



# Tech

*in the UK 2023*  
*Innovation Nation*

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 **BARCLAYS**

**Eagle Labs**



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 **Beauhurst**

# Executive summary

The UK's tech sector has demonstrated significant growth and resilience from 2019 to 2023, with substantial equity investments and the development of tech hubs across the country.

The UK stands strong as a hub for technology innovation, marked by the continuous growth in new company formations since 2013. Whilst London has significant concentration of existing high-growth tech companies, the innovation landscape extends nationwide, with several clusters contributing notably to the dynamic ecosystem. Leeds, Oxford, and Cambridge stand out, elevated by the close partnerships between business and academia. These world-leading institutions are instrumental in cultivating fertile ground for technological advancements on a national and global scale.

The widespread locations of tech hubs beyond London provides an opportunity for clustering and regional specialisation. Edinburgh's high-growth companies lead in fields such as biotech and artificial intelligence. Bristol is another burgeoning tech hub, particularly in robotics and aerospace technology.

In 2023, the UK's tech sector demonstrated resilience when navigating a challenging funding environment. Despite a collective 27.2% drop in total equity investment for private UK firms between 2022 and 2023, some regions resisted the trend. Yorkshire and the Humber and Wales were among the regions that registered an upward trend in funding activities between 2022 and 2023, with a 19.9% and 8.74% growth respectively. Moreover, there was a significant increase in grant funding across half of the 12

constituent countries and regions of the UK. It is important to note that the investment trends observed across 2020 and 2022 were unusual. Government support plays a vital role in supporting the UK tech ecosystem, as underscored by our survey involving 2,500 UK tech workers. A large majority recognise the benefits of initiatives such as Innovate UK and investment schemes like SEIS and EIS. Innovate UK has the highest positive rating at 45.5%, signifying strong approval of their efforts to stimulate technological innovation and growth within the sector.

The **UK Science and Technology Framework**, unveiled in March 2023, sets forth a list of actions to set the stage for the UK to become a top global tech player by 2030<sup>1</sup>. These actions encompass a range of initiatives, from tackling industry challenges to enhancing digital infrastructure. To address the skills gap, the Department for Science, Innovation and Technology (DSIT) launched a communications campaign to promote government-funded Skills Bootcamps in high-demand digital fields like software development, data analytics, and cybersecurity.

Opportunities in digital transformation, artificial intelligence, and clean energy technologies, present great potential for the UK to strengthen its position in the global tech landscape. These technologies present an opportunity for the UK to foster growth and competitiveness on a global scale.

# Introduction

The number of active companies in the UK's technology sector has consistently increased since 2019. This expansion of the sector extends beyond London, fostering the development of technology hubs throughout the country. These hubs play a vital role in attracting investment and supporting the development of ecosystems for startups and scaleups.

Andrew Roughan, CEO at Plexal, says, "The UK tech ecosystem is undergoing an exciting evolution, which has challenges but also opportunities ahead. With emerging technologies advancing at pace, the launch of a world-first from Britain, like the [AI Safety Summit](#), is one example of how we can demonstrate leadership on the global stage. This is increasingly important to ensure the UK's position as a science and tech superpower in the next six years."

Globally, technology sectors are developing, fuelled by rapid advancements in artificial intelligence, machine learning, blockchain, and other cutting-

edge technologies. The UK's tech sector in particular has a strong emphasis on research and development, bolstered by its universities and research institutions. Despite the sector's role in generating substantial employment opportunities, 2023 witnessed a downturn with the loss of many tech jobs worldwide.

Manchester is another exemplary case of how a regional city can evolve into a tech hub. Katie Gallagher OBE, chair of the UK Tech Cluster, emphasises the role of Manchester within this landscape: "Manchester's tech sector is a testament to the city's resilient and innovative spirit. It has become a beacon of technological advancement and a hub for tech talent, significantly contributing to the UK's position on the global tech stage." This sentiment highlights how Manchester has embraced technological innovation, attracting both startups and established companies to the city. Alisdair Gunn, Director at Glasgow City Innovation District, echoes a similar narrative for Glasgow, highlighting the city's growing significance within the UK's tech ecosystem. "Glasgow is emerging as a significant player in the UK's tech ecosystem, with our Innovation District fostering collaboration between academia, business, and the public sector."

Wales is rapidly establishing itself as a pivotal centre for technology, showcasing significant expansion

and expertise across diverse fields. Mark John, co-founder and Director of Tramshed Tech, highlights this progress: "The technology sector in Wales has surged by 83% since 2010, reaching an estimated value of £8.2b by 2022." He further elaborates on the dynamic creative industries sector, where Wales outshines as a major hub of creative output and talent in the UK, second only to London. This is propelled by the support from leading sector organisations like Media Cymru, Ffilm Cymru, and Creative Wales.

Ian Browne, Managing Director of the National Digital Research Centre (NDRC) based in Dogpatch Labs underscores the importance of supporting early-stage ventures, "More North and South initiatives are being proposed to connect the startup ecosystems of both the UK and Europe with Northern Ireland at the core. The NDRC's mission is to invest in and support digital startups that have the potential to scale internationally. Our success stories underscore the UK and Ireland's capability to produce world-class tech companies."

Irene Graham OBE, CEO, ScaleUp Institute said, "Science and tech businesses are a key segment of the scaleup landscape. ScaleUp Institute research shows that the building of clusters and hubs are critical enablers of scaling businesses, alongside access to

skilled talent and growth capital accessed locally."

Looking ahead, the trajectory of the UK's tech sector appears promising. With the government's increased focus on digital skills, research and development (R&D) tax credits, and initiatives aimed at encouraging investment in tech startups, the ecosystem is poised for sustained growth. Additionally, the UK's departure from the European Union presents both challenges and opportunities. While it necessitates the renegotiation of trade, it also offers a chance to redefine the UK's role in the global tech landscape, forging new partnerships and reinforcing its status as a global tech leader.

The report is focused on the UK tech ecosystem as of December 2023. To qualify as a tech company for this report, the business must fall within the 'technology' classification developed by Beauhurst.



# *Survey analysis*

The survey, conducted as part of the comprehensive study on high-growth companies in the UK, utilised a methodical approach to gather and analyse data across the tech sector. The primary objective was to evaluate the diverse factors influencing the success and the challenges encountered by high-growth UK businesses. The survey targeted 2,500 individuals within the tech sector. The questions were tailored to key themes, including access to capital, talent, government and regulation, access to facilities, exits, and international markets.

# Methodology and audience

The methodology was designed to ensure a balanced representation across various characteristics such as company size, geographic location within the UK, and subsectors within the tech industry. It was distributed through multiple channels, including industry associations, social media platforms, and direct email campaigns, to ensure a wide reach among potential respondents.

The survey, which consisted of both closed and open-ended questions, encompassed various thematic areas, including market expansion, regulatory environment, and talent. The findings aim to offer insights into the current business landscape, highlighting areas of opportunity and concern that can inform strategy, policy, and research into the UK's economic environment. Of the 2,500 surveyed, 35.4% were C-suite employees and 12.6% were founders. The survey commenced in November

2023 and concluded upon receiving responses from 2,500 participants.

The primary audience for this report is entrepreneurs operating within the UK tech sector looking to gain direct insights into the landscape. The survey data also serves as a valuable resource for investors looking for data-driven insights into the sector's health and growth prospects. Policymakers and government officials are also a key audience, as the findings provide evidence to guide the development of supportive regulatory and economic policies. Academic researchers and industry analysts can utilise the report's findings to further investigate the dynamics of the tech ecosystem, contributing to a broader understanding of its impact on the UK's economy.



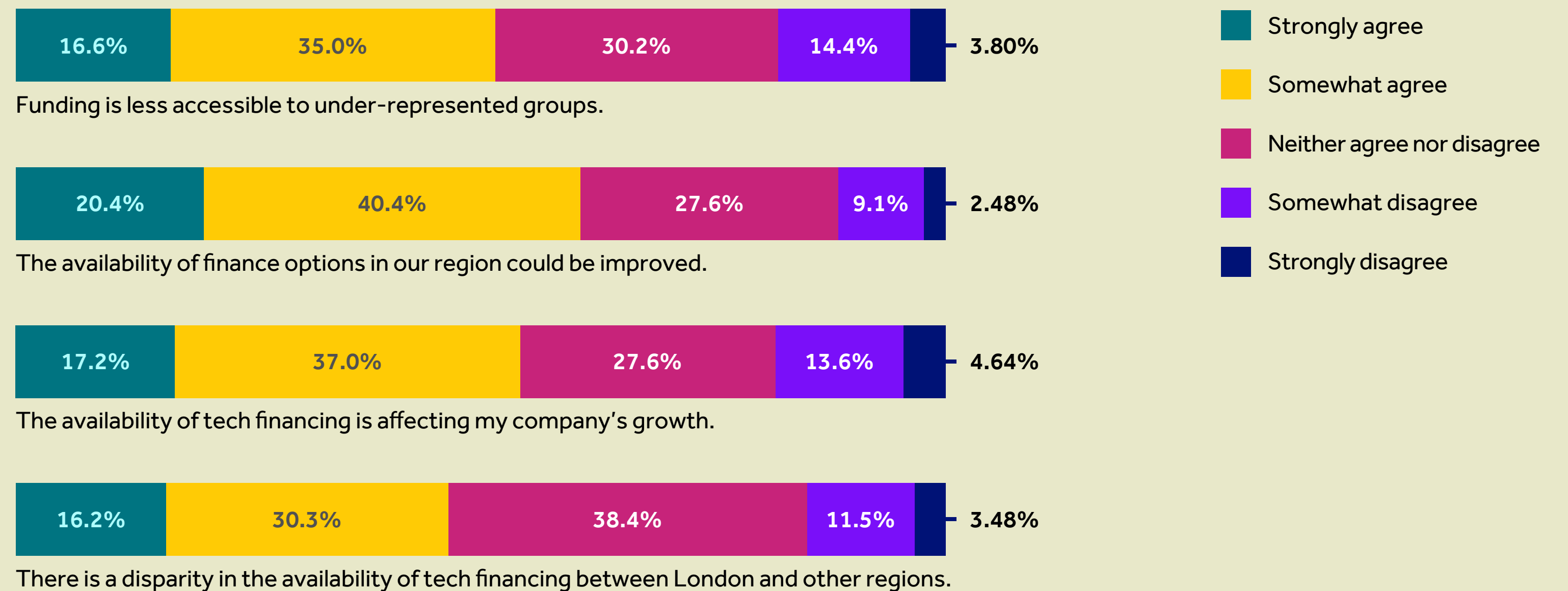
# Access to capital

The survey results indicate agreement that access to funding varies significantly between regions. A significant proportion of respondents (46.6%) agree that there is a disparity in the availability of tech financing between London and other regions, compared to 15.0% who disagree. This perception was particularly strong amongst businesses located outside of London and the South East, where accessing financial resources may be more challenging when compared to the capital.

The data indicates that a substantial majority (60.8%) of respondents agree the finance options in their region can be improved upon.

Over half of the participants (54.2%) acknowledge that the availability of tech financing directly impacts their company's growth, indicating that financial access is a critical factor for scaling operations. This sentiment is even more pronounced among under-represented groups, with 51.6% agreeing that funding is less accessible to them, highlighting an urgent need for more inclusive financial practices.

