Lords Science and Technology Committee

Financing and Scaling UK Science and Technology– Call for evidence

About the BIA

The BioIndustry Association (BIA) is the voice of the innovative life sciences and biotech industry, enabling and connecting the UK ecosystem so that businesses can start, grow and deliver world changing innovation. Our 600+ members include start-ups, biotechnology and innovative life science companies, large pharmaceutical companies, universities, research centres, tech transfer offices, incubators and accelerators, and a wide range of life science service providers: investors, lawyers, IP consultants, and IR agencies. We promote an ecosystem that enables innovative life science companies to start and grow successfully and sustainably.

Summary

The UK life science sector has been identified by government as a key contributor to the growth mission, and government has also confirmed its ambition to make the UK a powerhouse for life sciences and medical technology as part of the building an NHS fit for the future mission. This commitment to, and belief in, the sector continues to be well-founded, with current data demonstrating considerable growth and opportunity for job and wealth creation.

However – despite its world-leading strength – the UK life science sector faces unique challenges. Due to the long R&D timelines, high risk and cutting-edge nature of life sciences and biotech, the sector is more dependent on venture capital than almost all others. Businesses must raise multiple, successive rounds of venture capital, with the total amount needing to be raised to develop a single new medicine ranging from about £1 billion. A clear and robust pipeline of investment across the public and private sector, is therefore essential for the sector to thrive, and in turn, drive economic growth.

In particular, a lack of scale up capital is the key barrier to the successful translation of UK scientific discoveries into global life sciences businesses, one that pensions funds are uniquely well positioned to solve due to their long-term horizons and deep pools of capital. However, our latest quarterly finance report[1] shows that despite the commitments made under the Mansion House Compact, there is still no meaningful participation from UK pension funds in supporting the growth of the UK life science sector. As a result, we are at a strong risk of continuing to lose promising companies to abroad.

The BIA is urging government and regulators to stop waiting for voluntary commitments to materialise and instead level the playing field through mandatory participation in UK growth sectors like biotech. Decisive action is needed to unlock the true potential of the life sciences, and deliver the economic growth that the country needs.

However, as pension reform may take multiple years to result in the substantial extra investment our sector needs, funding from the British Business Bank is a vital source of capital for innovative UK businesses that are scaling now and want to stay in the UK, and should be resourced and supported accordingly.

Addressing the lack of scale-up capital, and securing the funding pipeline for the sector, is more urgent and timely than ever before, given the current geopolitical landscape and macroeconomic trends. The government must seize the opportunity to demonstrate that the UK is the preeminent destination on the global stage for businesses to start, scale, and stay in the UK.

Key points:

- Britain has a genuinely world-leading life sciences and biotech sector, which presents a unique economic growth opportunity for the UK in industries of the future, from healthcare to agritech and climate solutions.
- However, the UK underinvests in the sector relative to other sectors, and in comparison to the US. In particular, the UK fails to fund its companies through scale-up (Series B+/£20m+ deals, and the public markets) due to a market failure in our own financial system, driven by risk aversion.

[1] BIA: UK biotech financing 2024. (2024).

- International investors see the value of UK innovation, and are over-represented in UK financing deals as a result. Venture-stage companies continue to draw significant interest from international investors, particularly in later-stage Series B rounds, where North America leads with 38% of investments.[2] It is UK investors – in both public and private markets – that do not invest in the UK's life sciences sector, despite the opportunity on their doorstep.

- This is a strategic threat to the UK as a core part of our economy is dependent on foreign capital, but more importantly it is off-shoring wealth creation. It is preventing a positive feedback loop whereby UK investors generate returns from UK growth companies that are reinvested into the next generation of growth companies.

- UK pension savers and taxpayers are also missing out, because the architecture of our financial system is not capturing the downstream value of the commercialisation of our research and innovation, which taxpayers are funding in our universities and start-ups.

- Pension funds – both local government and defined contribution – are well placed to increase their exposure to late-stage VC funds and growth-stage public market deals.

- However, they are not moving fast enough. If the City of London cannot voluntarily organise investment vehicles in 18 months to match the ambition of UK innovators and government in backing our growth economy, it is time to mandate them to do so. Ministers must ensure the UK pensions industry – which enjoys a dependable and growing income enabled by tax relief at great cost to the UK tax-payer – uses our nation's wealth to build an economic future for UK citizens' benefit.

- Action by government to mandate pension funds to invest in innovative UK industries will help close the funding gap between the UK and US by unlocking a significant new source of domestic capital, while also opening up the financial opportunities of the UK's world-leading life sciences sector to fund comfortable retirements for citizens and grow the British economy.

