

# INSTITUTIONAL INVESTMENT INTO SCIENCE AND TECHNOLOGY SCALEUPS



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## Executive summary

- Science and technology sector businesses will be integral to the United Kingdom growing its economy and tackling major problems – from addressing climate change, to bolstering national security, to dealing with an ageing population.
- Fortunately, the Government appears to fully understand the importance of this agenda. It has an explicit aim to turn the UK into a ‘science superpower’, and the recent establishment of the Department for Science, Innovation and Technology serves to underscore this ambition. It should also be noted that this enthusiasm for science and technology enjoys strong cross-party support across the main Westminster parties.
- One key ingredient to successfully scaling any businesses is access to investment. This is particularly the case for firms in the science and technology sector – which are materially different to more conventional businesses, due to the intangibility of their assets, the timescales they operate on, and the often high-risk, high-reward nature of their business.
- Institutional investment represents a potentially lucrative source of capital for such scaleups. Yet investment of this kind into scaleups from British institutional investors is significantly lower than is the case in countries such as the United States, Australia or Canada.
- Recently announced regulatory changes and initiatives – namely the Edinburgh Reforms and the Mansion House Reforms – should open up more institutional investment into scaleups. But there is a widespread belief that these reforms may well end up being only a necessary but not sufficient condition to unlock investment and deliver the full growth potential of the UK science and technology sector.
- Our research bears out this belief. We spoke to representatives on both sides of the investment equation – investors and scaleups – and heard time and again that there is much more beyond purely regulatory barriers to getting more institutional investment into science and technology scaleups. (Although it was recognised by many of our consultees that the non-regulatory barriers are simply often downstream of regulatory barriers themselves.)

- In brief, three broad themes emerged during our research, which help to explain more holistically the challenge that the UK faces in terms of getting more institutional investment into its science and technology scaleups. These were:
  1. A lack of specialist investment expertise among institutional investors;
  2. A lack of risk appetite among institutional investors and scaleups;
  3. A lack of investment opportunities for institutional investors.
- Opinions on each of these themes were not universal, however, with consultees placing different weights on how important each issue was within the overall challenge. There was also a breadth of opinion on how best to solve each of them.
- We conclude our research with a discussion of how the government should proceed with respect to the issues highlighted above. By and large, we agree with the majority opinion among our consultees that much of the current culture is dictated by the regulatory frameworks they abide by. We also recognise, however, that any cultural change that occurs as a result of regulatory change will not be instantaneous – and needs to be given time to bed in.
- Beyond this, we also assert the importance of simply ensuring that the UK makes itself as promising a place as possible for founders to establish science and technology businesses, and begin scaling them thereafter. Problems associated with poor transport connectivity, inflexible visa frameworks, or stubborn planning rules are obvious barriers to the UK realising flourishing clusters of innovation, and not surprisingly were issues communicated to us by many of the investors and founders we spoke to during the research.
- Almost all scaleups could benefit from being able to tap into deeper pools of capital and investor expertise. Clearly, this is something that the current Government acknowledges, and recent regulatory reforms it has made ought to have a positive and catalysing effect. But, as our research shows, they will likely not be enough in isolation. Further endeavours to shift cultural attitudes will also be necessary – and indeed could prove to be the more important piece of the puzzle to get right.

# Introduction

## Science and technology is critical to growing our economy and tackling other problems

Recent years have seen a renewed focus on the value of science and technology to Britain's economy, and our long-term wellbeing. From the way in which scientists created vaccines in record speed to quell the Covid-19 pandemic, to mounting concerns about climate change, to the diffusion of artificial intelligence into the cultural mainstream – the salience of science and technology in our everyday lives has scarcely ever been greater.

Quite appropriately, this development has permeated the political agenda too. Emblematic of this was the establishment in February 2023 of a brand new Department for Science, Innovation and Technology (DSIT), with a mission of “positioning the UK at the forefront of global scientific and technological advancement.”<sup>1</sup> This was reflective of Prime Minister Rishi Sunak's long-standing desire to make the UK a “science and technology superpower” – and heralds fresh opportunities to ensure that the policies necessary to achieve this are both in place and fit for purpose.<sup>2</sup> Across the political divide, the enthusiasm for science and innovation is wholeheartedly shared – with Leader of the Opposition Sir Keir Starmer using his last conference speech to praise the “creative genius of our scientists and universities.”<sup>3</sup> Nobody, it seems, doubts the importance of ensuring that Britain is regarded as a place where cutting-edge science and technology can not just take place, but flourish.

## The UK has a strong foundation on which to become a science and technology superpower

In this endeavour – of becoming a science and technology superpower – the UK starts from a position of strength. It of course boasts a long and rich pedigree of scientific prowess – being the birthplace for a constellation of distinguished scientists, serving as the stage for an abundance of their groundbreaking discoveries, and consistently punching above its weight in contributing to (and creating entirely new) scientific fields. This reputation for scientific eminence is predicated largely on Britain's density of world-class universities and other scientific institutions. Compared to other nations, the UK also performs highly on measures of academic citations,<sup>4</sup> and has a large number of STEM graduates as a proportion of the population.<sup>5</sup>

Yet while it is all well and good to be the place where important research is carried out, that can only achieve so much on its own. For new knowledge and understanding to be truly beneficial to society, it needs to leave the science lab and the lecture hall, and find its way out into the 'real world'. And a key way for that to happen is to ensure there is a vibrant ecosystem of innovative entrepreneurs and ambitious startup firms which are able to commercialise the fruits of scientific discovery.

On this front, the UK is, again, in a strong position. It can point to a number of renowned trailblazing and innovative companies, such as Darktrace, Oxford Nanopore, Deliveroo, Ovo Energy and Octopus Energy to name but a small handful. Some of these companies are the result of spinning out academic research, some have invested heavily in R&D to create innovative goods and services, while others have simply shown a knack of understanding – and embracing – economic and technological trends. All help to generate wealth in the economy, and push society forward.

