Royal Academy of Engineering | Enterprise Hub

Beauhurst

Spotlight on Spinouts

March 2025

UK academic spinout trends

Contents

Foreword

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Enterprise Committee Member,
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> ***We know that tangible change in the spinout landscape can only be achieved by increasing transparency and data in this space, and Spotlight on Spinouts has been our continued contribution to this.***

We are delighted to present the fifth edition of our annual report, Spotlight on Spinouts 2025, which is produced in collaboration by the Royal Academy of Engineering and Beauhurst. For the past five years, this report has provided a crucial read and a comprehensive analysis of the trends in UK spinouts. Year-on-year it presents a wealth of quantitative data in an area that has historically lacked transparency.

When we began this initiative in 2021, our aim was to understand what it takes for spinouts to thrive. By tracking investment trends and knowing more about the processes, people and decisions that power our spinouts and the outcomes they lead to, we hoped to identify best practice and incentivise and facilitate change.

Five years on and we are proud of what we have achieved. Our data has catalysed debate and discussion, university equity stakes have hit a 10-year low of 16.1%, equity investment in spinouts is on the rise and the *Independent Review of University Spinout Companies* set out a programme of change.[1] We are not complacent that all the necessary changes have been made and that our work here is done. Today we are also publishing ***UK Spinouts – a status update***, tracking the implementation of the Review's recommendations and holding the government and the delivery bodies to account.

We know that tangible change in the spinout landscape can only be achieved by increasing transparency and data in this space, and *Spotlight on Spinouts* has been our continued contribution to this. The forthcoming publication of the national spinout register, being developed by Research England in partnership with Higher Education Statistics Agency (HESA), is hotly anticipated and we hope its potential to provide consistency through a unified definition of spinouts and reliable public data will be game changing.

In the meantime, Spotlight on Spinouts 2025 contains key insights that will be of interest to founders, universities, policymakers and industry, and other stakeholders including:

- The average stake taken by universities has decreased from 21.5% in 2023 to 16.1% in 2024, the lowest it has been in the past decade.
- Equity investment in spinouts increased significantly in 2024 to £2.60 billion, however the number of deals dropped reflecting the wider equity market climate.
- Comparisons can be drawn with the trend seen in the Academy's recent State of UK Deep Tech report, whereby UK deep tech companies have consistently attracted substantial investment, but there has been a slowdown in overall investment activity.[2]
- The total value of equity investment from 2015-2024

[1] Independent Review of University Spinout Companies, DSIT and HMT, 2023.

stands at £17.0 billion.
• The median stakes by company type have showed little change compared to 2023, most notably though the median stake for hardware companies has dropped from 21.7% in 2023 to 19.1% in 2024.
• The Golden Triangle, consisting of Oxford, Cambridge, and London, accounts for 27.7% of the total spinout population.
• Pharmaceuticals continues to lead the top sectors by number of spinouts in 2025 with 399 companies.
• Between 2015 and 2024, 200 spinout companies exited with 201 exit events due to Darktrace, a University of Cambridge spinout, which exited once through an IPO in 2021 at the value of £1.72 billion and for the second time in 2024 via an acquisition at £3.99 billion.
• Women remain underrepresented, with only 7.38% of spinouts founded by all-female teams, compared to 12.3% across high-growth companies. There is still no data available on ethnicity, which continues to be a key barrier to affecting change.

Launched in April 2013, the Academy's Enterprise Hub has been supporting talented entrepreneurs and decision-makers in transforming their engineering innovations into disruptive spinouts and startups. Since its inception, we have awarded over £18 million in grant funding, and our Hub members have gone on to raise £3.4 billion in funding and create 5,600 jobs.[3]
We take no stake in the spinouts we support and thus our independent position has enabled us to provide input on national discussions on IP and commercialisation policy.

We would like to thank the stakeholders who have helped contribute to this continued analysis over the past five years, as well as the experts and the Academy's steering group who provided their contributions to this report. We encourage those with insights or queries to get in touch with us at the Academy's Enterprise Hub.

We look forward to continuing to drive data, debate and discussion over the next five years and beyond.

We take no stake in the spinouts we support and thus our independent position has enabled us to provide input on national discussions on IP and commercialisation policy.

[2] State of Deep Tech 2024, Royal Academy of Engineering, 2025.
*The Academy is undertaking research into deep tech spinouts in Ireland and we look forward to the findings and understanding if and how the learnings can apply to the UK spinout ecosystem.
[3] Our alumni have raised £3.4 billion in additional funding and created 5,600 jobs, including £2.5 billion in funding and 2,600 new jobs since joining the Enterprise Hub.

Executive summary

Henry Whorwood
Managing Director, Research and Consultancy at Beauhurst

Spinouts drive innovation in the UK, transforming research into commercial ventures that fuel economic growth and societal progress. In 2024, they secured £2.60b in funding — significantly more than in 2023 — in contrast, the UK's wider equity market for high-growth companies faced a 19% decline in investment. This rise in funding suggests renewed investor confidence in spinouts, even as broader equity investment declines. AI and life sciences equity markets remained strong, which likely boosted spinouts, as a high proportion operate in these sectors.

The recommendations from the 2023 Independent Review of University Spinout Companies may have also contributed. These included additional proof-of-concept (POC) funding and advice for academic institutions to take lower stakes in spinouts to help encourage investment. Since then, over 50 universities have issued adoption statements aligning with these principles. In 2024, we saw tangible signs of progress: university equity stakes hit a 10-year low of 16.1%, while the government announced a five-year £40.0m POC fund in October, with £9.0m allocated for 2025.

Beyond funding, spinouts face challenges such as access to affordable, high-quality facilities close to their academic institution. Demand for space in spinout hubs like Oxford remains intense, with shortages of suitable facilities risking delays to breakthrough research. In 2024, efforts to address this took shape, with the University of Manchester's North Campus transformation and Oxford Science Enterprises' partnership with the Crown Estate, both aiming to expand spinout infrastructure in key locations.

We've partnered with the Royal Academy of Engineering for five years to produce this spinout report for the knowledge exchange community. With this invaluable partnership, we've used Beauhurst data to highlight the profound impact spinouts have on the economy and technological discovery. We remain committed to tracking the key trends shaping the opportunities and challenges for UK spinouts, across locations, sectors, funding, and leadership diversity, ensuring our research remains a valuable resource for those invested in the ecosystem.

2,064
Total number of spinouts tracked since 2011 in the UK with 1,609 active

£2.60b
Equity investment received by spinouts in 2024

55.0%
Proportion of active UK spinouts at the seed-stage

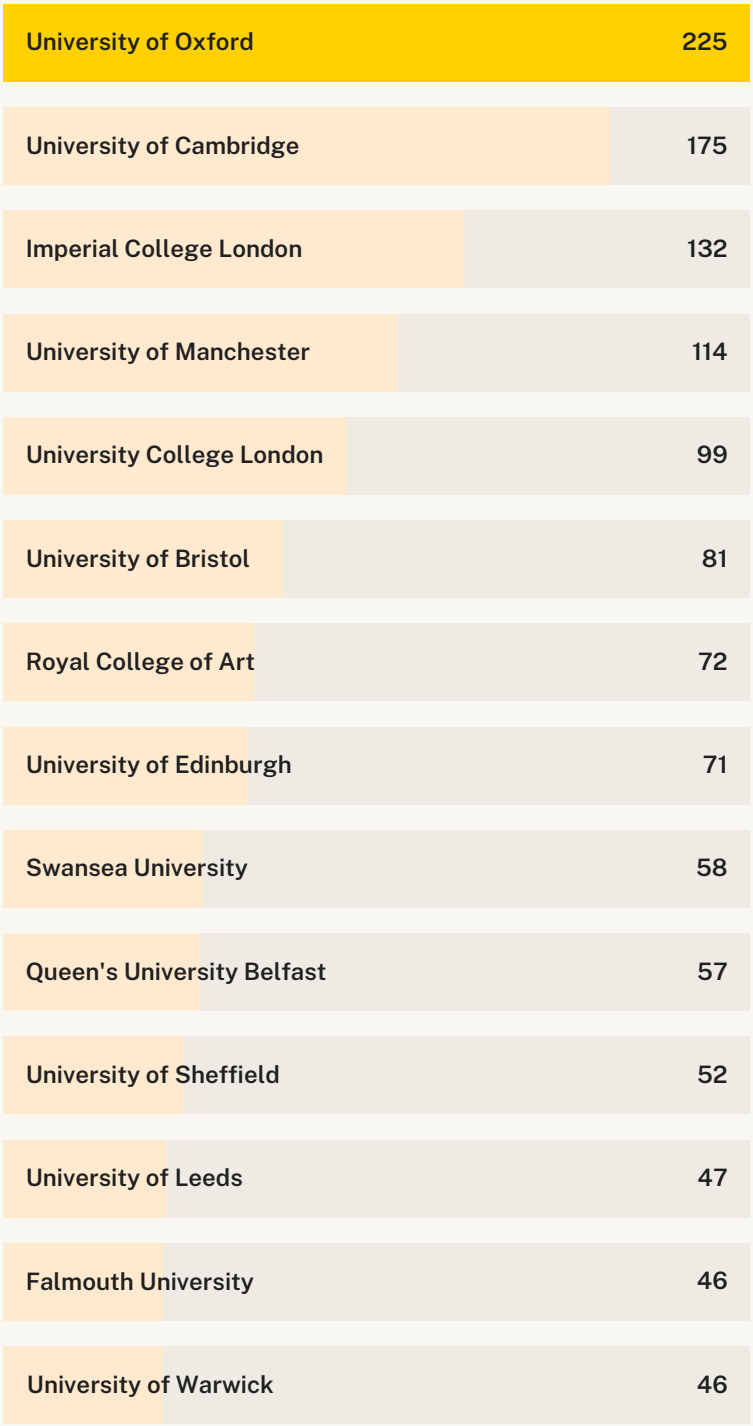
16.1%
Average stake taken by universities in 2024

Chapter 1

Demographics

Top academic institutions

Top academic institutions by total number of spinouts tracked (2011-January 2025)[8] (1-14, continued on next page)



52.5%

Of spinouts originated from top 10 academic institutions

Since the first edition of this report, the University of Oxford has consistently led the ranking. As of January 2025, it has generated 225 spinout companies, up 15 (7.1%) from last year. Its ecosystem thrives on investor partnerships with Oxford Science Enterprise (OSE), funding deep tech and life sciences.[4] It also collaborates with OpenAI and Microsoft to provide researchers with advanced generative AI tools.[5] The institution's healthcare spinouts are using these tools to transform the industry, improving disease detection and refining treatments.[6]

The University of Cambridge ranks second. Since last year, it has experienced the largest spinout growth of 26 (17.4%) among the top three, with Imperial increasing its figures by eight (6.45%).