[2] BIA: UK biotech financing 2024. (2025)

Responses to questions

1. **Translating excellent basic science and technology into global companies has long been recognised as a problem for the UK. Many policy initiatives have tried to address this. What are the key barriers that the Government must address to fix this? What specific policies need to change? Why have previous attempts not succeeded?**

Although the UK life sciences and biotech sector is a strong performer compared to European competitors (consistently accounting for approximately 30-40% of the continent's annual total[3]), compared to the US, the sector receives much lower levels of investment, even when accounting for GDP. The British Business Bank's latest Equity Tracker showed the US life sciences sector raises 59% more investment relative to GDP than the UK sector, and that this is the biggest sectoral funding gap seen in British venture capital.[4] The BBB's data also showed that UK life sciences is the only R&D-intensive UK sector that has not increased its market share of global venture investment over the last ten years.

Seed funding for UK life sciences is relatively strong, with levels comparable to the US.[5] However, the funding gap emerges at early and late-stage VC rounds (Series B+/£20m+), where most investment comes from foreign—primarily US—investors. Since 2015, this trend has extended to public markets, with many UK life science firms choosing to list on Nasdaq over the London Stock Exchange. As scaling businesses follow capital, the UK risks losing high-value R&D, manufacturing, and leadership roles overseas. In turn, financial returns and tax revenues flow abroad, limiting domestic wealth creation and reinvestment in future growth.

There is a clear market failure demonstrated by these data: UK investors do not want to invest in UK life sciences. The quality of UK life sciences and the companies is not at fault, as venture-stage companies continue to draw significant interest from international investors, particularly in later-stage Series B rounds, where North America leads with 38% of investments.[6] Risk aversion in the UK investor base is widely acknowledged, and life sciences is seen as one of the riskiest sectors to

[3] BIA: Finance report 2023 (2023)
[4] British Business Bank: Small business equity tracker (2024)
[5] BIA: UK biotech financing 2024. (2024).
[6] BIA: UK biotech financing 2024. (2025)

invest in and potentially the most difficult and therefore least attractive. None of these assumptions are necessarily true, but there is a strong perception within the financial system that is driving perverse behaviour, resulting in poor returns for retirement savers and the British economy.

Irrespective of where the funds are coming from, the fundamental barrier to translating UK science into global companies is a lack of scale-up capital. The data clearly demonstrates that the fault does not lie with the quality of UK innovation, but with a financial system that fails to provide a complete pipeline of investment.

Pension reform

On the contrary, pension funds – both local government and defined contribution – are well placed to increase their exposure to late-stage VC funds and growth-stage public market deals. The capital-intensive and long R&D timelines of the life sciences align well with the longer term investment horizon of pension funds. Action by government to address this lack of investment through pension reform will help close the funding gap between the UK and US by unlocking a significant new source of domestic capital, while also opening up the financial opportunities of the UK's world-leading life sciences sector to fund comfortable retirements and grow the British economy.

The Mansion House Compact, signed in July 2023, was an enormous step forward for the UK's financial services industry and has given hope to start-ups and scale-ups that the pensions industry is ready to engage with them and invest in their growth, in a way that foreign investors and pension funds already do. UK pension funds have a significantly lower allocation to private equity and infrastructure assets (around 6% combined) than many of their peers (Canadian public sector pensions 34%, Finnish pensions 17%, and Australian supers 14%).[7]

Australian and Canadian pension funds have structured themselves to be able to invest knowledgably and successfully in innovative life science opportunities in the UK and Europe in the last decade. They have learnt how to invest in innovation and scaled to employ in-house experts to understand emerging areas of science and technology. It is the outdated UK pensions industry

[7] William Wright and James Thornhill: Comparing the asset allocation of global pension systems: Analysis of investment in domestic equities & of home bias by pension funds in the UK and around the world. (2024)

that is holding back the allocation from Britain's investors and savers into British growth companies to support the science superpower ambition and drive economic growth.

The French Tibi Scheme has been immensely successful, and a similar approach could be taken in the UK to increase the interaction of institutional investors and VC funds, and channel any unlocked capital into the UK VC ecosystem. The scheme was launched by the French government in 2020 to address the lack of willingness among its own institutional investment community to invest in the French tech industry. The scheme, championed by President Macron, secured the commitment of institutional investors to invest €6bn into French tech companies by December 2022. It was delivered through strong political involvement and the appetite of French institutional investors to support the country's strategic interests. Crucially, government spending was not required, whereas government leadership was essential. (For a more comprehensive list of international initiatives, please see Appendix 1).

It is, therefore, critical that government continues to give this agenda, and the Compact specifically, its full backing and maintain pressure on the pensions industry to change its behaviour in the interests of the country. Ministers must ensure the UK pensions industry – which enjoys a dependable and growing income enabled by tax relief at great cost to the UK tax-payer – uses our nation's wealth to build an economic future for UK citizens' benefit. That means backing innovative UK companies creating value that improve our lives.

The BIA is urging government and regulators to stop waiting for voluntary commitments to materialise and instead level the global playing field through mandatory participation in UK growth sectors like biotech.

However, as pension reform may take multiple years to result in the substantial extra investment our sector needs, funding from the British Business Bank is a vital source of capital for innovative UK businesses that are scaling now and want to stay in the UK, and should be resourced and supported accordingly.