At the very frontier of innovation, the UK stands head and shoulders above its European counterparts in various respects. Research from Dealroom, for instance, shows that the UK was the largest destination for venture capital investment in deep tech in 2022 – with \$5.1 billion invested, more than France (\$2.4 billion) and Germany (\$2.3 billion) combined.<sup>6</sup>

## Obstacles in access to investment prevents the UK from fulfilling its science and technology potential

Despite this good news, there is also a common feeling among people within the science and technology ecosystem, and the financial world that supports it, that the UK could be doing even better. There is a general consensus that the UK underperforms in terms of scaling up promising companies as quickly as other countries – most notably the United States. Indeed, data suggest that while UK and US VC investment as a percentage of GDP over the last few years has been broadly comparable, a gap opens up with respect to follow-on investment.<sup>7</sup> Other data show how the UK comes dead last among G7 countries for later stage VC investment as a proportion of total VC investment, as shown in **Table 1** below.





**Table 1.** VC investment by country and development stage (2022)<sup>8</sup>

Country	Development stages	VC investment (\$ millions)	VC investment (%)
<b>Canada</b>	Total	6,917	100.0
	Seed	655	9.5
	Start-up and other early stage	2,958	42.8
	Later stage venture	3,303	47.8
<b>France</b>	Total	3,823	100.0
	Seed	185	4.8
	Start-up and other early stage	1,554	40.7
	Later stage venture	2,084	54.5
<b>Germany</b>	Total	3,605	100.0
	Seed	305	8.5
	Start-up and other early stage	1,758	48.8
	Later stage venture	1,542	42.8
<b>Italy</b>	Total	745	100.0
	Seed	86	11.5
	Start-up and other early stage	370	49.6
	Later stage venture	289	38.8
<b>United Kingdom</b>	Total	3,526	100.0
	Seed	375	10.6
	Start-up and other early stage	2,027	57.5
	Later stage venture	1,124	31.9
<b>United States</b>	Total	190,502	100.0
	Seed	22,794	12.0
	Start-up and other early stage	71,150	37.3
	Later stage venture	96,558	50.7

More anecdotally, founders have voiced their belief that the UK lags behind the US in terms of being a place to grow a truly successful science and technology business – with Monzo founder Tom Blomfield recently going on the record to say: “That ambition and that sort of belief that you can achieve anything I think is very, very powerful and intoxicating, and doesn’t exist as much in London.”<sup>9</sup>

There are myriad variables which can explain our current situation. Different factors will hold different weights for different firms – from the ease of hiring international talent, to regulations pertaining to their sector, to the availability and cost of lab and office space.

But one reason that stands out as being especially important is the issue of access to finance – or lack thereof, as the case might more accurately be. Indeed, this is a common issue which we hear time and again from entrepreneurs in every corner of the economy. But for would-be scaleups in the science and technology sector – a sector characterised by intangible assets (more on this to follow), expensive inputs, long timescales, and above all, high risk – the problem is often all the more acute.

One potentially lucrative source of finance which UK startups appear to be missing out on, particularly in comparison to their international competitors, is institutional investment. In the UK, between 2017 and 2021, pensions funds represented 10 per cent of all capital committed to VC funds. In the US, the figure stood at 72 per cent.<sup>10</sup> Worryingly, the direction of travel seems to be getting worse, too, with the proportion of VC funds involving at least one pension fund dropping by nearly two thirds between 2017 and 2021.<sup>11</sup>

Advisory firm Ondra Partners points out how the percentage of UK listed equity held by UK pension funds has fallen from 18 per cent in 1999–2000 to just two per cent in 2020–2022, and how the percentage of UK pension fund assets invested in UK listed equities has fallen from 48 per cent to just four per cent over the same time period.<sup>12</sup> Meanwhile the percentage of UK pension fund assets invested in fixed income securities rose from 17 per cent to 72 per cent between 1999–2000 and 2020–2022.<sup>13</sup>

Research from the government itself has shown that two thirds of pension providers have no direct investments in illiquid assets in their default funds – and that the other third only had a small proportion, typically between 1.5 per cent to seven per cent.<sup>14</sup> Of those that did invest in illiquid assets, property was named the main class of investment.

This paper examines how we might reasonably be able to change this state of affairs. We have spoken to a range of institutional investors, venture capitalists and science and technology scaleup founders to better understand their attitudes towards making and receiving institutional investment. As we shall see, non-regulatory barriers stand out as a significant obstacle – meaning that the recent regulatory reforms which the Government has instigated may well turn out to be a necessary but not sufficient step towards achieving a science and technology investment profile more akin to that of the United States’ – whereby promising firms really can fulfil their growth ambitions.

