth plans would be a predictable response to this wider context, but one that needs to be challenged if these areas are to become more prosperous and resilient.

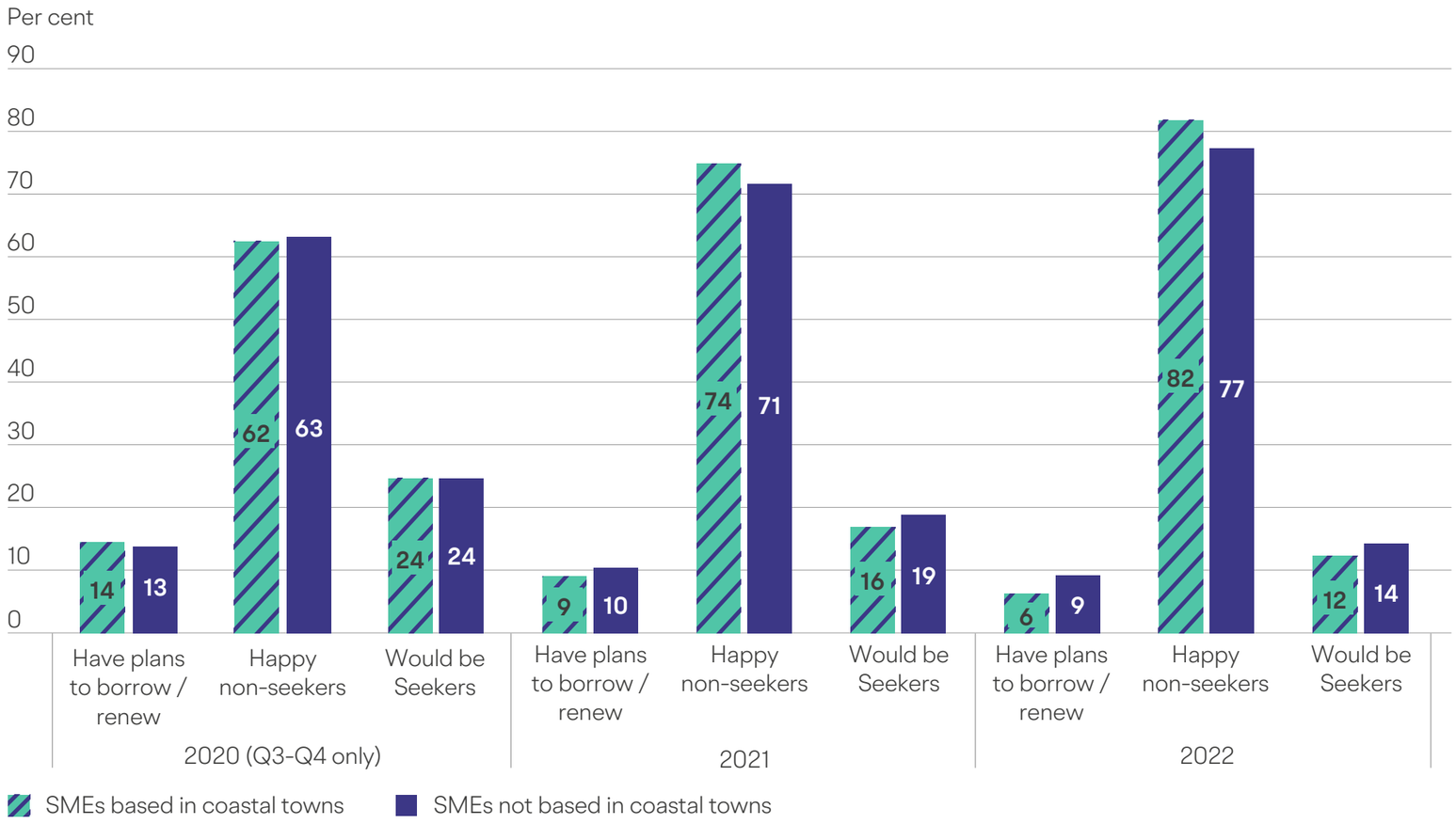
While the high levels of pessimism seen during the pandemic have reduced, the SME Finance Monitor data confirms coastal town-based SMEs' more prudent and risk averse attitude to growing their business, which likely has a role on their greater reluctance to use external finance. Compared with those based elsewhere in the UK (Figure 3.7), a lower share of SMEs in coastal towns agree that they would be prepared to take risks to become more successful (41% in 2022, compared with 46%) or that they have an ambition to be a significantly bigger business in the long term (34% compared to 40%).

This aligns with the declining share of scale-ups in coastal towns seen between the second half of 2020 and 2022. About 32% of coastal town-based SMEs said they had experienced significant growth at some point

Figure 3.6

SMEs' future requirements for external finance; SMEs in coastal towns vs. SMEs not based in coastal towns

Source: UK Finance/BVA BDRC SME FM, Q3 2020-Q4 2022 (2020 n=1,184; 2021 and 2022 n=2,368)



in their past (meeting the definition of scale-up), outperforming the rest of the UK on this measure. However, by 2022 this had fallen just below one quarter (24%), a similar proportion to the comparator group.