The University of Manchester exhibited a significant rise in spinouts, increasing from 86 to 114 (32.6%) since the previous report. Eight of its additions this year were due to the revised spinout definition by HESA (see methodology on page 32 for information). In September 2024, the University of Manchester announced a partnership with Bruntwood SciTech to strengthen its spinout ecosystem. This will transform the university's North Campus into an Innovation District over the next 15 years.[7] Part of this includes developing the Renold building into an innovation hub designed to support spinout activities by providing low-cost co-working and office facilities.

The previous ranking in the 2024 report can be found **here**.

[4] Deep tech refers to technologies that build on the fundamental principles of engineering and science to create novel solutions to the world's most complex environmental, economic and societal challenges and are recognised as being capital, time, and R&D intensive.
[5] University of Oxford, 2025. Generative AI at Oxford | Ox.ac.uk. 2025. https://www.ox.ac.uk/gen-ai
[6] University of Oxford, 2025. How is AI being used at Oxford? https://oxford.shorthandstories.com/ai-how-is-it-being-used-at-oxford/index.html

Top academic institutions

Top academic institutions by total number of spinouts tracked (2011-January 2025)[8] (15-42, continued from previous page)

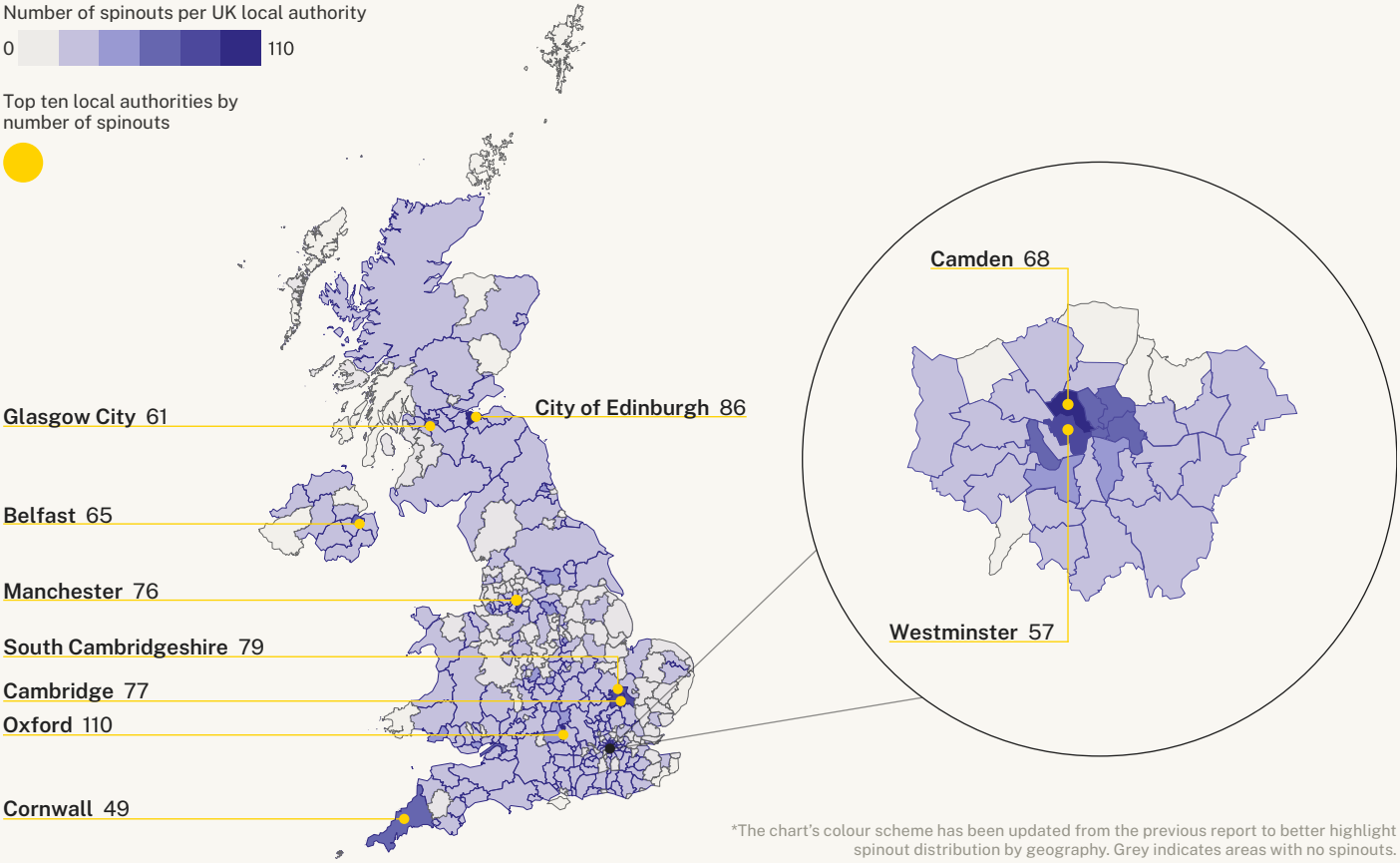
Newcastle University	45	Durham University	23
University of Strathclyde	44	Lancaster University	22
University of Nottingham	43	University of Bath	21
University of Southampton	43	University of Surrey	20
University of Glasgow	40	Loughborough University	18
Queen Mary (University of London)	35	Cardiff University	18
University of Birmingham	32	University of York	16
University of Exeter	30	University of St Andrews	14
King's College London (University of London)	30	Science and Technology Facilities Council (STFC)	14
University of Liverpool	29	Aston University	12
University of Ulster	28	University of Sussex	11
University of Aberdeen	24	University of East Anglia	11
Heriot-Watt University	24	City University	11
University of Dundee	23	Bangor University	11

[7] University of Manchester. 2024. "£1.7bn Innovation District and Neighbourhood in Manchester Opens Its Doors and Reveals New Name, Sister." University of Manchester. September 27, 2024. https://www.manchester.ac.uk

[8] The ranking of top-origin universities is dynamic as UK universities and company founders are continually creating new spinout companies to commercialise IP. Beauhurst sources spinout data from university technology transfer offices and from public sources throughout the year.

Spinout clusters

Map of top local authorities by number of active spinouts (January 2025)*



*The chart's colour scheme has been updated from the previous report to better highlight spinout distribution by geography. Grey indicates areas with no spinouts.

Oxford remains the most popular headquarters, home to 110 spinouts, followed by Edinburgh (86) and South Cambridgeshire (79). Since last year, South Cambridgeshire added 11 spinouts, compared to Oxford's eight and Edinburgh's four.

Edinburgh is renowned for its deep tech and life sciences ecosystem. The University of Edinburgh has spun out 53 of the city's spinouts, driving innovation through facilities like the Bayes Centre, an AI and data research hub. It recently partnered with engineering firm Leidos, leveraging AI and data science to tackle healthcare and national security challenges.[9]

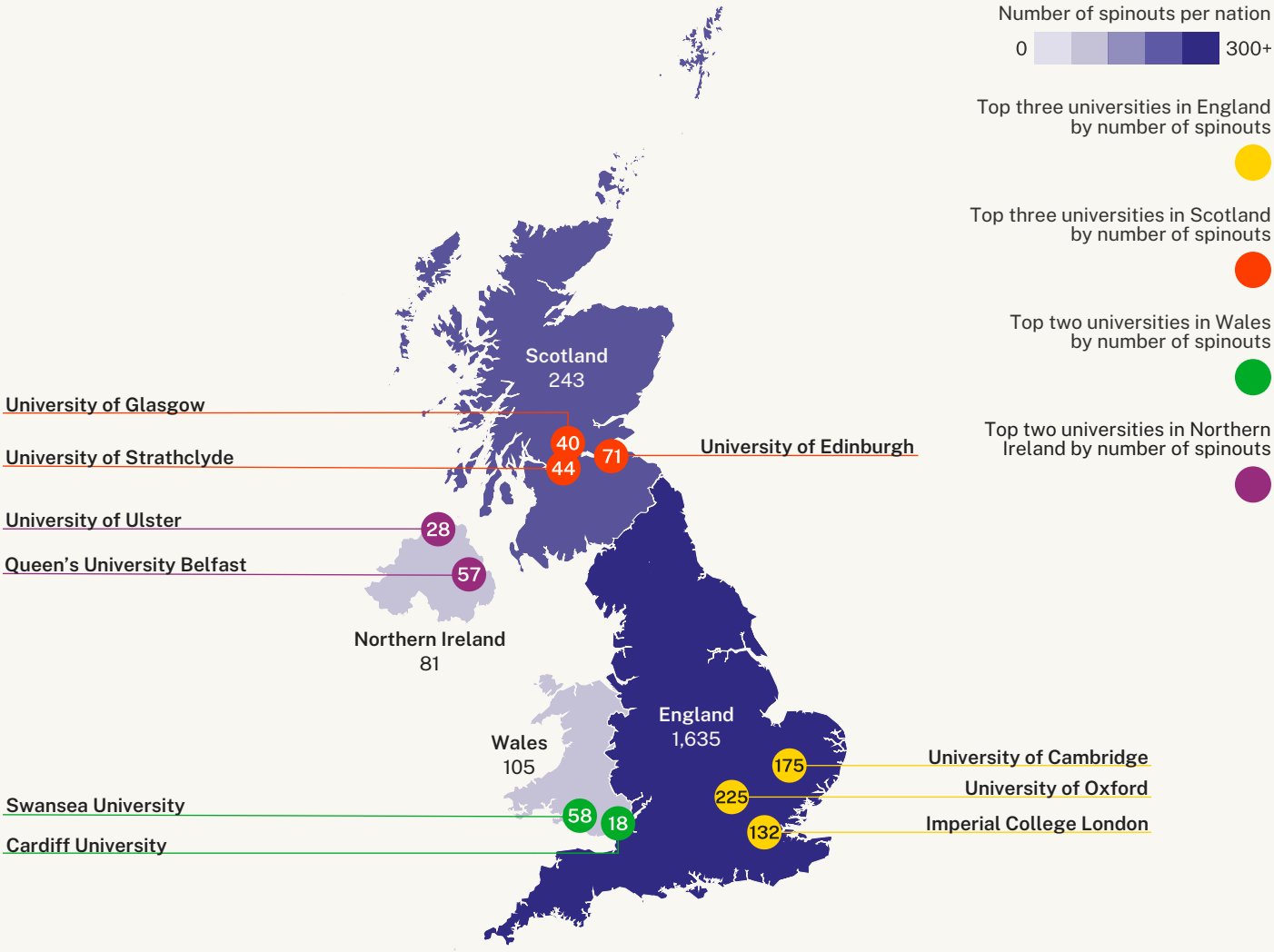
Spinouts headquartered near their founding institutions gain more than access to facilities and talent — they benefit from seamless collaboration with the academic ecosystem. Oxford hosts 110 spinouts, 90.9% (100) from Oxford universities. Cambridge shows a similar rate at 89.6%, while Edinburgh and Manchester have lower proportions at 81.4% and 82.9%, respectively. This highlights the stronger integration of Oxford and Cambridge ecosystems with their universities.

