THE PURPOSEFUL COMPANY

The Growth Trilogy

Paper One: Purpose, Innovation and Growth

January 2025

THE PURPOSEFUL COMPANY

The Purposeful Company was launched in 2015. A consortium of leading FTSE companies, investment houses, business schools, business consultancy firms and policy makers, it has been examining how the governance and capital markets environment in the UK could be enhanced to support the development of value generating companies, acting with purpose to the long-term benefit of all stakeholders.

The Steering Group, co-chaired by Clare Chapman and Will Hutton, oversees its work. Members of the Steering Group act in their personal capacity, and their views may not be taken to represent the views of their organisation. Equally the conclusions and recommendations that the Steering Group draw from its work, this report included, are ours and not every specific proposal or comment should be taken to represent the views of each of our interviewees or our task force members, although they do support our overarching principles and aims.

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The Growth Trilogy

This year marks the tenth anniversary of the foundation of the Purposeful Company. We thank everyone, especially our taskforce and pathfinder members, who have supported our work over the last decade and made it possible. We continue to make the case that businesses who instrumentally and hard-headedly Identify a purpose rooted in their strategic assets which solves a real world problem and then make it live through their culture and operating model tend to achieve better performance across the gamut of key business metrics. It is an important insight not only into what helps create the optimal internal operation of firms, but also enables the construction of creative stakeholder relationships that drive their business forward.

So we celebrate this decennial anniversary with the launch in 2025 of the Growth Trilogy, three reports that through that framing of the role of purpose analyse how best Britain can promote our many startups into successful scaleups ,and beyond into becoming genuinely consequential, innovative, purpose-driven companies operating at the frontiers of technology. We are optimists. With the right fit-for purpose ecosystem of support that builds on our many strengths, Britain – already with 43 unicorns third only in the world to the US and China - has it in its hands to become one of the leading growth economies in the industrialised world.

The trilogy represents a change of focus: hitherto we have concentrated most of our work and evidence-gathering on publicly quoted companies, only recently adding to our portfolio of research investigation into private markets, examining private equity - *Private Equity and Purpose,* concentrating on buyouts. This paper goes further, given the proven importance of a small if critical mass of young growth companies in delivering productivity and growth. One of the conclusions in 'Purpose, Innovation and Growth' is that many of the most successful startups and scaleups define themselves as mission-driven problem solvers, backed in that ambition by a small number of engaged venturesome shareholders. They have found their way to purpose and an appropriate shareholding structure in the burgeoning private markets because it works – mirroring, perhaps more purely, the approach we have advocated in the public markets. Policy must at the very least not get in the way of this development: it must understand and respect the importance of purpose and find ways to strengthen not only both public and private markets, but their crucial synergies and interdependencies.

In our two later reports we will build on the analysis, looking first at the venture capital and growth equity industries rapidly evolving as one of the most important building blocks of the twenty-first century economy, and in the last report how the entire ecosystem might be better framed to drive growth. We hope you agree this is important work, and we look forward to your reactions, comments and hopefully support as we build a coalition for change that has enduring momentum.

Clare Chapman and Will Hutton

Co-Chairs the Purposeful Company

Executive Summary

I. The Challenge

- The paper is the first in a series of three assessing the ecosystem in which purposeful startups and scaleups can best contribute to enhanced growth and productivity. The second will focus on the venture capital industry and the third on wider ecosystem reforms. They follow a succession of earlier Purposeful Company reports that have explored the role of purpose in animating successful publicly-listed businesses.
- Britain can and must do better economically. A sustained increase in productivity is the foundation for the much-needed long-term gains in living standards and fiscal sustainability, but here the country's record is baleful. The core of the UK's malaise is chronic underinvestment in tangible and intangible assets and a decline in business dynamism.
- These causes have directed attention to the significance of small, young and fast-growing firms. Research shows that these companies are rare but are responsible for a disproportionate share of innovation and job creation in the economy.
- Research and interviews alike cite pursuing a compelling purpose or mission that seeks to solve problems that serve customers and society as crucial to driving profit, so helping to alleviate many of the factors that hinder startup and scaleup success. This is especially true in the world of intangible, knowledge driven companies and their ability to emerge as consequential companies.
- While the UK has an impressive record in fostering startups, there is a cross-party consensus that it is not getting the full potential value from its institutional capabilities and entrepreneurial talent. Notwithstanding some strengths, as evidenced by the impressive number of unicorns exceeded only by the US and China, there has been very little churn in our leading companies with almost no innovative growth firms joining their ranks.
- There are important complementarities between public and private markets. One cannot flourish without the other. Robust private markets seed the flow of startups and scaleups, the space to innovate and provide a pipeline of companies for public listing. Thriving public markets in their turn provide liquidity, exit opportunities and resources to scale up commercialisation and investment. In this respect the recent dismal performance of the UK public equity markets takes on added significance.

II. Small, young firms are drivers of economic growth – a role that requires curating

- Young high growth firms have an unique place in the market ecosystem as sources of exploratory innovation. Growth ventures are the 'first responders to the call for purposeful business' at a time when many of society's most 'wicked' problems resist easy solutions.
- The comparative advantage of young high growth companies reflects differences in incentives, management and organisational flexibilities and the impact of ownership structure – often found in private markets.
- Purposeful economies work best when there is an optimal balance between young, high growth and large firms. Regions dominated by a mix of small and large, anchor firms tend to be innovative, when compared with regions that are home to only a small number of large firms or a large number of small ones. However this delicate balance has been unravelling.

III. The importance of purpose in animating successful startups and scaleups

- Purpose is the necessary but insufficient condition for driving performance in young high growth firms. It matters most for those that rely on innovation and intangible assets like intellectual property and brands. Purpose helps managements to broaden ambition and identify problems, to experiment and navigate inevitable uncertainties, to motivate and retain great staff, to make common cause with stakeholders, and even to raise capital. Purpose supports norms of ownership, speed, science and openness.
- Today's technological and market trends - the increasing complexity of products, ever-shortening development cycles, declining research productivity and ever more demanding customers - have further magnified the benefits of purpose and a stakeholding approach. This is particularly important in the startup universe, as creating innovation linkages external to the firms compensates for limited internal resources in areas like technology, financing and skills. This approach has been exemplified by the success of the chip designer Arm.
- Initial conditions, including purpose, play a decisive role in future success. A large proportion of firm growth twenty years after entry can be traced to firm differences present at the time of the founding.

IV. The shock and opportunity of the private markets

- The private markets in which startups and scaleup are founded and grow are burgeoning, so crucial to economic vitality. Private firms are tending so stay private for longer and to grow larger. Today they can have economic and social impacts, both good and bad, that are as great as listed companies. But despite some potential risks they operate relatively in the dark with less transparency relative to public markets. Some argue this lack of transparency will need to be addressed if the flow of institutional investment funds to private markets is to increase significantly.
- There are distinctive pressures within startups and the wider entrepreneurial ecosystem that militate against purpose. These include intense competition for deals offering founder-friendly terms, business and ethical pressures generated by the need for 'home runs' and the shift to a spray-and-pray investment approach that has made exercising active governance more costly. An exemplar of these concerns is the risks posed by AI where many breakthroughs are by private firms in private markets.
- Historically, these risks were contained by the public-private divide in corporate and securities law - a highly regulated public realm and a lightly regulated private realm. If private companies wanted to access capital they would have to go public assuming the accompanying regulatory and disclosure obligations. With the growth of private markets this is less necessary, so that two firms operating on two sides of the divide, otherwise identical in every respect, can be subject to very different regulatory requirements.

V. Whither the public-private divide?

- There are two broad alternative ways forward. Private market regulation can be more closely aligned with public company regulations – or vice-versa. Each option has difficult trade-offs.
- On private markets policymakers need to tread carefully and not encroach on the capacity to innovate - not being ideologically pro or anti regulation in principle - and to make interventions only where material stakeholder interests are affected.
- In practice the direction of travel has been to relax public market regulation, with recent flexibilities on the use of dual class share structures a signal of the trend. However, the story is not only about regulation. There are important lessons for the public markets in the energy of the private markets, in particular the way boards are well-resourced, composed of individuals deeply knowledgeable about the company's business and growth objectives. A public listing should not distract from this culture.
- There are other innovative solutions to managing the public-private divide, including the facilitation of trading privately held shares and new governance arrangements as a self-regulatory alternative.

Conclusion

- Britain has some of the elements in place for startups to grow into consequential, purposeful growth companies. However to capitalise on the opportunity reforms will need to be implemented across the wider ecosystem, spanning venture capital, the equity risk culture, deepening and diversifying the pool of domestic risk capital, the character of regulation and codes of practice and redressing the deficiencies in the broader framework of innovation policy.

I. The Challenge

Britain can and must do better economically. A sustained increase in productivity is the foundation for the much needed long-term gains in living standards and fiscal sustainability, but here the country's record is baleful. Low productivity levels have been like a slow puncture, silently undermining the economy for nearly two decades. While the 2008 financial crisis triggered a global slowdown in productivity growth, the problem has been particularly acute in the UK, where productivity has grown by just 0.4 per cent annually, less than half the rate of the 25 richest OECD countries[1]. The consequences include stagnating real wages, faltering public services, low economic growth, further entrenchment of wealth and geographical inequalities and an increasingly widely shared view that the future can only be worse than today[2]. It is a grim rollcall that must be reversed.

There is no single cause of poor productivity, whose roots range from weak transport links, a gummed up planning system to lack of fit-for-purpose, high quality training. However there is one cause on which there is common agreement. The necessary if insufficient precondition for any sustained productivity improvement is to lift the current systemically low levels of investment in tangible and intangible assets. This obviously results in an inadequate stock of capital compared with our major competitors and limits both the rate of innovation and its diffusion across the range of British companies[3]. This has been made worse by a decline in business dynamism, as measured by indicators such as new firm formation, worker flows and job creation and destruction, which have slowed down the reallocation of resources from less productive to more productive firms and activities[4].

These two features highlight the importance of young fast-growing firms and the importance of their eventually becoming consequential companies. A wide body of research confirms how a small number of high-growth small firms account for a disproportionate share of job creation in a wide variety of economies: thus in Britain around 5% of high-growth firms account for at least 50% of all 'net jobs' created, with some evidence suggesting that this activity is confined to an even smaller group of firms[5]. These companies are important and significant investors, in particular because the objects of their investment tend to incorporate new ideas and ground-breaking technologies that compete with, and eventually, displace typically less agile, larger incumbent companies. Even when incumbents do not exit the market, the credible threat of entry from new companies may spur them to invest and innovate more to respond to potential competition, raising productivity growth. And of course all this activity helps resources to be reallocated to their most productive uses[6].

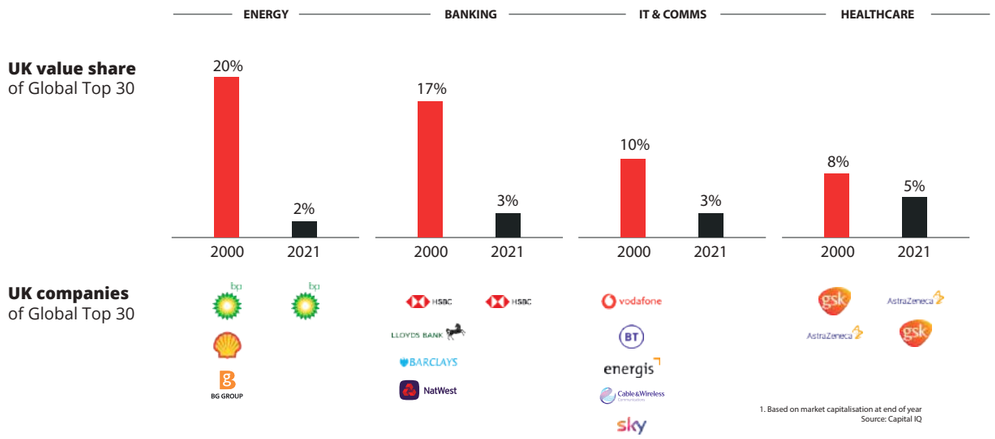
Here Britain boasts a plus side of the ledger. We have a strong record in creating small, young and fast-growing firms, notably the exotically titled gazelles and unicorns. The sighting of the very first unicorns in the mid-2000s prefigured what would turn into a torrent. Currently, there are forty-three active, unquoted unicorns headquartered in the UK that have valuations exceeding one billion dollars, with eight more having exited the private market after attaining unicorn status - a figure that makes the UK the third largest breeding ground for unicorns globally, after the US and China.

While these valuations of unicorns are not always as they appear on the surface, there is no disputing the impressive amount of capital that these firms have raised and growth rates that many have achieved[7]. They are joined by a large cohort of fast-growing scaleups that could become the unicorns of tomorrow: in 2023, there were 28,410 scaleups that generated a total turnover of £1.3tn - 58% of the turnover of all UK SMEs - and employed 2.6mn people, despite comprising only 0.5% of the SME population[8].

Yet this impressive activity does not translate into a powerful cohort of consequential, independent growth companies domiciled in the UK. By its nature, high growth firms experience episodic growth which is difficult to sustain over time. This is particularly true in the UK where commercialising first class innovations, scaling ventures and building globally competitive businesses that will anchor the economy have seemingly proven elusive. While the UK ranks third in the world for the number of startups, it falls to 13th place for scaling them, indicating a low conversion rate of startups advancing to the next level[9]. It shows up in the stubborn persistence of the same companies occupying the top rankings on the London Stock Exchange. So while just one of the US's top ten companies in 2000 still remained in the top ten in 2023, five of the ten largest publicly listed UK companies in 2000 still remained in place in 2023. Indeed, none of today's top ten UK companies were founded or scaled during this period, compared with seven in the US. Worse, in energy, banking and healthcare, Britain has fallen far down the rankings of the Global Top 30 over the twenty-one years between 2000 and 2021 *(see Figure 1)*. This is particularly stark in technology where in IT and Communications we now score zero, the worst deterioration of all[10].

Figure 1:

Number and value share of UK companies in the global top 30 companies



Source: Lakestar (2022).

Despite a lively mid-cap sector, and strengths in the creative industries and parts of the service sector, there is too little pull through. Only 1% of large-cap UK equities are in technology compared with 30% in the US - and this US figure does not include giants like Amazon, Meta or Tesla that are classified into other sectors. Britain has only eight pure technology companies quoted on the London stock exchange worth more than one billion pounds[11]. Arm, bought by Japan's Softbank for $30 billion in 2016 , now has a market capitalisation of $170 billion which would have made it the third largest British quoted company.

This widening of the lens across all the technology sectors underlines the dismal performance. Britain has only one software company and one electronics company in the respective world's top 100 ranked by stock market capitalisation. There is only one medical device company in the world top 50 ranked by revenue. There are no British companies at all in the top 25 listed global biotech companies. We have only one company in the top 24 scientific and instrument companies. In the pharmaceutical and chemical industries we fare a fraction better – with two pharmaceutical companies, AstraZeneca and GSK, in the top 50 and five companies in the top 100 chemical companies ranked by stock market capitalisation. But any relief should be qualified. The trends overall are a cause for deep concern: they need to be turned round.

There are multiple drivers of corporate success some rooted within firms – management competence, strategic and operational capacities, striking the right balance between skills and aptitudes and customer value propositions – and some beyond. Here there are broader system-wide factors: the depth of agglomerations and networks of dynamic firms, access to finance, competition issues along with regulation and taxation. Many of these activities are self-reinforcing, creating a virtuous cycle. Once activities achieve a certain level of maturity, they benefit from established structures, routines, relationships, and expertise, which make further interactions smoother and more efficient. This is a key difference between the US and the UK: for example, a larger pool of founders in the US with prior experience running startups is considered instrumental in enabling the innovation ecosystem to embrace higher-risk projects and tackle more difficult challenges[12].

However, a consistent finding in the Purposeful Company's work over the last eight years, focused on public companies, is that a commitment to the pursuit of an intrinsic purpose is a necessary if insufficient condition for improved performance. This is especially true in the world of intangible, knowledge driven companies, profound uncertainty and their ability to emerge as consequential companies – the universe inhabited by startups and scaleups.

There have been well-publicised recent reverses over purpose, for example the incoming CEO of Unilever saying that purpose can sometimes be a distraction and so hinder performance[13]. In all the concern was that business considerations were being blurred by broader conceptions of doing social good. By contrast all the interviews we have conducted with leading successful startups to accompany this paper have unanimously cited pursuing a compelling purpose or mission that seeks to solve problems that serve customers and society as crucial to driving profit. This focus on purpose helps alleviate many of the factors that hinder startup and scaleup success. In today's environment of radical uncertainty, where the information, capabilities, and commitment required for success are widely dispersed, purpose plays a central role in helping businesses pool and harness collective intelligence to chart a path through complexity. Purpose helps managements to motivate and retain great staff, to enlist stakeholder relations in support of the company, to experiment and even to raise capital. It defines – and is a constant reminder – of the problem any particular business model exists to solve. A business does not need to deliver social good to be purposeful, but under any definition purpose cannot be congruent with creating social harms. This meshes with the definition of business purpose in the recent British Academy work on the future of the corporation: it defines business purpose as 'profitably solving the problems of business and planet, and not profiting from creating problems'.

