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Breaking ground

Opportunities in life-sciences real estate

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It takes Aviva Investors



In this article, we look at the strong fundamentals of this emerging asset class, as well as the opportunities and challenges for investors.

Chesterford Park, which occupies 250 acres south of Cambridge, has a long and storied history. Originally a rambling estate built for a country gentleman in the 19th century, complete with manor house and arboretum, it was converted into a hospital during the Second World War.

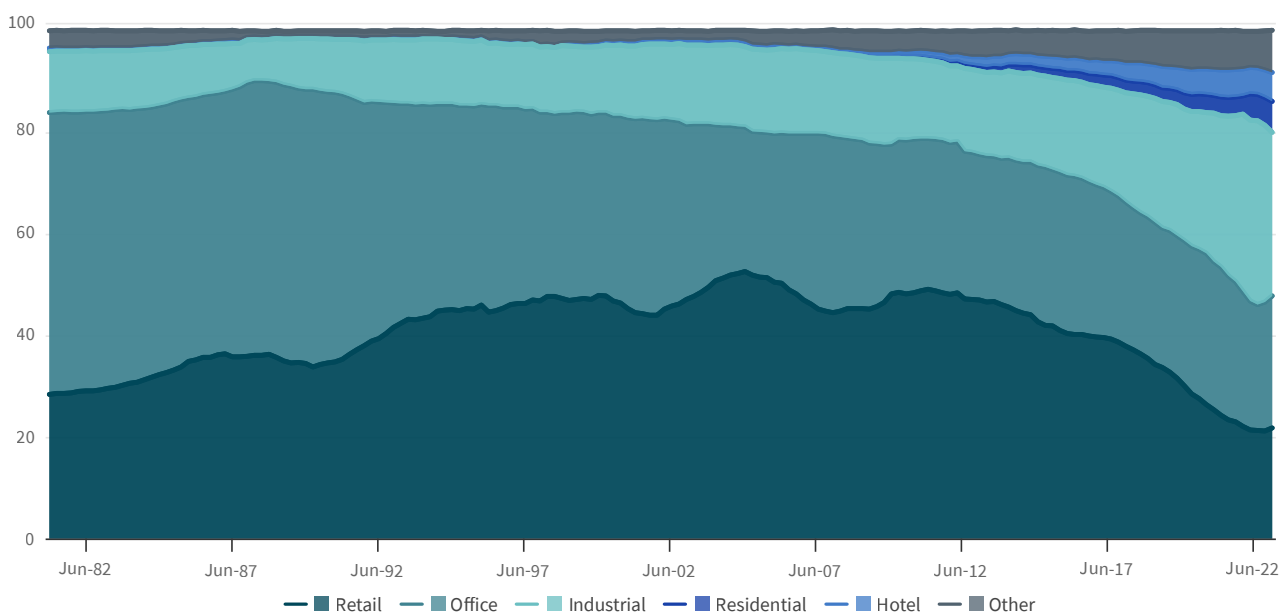
Today, you will find a clutch of sleek modern buildings nestled among oak trees and well-tended lawns. In a far cry from its staid Victorian beginnings, the site is now a fizzing hive of scientific activity and entrepreneurial spirit. Its buildings house cutting-edge research facilities, where life-sciences companies carry out vital experiments.

Chesterford Research Park, as it is known, was acquired by Aviva in 2000 and Aviva Investors is planning to develop it further alongside its joint-venture partners, adding new buildings and infrastructure to accommodate tenants as their operations expand. The roster includes pharmaceutical giants such as AstraZeneca as well as smaller start-ups linked to Cambridge University.

The ongoing development of the park illustrates the wider growth of life-sciences real estate in the UK. Propelled by the rise of the biotech industry, which needs R&D and manufacturing facilities – especially in the so-called “Golden Triangle” that links London with the world-class universities of Oxford and Cambridge – the sector is attracting domestic and global capital.¹ Singaporean sovereign wealth fund GIC recently bought a £160 million stake in a similar site, the Oxford Science Park.²

In total, £339 million of assets were bought and sold in the Golden Triangle in the first quarter of 2023, an increase over the same period in 2021 and 2022 despite the challenges posed by rising interest rates.³ The boom in life sciences is contributing to a change in the overall composition of the UK real-estate sector, adding useful diversification to a market still dominated by retail, offices and industrial assets (see Figure 1). The European life-sciences sector, too, is seeing growth, especially in emerging clusters around leading universities and hospitals in countries such as France, the Netherlands and Switzerland.⁴

