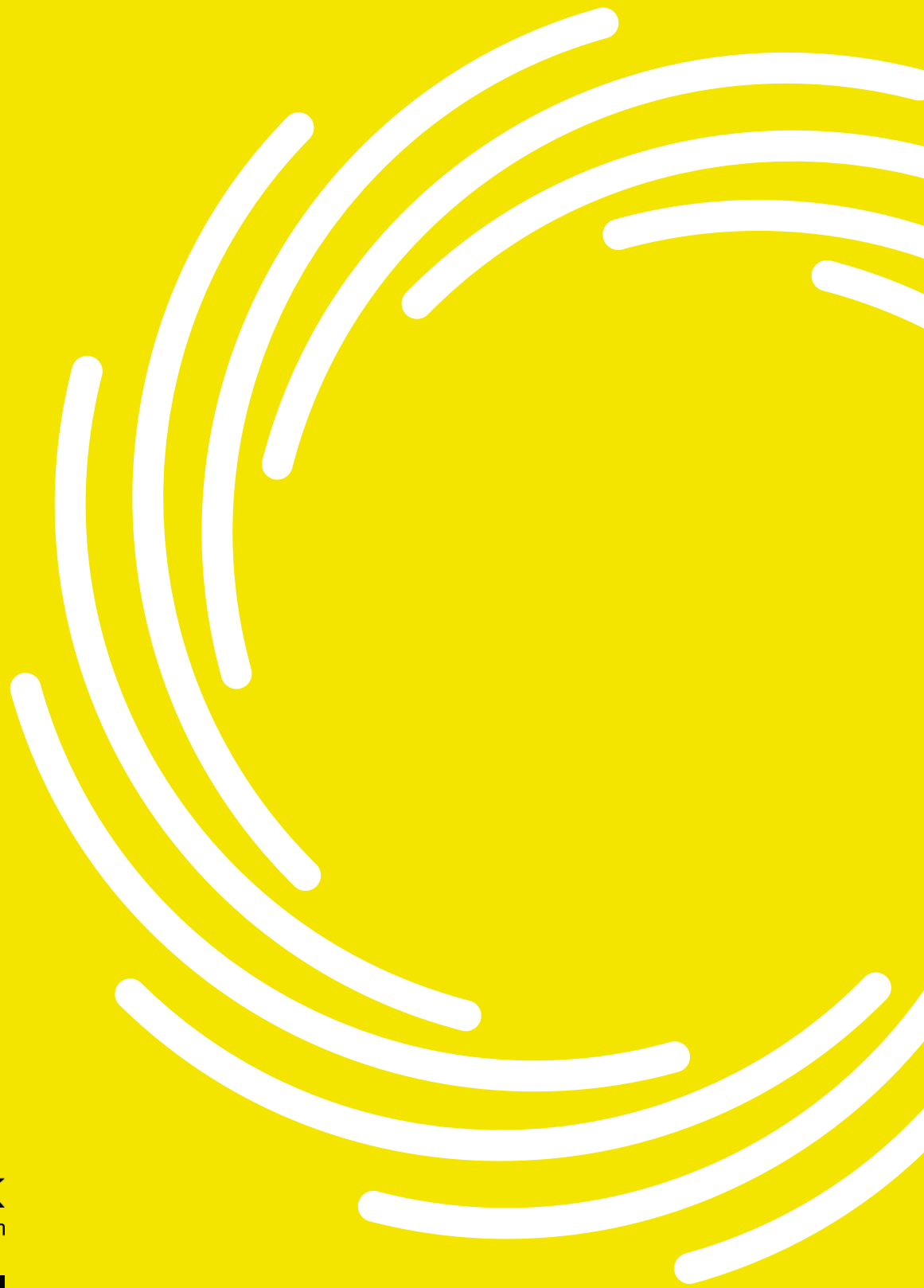


Equity investment into UK spinouts

2021



Parkwalk
Investing in Innovation

Beauhurst

Contents

- 4** Foreword: Parkwalk
- 5** Commentary: Beauhurst

- 6** Methodology
- 7** Investment by year
- 8** Proportional investment

- 9** First-time deals
- 10** Deals by stage

- 11** Top 2020 investments
- 12** Top 2020 funds

- 13** Institutions by deals
- 14** Institutions by amount

- 15** Foreign investments
- 16** Investor nationality

- 17** Exit valuations

- 18** Contributors



Foreword

Moray Wright
Chief Executive Officer, Parkwalk Advisors

“UK deeptech is still hugely underfunded at the scale-up stage, especially from UK investors.”

This year’s report shows a jump in funding for academic spinouts, but the bulk of the funding is focused in a limited number of companies—less than 3% of deals account for more than 40% of capital invested.

We continue to believe that despite the world-leading research it produces, UK deeptech is still hugely underfunded at the scale-up stage, especially from UK investors. Around 50% of the capital invested over the last 10 years has come from overseas. This creates opportunities for investors in this sector, but the events of 2020 only highlighted the issue of concentrated capital and the lack of UK investors,

with the number of first-time deals falling dramatically. This can be explained by fund managers focusing on existing portfolio companies and universities closing during the year due to the pandemic. However, this fall in first-time deals will have knock-on consequences for producing the next cohort of large university spinout companies.

A commitment from the Government to increase R&D spend to £22b annually is a positive move, but there needs to be a financial ecosystem to support this grassroots investment if the UK is to produce leading global businesses. This report highlights how the Government can assist in creating this financial ecosystem: activity north of the border in Scotland was high in 2020, driven by Scottish Enterprise, an entity funded by taxpayer money.

The last year has shown the world the power of scientific research, and 2021 is going to be an important year in setting out the UK’s post- Brexit priorities. If the Government genuinely wants to create a ‘scientific superpower’, it should look at how it can help create a sustainable financial ecosystem for this sector.

“

If the Government genuinely wants to create a ‘scientific superpower’, it should look at how it can help create a sustainable financial ecosystem for this sector.”