2. **How should the UK's science and technology strategy respond to ongoing major changes in the economic, geopolitical, and technological landscape? What challenges and opportunities now face the UK's science and technology sector? What policy actions would you prioritise?**

The UK's R&D-intensive life sciences and biotech sector is universally recognised as world-leading, delivering significant benefits to the economy, and the health of the nation. It is key to the government's growth mission – already being identified as a priority area for growth – as well as government's ambition for clean energy and building an NHS fit for the future.

UK life sciences employs over 300,000 people. There are 6,850 life sciences businesses, 75% of which are SMEs, and combined they generate a turnover of £108.1bn.[8] The average GVA per employee is over twice the UK average at £104,000 and the sector consistently invests more in R&D than any other (£9 billion in 2022).[9] With over 6,850 businesses, generating £108.1bn in turnover,[10] 300,000 jobs – around two-thirds of which are outside London and the South East – and approximately 5% jobs growth per year, UK life science consistently delivers for the UK tax payer. In 2024, pharmaceuticals were the third largest sector for exported goods at over £24 billion.[11]

What's more, it's exceptionally capable at crowding in capital. In 2024 the sector attracted significant investment, raising £3.7 billion – a 106% increase compared to the previous year.[12] This represents the highest annual figure since the £4.5 billion raised in 2021 and is a testament to the sector's resilience, innovation, and global appeal, even in the face of challenging economic conditions. The sector is particularly attractive to the US, with 33% of seed deals are led by US investors, and 47% of Series A deals.[13]

In addition, UK life sciences continually draws high levels of foreign direct investment (FDI); it continually places within the top ten countries worldwide for life sciences FDI.[14] In 2023, an estimated £800 million of inward FDI was attracted by UK life sciences. However, the levels of FDI

[8] DSIT, DHSC, OLS: Bioscience and health technology sector statistics 2021 to 2022. (2023)
[9] ONS: Business enterprise research and development, UK: 2022. (2024)
[10] DSIT, DHSC, OLS: Bioscience and health technology sector statistics 2021 to 2022. (2023)
[11] ONS: Trade in goods: country-by-commodity exports (2025).
[12] BIA: UK biotech financing 2024. (2025)
[13] BIA: UK biotech financing 2024. (2025)
[14] DSIT, DHSC: Life sciences competitiveness indicators 2024: summary. (2024)

have decreased since the pandemic, showing there is potential to improve our position with the right infrastructure investments to boost competitiveness. Similarly, the UK ranks in the top ten worldwide for pharmaceutical exports, with a value of £25.6 billion in 2023.[15]

The UK is therefore well placed to seize the opportunity presented by the current economic landscape in the US. With cuts to federal funding and the FDA, alongside the looming threat of pharmaceutical tariffs, the environment is becoming increasingly hostile for emerging companies trying to raise funds and base themselves in the US. This will inevitably lead to companies looking elsewhere to set down roots and scale – and as the largest biotech hub outside the US – the UK is an attractive prospect. An increase in migration to UK shores could also encourage US investors to divert more money into the UK. However, this is not to downplay the threat of harm to the UK sector resulting from US developments; given the global nature of the industry, the size of the US healthcare market and link between US capital markets and UK financing conditions, there are significant threats as well as opportunities.

Capitalising on the opportunity is essential, and will require swift and decisive action. Ensuring a robust funding pipeline for the life sciences should be a priority, with particular focus on scale-up capital from UK sources (i.e. pension funds). The UK needs to be seen as a viable location to scale a business and maintain it. Beyond capital, solidifying the UK's international standing will requires us to improve the commercial environment for life sciences and double down on our strengths. Government should leverage UK biotech's unique advantages – including burgeoning AI-powered techbio innovation, growing manufacturing infrastructure, a digitalising NHS and globally recognised regulatory expertise – to bolster our reputation within the international life sciences ecosystem. Finally, further steps should be taken, and funds directed, to attract talent – a move that should be bolstered by an internationally competitive and efficient visa system and immigration plan.

[15] DSIT, DHSC: Life sciences competitiveness indicators 2024: summary. (2024)

3. Is the UK's research and innovation landscape well-structured to support science and technology commercialisation, economic impact, and strategic advantage for the UK?

The government's plan for life sciences rightly recognises the need for specific support for the sector, identifying life sciences as a priority sector for growth, and committing to the launch of a sector specific plan. This is welcome, as the UK's life sciences sector – despite its world-leading strength – faces unique challenges and the life sciences business model has unique characteristics that must be considered by policy makers when designing an industrial strategy and also when determining the economic benefits that can be gained. This is particularly true for start-ups and scale-ups, which are the source of much of the innovation in healthcare; emerging life science companies represent 65% of the global drug development pipeline with an additional 7% being developed by them in partnership with larger firms.[16]

It is essential therefore, that support for UK SMEs is embedded into both the Industrial Strategy and the Life Sciences Sector Plan. They must take into account the unique characteristics of the sector – typically amplified in SMEs – such as exponentially increasing R&D spend, high reliance on venture capital, long timelines to commercialisation, and high associated risk; and deliver both a plan and strategy that provides joined-up government support for the entirety of the financing continuum.