Figure 1. UK real estate valuation index weightings (per cent)



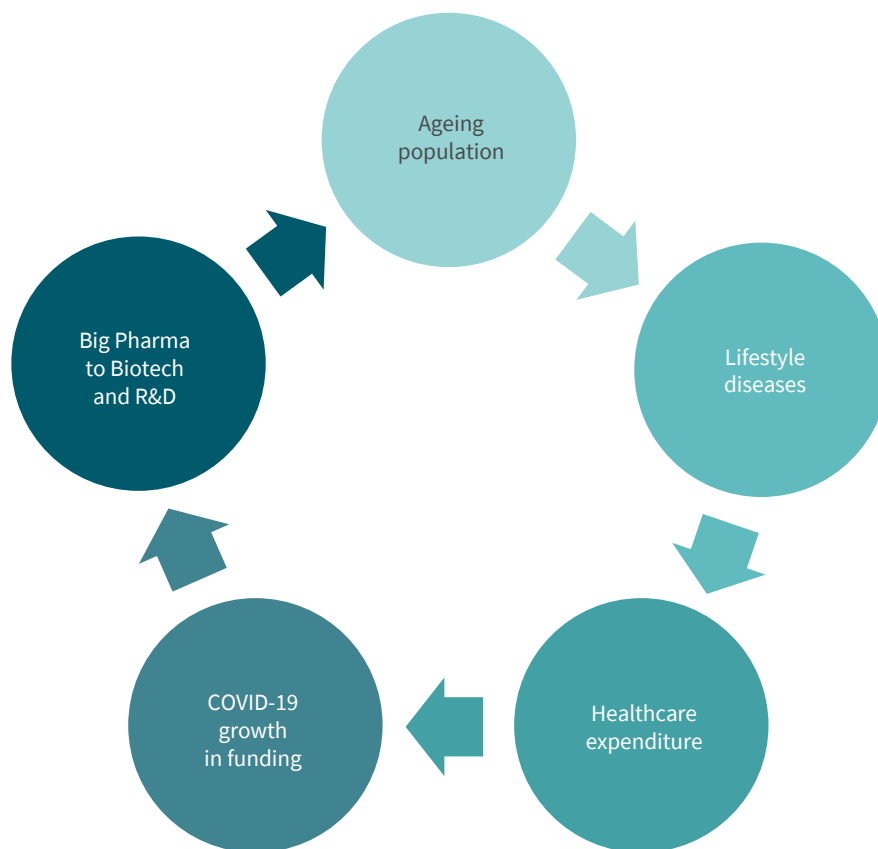
Source: MSCI/IPD UK, Q4 2022.

The growth of life sciences

The life-sciences sector has been rising in popularity among real-estate investors for some time, which can be attributed in part to structural drivers (see Figure 2).

Simply put, life sciences refers to the study of living organisms, encompassing a variety of disciplines, from pharmaceuticals to biotech. For example, health life science can involve the application of new technology in the diagnosis and treatment of health conditions. The COVID-19 pandemic acted as a catalyst for growth as companies raced to produce vaccines and treatments, in the process highlighting the social and wider economic benefits the industry can deliver.

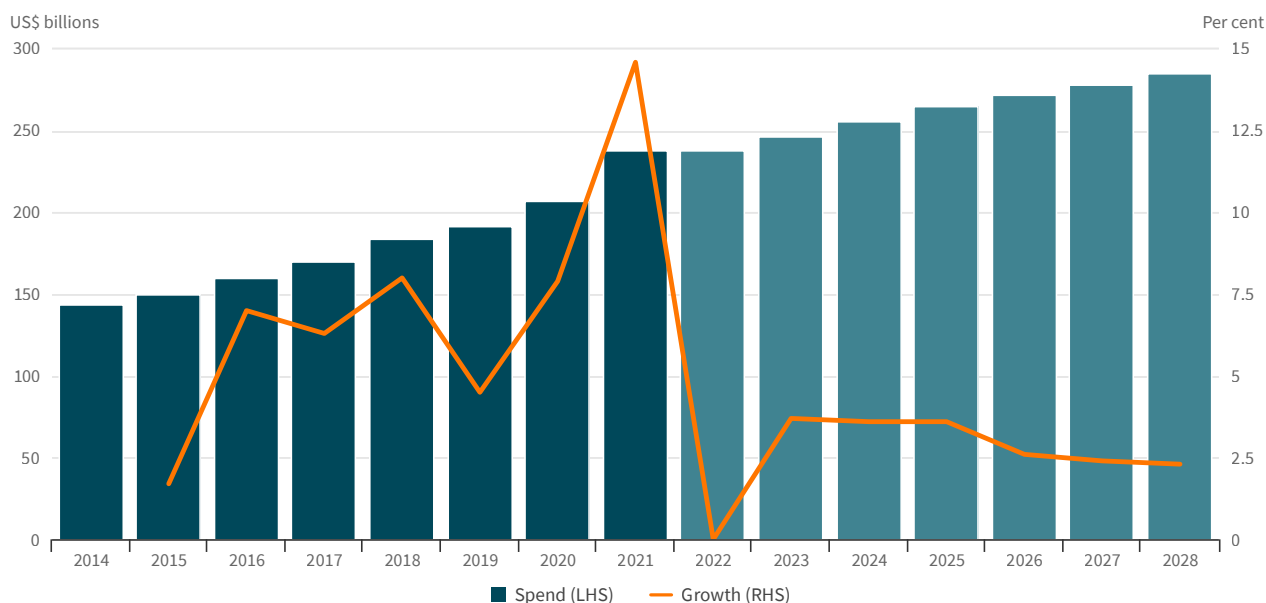
Figure 2. The main drivers of sector growth



