

Factors influencing the decline in the number of public companies in the UK

A report by the University of Edinburgh Business School for the All Party Parliamentary Corporate Governance Group (APPCGG)

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Foreword



As a legislator and former investment banker, I find this report both timely and fascinating. As a dealer on the floor of the old London Stock Exchange, in my youth, I can boast first-hand experience of watching the flows of capital run through an equity market. Of course, in the 21st century, those flows run through fibre optic cables and complex algorithms. But at the heart of an equity market lies the symbiotic relationship between businesses seeking capital, and investors seeking opportunity.

Yet we have seen a marked drop-off of businesses seeking market listings. Whilst the businesses are, it seems, finding access to capital through other means, investors are finding a diminishing choice of equities available to them.

This report from the University of Edinburgh Business School seeks to find out why companies seek alternative investor avenues, what the challenges are to securing a stock market listing, and how the 21st century economy faces challenges from 20th century valuations.

In my role as chair of the All Party Parliamentary Corporate Governance Group, I am proud to be able to present this in depth research. The world is a fast changing place and we in the UK are at the forefront of global financial markets and services. But to maintain that position, we need well informed legislators and the best informed practitioners. That is why this report, with its in depth analysis and intelligent recommendations, is so important.

Mark Garnier MP

Chair

All Party Parliamentary Corporate Governance Group

Executive Summary

In April 2020, the All Party Parliamentary Group on Corporate Governance asked the University of Edinburgh Business School to investigate the factors contributing to ‘the decline in the number of listed companies in the UK’. This report presents our findings and offers recommendations on how to arrest the emerging slide in the number of listed companies in the UK.

The contents of this report reflect the insights gained from analysing primary interview data and secondary quantitative data obtained from various financial databases, alongside other relevant sources, including agencies of the UK Government. Our positions are also influenced by the current thinking within the (academic) financial economics literature. We find that the following factors are key drivers of the emerging decline in the number of companies listing in UK public markets:

- The increasing rebalancing of company assets towards intangibles in the UK favour companies staying private longer than was previously the case. Part of this is linked to the difficulty of valuing the yet-to-be-proven intangible assets of early-stage innovation companies in public markets, which have a dispersed investor base that is often dominated by non-specialist investors. This problem is exacerbated by an emerging reduction in equity research focusing on smaller companies, an unintended consequence of MiFID II provisions.
- Public companies face higher costs than private companies. While some progress has been made in reducing the gap in corporate governance burdens faced by public companies and large private companies, the cost of managing a public company is still generally significantly higher than for private companies of a similar size or similar public interest risk. The cost of taking a private company public also remains prohibitively high for many early-stage and small companies.
- Investors are increasingly focusing on short-term returns. The Kay Review¹ identifies short-termism as a problem in equity markets. We find evidence consistent with this trend that constrains managers from making longer-term investment decisions in the long-term interests of companies. Being a private company thus offers greater flexibility in making decisions in the interest of companies as ‘going concerns’.
- A significant growth in private equity funds. Developments in the US are contributing to a significant increase in the acquisition of financial muscle by private equity funds that are in turn actively investing in UK companies, including investments leading to taking public companies private. Indeed, 43% of the companies that delisted from UK public markets in one year (2015) were delisted as a result of being purchased by foreign entities. £47.59 billion was raised by UK private equity funds in 2019, out of which £18.8 billion (39.5%) was raised from North America and only £5.4 billion (11.35%) was raised from the UKCS, which covers the UK, Bermuda, British Virgin Islands, Cayman Islands, Channel Islands, Guernsey, Isle of Man and Jersey.²

¹ See [the Kay Review of UK equity markets and long-term decision making](#).

² See [the BVCA Report on Investment Activity 2019](#).

Our recommendations are as follows:

- Government should explore approaches for levelling the playing field between private and public sources of capital by making equity taxation more favourable to the average long-term investor. We recommend that the disparity in taxation between investors investing through public and private market channels be addressed. Eliminating this gap in taxation could contribute to arresting the decline in the number of UK public companies.
- We advise that the UK Government consider introducing secondary legislation focusing on making corporate governance requirements proportional for both public and private companies. At present, the European Commission's definition of 'public interest entity' embraces all UK listed companies, without consideration of whether or not they carry a risk to the public interest. Exiting the European Union offers flexibility in terms of establishing a more proportionate, risk-based approach to corporate governance.
- Consistent with the recommendations and sentiments espoused in the Kay Review, we recommend that HM Treasury consider tax incentives to bring about a meaningful change in the investment culture of investors in UK plc. Specifically, incentives should be targeted at encouraging longer-term investment horizons.
- A future iteration of the Stewardship Code should include an expanded emphasis on encouraging long-term focus in investment decisions and explaining how this is embedded in the investment process.³
- The establishment of a market-led inquiry to develop specific recommendations on incentives to facilitate the provision of equity research focusing on smaller companies.
- In order to enhance the ability of investors to value innovative companies, especially those whose asset bases are dominated by intangibles, we recommend that the Financial Conduct Authority (FCA) consider strengthening its training and competence regime for regulated investors⁴ to include a focus on valuing intangibles and other aspects of emerging innovative UK companies.
- Efforts should also be made to streamline the listing process, especially for early-stage and smaller companies. The FCA in particular should take the lead in outlining rules aimed at enhancing investor safeguards for alternative public listing routes, such as direct listings, reverse takeovers and Dutch auctions, and making them more mainstream in the UK. This would potentially reduce the significant cost involved in listing new public companies.
- An additional step that could be taken to mitigate the costs and risk associated with public listing is the introduction of an 'earn-out' payment option to cover some of the costs of listing a new public company of a certain size. This suggests that investment banks and other advisors could be required to take a meaningful proportion of their fees in restricted shares rather than cash, and thereby create an alignment of interest with investors.

³ See [The UK Stewardship Code 2020](#).

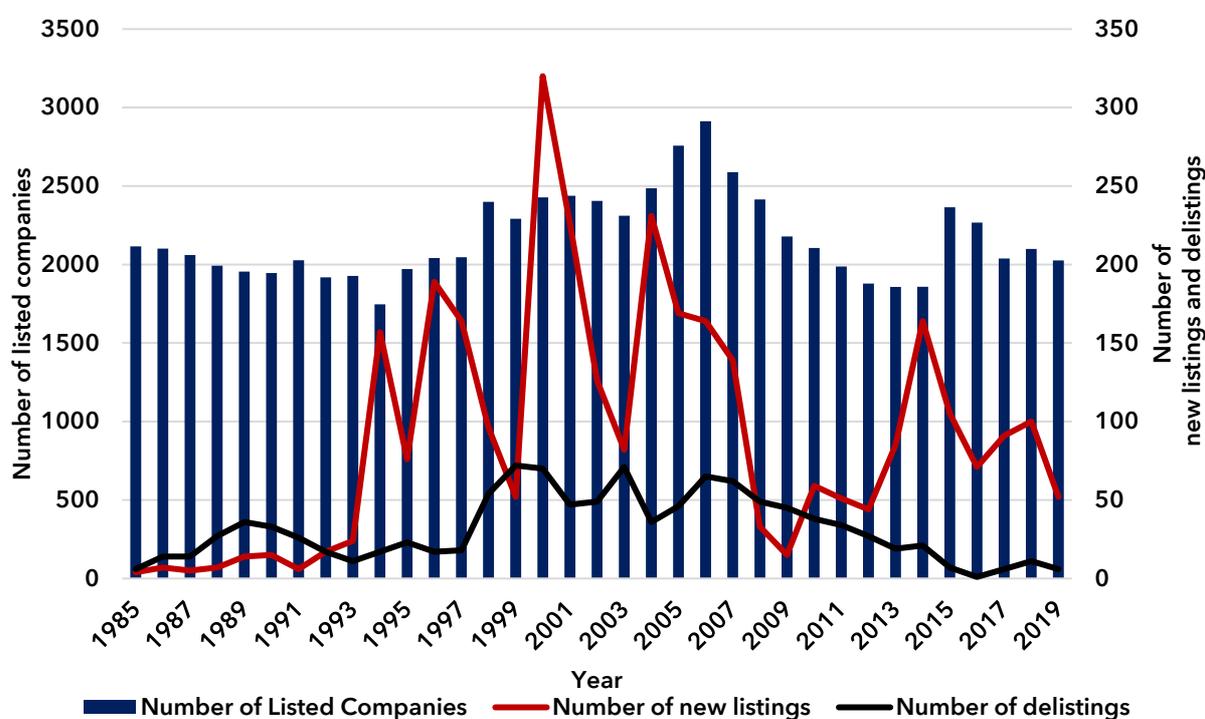
⁴ See <https://www.fca.org.uk/firms/training-competence>.

1. Introduction

Since reaching a peak of 320 annual equity listings in 2000, there has been a gradual but perceptible decline in the number of companies choosing to make initial public offers (IPOs) through UK public markets. An annual average of 150.5 listings was recorded for the decade ending 2009, and an annual average of 82.2 was recorded for the subsequent decade, marking a decline of 45.38% between 2010 and 2019. The total number of listings in 2019 was just 52 (see Figure 1). Although net listings (the difference between the number of companies entering and exiting public markets) has remained positive since 2010 (see Figure 2), the majority of new entrants are small companies. Indeed, none of the ten largest global initial public offering (IPO) deals of 2019 were in the UK.⁵ Increasingly, destinations such as Hong Kong, China, the US and Germany are appearing more attractive for large equity listings.

Figure 1. The evolution of issuances, delistings and listed companies in the UK

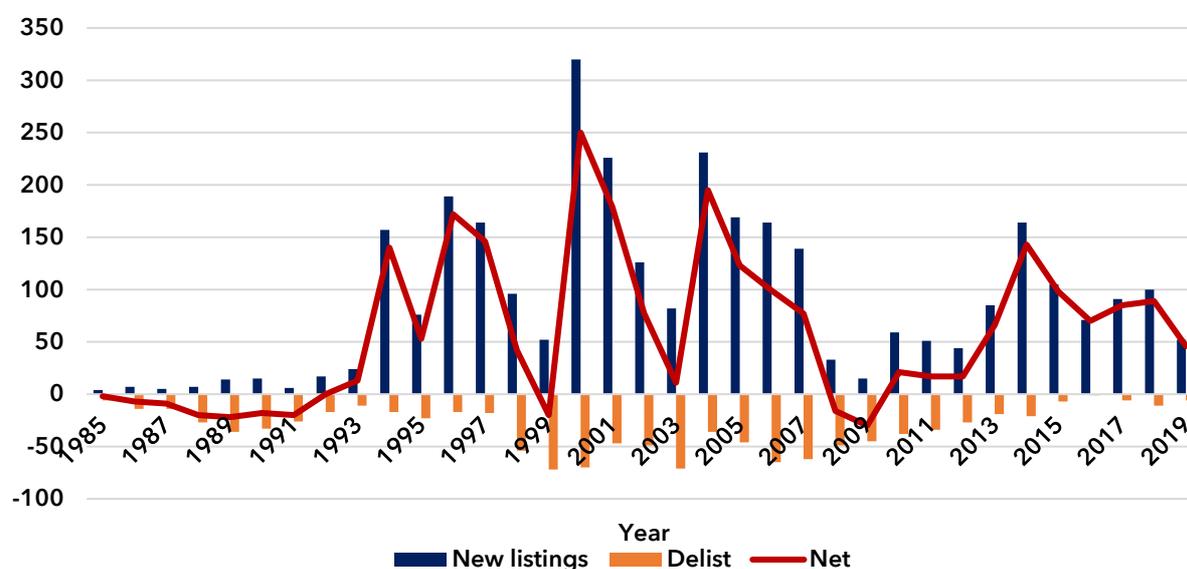
This figure presents the annual numbers of new listings, delistings and listed companies in the UK. The sample covers 1985 to 2019 and data is obtained from Thomson One Banker.