Oxford and Cambridge are developing facilities to keep spinouts local, including the Ellison Institute of Technology (EIT) in Oxford, set for completion in 2027. The EIT will connect researchers, students, and entrepreneurs to drive innovation in health, AI, energy, and agriculture — areas aligned with Oxford's spinout ecosystem.

[9] O'Sullivan, Kevin. 2024. "Leidos Announces Partnership with University of Edinburgh to Drive AI and Data Science Innovation | FutureScot." FutureScot. November 15, 2024. https://futurescot.com

Regional distribution

Map of spinouts by nation (January 2025)



London has the highest concentration of the UK's spinouts regionally, hosting 18.6% (384) of the spinout population. Its status as a leading financial hub and access to funding networks make it an ideal spinout base. The South East follows with 321 (15.6%) spinouts, then Scotland with 243 (11.8%), and the East of England with 218 (10.6%).

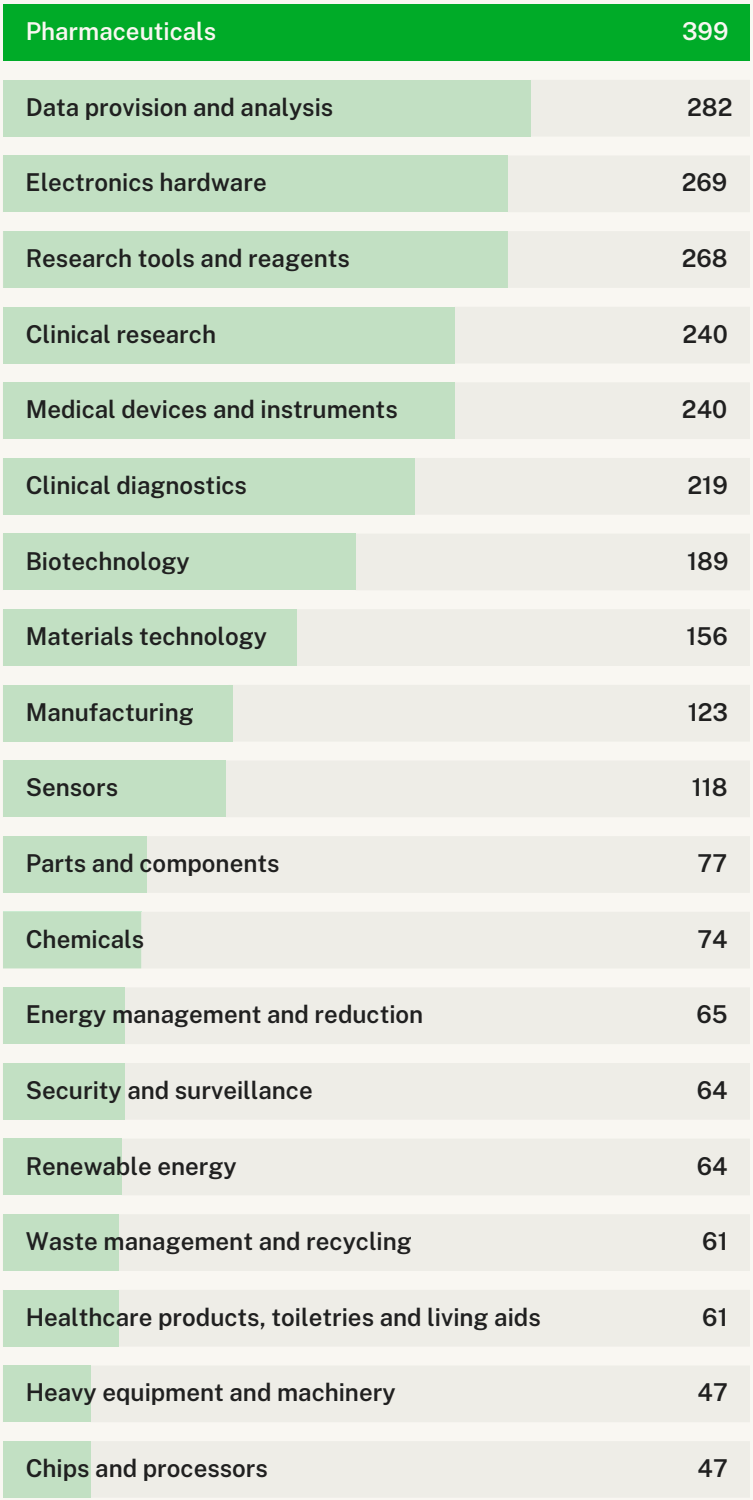
The Royal Academy of Engineering supports deep tech and engineering spinouts through its Enterprise Hubs, focusing on Northern England and Yorkshire and the Humber — regions with fewer spinouts and a greater need for support. To extend this, the Academy has established Hubs in Northern Ireland, Scotland, and Wales, including the Scottish Hub at the University of Strathclyde, launched in 2024 to help entrepreneurs commercialise deep tech innovations.[10]

The South East and East of England include the cities of Oxford and Cambridge. Adding London to this group makes up the Golden Triangle — a world-renowned science and R&D cluster. The triangle supports the three top academic institutions for spinout generation. The three cities combined account for 27.7% (571) of the total spinout population.

[10] "New Enterprise Hub Launched in Scotland to Help Engineering Entrepreneurs | University of Strathclyde." 2024. Strath.ac.uk. 8 March, 2024.

Dominant sectors

Top sectors by number of spinouts (January 2025)[11]



The UK's robust life sciences ecosystem powered by world-class research and a strong infrastructure for commercialisation is reflected by the UK's spinout ecosystem, with life sciences dominating six of the top 10 sectors.[12] The top sector for spinouts is pharmaceuticals, with 399 spinouts. Oxford (53), Cambridge (38), and UCL (31) dominate pharmaceutical innovation, driving a concentration of activity in the Golden Triangle. One example is Immunocore. This University of Oxford spinout develops drugs to treat cancer, viral infections, and autoimmune diseases.

Data provision and analysis ranks second with 282 spinouts in this sector. Companies in this field leverage technology to collect, process and analyse information for business. By harnessing advanced algorithms and analytics, these companies are transforming industries ranging from healthcare to finance. Data provision and analysis is Manchester's leading spinout sector, making up 21.1% of spinout companies. One example is VRGeoscience, a software platform for 3D geological and geospatial data that helps scientists and engineers reduce the environmental impact of large-scale projects.

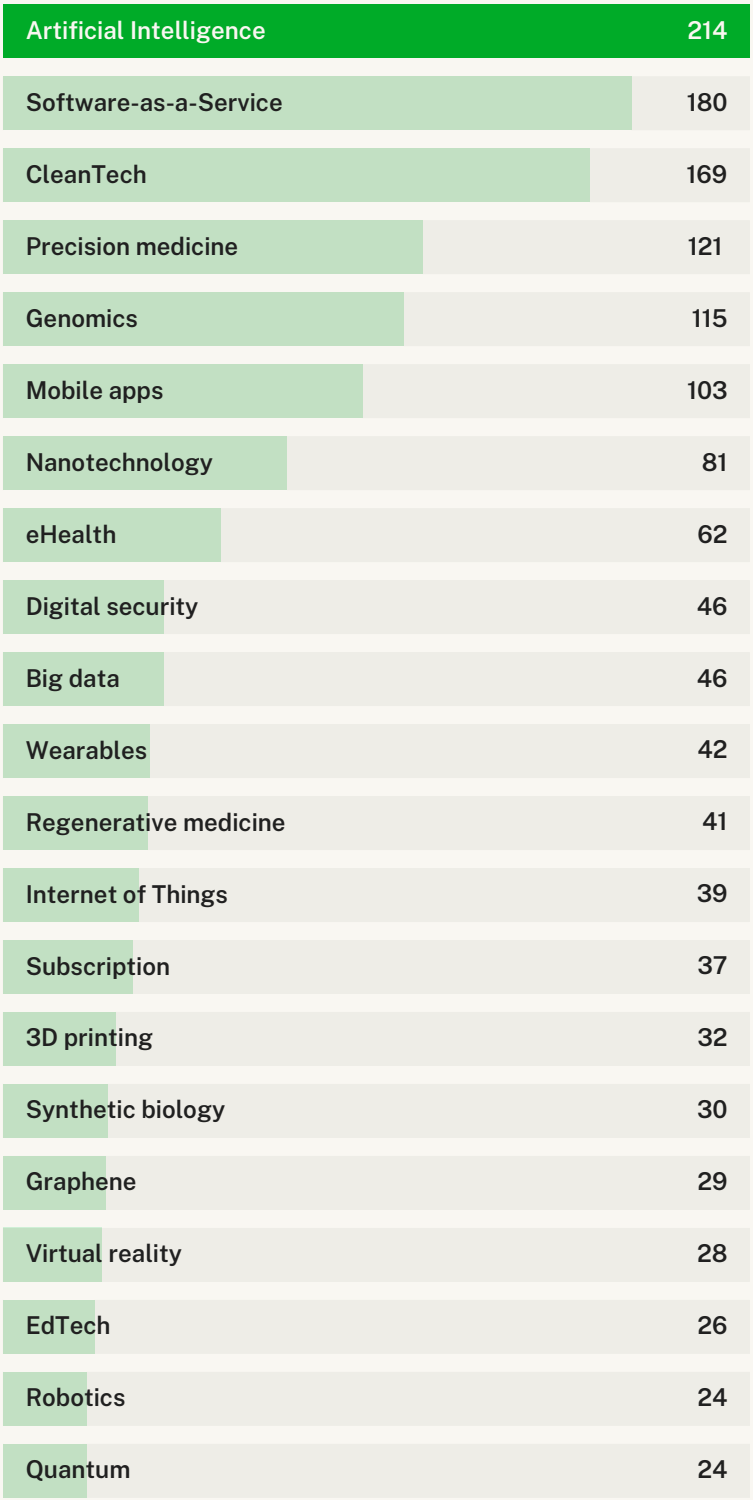
There are 269 companies in the electronics hardware sector which focus on designing, manufacturing, and distributing devices containing electronic components with computing capabilities. Cambridge Mechatronics operates in this sector. Using its patented Shape Memory Alloy technology, the University of Birmingham spinout designs and engineers precision motion systems for use in consumer electronics such as smartphones, AR/VR, and wearables.

[11] Beauhurst's internal classification system has updated since the 2024 edition of this report. As a result, some dominant and emerging sectors have been recategorised. See page 32 for methodology definition of sectors.