Robert Natzler is manager of private company investment for Baillie Gifford, the Scottish Investment Partnership which invests increasingly in scaleups in Europe and the US. Every company pitching for funding, he says, has a 'problem statement' in its pitch deck setting out the problem its business model will solve and how it will improve customers' lives, and is thus its purpose.

> *"The job of any company founder is to mobilise capital and human beings around them in order to build an organisation. That is horrendously difficult, and is even harder to do if you can't articulate a clear purpose. This is normally done by identifying a supposedly structural problem that 'only' the founder and their team can go after fixing for their customers. Indeed I can't think of a single company pitch that at Series B, C, D, or E, doesn't come with such a 'problem statement'. Business leaders know that the big opportunities come from solving big problems, and that articulating this is key to getting into the game."*

In this sense purpose is distinct from the environmental, societal and governance issues (ESG) that have preoccupied the debate over corporate behaviour and investment priorities. It goes to the heart of what a company is about and for. Matthew Scullion, founder and CEO of data analytics company Matillion, one of Britain's unicorns, drives the point home.

> *"I think about Matillion as very purpose driven. But that word, I guess it can have a capital P or a little P: I know there are many entrepreneurial endeavours out there specifically focussed on certain types of societal impact :their capital P purpose. And whilst our technology is used in all sorts of domains, including in those that create direct capital P good in the world – healthcare, life science, education, charities – our software is also used by lots of other companies that aren't as directly indexed. The fundamental raison d'etre of Matillion isn't directly to deliver one of those capital P purposes but to encompass them both. So I do feel it's purpose driven and that is a key ingredient in the early progress that we've made in our journey and business building.*
>
> *So to me the purpose of Matillion has always been to make a little dent in the universe – to build something beautiful, that improves the lives of our users and our customers, in however a small way. Just to make the world spin on a slightly different, hopefully better axis."*

The private markets in which startups and scaleups pitch for funding from venture capitalist and growth equity firms are all a key part of this alchemy. It is venture capital (VC) that has originated numerous technological breakthroughs, from memory chips to recombinant insulin, that have propelled society forward - and in turn, catalysed further waves of investment and technological progress[14]. While Britain has the largest VC industry in Europe, for all its importance in supporting startups and economic growth, there are concerns – as we will discuss in our second paper.

Nonetheless there is near unanimity by City investors and policymakers' alike that the flow of such risk capital to growth businesses needs to be boosted, most recently reflected in the Mansion House compact in which eleven major pension fund managers undertook to invest at least 5 per cent of their 'default funds' (those whose investment objectives were left unspecified) in unlisted securities by 2030. But the scale and terms of provision of venture and growth risk capital is closely linked to the existence of a healthy, liquid stock market. Equity is a better means of financing the risks of innovation than debt, while a stock market listing permits investors' portfolios to become more liquid and diversified, allowing the cost of capital to the investee to be lowered[15].

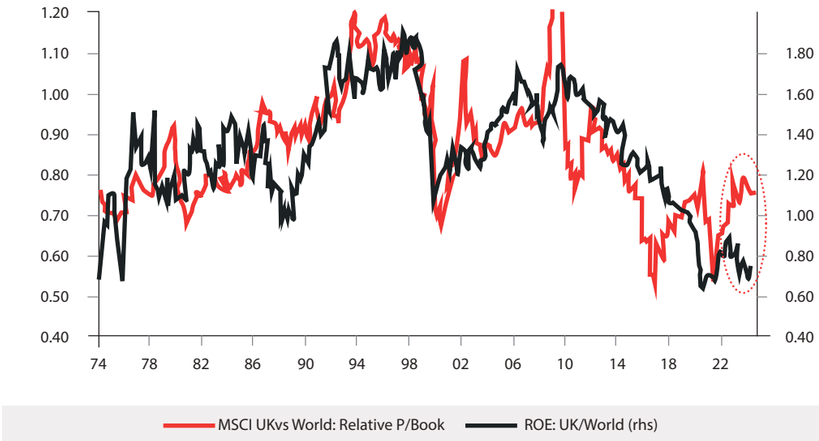
Thus a healthy stock market is a crucial factor contributing to the success of VC and other private assets, and in consequence economic growth. Large investors are more willing to supply funds to VC firms if they believe that they can later recoup and monetise their investment. The availability of an exit mechanism, moreover, enables the recycling of capital and talent into new ventures, which in turn boosts the demand for venture capital. Conversely, volatile and drifting public markets and poorly performing IPOs may lower exit opportunities for startups, hindering these flywheel effects. The recent low numbers of UK Initial Public Offerings (IPOs) is hardly encouraging in this respect. Moreover, the stakes are rising as exit markets remain gridlocked. Globally, VC/PE groups are sitting on an ageing $3.2 trillion of unsold assets across 28,000 companies, while in the UK, over 4,100 firms valued at more than £200 billion remain unexited, gumming up the entrepreneurial finance ecosystem[16]. Even as there are growing hopes that the IPO market will rebound from its lows, the lack of a healthy IPO market to serve as both an exit strategy and a pricing mechanism for acquisitions means less capital is likely to be available to reinvest in new startups.[17].

This relationship is not a one-way street; generating an IPO pipeline of young, fast growing firms is seen as an important means in itself of reviving the attractiveness of UK capital markets at a time when trading volumes and IPOs have declined, valuations have been depressed, and some of the UK's largest companies have shifted their primary listing to the US. Of course, these trends are neither set in stone nor unique to the UK, although the UK is particularly hard hit. UK Insurance companies and pension funds manage over £4.6 trillion, and since 1997 have reduced their allocation to equities from 73 to 27 per cent , with their allocation to UK listed equities falling from 39 to 4 per cent over the same period[18]. This shrunken pool of risk capital reduces the available buyers of UK equity – further depressing share valuations.

The prolonged doldrums of the UK 's public markets and equities thus contributes to weakening growth. The open question is whether there is a specific UK discount on UK companies – even after adjusting for differences in earnings growth and sector mix- - or simply it is a by-product of the fact that disproportionately too many companies in the UK stock market are in sectors the global markets regards as low growth[19]. Even that is hardly comforting – a condemnation of Britain having too few significant growth companies as commented earlier. However, one possible hopeful sign that UK plc may currently be undervalued is that the UK return on equity (ROE) relative to the rest of the world (RoW) has rebounded from its lows. It has not yet pulled price-to-book (P/B) valuations higher but is is a hopeful augury[20]. Assuming profitability remains stable, UK stocks look unwarrantedly cheap, suggesting a potential reversion to the mean *(see Figure 2).*

Figure 2:

UK stocks versus rest of the world (RoW) on profitability and valuation measures



Source: LSEG Data & Analytics, IBES, Barclays Research (2024).

It is also notable that the FTSE 250 has become a favourite hunting ground for the big beasts of private equity suggesting UK companies are undervalued, with take-over private transactions recorded in everything from supermarket chains to veterinary pharmaceuticals to cybersecurity.

Despite these indicators of increasing investor interest, it is not obvious there will be follow through. There have been false dawns before, and the adverse headwinds are very deep-seated and long-standing. For example while it may be true that value stocks that comprise large parts of the UK equity market have outperformed growth stocks, such premia can disappear for long periods, leaving investors underwater. Recent history has been particularly unkind to value investing: in the UK, between 1987 and 2020, value stocks underperformed over a period of 34 successive years[21].

Trying to turn this around has become a policy preoccupation, calling forth proposals to reform the capital markets – but unless they are accompanied by structural solutions to boost the representation of growth-focused companies and an IPO pipeline featuring such firms they will make little progress. Change requires a coherent overarching strategy across the entire investment ecosystem.

For example there are hopes that the recent relaxation of listing rules and governance reforms will move the dial[22], but as important as these reforms are, they are only one piece of the puzzle in decisions made about when and where to take companies public. Stock market buoyancy and companies' appetite for public listings also requires more buyers of British equity, for which pension fund consolidation and more diversification of portfolios is a pre-requisite, but that in turn raises questions about whether pension fund contribution rates are high enough and whether the investor research ecosystem is sufficiently skilled – let alone the other macroeconomic bottlenecks that hold back the growth of new companies of sufficient scale.

This brings us full circle to the determinants of startup success and thus improving the pipeline of such growth companies. If the pursuit of purpose is important in galvanising young organisations and generating outsized performance, then it is important that investment market structures foster such a process. For example, a counterpoint to the travails of public markets has been the spectacular growth of private markets. One consequence is that companies are staying private longer, regardless of how much they have grown and how large they have become, as we discuss in more detail later in this report. Today, only 36% of the 500 largest companies in the UK are publicly listed[23].

This reshuffling has destabilised the traditional public-private divide that has underpinned corporate law, with vastly different regulatory obligations and oversight in the two spheres. Startups and scaleups may find that private markets lean into their needs, but becoming larger private companies with less scrutiny, disclosure and transparency can raise awkward questions for regulators, investors and broader stakeholders. This was a theme explored in our earlier paper on the private equity buyout industry whose heterogeneity exhibited both the best and worst of capitalism, making it vital to understand the conditions under which it works best[24]. Similarly there have been regulatory failures, malpractice and some spectacular failures in private markets: if for investors that comes with the territory of startup and scaleup investment, the same cannot be said for the rest of society. The vitality of private markets is obviously important and attractive: but society cannot be indifferent to potential wider harms.

One counterpart of IPOs becoming increasingly unattractive is that a scaleup's exit is increasingly via selling to a large corporate – frequently, not based in Britain: between 2013 and 2024, for example, it is estimated that nearly 2600 British growth companies were sold overseas, predominantly in high-tech sectors and largely to the US. Over the same period, acquisitions dominated exits, accounting for 94% of all exits, while IPOs made up only 6%. Notably, the share of IPOs has declined over time[25].

This trend, as highlighted by Professor John Van Reenen, Chair of the Council of Economic Advisers, among others, raises significant concerns[26]. One concern is large incumbent companies may be snuffing out potential competition. Furthermore, once innovative companies are absorbed by larger entities, they often lose their innovation edge – not to mention the inherent risks associated with major mergers and acquisitions. This comes at a time when barriers to entry and the distance to the technological frontier appear to be growing[27].

As argued above, it is fast growing small firms that play an essential role in promoting productivity. The counter argument is that the good prospect of a profitable exit by whatever means is a powerful spur for investors and entrepreneurs and the ability to recycle capital into new investments. Any intervention that inhibits acquisitions, if it damages these incentives, will do more harm than good. An exit is an exit, and is a key part of the startup and scaleup story.

In specific British terms, the phenomenon risks reducing the capacity of the UK stock market to replenish itself with attractive growth companies, but has also led to charges that Britain is developing as an incubator economy – a sandpit for developing technologies whose strategic control ,wealth generating and productivity enhancing ability are going abroad. Certainly if only a small fraction of these companies had grown to independent maturity in the UK with a British public listing, Britain would have looked the obvious tech capital of Europe – and retained a critical mass of companies driving productivity growth.

At the very least there is a need to ensure the private and public markets work in ways that complement and respect their different strengths, while comprehensively strengthening as far as possible all the elements that contribute to startup and scaleup success – recognising the trade-offs, costs and benefits. For one way or another it remains true that if Britain is to achieve the goal of lifting its growth rate across all its cities and regions, then it does need a new generation of consequential growth companies that can grow to independent maturity, stay domiciled in the UK and operate as significant British companies. Success will hang on unpicking the key interdependencies that have grown up over the last thirty to forty years and build a financial and investment ecosystem in which not only is the pool of greatly enlarged risk capital but investment in British quoted and unquoted securities is prioritised. There needs to be an overarching strategy which the three papers in this series attempt to provide.

The aim of our second paper is to explore the mechanisms through which venture capital contributes to purposeful outcomes: venture capital representing in the words of author Sebastian Mallaby 'the great third institution of modern capitalism' alongside markets and the corporation[28]. It will examine how venture capital's unique combination of incentives, funding, expertise, and networks has allowed it to punch above its weight and serve as a particularly potent source of capital for innovation. At the same time, the VC industry suffers from a number of limitations in its capacity to support purpose and broad-based innovation: it is highly concentrated, prone to cycles of feast and famine, and focuses on too narrow a range of technologies and entrepreneurs. These questions take on particular significance in the UK where there exist a number of funding gaps - particularly at a regional level - along a business's growth journey which can dampen their growth and ambition. Successive governments have set up a variety of schemes to close these gaps, and while they have seen some benefits, progress has been uneven. Structural biases, and dissatisfaction with the traditional model of VC and the current configuration of the industry, have also spurred interest in alternative approaches to growing new businesses, such as corporate venturing which are capable of supporting a broader range of technologies, entrepreneurs, business models and geographies.

Paper Three will explore the shifting balance between acquisitions and IPOs as exit strategies for businesses, assessing the broader challenges posed by the shift toward trade sales, including foreign acquisitions, and its impact on competition and the UK's ability to grow businesses to full maturity. Rebuilding the IPO ecosystem—or creating an institutional framework that encourages more businesses to remain independent—will require the revival of an equity risk culture in the UK. Establishing a strong base of long-term, aligned investors is not limited to the country's vast near £3 trillion pension savings —though these are a crucial piece of the puzzle—but also includes the important role of insurers and retail investors.

There is ongoing debate about how best to address these problems. The necessary but insufficient condition for change is the partial consolidation of Britain's multiple tiny pension funds - 27,000 DC pension funds and 5800 DB pension funds. However consolidation will have to be supported with regulatory and fiscal interventions to make UK growth investments more attractive; options include raising pension contributions and tax incentives.

Other suggestions include increasing flexibilities in charging strategies for investment management services (cost versus value for money), broader initiatives like establishing new trading venues for private companies and improving analyst coverage of high-growth firms. However framed, there is a risk that these issues will be addressed in isolation, leading to ineffective or counterproductive outcomes. Thinking has to be joined up with a recognition of the trade-offs.

These reforms are more likely to succeed if developed within a unified, overarching strategy. It is, therefore, crucial to situate these issues within the broader innovation ecosystem which plays a critical role in nurturing a vibrant pipeline of companies. Intermediary institutions are essential in bridging gaps between central government, local government, businesses, investors and universities. Public support and funding remain unbalanced in key areas, often failing fully to reflect that growth-oriented businesses are necessarily diverse and not addressing the most important barriers to innovation –lack of lead customers prepared to take risks and developing demand. Britain must break from its long history of scatter-gun initiatives: circumstances demand a more determined and holistic approach. In November 2024 the government published its consultative Green Paper on a modern industrial strategy to deliver growth and jobs, promising such a holistic approach to addressing these issues in order to promote business investment, prioritising sectors with proven prospects. A white paper is expected by the middle of 2025.

The Green Paper is a welcome development, especially given the fluctuating fortunes of industrial policy in recent years. However, by listing specific sectors, technologies, and policy areas for intervention, there is a risk of losing sight of startups and scaleups—particularly the importance and dynamics of the scaleup process. Failing to place these actors at the heart of any sustainable industrial strategy is like staging Hamlet without the prince. There is no sustained economic growth without a cohort of young, strong, innovative companies, resulting from scaleups, to drive it.

Moreover the latest iteration of the industrial strategy offers limited consideration of broader issues such as corporate governance, ownership and pension reform, all of which are essential to its success. These should not get lost in the broader push to increase investment in UK productive illiquid assets. Asset classes such as infrastructure, property, buyouts, growth equity, and venture capital are quite different beasts, and should not be conflated under one umbrella – illiquid investment by private markets which often defaults to a focus on infrastructure, so inadvertently hindering efforts to nurture startups and scaleups. Such an approach risks creating a weaker pipeline of opportunities without which pension fund investment is less likely to be forthcoming. Recognising these nuances is crucial. The startup and scaleup agenda is not only distinct but equally deserving of attention and emphasis. An important objective of this paper –and its companion papers- is to secure such attention. The prize is a high innovation, high investment, high wage economy driven by high growth purposeful companies spread evenly around the country. It can and must be done. We begin with an assessment of the importance of small firms as drivers of innovation, the role of purpose and the contribution of private markets.

II. Small, young firms are drivers of economic growth – a role that requires curating

If an economy is conceived as an evolutionary ecosystem, startups and entrepreneurial financing are fundamental to its processes of selection, growth and vitality. They allow economies to experiment with untested ideas and introduce new capabilities that are better adapted to their environment, thereby building system-wide fitness[29]. In cybernetics, systems achieve stability only if they have the variety and capability to match the complexity of the environment in which they operate – a variety that a steady flow of startups provide in the economy[30]. Hence their close relationship with purpose. As Arun Gupta and his co-authors argue in their book Venture Meets Mission, at a time when society's most 'wicked' problems resist easy solutions – whether navigating the transition to net-zero, geopolitical uncertainty or supporting an aging population and the costs of chronic health problems - the 'first responders to the call for purposeful business' will be small startups declaring that their purpose is to offer solutions in innovative ways that established firms find difficult[31]. In the accompanying box we set out the astonishing range of young companies doing just that -ranging from frontier software for self-drive cars to radically transforming the human body's regenerative powers.