Executive commentary

Henry Whorwood
Head of Research and Consultancy, Beauhurst

“It seems likely that 2021 will be a record year for spinout investment.”

Last year saw a record 371 equity deals into UK spinouts and a near-record £1.35b total investment, just falling short of the £1.36b invested in 2018. The high level of investment in spinouts mirrors what we saw more broadly for high-growth companies across the UK in 2020.

However, these positive top-level figures do not tell the whole story; equity deals into UK spinouts have decreased as a proportion of all equity deals. This reflects the slower rate at which spinouts are created compared to the rate at which other high-growth companies are created. It may also gesture to a reticence on the part of some investors to back technologies with longer development times and higher capital requirements.

First-time fundraisings for spinouts peaked in 2015, compared to 2017 for the rest of the high-growth ecosystem. First-time spinout deals have also fallen at a faster rate between 2015 and 2020 than first-time deals for the rest of the high-growth population. Though, for both populations, the decline in 2020 is partially the result of an aberrant (and abhorrent) year.

Despite the proportional decline in deals, there are positive tailwinds for spinouts. The University of Cambridge launched its 8th Enterprise Fund this year; the Imperial College Innovation Fund made its first investment in February, the Northern Accelerator seed fund is being invested by Northstar and new collaborations with universities are being fostered by Research England’s Connecting Capability Fund.

And of course, the strength of the UK’s spinout ecosystem continues to attract foreign interest. US investors are most enthusiastic about UK spinouts, participating in 7.6% of all spinout equity deals since 2011. China and the Netherlands are the next most active countries by number of deals but by an order of magnitude less. US companies are the most active acquirers of UK spinouts—even beating UK companies. US acquirers account for 41 deals over the last 10 years, seven of these in 2020.

The pandemic has redirected global attention toward knowledge-intensive businesses, particularly the life sciences in which the UK is particularly strong. It seems likely that 2021 will be a record year for spinout investment.

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 at the bottom of this page) that we believe suggests a company has high-growth potential. More detail on Beauhurst's tracking triggers is available [via our website](#).

WHAT IS AN ACADEMIC SPINOUT?

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

1. The company was set up to exploit intellectual property 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

EQUITY INVESTMENT

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

- Secured by an academic spinout (as defined above)
- Some form of equity investment
- Secured by a non-listed UK company
- Issued between 1 January 2011 and 31 December 2020