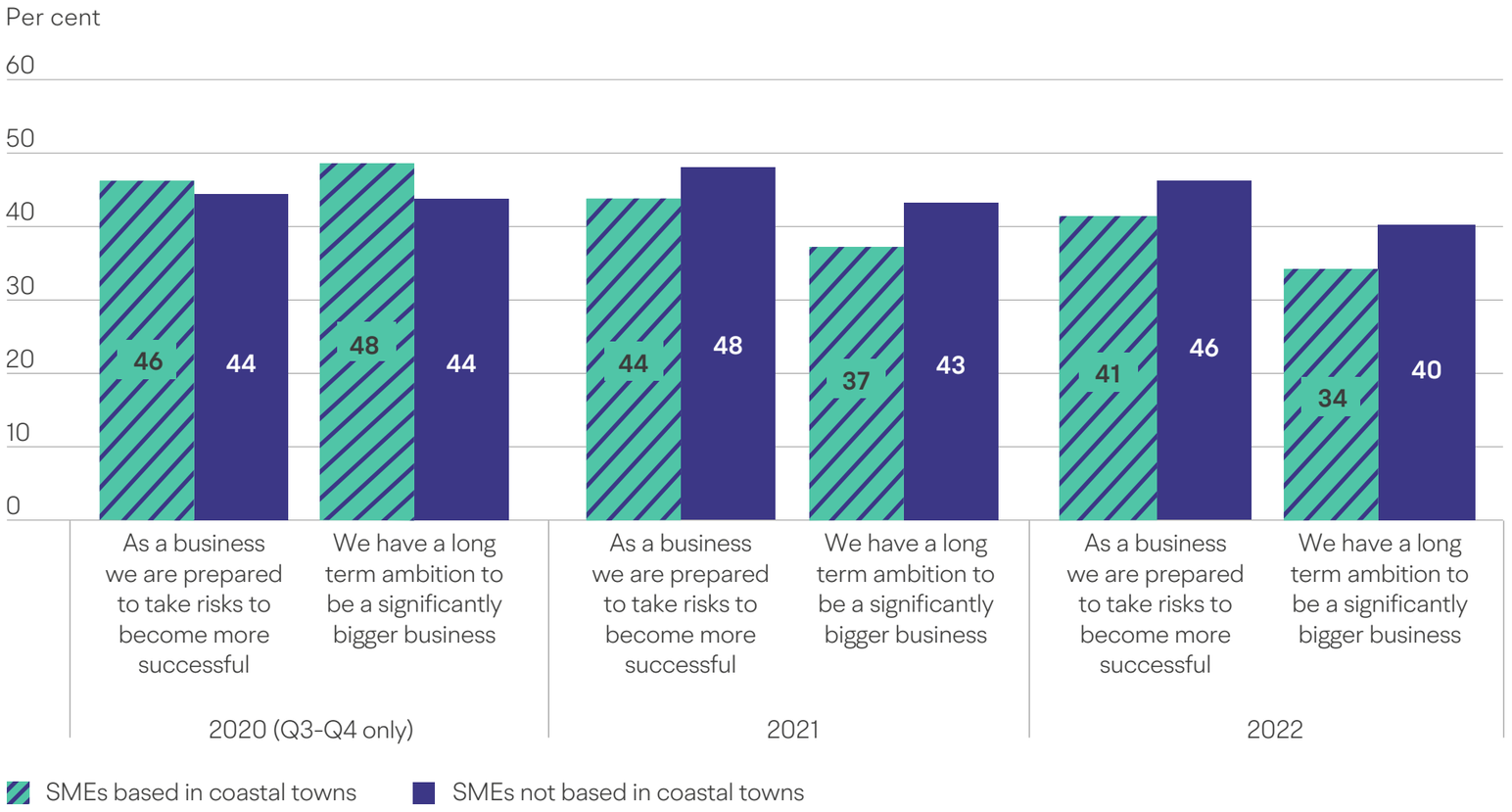
Consistent with this generally lower level of ambition demonstrated by coastal town-based SMEs, we further find that proportionally fewer also plan to pursue objectives that may potentially require using external finance. Figure 3.8 suggests that in 2022, SMEs in coastal towns were less likely to say they plan to increase exports or imports ("international"), to develop a written business plan and file regular management accounts ("planning") or to introduce a new product/ service, improve any aspect of the business or find a business mentor ("innovation").

Similar results emerge on the innovation dimension if we consider the LSBS data. This suggests that coastal businesses' propensity to innovate in 2021 was slightly higher than that of their counterparts in the rest of the UK (35% v.31%), in line with the SME Finance Monitor's results for that year. At the same time, proportionally fewer of them invested in R&D (6%) than the UK average (13%) and if we look at their plans in 2021, a lower share was expecting to develop new products and services (11% v.15%) or undertake capital investment (8% v.11%).

Figure 3.7

Share of SMEs that agree with each statement, SMEs in coastal towns vs. SMEs not based in coastal towns

Source: UK Finance/BVA BDRC SME FM, Q3 2020-Q4 2022 (2020 n=1,184; 2021 and 2022 n=2,368)



Coastal towns are underrepresented in equity investment relative to their population size, but have high deal concentration in opportunity areas like net zero

Despite accounting for around 12% of the UK population, coastal towns made up only around 4% (889) of UK equity deals and 2% of the related investment value (£2.2 bn) between 2011 and Q2 2023 (Figure 3.9). The deals completed in coastal towns and their investment value over this period equate to, respectively 13 deals and £32.4m investment per 100,000 population, compared to 45 deals and £154.7m investment per 100,000 population in the whole of the UK (Figure 3.9).

Equity deal numbers in coastal towns were 4.4 times higher in 2022 than 2011, equating to a slightly higher growth rate compared to the UK average (4.2), but investment value grew at a slower rate, reaching 6.6 times the amount seen in 2011 (v. 8.7 times for the UK as a whole). Further, coastal towns are much more heavily dependent on involvement by government investors to sustain local deal activity (40%), than the UK overall (17%).

Figure 3.8

Share of SMEs that plan future actions relating to planning, innovation or international activities, SMEs in coastal towns vs. SMEs not based in coastal towns

Source: UK Finance/BVA BDRC SME FM, Q3 2020-Q4 2022 (2020 n=1,184; 2021 and 2022 n=2,368)