[12] Life sciences sectors: Pharmaceuticals, Research tools and reagents, clinical research, medical devices and instruments, clinical diagnostics, biotechnology

Emerging sectors

Top emerging sectors by number spinouts (January 2025)[13]



Emerging sectors drive innovation and sustainability, they include classifications of technologies that go beyond traditional sectors.[13]

AI remains the top emerging sector, with 214 companies, up from 184 in the previous edition. AI has transformed society globally through tools like generative AI to process data, solve tasks and answer complex queries. AI spinouts are expected to grow further. The UK's AI ecosystem ranks third in the world behind the US and China.[14] The release of the AI Opportunities Action Plan in January 2025 outlines the Labour government's ambition to distribute AI across the nation. The Plan seeks to improve public services and increase supercomputing capacity twentyfold by 2030.[15]

SaaS ranks second with 180 spinouts. SaaS companies deliver cloud-based software solutions to streamline processes, creating AI and data solutions. UCL spinout Synthesia operates in this area. The company uses generative AI to create realistic human avatars to deliver digital presentations. The London-based company received a £117m funding round in December 2024 to support job creation and market expansion.

CleanTech companies develop technologies to reduce environmental impact and promote sustainability. Tokamak Energy operates in this emerging sector, specialising in fusion technology to create clean energy. The company raised £98.5m in November 2024 to commercialise its fusion energy and high-temperature superconducting magnetic technology.

[13] Beauhurst's internal classification system has updated since the 2024 edition of this report. As a result, some dominant and emerging sectors have been recategorised. See page 32 for methodology definition of emerging sectors.
[14] Dr Jess Whittlestone. 2023. "The UK Could Lead Global Regulation of AI – but Whitehall Must Move Fast." Thetimes.com. The Times. June 30, 2023. https://www.thetimes.com
[15] Department for Science, Innovation and Technology, 2025. AI Opportunities Action Plan

Chapter 2

Funding sources

Equity investment

The value of equity investment in high-growth companies fell by 19% (£16.5b) in 2024 compared to 2023 (£20.3b), reflecting investor caution amid political uncertainty.[16] Yet, spinouts showed resilience, increasing equity investment in 2024 to £2.60b. This growth indicates renewed investor confidence after year-on-year reductions in 2022 and 2023. Deal volume dropped, driving an increase in the average deal value to £7.43m from £4.56m in 2023.

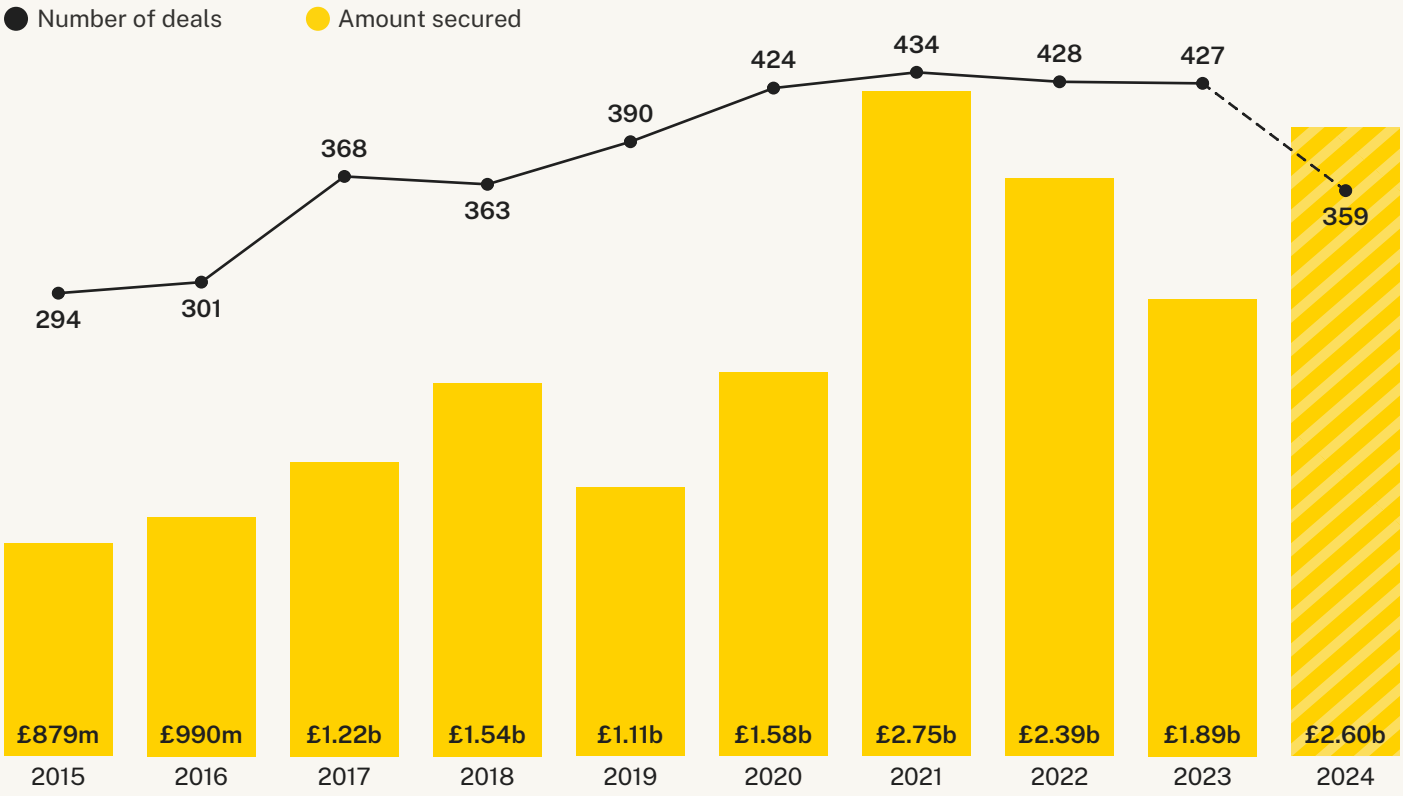
East of England spinouts secured 35.0% of total investment, leading all regions. The area hosted two of the top five spinout fundraisings in 2024, including a £450 million raise by Bicycle Therapeutics in May. The South Cambridgeshire-based company develops cancer treatments using proprietary bicyclic peptide technology, with the investment aimed at supporting its R&D efforts.

This year's *Spotlight on Spinouts* report shows slight variations in annual investment and deal totals compared to previous reports.[17]

£17.0b
Total value of equity investment (2015-2024)

3,788
Total number of equity investment deals (2015-2024)

Equity investment secured by spinouts (2015-2024)



[16] Beauhurst, The Deal, 2025. https://www.beauhurst.com/research/the-deal-2024/ High-growth companies are companies that have experienced rapid growth, meeting at least one of Beauhurst's eight qualifying criteria. Please see page 32 for further information.

[17] Beauhurst's equity investment data is continuously updated to include new deals and newly identified spinout companies, leading to minor adjustments in total investment figures for past years.

Top investors

Top investors by number of equity deals into spinouts (2015-2024)

Parkwalk Advisors*	325
Scottish Enterprise	320
Mercia Ventures	172
Cambridge Enterprise	132
Oxford Science Enterprises (OSE)	127
Future Planet Capital	120
IP Group	105
SyndicateRoom	91
British Business Bank	87
Cambridge Angels	80
Development Bank of Wales	64
SFC Capital	58
Archangels	57
BGF	56
Northstar Ventures	54
Oxford Technology	53
Epidarex Capital	46
Oxford Innovation	43
Amadeus Capital Partners	42
IQ Capital Partners	40

*The figure for Parkwalk (combined funds) includes all deals by Parkwalk funds, including those featured elsewhere on this ranking. Parkwalk is a subsidiary of IP Group.

Investors play a crucial role in advancing spinout activity. Parkwalk Advisors remains the top investor in spinouts by deal count and value. It has participated in 325 equity funding deals since 2015 and contributed to deals worth £1.84b. In September 2024, Parkwalk launched the University of Cambridge Enterprise Fund (UCEF) X, reinforcing its commitment to supporting spinouts from one of the UK's top academic institutions. The UCEF X offers investors a chance to back companies commercialising scientific and technological discoveries from the University of Cambridge while benefiting from tax reliefs under the Enterprise Investment Scheme (EIS).[18]

Several investors use the EIS and its sister scheme, the Seed Enterprise Investment Scheme (SEIS), which offers tax relief to encourage investment in early-stage companies. Investors such as Parkwalk, Mercia Ventures, SyndicateRoom, and Oxford Innovation participate in these schemes.

Scottish Enterprise is Scotland's national economic development agency. It invests through various funds, including the Scottish Venture Fund and Scottish Co-Investment Fund. Since 2015, it has participated in 320 spinout equity fundraising deals. Its High Growth Spinout Programme helps researchers transform ideas into commercial possibilities through funding and support.

Oxford Innovation and IQ Capital are new additions to the top 20 investors list, participating in 43 and 40 fundraising deals in the last 10 years, respectively. The British Business Bank rose from 12th to 9th place since last year, with 87 spinout deals between 2015 and 2024. Meanwhile, Amadeus Capital Partners dropped in position from last year's ranking, going from 16th to 19th place.

[18] Allen, Lucy. 2024. "University of Cambridge Enterprise Fund X Launch." Parkwalk Advisors. September 30, 2024. https://parkwalkadvisors.com/2024/09/

Top investors

Top investors by value of equity deal participations into spinouts (2015-2024)*

Parkwalk Advisors	£1.84b
Oxford Science Enterprises (OSE)	£1.83b
IP Group	£1.42b
Syncona Partners	£1.16b
British Business Bank	£1.15b
Forbion Capital Partners	£1.12b
Woodford Investment Management	£863m
Amadeus Capital Partners	£673m
BGF	£637m
Novo	£599m
Molten Ventures	£597m
Cambridge Innovation Capital	£581m
Google	£570m
Cambridge Enterprise	£566m
AlbionVC	£555m
Scottish Enterprise	£546m
Sofinnova Partners	£527m
F-Prime Capital Partners	£504m
Advent Life Sciences LLP	£491m
Jupiter Asset Management	£433m

*The above figures refer to the size of the whole deal the fund participated in rather than the individual contribution of the fund to the deal, as this information is usually not disclosed. Parkwalk is a subsidiary of IP Group. Woodford Investment Management is now defunct.

Since 2015, OSE has been the second-largest investor in spinouts by deal value, participating in funding rounds totalling £1.83b. OSE invests in businesses within the Oxford cluster, focusing on the University's science departments of life sciences, deep tech, and healthtech. One recipient is Amber Therapeutics, a London-based company developing implants to treat urinary incontinence. In June 2024, it raised £78.6m in a funding round supported by OSE and five other investors. The funding will support its R&D and its regulatory approval in the US, as the company prepares to launch US and Europe pilot trials.

In addition to financial support, OSE has partnered with The Crown Estate and Pioneer Group to develop a c.100,000 sq ft life sciences and technology hub.[19] Pending planning approval, this hub aims to tackle an obstacle for spinouts: the lack of essential lab and office facilities close to their academic institutions to advance scientific breakthroughs. This issue is more pronounced in science clusters like Oxford, where recent high demand has constrained supply.