35,000+
tracked companies

1,450
academic spinouts

HIGH-GROWTH TRIGGERS



Equity investment



Academic spinouts



Scaleups



High growth lists



Accelerator attendance



Major grant recipients



MBO/MBI

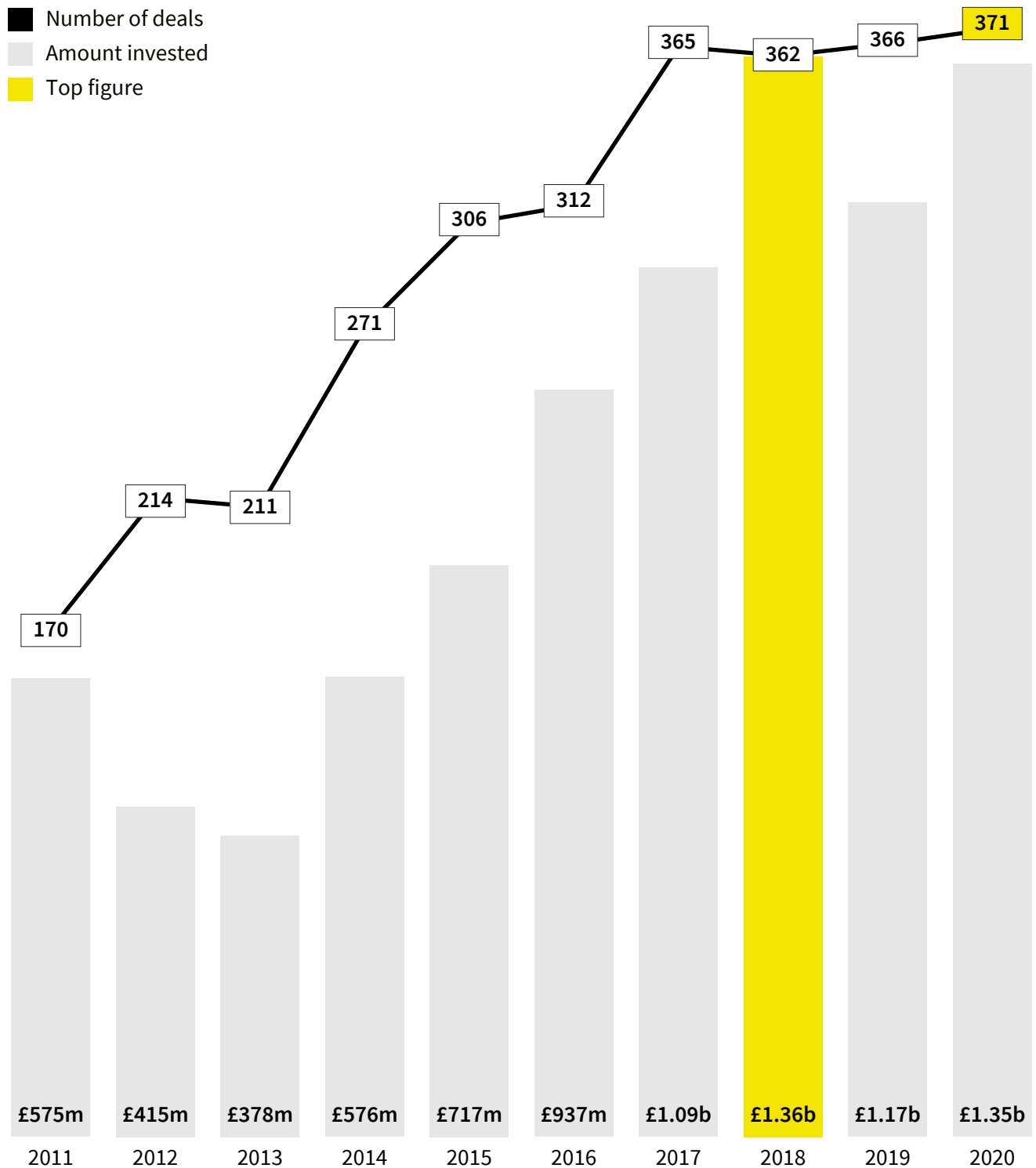


Venture debt

Spinout investment by year

Last year saw £1.35b invested into academic spinouts via 371 deals, falling just shy of the £1.36b record in 2018. Much of the funding was raised by a small number of companies, with the top 10 companies by amount invested accounting for £521m of the total. Oxford Nanopore took the most investment of any spinout in 2020, securing £168m via five deals.

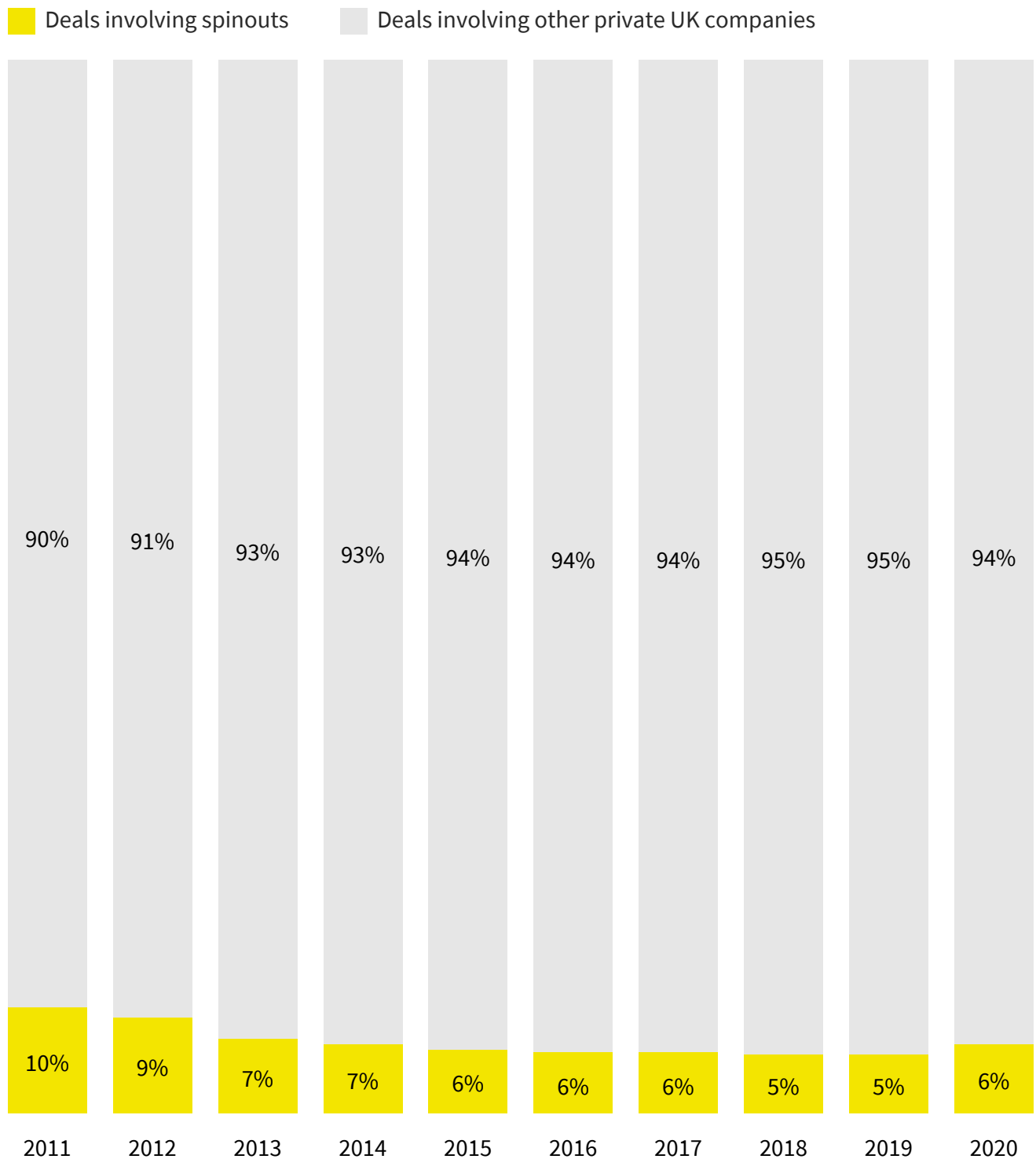
EQUITY INVESTMENT INTO SPINOUTS (2011 - 2020)



Spinout deals as a proportion of all deals

Deals involving UK spinouts accounted for 6% of all deals in 2020. While this is a recovery from the 5% lows of 2018 and 2019, it still trails the highs at the start of the 2010s.