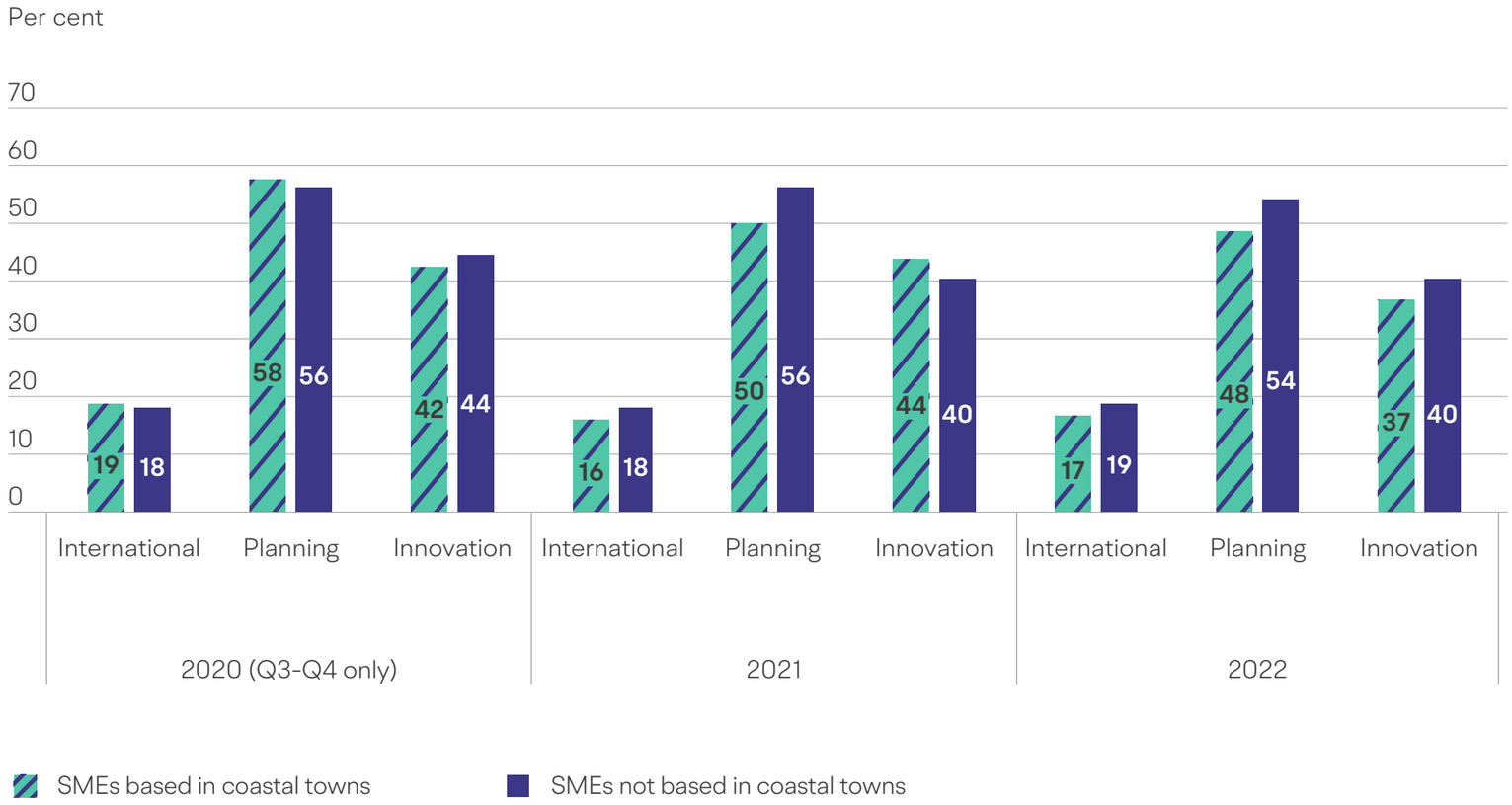
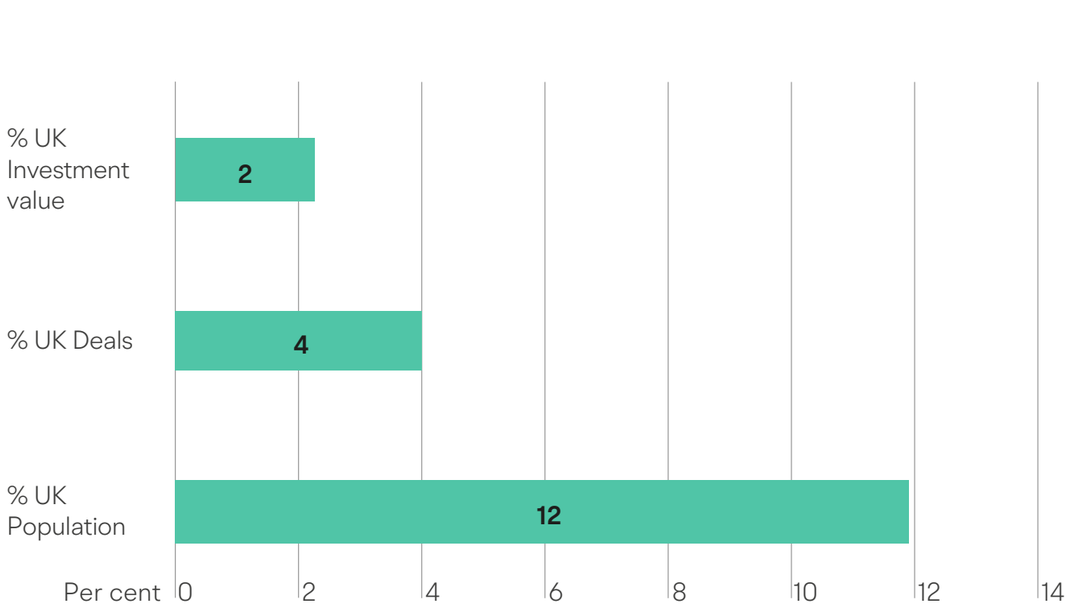
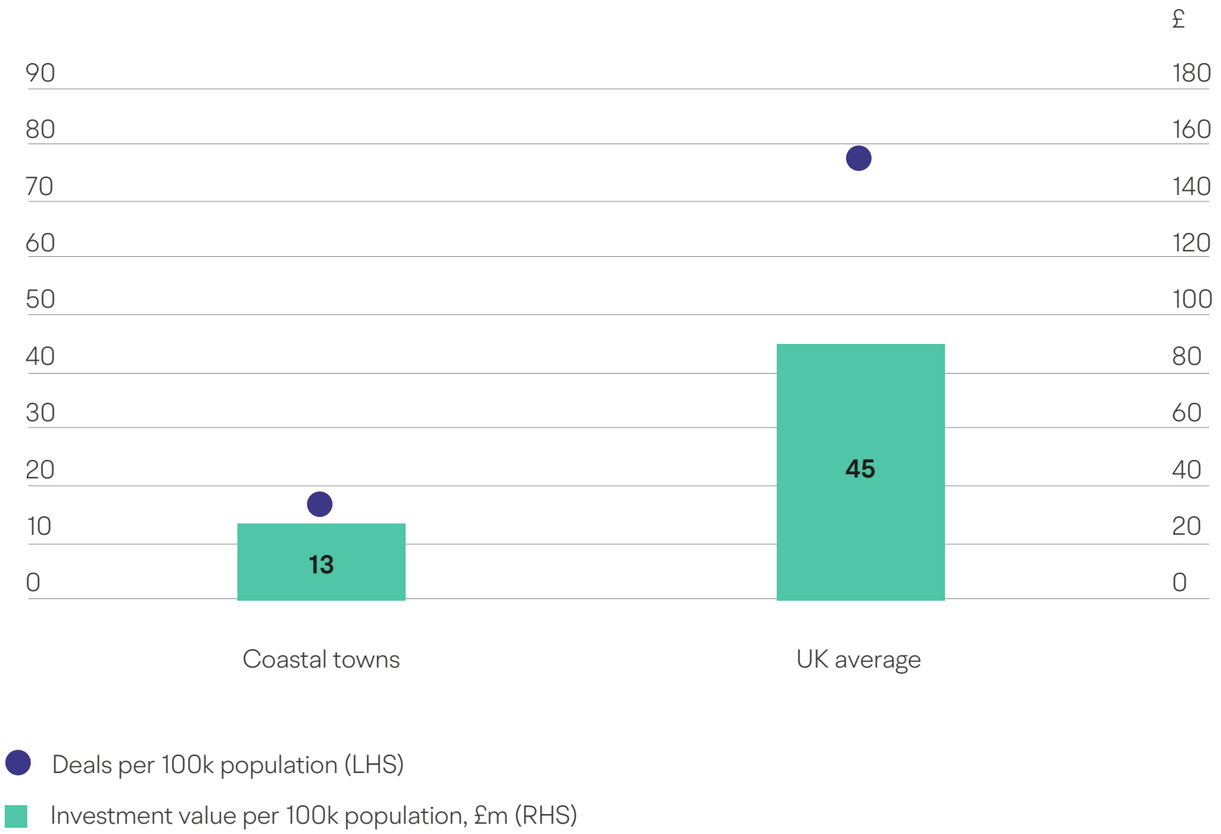