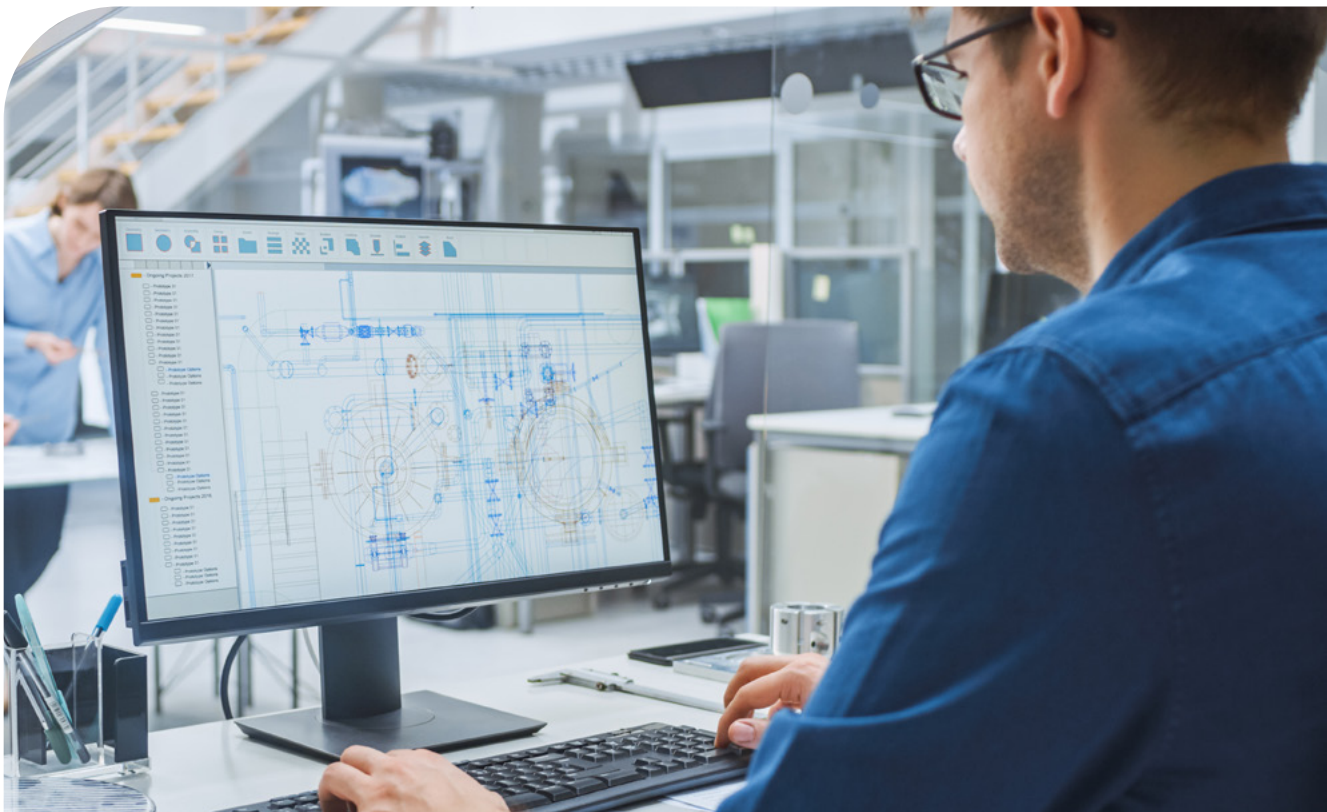


# The case for more institutional investment into science and technology scaleups

## Institutional investment can boost innovation

If the UK wants to make good on its bold ambitions to become a science and technology superpower, it needs to increase the quality and quantity of innovation taking place within the economy. As it happens, there is a strong body of academic evidence to suggest that getting more institutional investment into private companies is a particularly impactful way of spurring innovation.

A 2000 paper from economists Sam Kortum and Josh Lerner was one of the first to qualitatively reveal the impact of venture capital activity on boosting innovation.<sup>15</sup> They found that: “increases in venture capital activity in an industry are associated with significantly higher patenting rates,” and specifically showed that: “While the ratio of venture capital to R&D averaged less than 3% from 1983-1992, [their] estimates suggest that venture capital may have accounted for 8% of industrial innovations in that period.” What they also deduced was that this situation was overwhelmingly driven by a 1979 policy change to regulations which permitted more investment from American pension fund managers into riskier asset classes, such as venture capital.



Other pieces of research in the overall literature reach similar conclusions. A 2001 paper from Li Li Eng and Margaret Shackell found that: “holdings by institutional investors are positively associated with the level of R&D spending in the firm,”<sup>16</sup> while a 2019 working paper from Veronika Penciakova, Emin Dinlersoz, Jeremy Greenwood and Ufuk Akcigit found not only that startups with VC-backing have an increased likelihood of innovation, but also that VC-backed startups experience faster early-stage growth rates and higher initial patent quality than startups without VC-backing.<sup>17</sup>

A 1998 paper from Brian Bushee found that in situations where institutional ownership is high, the likelihood of managers reducing R&D efforts to counteract a decline in earnings is reduced. This suggests that institutional investors tend to play a monitoring role in mitigating short-term focused actions.<sup>18</sup>

Interestingly, a 2018 paper from Alon Brav, Jiang Wei, Ma Song and Tian Xuan examined how firms’ R&D changed over a five-year period after being targeted by a hedge fund, and found that while the expenditure on R&D actually declined, innovation output, as measured by both patent counts and citations, increased.<sup>19</sup> This suggests that hedge fund targeting can result in better quality innovation – presumably as R&D projects of little benefit to the firm get axed.

Somewhat similarly, a 2013 paper from the economists Philippe Aghion, John Van Reenen and Luigi Zingales found that greater institutional ownership is associated with more innovation – in that: “Institutional owners have a small and positive impact on R&D, but a larger positive effect on the productivity of R&D (as measured by future cite-weighted patents per R&D dollar).”<sup>20</sup>

All in all, the weight of academic evidence shows that it is quite clear that institutional investment in companies has a positive impact on innovation – and if we are to become a more innovative nation, finding ways of increasing such investment can only be a good thing. Beyond this, however, there are other reasons to believe that opening up institutional investment into science and technology scaleups should be seen as a prerequisite if the industry – and the economy as a whole – is to thrive.

## Savers deserve better returns on their investments

While investment into innovative scaleup businesses such as those in the science and technology sector carries risk, it can also pay significant dividends. Many commentators and analysts believe that savers are being let down by an excessive conservatism towards investing in supposedly risky assets – and the sentiment that it is actually riskier (in terms of delivering a healthy final pension pot) to eschew such assets than embrace them came through strongly from many of the people we spoke to during this research.