Source: Source: Aviva Investors; Office for Life Sciences, 2019.

Over the longer term, ageing populations in developed economies are expected to provide a further structural tailwind. As people age, there is an increasing need for medical care and new treatments. No wonder, then, total expenditure on pharmaceutical R&D is expected to rise at a compound annual growth rate of 2.6 per cent between 2021 and 2028 to \$285 billion (see Figure 3).

Figure 3. Worldwide pharma R&D spend, 2014-2028



Source: MSCI/IPD UK, Q4 2022.⁵

Investment and policy

The availability of funding is particularly important as companies often have to spend heavily on R&D prior to significant discoveries. In this respect, the UK is among the fastest-growing markets, with 2021 a record-breaking year for investment: £4.5 billion was raised in public and private financing. Initial public offerings (IPOs) totalled £1.3 billion, an increase of 434 per cent from the previous year.⁶ That momentum continued into 2022, with the UK life-sciences and biotech sector raising £457 million in the first quarter (although the total for the year was lower than 2021, at £1.7 billion).⁷

Recognising life sciences as a critical industry, the UK government is getting behind the sector. On May 25, 2023, Chancellor Jeremy Hunt unveiled a £650 million package of support as part of a broader plan to make the UK a “science and technology superpower” by 2030.^{8,9} The government also announced an extension to the end of September 2023 of the Horizon Europe Guarantee scheme, which protects funding for UK research.¹⁰

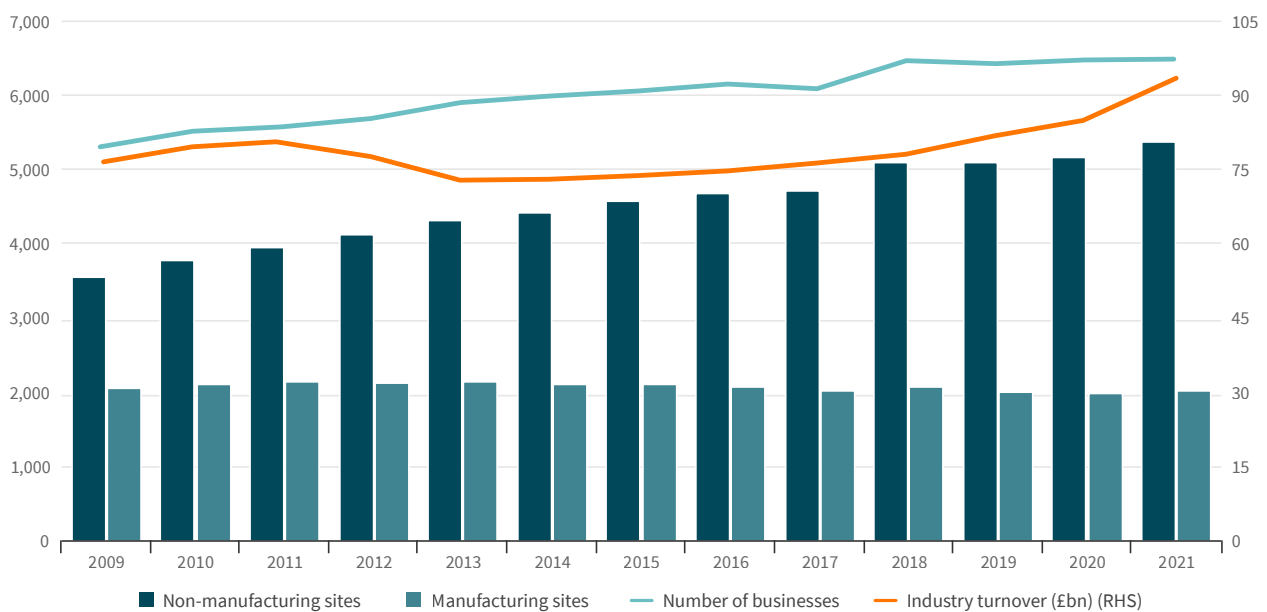
Mainland Europe, too, has seen significant growth in life sciences in the wake of the pandemic. Recent months have seen new investment into scientific research parks in established markets such as Paris and the Netherlands and new centres of excellence emerging, with Belgium, Sweden, Denmark and Germany among the markets to watch.¹¹