## To what extent do you agree or disagree with the following statements?



# Access to talent

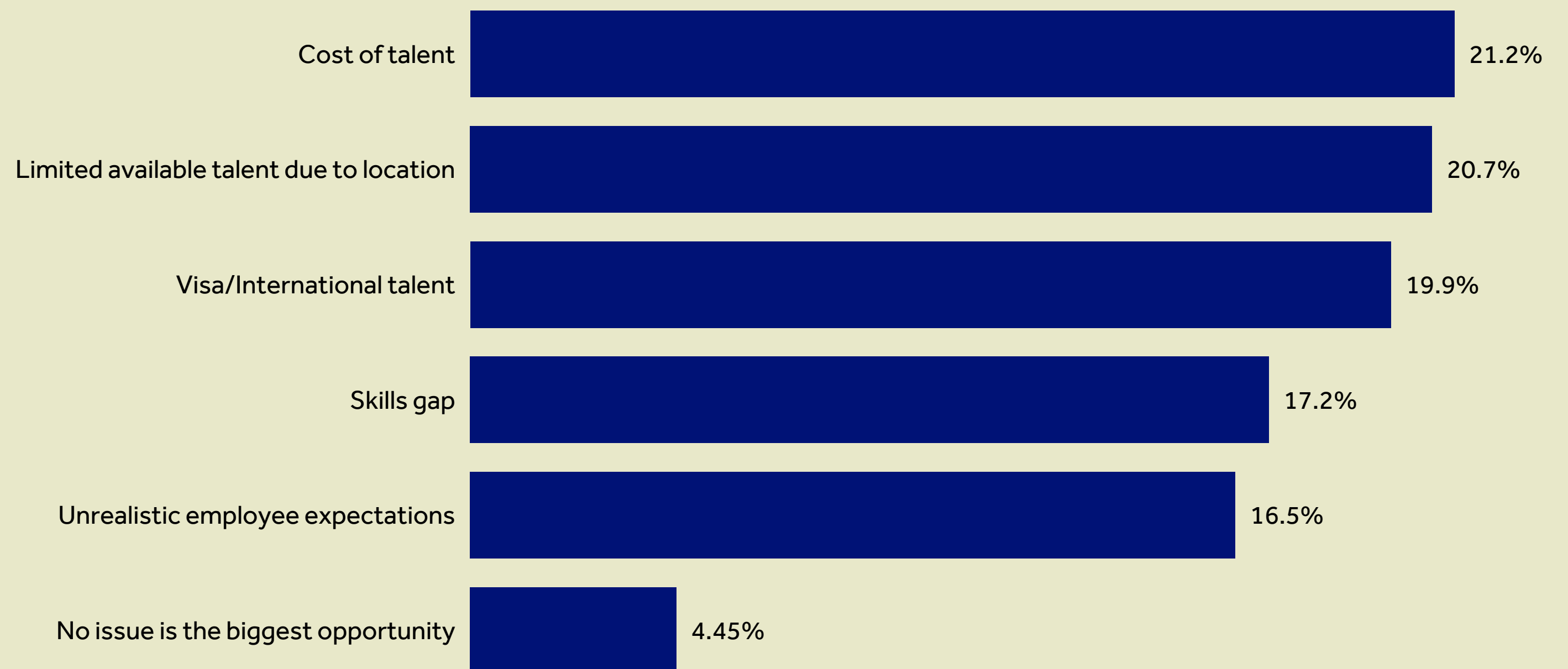
The UK tech ecosystem has a challenge with talent acquisition, as evidenced by the survey data. Of the respondents, 63.0% agree there is a shortage of suitable talent within the sector, indicating widespread concern over the ability to find and secure the human resources necessary for growth and innovation.

The talent shortage is a complex issue with multiple underlying factors. The data suggests that the most pressing workforce issues include “cost of talent” and “limited available talent due to location”, comprising 21.2% and 20.7% of the responses, respectively. These figures suggest that not only is there a quantitative shortfall, but the cost and geographical distribution of skilled individuals are also seen as barriers to building effective tech teams.

Furthermore, 19.8% of respondents identify visa and international talent issues as a significant opportunity, reflecting the tech industry's reliance on global talent pools to fill skills gaps. The survey highlights that 17.2% of the respondents see

the “skills gap” itself as the most considerable opportunity, pointing to a potential area for strategic investment in education and professional development.

## What workforce issue, if any, is the biggest opportunity for UK tech?





# Government support and regulation

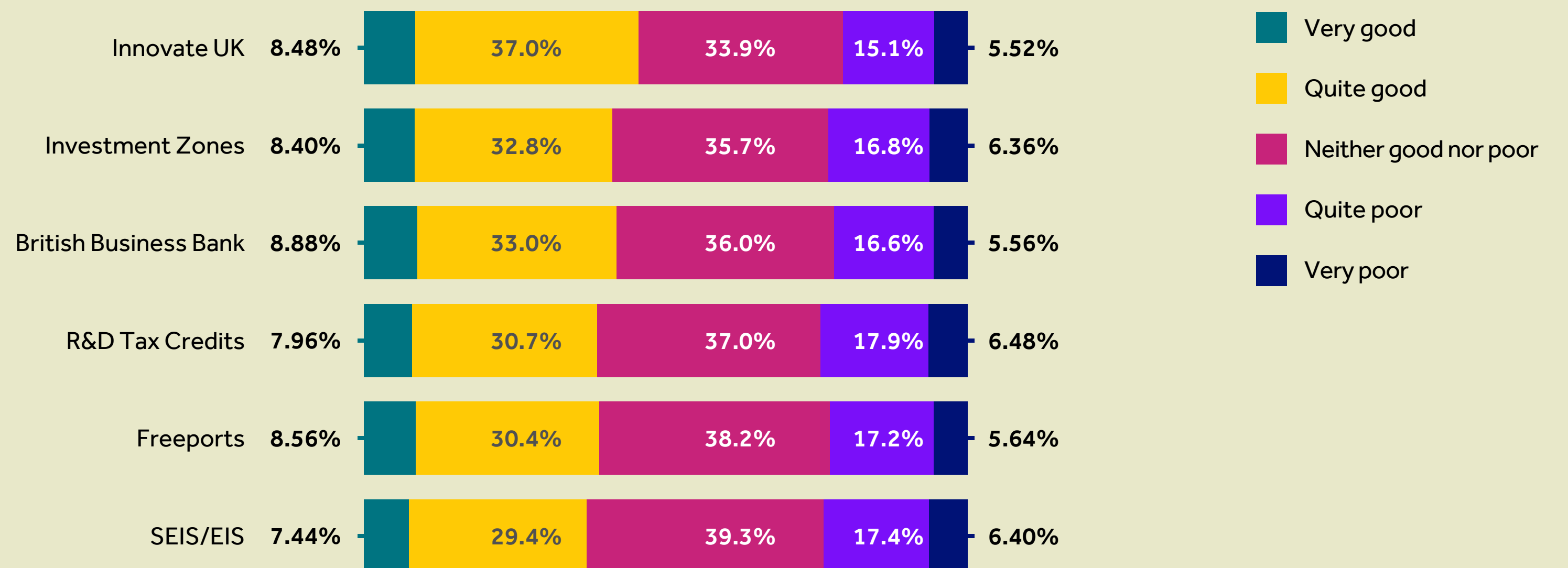
Government support plays an important role in the UK tech sector's growth, with initiatives like R&D Tax Credits, Innovate UK, the Seed Enterprise Investment Scheme (SEIS), and the Enterprise Investment Scheme (EIS). A majority of participants (65.4%) agree that public or local grant funding schemes are supportive of the tech ecosystem, indicating a positive reception of these initiatives among tech businesses.

When evaluating specific government support mechanisms, responses are more varied. R&D Tax Credits are seen as effective by 38.6% of respondents, suggesting that there is room for improvement. However, 24.4% of respondents rate them poorly, highlighting a disparity in how different tech companies benefit from such policies.

Innovate UK stands out with the highest positive rating at 45.5%, signifying strong approval of their efforts to stimulate technological innovation and growth within the sector. SEIS and EIS also received a good rating from 36.9% of respondents, reinforcing the role of these schemes in fostering early-stage investment and growth within the tech sector.

The data indicates that while there is a general agreement on the effectiveness of government support, there remains a significant proportion of the tech sector that is either undecided or dissatisfied with these initiatives.

How would you rate the effectiveness of the following government support?



# Exit markets and liquidity

The outlook on the mergers and acquisitions (M&A) landscape within the UK tech industry is predominantly optimistic, with over half (65.0%) of survey respondents holding a positive view of the future.

Conversely, a smaller segment of respondents (10.2%) express pessimism regarding the future of M&A in the tech industry. This may reflect concerns about economic conditions, regulatory environments, or the complexities inherent in M&A activities.

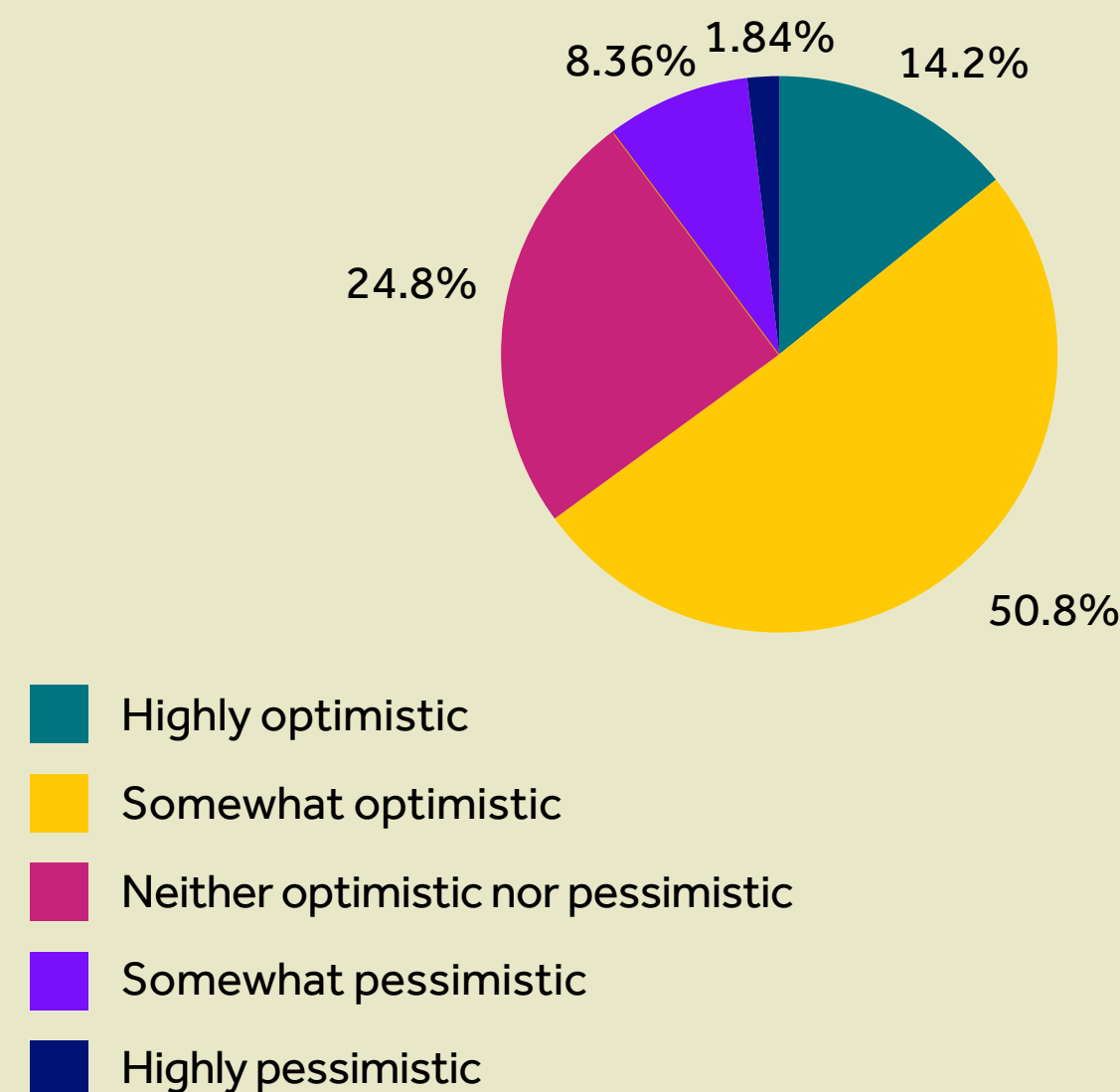
An evaluation of the responses regarding exit strategies for tech companies reveals a diverse range of preferences, with no single strategy dominating. Sales to trade buyers, both within the UK (14.4%) and abroad (15.8%), are the favoured options, indicating that tech companies are open to both domestic and international acquisition

deals. The slight preference for sale abroad may be attributed to favourable overseas conditions. Private equity sales stand out as well, with 15.5% of respondents considering this route, demonstrating the sector's attractiveness to investment firms.