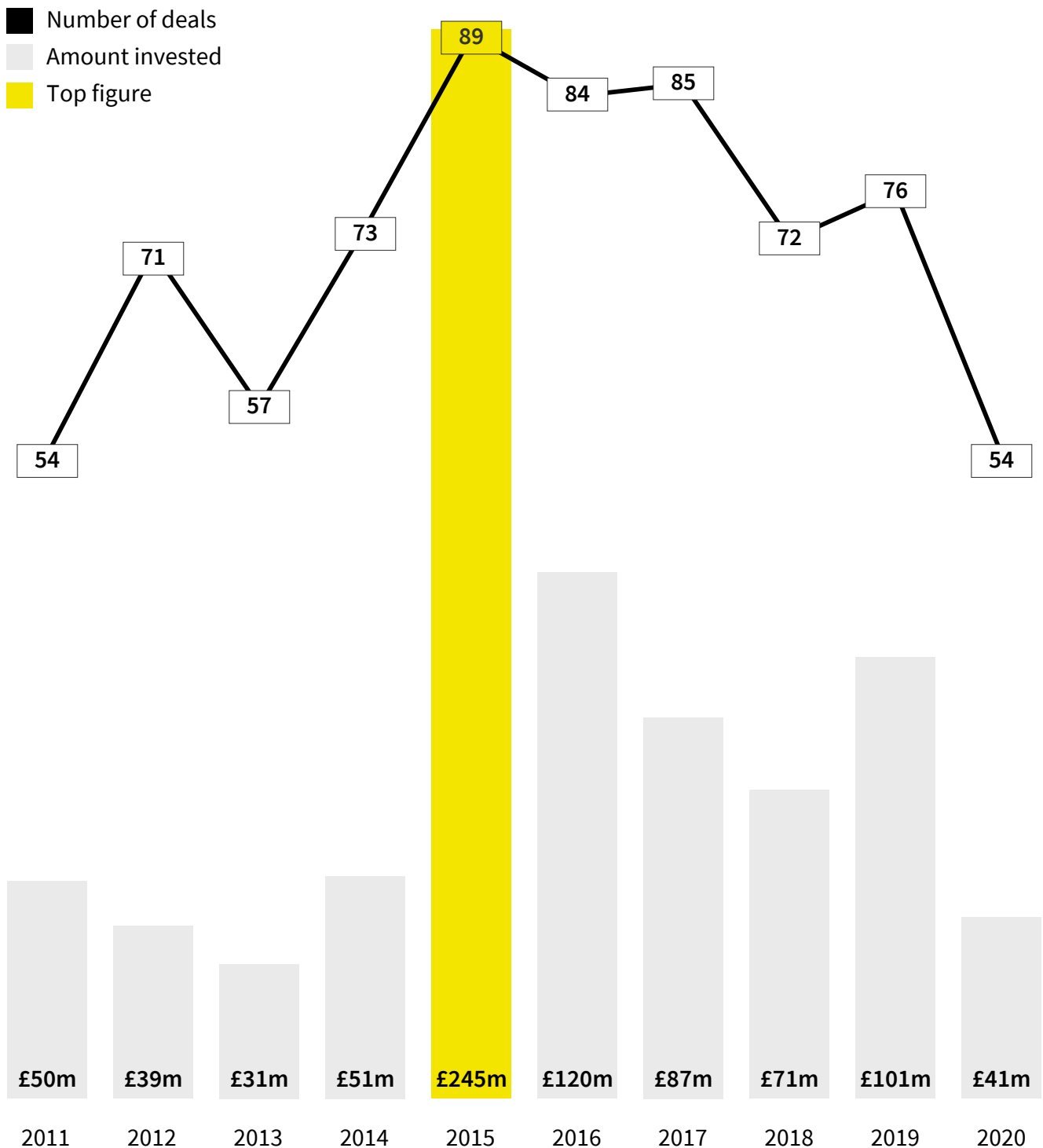
SPINOUT INVESTMENT AS A PROPORTION OF ALL INVESTMENT BY DEAL NUMBERS (2011 - 2020)



First-time spinout deals

The unprecedented total value of first-time deals in 2015 was the product of a handful of large deeptech deals. TauRx Pharmaceuticals raised £88m, the Compound Semiconductor Centre raised £51m, and immunotherapy firm Autolus raised £30m. In comparison, the largest first-time deal in 2020 was a £9m investment into epigenetic analyser Base Genomics.

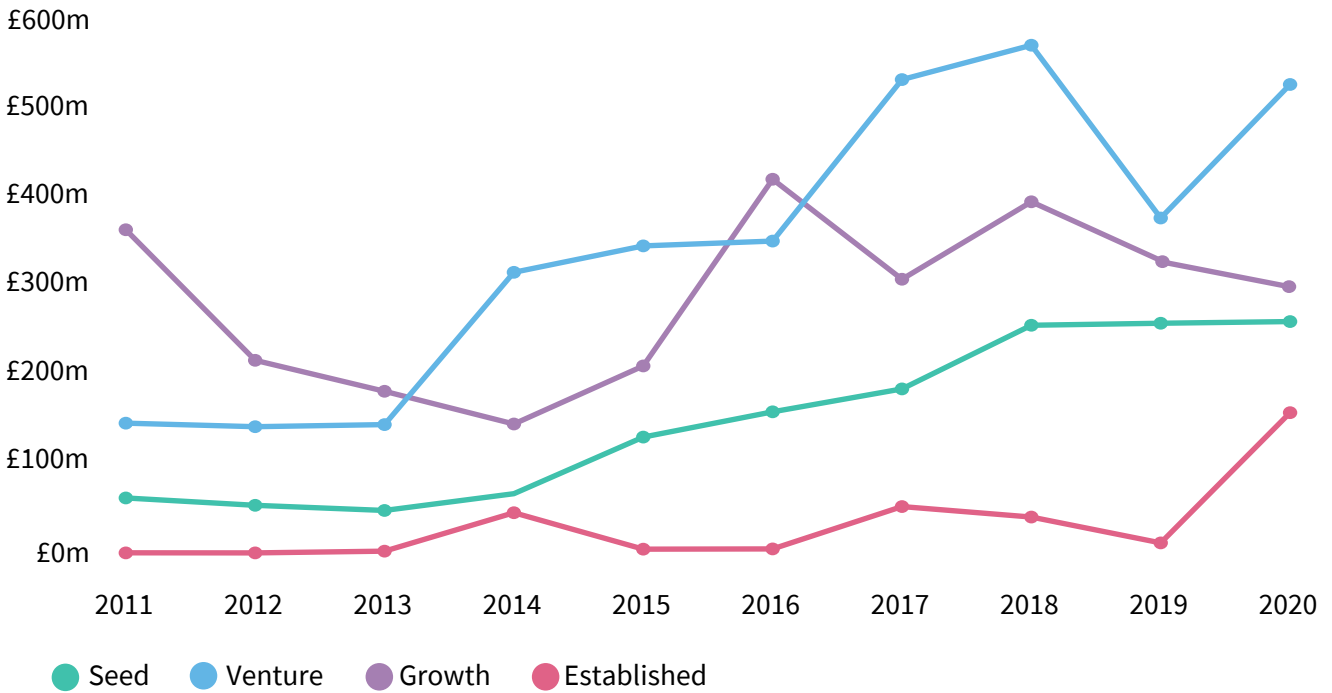
FIRST-TIME DEALS INTO SPINOUTS (2011 - 2020)