These trends have important implications for real-estate investors. Global venture-capital funding is down, partly due to higher interest rates, meaning the strong historic growth in this sector cannot be extrapolated into the future. But we still anticipate moderate growth. Importantly, life-sciences companies require physical space in which to operate. Unlike service industries that have pivoted to remote or hybrid working since the pandemic, reducing overall demand for office space, these firms rely on laboratories to conduct research, along with manufacturing facilities in which they can develop and commercialise it. But there is a mismatch between the demand for space and the available stock in many markets.

The UK's Golden Triangle

Assessing the life-sciences real estate market requires a focus on clusters. As is the case for most knowledge-intensive industries, being near their peers enables life-sciences companies to share knowledge and resources, with opportunities for collaboration and idea-sharing usually outweighing drawbacks such as competition for resources and talent.¹² Proximity to leading research institutions, such as universities, is also crucial – many life-sciences companies originally started as commercial spinouts from university research departments.

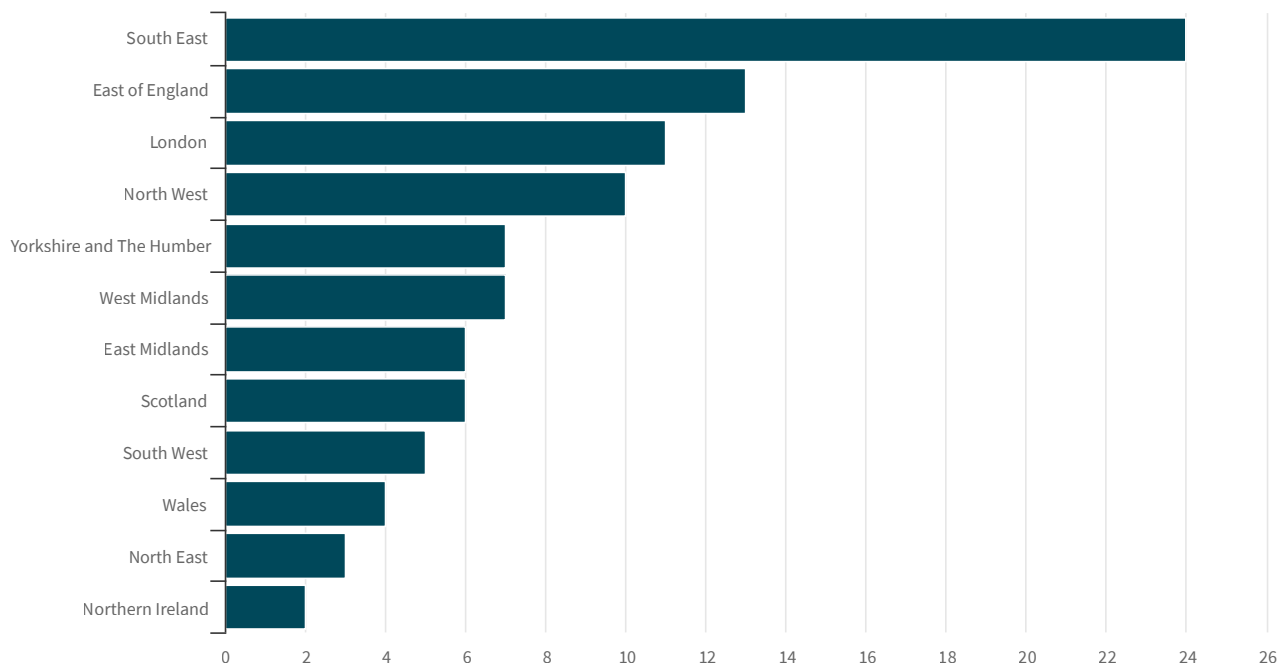
Figure 4. R&D driving growth in UK life sciences, 2009-2021



Source: GOV.UK, 2023.¹³

The fastest-growing clusters, such as the Golden Triangle, are where employment is concentrated and the need for laboratory and manufacturing space is most pressing (see Figures 5 and 6). London represents the largest share of investment activity (see Figure 7) and is playing an increasingly important role as a hub for leading life-sciences companies, particularly in the sub-markets of King's Cross, White City and part of East London.