Initial public offerings (IPOs), both in the UK (12.6%) and abroad (10.4%), are also significant considerations,

reflecting the aspiration of some tech companies to go public. The interest in special purpose acquisition companies (SPACs), at 11.5%, points to a growing trend in the industry, where companies may seek to merge with or be acquired by these entities as a pathway to going public.

How optimistic or pessimistic do you feel about the future of the M&A (Mergers & Acquisitions) landscape in the tech industry?



Regarding exit strategies, which is your company most likely to choose, if any?

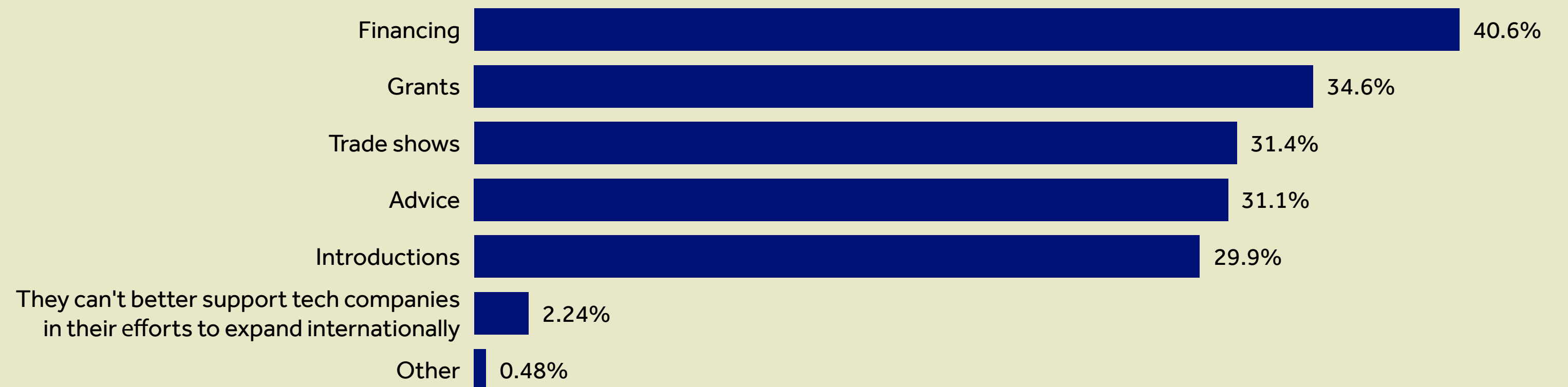


# International markets

The growth of the UK tech sector into global markets relies on strong and varied support from the government and other key groups. A substantial portion of respondents highlight the necessity of financial support to venture into and establish themselves in new international markets. Additionally, 34.6% of businesses surveyed recognise grants as crucial for international expansion. Moreover, 31.4% of the respondents value the role of trade shows and fairs, acknowledging these events as important for gaining exposure.

Advice and introductions are nearly as valued, at 31.1% and 29.9%, respectively, indicating that knowledge sharing and connections facilitated by the government can greatly assist companies venturing into new territories. A small fraction (2.24%) believe there is no more that the UK government can do, suggesting a high demand for additional governmental support.

In your opinion, how can the UK government or relevant organisations better support tech companies in their efforts to expand internationally, if at all?



Which factors, if any, most influence the selection of a specific international market when you are looking to expand?



# Access to facilities

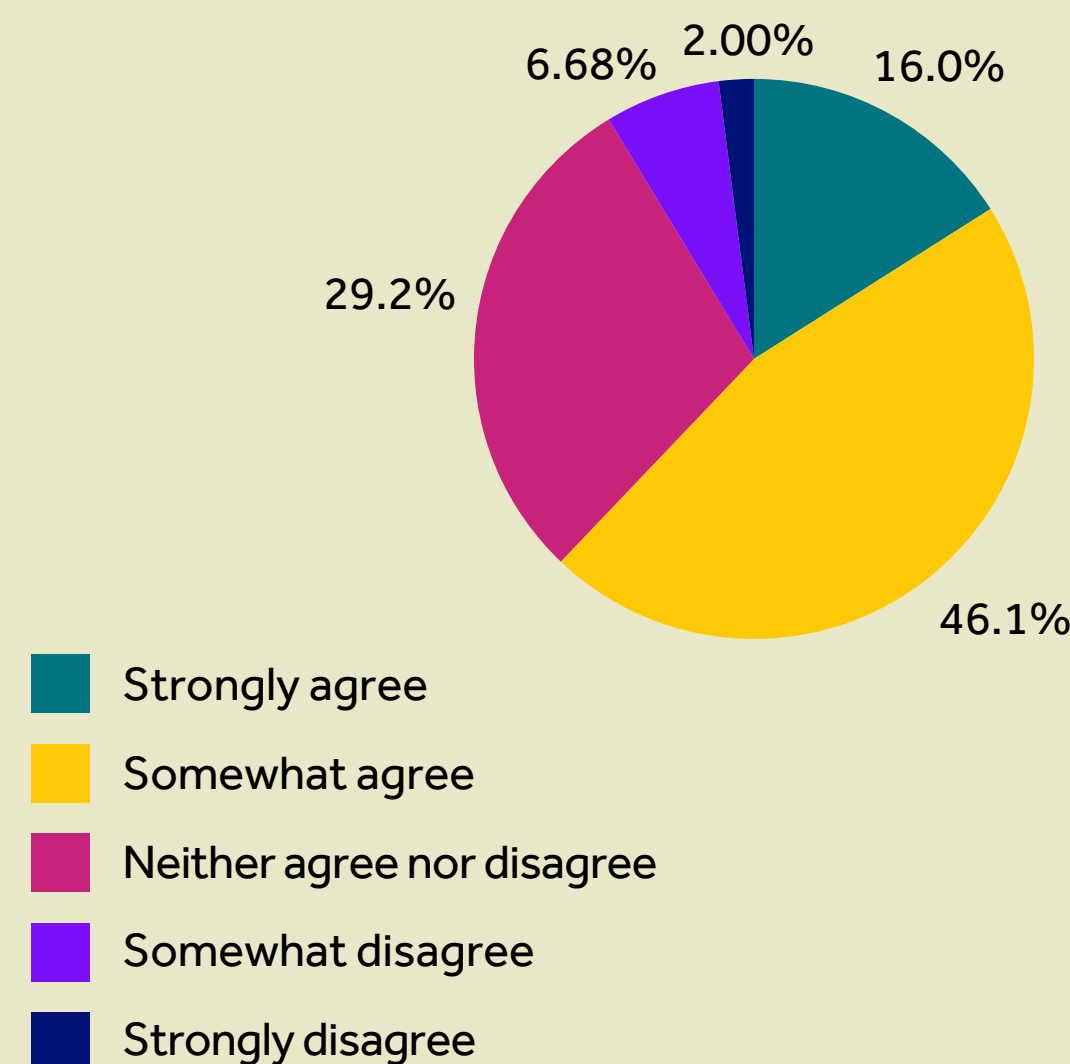
The survey data indicates a consensus among UK tech companies regarding the importance of planning systems and infrastructure for their growth. A notable 62.1% of the respondents agree that refining the planning system could benefit their local tech ecosystems, suggesting that many see room for improvement in the regulatory framework governing their operations.

Ratings of the current facilities and infrastructure reflect a divided stance. While a combined 55.3% of respondents view their available facilities positively, a noteworthy 19.6% find them lacking, pointing to a disparity in infrastructure satisfaction across the sector.

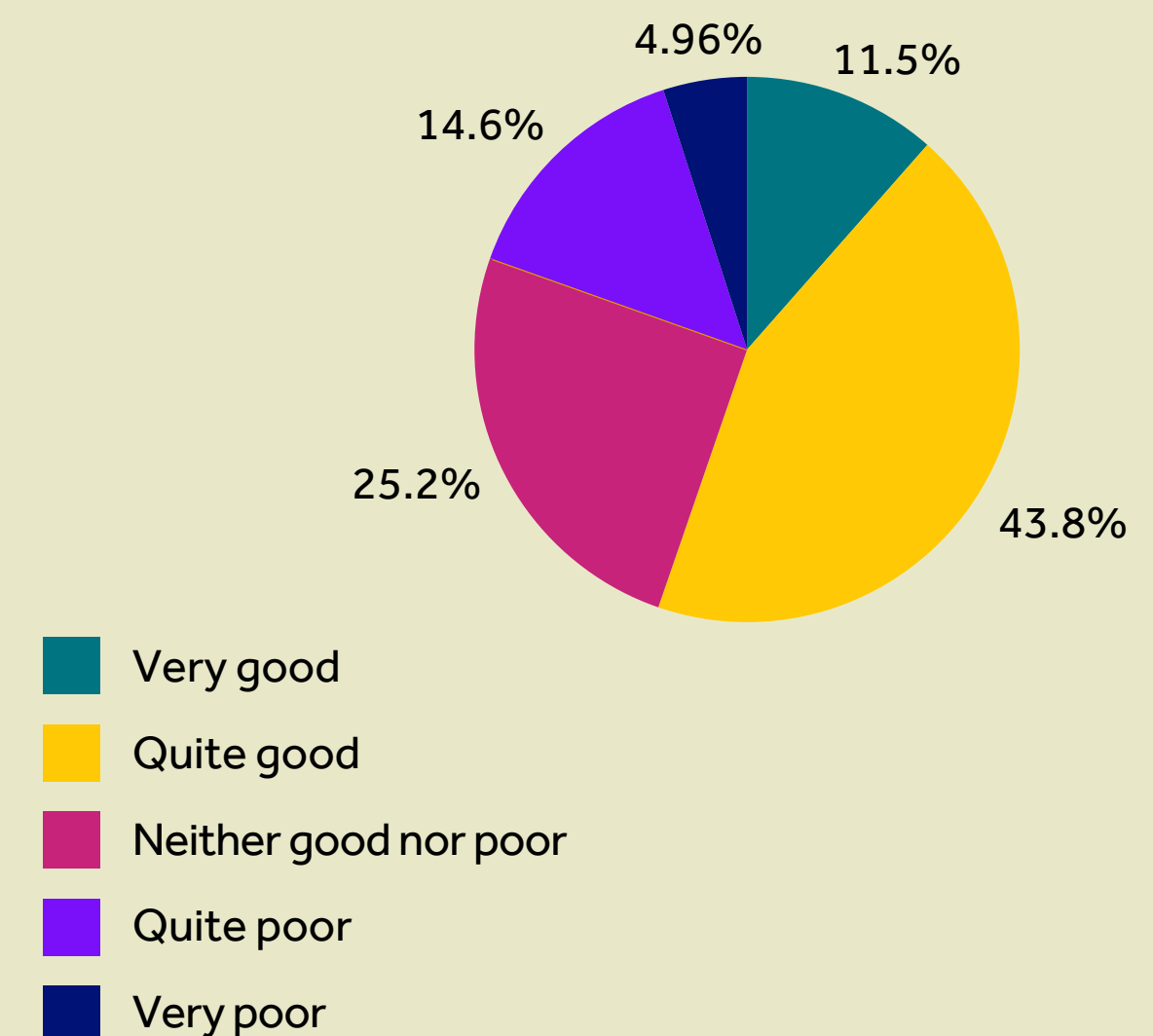
Concerning the impact of infrastructure on business location decisions, a significant 73.0% of participants acknowledge considering relocation due to infrastructure inadequacies, with nearly a third of these already planning such moves.