BOX 1:

Tomorrow comes today: a selection of disruptive UK startups

Founded in 2017, Wayve develops software for self-driving cars that harnesses artificial intelligence, machine learning and computer vision technology. It is a global leader in the rapidly advancing field of embodied AI - intelligent systems that learn from and interact with their real-world environments and can navigate situations that do not follow strict patterns or rules. Unlike many traditional approaches, Wayve's software does not rely on very complex sensors and high-definition maps, allowing it to scale easily and cheaply to new roads and cities. In 2021, its vehicles, trained in London, were able to drive in five other UK cities -Cambridge, Coventry, Manchester, Liverpool and Leeds- that they had never encountered before.

The platform is underpinned by a suite of innovative technologies, including fleet learning, data infrastructure, evaluation, and simulation tools, designed to rapidly enhance Wayve's AI models using real-world and simulated data. Its research in multimodal and generative models is also paving the way for advanced features like intuitive decision-making, language-responsive interfaces, personalised driving styles, and co-piloting capabilities. Collectively, these developments hold the promise of transforming road safety, alleviating traffic congestion, and minimising environmental impacts, all while enhancing accessibility for users.

Wayve has recently raised $1bn in a Series C funding round from Nvidia, SoftBank and Microsoft, the single largest ever into a European AI company. It also announced a new strategic partnership with Uber to deepen its work with global original equipment manufacturers (OEMs) to use Wayve's AI to enable a range of automated driving capabilities as well as to put future Wayve-powered self-driving vehicles on the Uber network.

UK startups and scaleups are also harnessing AI and digital technologies to disrupt other industries. Consider the Insuretech unicorn **Marshmallow**: its founding purpose is to provide fairer and affordable insurance to migrants and marginalised communities, who fall outside the typical 'good risk' profile. On some estimates, car insurance quotes are around 50% more expensive for those not born in the UK. To underwrite policies more accurately and personalise insurance offerings, it uses alternative data sources like social behaviour, non-UK driving experience, and international records.

Synthesia, which became a unicorn in 2023, has developed AI technology that accurately models the intricate details of the human face in motion, greatly enhancing virtual storytelling. Text can now be transformed into videos in minutes, featuring AI-generated avatars that express a wide range of emotions based on an analysis of the script. Currently, around half of Fortune 500 companies have adopted this technology to create videos at a cost comparable to producing a slide deck. Its applications encompass not only sales and marketing but also education, training, and counselling, where video serves as a powerful medium for communicating knowledge and explaining complex topics. The founders believe they are about 40% of the way toward realising their ultimate vision: empowering a teenager to create a Hollywood-quality film from his or her bedroom.

These efforts are complemented by unicorns like **Improbable**, a leader in building expansive, large-scale virtual worlds and simulations for social, entertainment and enterprise applications. In 2023, it achieved profitability for the first time, following a strategic move toward venture building.

At the same time, UK startups are eyeing the next phase of the digital revolution, driven by the transformative potential of quantum computing and its ability to solve many problems exponentially faster than classical, or binary, computers. **Riverlane** has developed a chip and software stack technology called Deltaflow, which aims to help companies manage the high error rates inherent in quantum computing. This addresses the fact that quantum bits, or qubits, used in today's machines are highly unstable and only maintain their quantum states for extremely short periods. Currently, the best quantum computers can only perform a few hundred quantum operations before failure. Riverlane envisions its technology correcting billions of errors per second, bringing real-world use cases within reach, with some estimates suggesting quantum computing could generate nearly $1.3tn in value by 2035[32]. In a sign of confidence in Riverlane's work, the company recently raised $75mn in Series C funding, becoming Europe's first quantum computing company to close such a round.

Energy and sustainability are another industry ripe for disruption. **Nexeon** is a leading developer and manufacturer of advanced silicon anode materials for lithium-ion batteries, which support the creation of lighter batteries with more power and longer lifetime between charges. In 2023, the company signed a long-term supply agreement for silicon anode material for batteries with Panasonic, a leading electric vehicle (EV) cell manufacturer, and in 2024, it broke ground on its first commercial production facility in Gunsan, South Korea.

Bboxx, founded by alumni from Imperial College, is pioneering a new approach to energy supply by combining off-grid solar panel systems, a pay-as-you-go model and Internet of Things (IoT) sensors to enhance access in countries that lack reliable electricity. Bboxx was recently awarded Gold Standard certification for its clean energy projects across five African countries and has been backed by major companies like Mitsubishi, Engie and EDF.

Despite the hurdles presented by the green transition, it is stimulating creativity and imaginative solutions. **Modern Synthesis** is a microbial textiles platform which uses K. rhaeticus bacteria to grow biomaterials for the fashion industry, aiming to offer a more sustainable textile option. It has collaborated with the popular Danish fashion label GANNI to create its signature 'Bou Bag' using a leather alternative made by bacteria. Such ventures are notable considering the fashion industry is estimated to contribute 10% of global carbon emissions - more than international flights and maritime shipping combined.

Mura Technology uses supercritical water -water subjected to high pressure and temperature- to convert plastics deemed 'unrecyclable' -those typically destined for incineration or landfill- into refined synthetic hydrocarbon products. Among these is low-carbon synthetic crude oil, a versatile feedstock that can be repurposed in the production of virgin-grade plastics and a range of other useful materials. The scale of its ambition and commitment to the circular economy is evident in the company's opening of the world's first commercial-scale advanced plastic recycling plant in Teesside in 2023 along with partnerships with blue-chip companies such as Dow Chemical, LG Chem, Igus and Chevron Phillips Chemical.

Not all solutions in this space are grounded in scientific innovation. For example, meal-kit companies like **Gousto**, which send precise ingredients and easy-to-follow recipe cards to people's homes, have helped reduce food waste and spur innovations in packaging, such as edible stock cube wrappers; while allowing people to eat healthily and enjoy the pleasure of cooking meals from scratch. Gousto secured B Corp certification in 2021.

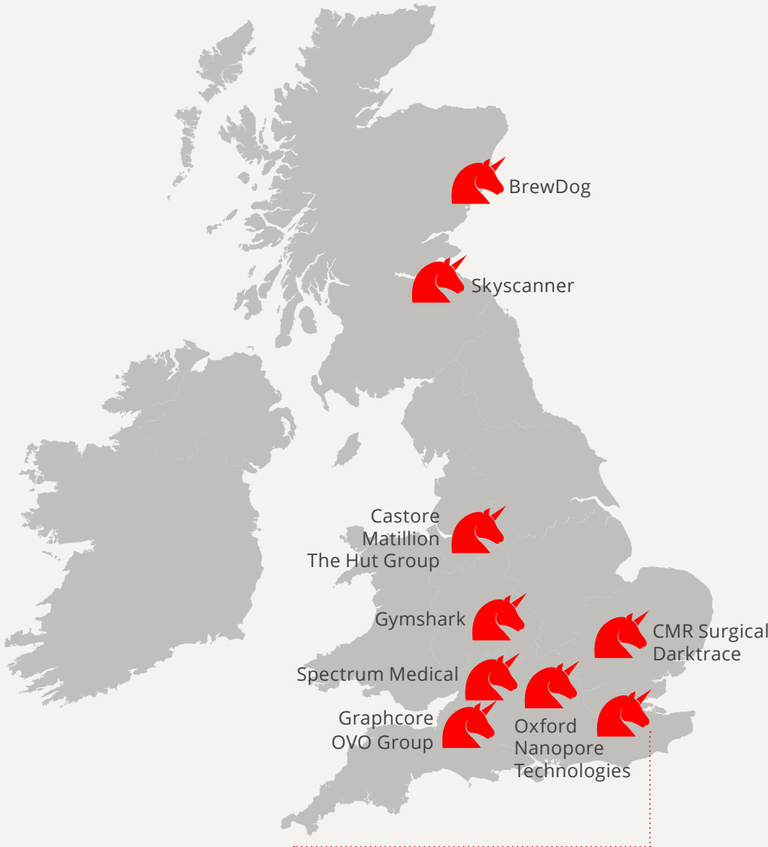
Companies are emerging with the promise of delivering substantial health and economic benefits through innovations in the detection, prevention, and treatment of disease. **Bit.Bio**, a Cambridge-based synthetic biology company, is developing new therapies and research tools using reprogrammed human induced pluripotent stem cell (iPSC) derived cells. Stem cells are the body's 'master cells', the basic building blocks of all organs, tissues, blood and the immune system. Bit.Bio's cutting-edge platform technology, OPTi-Ox, seeks to overcome two major bottlenecks that have frustrated the application of these techniques in medical and industrial settings: consistency and scalability. These advances open the door to applications in regenerative medicine, the use of cells in high throughput screening in the context of drug discovery and the modelling of human organs to better understand cell behaviour and disease mechanisms, ranging from infertility to neurodegenerative disorders to cancer progression. This could unlock treatments for a variety of serious conditions, with some predicting that within a decade or two, it may be possible to build on-demand organs such as livers and hearts from stem cells. In recent years, the company has doubled the size of its laboratory facilities and recruited a number of industry luminaries and a Nobel Laureate to its board and executive team.

These efforts have positioned the company as a leading force in its mission to 'code cells for the advancement of human wellbeing'.

UK robotic surgery group **CMR Surgical** is helping redefine the landscape of surgical procedures at a time when healthcare systems are coming under pressure, and there is increasing demand for more efficient, precise, and minimally invasive treatments that can improve patient outcomes while reducing recovery times and overall expenses. CMR Surgical's Versius system features a compact, portable design that can be easily wheeled throughout healthcare facilities, an open console that allows surgeons to better direct their operating room staff, and a more affordable price point, all of which set it apart from industry leader Intuitive Surgical's Da Vinci system. Versius has performed more than 17,000 surgical procedures in more than 20 countries since its launch in 2019, with a procedural growth rate of over 60% in 2023, compared with 2022. It is suitable for more than 130 procedures across seven surgical specialities. In 2024, a seven-year-old boy became the first child in the UK to undergo surgery, using the technology to treat a kidney condition.

Innovative startups are finally redefining the boundaries of where healthcare begins and ends. **Huma**, for example, has developed remote patient monitoring (RPM) solutions for pharmaceutical companies and healthcare providers, with applications in decentralised clinical trials and 'virtual wards'. These virtual wards enable the tracking of patients' treatment and recovery at home using wearables and mobile devices. Research in cardiac and respiratory care shows that they can significantly improve patient outcomes, with mortality rates reduced by three to four times, oral medication adherence rising from 85% to 96% among patients with low initial compliance, and patient reviews requiring 40% less time, highlighting their potential to alleviate pressures on healthcare systems[33]. In a similar vein, **DnaNudge**, an on-the-spot genetic testing service, is empowering individuals to take control of their health by providing product and retail recommendations tailored to users' DNA, encouraging a healthy lifestyle.

Distribution of UK unicorns by city (January 2024)



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Blockchain.com
Cazoo
Checkout.com
Copper
Deliveroo
Funding Circle
GoCardless
Howden Group Holdings
Improbable
Inspired
Lendable
Many Pets
Marshmallow
Monzo
Motorway for Tomorrow
Multiverse
Oaknorth Bank
Octopus Energy
Paddle
Quantexa
Revolut
Rocco Forte Hotels
Rothesay Life
Stability AI
Starling Bank
Synthesia
Teya
Thought Machine
Touchlight Genetics
Tractable
Tripledot Studios
TrueLayer
Wise
Zego
Zenobē
Zepz
Zilch Technology
Zopa

Source: Beauhurst (2024).

Why do startups tend to produce major innovations that are at the core of creative destruction, so essential to the vitality of capitalism?[34] The evidence is that small firms are more innovative relative to their size, suggesting they are better at putting R&D resources to work. As companies grow larger, they have stronger incentives to redirect their attention from creating new products to refining the quality of existing product lines – and this is true even when they can leverage similar innovation capabilities and technologies as small firms[35]. Other research unpacks trends that compound the anti-exploration bias of large firm R&D. Not only are the patents of large firms less innovative, but they are often used to build patent thickets in order to deter competition[36]. This behaviour can extend to other activities such as hiring local politicians and lobbying that aims to limit competition[37]. In each case, the strategic intent is to defend the advantage held by the incumbent – not to risk the new.

An extensive management literature has lifted the hood on these issues, providing more granular insights into how innovation decisions are made. Notably, it draws attention to the barriers to change and embedded dilemmas inside large mature organisations. Trapped by their history, they are vulnerable to path dependence, organisational rigidities and creative myopia[38]. They may be locked into the relationships and attitudes built up by existing assets, capabilities and strategy, so making the adoption of new arrangements difficult, a phenomenon sometimes referred to as 'not invented here'[39]. Large incumbents thus pass up opportunities to avoid cannibalising existing revenue streams that smaller firms might find worth pursuing[40]. Finally, the move to a formal and hierarchical structure with multiple veto points can make it harder for large organisations to nip failures in the bud. Executives are rarely shown the door for neglecting promising opportunities, yet quickly become targets of blame when things go awry. To prevent finding themselves in positions like this, organisations often choose to play it safe by selecting projects that are less ambitious in the first place[41].

The pattern is nearly always the same: the permanent conflict between the old and the new ensures that even disruptive startups eventually evolve into incumbents themselves. In her recent book, Supremacy: AI, ChatGPT and the Race That Will Change the World, Parmy Olson recounts how a group of Google AI researchers in 2017 pioneered transformer technology—a breakthrough that enabled significant advancements in understanding and generating human language by processing entire sequences of text in parallel. Yet, Google was slow to capitalise on this innovation, hindered by bureaucracy, inertia, defensiveness, and indecision. This hesitation created an opening for OpenAI to harness the technology's full potential, rapidly scaling it to develop groundbreaking AI products like ChatGPT[42].

Zooming out further, innovation incentives are shaped by the external environment, including governance and ownership arrangements[43]. Nowhere is this more evident than in the transition from private to public equity markets. On the one hand, a public quotation gives firms access to a large pool of potential low-cost equity capital that can help bring innovations to market at scale and serve as currency to acquire external innovations[44]. But it also comes with costs, particularly for the nature of innovative activity.

To identify how a public quotation impacts on investment decisions an intriguing research project compares the behaviour of companies after a public IPO with that of companies who filed to go public but then withdrew for exogenous reasons, like unexpected market volatility, but who in every other way had similar growth and innovation characteristics to the firms that floated – so minimising the chance that the behaviour of the two samples could be co-related. Going public , finds the research, reduces the novelty of a firm's innovations, as proxied by patent citations, by 40 per cent while a mass of key inventors opted to leave. At the same time, innovation becomes narrower in scope[45]. Similar results are reported for other countries and sectors[46].

These findings are consistent with the criticism that public markets are short-term; firms find it difficult to pursue risky and exploratory projects when dispersed shareholders insist on uninterrupted quarterly earnings growth as a signifier of corporate health and lack sufficient skin in the game or analytic capability to monitor performance. In the UK, a lack of blockholders in public markets—large investors with the incentives to dedicate time and resources to understand a company, and who can shield managers from the risks inherent in innovation due to their superior ability to distinguish failures caused by bad luck from those due to managerial incompetence—has exacerbated this issue[47]. The findings are also consistent with publicly owned firms taking advantage of a lower cost of capital to change their strategy and focus on scaling and commercialising innovations[48].

Pragmatic Semiconductors, a company specialising in the development and manufacturing of ultra-low-cost, flexible integrated circuits, making it possible to embed intelligence in everyday objects, had its funding round in 2024, nearly establishing it as another British unicorn. Founded in 2010 it is still private in 2024, and the firm has no intention of an early IPO. While acknowledging the value of liquidity, co-founder Richard Price explains what the firm considers as the greater danger: short term reporting cycles and public market volatility;

> *"There are several factors for companies to consider regarding private and public ownership to weigh up what's right for them and when. Public companies have access to more capital and liquidity but face regulatory scrutiny. Private companies can enjoy greater control and privacy but can face challenges in raising capital and liquidity. Ultimately, it's a decision based on the specific requirements of the business throughout its growth trajectory; funding, time scales, short – long term strategic plans and financial return on investments for shareholders. The aim is to have a range of options for liquidity."*

The capacity to innovate should not be viewed in isolation; how talent and other productive inputs are allocated across firms and the economy are also important. Innovation thrives when there is a proper balance between resources focused on innovative exploration and that on subsequent exploitation. Thus, research shows that regions with a mix of small and large anchor firms are more innovative than those dominated either by a small number of large firms or a large number of small ones[49]. Such a mix leverages the innovation strengths found in large firms while providing a fecund environment for sharing ideas and resources with startups, often founded by former employees of established firms who are free to build on ideas that their former large firm employer simply could not attempt[50]. Trying to do the same and diversify into new areas would incur significant diversification costs if large firms were to take forward and commercialised the underlying ideas themselves[51].