⁵ According to FactSet, the 10 largest global listings of 2019 are Saudi Aramco (\$25.6 billion, Saudi Arabia), Alibaba (\$12.9, Hong Kong), Uber (\$8.1 billion, US), Budweiser (\$5.7 billion, Hong Kong), Postal Savings Bank of China (\$4.0 billion, Shanghai China), Shenzhen Transsion Holdings (\$4.0 billion, Shanghai China), Avantor (\$3.3 billion, US), Lyft (\$2.6 billion, US), XP (\$2.3 billion, US) and TeamViewer (\$2.2 billion, Germany).

Figure 2. The evolution of new listings, delistings and net listing in the UK

This figure shows the evolution of the number of new listings, the number of delistings and net listing (the difference between the number of new listings and the number of delisted companies) in the UK. The sample covers 1985 to 2019 and data is obtained from Thomson One Banker.

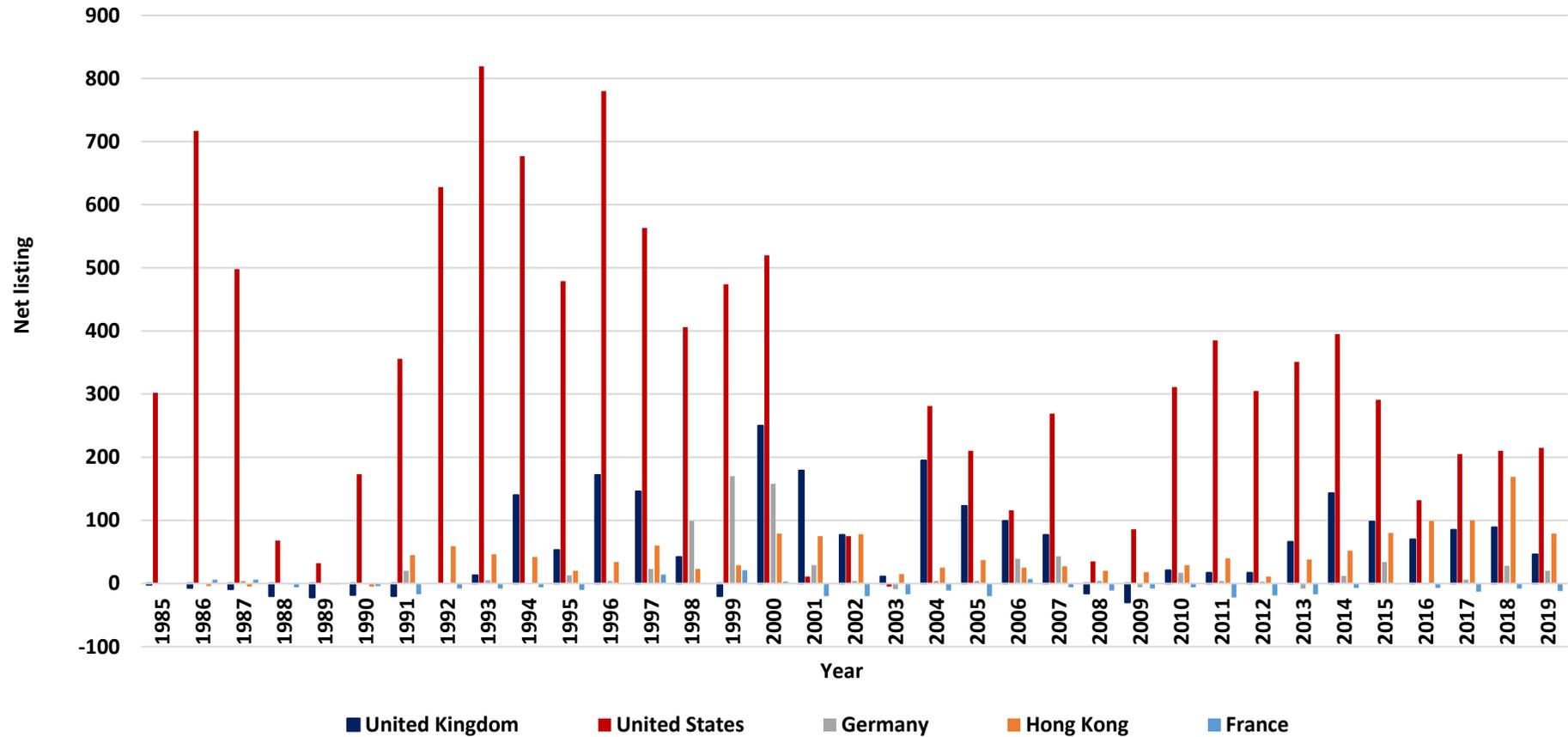


It is nonetheless important to put this observed decline into some context. Compared to the UK, the decline in the number of US companies listing in public markets has been dramatic. The number of listed companies in the US stood at just over 4,000 at the end of 2019, which was about half of the figure in 1996, at the height of the floating boom. Net listings (the difference between the number of new listings and the number of delisted companies) in the country have also fallen dramatically from a height 819 in 1993 to 215 in 2019 (see Figure 3). Although the UK's position on net listings is stronger than that of peer countries like Germany and France, it has lagged behind Hong Kong in recent years.⁶ The answer to why this trend has appeared, and why it now appears to be hastening in the UK, lies in considering why companies list on stock exchanges in the first place; understanding these drivers can offer insights into the current trend. Companies might be inclined to raise capital through public markets when their needs are better met through them than other sources of capital. Conversely, this suggests that when private markets are better at meeting their needs, shareholders will be inclined to keep their companies private or take them private.

⁶ Although Hong Kong benefits from proximity to Mainland China, leading to many Chinese companies listing there, it has also been successful in attracting a significant amount of non-China overseas listings as well, among them Rusal (\$2.2 billion), Prada (\$2.14 billion), Samsonite (\$1.25 billion) and L'Occitane en Provence (\$708 million).

Figure 3. The evolution of the net listings in France, Germany, Hong Kong, the UK and the US

This figure shows the evolution of the net listing (the difference between the number of new listings and the number of delisted companies) in France, Germany, Hong Kong, the UK and the US. The sample covers 1985 to 2019 and data is obtained from Thomson One Banker.



As observed from Figure 1, the number of UK-listed companies peaked at 2,913 in 2006 and by 2019, there were only 2,026 companies listed in the UK. In contrast, according to the British Private Equity and Venture Capital Association (BVCA), 4,330 companies are currently backed by UK private equity funds.⁷ Globally, the net asset value growth of private equity funds continues to significantly outperform market capitalisation. In 2019, UK private equity funds generated 5-year and 10-year returns of 20.1% and 14.2% respectively, which are significantly higher than the corresponding 7.5% (7.1%) and 8.1% (7.4%) achieved by the FTSE All-Share (FTSE 100).⁸ These contrasting fortunes of the public and private markets demand attention. We observe that, among other factors, the divergence appears to be linked to the nature of the modern UK company, which is increasingly reliant on valuations driven by intangible assets. As the typical business model in today's average UK company has evolved, the public capital markets appear to have become less suited to companies' capital needs.

In this report, we investigate the factors contributing to the observed reduction in the number of companies listing on UK stock markets. In turn, we consider: (1) the drivers of decisions in UK companies to pursue the raising of funds in public or private markets; (2) the evolving nature of the average UK company; (3) the costs of going public; (4) the changing attitudes of investors in UK companies; and (5) the growth in private equity funds. Finally, we address the narrower question of company-level drivers of the decision to exit the public market; in particular, we ask why a public company might make the decision to delist.

Our investigative approach involves interviewing key stakeholders in relevant UK companies (companies that have exited the public market and companies that have recently listed in the public market) and analysing a significant amount of data using data science and econometric modelling approaches. Our data sources include the Thomson One Banker database, The World Bank database, the WRDS – Compustat database, Bloomberg, Factiva and Yahoo Finance. The insights, presented in Sections 2 to 7 of this report, are informed by the outcome of the interviews and the quantitative analysis undertaken. An overview of our quantitative analytical approaches and the results obtained is also presented in Annex B and C to this report.

⁷ <https://www.bvca.co.uk/Our-Industry>.

⁸ See [BVCA Private Equity and Venture Capital Performance Measurement Survey 2019](#).

2. Private or public? The choice⁹

2.1. Starting small

We begin by examining the theoretical and practical arguments for why companies raise capital in public or private markets. This part of the report serves as a foundation to understanding the issues addressed further on. The neoclassical view of why companies exist suggests this is for profit maximisation and this focus drives decisions throughout the life of a company. However, as noted by the Kay Review, financial rewards are not the only human motivation and indeed investment goals are more complex than the neoclassical view would suggest. Thus, factors other than profit maximisation, such as environmental considerations, are increasingly driving investment decisions.

Companies generally start out small, at which stage they are usually private entities. Investment in a company, either through the re-investment of profits or leveraging, can lead to the company becoming bigger. However, leveraging its operations will undoubtedly increase the risk associated with the initial investment. One way of reducing risk is by diversifying the ownership of the company. Depending on the ambition of the nascent company with regards to scale, a public listing may therefore be inevitable. Thus, the primary drivers of public listings are access to capital and the diversification of risk. This basic aspect of the *theory of the firm/company* has remained generally unchanged since the first signs of organised trading emerged in London's coffee houses in the 17th century.¹⁰ A key ingredient in successfully enticing further investment in a new company is to present the company in a way that convinces investors that they will make a return on their investments.¹¹ However, the value investors place on the shares of the company corresponds to today's value of the future benefits they expect to reap from their investment. Therefore, if investors are convinced that they will make large returns in the future, they will value the shares of the company highly, and they will consider them to have low value if the opposite is the case.

2.2. Agency conflict¹²

The raising of funds from additional investors leads to *agency conflict*. This arises because of the separation between the new owners of the company, i.e. the investors, and the company manager(s). The classical expectation of investors is that their investments should be frugally deployed by company manager(s), i.e. in pursuit of the factors that are most important to the investors. For some investors, these factors are simply the exclusive

⁹ See Jensen, M.C. and Meckling, W.H. (1976) Theory of the firm: managerial behavior, agency costs and ownership structure. *Journal of Financial Economics* 3, 305-360; and Stulz, R.M., 2019. Public versus private equity. European Corporate Governance Institute Finance Working Paper N° 640/2019.

¹⁰ According to the academic financial economics literature, there are at least two further reasons why companies might go public. The first is the need to earn the firepower to pursue acquisitions, something companies are more predisposed to doing early in their corporate lives. Secondly, companies may go public for reasons related to manager compensation or to facilitate the exit of early investors. Public equity prices in a public company, which are more attractive to managers than private equity, can be employed as a means of manager compensation (see Arkan, A. and Stulz R.M. (2016) Corporate acquisitions, diversification, and the firm's lifecycle. *Journal of Finance* 71, 139-194; and Holmstrom, B. and Tirole, J. (1994) Market liquidity and performance monitoring. *Journal of Political Economy* 101, 678-709).