This suggests that infrastructure challenges have a substantial influence on business strategies within the tech industry. However, 27.0% do not see infrastructure as a deciding factor for a relocation, which may indicate either contentment with current conditions or other overriding reasons to remain in place.

**To what extent do you agree with the statement: 'Improvements to the planning system can unlock growth for your local tech ecosystem'?**



**Please rate the quality of facilities and infrastructure available in your current location for tech-related activities.**



# Future generations

Access to resources and funding is the most significant barrier, with a quarter of respondents (25.0%) recognising this obstacle, which indicates a need for better financial support systems for emerging entrepreneurs.

An educational gap is also apparent, as 20.4% of participants cite a lack of entrepreneurial education and training as a hurdle, suggesting that educational programmes may not be fully aligned with the practical needs of budding entrepreneurs.

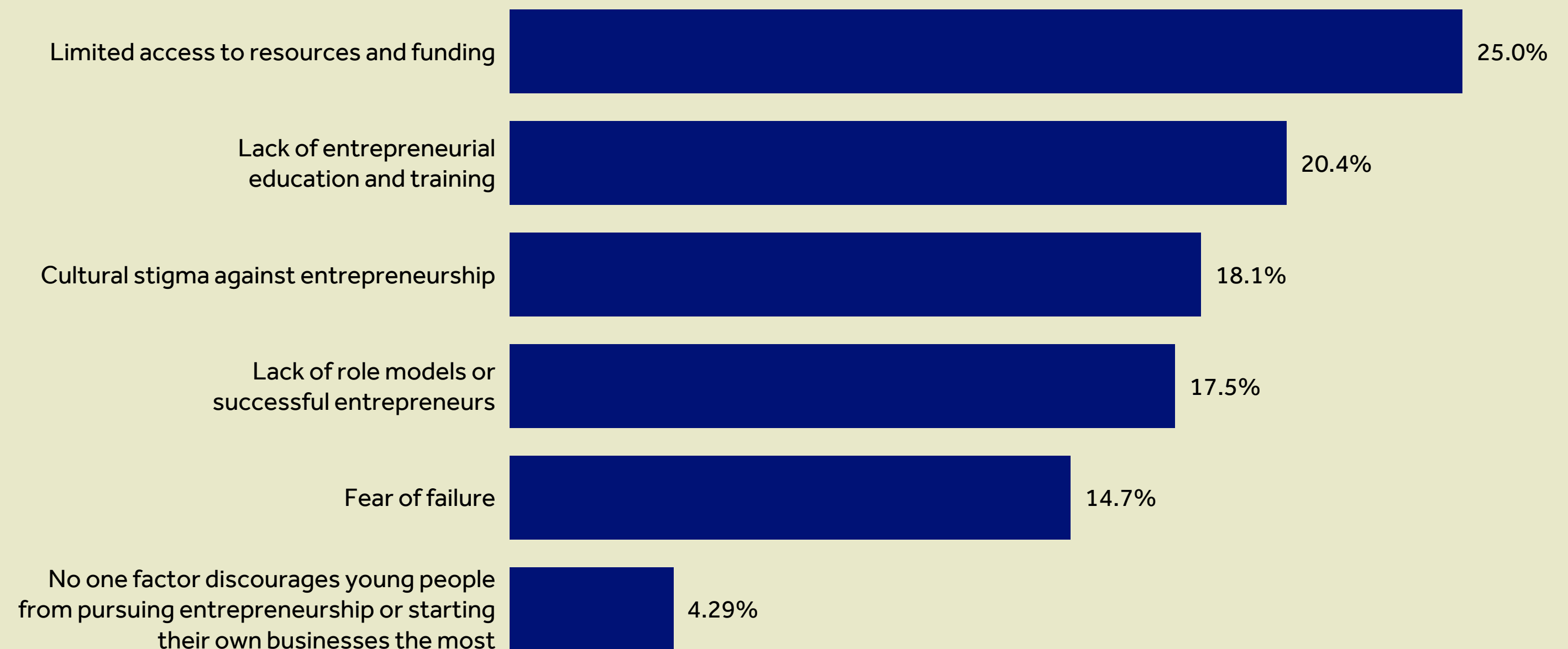
Cultural perceptions contribute to the challenges, with 18.1% noting that a cultural stigma against entrepreneurship can discourage young people, pointing towards a societal mindset that may undervalue entrepreneurial endeavours compared to more conventional career routes.

The absence of role models in the field is seen by 17.5% as a factor that may leave young people without the inspiration or guidance necessary to embark on their own business ventures.

The fear of failure affects 14.7% of survey participants' views on youth entrepreneurship, indicating that the aversion to risk may inhibit the willingness to engage in startups. A minority of respondents (4.29%) believe that no single factor is overwhelmingly discouraging to young entrepreneurs.

These findings suggest that to cultivate a generation of new entrepreneurs in the tech sector, there is a clear call for more accessible funding, relevant educational offerings, cultural shifts to embrace entrepreneurial risks, and the presence of entrepreneurial figures as role models.

## What factor, if any, do you believe discourages young people from pursuing entrepreneurship or starting their own businesses the most?



# Key themes

Access to funding is a significant hurdle within the UK tech ecosystem, with disparities regarding regional capital availability becoming increasingly evident. London remains the epicentre for tech financing. To combat this, the UK currently offers schemes like Seed Enterprise Investment Scheme (SEIS) and Enterprise Investment Scheme (EIS), alongside incubators and accelerators, to provide funding, mentorship, and support, particularly for under-represented founders.

Efforts to tackle the talent shortage in emerging technologies includes STEM education and international talent attraction. Government incentives, regulatory frameworks, and strategic initiatives in cybersecurity and AI, coupled with academic partnerships, aim to foster a supportive environment for tech innovation.

# Access to funding

Access to funding is a challenge within the UK tech ecosystem, as highlighted by the survey data. The data indicates that respondents agree on a significant regional variation in capital availability. Whilst London has traditionally been a hub for tech financing, drawing in a mix of venture capitalists, angel investors, and government funding, other regions may not have shared this level of access. This regional funding gap suggests that entrepreneurs outside the capital may encounter additional hurdles in securing the capital necessary for startup and growth phases, potentially affecting the overall balance of technological innovation across the UK. With technology being a key driver of economic growth, uneven distribution of capital investment could potentially stifle the nation's collective potential for technological advancement and economic diversification.

Despite these challenges, the UK tech ecosystem is supported by a range of initiatives aimed at growing entrepreneurial ventures. Government schemes

play a vital role in this support network. Programmes such as the SEIS and EIS offer tax reliefs to investors in high-risk early-stage companies, incentivising investment in the nation's startups.

In addition to these financial incentives, incubators and accelerators throughout the country provide critical support, offering not just funding but mentorship and networking opportunities that are vital for early-stage companies. These institutions are useful to many entrepreneurs, equipping them with the tools and knowledge necessary to navigate the complex world of tech startups.

However, the disparity in funding access extends beyond geography. Entrepreneurs from under-represented groups often face additional barriers. The majority of participants in the survey agreed that funding is less accessible to under-represented founders. While there have been strides towards inclusivity and diversity, the entrepreneurial community broadly agrees that the current measures are not enough.

Targeted initiatives aimed at supporting female founders and entrepreneurs from ethnic minority backgrounds have emerged to tackle this disparity. Examples include the Barclays Black Founder Accelerator and the Barclays Female Founder

Accelerator, which is government-funded. These programmes specifically aim to address the unique challenges faced by these groups, providing tailored support that acknowledges and bridges gaps in funding, knowledge, and network access.

# Skills and talent shortage

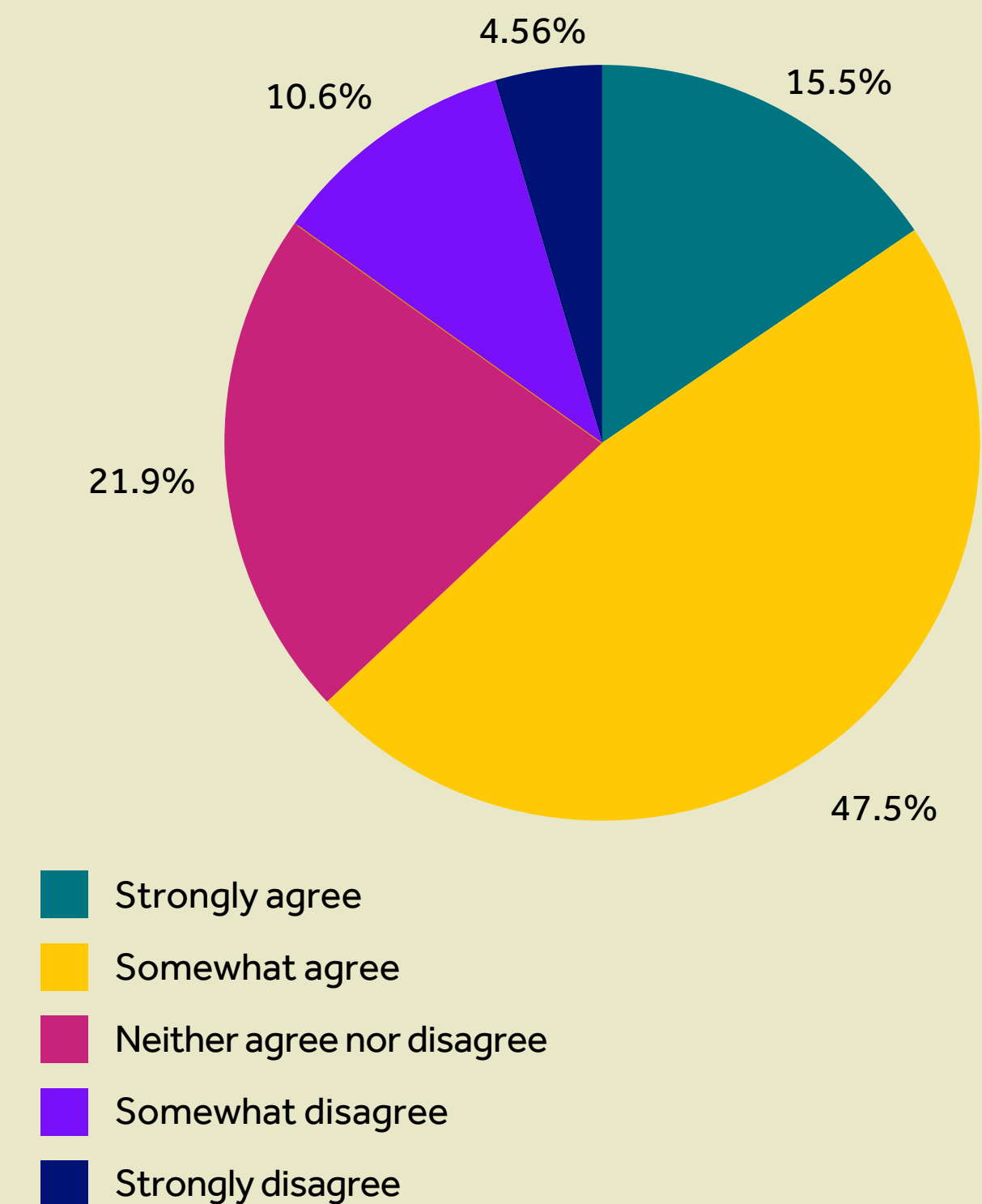
The UK tech sector faces a persistent challenge in bridging the skills gap, particularly as the pace of technological change accelerates. The survey supported this perspective, as many agreed there is a shortage of suitable talent in the UK.