These interactions are most effective when established companies demonstrate strong innovation capabilities. The evidence suggests that the stronger the parent company from which a startup spins out, the greater the startup's likelihood of success –and the more likely it is to be VC backed and high-tech[52]. Such companies offer management expertise and other benefits that can be leveraged to help scale promising ventures. Venture capitalist Hermann Hauser sees this as a frequently overlooked factor in the 'alchemy' behind Silicon Valley's success, and another cost and consequence of the UK's lack of large innovation-driven or tech-based companies.

> *"The one big advantage that Silicon Valley still has is that if I have a stake in a Silicon Valley company that now looks as if it's really going to hit the big time, and can scale to hundreds of millions of dollars and eventually billions, I can pick the guy in Apple, Google, Meta etc who has run a billion dollar division. Two weeks later he joins the startup and transfers the expertise that he has from running that division, to the startup. In Britain we have neither the culture of people leaving large companies within a fortnight (they are all on a two weeks notice periods over there) nor do we have the large tech companies where you can find these really accomplished managers. So that's another big hole in Britain."*

Matthew Scullion, founder and CEO of data analytics company Matillion, one of Britain's unicorns, shares Hausser's preoccupation that Britain needs more exemplars of entrepreneurial ambition – much easier if there are precedents to follow along with the knowledge that goes with it.

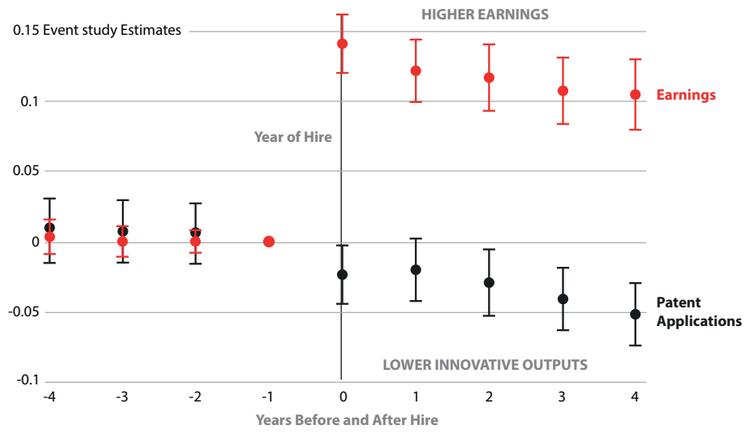
> *"My passion has always been how can Britain improve our entrepreneurial and investor playbook so they are united in going after large markets, maniacally and aggressively, and build consequential businesses? It's exquisitely rare. The exit velocity required for a company to become durable, lasting over the generations, is just so high that hardly any companies achieve it. There are a succession of life cycle stages – from startup through to IPO but that is not a destination in itself, but the beginning of another stage which can end in acquisition. The task is to recognise that the company must be top tier– otherwise ultimately it will end up being acquired by a truly inter-generational and durable company. So far Matillion, even with 90 per cent of its revenues outside the UK, is an independent UK limited company. I am really proud of that."*

Britain does have examples of these processes at work. GSK, for example, has spun out several companies, including NeRRe Therapeutics, founded in 2011, to develop a treatment for a chronic cough linked to idiopathic pulmonary fibrosis. In 2017, NeRRe successfully raised an oversubscribed Series B funding round, which led in turn to the spin-off of KaNDy Therapeutics, which focuses on developing non-hormonal alternatives to hormone replacement therapy for postmenopausal symptoms, before its acquisition by Bayer in 2020. The big chip companies that located in Bristol – Fairchild, Inmos, and later XMOS, helped by the SETsquared group of universities – became the breeding ground for the semiconductor and AI startup Graphcore, a short lived unicorn until bought by Softbank in 2024[53]. Knowledge transfer and collaboration do occur in Britain, but arguably not enough.

From this perspective, innovation is a subtle process, not captured solely by aggregate measures of innovation such as R&D spending as a share of GDP or the proportion of the labour force employed in the research sector. The top-line numbers conceal worrying details in the structure and composition of what is happening below the surface. Professors Ufuk Akcigit and Nathan Goldschlag in an important recent paper use novel data on the employment history of over 760,000 US inventors and find that inventors are increasingly concentrated in large incumbent firms. The share of inventors employed by the largest companies grew to 57% in 2016, up from 48% in 2000. This was a boon for inventors: there was a 20% increase in their pay premium offered by large businesses in this period, while R&D as a share of GDP continued to rise impressively. However, after being hired by an incumbent, these inventors' innovation output declined by 6% to 11%, compared with that of their peers who joined smaller and younger firms. The authors attribute these contrasting trends to the strategic poaching and hoarding of inventors as a means to neutralise potentially disruptive competitors – a pattern that holds despite alternative explanations, such as older inventors moving to incumbent firms, incumbent hires being promoted into managerial positions in large incumbents or differences in hiring during the 2008 financial crisis. The figure below captures the research findings; earnings jump as inventors move to the larger firm – but patent applications go down *(see Figure 3).*

Figure 3:

Difference in an inventor's outcome between inventors hired by incumbent or young firms



Note: This Figure shows event study estimates for years relative to the hire event of the diference in an inventor's outcome. Patent applications and log earnings, between inventors hired by an incumbent firm and those hired by a young firm. Source: Inventor Employment History, Founding Team Database.

Source: Akcigit and Goldschlag (2023).

These same dynamics and forces ripple through other branches of the innovation ecosystem. Substantial pay differentials between industry and academia are making it increasingly difficult for universities to retain their most talented professors. This trend is particularly pronounced in fields like artificial intelligence (AI) where leading figures, such as Geoffrey Hinton and Yann LeCun -recipients of 2024 Nobel Prize in Physics and 2018 Turing Award respectively- have been lured to tech giants like Google and Facebook to lead their research efforts[54]. Along with high salaries, these companies entice academics with access to cutting-edge technology, vast datasets, and the opportunity to scale their intellectual contributions.

However, as Michael Gofman and Zhao Jin point out, the large-scale departure of AI professors from academia has had unintended consequences: students at affected universities are now launching fewer AI startups and securing less early-stage funding. The most plausible explanation is that this 'brain drain' limits the transfer of critical knowledge from professors to potential founders. This shift is significant, as other skills -like general programming knowledge, project management, or leadership seem to play only a secondary role in determining successful startup formation and fundraising[55].

Reflecting these trends, small companies in the US are finding it increasingly difficult to move up the ranks. While prior to 2000, 15% to 20% of small companies had managed to grow into medium or large enterprises each year, this figure had halved by 2017, putting the brakes on upward mobility[56].

If we take these trends to their logical conclusion, they paint a sobering picture in which the character of innovation is becoming less daring even while large company spend continues. This is even more pressing for the UK, where younger companies conduct a much smaller proportion of R&D than in the US. Even as inventors in the US are increasingly concentrated in large incumbent firms, younger firms still account for approximately 45% of R&D investment, compared with just 15% in the UK[57].

It is also important to recognise that skills are not the only issue affecting the divide between small and large companies. Greg Watson, founder of Partnership Capital, which is catalysing a new approach by the investment community to support innovation, observes that UK small businesses in sectors like advanced manufacturing and deep tech routinely experience slow and late payments from large corporates, impeding innovation investment. He takes up the story:

> *"Each of the scaleup successes I've been involved with has depended on faster payments at some stage. I recall one that had chronic delays with its main customer sometimes even running over a year late. It was crucified. If you're going to look at the metrics of collaboration and the culture in a big company, and you're looking in the broadest way at the relationships in the supply chain, late payments are the easiest thing to address. Everyone's got a payment ledger. I would like to see the investment and corporate communities having a new dialogue about the way big companies deal with smaller businesses across the waterfront – payments, corporate venturing and procurement. If you just had that dialogue between investment stewards and the finance team in the corporate, you'd start changing practices overall. The impact would be transformational."*

That smaller companies may be losing out in the race for talent does not bode well for economies that, over the past century, have depended on the unique strengths of entrepreneurial ventures to drive innovation and purposeful change.

III. The importance of purpose in animating successful startups and scaleups

Business life is turbulent – uncertainty is pervasive, missteps inevitable, and the unexpected always around the corner. It is estimated that roughly 75% of venture-backed startups fail, though the actual figure is hard to pin down, with some estimates suggesting it is even higher[58]. Sociologist Arthur Stinchcombe, writing nearly six decades ago, coined the memorable phrase 'liability of newness' to describe the vulnerable position of fledging businesses threatened by extreme market and technological uncertainty, the difficulty in attracting specialised resources, managing relationships between insiders and outsiders, developing workable operating routines and balancing founders' desire for wealth and control[59].

Yet economy and society alike need a significant cohort of young, high-growth companies to underpin growth and prosperity. Standard economic and business textbooks abstract away the heterogeneity of the small firms from which the high growth companies will emerge – some want to grow while others entertain no such ambition[60]. And among those with growth ambitions, many either cannot sustain growth or fall by the wayside.

They are not flying blind. There is broad agreement that identifiable and pre-existing differences in the growth profiles of firms play a decisive role in their future success[61]. Recent evidence suggests the size of this effect: in the US, as much as 40 per cent of firm growth 20 years after entry can be traced to firm differences present at the time of founding[62]. Potential candidates include management strength, workforce skills, quality of financial management and the strength of the customer proposition. There is also evidence that foreign born founders do well: the Entrepreneurs Network finds that 39 per cent of the UK's top 100 companies had a foreign born founder compared to 14.5 per cent in the population at large.

Yet among these drivers of future success, a commitment to purpose ranks highly, particularly in 'new economy', high tech growth firms. While there is no 'smoking gun' that indisputably supports the claim—after all, we are dealing with an area where much is still unknown, reflecting measurement challenges, inherent imprecision around concepts like purpose, and the difficulty of making causal claims regarding its effect on economic outcomes—the evidence is nonetheless suggestive.

Recent research has strengthened the case for purpose by sharpening our understanding of how, where and when purpose and profit are mutually reinforcing. Using Great Place To Work (GPTW) data, Wharton Business School's Claudine Gartenberg constructs a measure of purpose based on employee beliefs in the meaning of their work beyond quantitative measures of financial performance and how far management provides clear direction to employees. This way of measuring purpose makes intuitive good sense and is found to predict firm performance in other studies, particularly where beliefs are held by middle management[63].

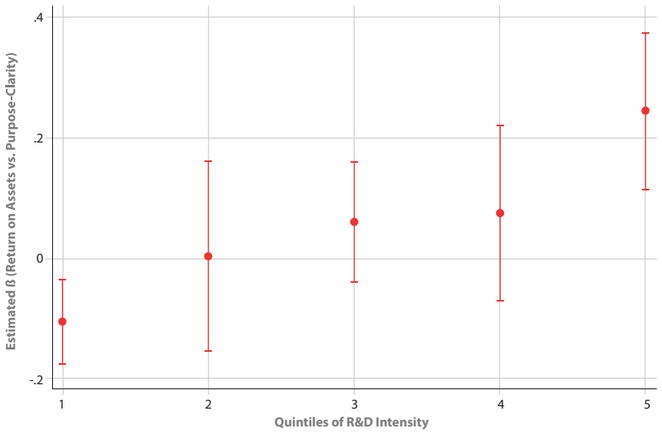
Analysing data from approximately 920,000 employees, the author finds that the relationship between purpose and profit becomes progressively positive for firms that rely more on R&D and innovation. This pattern can be seen in the figure below which splits firms into quintiles based on their R&D intensity, with firms in the top quintile exhibiting the strongest relationship between purpose and profit - the quadrant on the far right *(see Figure 4).* By contrast, for companies reporting zero R&D expenses, the opposite pattern holds: stronger purpose translates into lower profits – the quadrant in the bottom left[64].

This pattern of purpose mattering as a profit driver also holds if it is associated with the more a company boasts strong knowledge and organisational capital –two different forms of intangibles. There is also a positive relationship between purpose and share price performance, although this is more 'noisy'[65]. This has obvious implications for startups and scaleups that are disproportionately reliant on R&D and other intangible assets.

In a soon-to-be-released working paper, Alex Edmans, Vivian Fang and Lijun Lei examine the relationship between purpose statements and shareholder returns. In particular, they distinguish between purpose statements, which highlight how investing in stakeholders ultimately benefits shareholders, and 'purpose-like' statements which simply include shareholders and stakeholders in a list. To accomplish this, they use deep neural networks techniques to identify the grammatical relationship between words, in contrast to a 'bag of words' approach, which considers only the simple or unordered occurrence of words. This method allows the authors to unpack the precise causal and dependency relationships between stakeholders and shareholders, as disclosed in companies' 10-K reports. While they caution against a causal interpretation, they find that firms issuing purpose statements tend to experience future positive earnings surprises and higher stock returns, whereas companies with purpose-like statements show no such link[66].

Figure 4:

Purpose-Profit Association by R&D Intensity (by quintile)



Source: Gartenberg (2023).

These outcomes are not guaranteed – there is a lot that can get in the way. Thus while a company may be purposeful, if the founder does not have aspirations to grow the company to world-beating status or have a strong base of long-term, aligned investors, it is more likely that he or she will sell-out early. Anecdotally, at least, it seems that UK founders are less ambitious in their aims[67].

However, all things being equal, purpose emerges as crucial for startups due to their commitment to innovation and the need to differentiate their products and services from competitors. Building on Schumpeter's classic definition of entrepreneurship as the act of creating 'new combinations', recent research highlights the importance of a differentiated founding strategy in driving a startup's outperformance. Columbia Business School's Jorge Guzman and Aishen Li use text-based machine learning techniques and website data to measure the distance between the value proposition of a startup and that of other companies in the market[68]. They find that such differentiation predicts improved ease of financing and better long-term performance. Purpose manifested in this way drives better outcomes - specifically 30% of the total variation in the success rate of receiving early-stage financing and 20% of the variation in the success of achieving an IPO or acquisition.

Purpose is a valuable tool for achieving differentiation. Entrepreneurs' capacity and urge to identify unique problems that improve people's lives is enlarged to the extent they are driven by purpose: it is only possible to devise a compelling purpose if the entrepreneur possesses a sensibility to what is going on in the world beyond that brings awareness of new trends, customer needs and thus future opportunities[69]. Engaging with stakeholders is not performative for show, but rather a source of learning and even a requirement for progress, opening up new horizons of work and ways to create value. Purpose functions as an 'attentional filter,' enabling companies to single out salient concepts and relationships key to their business – and which they then drive into how they shape its internal operations[70].

One fundamental 'liability of newness' is nobody can know before the company starts trading and investment is made whether a particular technology, product or business model will succeed. A revealing study of prominent venture capitalists, for example, compared their expectations of investments with the results. The projections were dismal compared with the actual outcome: the correlation was 0.1, suggesting that even seasoned investors have limited ability to tell winners from losers[71].

The most obvious way to manage these challenges is through experimentation, which flows best from a problem solving mindset that flourishes in high trust organisations and where there is alignment over shared goals. This approach helps entrepreneurs assess the quality of a project and decide whether to continue with it. By breaking projects into a series of smaller experiments, entrepreneurs can pursue ideas that would not be feasible in an all-or-nothing bet. As each experiment generates steadily more information about a project's ultimate chances of success, entrepreneurs can make adjustments, thereby lowering subsequent risk.

Such an approach is evident in the 'lean startup' methodology, which advocates the rapid development of a minimal viable product (MVP) with the smallest set of features necessary to gather reliable customer feedback and assess the product's viability, which has been shown to improve new venture performance[72]. Dropbox, Airbnb, Uber and Spotify are among the best known examples of businesses that have successfully deployed these principles. 'A/B testing tools' are another low cost means of running experiments, allowing businesses to measure the impact of changes against a control group. They can be used not only to test narrow questions - say the effect of changing the size of a website's text on click-through rates - but also to screen more radical innovations, including new products, recommendation algorithms and even business models[73].

Despite its obvious benefits, very few startups embrace genuine experimentation. A four-year study of over 35,000 global startups found that fewer than one in five adopt A/B testing, despite those that do seeing a performance boost of 30% to 100% within a year[74]. Even for startups that engage in experimentation, progress has been slow and halting. One problem is that too many startups try to scale up too soon. They worry that their idea might be imitated by others or more prosaically want to escape being slaves to their young business for little compensation and to get their hands on some cash.

However, in practice, premature scaleup is often counterproductive. It can cut short the time needed for learning through experimentation and increases the risk of committing to a business idea that lacks market fit which then forces a costly pivot. One study found that startups that start scaling within the first six to twelve months of their founding are 20% to 40% more likely to fail, without a corresponding increase in the likelihood of achieving a successful exit[75].