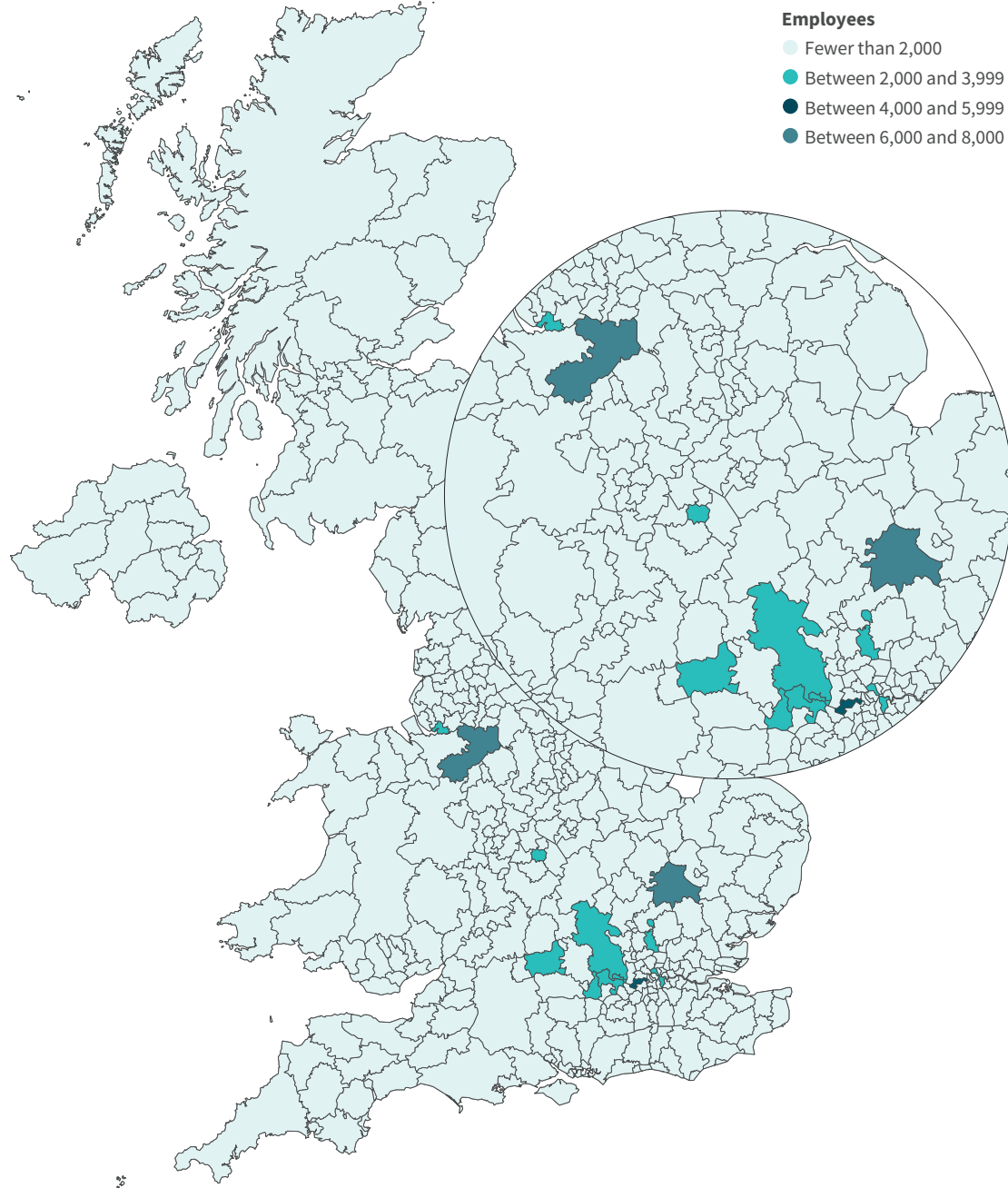
Figure 5. Employment in UK life sciences by region, 2021 (per cent)