Acknowledging the skills gap, the UK tech sector has seen an increase in initiatives designed to foster talent development. The government and private sectors are investing in education in science, technology, engineering, and mathematics (STEM), upskilling, and reskilling programs to meet the industry's evolving demands. Examples include the Skills Bootcamp in digital campaign which the Department of Science, Innovation and Technology (DSIT) launched, to promote government-funded Skills Bootcamps in high-demand digital fields like software development, data analytics, and cybersecurity. Developed in collaboration with the Digital Skills Council (DiSC), this campaign aims to

bridge the digital skills gap and empower individuals to seize exciting career opportunities in the digital economy.

The gap is most pronounced in emerging fields such as artificial intelligence, machine learning, and cybersecurity, where specialised knowledge is vital. In these areas, the UK is not only upskilling domestic expertise but also looking to attract individuals from overseas through immigration policies for highly skilled workers. According to survey findings, nearly one in five respondents (19.8%) highlight the management of visas and the attraction of international talent as a key opportunity. This underscores the tech industry's dependence on a diverse global talent pool to address the persistent skills shortages it faces.

To what extent do you agree or disagree with the following statement?: 'There is a shortage of suitable talent in UK tech'.





# Government support and regulations

Government support and regulation play pivotal roles in the UK tech ecosystem, creating an environment conducive to the development of cutting-edge technologies and the growth of businesses. This support spans various forms, including financial incentives, regulatory frameworks, and strategic initiatives designed to encourage research, development, and entrepreneurship within the tech sector. A majority of participants (65.4%) agree that public or local grant funding schemes are supportive of the tech ecosystem, indicating a positive reception of these initiatives among tech businesses.

An example of a financial incentive offered by the government is the R&D Tax Relief scheme. The scheme encourages businesses to invest in innovation by reducing their tax bill or allowing them

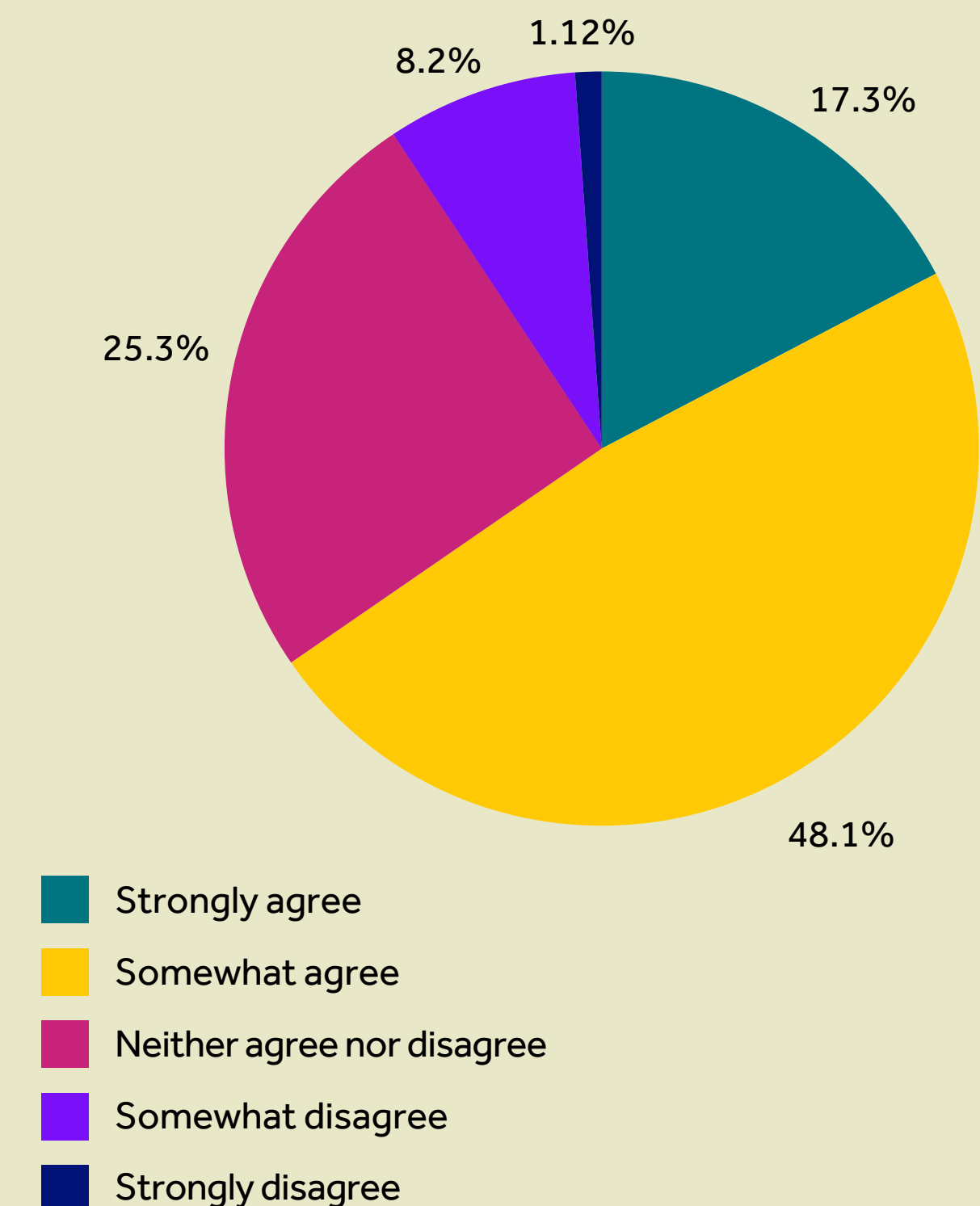
to claim payable cash credits as a percentage of their R&D expenditure.

In addition to financial incentives, the UK government has also implemented several regulatory frameworks aimed at ensuring a fair and competitive market while protecting consumer rights and data privacy. These are important for companies operating within the tech sector. The Digital Markets Unit, for example, has been established to oversee and regulate digital platforms to prevent any form of monopoly and ensure a level playing field for all tech companies, regardless of their size.

Furthermore, strategic initiatives such as the National Cyber Security Strategy 2022 and the AI Sector Deal underline the government's commitment to fostering a secure, resilient, and forward-thinking tech ecosystem. These initiatives not only aim to position the UK as a global leader in emerging technologies but also to address the societal challenges posed by digital transformation.

Partnerships between the government and academic institutions are also instrumental in advancing the UK's tech ecosystem. Collaborative projects and research hubs facilitate the exchange of knowledge, foster innovation, and provide startups with access to expertise and funding opportunities.

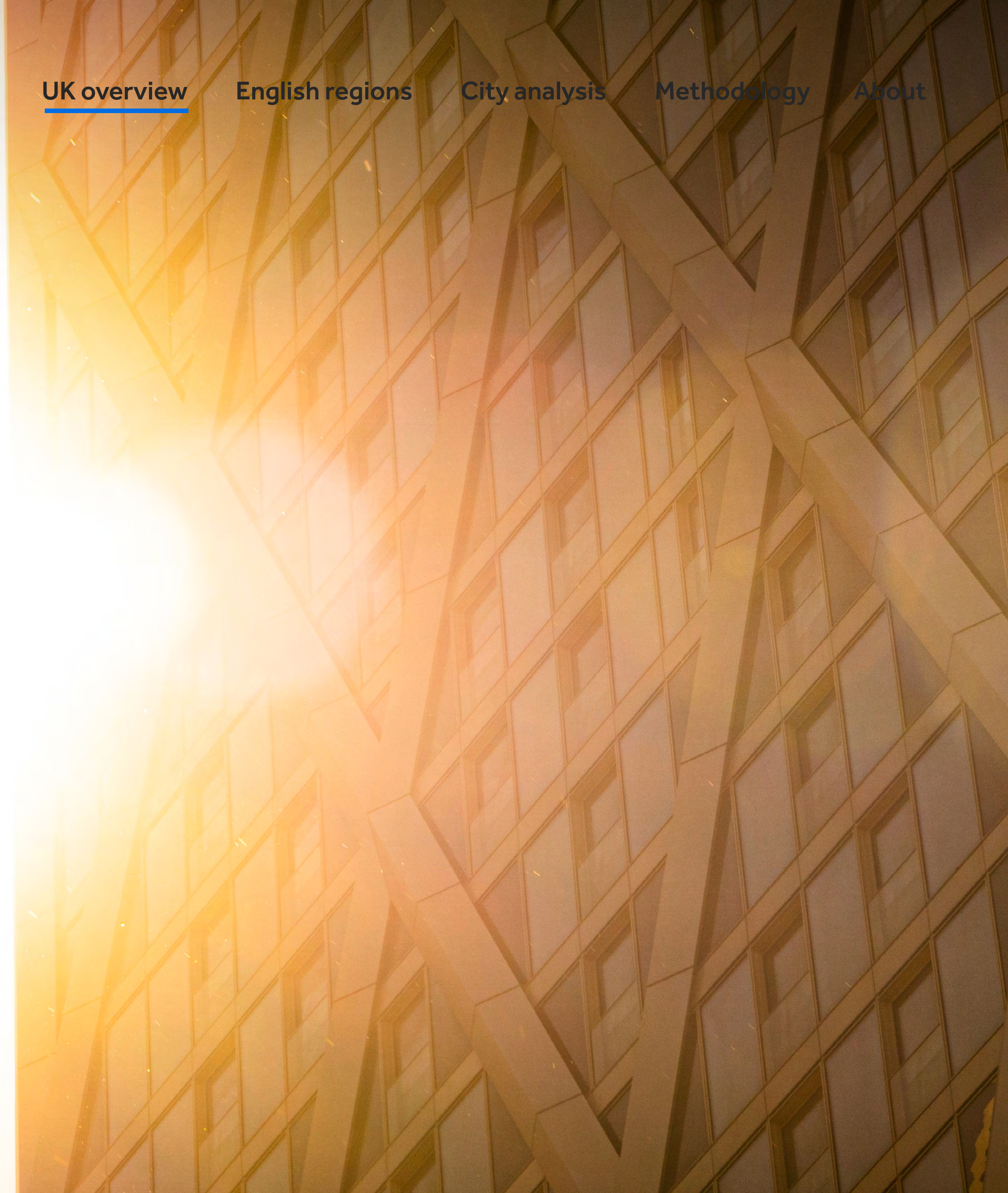
To what extent do you agree or disagree that public or local grant funding schemes adequately support your tech ecosystem?