¹¹ See Shleifer, A. and Vishny, R.W. (1997) A survey of corporate governance. *Journal of Finance*, 52, 737-783.

¹² See Stulz, R.M. (2005) The limits of financial globalization. *Journal of Finance* 60, 1595-1628.

pursuit of maximising shareholder value, for others it may be more nuanced, as evidenced by the growing focus of investors on sustainability/environmental, social and corporate governance (ESG) investing.¹³ However, managers' actions are often not exclusively driven by the same drivers as investors' investment decisions, hence agency conflict emerges. The agency conflict problem is less of a concern when ownership is concentrated, as is the case in privately held companies. This is because, even when there is more than one shareholder in a private company, the higher concentration of shares in relatively fewer hands allows for easier monitoring of the company's operations, thereby ensuring that the company's resources are economically employed.

"[...] they [private equity] are probably more influential in a business than the listed market can be as a rule because at the end of the day a listed company reports to its shareholders at the shareholder annual general meeting,¹⁴ but those shareholders don't have a whole lot of influence over the businesses because they're very dissipated. [...] whereas in private equity, you've got this very largely, this single investor who influences the business strongly."

Former FTSE 250 Company Non-Executive Director

The ownership of a public company is more dispersed, and monitoring is therefore more difficult for any single shareholder. Furthermore, the average shareholder is likely to hold a smaller share in a public company than in a private company, with a much smaller ownership base; hence, close monitoring of public company managers is unlikely to be cost-beneficial. This may in turn encourage managers to spend excessively on managerial benefits, such as expensive travel and unnecessary entertainment costs or furnishings. One approach to addressing this issue in a public company is to increase the stake of the managers in the business, thus ensuring that they pay for a larger share of the bill for the perks they indulge in. However, this also raises the problem of restricting the ability of the company to grow through additional investments by outside investors. Further options for addressing agency conflict include strengthened spending and disclosure requirements internally within the company or through additional regulations. Regulations can also be introduced to make it incumbent on the board of directors to monitor the disbursement of discretionary spending among managers in order to discourage unnecessary spending. Improving the regulations addressing agency conflict in ways that do not unfairly burden companies or their agents may encourage more companies to go or stay public.

2.3. When is going public not an option?

Public markets, along with the protections they afford investors, allow companies to raise significant amounts of capital. Additional disclosure and other requirements imposed by

¹³ Indeed, the recent body of evidence suggests that investments primarily or partly driven by non-financial factors yield returns that are comparable to those offered by investments primarily driven by profit maximisation. This is because investors are increasingly viewing non-ESG investments as riskier than ESG ones (as an example see evidence on the performance of green mutual funds in Ibikunle, G. and Steffen, T. (2015) European green mutual fund performance: a comparative analysis with their conventional and black peers. Journal of Business Ethics).

¹⁴ Note that there are different annual general meeting (AGM) requirements for private companies relative to public companies under UK law. Please see Annex A for an itemised list of the differences.

exchanges also boost investor confidence. This ability to attract a large volume of investors ensures a measure of liquidity for company shares; investors are therefore not locked in and can trade away their shares when needed. Conversely, the market for private shares is not liquid and, in the UK, there may also be restrictions on share transfer in private companies. In particular, private companies can impose restrictions on the transfer of shares. Such restrictions typically provide that shares must be offered to existing shareholders before being transferred to third parties.¹⁵ A private company's articles may also include provisions allowing directors to refuse to register the transfer of shares to persons that they do not approve (see Annex A to this report). Thus, if the aim of a company is to attract a large amount of capital from a diffuse group of investors, a public listing is usually the better option. Convincing a large group of investors to fund a private enterprise will be more challenging given the cost of due diligence in the absence of the disclosure requirements mandated under public listings.

Although public markets make it possible for companies to raise large amounts of capital from a diverse group of investors, it is not appropriate or expedient for all companies to pursue this option. A key factor in whether or not a company can beneficially pursue a public listing is the degree to which belief in the value of the company is dispersed between investors, on the one hand, and the company's managers, on the other. Essentially, company managers have access to more information about the fortunes of the company they run than potential investors. Although disclosure requirements ameliorate this information asymmetry, it nonetheless exists and is usually more severe for small and early-stage companies. More established companies will have built more enduring track records, which implies less noise in the process of discovering the price of their shares. Most early-stage companies are unlikely to have a commensurate track record, as they are usually at best post-proof-of-concept (POC) and are yet to adequately demonstrate the long-term viability of their offering. Thus, these companies may not be able to go public because investors are not convinced of the value of their offerings. Going public may indeed lead to the devaluation of an early-stage company's products because investors are not knowledgeable enough to price them fairly. In order to address information asymmetry and convince investors of the value of their products, early-stage companies may then have to disclose proprietary information. This action may impede their future growth as any information publicly disclosed can be accessed by potential competitors. This suggests that for many early-stage UK companies, the choice is not between going private or public, but simply exploring a series of private funding options. The trade-off described here is what companies have to regularly contend with. Companies that are compelled to stay private in order to retain their competitive edge and avoid disclosing proprietary information to the public may not be able to raise sufficient funds to adequately pursue their strategic goals given that the private market for capital is very illiquid in comparison to the public markets. This is a crucial issue and we revisit it in more practical terms with evidence in subsequent sections.

¹⁵ Although shares of listed companies must be freely transferable, unless, in exceptional circumstances, the Financial Conduct Authority (FCA) agrees to restrictions on transfer, pre-emption rights in public companies (e.g. in alternative investment market-listed companies) are also enshrined in law under the Companies Act 2006. Pre-emption rights may only be disapplied by a special resolution of shareholders at a general meeting of the company. The Pre-emption Group Statement of Principles offers guidance on the factors that should be considered by companies and investors in the disapplication of pre-emption rights.

3. The changing face of UK plc

3.1. Intangibles: a game changer?

As outlined above, choosing between raising funds in a private or a public market for capital is a trade-off. However, it is a trade-off that is fast evolving for several reasons. The first reason is that the nature of companies has changed significantly since the pre-dot com era, with the evolution favouring companies staying private longer than was the case just two decades ago. Secondly, the one-off and recurring costs of going public can put off potential public companies. The third reason relates to changes in investor attitudes, such as increased fixation on short-term returns. Finally, as is now evident with the growth of unicorns (privately held companies with a valuation of one billion dollars or more), there has been a surge in private equity funding, making it possible for companies to become billion-pound entities before listing in the public markets.¹⁶ In this section, we address the first of these major developments and, in subsequent sections, we discuss the other three factors.

Since 2007, 24 UK unicorns have been established.¹⁷ Several interesting facts about these companies include their propensity for a low number of employees, their lack of revenues and profits and the short period within which they achieve billion-dollar valuations, which are mostly predicated on intangible assets. For example, BenevolentAI, a UK tech company using its technology to analyse medical data with a view to helping researchers treat and target diseases and to personalise drug use, achieved its billion-dollar valuation within two years of its foundation. Hundreds of such unicorns have been established in the past two decades. Their existence underscores the remarkable nature of the volume of wealth being created within a short space of time by companies in recent years. The most valuable of this new breed of companies, such as ByteDance (\$140 billion), Didi Chuxing (\$56 billion) and AirBnB (\$18 billion), initially achieved their unicorn status with only a few dozen employees, with little to no profit profiles and with no physical assets of note. Some, like Instagram, before its acquisition by Facebook for one billion dollars in 2012, had almost no revenue. Hence, the valuation of these companies is often effectively based on intangibles and unproven potential. In comparison, in earlier decades companies had to be able to demonstrate profitability with a strong track record and become publicly traded before they were able to achieve such high valuations.

“I think there is a problem in knowledge base, particularly around tech companies. I mean one of the questions you have to ask yourself is why are there so few tech companies listed in the UK? And I think part of the answer is neither [UK] investors nor the analyst community really understand them properly.”

Former FTSE 250 Company Chairman

This change in the nature of what is considered valuable in a company is an important part of understanding why there has been a general decline in the number of public companies in the UK over the past decade. As advanced economies are becoming more knowledge-

¹⁶ See Stulz, R.M. (2019) Public versus private equity. European Corporate Governance Institute Finance Working Paper N° 640/2019.

¹⁷ See <https://www.beahurst.com/blog/uk-startup-unicorns/>.

driven, the dependence and value placed on knowledge, information, data-driven innovation and high skill levels have increased. Businesses have responded by increasing their R&D expenditure, further perpetuating a culture of valuing knowledge and innovation. This is not a bad thing; data-driven innovation in many areas, such as health, financial services and the creative arts, offers significant societal benefits. According to the Office of National Statistics (ONS), UK businesses spent £25 billion on R&D in 2018, up from £23.7 billion in 2017, marking an increase of 5.8%. The average annual growth rate between 2007 and 2018 was 4.4%, or 3.9% in constant price terms.

R&D expenditure generates what might be termed ‘knowledge intangible assets’; however, companies generate other types of intangible assets as well. Examples include brand value, which emanates from the quality associated with certain products and services, and other organisational processes. A prominent example of the latter is Amazon’s shipping practices and processes, especially the Amazon Prime one-day delivery guarantee. Sourcing and delivering products efficiently has over time proven to be perhaps Amazon’s greatest asset, and the Amazon Prime one-day delivery guarantee is a significant part of this, a view that is underscored by the company’s meteoric rise past a 1.65 trillion-dollar valuation in the summer of 2020. As the coronavirus pandemic of 2020 led to widespread shutdowns across the world, the importance of timely deliveries by online shopping platforms like Amazon became apparent, leading to significant increases in their valuations. Some academic researchers have even shown that intangible assets based on organisational processes like Amazon’s make up a larger proportion of companies’ intangible assets than knowledge intangible assets.¹⁸

The growth in intangible assets is not a reason for companies to shun public markets. Indeed, the extremely high valuations achieved by the likes of Amazon, Microsoft and Google are made possible by public markets. However, the public markets are only best placed to make these valuations when there is verifiable evidence of the relevance of intangible assets as a means of creating value, which suggests a requirement for an organisational track record and transparency. The lack of verifiable evidence for intangibles undermines the usefulness of traditional audited financial statements. Due to disclosure requirements, it is easier for public, large and established companies that have already achieved a sizeable market share to provide evidence on the relevance of their tangible assets.

“[...] the reasons to go live or to list in 2019 really relate to the maturity of the company, the experience of the management team. The company was in profit.”

FTSE 250 Company’s Company Secretary

Established companies are also in a better position to draw revenue from their intangible assets. In addition to contributing to Amazon’s overall value as a company by boosting its sales, the Amazon Prime one-day delivery guarantee is only available through paid subscription. Amazon does not have to be secretive about its plans to speed up delivery

¹⁸ See [Falato A., Kadyrzhanova, D. and Steri, R. \(2018\) Rising intangible assets, shrinking debt capacity, and the US corporate savings glut.](#)

times; its scale would make it difficult for any other company to successfully challenge its dominance. Amazon is admittedly an extreme example of how a large and established company is better placed to demonstrate the value and monetise its intangible assets; however, the point we are making here stands. For smaller and early-stage companies, complete transparency risks revealing valuable proprietary information to the competition since it is public. We discuss this further in the next section.