The most significant gap in the financing continuum occurs at scale up. Both BIA and BBB data shows seed funding for UK life sciences is relatively healthy, with levels comparable to the US.[17,18] This is in part due to government schemes such as SEIS, EIS, VCT, and robust R&D tax reliefs, as well as actions and initiatives from the British Business Bank (BBB). However, early and late-stage VC (Series B+/£20m+) deals are where the gap opens up. Data from both the BIA and the British Venture Capital Association (BVCA) shows that investment at these stages – critical for scaling a business – is predominantly coming from foreign investors, particularly American ones.[19,20]

[16] IQVIA: Emerging biopharma's contribution to innovation. (2022)
[17] BIA: UK biotech financing 2024. (2024).
[18] British Business Bank: Small Business Equity Tracker 2024. (2024).
[19] BIA: Finance report Q2 2024. (2024)
[20] BVCA and Beauhurst: UK scale-ups increasingly relying on overseas investors to grow. (2024).

This is also true for public markets, where there has been a significant trend since 2015 for UK life science companies to list on Nasdaq rather than the London Stock Exchange.[21] This is critical, as scaling businesses are drawn geographically to where they can access capital and be close to their investors. The UK therefore risks losing high value R&D, manufacturing, and management jobs as companies move overseas. Moreover, foreign equity investors participating in these later and larger financing rounds will collect the financial returns and pay capital gains taxes in their own jurisdictions, meaning wealth creation is not accumulated in the UK economy and reinvested in the next generation of scaling companies

A lack of domestic venture capital investment into UK life sciences is not an indication of the quality of the companies or innovations themselves. Our ability to attract significant foreign investment is a testament to that quality, and work is needed to ensure that domestic capital is funneled into growth companies and economic returns captured at home.

Action by government to address this lack of domestic investment through pensions reform will help close the funding gap in scale-up capital. This, in conjunction with joined-up support from government and constructive and genuine partnerships with industry, would lead to a sector-specific approach aligned with broader industrial strategy that fosters sustainable growth and addresses the unique challenges and opportunities of our sector.

4. **How can the Government encourage more private-sector investment in R&D, and in R&D intensive companies, including technology start-ups and scale-ups, in the UK? What are the major factors behind the exodus of capital and companies to the US, and is there anything that the UK can do to prevent this? We would welcome case studies from entrepreneurs or investors who have moved abroad, setting out their reasons for doing so.**

There is a clear market failure in that UK investors do not want to invest in UK life sciences. The quality of UK life sciences and the companies is not at fault, as venture-stage companies continue to draw significant interest from international investors, particularly in later-stage Series B rounds, where North America leads with 38% of investments.[22] Risk aversion in the UK investor base is

[21] Unpublished BIA analysis available on request.
[22] BIA: UK biotech financing 2024. (2025)

widely acknowledged, and life sciences is seen as one of the riskiest sectors to invest in and potentially the most difficult due to its technical nature, and therefore least attractive. None of these assumptions are necessarily true, but there is a strong perception within the financial system that is driving perverse behaviour, resulting in poor returns for retirement savers and the British economy.

Work from both the Bank of England,[23] and BVCA,[24] recommend that pension schemes should be encouraged to invest in venture capital via a revised approach to liquidity management, and clearer regulatory guidance. Disclosure of returns from venture investment can also demonstrate the opportunity present in high-growth, innovative companies.

In addition to risk aversion in the UK, another major barrier to institutional investment in UK life sciences is limited in-house expertise. This can lead to an over-reliance on passive strategies and global diversification, often at the expense of high-growth UK companies. To offset this, the government must implement a targeted programme to encourage pensions investment in UK growth and venture funds, learning from France's Tibi scheme, which included bold political leadership. Given previous Chancellors have not succeeded in ushering the change needed within the pensions industry, mandation should now be used. Meanwhile, regulators such as the FCA and TPR must be confident that new rules such as the Value for Money test do not unintentionally institutionalize short-termism or discourage investment in illiquid but high-return assets. Regulating allowed links and reviewing the structure of the Long-Term Asset Fund (LTAF) post-implementation will also be crucial to making broader access to private capital markets a reality for long-term savers. In the end, UK pension savers must benefit from UK innovation—not foreign investors alone

[23] Bank of England: Productive finance working group publishes recommendations addressing the barriers to investment in less liquid assets. (2021).
[24] BVCA: Pensions and private capital expert panel, final report. (2025).