# UK overview

Between 2022 and 2023, the number of active tech companies in each nation of the UK increased. England saw the largest increase in tech companies headquartered there, with 1.60% growth.

Whilst investment generally fell in the UK, as it did across the globe, tech companies in Wales still secured an 8.74% increase in equity funding across the period. This is a positive sign for the innovative firms within the nation and beyond. Grant funding also increased for three of the four nations. Notably, tech companies in Northern Ireland secured £63.6m in grant funding, which is over three times greater than the previous year. The South East of England also saw a 21.2% rise in grants, taking the total funding for companies across the region to £100m in 2023.



# Innovation Nation

Investment into the UK tech industry reached just over £12.3b in 2023. Whilst down from the highs of 2021 and 2022, the investment amount still surpassed annual pre-pandemic levels, which indicates positive signs of recovery for equity investment into tech. In 2023 alone, five new UK-based companies reached unicorn status, meaning they reached a valuation of \$1b. Four of these companies operate in the tech sector.

Analysing the scale of the UK's tech sector becomes clearer when comparing its fundraising activities with those of other sectors. In 2023, the business and professional services sector raised £9.30b in equity funding, which was approximately three-quarters of the amount raised by tech companies. The business and professional services sector was also not immune to the macroeconomic impacts that saw a reduction in equity fundraising by companies in 2023.

Grant funding awarded to tech companies in Wales increased to £25.9m in 2023, up 32.8% compared with the previous year. Companies in Cardiff were responsible for a significant proportion of this grant funding, having been awarded £14.3m in 2023.

Whilst equity funding in Northern Ireland fell across the year, tech companies in Belfast continued to attract investment. In 2023, investment in Northern Irish tech companies reached £92.1m, a 7.59% uptick from the previous year. There was positive growth in investment into tech companies in Yorkshire and the Humber, with companies in the region seeing a 19.9% increase in equity fundraising. This goes against the broader trends seen by companies headquartered in England as a nation. East Midlands-based companies saw an increase in grant funding from 2022 to 2023. This was in part due to companies in Nottingham raising £14.4m in grant funding during 2023, just over double the levels from 2022.

Four tech unicorns made in 2023

## Quantexa

Westminster, London

Quantexa develops a decision intelligence platform using big data and artificial intelligence.

## Synthesisia

Westminster, London

The company develops AI technology designed to accurately model the human face in motion, to enhance virtual storytelling.

## Zenobē

Westminster, London

Zenobē operates a range of battery storage facilities and charging points for electric vehicles.

## Zopa

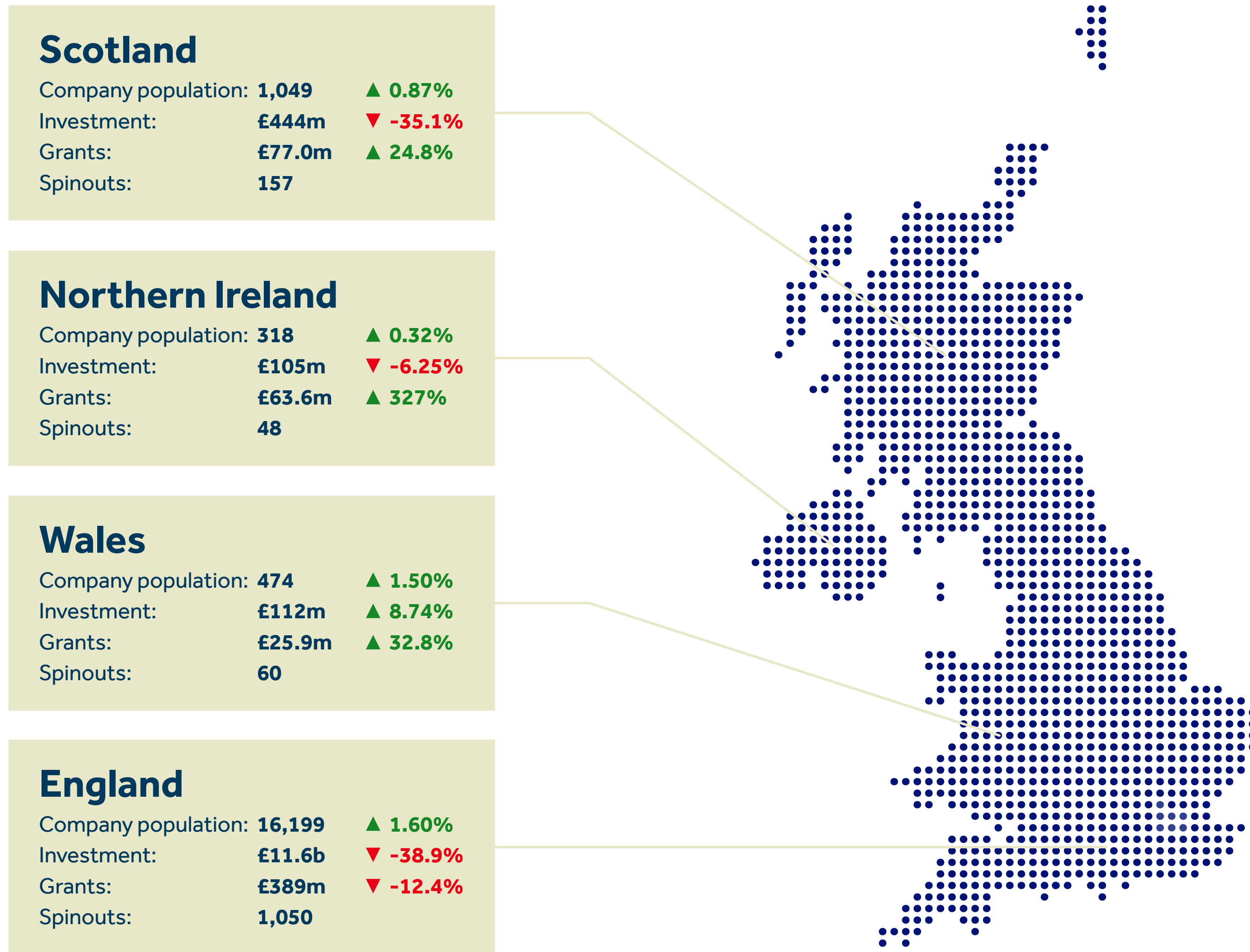
Southwark, London

Zopa operates an online bank.

# Nations

## Tech company population

The UK tech company population grew across all four nations of the UK. In England, the population grew by 1.60% in 2023, with Wales seeing a similar growth in company population. Institutions in the UK offer plenty of support to these businesses, as seen by the rise in grant funding awarded in 2023, with a notable rise seen in Northern Ireland. There were also some large equity deals carried out across 2023, including SumUp which raised £244m and Chemify which raised £36.0m.



The map presents data on the active and dormant tech company population in 2023. Percentage changes are derived by comparing statistics from 2023 with those from the preceding year (2022). The spinout population data is accurate up to the end of December 2023.

# *English regions*

London, home to 7,567 active tech companies as of December 2023, emerges as the top hub amongst the regions. Funding into companies based in the capital decreased by 72.0% in 2023 compared to the previous year. This stark decline may be attributed to broader economic challenges and the highs observed in 2022.

Active tech companies in the East of England and East Midlands saw modest growth amid funding decreases. Yorkshire and the Humber was the only English region in which investment into tech companies increased between 2022 and 2023. Companies in this region secured £201m, a 19.9% increase from the previous year.

# English regions

## Tech company population

The technology sector in England demonstrated varied growth between 2022 and 2023, with a number of regional highlights. Yorkshire and the Humber stood out as the only English region with an increase in investment, boasting a 19.9% increase to £201m. London was the leading region in terms of equity funding volumes in 2023, with companies collectively securing £7.79b. While overall equity funding volumes decreased in 2023, there was a significant rise in grant funding. Companies in the South East collectively secured £100m, reflecting a 21.2% growth from the previous year. This marked the highest year-on-year growth across the English regions and the highest volume of grant funding outside of London. Despite a decline against most metrics, the capital continued to excel in the academic spinout domain, with 237 active tech spinouts—the highest number nationwide.

| North East          |        |          |
|---------------------|--------|----------|
| Company population: | 407    | ▲ 1.72%  |
| Investment:         | £210m  | ▼ -4.76% |
| Grants:             | £11.5m | ▲ 15.4%  |
| Spinouts:           | 46     |          |

| North West          |        |          |
|---------------------|--------|----------|
| Company population: | 1,261  | ▲ 0.95%  |
| Investment:         | £338m  | ▼ -98.5% |
| Grants:             | £18.3m | ▼ -2.20% |
| Spinouts:           | 95     |          |

| South East          |        |          |
|---------------------|--------|----------|
| Company population: | 2,421  | ▲ 0.95%  |
| Investment:         | £1.29b | ▼ -54.0% |
| Grants:             | £100m  | ▲ 21.2%  |
| Spinouts:           | 231    |          |

| London              |        |          |
|---------------------|--------|----------|
| Company population: | 7,567  | ▲ 2.15%  |
| Investment:         | £7.79b | ▼ -72.0% |
| Grants:             | £105m  | ▼ -28.3% |
| Spinouts:           | 48     |          |

| South West          |        |          |
|---------------------|--------|----------|
| Company population: | 1,044  | ▲ 1.15%  |
| Investment:         | £454m  | ▼ -58.6% |
| Grants:             | £59.4m | ▼ -0.04% |
| Spinouts:           | 107    |          |

| East of England     |        |          |
|---------------------|--------|----------|
| Company population: | 1,476  | ▲ 0.81%  |
| Investment:         | £1.16b | ▼ -37.9% |
| Grants:             | £51.2m | ▼ -79.4% |
| Spinouts:           | 160    |          |

| East Midlands       |        |          |
|---------------------|--------|----------|
| Company population: | 539    | ▲ 3.34%  |
| Investment:         | £101m  | ▼ -24.8% |
| Grants:             | £20.1m | ▲ 8.90%  |
| Spinouts:           | 45     |          |

| West Midlands       |        |          |
|---------------------|--------|----------|
| Company population: | 750    | ▲ 1.36%  |
| Investment:         | £123m  | ▼ -23.6% |
| Grants:             | £13.0m | ▼ -3.43% |
| Spinouts:           | 58     |          |

| Yorkshire & the Humber |        |          |
|------------------------|--------|----------|
| Company population:    | 737    | ▲ 1.36%  |
| Investment:            | £201m  | ▲ 19.9%  |
| Grants:                | £19.2m | ▼ -3.43% |
| Spinouts:              | 71     |          |

This data presents the active and dormant tech company population in 2023. Percentage changes are derived by comparing statistics from 2023 with those from the preceding year (2022). The spinout population data is accurate up to the end of December 2023.

# *City analysis*

Excluding London, the following four cities have the largest active high-growth tech company population as of December 2023. The analysis highlights trends in equity investment across a five-year period. Within each city profile, key ecosystem components that support local tech startups are identified.