3.2. A path for early-stage and smaller companies

Early-stage companies often require outside capital in order to generate intangible assets, unlike established cash-rich companies like Apple that can internally invest in establishing vast supply chain networks to drive the production and distribution of their products. The use of outside capital to generate intangible assets creates a potential agency risk because the capital risk is only borne by investors, while the managers stand to benefit from a successful development of the asset. Therefore, early-stage companies dependent on raising outside capital to develop intangibles often find it challenging to raise money from public markets. A significant part of this problem is the need for high levels of regulation-mandated disclosure on a yet-to-be-proven asset in development. Even if disclosure requirements are met, many investors lack the specialist knowledge needed to accurately value an in-development intangible asset with no track record. This suggests that early-stage companies are more likely to favour raising capital privately from a few specialist investors to whom they can disclose the necessary information required to make investment decisions away from the public eye, rather than raising capital from public markets.

“There's an awful lot of money chasing tech companies at the moment. You don't need to go to the stock market.”

Former FTSE Small Cap Company Chairman

Such investors are also likely to have the wherewithal to supervise how their investment is being disbursed and, in many cases, to offer guidance. The challenges facing a new company looking to develop and monetise an intangible asset are therefore reduced to finding a patient and knowledgeable investor willing to support an idea for as long as is necessary.

If they engaged in a further relaxation of disclosure requirements, investment platforms such as the London Stock Exchange Group's (LSEG) Alternative Investment Market (AIM), which is designed to help smaller companies access capital from the public market, could offer a public market route in the UK for early-stage and small companies whose asset bases are concentrated on intangible assets. While the role of the so-called AIM nominated advisor (NOMAD), usually an investment bank, is mainly to make sure the company follows the AIM market rules and regulations, additional remunerated responsibilities could be levied on a NOMAD. For example, a NOMAD could conduct a confidential assessment of the potential of an early-stage company looking to raise funding from the public markets as a going concern, and on this basis provide a measure of viability rating to the company. Investors could look to this rating as an indication of the investment rating of the company without necessarily being privy to the company's critical proprietary information. The deterrent to abuse of the process would be that NOMADs should be keen to establish good track records or performance statistics in order to attract the patronage of new companies.

Such a reform would address the challenges many new companies experience in relation to the need for full disclosure. NOMADs also offer the kind of access to operational and financial strategy support that a specialist private investor might offer, thus providing a supportive platform for new companies looking to raise funding from public markets.

3.3. An alternative to public or private markets

Irrespective of whether a new company raises capital from public or private markets, investors are likely to require some form of collateral in case their return expectations are unmet – in the case of public companies this might be tangible assets, such as machinery, land and buildings. Investing in a company with physical assets will partly address this issue; however, investing in a company with an unproven intangible asset in development can be problematic. Although some intangible assets can be valuable enough to be monetised in some way, this is unlikely to be the case for new companies. This makes it even harder for new companies whose valuations are linked to intangible assets to raise funding in either public or private markets. There is a third option, however. The choices facing a new company are not limited to private or public funding; there is also the option of selling to an established company, and this is the path that our enquiries show some early-stage UK companies have recently taken.

“[...] Apple had been doing this for years. [...] they acquire and consume and kill. So, to some extent the bigger boys are getting rid of the competition by simply buying them, taking the bits, copying the bits that they need.”

Legal Advisory Partner

Google is a serial acquirer of unproven but promising early-stage companies. What Google offers is the opportunity to achieve high valuations/pay-offs that are unlikely to be matched by public markets, and the removal of the uncertainty associated with development under the tutelage and patronage of a regular private funder. Companies such as Google, Facebook, Microsoft and Apple offer the development capital, market knowledge and infrastructure support that new companies typically lack. These factors can help companies achieve scale and profit quicker than they would have from private or public funding.

4. Market quality, the costs of going public and red tape: a balancing act

4.1. The costs of going public

There are significantly more requirements for listing in a public market than for operating a private company. Annex A to this report details the key regulatory differences between public and private companies, covering areas such as governance, reporting and disclosure standards. The notes are based on excerpts and quotes from the Companies Act 2006 as obtained from the law, Derek French's *Blackstone's Statutes on Company Law 2014-2015* and the Thomson Reuters Practical Law website.¹⁹ As observed, the requirements are substantially different and weigh more heavily on public companies. Therefore, while the choice of raising capital in private or public markets may be driven by the nature of a company, the effects of regulation cannot be overlooked, especially given the costs associated with meeting the regulatory conditions of being a publicly traded company.

"It's time consuming. It's uncertain. It's expensive. It requires a huge amount of management time that takes you away from the business. The corporate governance – the additional processes that you need to build into your business to be able to cope with the added burden of being a public company – is significant."

FTSE All-Share Company Chief Operating Officer

"[...] when I explain the process to them, I can see the fear in their eyes, and I can hear myself talking myself out of a job."

Legal Advisory Partner

The complexities of the listing process may be off-putting for some businesses. When companies commence the process of issuing an IPO, they should be ready to accept significant risks. The process is arduous and expensive: according to PwC, there are significant financial costs involved under the best circumstances; from the initial meeting with advisors to the first filing, the process can take at least five months to price an offering and commence selling shares.²⁰ The total cost of public listings vary. The US Securities and Exchange Commission's (SEC) filings for US IPOs on major exchanges from 2015 to June 2020 shows that the cost for deals worth between \$25 and \$99 million range between \$2.6 and \$13.9 million. For the largest deals (worth more than \$1 billion), the costs range from \$46.7 to \$149 million. These estimates include underwriting, legal, advisory, accounting and public relations fees; IPOs offered on a best efforts basis are excluded.²¹ Companies must prepare a very detailed and often intrusive technical prospectus (on AIM, this is referred to as an admission document) that must be verified by lawyers and accountants. It represents a significant drain on management time and a distraction from the day-to-day task of keeping a company running. Floating may make economic sense for large companies able to

¹⁹ The Companies Act 2006 is available [here](#) and the Thomson Reuters Practical Law Website can accessed [here](#).

²⁰ See [Roadmap for an IPO: a guide to going public by PwC deals](#).

²¹ See <https://www.pwc.com/us/en/services/deals/library/cost-of-an-ipo.html>.

easily justify and bear the costs of being a public company and if they plan to raise money more than once on the market. This is because once a company is listed, it is easier and cheaper to issue seasoned (secondary) equity offerings. Furthermore, as the above estimates suggest, the bigger the float, the less expensive the overall process usually is.

Companies need to invest in new management skills in order to withstand the rigour and adjust to the rhythm of being a public company. They have to build a new board, increasingly at short notice, and the danger there is that they share control with people they may not have had opportunities to build long-term relationships with. Not only are there significant financial costs involved, but the outcome is highly uncertain. The listing process requires a considerable amount of time, which can take from a few months to years, depending on the readiness of the company involved.²² This length of time creates uncertainty in the valuation. The market conditions at the start of the listing process may be very different by the time firms get to market the deal.

“You're left in this situation where you commit huge management time and huge exposure to fees without really knowing whether you have a certain outcome.”

FTSE All-Share Company Chief Operating Officer

Companies try to mitigate this risk by engaging with their potential institutional investors and collecting feedback from them very early in the process. This feedback allows companies to check whether they are moving in the right direction, but it does not provide them with information on a likely final price. In addition to price uncertainty, there are reputational risks involved, for example in the case of a failed listing.

“Once you get on a train, it's a bit of an unstoppable train and you get to a point where you've kind of committed yourself. We ultimately decided that given the amount of time that we've invested in it and the reputational issues of not doing it, it could have been damaging in the eyes of our clients, suppliers, and people.”

FTSE All-Share Company Chief Operating Officer

4.2. Too much red tape?

Public companies are finding it increasingly difficult to act entrepreneurially and realise higher returns. This is partly because markets prefer stability, but also because corporate governance requirements essentially discourage companies from taking significant risks. Our respondents suggested that corporate governance disciplines companies, improves public market transparency, and drives down overall risk. Corporate governance encourages companies to be more rigorous about controls and reporting. However, being restricted by

²² We note that an IPO is not the only way for a company to access public markets; other options include direct listings, reverse takeovers and Dutch auctions. However, these methods are less employed in comparison to IPOs. The US-styled direct listing (e.g. Spotify) has been applied in varying formats to a few cases in the UK, including Diversified Oil and Gas (2020), Metro Bank (2016), the Bank of Cyprus (2016), Caracal Energy (2013) and Zenith Bank (2013).

too much red tape can damage companies, with a potential negative impact on national productivity and efficiency.

“[...] the implications of that red tape [...] is it does make listed companies less entrepreneurial and less risk-taking. They are sort of almost self-censored, which then leads to lower returns on the stock market.”

Former FTSE 250 Company's Company Secretary

The respondents agreed on corporate governance creating a disparity between private and public companies.²³ Private companies are able to take bigger risks partly because corporate governance is more light touch given that they are not in the public spotlight as much as public companies. Maintaining corporate head offices that deal with investor relations, open communication schemes, centralised corporate strategy, and the overall oversight that is required by the board of public companies is also expensive, yet necessary. Indeed, some of the respondents noted that when their companies went private, they were able to take a lot of the costs associated with the corporate head office out of the business, which immediately made them more profitable. This view is underscored by recent evidence. According to PwC's 2017 cost of IPO survey and Oxford Economics, CFOs estimated that going public increased their costs by 32% on average.

“I really think that there isn't a level playing field on corporate governance and the cost of corporate governance. People who run [public] companies have been increasingly prepared to consider going private because the whole glare of publicity and requirements of corporate governance in the public arena have become just too onerous.”

Former FTSE 250 Company's Company Secretary

As suggested by the respondents, public companies being subject to a wider set of rules and regulations that do not apply to private companies or that can be more easily complied with by private companies (see Annex A to this report) could make the difference in whether a company is viable or not. UK public companies must undertake regular straightforward accounting of their activities, every six months on AIM and quarterly on the main market. Although this is consistent with the practice in peer countries, such as the US, some respondents view this as overly intrusive and a distraction from their core businesses. The transparency requirements of corporate governance are especially onerous for public companies. Information is not meant to be private anymore, and there are extensive rules as to what companies must announce to the market and when they should do so; failure to do so would leave them susceptible to accusations of insider dealing. Transparency may also create certain issues for companies:

²³ The reference to private companies covers a wide spectrum of companies, from small early-stage to large companies with balance sheets in excess of £2 billion. Although disparities in corporate governance requirements between private and public companies apply in the case of the largest private companies, these are much smaller than in the case of small and medium sized private companies. The fact that the UK government introduced secondary legislation in June 2018 underscores this; The Companies (Miscellaneous Reporting) Regulations 2018 requires all companies of a certain size that are not currently required by law to provide a corporate governance statement to disclose their corporate governance arrangements. The Wates Principles of Corporate Governance for Large Private Companies, which was launched in December 2018, provides a template for large private companies to meet this new requirement.

“Everything plays out in the public arena as a public company. You get pressure from being a public company in terms of having to report publicly. You also get that through share price – an underperforming share price gives you more difficult people dynamics to deal with.”

FTSE All-Share Company Chief Operating Officer

Reporting can attract negative press, and employees in particular may feel unsettled by negative press coverage. When making announcements to the market, companies must anticipate how these announcements will play out in the market and how they can best communicate them internally.

“[...] you're creating a new public news flow and narrative that you have to manage [...] and that plays back into your people.”