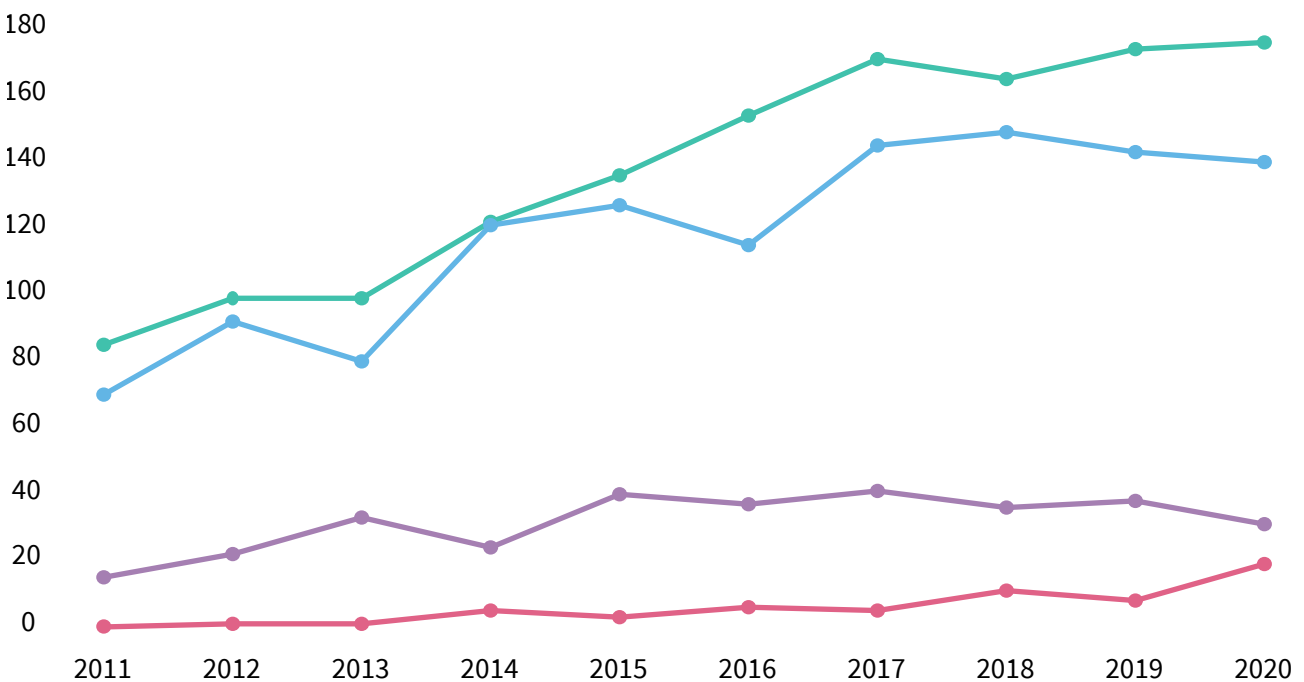
Spinout investment by stage of evolution

Seed stage and venture stage deals are more frequent, largely because there are more companies found at these earlier stages. Seed stage companies account for 42% of all spinouts, and venture stage companies represent 20%. While growth and established stage companies are less common in the spinout population, they tend to secure much larger deals.

INVESTMENT AMOUNT BY STAGE OF EVOLUTION AT DEAL DATE (2011 - 2020)