# Edinburgh

## Investment overview

Edinburgh-based tech companies have raised £1.11b in equity investment between 2019 and 2023. Investment volumes reached an all-time high (£331m) in 2022. A single fundraising by GoFibre (£164m) accounted for 44.1% of total investment in that year. Scottish Enterprise was the largest investor in tech companies headquartered in Edinburgh, participating in 218 deals across all its managed funds.

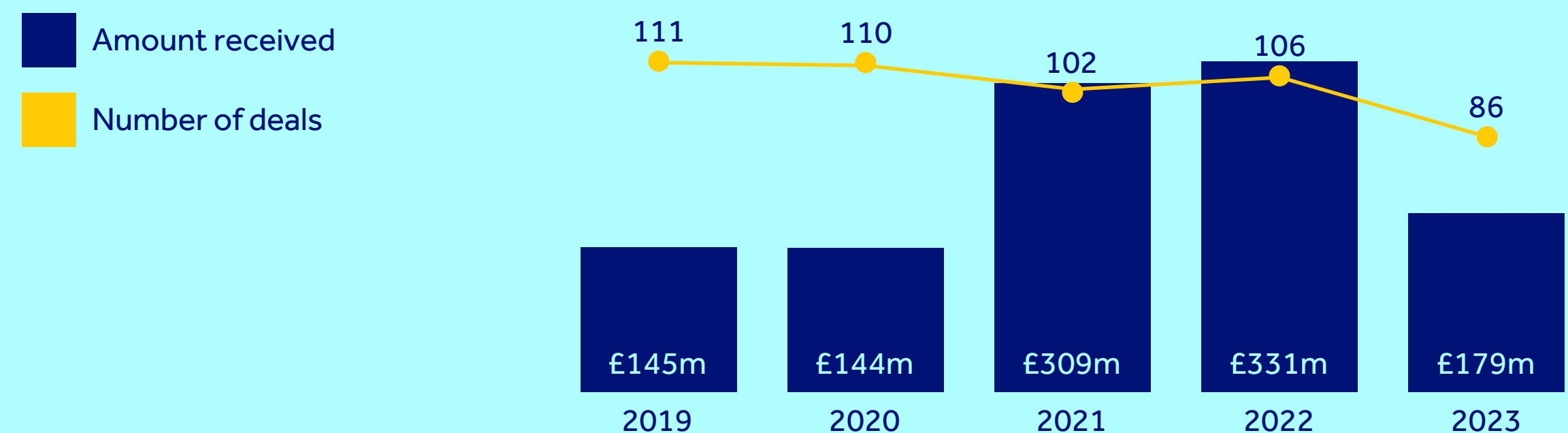
Edinburgh is home to several incubators, including CodeBase, the largest technology incubator in the UK. CodeBase provides mentorship and networking opportunities for tech startups. Similarly, initiatives such as Scottish EDGE promote growth in the city's entrepreneurial network. It runs a competition, allowing entrepreneurs the opportunity to win up to £150k in funding alongside targeted mentoring and support to accelerate business growth development. Businesses that have benefited from its support services include Carbogenics, a startup producing sustainable carbon adsorbents.

**59.1k**  
Number of active companies

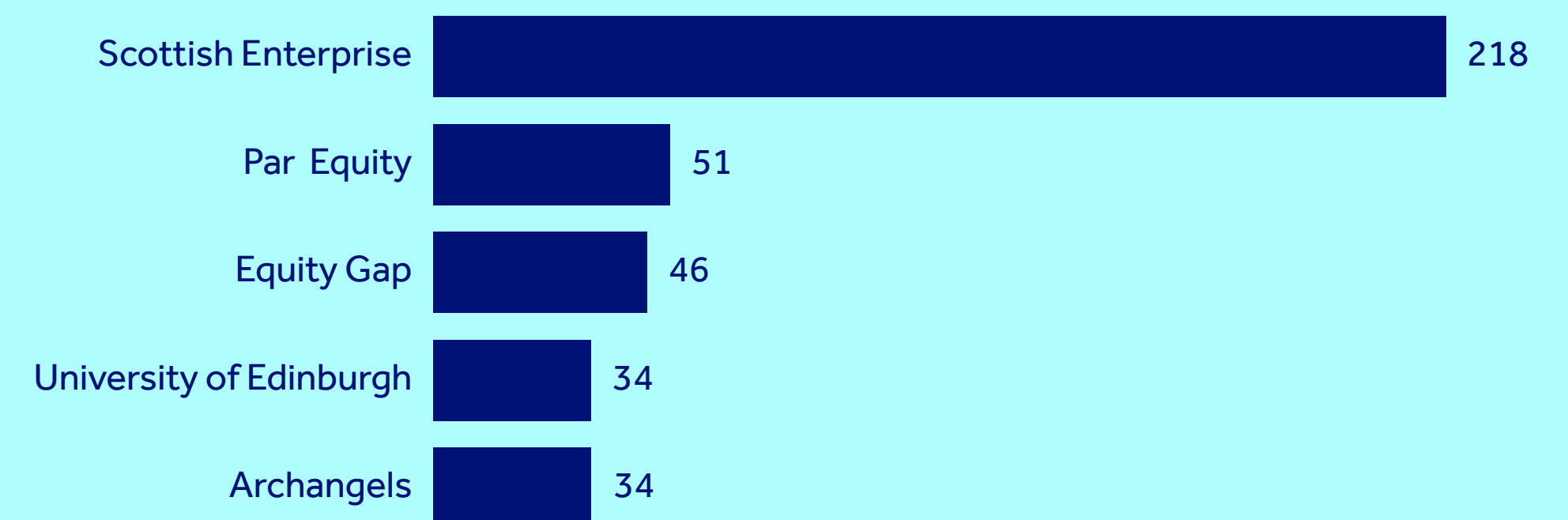
**798**  
Number of active high-growth companies

**355**  
Number of active high-growth tech companies

Equity investment secured by Edinburgh-based tech companies (2019-2023)



Top investors into Edinburgh-based tech companies by number of equity deals (2019-2023)





# Cambridge

## Investment overview

Cambridge Angels emerged as the most prolific investor in Cambridge tech companies, participating in 62 deals between 2019 and 2023. The network of angel investors is renowned for its focus on early-stage technology companies. Investment in Cambridge-based tech businesses peaked in 2022, with companies raising £504m.

Academic institutions provide the resources necessary for research, funding opportunities, and access to a network of industry partnerships. Accelerate Cambridge, an accelerator programme at Cambridge Judge Business School is an example of startup support offered by the University. This programme is designed to accelerate the growth of startups from ideation to commercialisation.

The University of Cambridge has produced 69.2% of the city's academic spinouts, totalling 54 companies. In 2019, software company Healx raised £43.9m

in equity fundraising, the largest raised by a Cambridge-based spinout over the period. Healx develops software to help find treatments for rare diseases.

**30.2k**

Number of active companies

**797**

Number of active high-growth companies

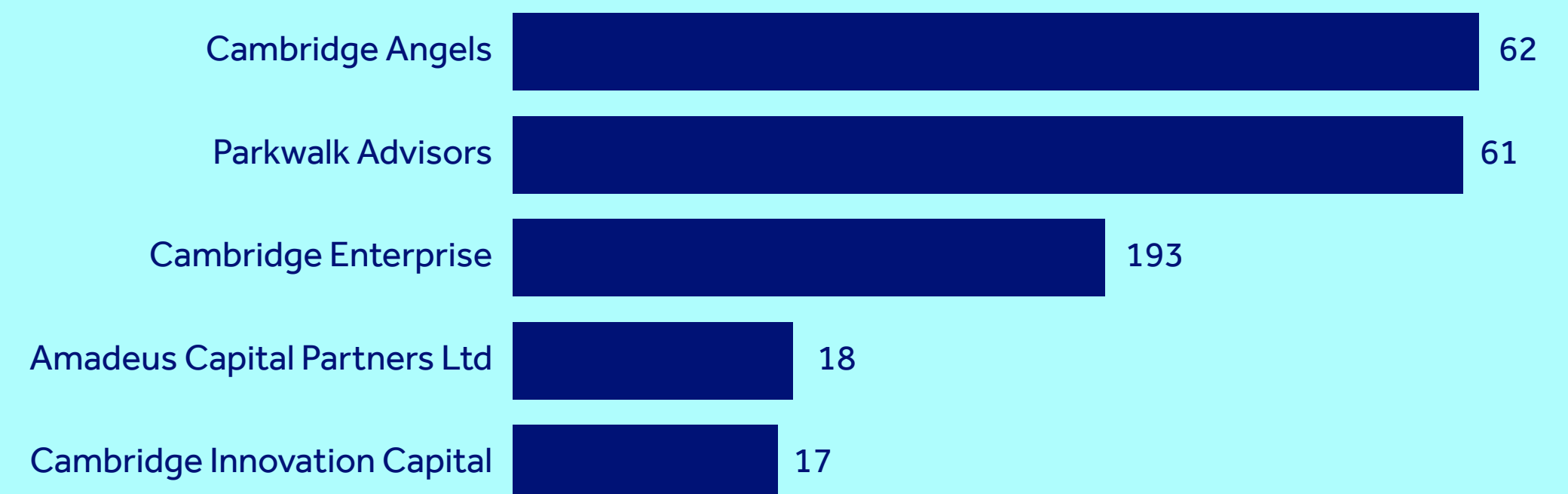
**354**

Number of active high-growth tech companies

Equity investment secured by Cambridge-based tech companies (2019-2023)



Top investors into Cambridge-based tech companies by number of equity deals (2019-2023)



# Manchester

## Investment overview

Manchester's tech sector has experienced substantial growth in investment between 2019 and 2022, with investment levels peaking at £278m in 2022. Iduna, an operator of an electric vehicle charging network, secured the period's largest single investment of £110m in equity funding. This accounted for 39.6% of the funding secured in 2022. Mercia Asset Management emerged as the most active investor in Manchester's tech scene, participating in 23 deals.

In 2022, the Greater Manchester Digital Security Hub (DiSH) launch in Lincoln Square introduced a pivotal resource for digital security businesses. DiSH provides these enterprises with access to mentorship and coaching. It does this through dedicated growth programs operated by Barclays Eagle Labs, and an industry accelerator managed by Plexal. Another key player in innovation is the University of Manchester, which supports startups and scaleups in the region. The proximity of

businesses to academic institutions enhances the potential for research collaborations and access to emerging technologies, driving forward Manchester's reputation as a hub for technological advancement and entrepreneurship.