FTSE All-Share Company Chief Operating Officer

The respondents suggested that another consequence of what they viewed as an excessive disclosure requirement is that it makes the UK less attractive from the executive reward perspective. For example, institutional/blockholders and activist investors appear to be increasingly questioning the remuneration of executives, and this makes it hard for public companies to attract global talent. This argument, however, does not appear to be consistent with the statistical evidence. Evidence suggests that UK listed company executives are some of the best rewarded in the world. According to data from Statista, in 2018 the ratio of the pay of an average UK chief executive to that of the average worker was 201, putting the UK third after the US (265) and India (229), while peer European countries, such as Germany and Netherlands, were on 136 and 171 respectively. France did not feature in the top 10 high chief executive to worker pay ratio countries. Nonetheless, single point estimates can be misleading because large public companies that are better able to justify large executive remunerations could be tipping the scale of the average UK chief executive to worker ratio upwards. Thus, while large public companies are able to attract and reward talent from the global market, smaller companies that are unlikely to be able to justify large executive pay may struggle to attract the kind of talent that could help them achieve exponential growth.

4.3. Governance and investor protection

Nevertheless, the crucial nature of the regulations in protecting investors cannot be exaggerated. Without provisions in place to shore up investor confidence in the markets, public companies will lose value. Confidence here relates to investors being able to have a reasonable measure of trust in the process for pricing the shares and governance of companies. Hence, regulation and its enforcement must be strategically tailored to focus on this – the protection of investors. If this element is not explicitly catered to, public markets lose their allure and thus a major means of transferring capital from where it is in excess to where it is needed fails.

Using data on the listings in UK public markets between 1999 and 2019, we find a strong indication that having a robust regulatory framework and the quality of trading in public markets are significant factors in the predisposition of companies to list in public markets. Indeed, our analysis shows that only three of the factors we considered explain annual

declines in the volume of UK public market listings between 1999 and 2019, and the most economically significant of these is the quality of the trading process in the public markets, which is proxied by the level of volatility in overall share prices. Based on a measure of price volatility in FTSE companies on the London Stock Exchange, we find that a relatively small higher-than-average increase in market volatility is linked to an annual decline of 5.92% in the number of IPOs, a 1.33% decline in the proceeds from IPOs, a 38.98% decline in IPOs as a proportion of publicly listed companies in the UK and a 46.62% decline in IPOs scaled by the size of the UK economy in GDP terms. The scaled IPO estimates are useful in viewing IPO activity as a portion of a larger variable, such as the number of public companies or the size of the economy. We also find that a World Bank proxy for the rule of law, which is consistent with enhanced protections for investors, is positively linked to IPOs. Our analysis suggests that a relatively small higher-than-average increase in the World Bank governance indicator is linked to a 19.66% annual increase in the number of IPOs, a 2.20% increase in the proceeds from IPOs, and a 54.42% increase in IPOs as a proportion of publicly listed companies in the UK. Thus, unsurprisingly, perceived good governance, which would include maintaining regulations aimed at protecting investors, remain critical in driving the use of public markets in the UK. What the government and regulators could address is exploring ways to balance the need for public market regulations to not be excessively onerous with the need to protect investors. The detailed estimates, accompanying methodological and explanatory notes and the justifications for investigating certain factors are presented in Annex B to this report.

5. Evolving investor attitudes

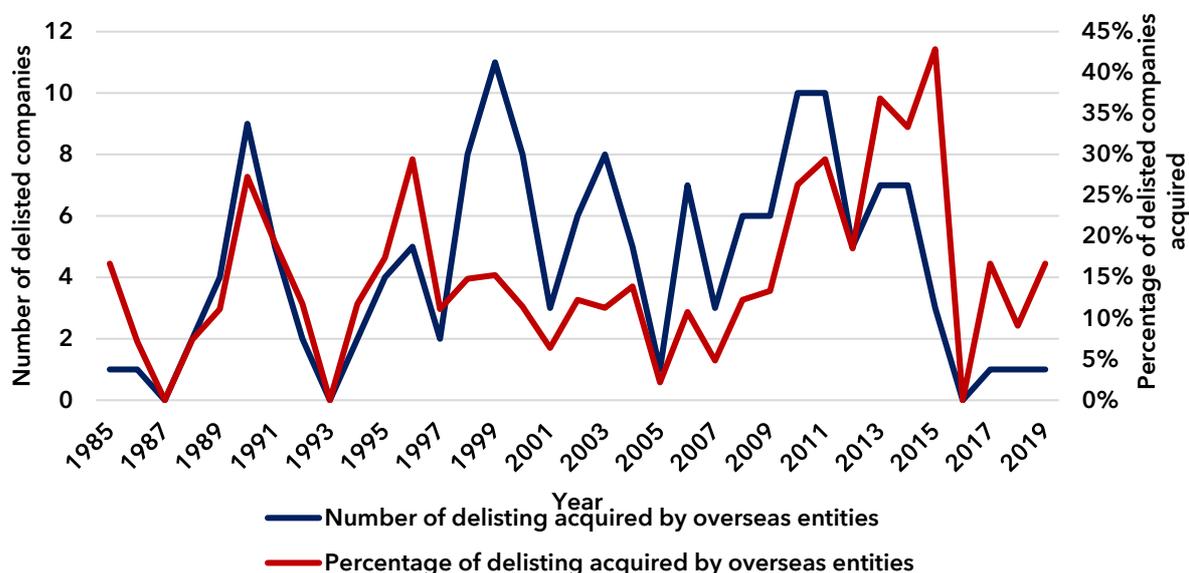
5.1. Short-termism

The share price of a company conveys information about its aggregate value as determined by the market, i.e. investors in the company assets. Hence, the views of investors on the valuation impact of every disclosure by company managers are reflected in company shares. For example, a decision to make an acquisition may seem strategically wise to the company managers, but investors may disapprove of this action. One way of expressing their concerns or displeasure is selling the company's stocks. When on aggregate a larger volume of a company's shares is sold relative to the volume being bought within a given timeframe, the resulting effect is a decline in the share price. The strength of investors' displeasure or concern is encapsulated in the extent of the fall in share price. Thus, in general, investors in public companies have a veritable weapon to influence management activity. While this may be a positive thing for most companies, one challenge in this regard is that, consistent with the findings of the Kay Review, investors' investment horizons are increasingly short-term. While management's long-term strategic view may yield more in terms of shareholder value, the fact that public markets are more short-term in their focus may dissuade management from making bold long-term strategic plays. This outcome is inconsistent with promoting the long-term success of the company or the spirit of the UK Stewardship Code. The identification of this 'misalignment of incentives in the equity investment chain' was a constant theme in our interviews with the respondents during the course of this research. The respondents stated that short-termism in market positions has intensified in the UK in the last 20 years and a sub-set argued that this has been a critical factor in their companies going private during the period. This development perhaps calls for an expansion of long-term investment principles within the UK Stewardship Code.

The dispersed ownership bases that public companies have are often not well-equipped to adequately monitor company activities or to develop a good level of understanding of the industry in which their companies operate in order to be able to adequately assess the strategic paths charted by management. This has led to management in some of the most innovative UK companies over the last two decades being left with little choice except to pursue growth by going private, leading to an inevitable increase in the use of private financing. This often involves takeovers by well-heeled foreign entities that are better placed to understand the needs of the companies. For example, in our analysis, we find that in one year (2015), 43% of all delistings were due to purchases by foreign entities (see Figure 4).

Figure 4. The evolution of the number of UK delisted companies acquired by overseas entities

This figure presents the evolution of the number of UK delisted companies acquired by overseas entities. The sample covers 1985 to 2019 and data is obtained from Thomson One Banker.



“Today, the number of traditional long holders is a lot reduced [...] There's a lot more smart, short-term money that is floating in and out shares [...] My view is that the long holder today is actually a private equity company.”

Former FTSE 250 Company Chairman

Investors' increasing penchant for taking short-term investment positions essentially makes it difficult for a public company to make rational investment decisions without depressing its share price as investors are unable or unwilling to take a longer-term view of the prospects of the company. The short-term investment horizon phenomenon appears to be linked to institutional shareholders themselves being judged on a short-term basis; fund managers, in particular, are focused on (short-term) quarterly performance. Therefore, they readily accept a short-term solution, typically cost-cutting, to a long-term problem in terms of performance.

“I think what has happened is investing institutions are increasingly measured on a quarterly performance basis whilst I don't think anyone would say that they make decisions on a quarterly basis.”

Business Advisory Partner

Focusing on short-term results makes it challenging for companies to make important wealth-creating structural changes without affecting the share price and ultimately putting the future of the company at risk. This was a particular problem for a company cited by one of our respondents, which was unable to pursue a strategic deal that it needed.

“[...] if it sold that business which was more than 40 percent of [Company X] [...] it would then have an enormous amount of cash, which it would either have to return to the shareholders or immediately buy something else. Because you can't, as a public company sit on a very large amount of cash. So, you return that and then you're in a company that's just over 50% of the size of what you were before. You drop out of the FTSE 250 immediately, which means funds have to sell their investments in you. At that point you might as well sell the rest of the company, so you are effectively breaking up the business.”

Former FTSE 250 Company's Company Secretary

The lack of understanding of the drivers of a business by investors in aggregate due to their diversity, and the unhelpful focus on short-term performance are crucial factors that can lead to the undervaluation of a company. In the next section, we discuss how this has created a route through which private equity funds have increased their investment footprint in the UK. Indeed, as a result of the increasing focus on short-term returns, many companies have been forced to take their businesses private, and this is not a trend that is limited to the UK. In September 2020, the *Financial Times* reported that Rocket Internet, the German start-up factory responsible for internet companies such as Delivery Hero, Zalando and Jumia, was planning to delist having seen its share price lose half of its value since it went public in 2014. Reports suggest that the company believed public listing to be ‘no longer required’ given that there was so much private money available for investing in technology companies. A statement credited to the company states that:

“Outside a capital markets environment, Rocket Internet will be able to pursue a long-term approach to longer-term strategic decision-making regardless of capital markets' sentiment.”²⁴

Rocket Internet via Financial Times

5.2. Inflexible public markets

The focus on short-term performance is linked with an increased focus on income in the UK. All the respondents suggested that the UK stock market is income-focused, and there is a lot of undue pressure on companies to pay out dividends. The downside of this development is that the regular payment of dividends leaves companies with little room to retain profits and invest in growth projects. As a result, strategic changes are difficult to implement and companies underinvest in themselves, which in turn leads to lost opportunities and lower returns – a self-perpetuating stagnation scenario.

“Expectations have been set sometimes by previous management which make it very difficult for current management to take a completely new course [...] without having an impact on the share price because share prices are all based on predictability and expectations and the moment you think radically with the public, you risk destabilising that picture.”

Former FTSE 250 Company's Company Secretary

²⁴ [Rocket Internet to delist from public market' by Tim Bradshaw, Financial Times \(1 September, 2020\).](#)

Consistent with academic theory, respondents identify market risk as an important concept underlying the functioning of public markets. The level of market risk inherent in a company's core business directly affects its share price and, therefore, its returns. This makes some companies less suitable for public market listings because of the excessively volatile nature of their businesses – partly due to their exposure to the economy (high beta shares), and partly due to the way they are financed. Examples include construction businesses that have to deal with significant market risks and are thus more susceptible to economic downturns. Public markets are also less attractive to companies where a culture of risk-taking is part of their fundamental character. For such companies, going public could limit their appetite for risk. Efforts to retain a risk-embracing appetite will require investing a considerable amount of time in maintaining relationships with their investors and the public. When this relationship is put at risk, the potential for an erosion of trust between investors and management ensues and investors may demand a change in management or sell their shares. A consistently acrimonious relationship ultimately leads to shareholders losing faith in management's ability to improve the prospects of their company. Several respondents acknowledged that restoring trust is hard once there is a breakdown in the relationship between investors and management.