Figure 3.9

Share of UK equity deals and investment value (2011-Q2 2023) and share of the UK population represented by coastal towns (top); equity deals and investment value (2011-Q2 2023) per 100,000 population, coastal towns v. UK average

Source: British Business Bank analysis of Beauhurst data (2011-Q2 2023) and 2019-2021 data from ONS, NISRA and National Records of Scotland





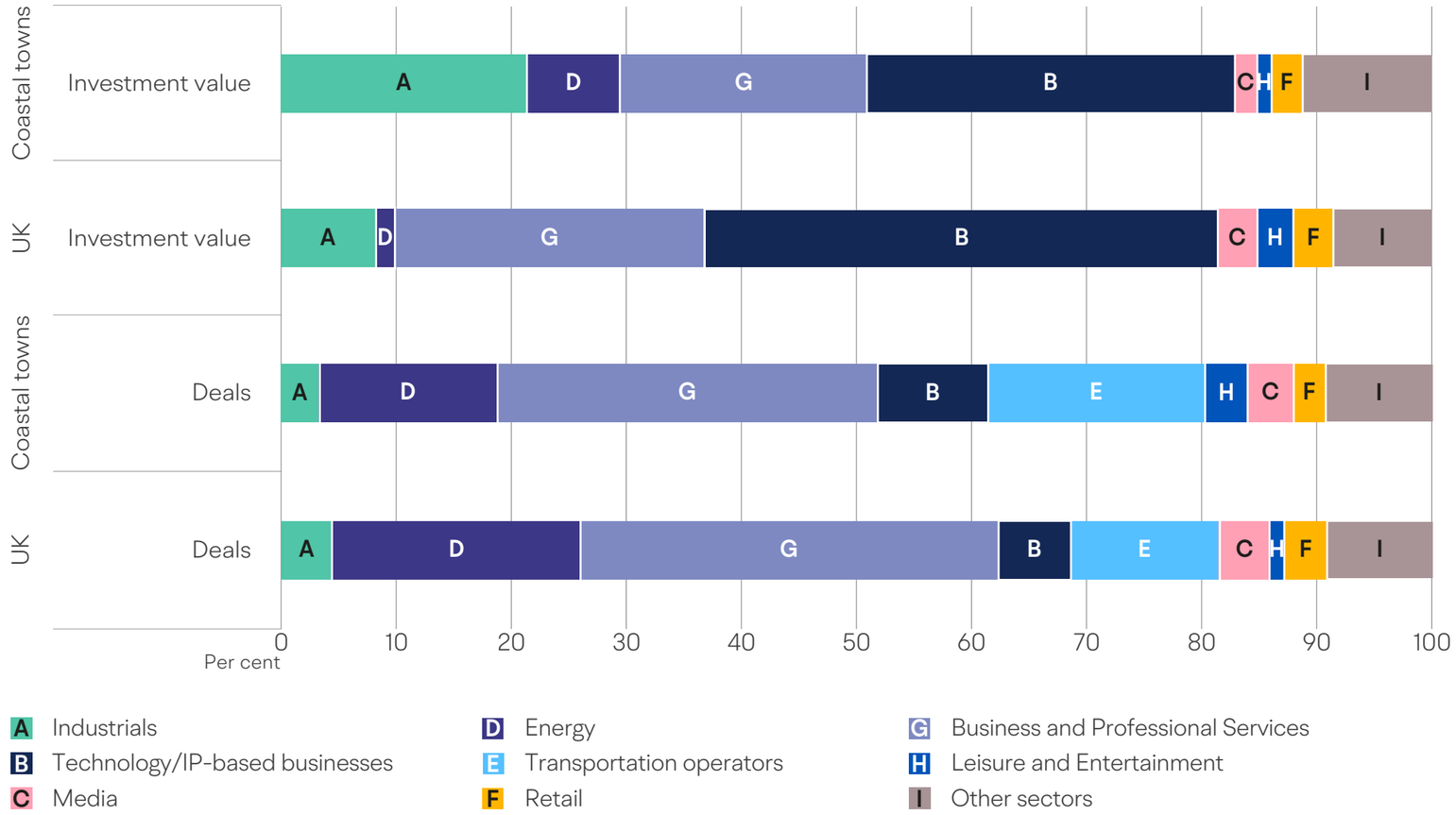
Compared to the UK average, the sectoral composition of these deals over the period considered was more skewed towards the Industrials sector (mainly encompassing deals related to manufacturing or production mining activities) and less towards Business and Professional Services and Technology/IP-based businesses (Figure 3.10). This partly justifies the lower overall investment volume of deals involving coastal town-based SMEs, in that the two underrepresented sectors generally have larger deal sizes than most others.