5. **Are the current major public sector investment vehicles, such as the National Wealth Fund, British Business Bank, and British Patient Capital, sufficiently resourced––in terms of capital, as well as scientific, technological, and financial expertise––to make meaningful scale-up investments in UK science and technology companies? Do they have the mandate to do this? If not, what changes or reforms would you propose?**

British Business Bank and British Growth Partnership

The British Business Bank (BBB), and its subdivision the BBB Direct Investments team (formerly known as British Patient Capital), have become a critical cornerstone of the UK venture ecosystem and will be instrumental in the government's growth mission and industrial strategy. It delivers effective direct equity investment into scaling life sciences businesses and seeks to develop the UK's venture ecosystem by investing into venture funds. The BBB is also developing the British Growth Partnership (BGP), which will provide a state-backed vehicle through which pension funds and other institutional investors can invest into life sciences and technology companies within the BBB portfolio.

Following the launch of the Mansion House Compact and the ongoing Pension Review, the scale of equity investment needs to be the focus moving forward. As the pension reforms may take multiple years to result in the substantial extra investment our sector needs, funding from the British Business Bank is a vital source of capital for innovative UK businesses that are scaling now and want to stay in the UK.

The BBB should continue to be resourced such that initiatives like Future Fund: Breakthrough, Life Sciences Investment Partnership, and the BGP able to catalyse investment into high-growth UK companies, and directly address the undersupply in late-stage venture capital. Through the strength and expertise of team, these initiatives have begun to close the most critical funding gaps in the life sciences by crowding in private investment. This scale-up support has enabled high-growth firms to remain in the UK, and is critical to the delivery of economic growth, and the continued establishment of the UK as a globally competitive.

National Wealth Fund

The launch of the National Wealth Fund (NWF) is very welcome. If effectively targeted and aligned with the priority sectors and pro-innovation approach of the Government's wider Industrial Strategy, the NWF can be an effective tool in delivering the government's growth and clean energy missions, generating returns for the taxpayer, and crowding in capital.

To fully unlock the Fund's potential, priority sectors must include high-growth, innovation-driven industries such as engineering biology and the life sciences – both of which are already recognised by Government as critical to UK growth, and uniquely positioned to meet the NWF's objectives. Engineering biology is considered by government as part of the "digital and technologies" sector of the industrial strategy, so should already be a focus for the NWF, and the life sciences has been identified as within the scope of an expanded mandate for the fund. Both have considerable sector-specific infrastructure gaps that need to be addressed, and are critically dependent on more traditional infrastructure projects such as building and transport. Therefore, the Fund should consider benefits and impacts on all priority sectors when making general infrastructure investment decisions. This will require it to build sector specific teams and work with others in government.

Success will be dependent on the NWF complementing existing institutions, drawing on established expertise across government, including the BBB and Innovate UK, and acting in concert with the private sector—de-risking investments and addressing critical market failures. Government must be prepared to take calculated risks and invest in innovation even where there is no guarantee of success, as this is crucial to securing the long-term benefits of innovation for the UK economy.

Both the BGP, as well as the NWF, are key steps in the right direction, but the sector-specific characteristics and capital hungry nature of the life sciences will require a more targeted approach, and the BBB should work with our industry to ensure this is delivered. Ring fencing a significant portion of funds within their respective budgets for investment in the life sciences, would be an essential first step.

6. **The Government has set out many policy actions in the Science and Technology Framework and elsewhere that it hopes will support the UK's science and technology sector and scale-up. Are these measures working? Do they address the right problems? What additional policy levers exist for the Government to support scale-up?**

R&D tax credits, introduced by the Labour government in 2000, have been critical to the growth and success of UK life sciences and biotech. BIA members regularly cite them as the most important support they receive from government. Crucially for pre-revenue companies, they reduce the cost of investing in R&D with cash payments, so that the level of investment required is more proportionate to the level of risk, thus incentivising private (often venture capital) investment into start-ups and scale-ups.

We very much welcome the Chancellor's recent commitment that the rates of relief will be maintained throughout Parliament. Government should now focus on ensuring that the scheme is running as smoothly and effectively as possible.

Tackling fraud will be a key aspect of this, as it remains a significant problem within R&D tax relief. It is a considerable barrier to a fair, effective, and efficient scheme, with our members reporting measures taken in recent years to tackle fraud are having very real consequences for legitimate claims. Policy changes to reduce fraud in the recent past have inadvertently harmed the life sciences sector – despite the fact that the vast majority of fraud/non-compliance is happening in other sectors[25] – and made the UK less competitive for global investment. These were due, in large part, to the insufficient evidence base that restricted understanding of how R&D tax relief supports high-growth businesses.

A thorough review of the schemes using a better, more comprehensive evidence base and industry consultation – as outlined by the BIA[26] – will allow government to tailor the R&D tax credit scheme to increase private investment and economic growth. It will also allow HMT and HMRC to determine the most effective way to tackle fraud without harming genuine claimants in sectors that deliver the greatest value for taxpayers.