“[...] in the private model [...] it's far more entrepreneurial, they value agility, they value flexibility and they value quick decisions.”

Former FTSE 250 Company's Company Secretary

6. The rise of private equity

6.1. Economic effect

In our data analysis, we find strong evidence that the growth in private equity funding is positively linked to the decline in the number of companies listing in the UK. Using a sample of all new listings during the period between 1999 and 2019 and holding all other relevant factors constant, we relate various measures of IPO activity to the annual percentage growth in private equity financing and find a negative relationship between the two sets of variables. This suggests that, all things being equal, a fall in the number of companies listing in UK public markets is in part driven by growth in the financing provided by private equity funds to companies in the UK. The results are robust to alternative specifications and economically meaningful and significant. We find that a higher-than-average growth in private equity financing in any given year leads to an annual decline of 2.4% in the number of IPOs for that year, a 1.55% decline in the proceeds from IPOs, a 12.73% decline in IPOs as a proportion of publicly listed companies in the UK, and a decline of 8.82% in IPOs scaled by the size of the UK economy in GDP terms. See Annex B to this report for the detailed estimates, accompanying methodological and explanatory notes and the justifications for investigating these factors.

6.2. Foreign influence

The increasing influence of PE funds in the UK is incontrovertible. However, this cannot be divorced from developments in the US and elsewhere. The gradual relaxing of the enabling laws on private company ownership in the US through the 1980s to the 2010s, culminating in the JOBS Act,²⁵ for example, makes it easier for US private companies to stay private for longer and for private equity funds to accumulate cash to invest in them. Deregulation of investment vehicles in the US has led to an unprecedented growth in the number of large private equity funds, and such firepower needs to be deployed with a global focus in order to yield the significant returns pursued by their investors. This has inevitably led to the growth of financing for private equity funds and the private companies they support in the UK.²⁶ In the UK, of the £47.59 billion raised by private equity funds in 2019, the largest share of £18.8 billion or 39.5% was raised from North America. Only £5.4 billion (11.35%) was raised from the UKCS, which includes the UK, Bermuda, British Virgin Islands, Cayman Islands, Channel Islands, Guernsey, Isle of Man and Jersey. This is also less than the £10 billion (21.01%) and £9 billion (18.91%) raised from the rest of Europe and Asia Pacific respectively.²⁷ The influence of foreign investment in driving the growth of private equity funds and, by extension, the decline in the number of companies listing in public markets in the UK is also supported by the results obtained from our data analysis. We find that foreign direct investment in the UK is linked to annual declines in the use of public capital markets by UK companies. Our analysis shows that a higher-than-average increase in the value of foreign investment (scaled by the size of the global economy in GDP terms) in the UK in a given year between 1999 and 2019 is associated with a 1.35% decline in the proceeds from

²⁵ See <https://www.govtrack.us/congress/bills/112/hr3606/text>.

²⁶ We note that, somewhat ironically, the growth in private equity funding is partly sourced from asset owners, such as pension funds, who would otherwise allocate their investments to public markets.

²⁷ See [the BVCA Report on Investment Activity 2019](#).

IPOs and a 24.42% decline in IPOs as a proportion of publicly listed companies in the UK (detailed estimates are presented in Annex B to this report).

6.3. Dry powder

The insights gained from our data analysis with regards to the increasing prevalence and impact of private equity funds is also consistent with the insights gained from the interviews conducted with our respondents. Indeed, all our respondents agreed that the role of private equity has grown substantially, and this is linked to the reduction in the number of companies listed in UK public markets.

“[...] private equity firms have been very successful for their investors. Investors put their money into these, they have so much money that they don't know how to spend it. They are desperate to find targets on the stock market that they can turn around and sell for more.”

FTSE 250 Company's Company Secretary

Their success and higher returns attract institutional investors who would traditionally have invested their money in the stock market. As stated above, recent performance surveys presented by the BVCA show that, over the past decade, UK private equity funds have consistently outperformed all the major FTSE indices. Private equity funds compete to buy and invest in attractive businesses, thus making it easier for cash-hungry but promising early-stage companies to raise capital. This further dampens any incentive for these companies to raise money in public markets. The advancements in technology have also improved approaches to identifying and researching the viability of promising early-stage companies, often while they are still at the pre-proof-of-concept (POC) level. With the establishment of innovation hubs in major technology start-up centres around the world, identifying likely winners has become even easier for private equity funds. Coupled with their outstanding fundraising abilities, private equity funds are well-placed to attract and retain early-stage companies as private entities for longer than was previously the norm.

“[...] they've got a lot of dry powder or money that they're ready to invest if opportunities come along.”

Former FTSE 250 Company Non-Executive Director

This ‘dry powder’, or access to significant financial resources, allows private equity funds to invest in almost any publicly traded asset, with perhaps the exception of taking the largest cap FTSE companies private. It allows them to offer substantial premiums that makes it hard for company boards to decline attractive offers. In addition to higher premiums, private equity funds offer a strong strategic agenda, which is particularly important when the strategic changes are difficult to implement in the public markets for reasons already discussed in this report. Private equity funds are closely involved in the development of the businesses they invest in and they are seen as more technically influential than the aggregate investor base in public markets can be. They are involved in company-level operational issues and are highly focused on revitalising companies by investing heavily in them. Private equity funds are often specialist funds, whereas the public markets consist of a diverse pool of investors. Consequently, all our respondents noted generally positive views of the role of private equity funds in the companies they are associated with. The

companies some of our respondents worked for had been taken private with support from private equity funds and they viewed these acquisitions as successes.

“I think it was a benefit to the company being taken over because it had a single shareholder who had significant financial resources. It contributed some strategic thinking.”

FTSE Small Cap Company Chairman

“In private equity, very largely, you've got this single investor who influences the business strongly. They have a lot of skill, a lot of competence, and they put one or two people on the board to actually really try and steer the agenda.”

Former FTSE 250 Company Non-Executive Director

6.4. Tax shield

Private equity funds appear to benefit from preferential tax treatment because of the way they are financed. Funds can finance their purchases through debt, and this provides them with a tax shield because, unlike dividends, interest is tax deductible. Thus, the tax shield benefit ensures that the proportion of taxable profit is less than in a non-g geared scenario. In contrast, publicly quoted companies pay out dividends post tax. This was not perceived by our respondents to be a level playing field.

“If you've hugely geared up your company, it means that the interest bill is enormous, so it reduces your taxable profit substantially. [...] if you structure the way that private equity people do, they get this benefit – tax shield – and I think that it's actually in your interests as a private equity firm to gear up to take out profits.”

Business Advisory Partner

6.5. Undervalued public companies

Private equity funds view public companies as attractive acquisition targets when they are significantly undervalued. A respondent interviewed for this report worked for a (public) company that was significantly undervalued in the public market to the extent that its estimated winding down value was higher than its market capitalisation on AIM at a certain point in time. Undervaluation is a particularly persistent problem for AIM companies. AIM provides a platform for growth companies to raise long-term equity capital. However, the lack of trading activity on a lot of the shares listed on it suggests that the price discovery process is noisy and the prices generated on the exchange are largely informationally inefficient. Trading activity is the channel through which investors convey their beliefs regarding the value of an asset onto its price. When trading activity in a financial instrument is at a good level, then it is relatively easy for market participants to find buyers and sellers for the instrument; hence, it is liquid. On the other hand, when trading in an instrument is sparse, it is illiquid and the information contained in its price becomes stale, leading to a lack of informational efficiency; specifically, the price of the instrument is dislocated from its

underlying value.²⁸ This can lead to the market undervaluing the shares of companies when these shares are not actively traded, as is the case for many AIM shares. Undervaluation in turn makes the companies attractive to outside bidders, because, as suggested by a respondent:

“...if they had great liquidity and they were valued properly, the bidder wouldn't see any gain.”

Legal Advisory Partner

Conversely, as suggested by estimates obtained in our quantitative analysis, public markets that overvalue companies attract more listings. Specifically, we observe that UK companies are more likely to raise funding in public markets when they hold the view that the shares in public markets are overvalued, which would suggest that they expect a measure of overvaluation of their shares as well (see Annex B to this report). This is unsurprising as, in this case, companies are more likely to obtain a higher price for their IPOs.

The Markets in Financial Instruments Directive (MiFID) provisions appear to have also led to fewer research notes being produced by brokers. Companies, especially those listed on AIM, have become ‘invisible’, with their prices regularly going stale and reflecting low valuations. Thus, UK companies that are unable to achieve the valuations they want might look to list elsewhere if they wish to remain publicly quoted. Certain stock exchanges are better at valuing certain types of companies because of the presence of a larger number of similar companies and investors who understand these companies’ sectors. For example, the Toronto Stock Exchange (TSX) is more attractive for mining companies, while NASDAQ has a reputation for attracting tech companies. Investors there are more specialised and are better able to value such companies. AIM, on the other hand, is more diverse in terms of its composition, and one of the respondents suggested that this lack of specialisation is a factor driving the common undervaluation-inducing problem of lack of investor knowledge and understanding.

“People in the UK don't understand these companies. They are (too) complex for them and therefore they don't invest in them and that keeps the share price artificially low. If the same company were to be listed, let's say, in (the US), its share price would be worth far more because American investors are far more knowledgeable and sophisticated when it comes to investment in industrial businesses.”

Former FTSE 250 Company's Company Secretary

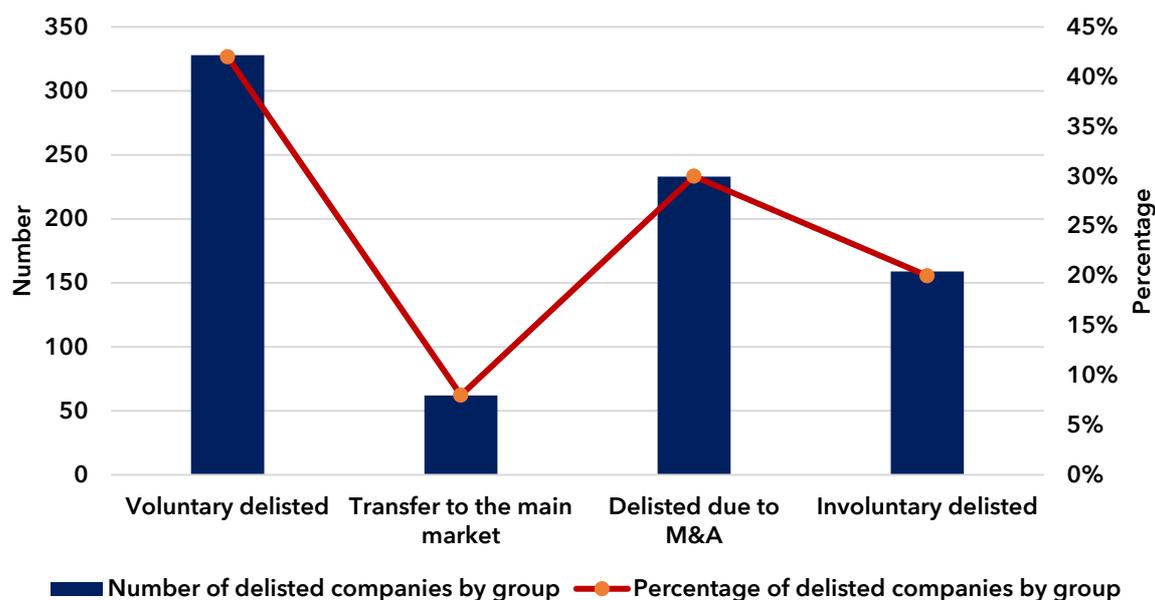
²⁸ See Ibikunle, G. (2018) Trading places: price leadership and the competition for order flow, *Journal of Empirical Finance* 49, 178-200; and Rzayev, K. and Ibikunle, G. (2019) A state-space modelling of the information content of trading volume, *Journal of Financial Markets* 46, 100507.