IP Group ranks third, contributing to equity deals that have accumulated to £1.42b since 2015. In 2024, it participated in fundraisings worth £61.2m. Companies that have benefited from the firm's financial support include Enterprise Therapeutics — a drug discovery company specialising in treating respiratory illnesses. The University of Sussex spinout raised £26.0m in January 2024 to fund clinical trials for its research in cystic fibrosis, and to support its expansion into Italy.

[19] "The Crown Estate Announces Significant New Partnership to Provide Vital Workspace to Support UK's Science, Technology and Innovation Ambitions." 2024. The Crown Estate. July 29, 2024. https://www.thecrownestate.co.uk/news

Innovate UK grant funding

Innovate UK grant funding in spinouts reached a record £150m in 2023. However, grant funding fell by 44.5% to £83.3m in 2024.

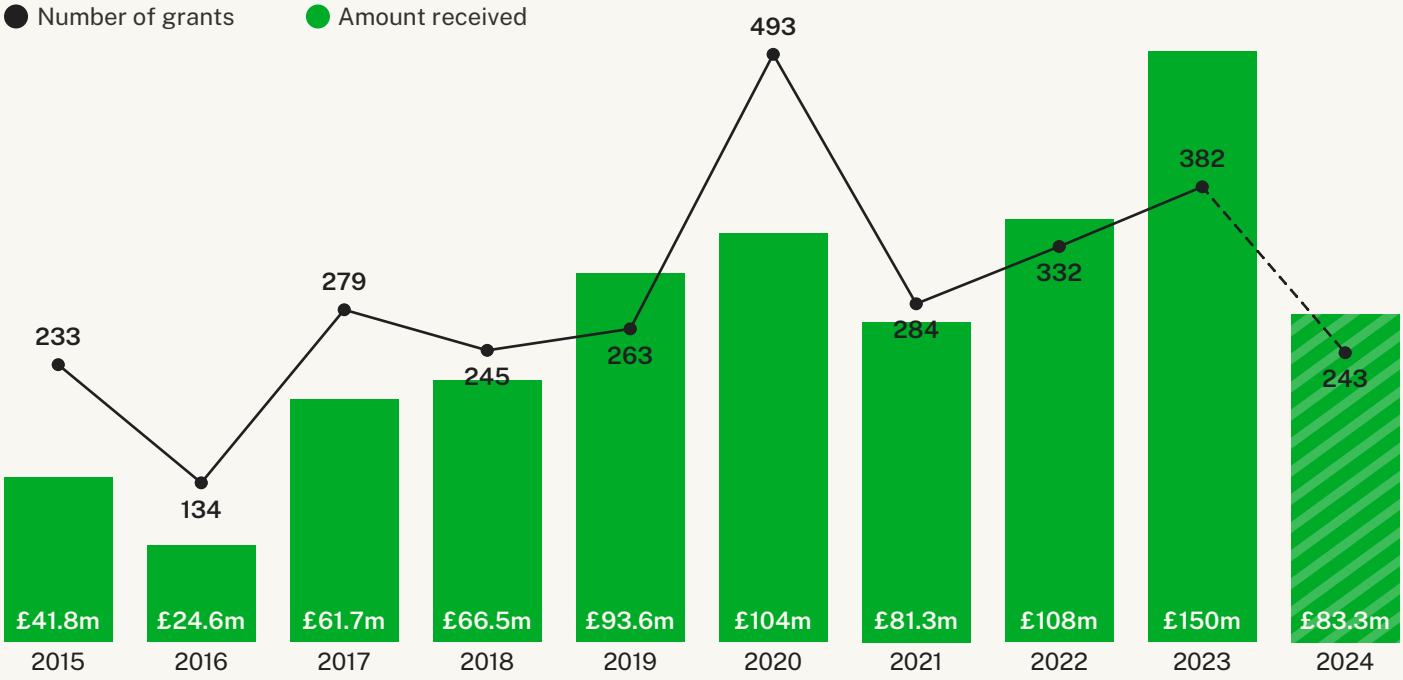
Following recommendations from the Independent Review, the government's autumn budget announced a £40.0m fund for spinout proof-of-concept funding (POC).[20] This was welcomed by TenU, a group of leading international research universities. TenU will lead discussions with the sector and government to emphasise POC's funding importance in attracting investment and ensure funding is implemented cost-effectively nationwide.[21] The UKRI announced that £9.00m of the £40.0m POC fund is available in 2025 to support academic researchers.[22]

The Royal Academy of Engineering maintains the importance of POC funding. It is vital in regions where local innovation ecosystems are underdeveloped, proximity to major investment hubs is limited, and commercialisation resources are scarce.

2,888
Total number of IUK grants (2015-2024)

£814m
Total value of IUK grants (2015-2024)

Innovate UK grants received by spinouts (2015-2024)*



*The data visualised on this page uses Beauhurst spinout data and Innovate UK grant funding data. The grant data includes grants to spinouts made until December 2024, accessed from the 23rd December 2024 version of "Innovate UK Funded Projects Since 2004." Innovate UK state that additional grants made in 2024 may be disclosed in subsequent versions of the file.

[20] Department for Innovation, Science, and Technology. 2024. "Government Backs UK R&D with Record £20.4 Billion Investment at Autumn Budget." GOV.UK. October 31, 2024. https://www.gov.uk
[21] Cambridge Enterprise, 2024. Universities, founders and investors get behind Government's spinout boom ambition. https://www.enterprise.cam.ac.uk/news/universities-founders-and-investors-get-behind-governments-spinout-boom-ambition/
[22] "New UKRI Proof-of-Concept Funding Set to Bolster Innovation." 2025. Ukri.org. January 22, 2025.

Chapter 3

Survival, growth and exits

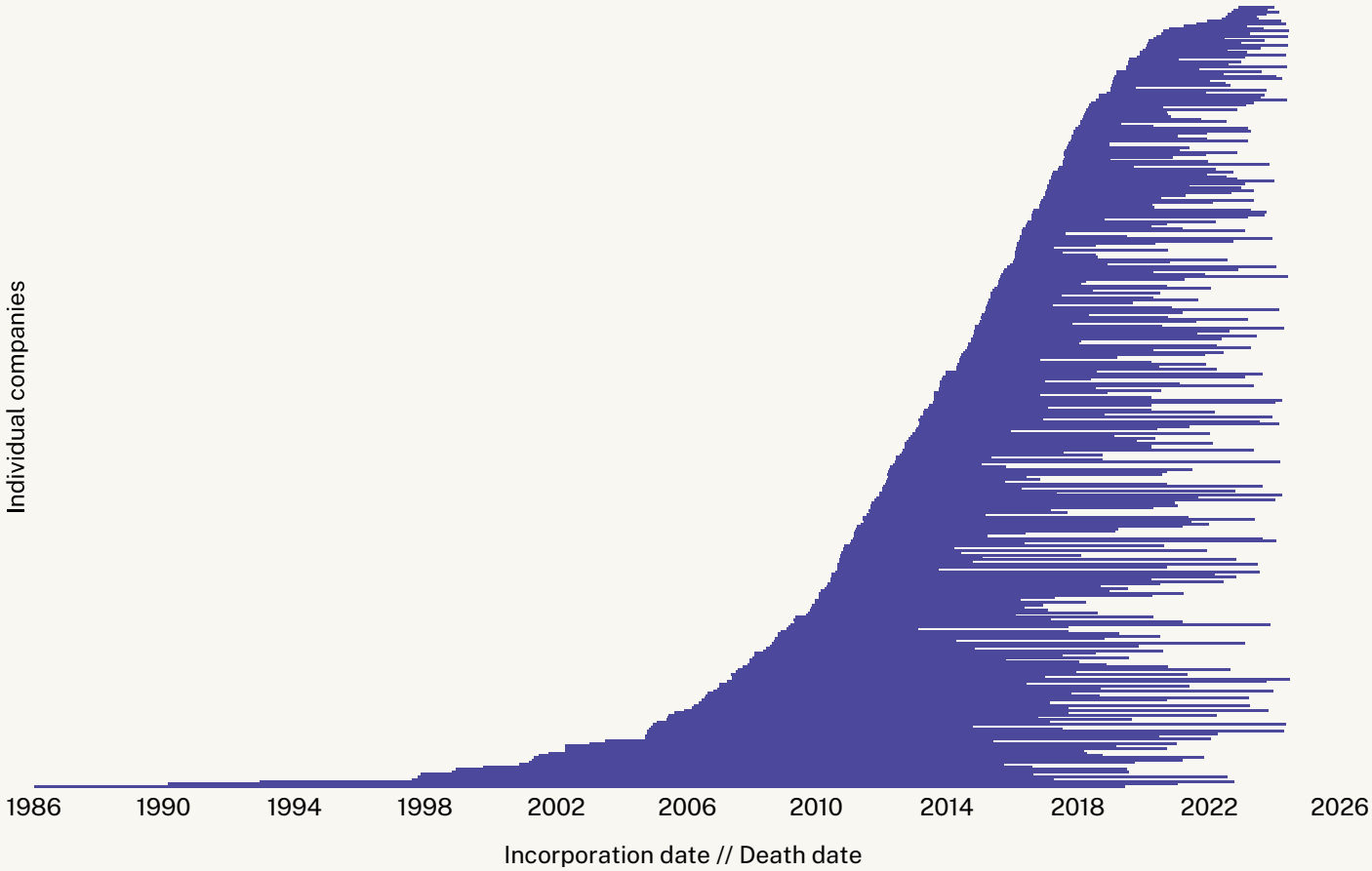
Survival rates

Of the 2,064 UK university spinouts, 441 (21.4%) are no longer operational. Business failure is a natural part of a dynamic economy. When businesses close, talented people are freed to innovate elsewhere, and capital tied up in unproductive ventures is recycled into new opportunities. This was the case for the University of Bristol spinout Dynamic Therapeutics. The e-health technology company was co-founded by Alexander Caccia, who previously co-founded the now-dead University of Oxford spinout Animal Dynamics. Positively, the number of "zombie" companies in this cohort (48) has fallen compared to last year (70). Whilst a dead company frees up resources for new ventures, "zombie" companies waste resources as operators decide between ceasing operations or finding a route back to growth.