# 223k

Number of active companies

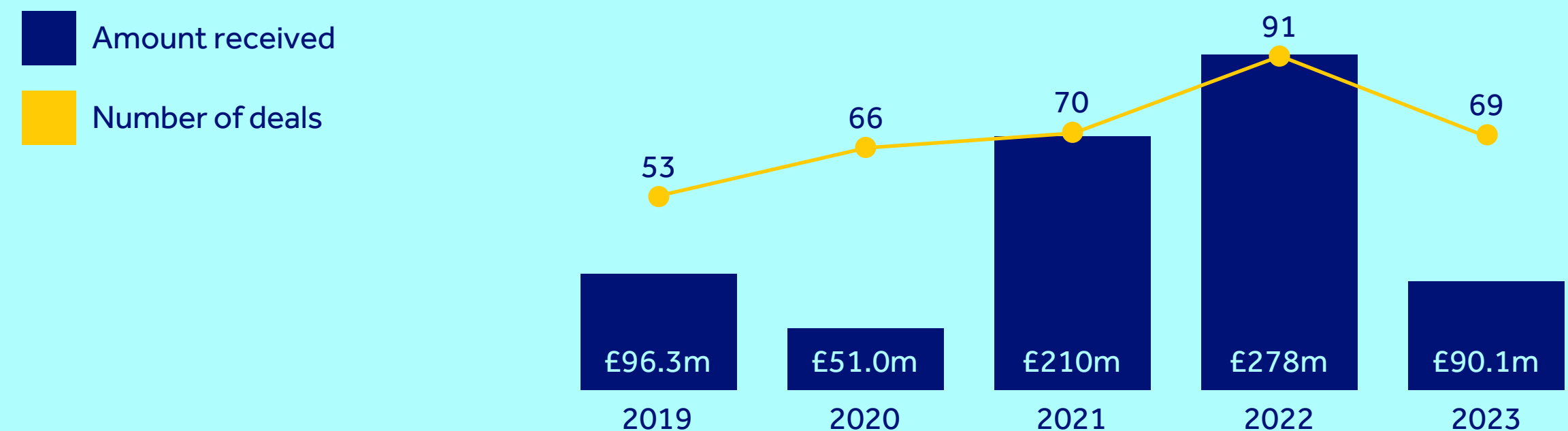
# 1,948

Number of active high-growth companies

# 305

Number of active high-growth tech companies

Equity investment secured by Manchester-based tech companies (2019-2023)



Top investors into Manchester-based tech companies by number of equity deals (2019-2023)



# Bristol

## Investment overview

Equity funding by tech companies in Bristol reached a peak of £526m in 2022. The city is home to several R&D centres including HP Labs and the University of Bristol Smart Lab, which in 2018 staged the world's first public trial of 5G. This innovative environment has catalysed diverse tech ventures, solidifying Bristol's position as an emerging city in the UK's tech landscape. Bristol Private Equity Club emerged as the most prominent investor, participating in 22 deals. This local investment group introduces high-net-worth individuals to local early-stage businesses that are seeking capital.

Moreover, Bristol's tech companies are set to benefit from their strategic location amidst "Silicon Gorge," a term denoting the thriving cluster of high-tech and research entities in the South West. This area has attracted a growing number of companies, particularly within the deeptech sector. Organisations such as techSPARK and SETsquared

help foster collaboration between businesses across South West England.

**36.6k**

Number of active companies

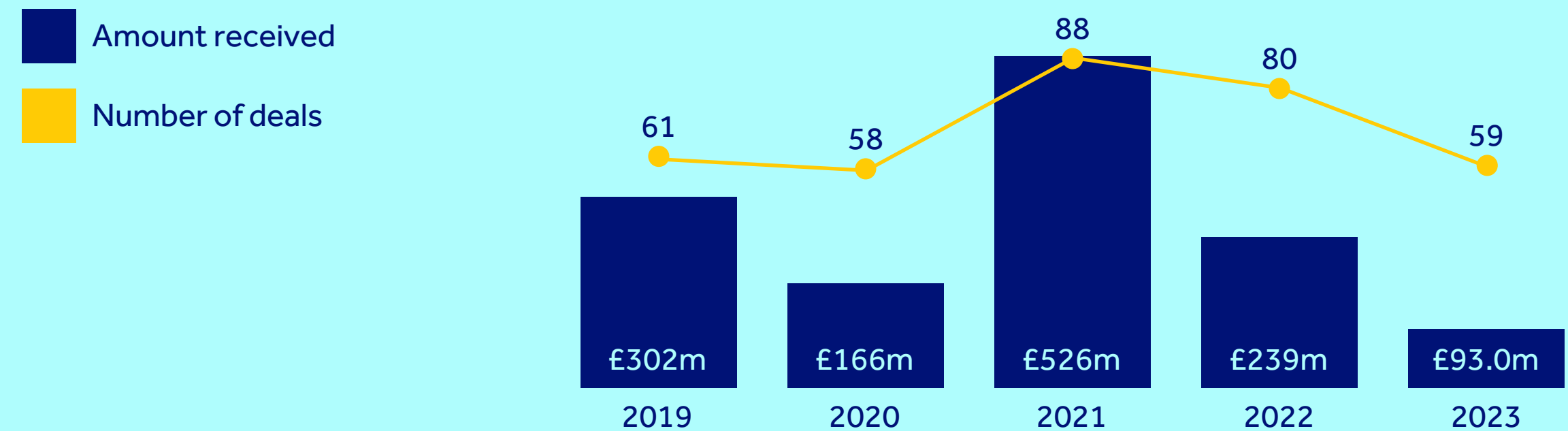
**639**

Number of active high-growth companies

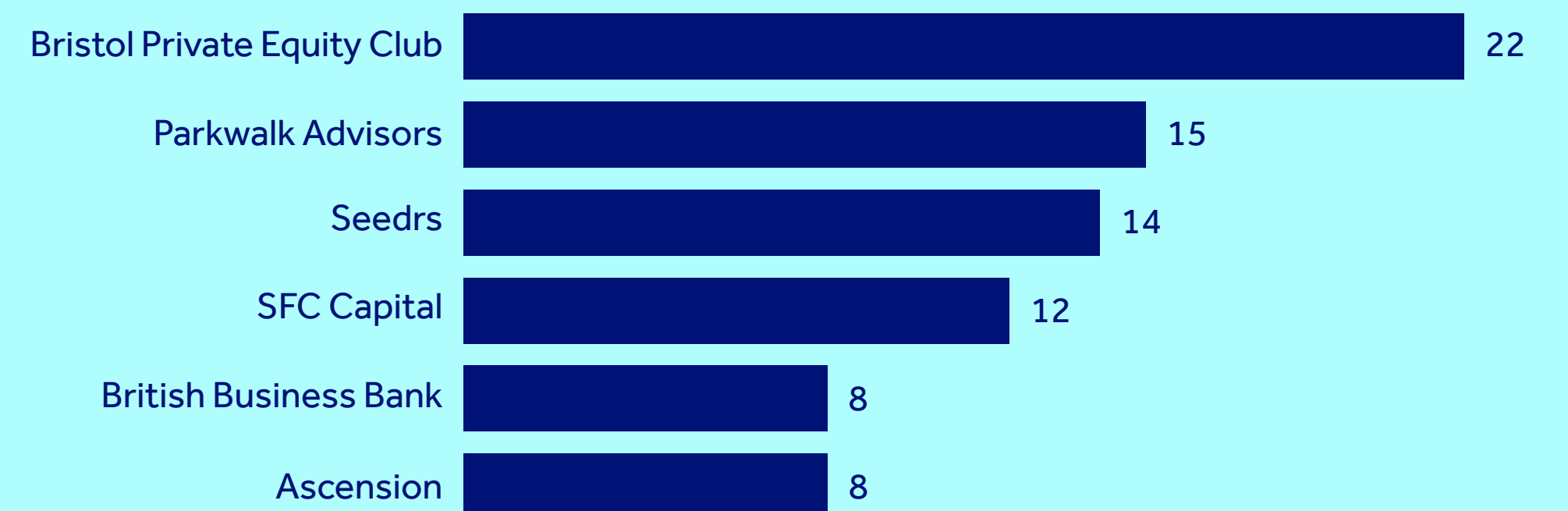
**305**

Number of active high-growth tech companies

Equity investment secured by Bristol-based tech companies (2019-2023)



Top investors into Bristol-based tech companies by number of equity deals (2019-2023)



# Methodology

Beahurst identifies high-growth startup companies using eight triggers (outlined on this page) that it believes suggests a company has high-growth potential. More detail on Beahurst’s tracking triggers is available via its website. Additionally, to qualify as a tech company for this report, the business must fall within the ‘technology’ classification developed by Beahurst.

## Active companies

"Active" companies refers to companies that have an active or dormant Companies House status. The term excludes companies that have exited via an IPO or acquisition.

## Equity investment

To be included in our analysis, any investment must be:

- Some form of equity investment
- Secured by a UK company
- Issued between 1 January 2013 and 31 Dec 2023.

## Announced and unannounced fundraisings

An unannounced fundraising is an investment made into a private company that is completed without press coverage or a statement from the recipient company or funds that made the investment. These transactions are an integral part of the UK’s high-growth economy, accounting for around 70% of all equity transactions.

## Grant funding

A company that has met our innovation grant trigger is one that has formally accepted a grant offer for a specific innovation project. The project’s primary focus must be fostering ‘New to the market’ innovation, as opposed to other aims such as job creation. The grant must have been received between 1 January 2013 and 31 Dec 2023.

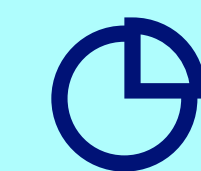
## Academic spinouts

We define an academic spinout as a company that meets condition 1 and at least one condition out of 2-4:

1. The company was set up to exploit IP developed by a recognised UK university or research institution (this is broadly in line with the Higher Education Statistics Agency’s (HESA) definition of a spin-off)
2. The institution owns IP that it has licensed to the company
3. The institution owns shares in the company

4. The institution has the right (via an options or warrants contract) to purchase shares in the company at a later date.

## High growth triggers



Equity investment



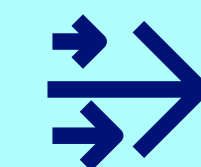
Academic spinouts



Scaleups



High-growth lists



Accelerator attendances



Major grant recipients



Management Buy-outs/ Buy-ins



Venture debt

# Barclays Eagle Labs

Barclays Eagle Labs is a growing national network that provides business incubation, dedicated growth programmes, mentoring as well as co-working, and office space for ambitious high-growth businesses.

By cultivating a community of like-minded entrepreneurs and providing a collaborative work environment, access to peers, and opportunities to maximise growth through digital connections and growth programmes, curated events, and funding opportunities, Eagle Labs is able to help startups to grow at pace.

Eagle Labs also specialises in positively disrupting key industries by bringing together key corporate players, industry bodies, leading universities, and startups to enable rapid innovation and investment, by asking them to collaborate and currently have dedicated lawtech, healthtech, energytech and agritech industry-aligned programmes.

With various Eagle Labs dotted all across the UK and many more in the pipeline, our focus is to help to connect, educate, inspire, and accelerate ambitious UK businesses and entrepreneurs.

Find out more at [labs.uk.barclays](https://labs.uk.barclays).

#### Important Information

We have pulled together the resources in this document for you to help with your independent research and business decisions. This document contains opinions from independent third parties and link(s) to third party websites and resources that we (Barclays) are not providing or recommending to you.

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# Beauhurst

Beauhurst is a searchable database of the UK's high-growth companies.

Their platform is trusted by thousands of business professionals to help them find, research and monitor the most ambitious businesses in Britain. They collect data on every company that meets our unique criteria of high-growth; from equity-backed startups to accelerator attendees, academic spinouts and fast-growing scaleups.

Beauhurst's data is also used by journalists and researchers who seek to understand the high-growth economy, and powering studies by major organisations – including the British Business Bank, HM Treasury and Innovate UK – to help them develop effective policy.

For more information and a free demonstration, visit [beauhurst.com](https://beauhurst.com)

## Contact

4th Floor, Brixton House  
385 Coldharbour Lane  
London  
SW9 8GL

[www.beauhurst.com](https://www.beauhurst.com)

T: +44 (0)20 7062 0060

E: [consultancy@beauhurst.com](mailto:consultancy@beauhurst.com)

# Before you go

Get in touch if you would like to find out how we can support you and your business. We'd love to hear from you.



[eaglelabs@barclays.com](mailto:eaglelabs@barclays.com)



[labs.barclays](https://labs.barclays)



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