Why do so few startups experiment in these ways? One answer is that the very uncertainty from which the startup wants to escape itself kills a culture of experimentation. All things being equal, the greater the degree of uncertainty, the more difficult it is for actors in any young organisation that has yet to take flight to specify and enforce each side's responsibilities covering all future contingencies in formal contracts and effectively constrain damaging opportunistic behaviour[76]. Uncertainty about how the firm will develop, how to measure innovation output—since its quality may only be revealed after a long period of time—and who deserves rewards and to what degree, makes designing workable contracts and appropriate incentives extremely challenging. There is abundant evidence that the more uncertain people feel about how rewards will be shared, the more they will act less co-operatively and more nakedly in their own self-interest[77]. Under these circumstances, organisations may find it easier to abandon experimentation and innovation in favour of more routine and certain activities, despite their lower returns[78].

Nor are startups capable of completely escaping the traps of all human organisations – status-seeking, wanting the approval of others, conforming to social norms and over-confidently sticking to a provenly wrong course of action for fear of loss of face[79]. These tendencies can also contribute to the growth of excess bureaucracy. Instead of enhancing coordination, they may result in structures with too much veto power, which slow down decision-making in the fast-moving environment of a startup. This is one reason why even large organisations like Amazon go out of their way to offer teams the maximum possible autonomy - the 'single-threaded owner model'.

What is needed are norms of speed, ownership, science and openness – thus the over-confident entrepreneur, often veterans of other startups, who is unwilling to experiment or recognise adverse feedback is particularly damaging in a startup environment[80]. Needless to say all these hazards are easier to negotiate when purpose is present. M&G Catalyst's Alex Seddon captures these tensions, and how crucial a commitment to purpose helps in managing them:

> *"As a founder, you're going to come up against a lot of challenges you didn't initially foresee when building and scaling a business. Having a clear purpose acts as a north star to guide founders and management teams through unforeseen challenges. Purpose creates unity, which in turn builds trust and confidence with investors, suppliers and customers. If you have a clear purpose and an overarching view of what you're trying to achieve then management teams, investors and customers are less likely to get out of sync."*

Purpose is no magic bullet – but its consistent presence relieves many of these tensions. When individuals identify with a firm's purpose, they tend to integrate it into their own identity and sense of self, which helps curb opportunistic and status-seeking behaviour. Appealing to stakeholders to share the same moral vision as the purposed founders creates a common moral identity, establishing a foundation for trust and cooperation with the firm[81]. Purpose, by providing clarity and assurance about the firm's future conduct, also helps manage expectations, coordinate interests and enhance transparency and accountability, making it rational for stakeholders to offer trust and cooperation in return[82]. The more a declared purpose is pursued, the more likely every stakeholder is to make sweeping, often irreversible commitments to the success of the venture, assured that their interests will be protected. This confidence is particularly important in a startup setting, where ownership is shared among a more diverse range of participants than in public markets, each with varied—and often sharply conflicting—claims and interests[83].

Our interviews with entrepreneurs confirmed that a first-order effect of good relational contracts is to elicit greater effort, increase retention and even lower wage demands. Some field experiments reinforce the argument. Thus, for example, although not a startup, one experiment in the world of college fundraising shows how demonstrating to the call centre operators the tangible benefits of fund-raising raised productivity dramatically. A five-minute pep talk from a scholarship recipient led university fundraisers to increase the amount of money donated by 171% and spend 142% more time on the phone relative to the control group. Even after a month, these effects still held in a field that is notorious for high burnout[84].

In a related field experiment, workers were randomly assigned to receive either a message detailing the company's corporate social responsibility initiatives or information solely related to the job itself and then asked to state their reservation wages. Once provided with information about an employer's social responsibility peoples' reservation wages were sizeably reduced in various online marketplaces[85]. Another, meanwhile, showed that those data-collection jobs that had a purpose, notably improving access to education for underprivileged children, increased the number of interested candidates significantly. Moreover, the purposeful component attracted employees who were more productive, produced higher quality work and had more highly valued leisure time[86]. Matthew Scullion captures how purpose cascades into an organisation.

> *"There's a well-used example about purpose that I love. It's a story about JFK walking into one of the NASA facilities, and there's a gentleman in the posh lobby in a white boiler suit. It turns out that this person is the janitor. So JFK says, what do you do here? And he says, I'm helping put a man on the moon. And that's purpose. And its true – he was helping put a man on the moon. So I think that focus, that rallying cry, and that test to allocation of resources, is what purpose is for, or should be for, in all businesses."*

Venture capitalist Saul Klein, co-founder of Phoenix Court, one of the most successful British venture capital firms that has backed more unicorns at seed stage than any other investor in Europe, the Middle East and Africa , confirms all these arguments about purpose – the motivation signal it sends to all his staff, raising funds and selecting companies in which to invest. It is integrated into his business model.

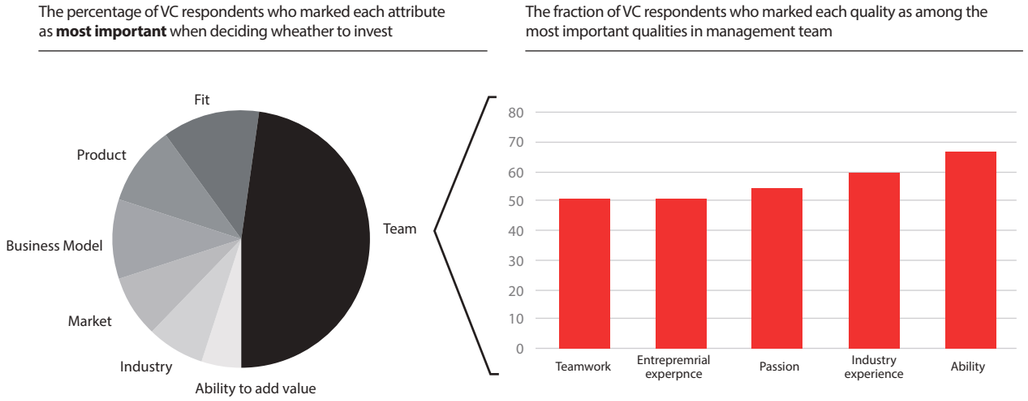
> *"We have deliberately connected our business model to purpose. It's not some philosophical sidecar: it's integrated. Firstly, you need to attract and retain the right type of talent. For us that means people who recognise that economic and social impact are not mutually exclusive but interdependent.*
>
> *Secondly, by being a purposeful business, we attract the right kind of investment opportunities. We are upfront about our values and how we operate. We cross reference any potential investment against our values and analyse the person running the business as well as what the business does.*
>
> *Thirdly, our physical location is key because our purpose is being a good long term neighbour. Somers Town has experienced centuries of economic and societal challenges, but now sits at the epicentre of one of the world's most valuable square miles. We believe that the next frontier will be defined not just by the people working in our neighbourhood as the likes of the ARIA, British Library, Francis Crick Institute, Google Deepmind, Meta, UAL, UCL and the Wellcome Trust or people passing through Kings Cross, Euston and St Pancras on their way to Paris and Brussels. It will also be defined by our local residents who have been left behind in previous waves of innovation.*
>
> *That is why we allocate 10% of profits in our management company and 2% of carry in every Phoenix Court fund towards our Phoenix Court Foundation which supports over 35 local organisations including schools, GP surgeries, Youth Centres, public spaces and social enterprises."*

Purpose can also have a significant positive effect on creativity. Employees are intrinsically motivated to create novel ideas and persist in the face of adversity, and if ideas become too whacky then purpose – by reminding them that they have to be useful to others– helps creativity become more grounded[87]. It can help galvanise teams as they grow larger to deal with a more complex environment, allowing them to process more information without all the attendant coordination costs[88].

Besides, the strength of teams, including aspects like passion and teamwork, is often the most important factor in the selection process used by venture capital investors *(see Figure 5)*[89]. Firms can also organise their workplace on a more flexible and decentralised basis, enabling a much wider set of operating individuals closer to the innovation process to pursue ideas outside the shackles of hierarchy and bureaucracy[90]. Having employees who can undertake projects independently also speeds up decision-making and saves management time. These arrangements only work because they are under-girded by a clear purpose that makes expectations known to all and can be translated into team-level goals and associated metrics from top to bottom. They permit employees from various parts of the organisation to speak the same language and ensure that teams, however autonomous, remain aligned with its overarching goals[91].

Figure 5:

Important factors for investment selection and important qualities in a management team



Source: Strebulaev and Dang (2024).

Finally, purpose can make employees feel more comfortable in the types of engagement that mitigate collective, organisational overconfidence[92]. Over the past decade, numerous studies have highlighted the benefits of psychological safety in the innovation process - the belief that one can express ideas, raise questions and admit mistakes without fear of ridicule or retribution. A high-profile example is Project Aristotle, the ambitious multi-year study at Google that sought to answer the question: 'What makes a team effective at Google?'. Running over 35 different statistical models on hundreds of variables, it found that psychological safety was the decisive factor explaining why some teams outperformed others. Other behaviours like completing work on time to a high standard and establishing clear roles and goals were also important to team outperformance[93]. However, without team members feeling psychologically safe, these behaviours alone were not enough. Purpose can contribute to what Harvard Business School's Amy Edmondson calls 'psychological safety' by reminding workers of why their work matters and what is at stake in (not) speaking up[94]. This is not a trivial task given the powerful incentives to stay quiet; speaking one's mind involves personal and immediate risks whereas the benefits to the organisation from doing so can seem uncertain and distant[95].

All this speaks to the value of purpose in growth businesses, confirmed by leading venture capitalist Herman Hauser, one of the co-founders of Britain's greatest recent success growth business in the creation of a technology company, the chip designer Arm. In the accompanying box we set out how Arm developed a unique relationship-based, stakeholder-oriented business to anchor and build an innovation ecosystem around it. Trends such as the increasing complexity of products, shortening development cycles, declining research productivity and ever more demanding customers have magnified the benefits of successfully tapping into external sources of know-how and resources. This is particularly important for startups, as external innovation linkages can compensate for limited internal resources in areas like technology, financing and skills[96]. From its founding, Arm's strategy has been to create a variety of partnerships with hundreds of companies, as well as a broader community of developers and other participants. This form of networking has been a crucial source of competitive advantage, particularly in accessing valuable and confidential information. At the same time, as Herman Hauser acknowledges, a foundational pillar in creating these relationship-based partnerships was and is its commitment to purpose.

> *"Most entrepreneurs declare they want to have an impact: that they want to make a difference in the world – the 'why' as they often call it. They have a vision for their company – how they want to have a product that really makes a difference, that makes the world a better place, with a product that makes it easier for people to do whatever it is they choose. So they do have that feeling of a purpose which drives them which they articulate to their staff: we are here to improve the world. Arm has grown into the UK's largest UK tech company. But all along its been driven by a great sense of purpose growing from that vision, enabling it to build the trusted community of users which are central to its business model."*

Corporate purpose does not spring from a vacuum; it is also shaped by cues, signals and by what is going on in the wider world. Narratives have to be grounded in reality. Hauser continues:

> *'Creating such a vision is not done independently of what is happening in the world beyond. When this recent AI excitement broke, it reminded me so much of this microprocessor era nearly forty years ago when we founded Acorn which created the Arm (originally short for Acorn Risk Machine). There was the microprocessor group at the university – Cambridge – that all shared the vision that these microprocessors will allow us to bring computing to the masses, maybe one in every home. You might even remember a BBC programme called, 'When the Chips Are Down', which painted that vision, and that was the inspiration for the Acorn computer that the BBC used to tell the nation about computing. It was an incredibly inspiring era where people believed that microprocessors will change the way we live, and make our lives better. We were all gripped – in the university and the microprocessor group – by an absolute sense of purpose."*

BOX 2:

How startups partner with stakeholders to create value and scale impact - the case of Arm Holdings

Consider the example of Arm, the Cambridge-headquartered chip designer and one of the UK's few homegrown technology successes with global reach. At the date of writing, it was valued at around $160bn. It hit the headlines for choosing a 'US-only listing', provoking what the Financial Times described as a Benedictine bout of self-flagellation in London financial circles. Founded in an old turkey barn in Cambridgeshire in 1990, Arm specialises in the design of high-performance, cost-effective and energy-efficient CPUs. Its designs have shipped in more than 300bn devices across various industries, with a market share exceeding 99% in the smartphone sector. It has also made inroads into the personal computer market and has ambitions to bring the energy-efficient computing to AI data centres that are putting huge strain on existing capacity. Arm operates through licensing its IP to semiconductor companies and original equipment manufacturers (OEMs), allowing them to develop their own proprietary technologies on top of Arm's base while it also collects a royalty on the sale of every chip that uses its design. By licensing the same IP to a multitude of customers, Arm has the ability to charge less than what a customer would otherwise need to spend on chip design.

Critically, Arm has secured this position by fostering close long-term relationships with partners such as semiconductor companies, OEMs, design and software companies and testing service providers – all of which flow from its purpose. This has guaranteed timely access to intelligence about market trends, emerging needs of customers, advancements in product and manufacturing process technologies that can be incorporated into its designs and architecture. As the ecosystem has grown in size and complexity –today it counts over 1000 technology partners, Arm has emphasised a smaller set of 'strategic partners' within each part of the value chain and application segment. The importance that Arm places on each strategic partner is so great that its assigns one of its directors to oversee relations. This has helped top management to balance short-term revenue goals with the longer-term interest in maintaining a genuine partnership, even in sales-oriented relationships involving large Arm marketing and sales teams. Beyond leveraging strategic partners, Arm also maintains less formal channels for knowledge exchange that are more tailored to the needs of the interaction in question.

Underpinning the success of this ecosystem has been the ability to build trust and convince stakeholders that trade-offs will be thoughtfully managed. For example, Arm has been alert to confidentiality issues and any perceived conflicts with its own semiconductor customers, ensuring that that their specific chip offerings are not handicapped by potential modifications to technology roadmaps arising from discussions with OEMs. Through the accumulation of shared history and understanding, partners have come to view these efforts as motivated by the desire to find the best compromise between competing demands, notwithstanding differences in time horizons, stakeholder power and conception of value.

Arm has also signalled its credibility and commitment to a healthy ecosystem by focusing on initiatives to grow the pie. This can be seen in Arm's partnerships with early stage and startup companies where it offers a flexible licensing model, along with design and software tools, and other necessary support to integrate its technology into their products. The rationale is that by reducing adoption barriers to Arm technology and conserving scarce resources, more startups are likely to align themselves with the ecosystem, promising substantial returns should they end up succeeding. This has been a driver of investment in successful purposeful businesses like Simprints that builds low-cost biometric identification systems for people in developing countries without formal identity to access essential services and Amplio that disseminates knowledge through audio technology.

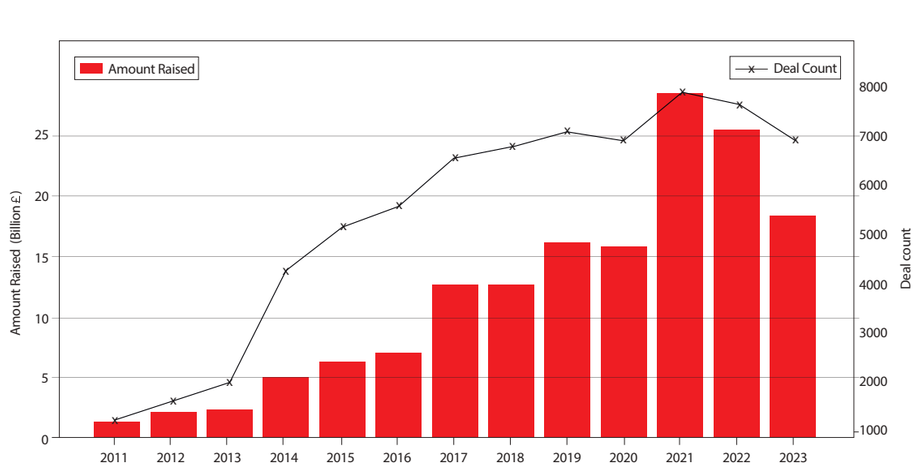
Adapted from Williamson and De Meyer[97].

IV. The shock and opportunity of the private markets

The private markets in which startups and scaleup are necessarily founded and grow have become very large. Globally, private assets under management (AUM) have grown more than thirteen-fold since 2000: from less than $1tn in 2000 to more than $13tn in 2023. By 2033, some predict they will reach $60tn[98]. Globally, the estimated total fair value of all private VC-backed unicorns now exceeds the GDP of the UK[99]. Equity investment in UK private companies, including venture capital and growth equity, has benefited from the same structural tailwinds, growing nearly 20-fold between 2011 and 2021 *(see Figure 6).* This has been accompanied by a spate of deals for companies that are deeply woven into the fabric of our everyday lives. The British Venture Capital Association estimate that in 2023, venture capital and private equity backed businesses employed 2.2 million workers, collectively earning £75 billion, which including their supply chain employees, constitutes around an eighth of the private sector workforce - up considerably since 2000[100].

Figure 6:

Equity investment into UK private companies: amount raised and deal count by year, 2011-2023



Source: Beauhurst (2024).