Source: GOV.UK, 2023.¹⁴

Investment is also strong in Oxford and Cambridge. A total of 1.39 million sq. ft. of life-sciences real estate was occupied across the Golden Triangle in 2022 – the highest figure in half a decade, according to Savills.¹⁵ With supply constrained – vacancy rates for fitted laboratory space are below one per cent in London and Cambridge and less than seven per cent in Oxford – rents are being forced higher. Savills estimates rents for fitted lab space could rise by as much as 25 per cent to £100 per sq. ft. over the next three years.¹⁶

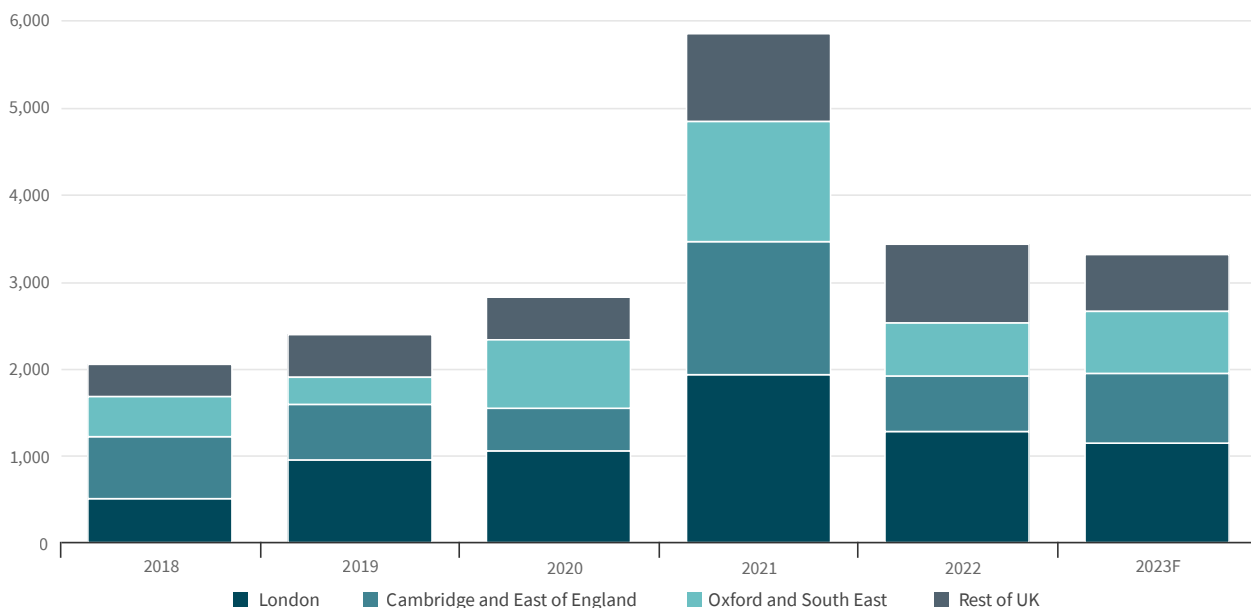
Figure 6. Employment in the biopharma sector by local authority district, 2021



Source: GOV.UK, 2023.¹⁷

The growth of the Golden Triangle is a good example of how clusters often expand from a specific area into multifaceted regional ecosystems. It also shows how competition for space within successful clusters can become fierce, pushing up asset prices. This has led some investors to look elsewhere in the UK and Europe for new clusters.

Figure 7. UK life science VC funding by geography (£ million)



Source: Knight Frank, 2023.