7.75 years

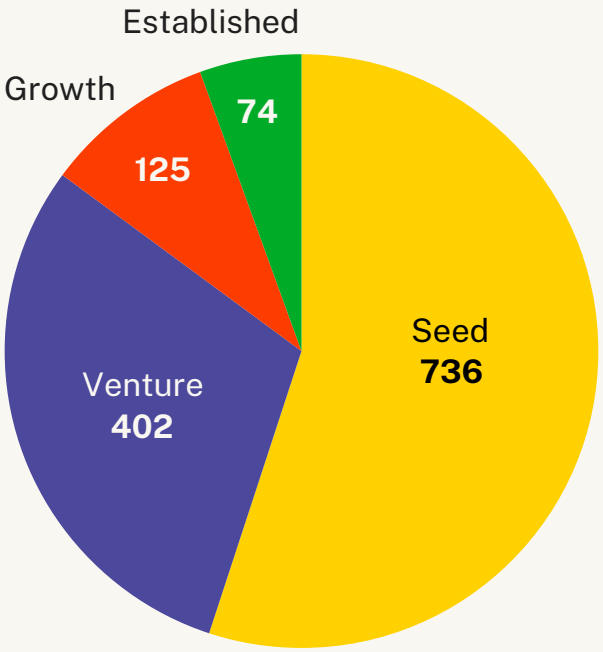
Average age of UK spinouts at death (2015-2024)

Lifespan of now-dead spinouts (January 2025)



Growth stages

Stage of evolution of active spinouts (January 2025)



1,337
Number of active UK spinouts
(as of January 2025 excluding zombies)

736
Active UK spinouts at the seedstage
(as of January 2025)

As of January 2025, there are 1,337 active spinouts in the UK, of which 736 (55.0%) are in the seed-stage.[23] This largely aligns with the proportions seen in 2024 (56.7%), suggesting that early-stage companies are continuing to commercialise technology and entering the UK spinout ecosystem.

Despite being at the seed-stage, King's College London spinout Pheon Therapeutics has received a significant amount in equity investment. Since 2015, the St.Albans-based spinout has received £151m in funding, including a £95.5m raise from various foreign investors in April 2024. The biotech company develops cancer therapeutics, specifically antibody-drug conjugates, which combine drugs and antibodies to target hard-to-treat cancer cells. Investment into companies at this early stage shows investors are prepared to back younger companies with strong IP, which is positive for the spinout ecosystem.

[23] The definition of growth stages can be found here: https://www.beauhurst.com/blog/stages-evolution-companies/

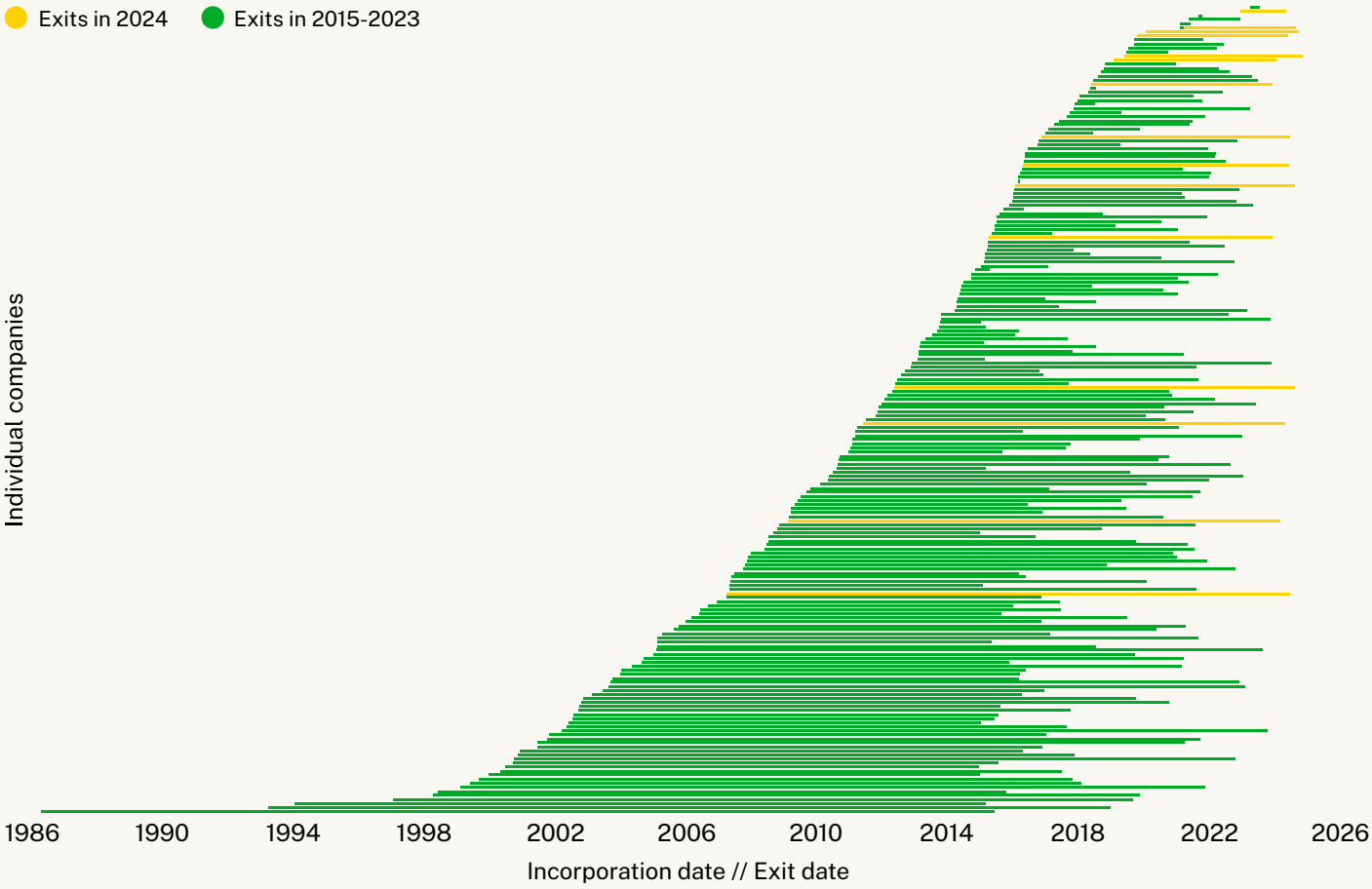
Exit volumes

Between 2015 and 2024, 200 spinout companies exited through an acquisition or an IPO. While 200 companies carried out an exit, there were 201 exit events due to the University of Cambridge spinout Darktrace's IPO in 2021.[24] The company — which applies AI to cybersecurity — was subsequently acquired by US private equity firm Thoma Bravo in 2024. During this ten-year period, 175 companies were acquired, accounting for 87.1% of the exit events. In 2024, 15 spinout companies exited the private market — all via an acquisition. This is a slight decrease from the 17 acquisition exits in 2023. The last UK academic spinout to exit via an IPO was the University of Dundee spinout Exscientia in October 2021. The average age of spinouts that exited between 2015 and 2024 is 9.06 years.

26
Number of IPOs by spinouts (2015-2024)

200
Number of exits (acquisitions) by spinouts (2015-2024)

Exits by spinouts via IPO or acquisition (2015-2024)



[24] Darktrace's 2024 acquisition is not included in the 200 exits, as it had already exited the market via IPO in 2021.

Top exits

Top IPOs by spinouts by market capitilisation (2015-2024)

Oxford Nanopore Technologies	£3.38b
Exscientia	£2.38b
Darktrace*	£1.72b
Orchard Therapeutics	£950m
Immunocore	£806m
Adaptimmune	£772m
Achilles Therapeutics	£529m
Autolus	£498m
Freeline Therapeutics	£476m
Vaccitech	£415m
Nightstar	£353m
MeiraGTx	£304m
Arcturis Data	£225m
Kainos	£164m
Oxford BioDynamics	£136m
Abingdon Health	£92m
Diurnal	£75m
Oncimmune	£66m
Mirriad	£63m
Redx Pharma	£55m

Top acquisitions of spinouts by consideration paid (2015-2024)

Darktrace (2024)*	£3.99b
Ziylo	£623m
Gyroscope Therapeutics	£588m
Graphcore (2024)	£462m
MiroBio	£356m
Base Genomics	£315m
Inivata	£280m
Heptares	£259m
Endomag (2024)	£241m
Oxitec	£103m
Quethera	£85m
Atopix	£64m
Process Systems Enterprise	£58m
Cobalt Light Systems	£40m
VocalIQ	£39m
Permasense	£31m
Cambridge CMOS Sensors	£30m
Haemostatix	£28m
Flusso	£28m
The Floow	£24m

*Darktrace exited the private market via IPO in April 2021 and susbequently delisted and was acquired by Thomas Bravo in October 2024.

Chapter 4

Leadership

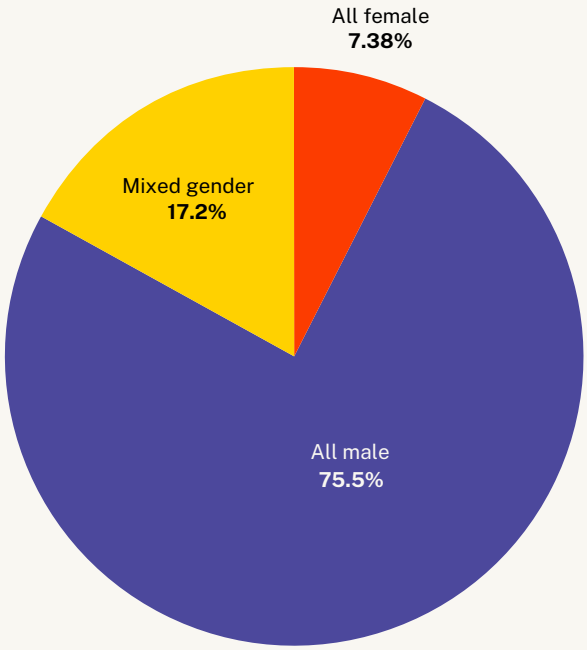
Gender of founders and directors

The majority (75.5%) of active spinouts have all-male founding teams. This aligns with the broader high-growth ecosystem, where 74.7% of companies have entirely all-male founders. Directors show more diversity than founders in mixed-gender, with 43.3% of spinout teams falling into this category. Although, teams of solely female directors at 2.91% is below the 7.38% of female founded spinouts.