[25] HMRC: HMRC's approach to Research and Development tax reliefs. (2023)
[26] BIA: Improving the evidence base for R&D tax relief in the life sciences sector. (2024)

Once the scheme is functioning to its fullest potential, the strength of the UK's offer in this area should be made known to the global investment community to attract them to UK shores. Moreover, as fraud is cut and the scheme better targeted, the cost of the scheme to the Exchequer will go down, which could allow for the R&D-intensive SME rate to be returned to its original levels of 33p/£.

Appendix 1 – International initiatives

France - The Tibi Scheme

Summary

France's Tibi scheme has been successful in pooling institutional investors funds (£3bn invested into funds to date out of a total commitment to invest £5bn) at pace and into technology-focused funds (and a smaller % allocated to those investing in life science assets).

The Tibi scheme was established using significant political capital and the personal involvement of President Macron; therefore if the UK wants to implement a scheme of similar scale, then it will require similar levels of Government commitment

What is the policy?

Launched by the French Government in September 2019, the Tibi scheme was created to address the financing challenges faced by French tech (and life science) companies.

When and how was it implemented?

The scheme involved achieving pledges from institutional investor funds to invest £5bn into French tech companies by December 2022. It was delivered through strong political involvement (President Macron led the discussions with industry) and the appetite of French institutional investors to support the country's strategic interests

How has this policy progressed / what has its impact been?

To date, 56 'approved' investment funds have raised £3bn directly from Tibi investors, and a further £13bn raised from non-Tibi investors[27] which will be deployed towards French tech, including life science.

[27] DG Trésor: Financing the Fourth Industrial Revolution: an initial assessment of the Tibi Initiative after 18 months. (2021).

Of these 56 funds, 64% are tech-focused, 20% have a mix of life science and tech assets, whilst 9% are life science-focused.[28]

What is the applicability of this to the UK?

The Tibi scheme provides a strong example of how Governments can drive investment into a specific sector to support strategic interests without taxpayer commitment. There are several learnings the UK can take from this initiative including:

- How the scheme was structured and delivered by collaboration between business and the State.
- The pace at which capital was raised and deployed.
- The broader impact the scheme had in terms of attracting investment from a wider range of investors.

Switzerland - Pension reform to support higher allocation to venture capital

Summary

Switzerland recently[29] enacted pension reform allowing 5% of a pension's assets to be invested directly into VC which will enable greater levels of institutional funding into illiquid assets.

Whilst this comes into effect in 2022 this is an example of how the UK can potentially act in a swift manner, and implement a regulatory change which could be beneficial towards life science.

What is the policy?

In November 2021, the Swiss Government changed pensions regulation to allow pension funds to have a separate 5% limit on eligible unlisted assets rather than be bucketed into a general 15% alternative asset class.

In order to be eligible over 50%[30] of funds must be invested in VCs that are located in Switzerland.

Previously the regulations did not stipulate Swiss-specific allocation proportions, allowing a maximum of 15% to be allocated across internationally-based unlisted assets.

[28] CSIS: Healthcare innovation 2030 - Shaping France as the leading European nation in innovation and sovereignty in healthcare. (2021).
[29] Swiss Federal Council: Investments in innovative technologies: New investment category for pension funds (2021).
[30] IPE: Swiss cabinet creates unlisted assets category to boost tech investments. (2021).

When and how was it implemented?

This a regulatory change rather than the investment being mandated. It means that from 2022, Swiss pension funds are able to invest up to 5% into VC funds and have the regulatory cover to do so. This is in addition to the pre-existing limit on allocation to alternative assets of 15%.

The Pensions regulator is responsible for implementation. Investments can be made into VC funds with headquarters, or operations, within Switzerland.

How has this policy progressed / what has its impact been?

The change does not happen until next year, but the Swiss Government has previously already allowed pension funds to allocate up to 15% into alternative assets (although these need not have been based in Switzerland).

What is the applicability of this to the UK?

This provides a good example of how Governments can facilitate greater investment into growth sectors.

Also gives pension fund advisors the comfort that investments into growth sectors are appropriate and supported through regulatory changes.

Sweden - Pension reform to support investment into illiquid asset classes

Summary

Sweden's pension regulatory changes to allow 40% of a pension's assets to be invested into illiquid asset classes (compared to 5% previously) is a progressive move towards increasing institutional funding into illiquid assets.

For the UK a similar approach could be taken but needs to be specifically tailored towards life science.

What is the policy?

In late 2018 regulatory changes to Sweden's AP public pension schemes allowed public pension funds to increase their allocation towards illiquid asset classes.

When and how was it implemented?

This is a regulatory change rather than the investment being mandated. It meant that from 2019, Swedish pension funds were able to invest up to 40% into Illiquid asset classes such as PE when compared to previous regulations of 5%.

How has this policy progressed / what has its impact been?