But for all its growth, not everything private works as it could and should. The numbers of successful startups and scaleups -the focus of this paper and a distinct part of the private markets universe- must be qualified by recognition of the failures that have disappeared from the records, or of the lucky breaks without which success would never have happened. This is especially true of startups that have sometimes grown fast – but in ways that quickly prove unsustainable. It is also difficult to ignore the real-world problems, from toxic workplaces to the mistreatment of stakeholders to Potemkin village fake business models to cases of raw illegality at unicorns. Well-known, largely US examples include WeWork, Theranos, FTX, Zenefits, SoFi, Jumio, Uber, Airbnb, LendingTree, among others. In Britain online bank Starling Bank in September 2024 was fined £29 million by the FCA for its 'shockingly lax' controls against crime.

It is an open question whether these cases are exceptional or evidence of something more systemic as private markets become larger and host to ever larger companies. The sheer size of these new private companies means that any failure, regardless of their cause, can have significant ramifications for the rest of society. This is especially true for unicorns operating in new or disruptive sectors where regulatory institutions are incomplete or evolving, and even successful innovations experience missteps and setbacks along the way. For example, artificial intelligence has the potential to deliver significant economic and societal benefits with a seemingly boundless number of uses[101]. However, alarm bells have been ringing for many concerned about the proliferation of AI risks, including job destruction in labour markets, income inequality, the loss of human connection and privacy, and its corrosive effects on political discourse and democratic institutions[102]. The tumult at OpenAI, the startup behind the generative AI tools ChatGPT and DALL-E where the CEO was abruptly fired following a breakdown of trust with the board and then reinstated by a new board behind a veil of secrecy, lends credence to the view that control over the current path and future direction of AI, for all its possibilities, rests in the hands of a narrow few[103].

BOX 3:

Profit and purpose: the case of OpenAI

Despite a crowded field of companies developing AI models and a recent pullback in public markets, new startups in the sector continue to command eye-popping valuations. Startups occupy a commanding position in shaping the future of AI development, equipped with the talent, capability, and, increasingly, the resources to drive innovation. However, there is a growing belief that this privileged role carries a special responsibility to ensure that AI development and deployment serve the public good and adhere to ethical standards[104].

OpenAI, with its cutting-edge AI models like ChatGPT, has been a lightning rod for these issues. It was established in 2015 as a nonprofit with the goal of building safe and beneficial artificial general intelligence for the benefit of humanity. In 2019, OpenAI faced the realisation that achieving its ambitious goals would require substantial financial backing. This led the organisation to adopt a capped-profit model, establishing OpenAI LP. Under this structure, investors could receive returns up to a certain limit (capped at 100x their investment), while excess profits would be reinvested in further research and the pursuit of its mission. Investors have also been required to sign up to an operating agreement that states 'It [is] wise to view any investment in [OpenAI's for-profit subsidiary] in the spirit of a donation' and that OpenAI 'may never make a profit'. Finally, OpenAI's founding charter states that it will not use its AI to 'concentrate power'.

A key element of this model is the oversight provided by OpenAI's nonprofit board. This board is made up of independent members with a fiduciary responsibility to prioritise the safety and ethical development of AI over profit. It enjoyed significant control over major decisions, such as approving mergers or changes in company direction. It was also responsible for setting the boundaries on how OpenAI LP operated, acting as a safeguard to prevent conflicts of interest or profit-driven motives from overshadowing its broader mission.

This shift served as a catalyst for additional funding. In 2019, OpenAI secured a $1bn investment from Microsoft, followed by an additional $10 billion in 2023, providing both financial support and access to powerful cloud computing resources essential for training large AI models. In return, Microsoft gained exclusive licensing rights to the OpenAI's GPT-3 while also becoming its exclusive cloud provider. However, it also led to angst and uncertainty about the organisation's direction and the risk of mission drift. In 2022, a group of leading researchers, concerned about the seemingly headlong rush to commercialise technology before adequate safety measures were in place, left to establish a rival AI venture called Anthropic.

Simmering tensions within OpenAI erupted dramatically in late 2023 when the company's board unexpectedly ousted co-founder and CEO Sam Altman. The shocking and abrupt move stemmed from concerns about his leadership, particularly regarding transparency and honesty in key decisions, including the company's safety protocols. The takeover lasted just five days, as mounting pressure from OpenAI's influential investors, supporters, and employees forced the board to reinstate Altman, with a new board replacing the one which fired him and Microsoft receiving an observer, non-voting seat on the board.

OpenAI has undergone significant internal and organisational changes to adapt to increasing complexity and demands. It has hired a deep bench of technology executives, disinformation experts, and AI safety researchers. However, it has also experienced a high turnover of employees. Of the 13 people who helped found OpenAI, only three remain. Some of this churn is par for the course as startups scale rapidly.

In Silicon Valley, churn is a constant, particularly when companies miss profit targets and jeopardise option packages.

But it is not the sole reason. OpenAI has parted ways with numerous employees who either challenged management or were more focused on pursuing advanced research than building a conventional tech company. This includes chief technology officer, Mira Murati, chief scientist and co-founder Ilya Sutskever, along with members of OpenAI's now-dissolved 'Superalignment' team, which had been tasked with ensuring that AI remained aligned with human and societal values. As one departee observed 'Safety culture and processes have taken a back seat to shiny products'[105].

This occurs at a critical moment, as the rapid growth of OpenAI and other startups is generating significant externalities while operating in a largely unregulated space. AI companies have faced industry opposition and lawsuits from several news organisations over the unauthorised use of published work to train their models[106]. There is limited transparency regarding the data used to train foundation models, their processes, and their downstream impact on stakeholders. Indeed, even the developers of these models can struggle to fully understand their inner workings and results.

The political and economic terrain on which these skirmishes are being fought is much broader, encompassing anxieties about the potential existential harms of very powerful AI systems. These fears were underscored in a 2023 open letter signed by over 27,000 people, calling for a moratorium on AI development. OpenAI itself has acknowledged the growing risks associated with its latest models, which boast improved reasoning capabilities but have also 'meaningfully' increased the potential for misuse, including in the creation of biological weapons[107]. There is mounting evidence that these models possess the ability to deceive humans in ways they have not been explicitly trained to do, offering false justifications for their actions or framing their behaviour in a more benign light than it truly is[108].

Capital needs remain substantial as the company continues to scale its operations, with annual revenues surpassing $2 billion. As of August 2024, ChatGPT boasted over 200 million weekly users—double the number from just nine months before. As well as upgrading and refining its large language models, OpenAI is investing heavily in new types of models, which are capable of delivering advanced reasoning capabilities, including performing long-horizon tasks (LHTs). On some estimates, OpenAI is spending $7bn each year and could lose as much as $14bn in 2026[109].

It is against this backdrop that OpenAI recently closed a massive $6.6bn funding round, bringing the company's valuation to $157bn. To make the company more investor-friendly, it announced plans to restructure its core business into a for-profit public benefit corporation (PBC), which will no longer be controlled by its non-profit board. Speculation is also growing that OpenAI might scrap a key clause blocking Microsoft, its largest investor, from accessing its most advanced models once 'artificial general intelligence' is achieved. Originally designed to prevent the misuse of such groundbreaking technology and keep ownership under OpenAI's non-profit board, the clause is now seen as a barrier to unlocking billions in potential investment[110]. While it still retains an independent not-for-profit entity with a stake in the PBC, these moves are likely to have significant implications for how OpenAI manages AI risks and balances commercial and social logics in the new governance structure.

It remains an open question how these issues will unfold. One scenario envisages a possible disengagement from responsible AI research as new governance structures incentivise scientists to prioritise more profitable strategies[111]. However, this is not guaranteed. The extent to which OpenAI integrates responsible AI research into its commercial innovations will depend on its ability to attract and manage long-term investors aligned with its responsible AI goals. Given that shareholders have diverse objectives, this scenario is not inconceivable and is consistent with research showing that managers often have more latitude and influence over these matters than is commonly assumed[112].

Nevertheless, the challenge is significant, leading some to advocate for alternative governance models, such as those at Anthropic, or more open-source approaches that emphasise transparency, openness, and broad stakeholder participation. Others go further, questioning whether self-regulation is even feasible, given the complex web of power dynamics and competing incentives involved.

For most of the past century, these risks were effectively marshalled and contained by the public-private divide in corporate and securities law. This divide established two distinct regulatory spheres: a 'public sphere' involving substantial regulatory, disclosure and compliance burdens for publicly-listed companies wanting to raise capital from ordinary investors and a lightly-regulated 'private domain' where privately-held companies raised capital from sophisticated investors who were presumed to be capable of fending for themselves. In the UK, for example, Listing Rules and many provisions in the FCA's Disclosure and Transparency Rules applied only to listed companies. Moreover, various 'super-equivalent' measures in the Listing Rules such as adherence to the UK Corporate Governance Code were historically restricted to premium-listed companies, which had the sole right to be included in well-known FTSE-indices[113].

To a large degree, this divide proved its worth and withstood the test of time, aligned as it was with firms' observed behaviour and lifecycle needs: for many startups, going public via an IPO was the promised land, the main way to exit or raise substantial capital whereas private status was a staging post on that journey.

This meant that as firms grew and deepened their footprint on society, so they were brought into the orbit of public markets and along with it greater disclosure and transparency. For companies that might had gone through the immaturity and excesses of youth, the process of preparing for an IPO constituted a rite of passage, signalling they had grown up and were now ready for the responsibilities of corporate adulthood, including its 'publicness' and 'social license'[114]. Where this was not done adequately, public market investors might refuse to buy into the offering with serious consequences for VC returns, as was arguably the case with the IPO of food delivery group Deliveroo in 2021 when large fund managers shunned the listing due to ESG concerns over future potential legal and regulatory risks posed by the poor pay and working conditions of the company's riders.

Today, many legal academics and commentators worry that this divide is losing coherence. Capital markets have changed fundamentally over the last two decades due to regulatory reform, technological change and market trends, notably the rise of private capital[115]. The result is that firms have much less need to go public to finance growth -and when they do go public, they are older and have raised more private capital than in the past. For instance, the rise of asset-light business models and introduction of new technologies such as cloud computing, removing the need for large fixed upfront investments in hardware, has reduced the amount of capital startups need to raise early on and accentuated the trend. In 2002, the total sum of private equity capital invested in VC-backed startups raising a Series C or higher round was $14.2bn in the US; fast forward to 2019, this figure had surged to $80bn. It is no coincidence that venture capitalists now refer to later financing rounds as 'private IPOs'[116].

In the UK, a similar pattern has emerged. Companies are much larger when they go public, as reflected in market capitalisation at IPO. This can be seen in the figure below where there was a general upward trend in average market capitalisation from 2012 to 2021, with some fluctuations *(see Figure 7)*.

Figure 7:

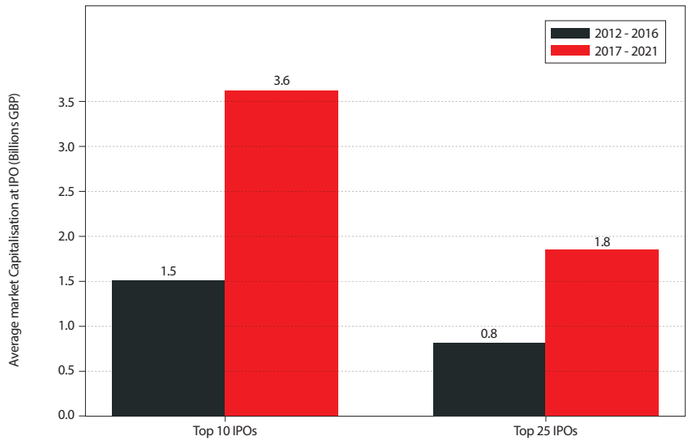
Average market capitalisation at IPO, UK companies, all exchanges, 2012-2021

Source: Beauhurst (2024).

Among the ten largest IPOs in the period 2012-2021, it is notable eight took place in the second half of the decade (2017-2021), led by Wise, Deliveroo, The Hut Group, FarFetch and Oxford Nanopore[117]. The combined value of the top 10 IPOs that took place in this period represented approximately 46% of the total value of IPOs over the decade. A similar trend is evident when comparing the average market capitalisation of the largest IPOs across the two periods *(see Figure 8)*[118]. While some of this increase can be attributed to changes in macroeconomic conditions, exit opportunities, and rising valuations, it also reflects the trend of private companies growing larger before going public, underscoring the significant growth happening in private markets.

Figure 8:

Average market capitalisation of top 10 and top 25 IPOs: 2012-2016 vs. 2017-2021



Source: Beauhurst (2024).

In unpacking these changes, attention has turned to the impact of 'over-governance' of listed companies. The recent Hill Review admonished the UK's listing framework, suggesting it had weakened the London Stock Exchange's (LSE) competitive standing relative to other global exchanges by not attracting listings of the 'companies of the future' and explicitly stated that the listing regime was 'overly-complex', made up of 'unnecessary and burdensome requirements'. It is nonetheless open to question how far rising regulatory costs of becoming and remaining a public company are specifically to blame for these trends. Chief executives of large, publicly-traded firms understand and have largely accepted that 'jumping through hoops' is par for the course of running a listed company. The regulatory cost hypothesis has also received decidedly mixed support from the evidence. Thus using US data, one research project does find evidence confirming that firms strategically bunch their public floats below regulatory thresholds in order to avoid triggering regulation[119]. Set against that, regulatory costs explain only a small part of the decline in the number of public firms, with a one-standard-deviation increase in regulatory costs associated with a mere 6.5% decrease in the likelihood of an IPO.

Still it would be wrong to dismiss this hypothesis altogether, not least as the UK's stock market decline is even starker than that of its peers[120]. There is no question that corporate governance requirements for public companies, especially premium-listed companies, have increased considerably since the promulgation of the Cadbury Code in 1992. In recent years, the Code has ventured into broader areas, particularly in relation to stakeholders[121]. Among other things, the growth of the Code over time may have contributed to changes in board composition, leading to the recruitment of generalists and compliance-focused directors at the expense of those with specialist expertise[122].

At the same time, much of the vaunted flexibility in the Corporate Governance Code's comply-or-explain framework has turned out to be more apparent than real insofar, as many companies have settled for full compliance and the path of least resistance reflecting an investor preference for 'box-ticking'. This trend seems to have pressured companies into adopting one-size-fits-all governance arrangements that are not tailored to their specific needs and circumstances[123]. Rupert Soames, now President of the CBI, was on record in 2021 as declaring that a 'tipping point' may soon be reached when a 'critical mass of companies say 'enough is enough' and absent themselves from public markets'[124].

Whatever the precise cause, the blurring of boundaries between public and private markets is raising questions that policymakers, researchers and market participants are only beginning to address[125]. One legal scholar, George Georgiev, writes of a 'regulatory paradox' where 'it is possible today for two firms that are identical in virtually every respect -business model, size and scope of operations, enterprise value, access to capital, number of shareholders, number of employees and so on- to have widely different regulatory obligations'[126]. This view is shared by industry executives such as Cyrus Taraporevala, President and CEO of State Street Global Advisors[127]. The unmistakeable undercurrent to these observations is that some companies are able to avoid the obligations of 'public' status despite their considerable size and impact - in effect, remaining in an eternal corporate Neverland[128].

Needless to say, these trends are a matter of degree, not kind, since companies have always enjoyed a degree of control over when to go public. Similarly, there is limited evidence so far that companies are entirely avoiding IPOs. Rather they are opting to stay private for longer, not forever.

Moreover, the UK is well ahead of the US in extending transparency and disclosure requirements to private companies[129]. This is evident in domain-specific areas like climate risk and impact disclosures, which now partially cover large private companies, and is also reflected in broader trends. For example, the 'Wates Corporate Governance Principles', published by the FRC in 2018, is an official acknowledgment that higher governance and reporting standards are required for large private companies. It is made up of six high level principles to help the largest private companies -more than 2,000 employees or a turnover of more than £200 million and a balance sheet of more than £2 billion- fulfil a new requirement to report on their corporate governance arrangements (The Companies (Miscellaneous Reporting) Regulations 2018). It covers areas such as purpose and leadership, board composition, director responsibilities, opportunity and risk, remuneration and stakeholder relationships and engagement. Companies that apply these principles are expected to explain, in their own words, how they have been implemented in their particular circumstances.

These differences should be acknowledged, but they should not be exaggerated. Given their voluntary nature, it is at least questionable whether such principles have much bite. The Institute of Chartered Accountants in England and Wales describes them, at best, as a 'placeholder pending changes to the broader landscape', suggesting that they may be revised sooner than planned[130]. Although there has been some improvement over time, boilerplate disclosure is still commonplace and there is no body to monitor compliance. Adoption rates stand at approximately 30%, and the quality of disclosures within this group -measured by the provision of meaningful, context-relevant information on behaviour- varies widely ranging from 23%

for purpose and leadership to 45% for risks and opportunities[131]. Perhaps surprisingly, given their stated ambition, the principles are designed to be applicable to all companies. This broad scope may have resulted in lower and less appropriate expectations for large private companies and principles reduced to their lowest common denominator.