According to the British Venture Capital Association, its members' private equity and venture capital funds have: "outperformed the stock market as represented by the FTSE All-Share and the MSCI Europe, the most comparable indices for the range of small, medium and large investments held by UK private equity and venture capital funds, each vintage year since 2001."<sup>21</sup>

In a 2019 report published by the British Business Bank, it was noted that: "The global VC/GE [venture capital and growth equity] asset class has, on average, outperformed stock markets over a sustained period, delivering an average 18% annualised net return per year between 1970 and 2016. This compares to 11% for the MSCI World Equity Index over the same period, an average VC/GE 'premium' of 7% points."<sup>22</sup> The same report also recognised that while "The volatility of individual VC/GE fund investments is high [...] the diversified return for the asset class overall tends to have lower volatility than the equity markets. DC funds would benefit from diversifying their investments across different funds and vintages to reduce risk."<sup>23</sup>

Lastly, as one senior financial expert we spoke to for this research bluntly put it: "UK pension funds are actively hurting their savers by not investing in better assets."

## A changing economy requires new ways of financing businesses

Economists Jonathan Haskel and Stian Westlake have written comprehensively about how the modern global economy is materially different to that which preceded it.<sup>24 25</sup> Specifically, we have gone from an economy generally characterised by tangible assets, to one characterised by intangible assets. The successful companies of today, and certainly those of tomorrow, will be those which are best able to capitalise on assets “one can neither see nor touch,” as they put it.<sup>26</sup> Many businesses in the science and technology sector invest intensively in such intangible assets – from the people they employ, and the connections and ideas they have, to branding and business models, to the research they carry out and the intellectual property that comes as a result.

*In Capitalism without Capital*, Haskel and Westlake note how the properties of intangible assets present particular challenges to financing businesses which need to invest in them – and suggest that traditional financial markets are in many ways ill-structured to do so. Conventional lending of money by banks to businesses is harder when the businesses in question are intangibles-heavy, because they will likely have fewer easily saleable assets against which to secure a loan. This makes equity investment a more appropriate vehicle for financing such a business, although simply assuming we can easily increase the amount of capital available for equity financing would be naive.<sup>27</sup>

A mixture of regulations (such as those which disallow intangible assets counting towards banks' capital reserves), the bias towards debt-financed investment (because firms can claim debt interest payments as an operating expense to reduce their tax liabilities), and a cultural aversion to equity from business owners are all put forward by Haskel and Westlake as just a handful of the reasons which explain why equity investment is less commonplace than we might want it to be.

Clearly, therefore, something needs to be done to overcome this state of affairs.

# Getting more institutional investment into science and technology scaleups

One of the UK's long standing economic strengths is its financial services sector. Not only does it account for a significant portion of our national income while providing jobs to millions of people in the process, it also means that British companies have on their doorstep access to deep pools of capital and expertise that are simply not on offer in many other economies.

Yet despite this, British startups frequently cannot access the finance they need in order to scale to their full potential. Some firms will fail to get the full amount of investment they require, while some might not get any at all. Those that do receive investment, may receive it on less attractive terms than they would ideally wish. Altogether, the ScaleUp Institute estimates there to be a 'growth capital gap' of around £15 billion a year in the UK – representing the level of funding scaleups require to properly realise their growth ambitions.<sup>28</sup>

The UK's underperformance has been the subject of numerous government-commissioned reviews – from the Cruikshank Report (2000),<sup>29</sup> to the Rowlands Review (2009),<sup>30</sup> to the Breedon Review (2012),<sup>31</sup> to the Patient Capital Review (2017).<sup>32</sup> In addition, as part of the recently published Science and Technology Framework from DSIT, a specific pledge was made to “[narrow] the financing gap for the UK's most innovative science and technology companies” by 2030, which will be achieved in no small part by “[increasing] the supply of UK institutional investment to deepen the pool of domestic capital available for scaling UK science and technology firms.”<sup>33</sup>

In December 2022, the Chancellor Jeremy Hunt unveiled the 'Edinburgh Reforms' – a package of measures which ought to ease the regulatory restraints which many believe have acted as a decisive limiting factor in the supply of capital to scaleups from institutional investors.<sup>34</sup> By and large, these reforms have been welcomed by both investors and businesses alike.





Among other measures, the Edinburgh Reforms included plans to:

- Lay regulations to remove well-designed performance fees from the pensions regulatory charge cap (which duly came into effect from April 2023);<sup>35</sup>
- Instruct the Bank of England and the Financial Conduct Authority (FCA) to consult on scrapping rules which limit bankers' bonuses;<sup>36</sup>
- Announce a consultation on amending guidance to the Local Government Pension Scheme to ensure they are considering investment opportunities in illiquid assets such as venture and growth capital;<sup>37</sup>
- Make changes to the remits of the FCA and the Prudential Regulation Authority to provide for a greater focus on growth and international competitiveness (with letters to this effect each issued in December 2022).<sup>38 39</sup>

The Edinburgh Reforms are far from the only work the current government has undertaken in its bid to channel more capital into science and technology scaleups, however. In October 2022, the then Chancellor Kwasi Kwarteng announced the creation of the Long-Term Investment for Technology and Science (LIFTS) competition, which was initially due to provide “up to £500 million to support new funds designed to catalyse investment from pensions schemes and other investors into the UK’s pioneering science and technology businesses.”<sup>40</sup> A consultation was subsequently launched at the Spring Budget of March 2023, although the amount the government stood ready to commit to had halved to “up to £250 million.”<sup>41</sup> At the end of May 2023, a summary of responses – and the government’s own response to the consultation – was published.<sup>42</sup>

Most recently, the Chancellor used his latest Mansion House speech to introduce the ‘Mansion House Reforms’ – a series of measures aimed at getting more pension fund investment into British businesses, with a particular focus on high growth firms.<sup>43</sup> The most eye-catching proposal on this front was without doubt the Compact agreed between nine of the biggest defined contribution pension providers, with an objective to allocate five per cent of their default funds to unlisted equities by 2030.<sup>44</sup> As well as this was the announcement of a number of consultations which aim to investigate many of the issues raised by consultees during our research as barriers to greater investment in scaleups from British institutional investors.