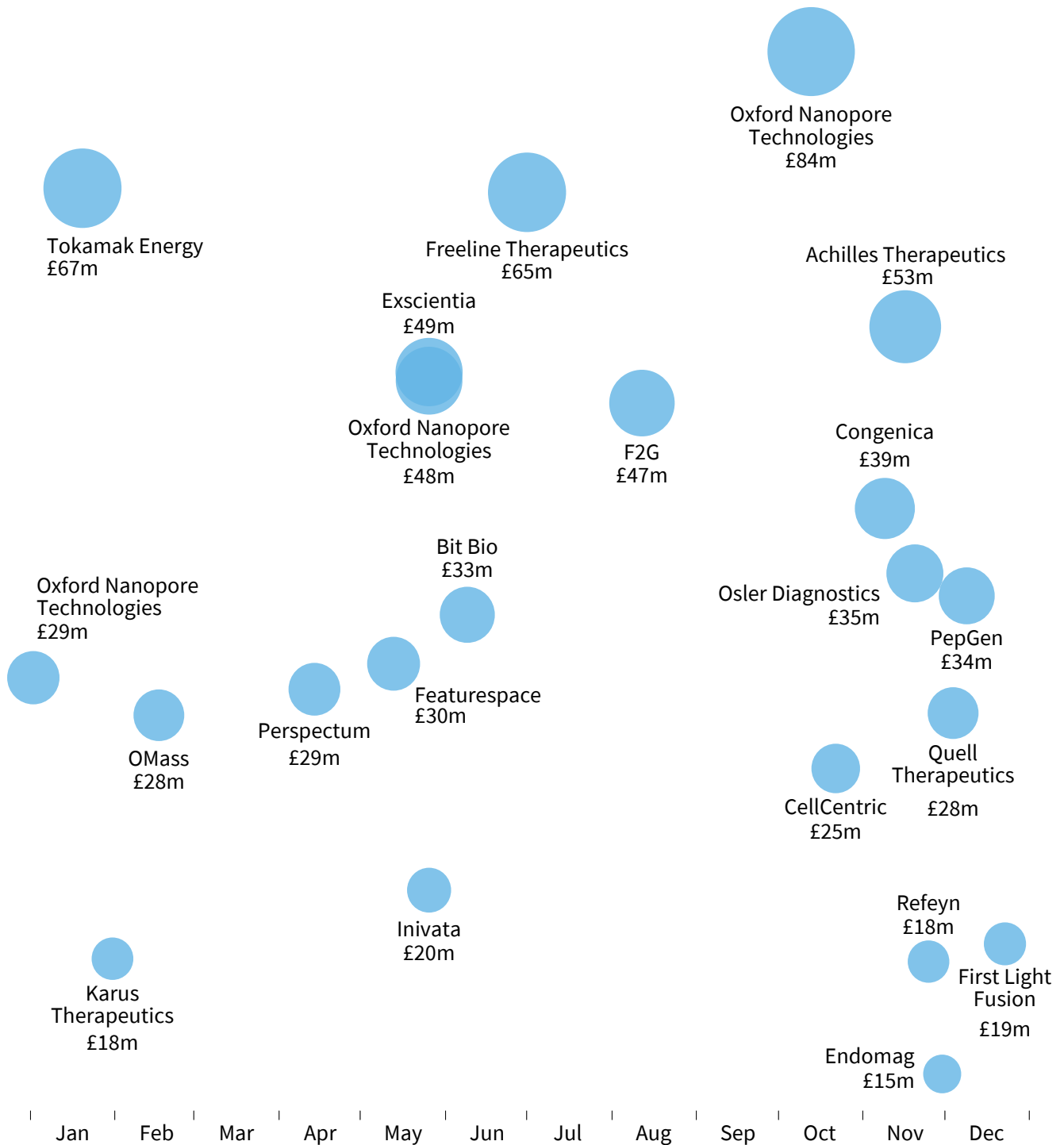
DEAL NUMBERS BY STAGE OF EVOLUTION AT DEAL DATE (2011 - 2020)



Top 2020 investments into spinouts

The highest single deal in 2020 was DNA sequencer Oxford Nanopore's £84m raise in October with participation from International Holdings Company and RPMI Railpen. Fusion reactor-builder Tokamak Energy had the second-highest deal with its £67m raise in January, followed by Freeline Therapeutics' £65m deal in June.

EQUITY INVESTMENTS OF £15M OR MORE (2020)



Top investors into spinouts in 2020

There were 371 equity deals involving spinouts in 2020. Scottish Enterprise participated in 38 deals (10.2% of the total) involving spinouts, earning it the top spot. It is followed by Parkwalk with 35 deals (9.4%) and Mercia Asset Management with 17 deals (4.6%).

TOP INVESTORS INTO SPINOUTS BY NUMBER OF DEALS (2020)

FUND	DEALS
Scottish Enterprise	38
Parkwalk	35
Mercia Asset Management	17
Oxford Sciences Innovation	16
BGF Growth Capital	11
Future Fund <i>managed by the British Business Bank</i>	11
IP Group	10
SyndicateRoom	7
Archangels	7
Crowdcube	7
SyndicateRoom	7
Frontier IP Group	6
IQ Capital Fund	6
The University of Strathclyde	6
University of Oxford	6
Cambridge Angels	5

This ranking is based on spinout deals that occurred during 2020 where the investors were publicly announced or disclosed to Beauhurst.

“A commitment from the Government to increase R&D spend to £22b annually is a positive move, but there needs to be a financial ecosystem to support this grassroots investment if the UK is to produce leading global businesses. This report highlights how the Government can assist in creating this financial ecosystem: activity north of the border in Scotland was high in 2020, driven by Scottish Enterprise, an entity funded by taxpayer money.”

Moray Wright
Chief Executive Officer
Parkwalk Advisors

Institutions by number of deals secured by spinouts

Unsurprisingly the universities with the largest spinout populations secured the most deals during 2020. Universities in the 'golden triangle' of Oxford, Cambridge and London account for around 40% of the UK's total spinout population.

TOP INSTITUTIONS BY THE NUMBER OF DEALS SECURED BY THEIR SPINOUTS (2020)

University of Cambridge	62
University of Oxford	58
Imperial College London	25
University of Strathclyde	22
University of Edinburgh	17
University College London	13
Royal College of Art	12
University of Southampton	11
University of Bristol	9
University of Warwick	8
Heriot-Watt University	8
University of Nottingham	7
University of Manchester	7
University of Leeds	7
University of Dundee	6
University of Birmingham	6
University of Aberdeen	6
Queen's University Belfast	6
University of Sheffield	5
University of Exeter	5
Edinburgh Napier University	5

Institutions by investment secured spinouts

Spinouts from the University of Oxford raised the most equity investment in 2020. The five deals by Oxford Nanopore account for 34% of the £500m total. Spinouts from the University of Cambridge raised £229m in 2020, with the top sum of £39m raised by genome analysis tool maker Congenica last November.