Emerging clusters across Europe

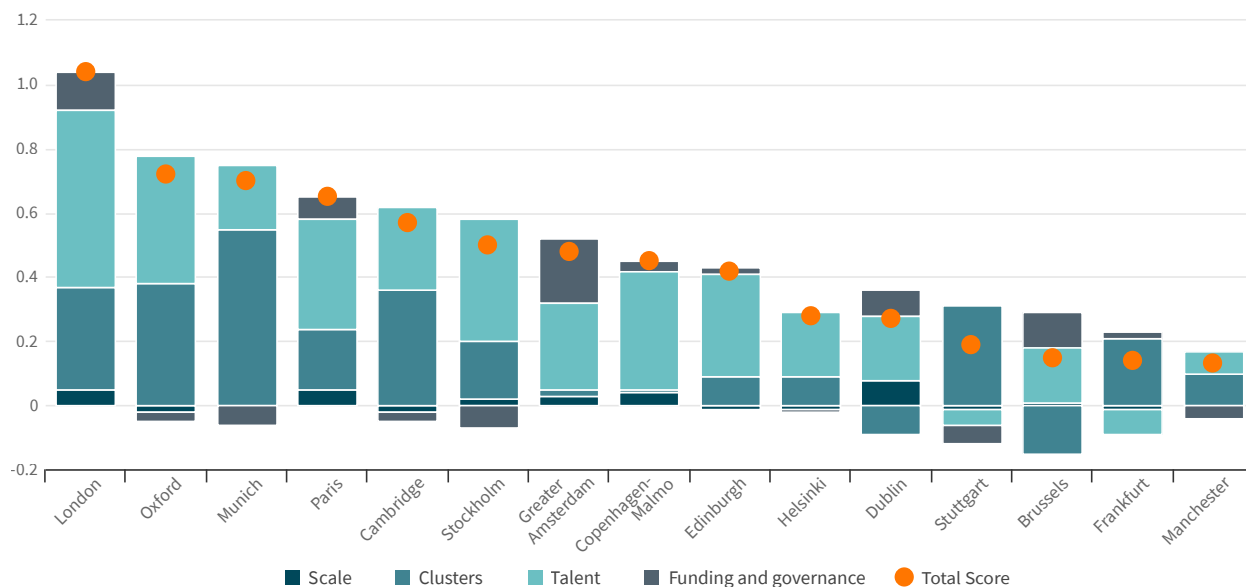
So, where could the next great life-sciences hub be located? To answer this, we need to identify the characteristics occupiers are looking for.

In many cases, these are similar to those sought by most office-market tenants, such as on-site or local amenities. One significant trend has been the move towards more flexible use of space among life-sciences companies, with some new developments featuring an equal divide between so-called “wet lab” space – traditional lab facilities where water, chemicals and live organisms can be stored – and “dry labs”, where experimental processes can be digitised through simulations. In addition, occupiers may be looking for a combination of private lab space – often for reasons of confidentiality – and managed communal laboratories for occasional use.

As companies are now able to undertake more research tasks in dry labs and require less space and infrastructure for direct experimental work, they can take up locations in cities rather than out-of-town facilities. One example of a cutting-edge urban life-sciences facility is The Francis Crick Institute in London, a so-called “superlab” with an open-plan layout, abundant dry-lab areas and extensive collaborative space. State-of-the-art experimental facilities are located in the basement and shared among on-site researchers.¹⁸

Our analysis in Figure 8 shows the top 15 European urban locations for life sciences based on metrics including the quality of their clusters, scale and access to talent, funding and governance. Established life-sciences centres such as London, Oxford, Munich, Paris and Cambridge rank near the top.

Figure 8. Top 15 European life-science urban locations



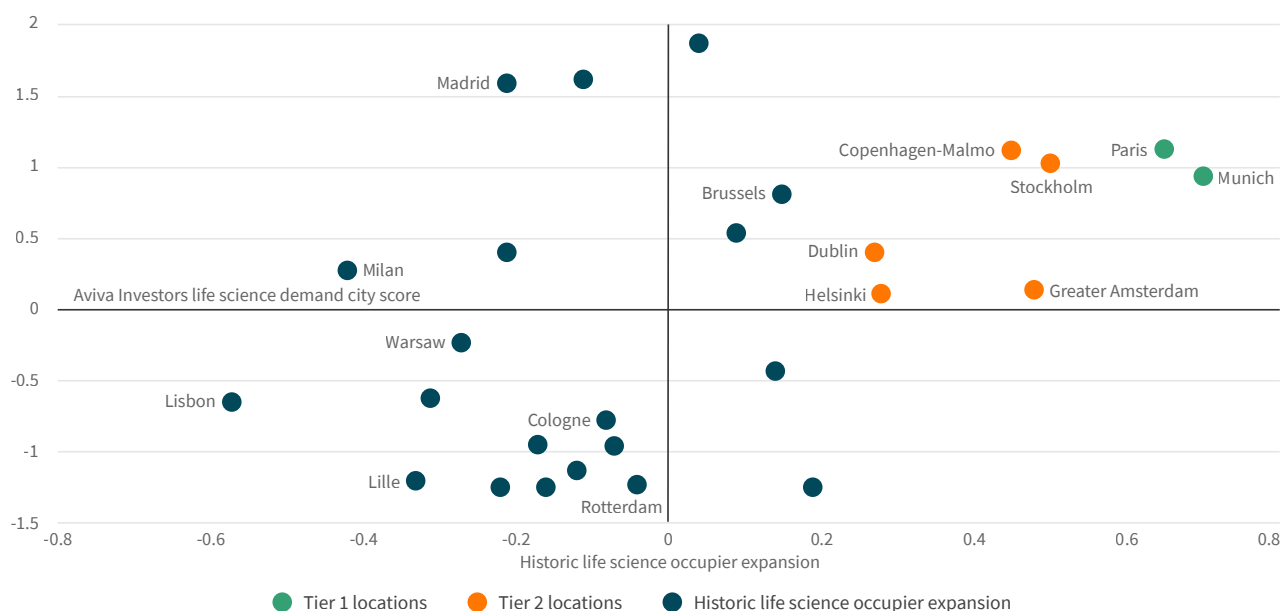
Source: Aviva Investors, July 2023.