Another factor that might contribute to lower equity investment levels per population is the fact that coastal towns have a greater share of deals that involve companies based in the 10% most income-deprived areas in each nation, reaching 11% compared to 5% in the UK. This matters because deals in these areas show lower average deal sizes. As shown in Figure 3.11, this is true for both coastal towns and the UK overall, but the former show a larger gap in average deal size between the 10% most income-deprived areas and the rest than the latter.

Figure 3.10

Share of equity deals and investment value (2011-Q2 2023) by top-level sector, coastal towns v. UK

Source: British Business Bank analysis of Beauhurst data (2011-Q2 2023)



Some of the equity indicators we present above for coastal areas reflect the greater challenges coastal town-based SMEs face in securing investment. On the other hand, they also highlight how coastal towns are capitalising on opportunities, for example in the net zero space. These have a higher proportion of equity deals that relate to net zero sectors (14%), reaching double the share seen in the UK overall (7%) between 2011 and Q2 2023. Further, as noted in the previous chapter, innovation-led clusters in coastal areas are just as likely to feature a strong academic spinout presence in deal activity as other cluster groups. Based on our coastal town definition, coastal towns had a total of 113 academic spinouts between 2011 and the first half of 2022, which equates to a higher proportion of deals (13%) than at the UK level (10%).

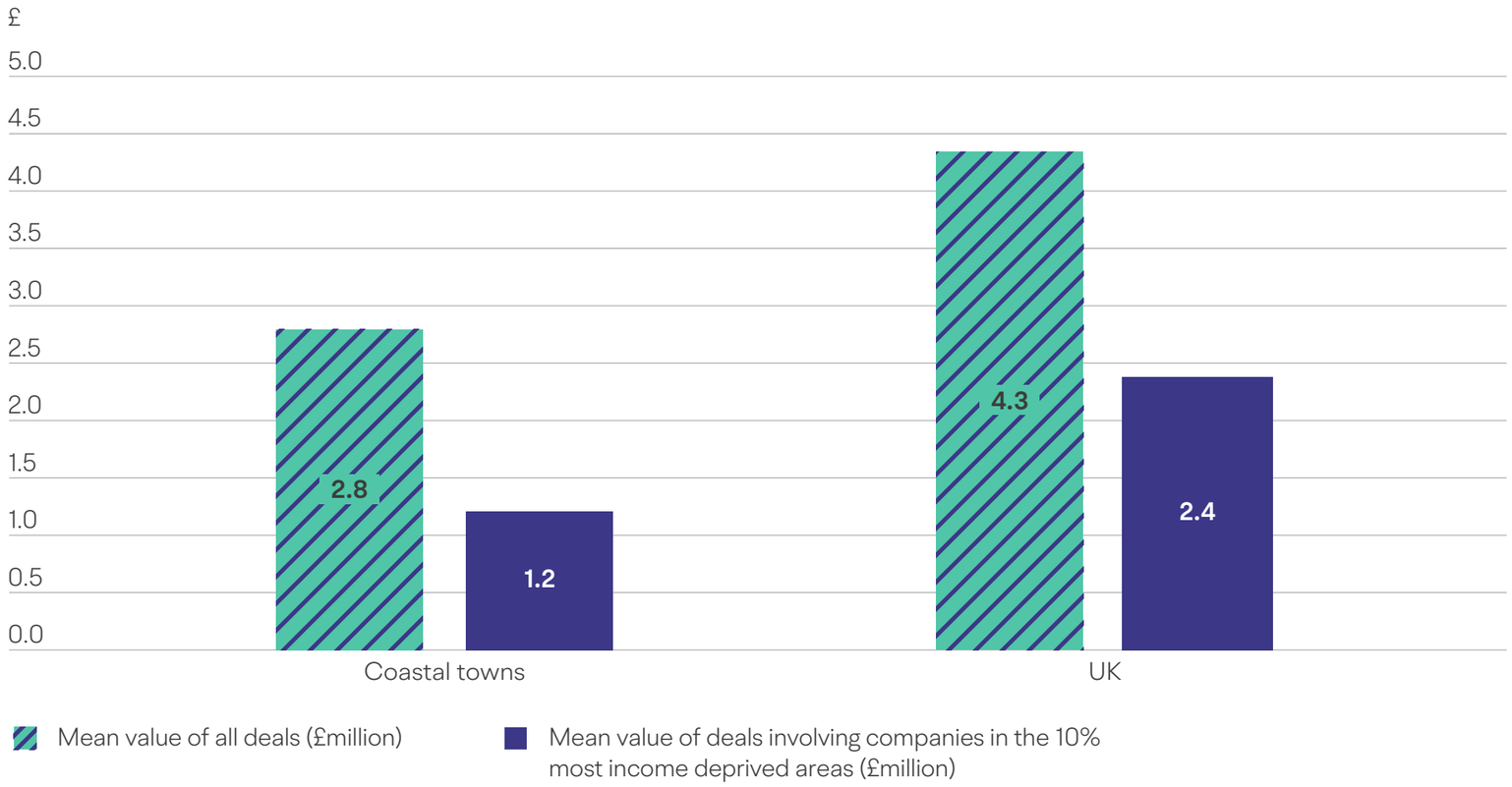
The British Business Bank facilitated significant investment in coastal towns, particularly through the regional funds and the Regional Angels Programme

The British Business Bank facilitated nearly £800m[95] of investment in areas of the UK that cover coastal towns, supporting around 750 businesses there since the

Figure 3.11

Mean size of equity deals involving companies based within the 10% most income-deprived areas in each nation, coastal towns v. UK

Source: British Business Bank analysis of Beauhurst data (2011-Q2 2023) and 2019-2020 deprivation data from ONS, NISRA and Scottish Government



Bank's inception. The regional programmes once again emerge as a key vehicle for the Bank to target coastal areas. Taken together, NPIF and CloSIF have facilitated approximately £270m worth of investment into regional subdivisions encompassing coastal towns,[96] corresponding to one third of the total. Other programmes also make a significant contribution to this objective: Regional Angels (£124m), Growth funds (£130m), UKIIF (£86m) and Venture (£66m). The Bank's contribution to encouraging investment into coastal towns will be further enhanced when the new NRIF schemes will be fully operational. These will also better incorporate ESG criteria into selection and tracking mechanisms, ensuring that finance can be effectively used to facilitate social and environmental goals.