By all accounts, these changes should help in turning the dial towards getting more capital into innovative scaleups from institutional investors. But our research suggests that these reforms should be seen as a necessary but not sufficient condition to deliver the full growth potential of the UK science and technology sector.

From our conversations with institutional investors, scaleup founders, and other relevant policy stakeholders, a number of themes emerged which point to there being other barriers, typically more ‘cultural’ in nature, which are hampering the UK’s ability to get more institutional investment into growing science and technology scaleups.

We have broken these themes down into a three broad categories, namely:

1. Lack of specialist investment expertise among institutional investors;
2. Lack of risk appetite among both institutional investors and scaleups;
3. Lack of investment opportunities for institutional investors.

The rest of this chapter shall take each of these in turn.

## Lack of specialist investment expertise among institutional investors

Investing – competently, at least – is not a straightforward exercise. As well as needing a pinch or more of good fortune, successful investors have to routinely display wise judgement and a sound understanding of the businesses before them, and the markets they operate in.

This is true for all types of investment, but especially so when making bets on science and technology scaleups. These firms might be operating right at the cutting-edge of current human understanding about a field, where the commercial applications of a technology might be uncertain, or the regulations pertinent to it unclear. For an investor to be able to consistently sort the wheat from the chaff when it comes to investing in science and technology companies, a degree of specialist expertise will almost certainly be required.

Many venture capitalists are appreciative of this fact, and will deliberately specialise in investing in businesses of a certain kind. Indeed, to a lot of people, venture capitalists are almost intrinsically tied up with businesses of the sort this paper focuses on – those operating in the technology, life sciences, and sustainability industries, or other particularly digitally-enabled firms.

But other investors won't necessarily have that deep level of knowledge to confidently invest in such businesses. And even an expert investor might still be unsure, given how niche and specialised some firms will be.

Altogether, perhaps the most common response we heard when we asked our consultees about why Britain struggles to get investment into science and technology scaleups was that of the lack of specialist investment expertise. "I think it's fair to say that we're still blind to large chunks of the market," one investor told us, before adding: "We can work on 'market mapping', but that will take time to turn into opportunities, and especially ones we feel confident on closing on."

Another investor agreed, stating: “Most institutional investors simply haven't built up teams with the necessary skill sets to begin investing in [science and technology] businesses.” They also spoke of there being a ‘chicken and egg’ situation with respect to investing in these firms, saying that: “You can learn as you invest [...] Once people start making investments in a sector, they build up their capabilities.” But they also added that for that learning to happen, certain risks are going to have to be made. And if an investor isn't willing to take those risks, they'll remain stuck at square one in perpetuity.

Many science and technology scaleups are characterised by the fact that much of their value comes in the form of intangible assets. This may be patents, production techniques, networks, or so forth. This poses a further problem from an investor's point of view – with one saying that: “If [the intellectual property] is in a highly specialised area, you might not know whether it is worthwhile or worthless.” They further went on to say that they recently had a chance to invest in a technology-intensive business, but decided against doing so, precisely because they couldn't be sure about the true value of the IP it was based upon.

The sense that UK institutional investors lack specialist knowledge – at least relative to investors from other countries, such as Canada and Australia – is widespread. One of the explanations commonly offered is that it is because of their size, which better allows them to specialise due to economies of scale. Indeed, as one person told us: “Scale is everything [...] Smaller funds are always going to struggle to create a high-quality in-house team while still delivering good value for money.” This was something echoed by a consultation run by the Department for Work and Pensions last year, in which it recognised that pension fund consolidation in Australia had led to fewer, larger schemes, with lower charges and more diversified portfolios.<sup>45</sup>

In a submission to the Treasury Select Committee's inquiry into venture capital markets, the UK BioIndustry Association's response also summarised the situation succinctly:

"Australian and Canadian pension funds have structured themselves to be able to invest [knowledgeably] and successfully in innovative life science opportunities in the UK and Europe in the last decade. They have successfully learnt how to invest in innovation and scaled to employ in-house experts to understand emerging areas of science and technology. [...] Teachers in Ontario and Brisbane invest in UK biotech stock as part of their diverse and growing pension portfolio, teachers in Ormskirk and Birmingham should be able to benefit from the same opportunity."<sup>46</sup>

Having said all that, it is incumbent upon us to also acknowledge that some of our consultees were less supportive of the hypothesis that lack of expertise was holding back investment into science and technology scaleups. "Innovation is always going to outpace investors' understanding," one investor-turned-entrepreneur told us, before adding: "You don't necessarily have to be an expert in the field, but you do have to be an expert in assessing opportunities." We're not entirely unsympathetic to this view, and there are certainly more general skills that will separate a successful investor from an unsuccessful one. Nevertheless, on the balance of people we spoke to and other evidence we reviewed during this research, the overwhelming feeling was that British institutional investors have not been able to establish the sort of in-house expertise which investors in certain other countries have managed to, and that this is stymying the flow of capital into promising science and technology scaleups.

## Lack of risk appetite among both institutional investors and scaleups

Within the financial services sector, and the wider policy sphere around it, many believe that there is a culture of excessive conservatism which pervades the sorts of institutions which could be investing more capital into Britain's scaleups. It is also something well-recognised within the current Government. As the City Minister Andrew Griffith made clear in a recent speech, "we need to develop what I would call a philosophy of risk in our country to be positive again and not beat ourselves up about the inevitable failures along the way."<sup>47</sup>

Just about all of the people we spoke to during our research echoed this sentiment. From an investor stating that "risk is treated as a dirty word in the UK – but risk taking is what all investments are," to another saying "we have got to become more accepting of failures," it is clear that many people think the UK's financial services industry's collective disposition towards caution has hampered its ability to nurture the country's most promising and innovative young businesses.