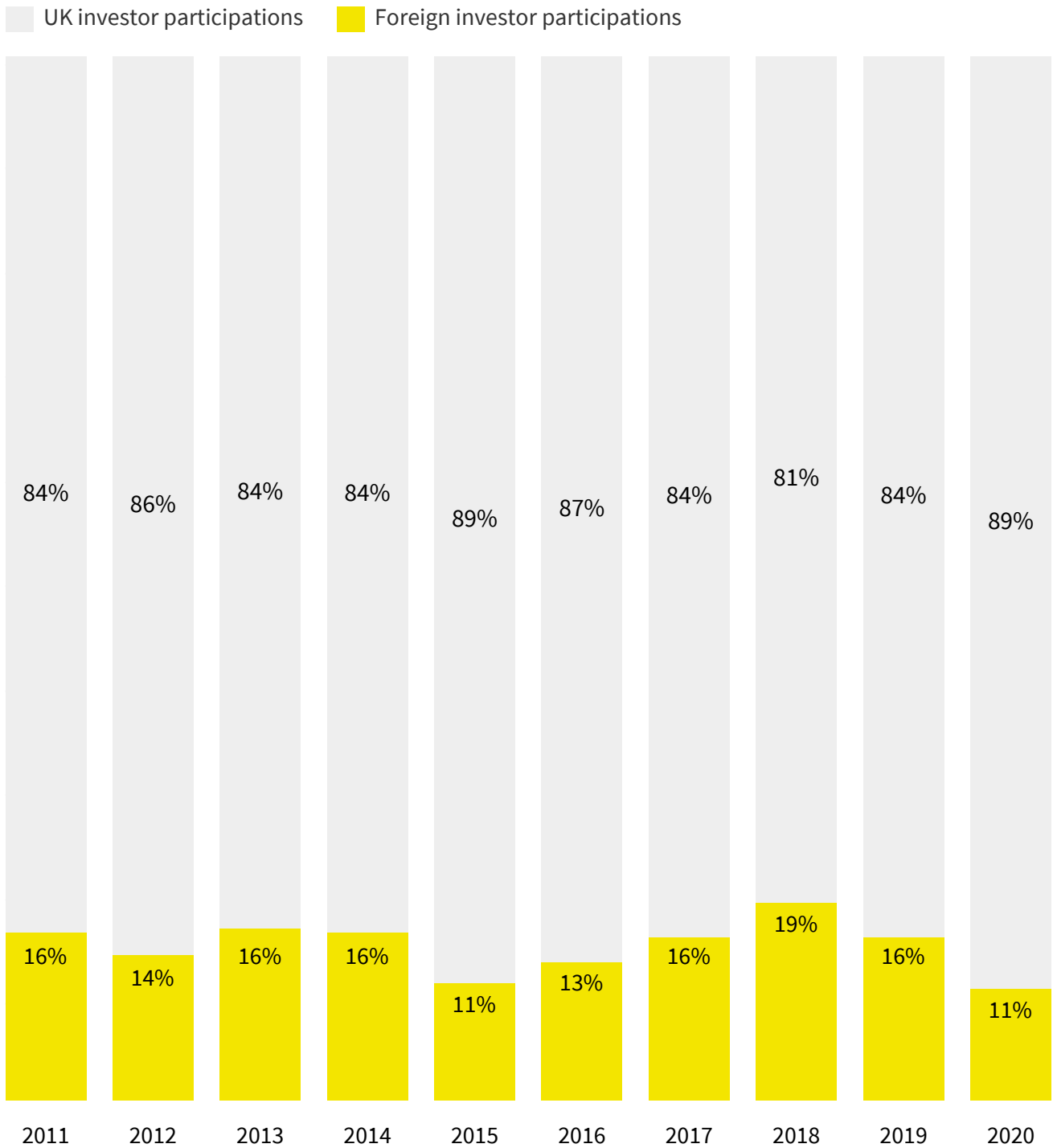
TOP UNIVERSITIES BY THE AMOUNT OF EQUITY INVESTMENT SECURED BY THEIR SPINOUTS (2020)

University of Oxford	£500m
University of Cambridge	£229m
University College London	£143m
Culham Centre for Fusion Energy	£67m
University of Dundee	£66m
University of Manchester	£48m
University of Southampton	£44m
Imperial College London	£41m
University of Warwick	£21m
BHF Clinical Trial Service Unit & Epidemiological Studies Unit	£20m
University of Edinburgh	£19m
University of Sussex	£18m
Edinburgh Napier University	£15m
Royal College of Art	£13m
University of Strathclyde	£12m
University of Birmingham	£10m
University of St Andrews	£7m
University of Leeds	£6m
University of Bristol	£5m
University of Leicester	£5m

UK vs foreign investment into spinouts

Since 2011 the amount invested into UK spinouts via announced deals involving at least one foreign investor was £3.35b (50% of the announced £6.70b). Even when including unannounced deals where investor nationalities are not known, deals involving foreign investors account for 40% of the total by value (£3.35b out of £8.37b). The chart below compares European investor participation in all deals since 2011 to deal participation by UK investors for announced deals.

FOREIGN AND UK INVESTOR PARTICIPATIONS IN UK SPINOUT FUNDING ROUNDS (2011 - 2020)



Investor nationality

US-based funds make up the vast majority of foreign investment into UK spinouts by number of deals. US funds completed 13 deals last year, bringing the total number of deals struck by US funds to 222. The US is trailed by China, which has completed a total of 29 deals. The rate at which Chinese funds are investing into UK spinouts is increasing, with seven deals completed last year.