The case studies below present some examples of British Business Bank programmes that have benefitted innovative businesses based in coastal towns.

North East: Arquer Diagnostics, is a female-led and Sunderland-based academic spinout company working at the cutting-edge of cancer diagnostics since 2005. In particular, the company develops urine sample tests for the early detection of prostate and bladder cancer. Arquer Diagnostics was supported by the British Business Bank via its Enterprise Capital Fund programme.

North West: Immersive Interactive ltd is a high-growth software company that provides technology to create interactive spaces to be used in schools and emergency services training. It was established in the coastal town of Southport in 2012 and achieved a successful exit in 2022. The company received support from the British Business Bank's NPIF.

East of England: Ehab (Ehabitation ltd) is a high-growth company based in Shoreham-by-Sea which develops software utilising blockchain for data management in construction projects since 2015. The company received support from the British Business Bank's Regional Angels Programme.

South West: Flexi-Hex Ltd. is a high-growth company established in 2017 in the Cornish town of Helston, located just 2.5 miles from the coast. The company manufactures recyclable and biodegradable packaging for a range of products including sports equipment, electronics, and bottled beverages. Flexi-Hex received investment from the British Business Bank through CloSIF.

Northern Ireland: Modern Democracy provides services for election delivery, audit, and technology support since 2017 from its headquarters in Londonderry. The company received investment through the British Business Bank's Regional Angels Programme.

Scotland: Verlume Holdings ltd develops energy management and reduction technology across the subsea, offshore, and onshore sectors since 2013. The company is based in Aberdeen and received British Business Bank investment through the Regional Angels Programme.

Wales: Established in 2017, Vortex IOT is based in Neath, around 6 miles north of Port Talbot. The company designs wireless sensor networks, which are used in harsh environments to collect data for remote monitoring and risk assessment within the heavy industry and infrastructure sectors. Vortex IOT completed a successful exit in 2023 and was supported by the British Business Bank's Regional Angels Programme.

Annex A: Identifying innovation-led clusters across the UK

The analysis in Chapter 1 covers announced equity deals involving SMEs between 2011 and Q2 2023, using Beauhurst data. To determine innovation-led clusters within the dataset, we use two sets of information. First, we evaluate companies' sectoral affinity with technological innovation by examining the number and investment value of deals completed in the Technology/IP-based businesses sector.[97] We normally refer to these as 'Technology/IP-related' deals in the chapter. Second, we assess the geographical proximity of these companies by calculating the distance between their registered addresses, using geographical coordinates derived from postcode information. This working definition of clusters broadly aligns with Michael Porter's ('geographic concentrations of interconnected companies and institutions in a particular field').[98]

As a first step, we apply density-based clustering techniques to the data to identify innovation-led clusters, using RStudio software. This approach offers advantages over traditional techniques like k-means clustering.[99] Density-based methods do not assume clusters have the same circular shape and size, allowing for the detection of clusters of any shape and size. Moreover, density-based methods are robust against outliers (i.e., observations with extreme values) and facilitate their isolation and identification. These features make density-based methods ideal for understanding the locations of innovation-led clusters as well as areas that are not part of such clusters. The clusters obtained through this analysis were then adjusted to align with Local authority District boundaries to enable matching with other datasets. Clusters with fewer than 25 companies were eliminated. Travel distances within each cluster were also checked to ensure all businesses located at the edges were within a less than 50-minute car journey from the cluster centre.

In addition to the 33 clusters described in the chapter, we identified 159 Local Authority Districts[100] as 'outliers'. These areas, accounting for approximately 7% of Technology/IP-related deals in the considered period, are the ones that don't contain any deals meeting our criteria for inclusion in any cluster. When relevant, the findings presented include this "outlier" group to provide insights into how performance may differ between companies in innovation-led clusters and those located in sparser or more isolated areas. Furthermore, our analysis identified 19 Local Authority Districts[101] that did not fall into either the clusters or the outlier group because no Technology/IP-related deals took place in these areas during the period under analysis. These data points, along with any others lacking postcode information, are excluded from the findings.

It is important to note that the names assigned to the clusters are a simplification of their broad geographical location and coverage; as such, they are not designed to reflect administrative boundaries precisely, but simply to give readers a sense of where most of the cluster's equity activity takes place.

Where sample sizes are too small to support analysis at the individual cluster level, we group these into geography-based clusters, comprising the following:

Coastal North of England clusters: Lancashire; Liverpool & Chester; Middlesbrough-Darlington-Durham; Newcastle upon Tyne-Gateshead-Sunderland-Tyneside Coastal

South and East of England clusters: Brighton & Hove; Bristol & Bath; Canterbury; Cambridge Eastern Corridor; Devon; Dorset-Hampshire-Solent; Kent & Medway

Golden Triangle clusters: Cambridge; Greater London & neighbouring counties; Oxford

Midlands clusters: Birmingham & Black Country; Coventry & Warwickshire; Nottingham-Derby-Leicester

Northern Ireland cluster: Greater Belfast

Non-coastal North of England clusters: Cheshire East; Greater Manchester; Leeds City Region; Sheffield City Region; York & Harrogate

Non-coastal South and East of England clusters: Buckinghamshire-Maidenhead-Windsor; Milton Keynes; Norwich; Reading

Scottish clusters: Aberdeen; Dundee; Edinburgh-Fife-Mid & West Lothian; Greater Glasgow