In the UK, Oxford leads Cambridge in this ranking based on the quality of its overall academic research – a key driver of future company growth. But there are nuances. For example, Cambridge is ahead of Oxford in the subfields of artificial intelligence-enabled biotech and medical technology research, partly because the former has a stronger tech cluster and opportunities for collaboration and knowledge exchange between the two industries are more abundant in Cambridge. This shows the importance of considering broader industry specialisms in a location and one reason there has been more real-estate lease activity in Cambridge than Oxford.

In Figure 9, we look deeper to analyse where new clusters are forming and consequently where demand for space may increase. Locations such as Paris, Stockholm, Munich, Greater Amsterdam and the Medicon Valley cluster in Copenhagen-Malmö appear likely to offer opportunities as the market develops, given their strong demand scores in our propriety index.

There are also likely to be opportunities in some of continental Europe's smaller cities, which are not featured in our index. The crucial factor will be the strength of academic institutions; based on this criterion, locations to watch include Aarhus in Denmark, Uppsala in Sweden, Leuven in Belgium and Heidelberg in Germany.

Figure 9. A framework for identifying the next life-sciences hotspots in continental Europe



Source: Aviva Investors, July 2023.

Implications for real-estate investors

Picking a location where demand is likely to be sustained is particularly important for investors in this type of real estate.

The upfront capital commitments required for life-sciences property tend to be higher than for traditional offices because of the increased expense of laboratory fit-outs (labs often require reinforced structures for heavy equipment such as centrifuges, along with high ceilings to accommodate pipework). In the event demand ebbs and the asset needs to be backfilled with different tenants, converting a life-sciences property into a traditional office may require significant additional expenditure.

There are other risks to consider. Among smaller pharmaceutical companies, for example, a failed drug trial can bring an abrupt end to a business – and its capacity to pay rent. For larger firms, regulation may curb the profits they can make from new drugs, affecting their capacity to invest in new research. Investors should also monitor M&A activity, as consolidation can reduce the need for space.

Despite these factors, the structural tailwinds for the industry are compelling and fundamentals across life-sciences real estate are strong: rents for suitable property can be 30 per cent higher than for office buildings in some markets, while vacancy levels are often much lower.

Investors who get their location calls right, and understand the technological forces driving the industry and its evolving use of space, should be able to take advantage of opportunities, whether they lie in urban lab space or dedicated out-of-town facilities such as Chesterford Research Park. Although maintaining and nurturing sites can be challenging – and operational intensity high – tenants benefit from being close to their peers and research parks can be developed and expanded as and when these companies grow and need more space.

This kind of active asset management is usually a better way of driving returns than trying to access market beta by allocating capital to a growing sector in a less targeted way. It can also make a tangible difference to the companies themselves as they pursue their ground-breaking work, one eureka moment at a time.

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Key risks

Investment risk

The value of an investment and any income from it can go down as well as up and can fluctuate in response to changes in currency and exchange rates. Investors may not get back the original amount invested.

Credit and interest rate risk

Bond values are affected by changes in interest rates and the bond issuer's creditworthiness. Bonds that offer the potential for a higher income typically have a greater risk of default.

Derivatives risk

The fund uses derivatives; these can be complex and highly volatile. Derivatives may not perform as expected, which means the fund may suffer significant losses.

Illiquid securities risk

Certain assets held in the fund could, by nature, be hard to value or to sell at a desired time or at a price considered to be fair (especially in large quantities), and as a result their prices could be very volatile.

Sustainable investing risk

The level of sustainability risk may fluctuate depending on which investment opportunities the investment manager identifies. This means that the strategy is exposed to sustainability risk which may impact the value of investments over the long term.

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