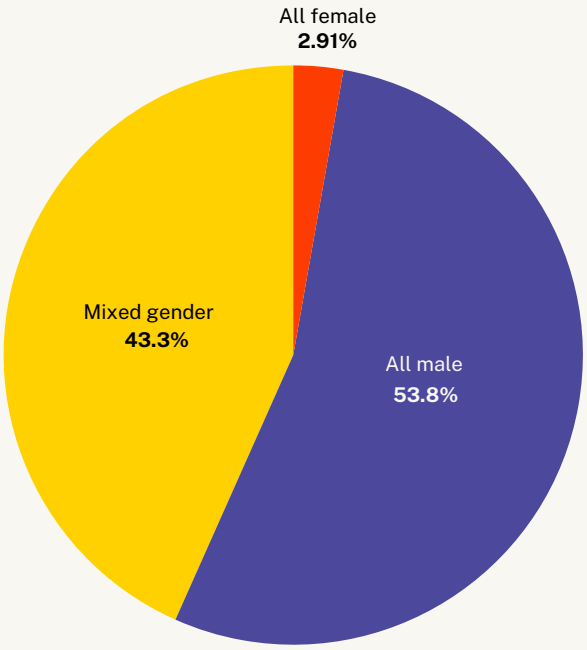
Women remain underrepresented, with only 7.38% of spinouts founded by all-female teams, compared to 12.7% across high-growth companies. A focus group by Oxford Brookes University highlighted a key barrier: the time-intensive nature of spinout research, which limits academics' ability to advance their careers while pursuing entrepreneurial ventures.[25] To address this, the Independent Review recommends funding to support academia-industry collaboration and "buy out" academic time.[26] This approach would enable academics to commercialise their research and develop spinouts with limited risk to their academic career. Further research from Oxford Brookes University reveals that the founders who were interviewed stated that retention of female researchers at post-doctorate and addressing gender imbalances within STEM are key focus areas to increase the number of female spinout founders.[27]

Efforts to improve gender diversity in spinouts are gaining momentum. Progress is evident at the University of Oxford, where its Increasing Diversity in Enterprising Activities initiative aims to boost the number of female founders at the university. The programme aims to increase this figure from 15.0% in 2015 to 34% by 2025.[28] Notably, 24% of Oxford spinouts have female founders as of January 2025, reflecting the school's commitment to supporting gender diversity in the entrepreneurial landscape.

Active spinouts by gender of founders (January 2025)



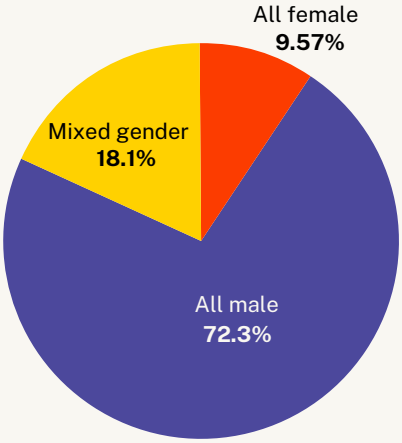
Active spinouts by gender of directors (January 2025)



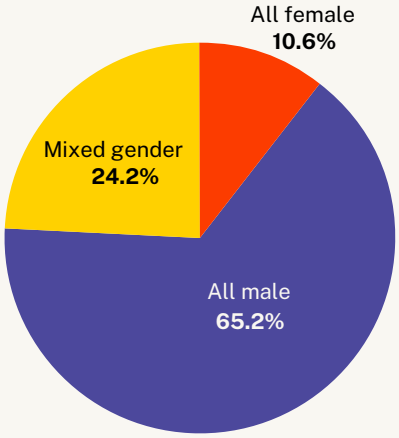
[25] "How Can Universities Increase Diversity in Spin-out Founders?" 2023. THE Campus Learn, Share, Connect. December 11, 2023. https://www.timeshighereducation.com
[26] "Independent Review of University Spin-out Companies." 2023. GOV.UK. November 22, 2023. https://www.gov.uk/government/publications
[27] Oxford Brookes University, "The Spinout Journey: Barriers and enablers to Gender Inclusive Innovation."
[28] "Expert Comment: Maintaining Momentum on Women's Entrepreneurship at Oxford | University of Oxford." 2024. Ox.ac.uk. March 18, 2024. https://www.ox.ac.uk

Gender of founders and directors over time

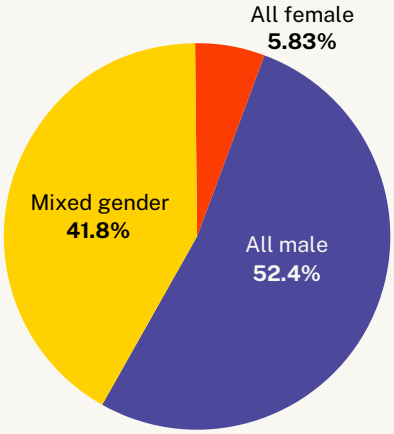
Spinouts by gender of founders (spinouts incorported in 2018)



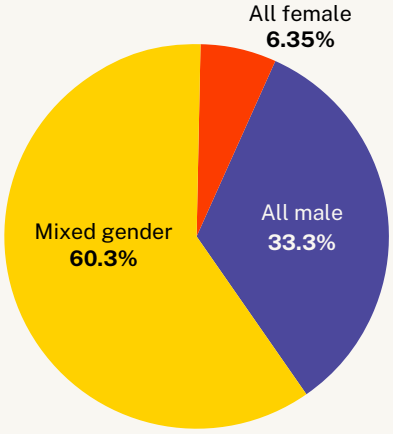
Spinouts by gender of founders (spinouts incorporated in 2023)



Spinouts by gender of directors (spinouts incorporated in 2018)



Spinouts by gender of directors (spinouts incorporated in 2023)



The charts compare changes in the gender diversity of active spinout founders and directors from companies incorporated in 2018 and 2023. While spinout companies remain predominantly composed of entirely male founding teams, there has been a 6.16% rise in the proportion of companies with mixed-gender founding teams among spinout companies incorporated in 2023. This trend extends to directorships, with mixed-gender directorships increasing to well over half at 60.3%, compared to 41.8% for spinouts incorporated in 2018. This marks a positive step towards improving representation across leadership roles. An important and encouraging trend is the growing proportion of all female founders and directorships in 2023. The share of all-female founded companies rose to 10.6%, up 1.03 percentage points from 2018. All-female directorships increased to 6.35% from 5.83% in 2018. While modest, these gains reflect progress toward greater gender diversity at the leadership level.[29]

[29] This analysis reflects the companies for which founder and directorship gender diversity data is complete; spinouts, where gender data is unknown, were excluded from the analysis (30.0% of spinouts in 2018, 24.9% of spinouts in 2023).

Nationalities of directors

Top 20 nationalities by number of directors of spinouts (excluding UK) (January 2025)

United States	427
Ireland	137
Germany	105
Italy	79
France	70
China	57
Netherlands	56
Spain	47
Australia	44
India	40
Greece	34
Canada	32
Japan	25
Switzerland	24
Sweden	24
Belgium	24
Denmark	21
Norway	19
Singapore	14
Poland	14

1,459
Number of foreign national directors (January 2025)

3,752
Number of UK national directors (January 2025)

International talent is vital to the success of high-growth businesses, driving growth through diversity and collaboration. US nationals are the most common foreign directors in UK spinouts, making up 29.4% of non-UK directors. The shared language and cheaper cost of starting a business likely make the UK attractive to American students and professionals. Among European nationals, Ireland leads with 137 directors, followed by Germany (105) and Italy (79). Proximity to the UK, alongside its renowned academic institutions, funding, and networking opportunities, draws European talent.

Amendments to immigration policies could impact the UK's ability to attract foreign talent. The Entrepreneurs Network (TEN) has urged for targeted reforms to maintain the UK's competitiveness. It suggests reviewing visa salary requirements and fees to match international competitors such as Australia and Germany.[30] Such measures would benefit spinouts, which often operate on tight budgets and depend on access to international expertise.

[30] Job Creators 2024. 2024. "The Entrepreneurs Network." The Entrepreneurs Network. 2024. https://www.tenentrepreneurs.org/job-creators-2024.

Chapter 5

Equity stakes

Equity stakes methodology

The dataset analysed for the equity stakes section of this report comprised 2,064 spinout companies tracked by Beauhurst since 2011. Of these 2,064 companies, 379 were removed as the company incorporated before 01/01/2010, and 756 were removed because no university entity held an equity stake. A further 63 businesses were omitted because the university held a stake >50%, leaving 866 analysable spinout companies. Some key methodological considerations are outlined under the headings that follow.

Institutional holdings versus captive funds

When an academic institution and its technology transfer office own shares in a company, their shareholdings have been counted in aggregate as the academic institution's equity stake. The stakes held by captive funds, such as Cambridge Innovation Capital (CIC), have been excluded because they are received in exchange for external investment.

Reliance on confirmation statements

UK companies are required to file a confirmation statement once a year with Companies House. The confirmation statement provides a snapshot of a company's shareholders at the time of filing but does not necessarily account for changes to shareholdings that occur between filings. For example, a company could spin out, split equity between founders and the academic institution, and raise dilutive external investment in the space of a year. While in practice, this may only apply to a small number of spinouts, these cases would make the founder and institutional stakes smaller in the first confirmation statement than the stakes had actually been at the point when the company spun out.

Spinouts without university stakeholders

An academic institution does not necessarily have to have an equity stake in a company for the company to be considered a spinout (please see page 32 for a definition of a spinout). An academic institution may choose to license IP to a company without taking equity. Out of the cohort of spinouts tracked since the beginning of 2011, there are 756 that do not appear to have had an academic institution as a shareholder and have been excluded from the analysis.

Exclusion of majority institutionally owned companies

In the case of 63 companies out of the 2,064 businesses analysed in our sample of spinouts, the academic institution holds more than 50% of the equity. For newer spinouts, this may be due to the time lag between a company spinning out and filing a subsequent confirmation statement where the institutional stake has been reduced to below 50%. Because these companies are nominally subsidiaries of the institution, they have been excluded from this analysis.

No provision for option pools

The equity stakes in this analysis do not account for option pools that may exist at the spinout. The stakes we have used represent the present truth of the company's capitalisation table, but if an options pool exists, the technology transfer office and founders will likely anticipate this dilution.

Founder equity split calculation

The founders' equity splits were calculated from the entire founding team's figures instead of analysing individual founder statistics. This is because founder teams can differ in size, causing their stakes to vary considerably. As such, assessing these stakes individually would not present the whole picture.

University and founder stakes

Average university equity stake for companies incorporated since 2010

22.6%
Mean stake taken in the year of spinning out

20.1%
Median stake taken in the year of spinning out

14.3%
Standard deviation in mean stake taken in the year of spinning out

Average founder equity stake for companies incorporated since 2010

52.2%
Mean stake taken in the year of spinning out

51.6%
Median stake taken in the year of spinning out

24.0%
Standard deviation in mean stake taken in the year of spinning out

The number of eligible spinouts for equity stake analysis has increased to 866 in this year's report, up from 809 in last year's edition — an addition of 57 spinouts. This increase led to minor adjustments of 0.20% and 0.10% to the mean and median university stakes, respectively. The most notable change is that the founder's stakes decreased from last year, from 54.1% to 52.2%.

The data, sourced from Companies House filings, inherently includes a delay that may not immediately capture shifts in equity distribution practices among spinouts. Despite this, the stability in equity stakes through 2023 and into 2024 suggests that the strategies for equity division among UK spinouts have remained largely unchanged.

The distribution of data points is notably symmetrical, as evidenced by the proximity between the mean and median values for both universities and founders. This symmetry underscores the consistency observed in the equity shares held across different spinouts, highlighting a structured approach to equity allocation that has persisted over the years.