The reasons we heard for why this is the case were as interesting as they were varied. The most common response was centred on the idea that the spirit of caution flows directly from the UK's regulatory frameworks, which bind institutional investors.

For instance, the pensions regulatory charge cap was frequently brought up as something which hindered the ability for investors to invest in productive assets such as innovative scaleups. This has now been reformed, with pension funds now able to exempt the performance-based element of the fee from their charge cap calculations.<sup>48</sup> Many of those we spoke to believe that, in time, this will unlock new streams of capital for science and technology scaleups.

However, there was not total agreement on this point – more than one investor we heard from noted that it would make little difference to their own decision-making, and that the main source of competition within the pensions industry will continue to be on the question of who has the most competitive fees, rather than most competitive rate of returns. If this is true, then it would suggest that the reform, and potentially others like it, will not necessarily turn the dial in quite the way we might hope they could.

Another idea on the matter of risk, put forward by someone working for an institutional investor, was that Britain has an unhelpfully negative stance towards the financial services industry and wealth creation in general – especially in the wake of the Financial Crisis in 2008. This, according to them, means that many people within the industry feel that 'satisficing' is the optimal strategy, and as a result some high-risk, high-reward businesses go ignored, and miss out on the investment they need.

In a similar vein, another individual we spoke to agreed with this point, saying that: “UK investors’ actions are driven by fear – not greed.” In other words, an investor will care much more about not doing anything bad, rather than doing anything good. They also criticised regulators who aren’t, to their mind, always clear about what regulations mean, or how they should be applied, or exactly how strictly ‘guidance’ must be adhered to. The sense that investors feel they have to always second guess how a regulator might view their behaviour at any given point in time was tangible in many of the interviews we had as part of this research.

One American pensions expert we spoke to reflected critically on the idea that British investors are inherently more cautious than their counterparts in the United States, as has sometimes been suggested in the discourse around the wider issue in question. They said: “The US used to be just like the UK [...] American investors were just as loath to invest in innovative businesses,” but also observed that that attitude changed when regulations changed in the late 1970s.

With all that being said, it must also be noted that some of the people we spoke to did not necessarily concur with the diagnosis that British institutional investors were too risk averse. “If things were to go wrong, and a string of investments didn’t pay off, that would put us at risk,” one investor stressed.

It is also worth noting that the ‘fear’ which some of our consultees thought drives investors’ decision-making processes is not necessarily a bad thing, and simply replacing the current culture with one which was unduly reckless or accepting of rule-breaking would not necessarily put us in a better position than we are now.

Just as investors believed there to be a lot of caution among their peers with respect to getting capital into scaleup businesses, so too did many founders. One founder we spoke to from Wales observed that many entrepreneurs around him didn’t have the best understanding of how they should be raising money to grow their businesses. “Equity is seen as a ‘London’ thing to do, and lots of founders are reluctant to give up any stake in their business.”

Some investors themselves also recognised this reluctance: “There can be a huge nervousness among some founders when dealing with us,” one remarked. They believed that there was frequently a “distrust” from founders, and that they often “fear the worst case scenario” for what could happen – and this limits their appetite for investment.

As well as founders being cautious or wary about institutional investment, one investor we spoke to, who specialises in investing in early stage companies, simply thought that a lot of founders are just not as ambitious as their counterparts in places such as America. They asserted that there tends to be less of a drive among British founders to create truly massive companies, or seek out larger investments.

## Lack of investment opportunities for institutional investors

A number of our interviewees explained the importance of there being a pipeline of investment opportunities – and suggested that this currently doesn't exist in the UK, which naturally limits the ability for investors to allocate capital to scaleups. These comments struck us as unusual, given the fact that the UK routinely scores highly on indices of startup activity, for example.<sup>49</sup>

Of course, one possible explanation for this is that investors may lack the necessary expertise to identify opportunities – as indeed we heard during many of our interviews and covered above. It is eminently plausible that at least some, and perhaps a considerable part, of the 'growth capital gap' is down to investors not knowing where investment opportunities lie. Put another way, the investment opportunities are out there – investors just need to know where to look.

Nevertheless, this sentiment was something which we heard from more than one of our consultees, and thus we believe it should be taken seriously. Moreover, it would be wrong to assume that even though the UK may be doing relatively well at being a place to set up a business, that doesn't mean it could be doing even better. While it is beyond the scope of this report to detail exactly what the UK should do to foster an ever more entrepreneurial business environment, certain obvious issues spring to mind.

Addressing perennial concerns such as inadequate access to talent, access to office and lab space, access to transport networks and so on would doubtlessly put Britain in a stronger position when it comes to establishing companies and enabling them to reach their full potential. Then in terms of more specific challenges, one might point to problems such as the UK's issues with respect to commercialising academic research,<sup>50</sup> or regulating emerging industries.<sup>51</sup> Focusing on these issues, and making the UK a more dynamic, encouraging place in which for entrepreneurs to found and scale companies can scarcely be a bad thing – and would go hand in hand with supporting the investment community too.





## How has Canada grown a successful pension industry?

Canada's pension funds are routinely held up as the posterchildren when it comes to institutional investors investing in growth-oriented businesses. But it wasn't always thus. From the late-1980s to the mid-1990s, concerns were mounting around the sustainability of some of Canada's pension funds. Various reforms around what funds could invest in and how they were governed ensued, and led to the creation of now internationally renowned institutions, such as the Ontario Teachers' Pension Plan and the Canada Pension Plan Investment Board.