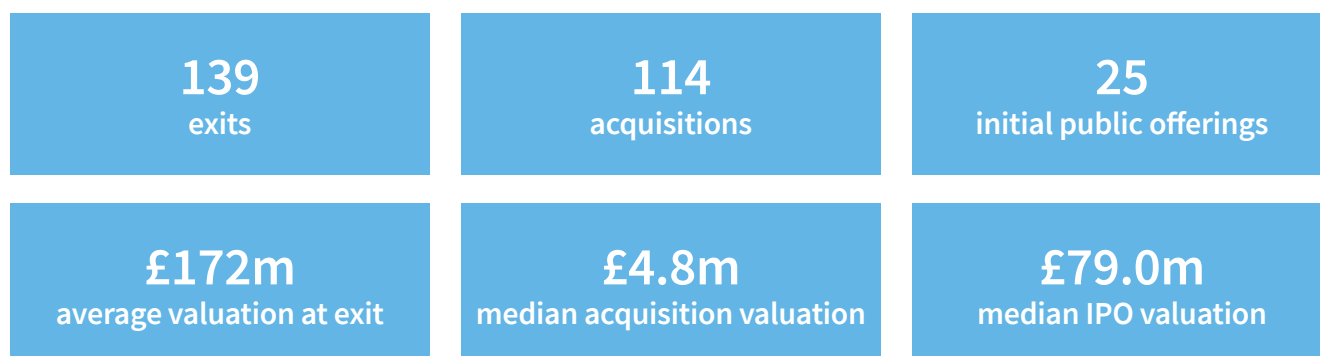
SPINOUT DEALS BY NATIONALITY OF FUND (2011 - 2020)



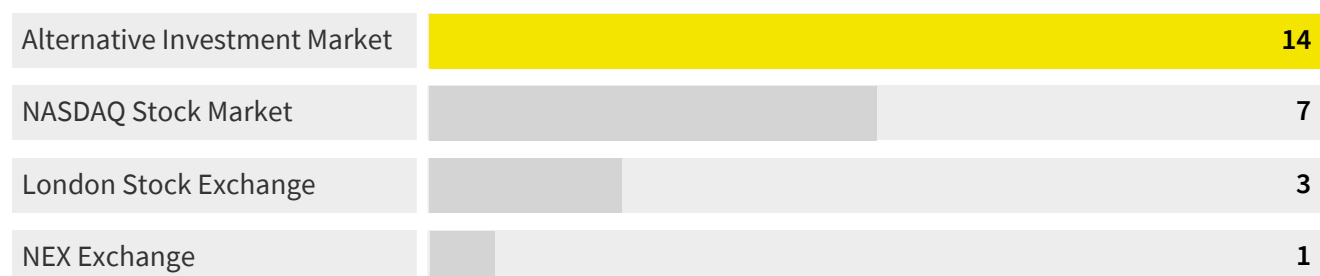
Exit valuations

Acquisitions are overwhelmingly the most popular exit route for spinouts with 114 firms acquired since 2011. The US is the top nation acquiring nation by number of deals, even beating the UK. This demonstrates the important role of US acquirers in incentivising founders and investors in the UK's spinout ecosystem.

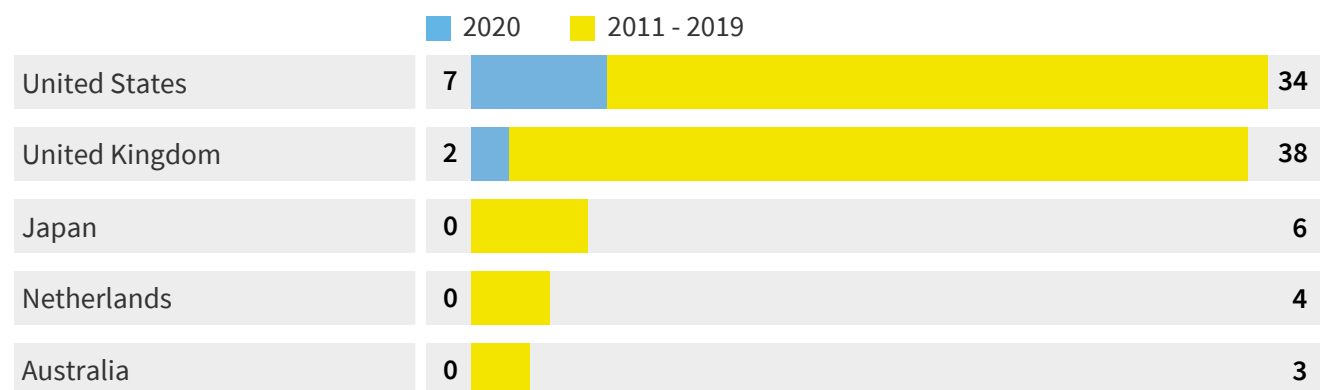
KEY FIGURES FOR SPINOUT EXITS SINCE 2011



TOP STOCK EXCHANGES BY NUMBER OF UK SPINOUTS LISTED (2011 - 2020)



NATIONALITIES OF ACQUIRERS OF UK SPINOUTS BY NUMBER OF DEALS (2011 - 2020)



This rank does not include nations that have acquired fewer than two UK spinouts. These countries include Switzerland, Sweden, Norway, Italy, Israel, Denmark, China and Austria.

Contributors

Beauhurst

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

Our platform is trusted by thousands of business professionals to help them find, research and monitor the most ambitious businesses in Britain. We 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.

Our 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.

CONTACT

5th Floor, Piano House
9 Brighton Terrace
London
SW9 8DJ

www.beauhurst.com
T: +44 (0)20 7062 0060
E: consultancy@beauhurst.com

Parkwalk

Investing in Innovation

Parkwalk is a leading investor in 'hard science' companies and is focused on commercialising the scientific discoveries made at the UK's globally-ranked research universities.

Parkwalk is the UK's most active investor in the university spinout sector, and currently has over £300m of assets under management. We have invested in over 100 companies across our managed funds, including funds managed in conjunction with the universities of Oxford, Cambridge, Imperial and Bristol. In 2017, Parkwalk joined forces with IP Group plc, a FTSE 250 listed company.

Parkwalk works closely with founders, university partners and our co-investors to optimise results for all stakeholders. We believe supporting this distinct asset class can generate attractive investment returns and create positive outcomes for UK society.

CONTACT

Warwick House
25 Buckingham Palace Road
London
SW1W 0PP

www.parkwalkadvisors.com
T: 020 7759 2285
E: enquiries@parkwalkadvisors.com

Parkwalk
Investing in Innovation

Beauhurst

Editor

Henry Whorwood

Production

Ava Scott, Dan Robinson