University stakes by company type

Median university stake for companies incorporated since 2010

19.1%
Median stake taken in hardware companies in the year of spinning out

20.0%
Median stake taken in software companies in the year of spinning out

21.5%
Median stake in life sciences companies in the year of spinning out

Number of companies incorporated since 2010 by company type[31]

271
Number of hardware companies (13.1% of the total spinout cohort)

680
Number of software companies (32.9% of the total spinout cohort)

965
Number of life sciences companies (46.8% of the total spinout cohort)

The Independent Review recommended sector-specific equity caps, advising universities to limit their stakes to 10% for software spinouts. This approach has begun yielding results nationwide. TenU endorsed these recommendations in the USIT Guide.[32] The Guide advised capping equity in life sciences spinouts at 25% and recommends a 10% equity share in software-based spinouts. The UKRI has since listed universities that have released adoption statements which meet these guidelines. The full list is found **here**. As of February 2025, over 50 universities in England, three in Scotland, two in Wales, and one in Northern Ireland have committed to adopting the guidelines. For example, Cambridge has adjusted its stakes to 10-15% for life sciences and 5-10% for other technologies.[33]

Since January 2011, universities have taken median stakes of 19.1% in hardware spinouts, 20.0% in software, and 21.5% in life sciences. Median hardware stakes have fallen from 21.7% last year, potentially reflecting equity stake guideline adoptions for IP-heavy businesses. Despite higher life sciences stakes this year, they remain below the 25% cap recommended for these investment-intensive ventures.

[31]Beauhurst's internal classification system has been updated since the 2024 edition of this report. As a result, some dominant and emerging sectors have been reclassified, with more companies identified within each sector. This has led to an increase in the number of companies by type in this edition compared to the previous report.
[32] "The USIT Guide: Leading Universities and Investors Launch Set of Recommendations for the Innovation Sector." TenU. https://ten-u.org/news/the-usit-guide

[33] "Independent Review of University Spin-out Companies: Adoption of Best Practices – Cambridge Enterprise." Cambridge Enterprise. September 15, 2024. https://www.enterprise.cam.ac.uk/venture-building-investment/independent-review-of-university-spin-out-companies-adoption-of-best-practices/.

Equity stakes of universities

Spinout equity stakes taken by academic institutions since 2011 and incorporated since 2010

Academic Institution	Average	Median	Standard deviation	Eligible spinouts	Total spinouts
University of Oxford	20.8%	20.0%	13.9%	113	225
University of Cambridge	10.8%	8.80%	9.10%	77	175
Imperial College London	21.3%	14.0%	16.9%	66	132
University of Manchester	29.7%	30.0%	10.0%	49	114
University College London	14.7%	9.40%	12.0%	42	99
University of Bristol	19.7%	18.7%	15.0%	31	81
Royal College of Art	6.30%	5.00%	3.10%	15	72
University of Edinburgh	14.2%	15.0%	8.50%	23	71
Queen's University Belfast	32.6%	33.3%	12.1%	26	57
Swansea University	15.4%	15.0%	5.8%	20	58
University of Sheffield	23.0%	21.3%	12.4%	16	52
University of Leeds	38.1%	42.9%	12.4%	29	47
Falmouth University	24.9%	24.9%	0.00%	9	46
University of Warwick	27.3%	28.4%	14.4%	29	46
Newcastle University	33.5%	38.4%	10.1%	26	45
University of Strathclyde	15.7%	20.0%	7.50%	16	44
University of Nottingham	26.4%	19.9%	16.4%	21	43
University of Southampton	19.7%	30.7%	7.20%	9	43
University of Glasgow	32.1%	23.3%	11.2%	19	40
Queen Mary University of London	23.8%	33.9%	18.8%	13	35
University of Birmingham	29.2%	33.9%	14.5%	16	32
King's College London	20.4%	20.1%	12.7%	18	30
University of Exeter	15.8%	17.5%	7.1%	15	30

Average university stakes

In 2024, the average university equity stake in spinouts fell to 16.1%, down sharply from 21.5% in 2023 — a record low for the decade. UKRI reports that over 50 universities have committed to the Independent Review guidelines on equity stakes. Lower university-held equity makes spinouts more attractive to investors, as high stakes often deter backers by signalling over-control and limiting returns. This shift enables faster growth and innovation by reducing administrative hurdles, allowing spinouts to focus on development and market entry.

Note that figures may change slightly, see metholodology on page 32 for details. Beauhurst's spinout shareholder dataset draws continuously updated data from Companies House. Therefore, reported average equity stakes for prior years might show slight variations.

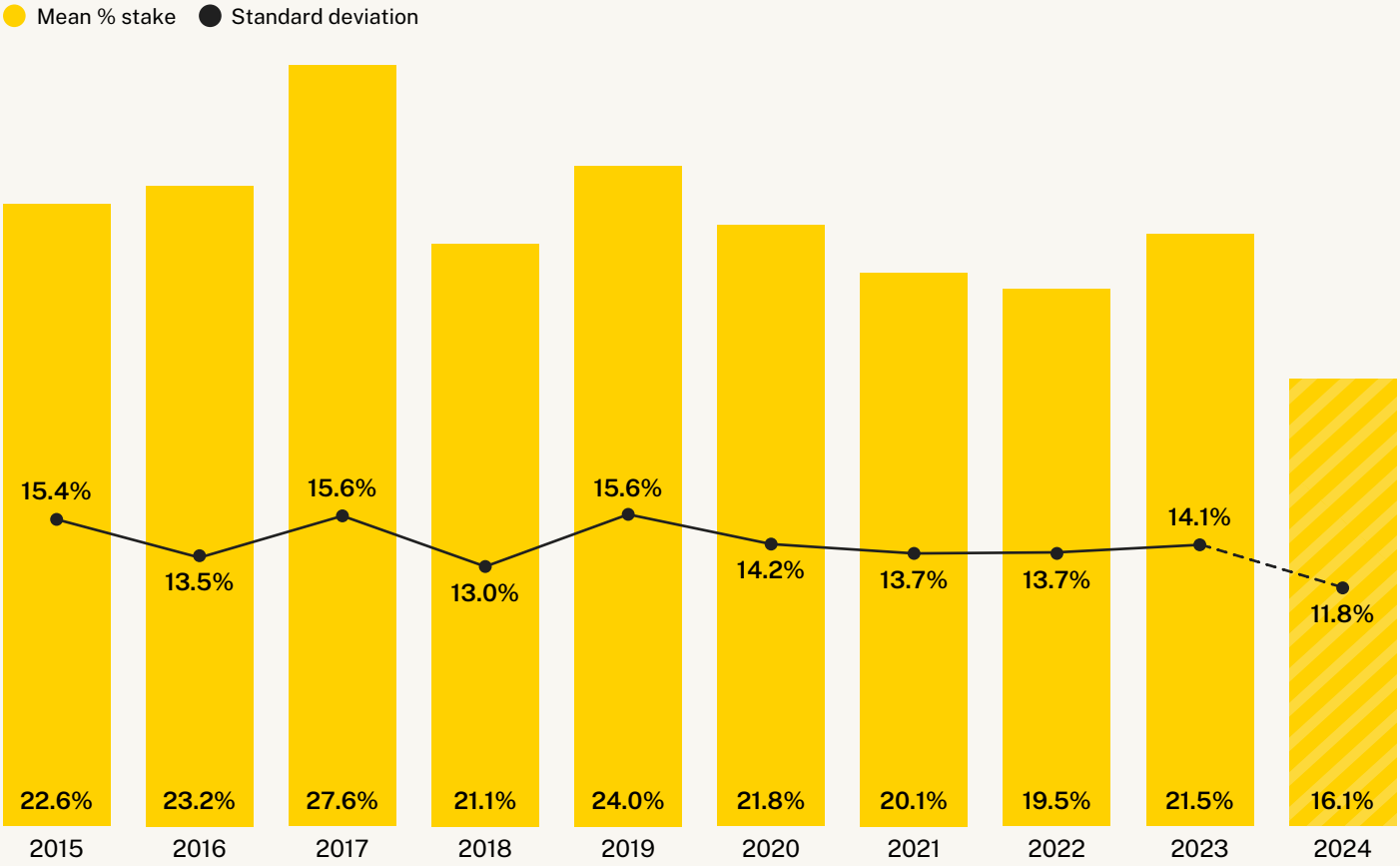
21.8%

% Mean stake taken by universities in spinouts (2015 - 2024)

28.6%

Decrease in the mean equity stake taken by universities (2015 - 2024)

Mean stake taken by universities in spinouts (2015-2024)



Chapter 6

Appendix

Full methodology

Beauhurst tracks all spinouts deemed to have spun out on or after 1 January 2011. Spinning out from an academic institution is one of our eight triggers (outlined on the right) that we believe suggests a company has high-growth potential. This report has identified 2,064 UK spinouts as of January 15 2025.

More detail on Beauhurst's tracking triggers is available via **our website**. Companies that spun out of an academic institution prior to 1 January 2011 may still be included in this report if they achieved one of the other seven triggers after 1 January 2011 and then were subsequently determined to be a spinout.

High-growth companies
The report refers to high-growth companies. This includes companies that have satisfied one of the eight high-growth tracking triggers identified below.

High-growth tracking triggers

- Equity investment
- Scaleups
- Accelerator attendances
- MBOs/MBIs
- Academic spinouts
- High-growth lists
- Major grant recipients
- Venture debt

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

- Secured by an academic spinout (defined below)
- Some form of equity investment
- Secured by a non-listed UK company
- Issued between 1 January 2015 - 31 December 2024

Beauhurst's equity investment dataset is constantly updated with historical deal activity, causing slight fluctuations and minor discrepancies between annual investment and deal totals in the *Spotlight on Spinouts* reports

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 intellectual property developed or licensed by a **recognised UK university** (This is broadly in line with the Higher Education Statistics Agency's (HESA) **definition of a spinout**)
2. The university either owns or has been assigned IP that it has licensed to the company
3. The university owns shares in the company
4. It has the right (via an options or warrants contract) to purchase shares in the company at a later date

If 1-4 are all false, the company may still be a staff or student startup. These are companies set up by students, recent graduates or staff. Neither HESA nor Beauhurst considers staff and student startups to be spinouts.

Innovation grants and equity stakes:
Beauhurst's spinout shareholder and grant datasets continually update with new data from Companies House and newly discovered spinouts or awards. Consequently, average equity stakes and grant figures, for previous years may exhibit minor fluctuations.

Dominant sectors and emerging sectors
Beauhurst's internal classification system has updated since the 2024 edition of this report. As a result, some sectors have been recategorised.

Dominant sectors have been classed according to Beauhurst's industry classification. It covers over 4.6m companies covered by Beauhurst's intellectual property. It combines the broadness of standard industrial classifications and the specificity of modern sectors to provide a comprehensive understanding of a company's operations.

Emerging sectors have been categorised using Beauhurst's internal classification system. Companies in this category operate in new and emerging technology areas, such as fintech or AI, that are not captured by traditional sectors.

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