While there is no definitive way to characterise Canada's pension industry, the following aspects are often cited as reasons for its success:

- **Large scale** – Canadian pension funds are among some of the largest in the world, when ranked by assets under management (AUM). This confers various advantages, not least the fact that it allows more in-house investing which thus enables them to build up internal expertise, hold down costs associated with investing in funds-of-funds, and reduce principal-agent problems. Some point out that their significant scale also enables them to invest countercyclically, and hold investments for longer than other investors might, ensuring they can maximise returns on investment;
- **Staff remuneration** – Canadian pension funds compete aggressively on salary, bonuses and long-term rewards to incentivise investing over longer time horizons, allowing them to attract talented individuals, who might otherwise go into other sectors of the financial services industry, or indeed other industries altogether;

- **Strong governance structures** – The relative independence that Canadian pension funds enjoy enables them to invest in as prudent a way as possible, free from other considerations that might drive asset allocations in a suboptimal direction. Many reference the strong appointment process of board members as a key feature of Canadian pension funds – which selects for talented individuals with deep and specialised knowledge of investing. Others note how much effort funds initially put into actively searching for the best talent from around the world when recruiting – and that now that Canada is recognised as a pensions superpower, they naturally attract ambitious people to work for them;
- **Portfolio diversification** – While institutional investors around the world have steadily begun to allocate more capital towards alternative investments in recent years, this was something pioneered early on by Canadian funds, from the 1990s onwards. Canadian funds have also diversified geographically, investing heavily in overseas assets and building out foreign offices. Compared to other countries, Canadian funds have less of a ‘home bias’;
- **Positive regulatory frameworks** – Canadian pension funds enjoy a welcoming regulatory environment in which they are relatively free to invest in the asset classes they see fit to do so. Rules which placed maximum limits on what sorts of investments funds could make were scrapped decades ago, for instance enabling more investment into diverse asset classes, and more international investment too. Canada’s pensions regulator – the Office of the Superintendent of Financial Institutions – has been praised for its focus on competition and growth, and its recognition of the risks involved in developing a successful long-term pensions industry.

## Recommendations and discussion

Much effort of late has been put into diagnosing and attempting to fix Britain's investment challenge with regards to getting more money into scaleups, and especially into those in science and technology sectors. What has been clear from our research is that the problem is multifaceted, and solving it will be neither easy nor quick.

We have particularly focused on the cultural barriers to investment – whether on the side of the investors or scaleup founders themselves. While it is not impossible for sectoral cultures to change rapidly, it would seem that in this case, any changes will in all likelihood come about through a much more gradual process of evolution, as opposed to revolution. (Drawing on the case study of Canada, the policy reforms successive governments enacted there did by no means herald results overnight – yet slowly but surely, their pension funds matured into some of the most successful institutional investors in the world as they built up scale, expertise, and other qualities.)

To our minds it is also not clear cut as to what extent a government can prompt cultural change on its own. This is not to say governments are entirely powerless, as we shall turn to next, but rather that we must be cognisant of the fact that for real change to occur, it will be down to the investors and founders more than any other actors who need to begin thinking differently.

During our research, we heard how the culture of institutional investors is often downstream of the regulatory frameworks which bind the financial services industry. It stands to reason, therefore, that recent regulatory changes, largely in the shape of the Edinburgh Reforms and the Mansion House Reforms, will have a positive impact – indeed, their introduction means policy is now aligning with what many commentators and industry experts have for years been writing about and calling for.

This regulatory shift has been coupled with growing rhetoric from politicians, most prominently the Chancellor and other Treasury Ministers, who have stated their eagerness for the industry to evolve.<sup>52</sup> The ability for governments to 'set the weather' in a policy domain is questionable, especially in a developed and complex part of the economy like financial services, but interventions such as these can only be helpful in terms of giving confidence to the industry to feel emboldened to do more.

When speaking to investors during this research, almost all reported being satisfied with the recent measures and regarded them as positive first steps, and looked forward to taking the new opportunities they believe have opened up as a result. But, again, few thought that the reforms would usher in a new culture immediately. The general feeling was that it would take time for institutions to get to grips with the changes, and longer still for any possible attitudinal shift – in other words, a less risk averse one – to occur as a result. With this in mind, again, we should perhaps not expect immediate results. Equally, we should not regard this as a failing of the reforms if it does transpire.

Positive as the recent reforms look set to be, however, it would be conceited to assume that they mean the job is done. Other policy changes should be within view to turbocharge the growth of science and technology scaleups in the UK. One such idea which different groups have shone a spotlight on in recent months relates to how the Pension Protection Fund (PPF) could be utilised to increase the amount of capital available for scaleups to receive.<sup>53 54</sup> The PPF takes on defined benefit pension funds when an employer in the UK becomes insolvent, and currently manages £39 billion of assets for almost 300,000 members. Over the years it has shown how a large fund with a long-term investment horizon can successfully invest in alternative assets (its strategic allocation for return-seeking assets stands at 41.5 per cent),<sup>55</sup> and its most recent accounts showed that it had a funding ratio of 137.9 per cent, and total reserves of nearly £12 billion.<sup>56</sup>

As such, some have suggested that the PPF could play a role in driving investment into promising scaleups, subject to changes being made to how it operates. One potential reform, as suggested by the Tony Blair Institute, would be to allow a company to voluntarily transfer its pension fund into the PPF without first having to go bankrupt, as is the case currently.<sup>57</sup> They go on to say that: “many corporate sponsors of smaller DB pensionschemes would therefore have a significant incentive to shift their funds to [a reformed PPF],” and suggest that the Government could prioritise the smallest 4,500 for consolidation. We think there is considerable merit in this idea, and recommend the Government examines it closely as a potential way to boost allocations to equities and productive assets, such as innovation science and technology scaleups.