These caveats aside, trends have reached the point where not only are substantial net costs on being incurred by listed companies and stakeholders, but lack of disclosure is causing problems in the private markets. To date institutional investors have been left largely to accept the risks, deemed to be operating with their eyes wide open in private markets, although it is worth noting that UK institutional investors are underweight in illiquid ,unquoted, high risk assets compared, for example, with their Australian and Canadian counterparts. Growing concerns have been expressed by investors themselves that efforts by policymakers to increase the volume of investment funds directed towards private markets to support the growth of young innovative companies may fall of their goals unless they additionally address the risks, costs and lack of opacity associated with private markets[132].

This is reinforced by employees' reasonable expectations. Rank-and-file employees have every reason to expect access to the same quality of information available to their counterparts working in listed companies – especially if they are being paid partly in stock options. Professor Elizabeth Pollman, co-director of the Institute of Law and Economics at the University of Pennsylvania and leading expert in US private markets, draws attention to the debate in the US.

> *"Some observers have raised concerns about stakeholders. I don't think we need to worry about founders or venture capitalists in these situations. They can fend for themselves. Rather the focus is shifting to the impact on startup employees. They may not be getting the sorts of information that they need to make decisions about their equity compensation, which can have important tax implications. The quality of disclosure to employees is becoming an increasingly salient issue."*

Implicit in this critique is that the current disclosure regime disproportionately benefits investor audiences at the expense of other stakeholders[133]. While public markets are beginning to correct this imbalance through the adoption of concepts like double materiality, the same is not happening or being demanded of companies in private markets. This can have a far-reaching impact – witness the troubling practice of brown-spinning, describing how some public companies offload their carbon-intensive assets to players in private markets. This practice allows publicly-traded firms to cut their emissions and meet climate goals under the watchful eye of investors, regulators, and the public. However, if these divested assets continue to be managed in the same manner—or with even less regard for the impact of externalities—by their new private owners, the overall greenhouse gas emissions from these assets will, at best, remain unchanged and, at worst, increase substantially[134].

Another consideration is that the more companies grow in private markets, the harder it is for smaller retail investors - who currently have easier access to investment opportunities in public markets - to diversify their portfolios and share in their growth, potentially undermining popular support for pro-business policies[135]. One calculation dramatises the impact. If, for instance, Amazon, Google, and Salesforce had remained private in today's environment with an average stay of twelve years -compared to just over three years in 2000- private investors would have lost out on an estimated $197 billion in potential additional capital growth[136]. By contrast, today, there is a prevailing belief that by the time companies go public, most of the growth has already been realised and the best returns have been squeezed dry. Whether this is a valid concern or more of an emotional reaction, it has not been assuaged by the poor post-IPO performance of many companies and the inclusion of secondary share sales in IPOs, where existing shareholders often sell their holdings *(see Figure 9)*[137].

Figure 9:

Post-IPO share performance and role of secondary issuances in the UK and US

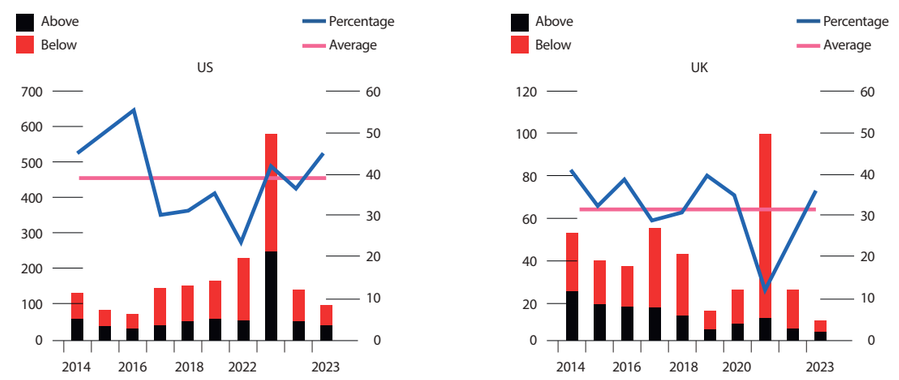
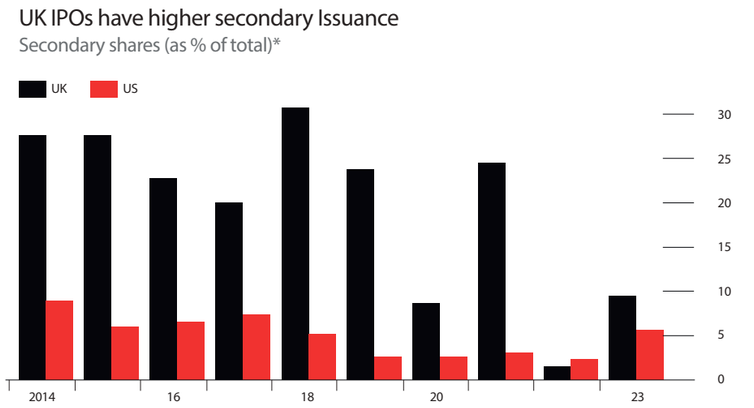


Figure 9 (continued):



*Notes: *Only includes deals with secondary shares. Source: SSP Capital 10; FT Research (2024).*

There are other reasons to think that the current divide is unstable and potentially unsustainable. Private companies have flourished in part because they have been able to free ride on the information contained in public company stock prices and disclosures. This information can shine light on everything from business models, financing terms, executive compensation and relationships with customers and suppliers. The financials or trading values of public firms can serve as benchmarks for valuation, which can reduce private firms' cost of capital relative to a setting where such benchmarks are not available. Given its value, it is not surprising that in the US nearly 40% of firms undergoing an IPO opt to redact information from their SEC registration filings, even it means experiencing greater under-pricing[138]. In effect this information amounts to a considerable de facto subsidy to investors, potentially enabling more capital to shift to private companies and away from public companies[139]. Indeed, public companies may find that their own costs increase if they are forced to police their value chain partners and clients to negotiate and obtain the data they need for their own disclosures[140]. They have no interest in participating in or indulging this activity as they themselves compete for funding, and it is not implausible that they may respond by delisting or not going public in the first place - in the process, weakening the high quality information environment on which private companies and the rest of the economy depend[141].

All these arguments highlight that the growth of private markets, and the size to which scaleups now can grow – both welcome and crucial to economic vitality – also mean that it is essential to find the right relationship with public markets. Equally the startup and scaleup universe, now larger than in the past , is also vulnerable to specific behaviours that could harm stakeholders, evident in high-profile scandals and the dizzying rise and fall of several now well-known private companies. This damagingly leaves the costs of the cleanup work to others, and the associated breaches in trust undermine not only the confidence of investors but wider faith in capitalism.

These cases certainly make for good storytelling – witness the articles, books, films, podcasts, comedy routines, and even Halloween costumes they have spawned. But they do not tell us whether the problems identified are generalisable to most or many other similarly situated companies. To this end, there are several factors that can create an environment that is conducive to bad or behaviour betraying purpose[142]. After all startups tend to be unprofitable for many years, teetering on the brink of insolvency and placing managers under intense stress. This is reinforced by the venture-backed business model which recognises that the majority of investments will fail, but a few will succeed on such a scale that they more than make up for everything else. Emphasising this point, Bill Gurley of Benchmark Capital has remarked, 'Venture capital is not even a home run business. It's a 'grand slam business'[143].

The pressing need to survive, followed by pressures to scale up, can lead to a fixation with growth at all costs. There is nothing wrong with this approach and related strategies such as blitzscaling, but there are risks and pitfalls in assuming rapid growth is the salve for all business problems. Where they are not appropriate for a given market or technology, firms may be saddled with unrealistic targets and the temptation to take unnecessary risks, cut corners or even engage in unethical behaviour. A particularly dramatic American example is Theranos, a company that claimed it could diagnose hundreds of diseases using just a few drops of blood, while concealing from the market that its testing technology was largely useless and unreliable in nearly all cases[144]. Strains of related behaviour are diffusely present in other examples. Young biotechnology firms specialising in cancer treatment, for example, are much more aggressive than established firms in bringing their drug candidates forward from Phase I to Phase II clinical trials, one study finds, even though those drugs are much less promising[145]. Managers and shareholders of single-product early stage firms are reluctant to drop their only viable drug candidates and, as Josh Lerner of Harvard Business School warns, they may feel the temptation to take shortcuts in trials in order to impress investors and maintain a high valuation[146].

Condemnation of such behaviour is easy, but as Donald Langevoort and Hilary Sale describe in an insightful paper 'Corporate Adolescence: Why did 'We' not Work', the hothouse atmosphere and intense pressures under which startups find themselves needs to be understood. Analysing the shortcomings and decline of the once growth star WeWork as a example they argue that dissembling in such circumstances and falling into self-deception and then the deception of others is almost rational – explained away as the price to be paid for much desired success.

They write:

> *"The temptation to dissemble in such high-stakes, high-expectations environments would be natural for most people and most organizations. 'Motivated inference' is the general phenomenon by which people exploit the moral wiggle-room of ambiguity about both reality and expectations—reality in terms of the enterprise being pitched, expectations about what to say or do (or not say or do). Early stage ventures reek of uncertainty, which can support inflated optimism that may be in good faith, but not necessarily warranted. Gradually, and down a very slippery slope of self-deception along with the deception of others, representations about the venture's progress take on a life of their own. If there are conscious doubts about the project in its early stages, ambiguity about disclosure norms can provide comfort. Many people feel justified in leaving out troubling details from a statement otherwise technically true, even though half-truths are fraudulent as a matter of law. This is where the perception (if not reality) of prevailing norms can be summoned to duty for good cause, project success. Some version of 'everyone does it' enables those with brilliant hopes and dreams to fake it with the expectation that all will be forgiven or forgotten when they make it"*[147].

Professor Elizabeth Pollman adds an additional caution. Even firms committed to purpose, unless very carefully framed and embedded throughout the organisation, may find the intense trading pressures push them away and towards growth at all costs, with the risks that entails.

> *"If the startup is creating an aggressive, envelope-pushing environment that is focused on growth, and if purpose is cast in vague terms, just a mission statement that is not embedded in the organisation, ultimately the purpose commitment is not going to matter. It will be trumped by the demands of growth"*

A 'move fast and break things' mindset is often paired with other high-risk strategies in the pursuit of winning the prize. This includes venture predation-using massive VC subsidies to price products below their costs and drive competitors out of the market and regulatory entrepreneurship -a willingness to ignore or even flout the law with the aim of creating facts on the ground and forcing the hands of lawmakers[148]. Much desired 'grand slams' and 'blitzscaling' often only come through creating networks effects that reduce or eliminate competitors, increasing the risk of monopoly.

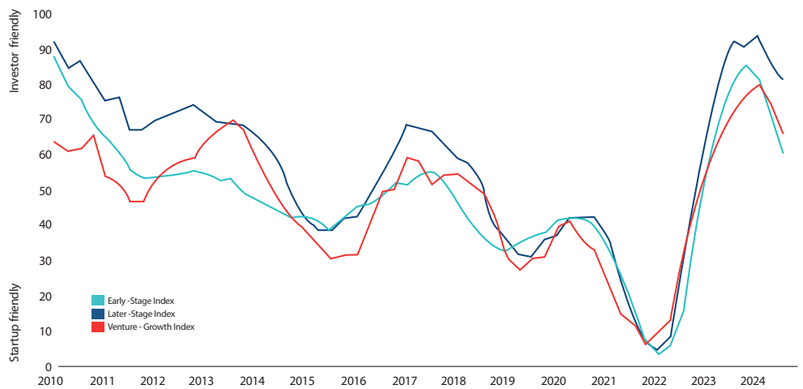
A good example is Uber which racked up heavy losses for years as it waged a price war against taxi companies and wrestled with drivers, localities and regulators over contested interpretations of regulations related to tax, licensing and classification of employees for the purposes of employment protection[149]. This is so-called 'permissionless innovation'- entrepreneurial startups challenging regulations in the name of innovation to create a mindset they are outmoded and should be discarded. They are merely anticipating a process that needs to happen anyway. There is evidence that entrepreneurs are temperamentally disposed to be self-confident rule-challengers, often with a history of even illicit behaviour[150]. Protagonists of this approach to innovation, often supported by a public sympathetic to the notion that startups are a force for good and ready to give them benefit of the doubt, portray this as a healthy and useful dynamic: critics that it fundamentally undermines the democratic process and universality of regulation and law[151]. It was Steve Wozniak, the co-founder of Apple, self-acknowledged hacker of telephone systems early in his career, who observed "... I think that misbehaviour is very strongly correlated with and responsible for creative thought"[152]. A precondition for creativity may be based on a proclivity for misconduct, but even for sceptics of the claim and many doubt whether the trait is universal, it raises the stakes on corporate governance concerns[153]. Who has power in a startup? What are the checks and balances?

For the first line of defence against misconduct is good governance - and venture capital has traditionally driven a hard bargain when it comes to negotiating control rights and providing oversight and discipline[154]. However, concerns have been raised about the apparent decline in active corporate governance by venture capital funds[155]. With intense competition for venture deals, driven by the fear of missing out and low interest rates, investors have sought to outbid one other by extending increasingly generous terms to founders. Founder friendly' terms, such as dual class share structures, have proliferated in recent years. Dual class stock permits founders to hold shares to which are attached enhanced voting rights - in many cases, granting holders ten and even one hundred votes per share, while other shareholders own shares that enjoy lesser, or no, voting rights. Positively, under the right circumstances, this can allow founders to entrench purpose, long-term strategy and values – but negatively it transmutes some founders into 'unconstrained monarchs' and opens the door to potential abuse and the destruction of value.

Separating out the cyclical and structural drivers of this trend is tricky. One reading is that the balance of power between founders and investors is simply a function of macroeconomic and credit market conditions. The figure below shows how in the decade up to 2022 deals became progressively more startup friendly as interest rates stayed low and capital abundant, but as credit conditions tightened in the wake of the Ukraine war and associated inflationary pressures, the balance of power shifted back to investors *(see Figure 10)*. It remains to be seen whether this trend will continue or reverse amid rising uncertainty about the future path of inflation and interest rates and widespread investor excitement for AI[156].

Figure 10:

Founder vs. Investor Friendliness (September-end 2024)



Notes: The VC dealmaking indicator quantifies how startup-friendly, or investor-friendly, the capital raising environment is, based on factors such as the supply and demand of capital, board voting rights and valuation step-ups.

Source: Pitchbook (2024).

On the other hand, the decline in governance may have deeper structural roots and prove more enduring. For example, some studies highlight the falling costs of starting a new business and the concomitant shift to a 'spray and pray' investment approach - where early-stage investors make a larger number of smaller bets in order to learn about the potential of a venture but which means that each venture receives only modest funding and bare-bones governance. Along with the growth of mega-funds, VC investors sit on an increasing number of boards, so resources dedicated to governance are being spread more and more thinly, diluting standards[157].

Others view founder-friendly terms as part of the implicit bargain offered by VC investors to persuade founders to pursue more high-risk strategies. VC returns depend on exponential growth from one or two outlier companies while founders may be less willing to gamble as much since they are risking everything – career and savings - that cannot be diversified. To compensate founders for this risk exposure, investors provide them control rights and the associated private benefits that flow from control[158]. Finally, weak oversight can stem from conflicts or misalignment of interest that occur not only vertically among founders, boards, and investors but also horizontally among various equity holders, many of whom occupy overlapping governance roles[159].

Intensifying these structural trends is the huge influx of money into the startup space from less traditional sources like mutual funds, sovereign wealth funds and listed companies, which we detailed at the beginning of this section and which show every sign of growing. These new sources of funding compete with traditional VCs for deal flow, but take a passive approach to governance or, at the very least, prioritise other objectives such as securing a path to liquidity, reflecting the more short-term nature of the capital that they have raised from investors[160].

This matters because voice has traditionally done most of the governance heavy-lifting in a startup context. By contrast, exit is a much less developed governance mechanism, not least because there is limited capacity to trade private company securities[161]. Despite the emergence of new platforms to facilitate transactions in private market securities in recent years, markets remain relatively illiquid, opaque and low volume – although the London Stock Exchange is launching PISCES (Private Intermittent Securities and Capital Exchange System) in May 2025 as a mechanism for private companies periodically to trade shares – but not issue new shares or bonds – to partially address this issue in the UK[162]. As a result, actors can struggle to get a handle on the value of companies. This challenge is compounded in a startup context where VC-backed companies typically create a new class of equity each time they raise money –each with a different set of cash flow and control rights[163].

A related problem is that new rounds of stock issuance - say every 12-24 months- are infrequent between which time there might be no trading activity, even as new material information is coming to light about the company. Even when trading takes place, companies largely control the extent to which their shareholders can participate, limiting the level of scrutiny that would otherwise come with robust trading. At the same time, as highlighted above, private firms face fewer disclosure obligations than their public counterparts that are further insulated by norms of silence among VC investors who generally keep their investment decisions private and seldom publicly criticise startups. The result is to limit the ability of market actors - short sellers, analysts and financial journalists - to use and profit from negative information about the company to arrive at the right price for its stock, weakening incentives to discover and reveal misconduct which might deter such behaviour in the first place[164].