Changes have occurred in asset allocation in particular towards PE when comparing allocations for the AP pensions from 2017 (pre allocation regulation change) and 2020 (post allocation regulation change):

- AP1 PE allocation: 4.6%[31] (2017) to 4.9%[32] (2020)
- AP2 PE allocation: 5.0%[33] (2017) to 6.5%[34] (2020)
- AP3 PE allocation: 3.0%[35] (2017) to 4.2%[36] (2020)

The increase towards PE past the previous 5% limit in AP1 and AP2, suggests that there was appetite from institutional investors to invest more towards this illiquid asset class.

What is the applicability of this to the UK?

This provides a good example of how Governments can facilitate greater investment into growth sectors. It also gives pension fund advisors the comfort that investments into growth sectors are appropriate and supported through regulatory changes.

Germany - The Future Fund or 'Zukunftsfonds'

Summary

The £8.5bn Future Fund launched in March-2021 was created by the German Federal Government to invest in innovative technology VCs in the next 10 years - £6bn has been committed to date.

It has created 3 funds of funds which have been allocated £6bn so far, of which they have invested £26m, with more vehicles to be announced in 2022.

[31] AP1: Annual report. (2017).
[32] AP1: Annual report. (2020).
[33] AP2: Annual report. (2017).
[34] AP2: Annual report. (2020).
[35] AP3: Annual report. (2017).
[36] AP3. Annual report. (2020).

What is the policy?

The German Federal Government has committed to invest £8.5bn into a Future Fund, which is a fund of funds with the objective of supporting innovative technology VC investments in Germany over the next 10 years.

The future fund is aimed at mobilising capital from institutional investors for start-ups and is expected to attract £26bn in VC from public and private sector partners.

When and how was it implemented?

Launched in March 2021, with investments into VCs from the Future Fund occurring alongside private investors.

How has this policy progressed / what has its impact been?

So far, there have been three fund of funds announced which have committed to investing £6bn out of the promised £8.5bn[37]:

- £3bn from the German Future Fund-EIF60 Growth facility to invest in growth funds and growth financing of start-ups
- £2.1bn from the ERP61 Future Fund to invest in VCs (up to £43m per VC fund) as well as making direct investments into public funds such as the high-tech start-up fund62
- £0.9bn from the Deeptech Future Fund to fund breakthrough technologies e.g. AI and biotechnology63 over a 10 year period (involves a co-investment of up to £26m per company with private investors who have long-term plans)

As of November 2021, of the £8.5bn, 0.3% has been invested so far (£26m) due to lengthy set-up procedures, difficulties mobilising public capital to allocate into the programme, and the need for careful examination of potential VC funds to invest in.64

What is the applicability of this to the UK?

This scheme is similar to one already in place in the UK, the BPC's Future Fund Breakthrough (FFB), but on a much larger scale (£8.5bn in Germany vs. £375m in the UK), although the German scheme has only invested £26m so far.

In comparison, BPC FFB has invested in a £60m series D funding round of Ultraleap in November 2021.

[37] Handelsblatt: 30 million of 10 billion euros drawn down: Future Fund slowly getting underway. (2021).

Belgium - Belgian Growth Fund

Summary

The Belgian Growth Fund is a fund of fund established in 2019 that will invest £265m[38] into VC funds investing in Belgian scale-up companies.

It has invested in 5 funds, indirectly impacting the growth trajectory of 8 Belgian companies.

What is the policy?

The Belgian Growth fund is a fund of funds that will invest £265m[39] into Belgian VC funds to invest in scale-up companies (not specifically life science), with capital from over 10 investors including institutional investors and family offices.[40]

The Federal Participation and Investment Company (SFPI) enable institutional investors which are subject to strict investment rules (e.g. insurance companies) to take greater risks by co-investing and/or partly lending to such institutional investors on behalf of the government.

When and how was it implemented?

The Belgian Growth fund was established in 2019 and was inspired by the Danish Growth Fund, which has co-financed growth in over 8,500 companies since 1992.

The Danish Growth Fund leverages a co-investment model to establish a fund worth £0.7bn in 2019; the Government provided £1 of funding for every £9 of private investment.

The Belgian Growth Fund was set up with finance from SFPI and partners, Flanders Private Equity firm (PMV), the Flemish investment bank, and BNP Paribas Fortis Private Equity, which worked together to fundraise subsequent capital.

How has this policy progressed / what has its impact been?

As of July 2020, the fund has raised £265m total from a range of high-profile institutional investors, including AG insurance, KBC insurance, BNP Paribas Fortis and public investment companies PMV (Flanders) and FPIM (federal). It invested £85m in 5 funds, indirectly making an impact on the growth trajectory of 8 Belgian companies.

[38] Belgium Growth Fund: Final closing Belgian Growth Fund at 312 million euro. (2021).
[39] Belgium Growth Fund: Final closing Belgian Growth Fund at 312 million euro. (2021).
[40] Belgium Growth Fund: Final closing Belgian Growth Fund at 312 million euro. (2021).

What is the applicability of this to the UK?

This type of fund shows the potential for co-investments from the Government with institutional investors in order to fill the scale-up funding gap.