Having said all of this, it must also be noted that any direct interventions, however well intentioned, could well end up backfiring. We heard on multiple occasions during our research that if government intervenes too heavy-handedly in its bid to spur more investment into scaleups, it could end up creating more problems than it solves. For example, when the idea of a £50 billion pension superfund was floated earlier in the year – an idea which looks to have shaped the flagship Mansion House Compact – many within the financial services industry were quick to condemn it on the basis it would compel pension funds to invest in assets they clearly do not think are worth investing in.<sup>58 59</sup>

This fear – of the potential for too much capital to be chasing after too few opportunities – points to the idea that there exists a mismatch between investors and founders. Indeed, one of our most interesting findings from our research which we heard time and again was that investors and scaleup founders alike questioned the idea of there being a strong ‘network’ between them. Very often in this policy debate, the same lines about the UK having a developed ‘ecosystem’ for tech companies or life sciences companies, or those other cutting edge industries, are trotted out and taken for granted. It is worth reflecting, however, on how true that might be – and how this truth might change depending on who you are and where you are based. From what we heard, the ‘ecosystem’ may be a rather superficial description, and there are still too many people located outside of it, or who don’t know how to take full advantage of it.

If you are an affluent, well-connected founder working in London, or at least the South East, you may well find that you can easily access the sort of investment needed to take your scaleup to the next stage. But if you are a founder who doesn’t fit this profile, things might be altogether more difficult. Studies have shown that firms’ physical proximity to investors matters,<sup>60 61</sup> and evidence suggests investors tend to invest in people like themselves,<sup>62</sup> and this impression was something which some of our interviewees raised when we spoke to them.

One of our interviewees also told us of how, in both Canada and the United States, they felt the investment community did much more to actively inculcate robust connections between founders and investors, even in quite ‘soft’ ways – inviting them to events, doing more to reach out directly to businesses, and so forth. It may be that the British investment community could learn from this, and British science and technology founders could benefit as a result.

The extent to which the government has a direct role to play in this question is up for debate – but few would take umbrage with the idea that at a bare minimum, Ministers should generally act as a cheerleader for more interaction between investors and scaleup founders. On this point, one policy idea discussed during our research was the Tibi Initiative – a scheme introduced by the French government.<sup>63</sup> This scheme brings together institutional investors with an aim of getting them to earmark more finance to technology companies. They do so by allocating capital through approved funds, of which 52 have been approved to date. The Tibi Initiative receives no public funding, although there is strong government support for it and the Finance Minister plays an important convening role. Having been launched in 2020, a review in 2021 found that €18 billion had been pledged under the scheme.

The announcement of the Mansion House Compact appears to have been influenced strongly by the Tibi Initiative. In the grand scheme of things, it is challenging to find much to disagree with the Tibi Initiative – fundamentally, it is a private sector endeavour which companies involve themselves with on a voluntary basis. If one was to raise any scepticism, it might be to question exactly how ‘voluntary’ participation in such a scheme really is – in other words, institutional investors may worry that non-participation would prompt the government to enact more mandatory measures, or even simply isolate them from government decision-making processes in other areas.

The observation that there is a disconnect between institutional investors, VCs, and scaleups also, to our minds, points to the importance of simply getting some of the fundamentals of a successful economy correct too. It is far beyond the scope of this paper to outline exactly what these would look like, but ensuring that we have functional transport networks which enable more interaction between founders and investors would be the sort of thing we have in mind, as would planning reforms which enable more office and lab space to be constructed – quite literally bringing founders and investors closer together. More than once, our interviewees – especially founders based outside of the South East – said how they’d had difficulty in getting to meetings with investors, not least when called in at short notice.

Ultimately, our ask of government here is to not forget the power and importance of agglomeration in fostering strong local economies, in which science and technology companies can set up and flourish. If they can do this successfully, it stands to reason that more scaleups will come to the fore, seeking injections of finance – thus also helping to address the concern we heard from some investors that even if they were to allocate more investment to such businesses, there might not be enough opportunities to deploy capital into.

If anything influences culture – whether at the firm, sector, or economy-wide level – it is people. When speaking to our interviewees about how the UK can improve in getting more institutional investment into scaleups, something that came up time and again was the idea that the UK needs to become “more American” or “more Canadian” and so on. Perhaps one way to do that would be to think about how our visa system can be reformed to more easily allow people working in those countries to come over to the UK.

# Conclusion

The current Government has lofty and commendable ambitions for the UK's science and technology sector. It clearly recognises the importance of such innovative businesses to a flourishing and modern economy, and the critical role they will play in bolstering our national security, decarbonising our economy, and improving our healthcare provision, among other objectives.

Recent moves by the Chancellor, the Science Secretary and others demonstrate that there is a clear understanding of many of the obstacles facing the science and technology sector, too. Among one of the most challenging nuts to crack has been the long-standing issue of inadequate access to capital for scaleups, which have a tendency to fail to fulfil their growth ambitions in the UK accordingly. Within this issue, there is a recognition that UK institutional investors in particular fall comparatively short in the amount of capital they deploy in scaleups, relative to other economies.

Measures announced under the auspices of the Edinburgh Reforms are extremely welcome, and ought to help in remedying this state of affairs. However, as our research has made clear, there is widespread acceptance – from industry, policymakers, and the scaleup community – that such moves will not, on their own, transform the current landscape which scaleups face. As important as regulatory reforms will be, a cultural and attitudinal shift from investors and investees will also be required if the UK is to deliver on its true potential.

Inculcating a new mindset, among investors and scaleups, will be far from straightforward, or quick to achieve. Moreover, it should be said that there are perfectly understandable reasons for the presiding conservatism in the industry. It would of course be imprudent to say investors should start financing everything and anything that comes before them, and policy suggestions which push the needle too far in the other direction to which it is currently pointing might simply result in new problems which need to be resolved.

Nevertheless, it seems obvious to us that gradual and measured changes, which strike a better balance between risk and caution, could result in better outcomes for British scaleups, investors, and savers – and we should be unstinting in our ambition to achieve precisely that.





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