Welsh clusters: Cardiff & Newport; Swansea

Annex B: SME attitudes to external finance in innovation-led clusters

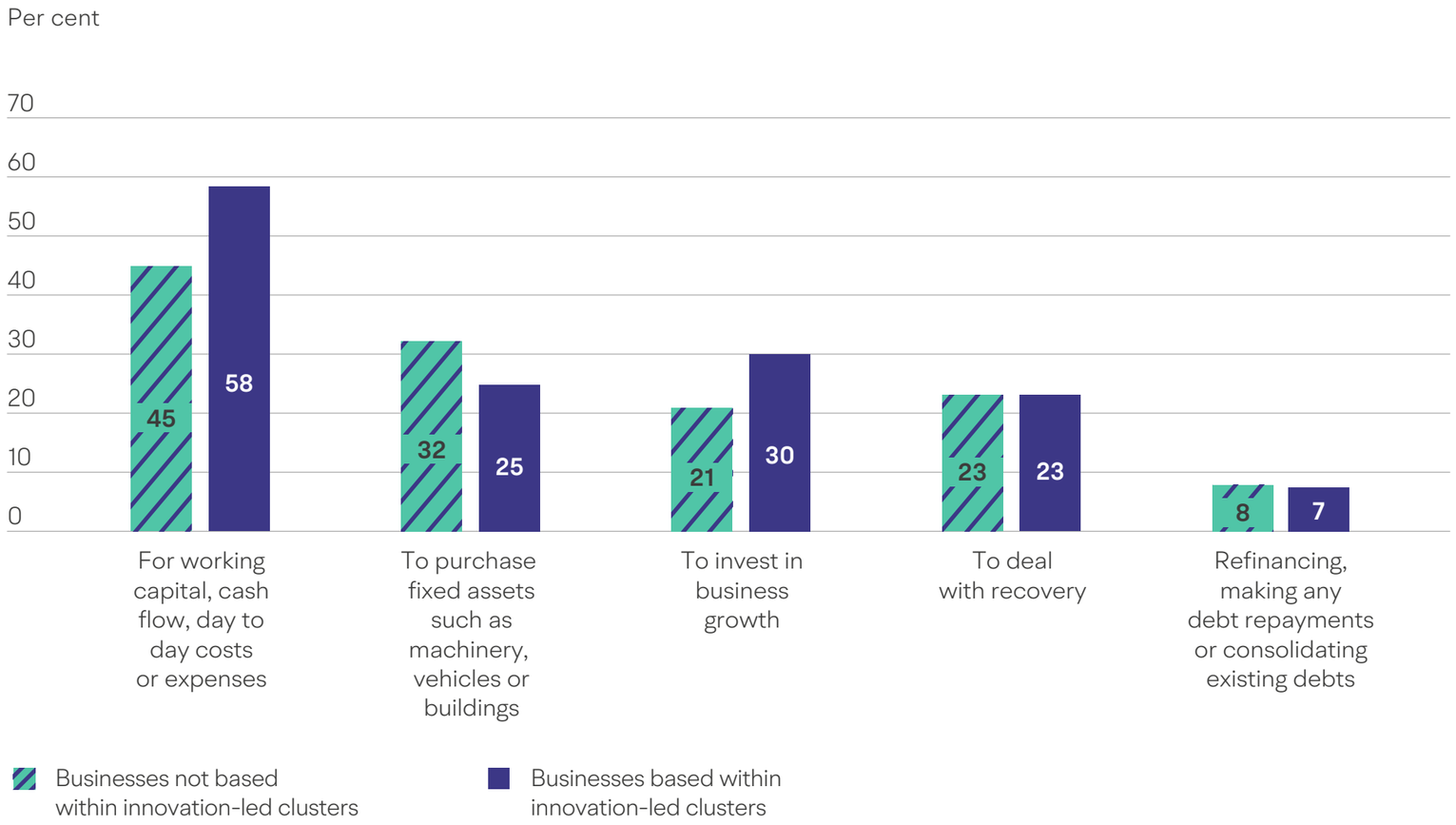
Data from our Business Finance Survey 2022 shows that overall, SMEs' attitudes to external finance in innovation-led clusters do not diverge radically from those of SMEs located elsewhere. These have similar levels of awareness of the key 5 finance types compared to their non cluster-based peers. However, they show greater awareness of business angels, and lower awareness of asset finance, which align with the higher/lower relevance of these finance types for technology-intensive companies. The propensity to access external finance (whether government-backed or not) is also just slightly lower for cluster-based SMEs, but this difference is not statistically significant.

Nevertheless, cluster-based SMEs diverge from the overall average in some significant ways too. These businesses are more likely to report feeling discouraged from applying for external finance (24%) than non cluster-based ones (11%) possibly due to the greater representation of younger and more knowledge-intensive companies without a strong finance track record. Whatever the motivation behind discouragement, this suggests that better geographical access to well-developed finance networks does always compensate for any business-specific barriers to finance that an SME might face.

Figure B1

SMEs' main reasons for applying for external finance

Source: British Business Bank Business Finance Survey 2022 (n=398)



Another key finding is that cluster-based smaller businesses that do apply for external finance are more likely to contact multiple providers (42% v.37% of their non cluster-based peers). This seems more related to their proximity to 'thicker' finance networks than to greater knowledge or experience in using external finance, as neither are significantly higher for cluster-based respondents.

The reasons for accessing external finance also differ for cluster-based SMEs (Figure 2.3). They are more likely to say they applied for external finance to secure working capital and to invest in business growth, consistent with what we'd expect to see in areas with high density of fast-growing innovative businesses.

Annex C: Beyond spinout creation: universities' multiple contributions to innovation-led clusters

Universities make other important contributions to cluster development beside creating spinout companies This is due to the fact that spinout creation is not always the only or most appropriate route for commercialising university-generated knowledge. Alternative commercialisation routes may be pursued when the IP requires complementary expertise to come to fruition, or when it is more effective for an established business to take the IP to market. In the former scenario, building collaborative research partnerships with businesses can be a better option, and in the latter, licensing the IP to an existing business. These commercialisation approaches are not mutually exclusive and can be deployed at different stages in the process of going to market or on different components of the IP.

In addition, universities and other research-active institutions (e.g., public/private sector research institutes or Catapult centres) can also support thriving innovation-led clusters by stimulating the formation of staff or student-led innovative companies, even when these companies don't rely on universities' IP or financial backing. Neither of these start-up typologies meets the Beauhurst definition of academic spinouts.