7. Why are public companies going private in the UK? Data-driven evidence

Thus far, we have addressed the issue of the declining number of public companies in the UK by holistically investigating a number of evolving factors, macroeconomic and otherwise, that are contributing to the trend. These factors apply to both a company making a decision to list in a public market or to retain a private company status. In this section, we take a different approach: we directly investigate a much narrower question using a large set of data obtained from various financial databases. In particular, we ask why companies that are already public choose to voluntarily delist. Delisting is defined as the removal of a listed company from trading on a stock exchange. In doing so, we address a few of the issues that we have previously contended with, such as agency conflict at the company level. However, we dispense with factors that are not idiosyncratic; i.e. we focus only on the factors that relatively exclusively affect a single company at a time in our sample. Hence, issues such as the increased financing strength of private equity funds, though relevant, are not directly examined in this section due to the constraints of our methodological framework. Generally, the factors we examine are driven by the financial economics academic literature and the findings of interviews conducted with the corporate experts who responded to our interview requests. Thus, we note that the foundational issues examined in Section 2 are particularly useful in understanding the relevance of the factors we explore here. Below, we discuss our main findings. In Annex C to this report, we then present a detailed set of tabulated results and an explanation of our methodological approach; we also offer an additional technical discussion of the results.

Figure 5. Reasons cited for companies delisting from UK public markets

The figure shows the number and percentage of the reasons for companies delisting in the UK during the sample period 1999 to 2019.



Focusing on the 1999 to 2019 period, the Thomson One Banker database identifies 782 instances where a UK company 'delists' from either the main market or AIM. As shown in Figure 5, using the Factiva database, we classify these into companies that voluntarily

delisted (328, 42%), companies that were removed from trading on AIM in order to transfer to the main market (62, 8%), companies that delisted as a result of a merger or acquisition (233, 30%) and companies that delisted involuntarily, i.e. because of bankruptcy or being in breach of exchange regulations etc. (159, 20%).

The first issue we consider here is how agency conflict could drive a delisting decision. Agency conflict between managers and shareholders is reduced when residual claims on a company (i.e. company assets) are concentrated in the hands of the managers. Hence, for private companies with low growth prospects, the risk of agency conflict is reduced. This suggests that companies with a low growth trajectory are more likely to go private.²⁹ A further implication of this argument is that high growth companies with limited free cash flow are more likely to be predisposed to be public companies in order to gain access to low-cost financing. Therefore, we examine whether companies with low growth opportunities are more likely to voluntarily delist in the UK and vice versa. We find that a one standard deviation negative (positive) shock to growth (proxied with return on assets) increases (decrease) the probability of delisting by about 24%. This suggests that companies with higher historic profitability levels are, all things being equal, less likely to voluntarily exit public markets. Hence, when a company is low growth, there is a higher probability that such a company will delist relative to a company that is high growth.

The second factor we consider is how the level of access to capital/capital restructuring might drive the decision to delist. Access to financing through public markets suggests an increased diverse option of raising capital for public companies versus private ones. This 'option' could perhaps be employed as a bargaining chip in negotiations for bank funding. Evidence from the financial economics academic literature also suggests that companies are more likely to publicly list in order to rebalance their capital structure, especially when they are highly leveraged.³⁰ Therefore, when the desire to reduce dependence on bank funding is unrealised in public markets, companies are likely to go private. This implies that low growth and highly leveraged firms with a low probability of raising additional capital in public markets are more likely to go private. We test this argument by examining the impact of leverage and experience in previously successfully issuing a seasoned equity offering on the decision to go private. We find that a one standard deviation increase in the leverage proxy raises the probability of delisting by 37%. This suggests that companies that have a higher level of debt are more likely to voluntarily delist. Companies that have previously successfully issued seasoned equity offerings are 17% less likely to delist.

"[...] one of our clearly stated intentions pre-IPO was that we wanted to use it to pay down debt in the company and for investment within the operations within [the region]. We've been able to do both of that."

FTSE 250 Company's Company Secretary

²⁹ See Aslan, H. and Kumar, P. (2011) Lemon and cherries? Growth opportunities and market temptations in going public and private. *Journal of Financial and Quantitative Analysis* 46, 489-526.

³⁰ See Leuz, C., Triantis, A. and Wang, T.Y. (2008) Why do firms go dark? Causes and economic consequences of voluntary SEC deregistrations. *Journal of Accounting and Economics* 45, 181-208; and Bharath, S.T. and Dittmar, A.K. (2010) Why do firms use private equity to opt out of public markets? *Review of Financial Studies* 23, 1771-1818.

Third, we investigate the effect of the liquidity of a company's shares on the decision to delist. The ability to trade large quantities of a company's stock quickly and with relatively little price impact is an important factor in going public when the main aim of the company is to easily raise capital. Liquid stocks have lower transaction costs and are therefore more likely to be in demand, thus helping the firm to achieve its aim of financing, for example, during a seasoned offering.³¹ Liquidity is also important for ensuring that the stock of a company is priced in an informationally efficient manner. Our results show that stocks with higher liquidity are 4% less likely to be delisted; hence, AIM-listed companies are generally more likely to voluntarily delist from public markets. This is linked to the fact that liquid stocks have lower transaction costs and are more likely to be in demand, thus helping the firm to achieve its aim of financing.

We also test a number of other factors that results suggest are not as relevant to the question of delisting based on the sample we examine. See Annex C to this report for the full details and further discussions.

³¹ Engel, E., Hayes, R.M. and Wang, X. (2007) The Sarbanes-Oxley Act and firms' going-private decisions, *Journal of Accounting and Economics* 44, 116-145; and Kashfi Pour, E. and Lasfer, M. (2013) Why do companies delist voluntarily from the stock market? *Journal of Banking and Finance* 37, 4850-4860.

8. Conclusions and recommendations

In this report, we present research-driven evidence on the factors contributing to the observed decline in the number of companies raising capital in public markets in the UK. Using primary interviews and secondary quantitative data, we show that, among other factors, an evolving rebalancing of company assets towards intangibles, the cost of being a public company versus being a private one, increasing investor focus on short-term returns, and a significant growth in private equity funds are linked to a reduction in the number of public companies in the UK.

One of the key reasons why companies consider going public is to access capital. However, companies are increasingly finding cheaper and more attractive private sources of funding. The private equity industry, in particular, has grown substantially in recent years. Recent regulatory developments in the US, low interest rates and a favourable tax regime for debt versus equity are some of the factors aiding the accumulation of significant financial resources by private equity funds. Resources that are then being deployed to acquire stakes in a wide array of companies, from early-stage ventures to publicly listed ones that are often taken private. Therefore, there is a larger number of private companies benefitting from private equity financing for longer without the need to raise capital in public markets. This is not necessarily a negative development due to several reasons addressed in this report. However, private equity funds benefitting from the debt tax shield contributes to the higher returns (in comparison to equity returns) they currently enjoy.

Recommendation 1: Levelling the playing field by making equity taxation more favourable to the average long-horizon investor will likely encourage increased use of public markets by companies and reduce investor focus on short-term returns. Tax incentives could be used to attract investment in smaller growth companies or to support first-time IPOs. These incentives should specify the minimum level of investment, holding period etc. The Treasury Select Committee is currently conducting an inquiry into ‘tax after coronavirus’. We recommend that members of the APPCGG urge the inquiry to consider addressing the disparity in taxation between investors investing through public and private market channels. Eliminating this gap in taxation could contribute to arresting the decline in the number of UK public companies.

Recommendation 2: A future iteration of the Stewardship Code should include an expanded emphasis on encouraging long-term focus in investment decisions.

Developments specific to the investor base for UK companies are also significant contributing factors with regard to the decline in the number of public companies in the UK. These developments include a short-term focus on investment returns and an increasingly obvious dearth of understanding of crucial specifics of certain sectors and the companies operating within them. Investors’ short-term return focus pressurises public companies to prioritise short-term performance over what could be a more sustainable and valuable long-term investment focus. This is a particular challenge for knowledge-driven tech companies, where the investment community fails to provide an adequate valuation of their (often intangible) assets. MiFID II may have further exacerbated the problem of investors lacking requisite insights into the activities of the companies they invest in due to a recently

emerging reduction in equity research focusing on smaller companies. This reduction suggests a lack of research into smaller companies and leaves them largely invisible to both institutional and retail investors. Therefore, there is a need to facilitate the provision of equity research focusing on smaller companies, and to mitigate any of the negative effects of MiFID II provisions on the generation of much-needed insights into the prospects of smaller companies. In addition, there is a need to support the development of a more patient investment culture within the UK investment community. Educational interventions by regulators and exchange operators that can aid dispersed investor bases in the valuation of innovative companies should also be encouraged.

Recommendation 3: Facilitating the provision of equity research on smaller companies will require some incentives and/or a willingness to pay higher costs. We call for a market-led inquiry to develop specific recommendations aimed at enabling this.

Recommendation 4: Consistent with the recommendations of the sentiments espoused in the Kay Review, we recommend that HM Treasury consider tax incentives to bring about a meaningful change in the investment culture of investors in UK plc. Specifically, incentives should be targeted at encouraging longer-term investment horizons.

Recommendation 5: In order to enhance the ability of investors to value innovative companies, especially those whose asset bases are dominated by intangibles, we recommend that the FCA consider strengthening its training and competence regime for regulated investors³² to include a focus on valuing intangibles and the other aspects of emerging innovative UK companies.

The growing costs (financial and otherwise) of being a public company are increasingly driving the decisions of many UK companies to shun public markets. Once listed, companies become subject to a number of market rules and regulations. Corporate governance and the types of disclosure that public companies must make are not only costly to maintain, but they may also significantly prejudice their commercial interests, which can be a critical factor for companies whose sustainable success is dependent on research and development. Specifically, costs associated with high levels of public scrutiny and corporate governance requirements are sticking points for many companies. Considering the growing role of private equity funds and their propensity for attracting institutional investors who hitherto have traditionally participated exclusively in public markets, the lower levels of disclosure required of private companies can be detrimental to a wide spectrum of stakeholders if a company fails. This is because lower disclosure standards may obscure some of the risks that are not as clear or apparent at the time of investment. Governance standards should be proportional³³ for both private and public companies. While progress has been made in narrowing the gap in corporate governance burden between public companies and the largest private companies with the recent introduction of the Wates Principles of Corporate Governance for Large Private Companies, there is some room for further improvement. Therefore, there should be some focus on further narrowing the disclosure gaps between private and public companies.