V. Whither the public-private divide?

Numerous recommendations for reform have been put forward to tackle specific challenges both within the private markets and between them and the public markets. Proposals include special disclosure regimes for the largest private companies, enhanced disclosures for startup employees, facilitating private company share trading, stronger whistleblower protections, and more dedicated resources for monitoring and compliance in private markets. These proposals share the common goal of bringing private markets in closer alignment with public markets.

None of the options are cost-free and are loaded with trade-offs – a point that emerged clearly during our interviews. Certain aspects of private markets that appear detrimental can actually be beneficial, depending on the stage of a company's growth and development. Thus the secrecy in private markets that enables firms to incubate innovative products and services away from the prying eyes of competitors also can allow non-purposeful behaviour to grow and spread. However, at the same time it also recognises that complex, technological and proprietary information does not always transmit well to outside audiences, such as dispersed shareholders – and secrecy thus helps capture the most value from their innovations[165]. Take Moderna, which was frequently criticised for its secretiveness and reluctance to share data proving the efficacy of its mRNA therapeutics[166]. Despite this, the company ultimately emerged as a key player in the fight against COVID-19, with a leading vaccine and a promising drug pipeline, including cancer immunotherapy. Would increased disclosure and compliance costs have infringed on this valuable contribution?

Equally restricting trading in private stock to avoid price manipulation comes with parallel costs and benefits. Restricting trading may impair price discovery and reduce valuable scrutiny, but weakening the flow of price information in turn weakens the high-powered incentives to work as hard as possible to make the company successful. Professor Elizabeth Pollman points to the tensions between offering startups the room for manoeuvre that permits innovation and growth with the risks of misconduct and at the limit fraud. Markets, startups and regulators walk a tightrope:

> *"Startups benefit and even thrive in many ways where they have more room to manoeuvre with less regulatory costs, supported by the more nimble set of investors that are part of the startup universe. That allows for them to pivot, to try to scale faster, to make other sorts of changes to the governance and business as it's going through its life cycle, facilitated by staying private. But while less stringent regulatory enforcement and scrutiny can facilitate rapid growth and innovation, it can also create a space where you can see misconduct. So we see trends in the US towards certain cultures in startups, some good, some less than ideal."*

All this suggests that while policymakers should be aware of the need to act they need to tread carefully - not being ideologically pro or anti regulation in principle, and to make interventions where material stakeholder interests are affected. Consider proposals to revise the Wates Principles: a stronger emphasis on tiering would leave most private startups unaffected, preserving important space to innovation, while more demanding principles are applied more selectively on the basis of a company's size, complexity and risk level[167]. Another option – consistent with this approach- might be to pare down the principles in terms of reporting to shareholders and focus on the most critical areas –notably stakeholder relationships and engagement. Less may be more[168]. Professor Bobby Reddy, while not an apostle of deregulation in principle, firmly takes this view:

> *"I would argue most of the Wates principles, for example on board composition, should be left to companies and only one , the provision on stakeholder requirements retained. If we think that board composition, in terms of independent directors et cetera, is something really important that society or the general public should know, then it should really be a mandatory disclosure and not something under this comply-and-explain regime, which is really focussed at shareholders".*

If society wants to prohibit some behaviours, then, argues Reddy, policymakers should have the gumption to legislate rather than rely on a voluntary code. After all misconduct or a readiness to pass on costs the company should pay to others – so-called externalities- are general phenomena not confined to startups and private markets. Publicly listed companies have frequently found themselves at the centre of significant controversies, including environmental pollution, bank bailouts, and public health disasters like the opioid epidemic. That said, startups, due to their inherent nature and business models, present a distinct set of risks and uncertainties for stakeholders. That said, startups, by virtue of their inherent nature and business models, present a distinct set of risks and uncertainties for stakeholders. Unlike more established companies, they occupy a unique position at the crossroads of innovation, experimentation, and rapid growth, which can introduce novel risks and unforeseen impacts that may not be immediately apparent[169]. As a result, these risks are often harder to detect, and their ethical boundaries more indeterminate.

There is also uncertainty about the scale of the benefits associated with the mooted changes. Again the grass is not always greener on the other side of the divide. Enron, Worldcom and Parmalat, still cast long shadows along with more recent scandals such as Volkswagen and Wirecard; all serve as a stark reminder that public market regulation and accounting rules have their limits when it comes to preventing corporate fraud[170]. While counterfactuals are impossible to test, there are arguments about whether better disclosure would have prevented Uber's toxic workplace culture, or whether what did the job better was changing societal norms and the power of movements like MeToo in fostering accountability[171].

The same is true for Theranos in light of the company's concerted efforts to deceive all manner of gatekeepers. Would more robust tradability of unicorn shares have brought Theranos' fraud to light faster? One suggestion is that market actors could have bet against Theranos by shorting a biotech sector ETF or Theranos' business partners like Walgreens, or going long in its main competitors in the diagnostics space but failed to do so. But this claim seems unconvincing insofar as these 'substitutes' offered, at best, only weak and indirect protection against what folk suspected of Theranos. Even if short-sellers had incorporated them into their trading strategies and profited handsomely, it remains unclear how these trades could have effectively signalled something was awry at Theranos, as there could be multiple other explanations than fraud. The power of markets to self-correct in circumstances like these is limited.

Others accept the diagnosis of the problem but disagree with its presentation as being too rigid and simplistic. Private and public markets are complementary and interdependent, and their relative position inevitably ebbs and flows with the economic cycle, credit conditions, regulation, tax, agency costs, technology and market enthusiasms[172]. Even though private markets have recently enjoyed their time in the sun, outshining public markets where the number of listed

companies has shrunk, the economic weight of the publicly quoted sector, at least in the US, has remained constant -and even grown- as reflected in total stock market capitalisation, profits, revenues, investment and employment. This is partly because the firms listed on today's stock market are larger than in the past, driven in part by the acquisition of ever-larger private companies[173]. In effect, many private firms may be going public through the backdoor, via acquisition.

Private companies can never fully escape the influence of public markets, even if they have no intention of listing. For example, it is shown that private equity (PE) firms increase ESG disclosures when they invest more in companies located in countries where publicly listed firms are subject to ESG disclosure mandates and subsequently align their actions with these disclosures[174]. In order to attract investor capital who could alternatively invest in public markets, PE firms respond to investors' heightened awareness of ESG disclosures - prompted by regulatory mandates- by enhancing their own ESG disclosures.

Even if agreement can be reached on ends, that does not preclude disagreement on means[175]. Even if policymakers agree that a more level playing field is necessary and that certain common requirements for private and public companies are justified to prevent arbitrage, that begs the question of how. As we have seen, reversing even if only partially, the deregulation of private markets to align them more closely with public company regulations is one possibility[176]. Alternatively one might redraw the public-private divide by reducing public company disclosures so that public markets are closer to private markets. Professors Brian Cheffins and Bobby Reddy call this a 'contracting paradigm', giving publicly listed companies more freedom to contract their own governance terms within general principles of disclosure.

In these terms, the thrust of recent reforms, in particular those to revive the faltering listing market, is unambiguously a nod in the direction of Reddy and Cheffin's 'contracting paradigm', scaling back the regulatory and voluntary 'asks'. Reform has proceeded gradually as policymakers have acted to correct obvious failings with practical, if limited scale, initiatives. But, as the Financial Conduct Authority recognises, the cumulative result of all these incremental changes has been noticeable[177]. Consider dual class shares. Historically having a dual class share structure meant foregoing a premium listing with all its advantages – a more restrictive and limited requirement compared to many of the world's most prominent stock exchanges – for example the US, Singapore, Hong Kong, Tokyo, Shanghai, Mumbai, and Toronto. However, following recent revisions, the rules now allow entities like VC firms and sovereign wealth funds to hold super voting rights (subject to a ten year sunset). A similar shift to a contracting paradigm can be seen in the relaxation of the significant Class one transactions and related-party transactions regime in favour of a more disclosure-based approach which supposedly was a deal-breaker for Arm when it decided against a UK listing.

Of course, one should be careful what one wishes for. Many investors have expressed concern that additional flexibilities will open the door for low-quality IPOs and water down investor protection in the London market which is widely considered a precondition for strong equity markets[178]. This is certainly the view of Anne Stewart at Baillie Gifford;

> *"We very much feel that the way to remedy this is not to strip back some quite basic and important investor protections as part of the listing rules. We think that the outcome will not necessarily attract the quality of companies to list in London that everybody wants to see listing here. There's a risk that you get lower quality companies because you've lowered all the bars that you have in place, so that is something that we will be monitoring. As active investors, of course we're better placed than passive funds who have to invest in anything that's in the index. We can pick and choose which IPO's that we invest in."*

This paper cannot settle the debate on dual class share structures which, at times, has been bogged down in a dialogue of the deaf, each side talking past the other even though some major companies use them. The world is second-best and tensions between private and public markets are real. There is limited value in admiring one's own virtue for being the safest market in the world if many do not want to use it. Retaining potentially controversial practices might be necessary to induce companies to go public and subject themselves to more accountability and being responsive to stakeholder interests. The alternative to restricting or prohibiting dual-class shares is not a public market filled with one share, one vote firms, as Berkeley's Ofer Eldar argues, but rather a world where founders maintain control by not going public at all - in the process risking more pronounced and extreme governance failures[179].

As Bobby Reddy observes, the structure and composition of boards is another area where prescriptive regulations may unintentionally deter companies from going public. While having a large number of independent directors in line with the corporate governance code may be suitable for traditional industries like manufacturing, retail, banking, and mining, it is less appropriate for young innovative growth companies, where the quality of independent directors and a deep understanding of the business and its technology are more important qualifications.

From this perspective, he argues that the voluntary Corporate Governance Code, in its current form, has outlived its usefulness and while acknowledging the political realities requires at least radical simplification or even phased out. Proponents of this view do not foresee significant departures from current practices which could unsettle investor confidence. However, it would give companies greater flexibility to adopt governance structures attuned to their own circumstances. An additional benefit would be that policymakers could no longer use the code as a catch-all for well-intentioned policies without expecting meaningful compliance. Instead, they would be compelled to address stakeholder issues felt important directly through law or regulation: and then be held accountable for the outcomes.

BOX 4:

The self-regulatory alternative: governing for purpose

Regulation, often intertwined with the provision of accountability and trust, is not solely dependent on government. Firms can take matters into their own hand. In this spirit, a new generation of unicorns have begun to explore alternative models of governance. With little prodding or pressure, companies like Anthropic and Inflection AI that are at the forefront of generative AI, have incorporated as public benefit corporations (PBCs). The definition of public benefit may be broad and non-binding but it adds a further layer of self-reflection and accountability to company business models and cultures. Directors have always enjoyed plenty of latitude when considering matters that have broader social or environmental implications thanks to the judges endorsing the doctrine that directors have wide discretion over how they manage companies in their best interests. But PBC status sends a clear signal to managers that the law does not stop them prioritising purpose over profit and offers a supportive framework to achieve this goal through various disclosure, reporting and auditing obligations[180].

Still, it is unclear that PBCs have delivered on the initial hopes for a reformed capitalism. The fundamental structure of PBCs preserves extensive shareholder control, meaning that commitment to purpose is only as strong as the readiness of shareholders to uphold it. Stakeholders have no recourse for enforcement, even if a PBC explicitly states its purpose as serving the interests of those stakeholders. Indeed, most shareholders have limited enforcement rights[181]. Standing requirements are prohibitive on any formulation and serve to limit the policing of purpose to institutional investors that, for structural and reputational reasons, may be unwilling to perform this function. Even if these hurdles can be overcome, parties will often be unable to collect damages from the defendant directors due to limited threat of personal liability and strict standard of liability in many jurisdictions.

Recognition of these limitations has led some startups to view PBC status less as a foundational governance standard and more as a baseline for further improvement and fine-tuning. Notably, Anthropic, which was nearing a $60bn valuation at the time of publication, has supplemented its PBC structure with the Long-Term Benefit Trust, which issues a special class of shares called Class T Common Stock. These shares are held by the trustees of the trust and empower them to select an increasing share of the company's directors based on their alignment with the company's purpose. Initially, one out of five directors is elected but this will gradually increase to constitute a majority of the board as fundraising milestones are met. Trustees also have the power to request any information or resources necessary to perform their role, though they are unable to remove the CEO or any other employee. To maintain an adequate balance between independence and a close working relationship with the company, the initial trustees are chosen by the company, but subsequent trustees will be appointed by the trustees. As part of this balancing act, trustees must consider input from company directors and CEO on trustee appointments and serve only one-year terms. Fail-safe measures also allow changes in the scope of trustee powers if a supermajority of the shareholders agrees[182].

Changes in a startup's operating model carry inherent risks and challenges, as evidenced by OpenAI's tumultuous governance history. The journeys of other startups bear their own battle scars. DeepMind, for example, considered becoming an autonomous unit within Google, followed by a 'global interest company' and later a 'company limited by guarantee', a structure common in the nonprofit sector. Some believe that these experiments are bold but ultimately doomed to fail in a system that emphasises short-term results and depends on the priorities of incumbents. However, these efforts are worth pursuing, as they have a role to play in a balanced system of oversight, with safeguards at multiple levels. Successfully embedding purpose in a startup through an element of self-regulation can foster organisational cohesion and a strong culture of innovation, while also offering the flexibility to adapt practices without incurring the compliance costs of sometimes strict top-down regulation.

Conclusion

The core propositions of this paper are to argue that the necessary if insufficient condition for higher growth and productivity is the prioritisation of the startup, scaleup and innovation agenda. And secondly that the pursuit of purpose as business mission is fundamental to the successful startup and scaleup process. In particular:

- Young high growth companies, often operating at the technological frontier, are vital to the growth process. They shift paradigms, create demand for new services and supply chains, generate jobs, challenge incumbents and impart more economic dynamism. Britain is fortunate in that it has generated multiple startups of which 43 have become fully fledged unicorns – third only to the US and China. This is a crucial if insufficient building block in raising productivity and economic growth.
- The evidence is that a precondition for entrepreneurial success, especially in the 'new economy' of tech and intangibles, is a commitment to purpose instrumentally to support the business model. No pitch deck for a startup raising new funds is complete without a problem statement setting out the market need that the technology and business model will solve. Purpose is part of the healthy climate that fosters high growth startups and scaleups.
- Young growth firms need large firms – as markets and suppliers of managerial and technological talent in addition to their ability to leverage economies of scale and support commercialisation efforts. It is thus important to have an appropriate mix of the small and the large, and an important reason why the lack of independent consequential growth companies located in the UK who can act as anchor 'primes' matters.
- The burgeoning private markets have generated more capital for young firms who are staying private longer and growing bigger because the incentives and structures of private markets lean into supporting purposeful founders and their growth objectives which public markets might threaten. But the welcome growth of private markets also raises challenges over lack of transparency and inconsistencies in their regulation compared to public markets which can materially damage stakeholder interests, and act as a disincentive to go for a public listing.
- Compared to the US, British policy makers have so far successfully managed the differing dynamics of private markets, but the position has to be constantly monitored. Nor is the traffic all one way: there are important lessons for the public markets in the energy of the private markets, notably regulatory flexibility, the way boards are well-resourced, composed of individuals deeply knowledgeable about the company's business and growth objectives and the value of having a concentrated base of engaged investors. A public listing should not distract from this culture. If a stakeholder issue is deemed sufficiently relevant, then it should be addressed directly rather than corporate governance take the load.

Britain has some of the elements in place to enable more successful scaleups, and to strike a better balance between listing and acquisition. However to capitalise on the opportunity reforms will need to be implemented across the wider ecosystem. Our subsequent papers examine how the UK's venture capital sector could work better to maximise the country's innovative potential in the broadest band of technologies and entrepreneurs. We also examine the importance of creating a stronger domestic equity risk culture among all our risk capital managers and owners. What new mechanisms, structures and incentives might be devised – and how could the pool of risk capital be grown further? Weaknesses in the wider ecosystem must also be addressed including the effectiveness of British R&D spend, the function of agencies like the British Business Bank and the Business Growth Fund, and the role of public procurement in driving the new economy and growth firms forward. Britain has many of the relevant pieces to become a high growth economy. They must just determinedly and single-mindedly be put in place.

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116. As we will discuss in a future paper, it remains an open question whether reforms, such as the introduction of a new Private Intermittent Securities and Capital Exchange System (PISCES)—designed to allow shares of private companies to be traded in periodic auctions—will reverse or reinforce these trends. Exchanges include London Stock Exchange, AIM, New York Stock Exchange, NASDAQ, Euronext Brussels, Euronext Growth Oslo, Euronext Paris, NEX Exchange, Aquis Stock Exchange, Wiener Bourse AG (n=211). Years 2022-2023 were not analysed since there were too few observations. Source: Beauhurst (2024).

117. This is despite the fact that IPOs in the period (2017-2021) represented 61% of the sample. In 2021, the largest IPO by market cap was Wise (£8bn), significantly larger than the largest IPO in 2012 (Luxfor = £80mn).

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Our Interviewees

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