Figure C1

Universities' total collaborative research income and IP/licensing income from SMEs per spinout created by cluster grouping, academic year 2014-15 to 2021-2022

Source: British Business Bank analysis of UKRI and HESA data (2014-2022)

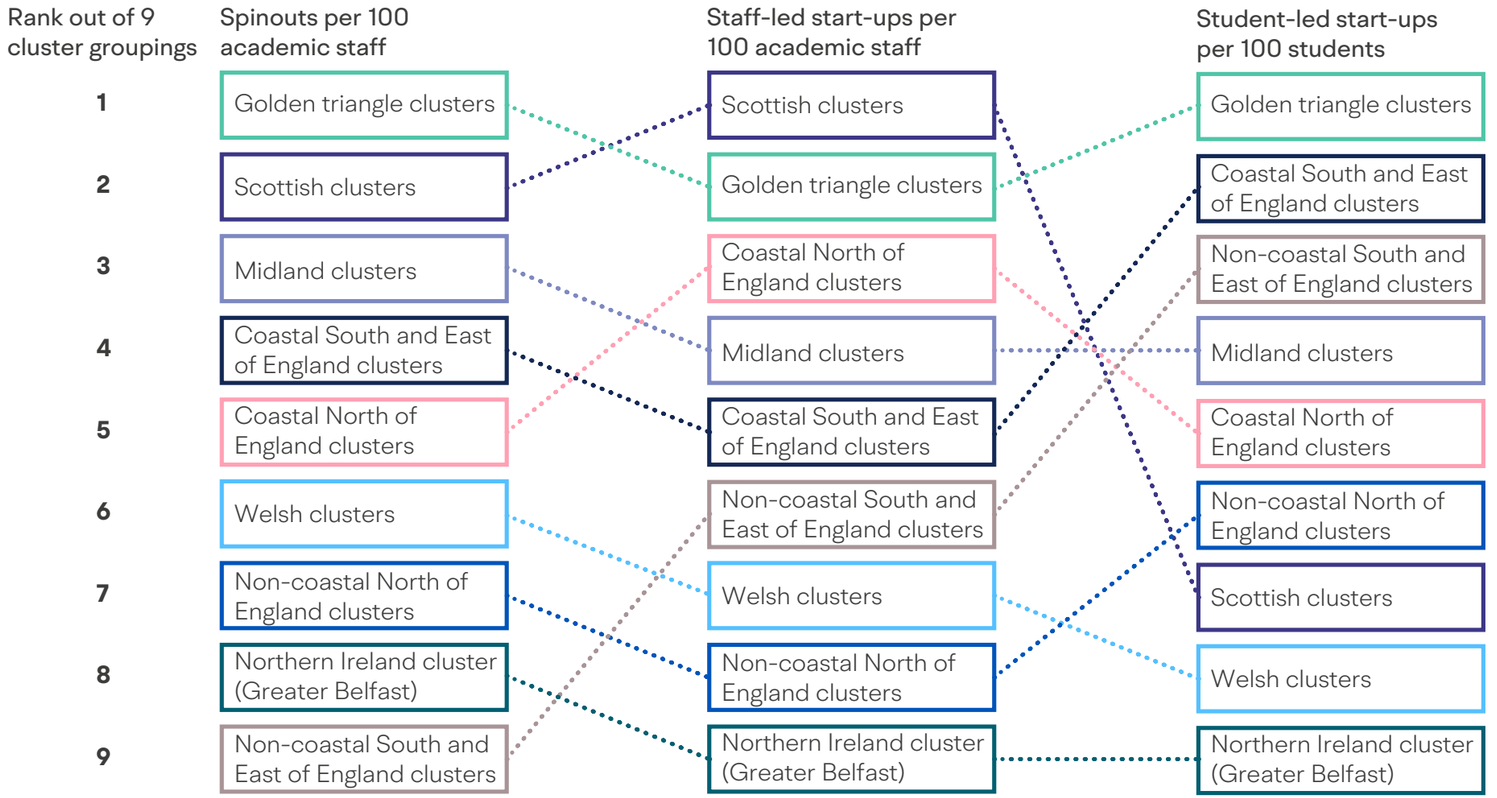
The contribution of these other university activities to innovation-led clusters' pipeline of investment opportunities is crucial and has implications for the local demand for finance as well. To capture this wider context, in Figure C1 we present an overview of how universities based in different clusters perform on these other activities in comparison with spinout creation. This uses data on universities' knowledge exchange activities published by UK Research and Innovation (UKRI) and the Higher Education Statistics Agency (HESA).

The top chart in Figure C1 shows that volume of collaborative research and IP/licensing[102] performed by universities in each cluster grouping (as described by the income they secured for these activities) can vary relative to the volume of spinouts they generate, possibly reflecting different priorities in their research commercialisation strategies For instance, if we compare the Scottish and Midlands clusters based on their spinout creation performance, the latter lags far behind the former; however, for every spinout created, the Midlands generate a larger volume of collaborative research activity and a similar volume of IP/licensing activity in comparison to the Scottish clusters. The UK rank of cluster groupings presented in the bottom chart highlight further differences in how universities located

Figure C1 (continued)

UK rank of innovation-led cluster groupings based on the number of spinouts and staff or student-led startups created by local universities per 100 academic staff/students FTE, academic year 2014-15 to 2021-2022

Source: British Business Bank analysis of UKRI and HESA data (2014-2022)



in a certain cluster perform on spinout creation on the one hand, and staff and student-led start up creation on the other (normalised by the number of staff or students at these institutions), particularly outside the Golden Triangle. For example, clusters in non-coastal areas of the South and East of England rank at the bottom based on the number of spinouts they generated per 100 academic staff (expressed as full-time-equivalents, or FTE), but third based on the student-led start-ups they generated per 100 student FTE. In other words, each cluster's performance on university-led activities like collaborative research, IP and licensing and staff and student-led start-up creation does not necessarily align with their performance on spinout creation. These findings matter because they demonstrate the importance of considering other activities beyond spinout creation that universities can leverage to strengthen each cluster's pipeline of innovative businesses.

Endnotes

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6. Consultations with industry players suggest that this internal data is broadly comparable to the overall provision of asset finance in terms of regional distribution. That said, these figures must be interpreted cautiously, as our objective to reduce regional imbalances in smaller business access to finance means that we tend to focus more on achieving a broad geographical spread of investment across the UK than the wider market.
7. A relatively small proportion of equity deals are announced (41% in 2022), and there is some variation in the proportion of deals that are announced by region and devolved nation. This may be a result of differences in the investor type active in each region and their relative likelihood to publicly disclose deals. By investment value the picture is reversed, with announced deals making up 78% of the total value invested in 2022, supporting the robustness of our results as unannounced deals tend to be smaller.
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