The Netherlands - Invest-NL

Summary

Invest-NL was launched in 2020 with £1.4bn of government funding to invest in VC.

Its aim is to supplement institutional investors and provide risk capital to enterprises, with nearly £340m allocated so far across equity, debt, funds and guarantees.

What is the policy?

Invest-NL is an initiative involving £1.4bn of Government funding for venture capital.

Investments are made directly into assets alongside VCs, with Invest-NL investing contributing up to 50% of the investment with a a minimum investment of £4.3m.

Its focus areas include carbon-neutral economy, circular economy, innovative scale-ups and affordable and accessible healthcare.

Investments are intended to be held for a minimum of 7 years and return positive social impact[41]

When and how was it implemented?

It was founded in 2019 with the Dutch Investment Agency merging into Invest-NL in December 2019 and Invest-NL launching in January 2021.

How has this policy progressed / what has its impact been?

Contributed £128m In October 2020 to set up the Dutch Future Fund, which will invest into 10-15 VC and growth capital funds.

So far the DFF has committed to 5 funds amounting to £68m.

First unlisted asset investment made in February 2021, involving an £8.5m investment into a c.£150m PE fund, which offers risk-bearing capital to firms focusing on commercialising academic IP.

[41] Invest NL: Annual report 2020. (2021).

As of November 2021 Invest-NL has committed nearly £340m in total across equity, debt, funds and guarantees[42].

What is the applicability of this to the UK?

It is not specifically focused on Life sciences and does not solely fund VC (also funding social projects) so provisions for directing investment into life science will need to be made if it is to be replicated in the UK, however one of its 5 aims is to double the number of well-funded scale-ups in the Netherlands.41

It was set up with input from several Dutch ministries e.g. by consulting with the Dutch ministry of Economic Affairs and Climate Policy on Deeptech investments.

It works to supplement institutional investors such as pension schemes and banks as well as providing risk capital to enterprises which is a useful example of how co-investment could work in the UK.

Canada - Venture Capital Action Plan

Summary

The Canadian Government Venture Capital Action Plan (VCAP) generated £0.8bn for venture capital (VC) funds via fund of funds, from both institutional, private investors and public funds

In order for the UK to deploy a scheme similar the UK Government will need to co-invest with institutional investors

What is the policy?

Launched in 2013 by the Canadian Government, the VCAP was created to make the Canadian VC industry globally competitive whilst also increasing the availability of financing for innovative Canadian firms (includes LS although not a core beneficiary).

When and how was it implemented?

The VCAP involved a co-investment model in which the Government invests alongside institutional investors who were aligned in their focus on venture capital, a key strategic focus at that time.

How has this policy progressed / what has its impact been?

In total, VCAP raised £0.8bn via the funds of funds with the following Investor base:

[42] Invest NL: Annual report 2020. (2021).

- £377.3m (47.1%) was invested by public funds
- £229.1m (28.6%) was invested by Institutional investors
- £193.3m (24.1%) was invested by private investors

Overall this program was seen as a success, with 61% of capital went to tech assets and 24% went to LS through this initiative. [43]

What is the applicability of this to the UK?

The VCAP program is an example of a co-investment model between Governments and institutional investors being successful; key learnings for the UK include:

- How it was structured and delivered by collaboration between business and the State
- The role BDC had in terms of governance and how this could be adopted by the BBB

Australia - The Innovation Investment Fund (IIF)

Summary

Australia's Innovation Investment Fund (IIF) has had some success in deploying a skewed returns model in which the Government takes an element of the risk and also reward alongside institutional investors.

The UK could look into a similar model however there are a few caveats: firstly the scale of such a program in order to make a viable impact to life science in the UK will need to be much larger and the UK Government will need to invest public funds.

What is the policy?

The Innovation Investment Fund (IIF) was established with the aim of addressing the low level provisions of high risk venture capital for small, new technology-based companies.

When and how was it implemented?

The IIF was established in 1997 by the Government; there were three funding rounds between 1997 and 2001. The Government committed to providing AUD$2 for every AUD$1 of institutional investment.[44]

Of any returns generated, 10% would be allocated to the Government, 72% to institutional investors and 18% to selected licensed fund managers).[45]

[43] Government of Canada: VCAP past reports. (2021).
[44] Australian National Audit Office: Management of the Innovation Investment Fund Program. (2002).
[45] Australian National Audit Office: Management of the Innovation Investment Fund Program. (2002).

How has this policy progressed / what has its impact been?

This fund within the selection rounds had generated £117m. Whilst the amount in its totality seems low, from our discussion with individuals involved in creating IIF this was significant progress at the time to induce institutional investors.

In total the government contributed £78m and institutional investors contributed £39m.

What is the applicability of this to the UK?

A co-investment and skewed returns model could be applicable in the UK as institutional investors have historically been risk averse and significant Government involvement in these ways could reduce the level of perceived risk being taken on by investors.