³² See <https://www.fca.org.uk/firms/training-competence>.

³³ See [Jubb, G. \(2017\) It's time we made corporate governance proportionate. University of Edinburgh Business School Insight Series.](#)

Recommendation 6: We advise the government to consider introducing secondary legislation aimed at making corporate governance requirements proportional for both public and private companies. At present, the European Commission's definition of a 'public interest entity' includes all UK listed companies without consideration of whether or not they carry a risk to the public interest. Exiting the European Union offers flexibility in establishing a more proportionate, risk-based approach to corporate governance.

Recommendation 7: Related to Recommendation 6, efforts should be made to streamline the listing process, especially for early-stage and smaller companies. One approach could be for the FCA to provide rules that enhance investor safeguards for alternative public listing routes, such as direct listings, reverse takeovers and Dutch auctions, and make them more mainstream in the UK. This should reduce the significant cost of listing new public companies.

Recommendation 8: Another approach to mitigating the costs and risk associated with public listing is the introduction of a form of 'earn-out' option for some of the costs of listing new public companies of certain sizes. In particular, investment banks and other advisors could be required to take a meaningful proportion of their fees in restricted shares, i.e. shares that cannot be sold until after a pre-determined period after the IPO, rather than cash, and thereby create an alignment of interest with investors. Although this is not common practice around the world, there is an opportunity here for the UK to lead the way in enhancing public market investor protections.

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Appendix

Annex A

Table A1. Differences in the regulatory requirements between private and public companies in the UK

The table below outlines the key distinctions in the regulations for private and public companies in the UK. The content is based on the Companies Act 2006 as drawn from the law itself, Derek French Blackstone's Statutes on Company Law 2014-2015 book and the Thomson Reuters Practical Law website.³⁴ Given the technical nature of the relevant terms and in order to ensure consistency in meaning and representation, the exact words are generally quoted and not paraphrased.

Term	Public	Private
<i>Liability</i>	The liability of members is limited by shares	The liability of members is limited by shares and by guarantee
<i>Number of directors</i>	Public companies must have at least two directors	Private companies can have one director
<i>Minimum share capital</i>	A public company must have a minimum issued share capital of £50,000	No minimum share capital requirements
<i>Share allotment (1)</i>	A public company may not allot shares unless at least 25% of the nominal value of the shares and the whole of any premium has been paid up	Private companies can allot shares with nil paid, partly paid or fully paid.
<i>Share allotment (2)</i>	A public company may not accept an undertaking to do work or perform services in consideration of the allotment of shares	No corresponding regulation
<i>Share allotment (3)</i>	A public company is not permitted to allot shares for non-cash considerations, unless an expert valuation is obtained. An exception is available where the non-cash consideration comprises all or part of the share capital of another body corporate.	No corresponding regulation
<i>Serious loss of capital</i>	Where the net assets of a public company are half or less of its called-up share capital, the directors must call a general meeting in the company to consider whether any, and if so	No corresponding regulation

³⁴ The Companies Act 2006 is available at http://www.legislation.gov.uk/ukpga/2006/46/pdfs/ukpga_20060046_en.pdf and the Thomson Reuters Practical Law website is available at [https://uk.practicallaw.thomsonreuters.com/5-613-3685?transitionType=Default&contextData=\(sc.Default\)&firstPage=true&bhcp=1](https://uk.practicallaw.thomsonreuters.com/5-613-3685?transitionType=Default&contextData=(sc.Default)&firstPage=true&bhcp=1)

	what, steps should be taken to deal with the situation	
<i>Purchasing of own shares</i>	The general rule is that a company cannot acquire its own shares, although there are a number of exceptions under the Companies Act 2006. In particular, the Act sets out procedures and conditions that must be satisfied for a share buy-back to be permitted, which include shareholder approval. A public company can only use distributable profits or the proceeds of a fresh issue of shares to pay for the buy-back.	A private company can finance the purchasing out of capital, subject to a number of conditions, including: <ul style="list-style-type: none"> • Shareholder approval; • Statements by the directors and auditors regarding the company's financial position and prospects.
<i>Capital reductions</i>	Public companies must go to court to carry out capital reduction	Private companies can carry out a capital reduction without going to court
<i>Distributions (1)</i>	A public company can only make a distribution out of profits available for the purpose and if the net assets of the company are not less (and not less following the distribution) than the aggregate of its called-up share capital and distributable reserves	No corresponding regulation
<i>Distributions (2)</i>	The availability of profits for distribution is determined by reference to the company's latest statutory accounts. If these do not disclose sufficient profits for an intended distribution, special accounts must be prepared and (in practice) audited to justify the distribution, and these must then be filed at Companies House before the distribution is undertaken. In particular, more rigorous standards apply to the preparation of such requirements by a public company.	No corresponding regulation
<i>Financial assistance for the acquisition of shares</i>	Public companies are prohibited from giving financial assistance, directly or indirectly, for the purpose of the acquisition of their shares. This prohibition is wide and covers the giving of loans, guarantees and security and other financial assistance that materially reduces the company's net assets, or	Private companies are no longer subject to restrictions on financial assistance, although a private company cannot give financial assistance for the purchase of shares in its public holding company. Private companies

	where the company has no net assets. The prohibition also applies to financial assistance given by a public company for the purpose of the acquisition of shares in its private holding company.	must also still comply with the general rules and restrictions on reductions of capital and distribution.
<i>Company secretary</i>	The company secretary of a public company must be qualified for appointment, either by his or her experience or through membership of a professional body	Subject to their articles of association, private companies are not obliged to have a company secretary
<i>Situational conflicts</i>	There must be express provision in a public company's articles enabling the directors to authorise situational conflicts of interest	The position for private companies varies according to when the company was incorporated: for private companies incorporated on or after 1 October 2008, the board is automatically empowered to authorise a situational conflict provided there is no contrary provision in the articles. For private companies incorporated before 1 October 2008, companies must pass a shareholder resolution empowering the board to authorise the conflict
<i>Shareholders</i>	A public company has the power to send out a statutory notice to find out about interest in its shares	A private company does not have this power
<i>Accounting requirements (1)</i>	Public companies must file their accounts within six months of their accounting year end	Private companies have nine months for this
<i>Accounting requirements (2)</i>	Public companies are not permitted to file short-form accounts	Small and medium sized private companies may file short-form accounts with Companies House
<i>General meetings (1)</i>	Members of public companies cannot agree to written resolutions instead of having resolutions proposed at general meetings	Members of private companies can agree to written resolutions instead of having resolutions proposed at general meetings
<i>General meetings (2)</i>	Public companies must hold an annual general meeting every six months beginning with the day following their accounting	Private companies do not need to hold an annual general meeting (though they should

	reference date	check the articles)
<i>General meetings (3)</i>	The requisite percentage for a public company to hold a general meeting on short notice is 95%	The requisite percentage for a private company to hold a general meeting on short notice is 90%
<i>General meetings (4)</i>	<p>Issues to be addressed at an annual general meeting:</p> <ul style="list-style-type: none"> • Approving the company report and accounts; • Approving the directors' remuneration report and remuneration policy (if applicable); • Approving the company's final dividend; • Appointing or re-appointing the company's auditors; • Electing or re-electing the company directors; • Approving amendments to the company's articles of association; • Granting authority to the directors to allot new shares; • Disapplying pre-emption rights; • Buying back the company's own shares; • Approving the making of political donations. <p>Listed companies must obtain further shareholder approvals at general meetings for certain transactions:</p> <ul style="list-style-type: none"> • "Related party transaction", that is, a transaction (other than a transaction in the ordinary course of business) between the company and a director, a substantial shareholder (a shareholder exercising or controlling the exercise of 10% or more of the voting rights at all general meetings), a "person exercising significant influence" or an 	<p>For private companies, the only decisions that must be approved in a meeting (rather than through a written resolution) are the:</p> <ul style="list-style-type: none"> • Removal of directors; • Removal of auditors; • The written resolution route is only available to private companies. Therefore, for a public company, all issues that require shareholder approval must be approved at a meeting.

	<p>associate of any of them. There is a separate regime for smaller related party transactions, which do not require shareholder approval.</p> <ul style="list-style-type: none"> • A "class 1" transaction; that is, a transaction in which one of the percentage ratios (gross assets, profits, consideration, gross capital) exceeds 25%. 	
<i>General meetings (5)</i>	<p>The notice periods for holding general meetings are as follows for public companies:</p> <ul style="list-style-type: none"> • 21 days for annual general meetings; • 14 days for other general meetings. <p>For traded companies (that is, companies whose securities are traded on a regulated market (for example, the Main Market of the London Stock Exchange in the UK), the following conditions must also be met before a meeting can be held with 14 days' notice:</p> <ul style="list-style-type: none"> • A special resolution must be passed allowing a 14-day notice period (this is usually passed at the company's AGM); • The company must offer the opportunity to vote by electronic means. This means that it must be possible to appoint a proxy through a website. 	The notice period for holding all types of general meetings must be at least 14 days for private companies
<i>Appointment and re-election</i>	<p>For listed companies, the 2018 UK Corporate Governance Code, which applies to financial years beginning on or after 1 January 2019, provides that all directors should be subject to annual re-election. Under the 2016 Corporate Governance Code, this only applies to companies on the FTSE 350 (an index containing the largest 350 companies by market capitalisation traded on the London Stock Exchange).</p>	No corresponding regulation

<i>Shareholders' rights of action</i>	For listed companies, the 2018 UK Corporate Governance Code, which applies to financial years beginning on or after 1 January 2019, provides that at least half of the board (excluding the chair) should be independent non-executive directors. The 2016 UK Corporate Governance Code requires this only for FTSE 350 companies and provides that non-FTSE 350 companies should have at least two independent non-executive directors.	No corresponding regulation
<i>Approval of the director's remuneration policy</i>	For quoted companies (that is, companies with shares listed on the Official List), a simple majority of shareholders must approve the directors' remuneration policy (a policy that sets out the company's future policy on directors' remuneration) at least every three years	No corresponding regulation
<i>Auditors' appointment (1)</i>	The auditors of a public company can be appointed by the company's: <ul style="list-style-type: none"> • Directors; • Shareholders by way of an ordinary resolution. 	The initial auditors of a private company can be appointed by the company's: <ul style="list-style-type: none"> • Directors; • Shareholders, by way of an ordinary resolution (either in a meeting or with a written resolution).
<i>Auditors' appointment (2)</i>	The Statutory Audit Services for Large Companies Market Investigation (Mandatory Use of Competitive Tender Processes and Audit Committee Responsibilities) Order 2014 provides that FTSE 350 companies should put out the external audit contract to tender at least every ten years. Transitional provisions allow companies some flexibility in choosing when to tender until 2023 at the latest, depending on the length of time the incumbent auditor has been in place. For listed companies, an audit committee will be the interface between the auditor and the board of directors, and the 2018 UK	No corresponding regulation

	Corporate Governance Code contains provisions relating to the role and responsibilities of the committee.	
<i>Information disclosure (1)</i>	Directors of Official List and AIM companies must notify the company in writing of all dealings in relation to the shares they hold in the company (<i>Regulation (EU) 596/2014 on market abuse</i> (Market Abuse Regulation)). The company must then notify the market of such dealings. This also applies to share pledges. This disclosure requirement applies to all "persons discharging managerial responsibilities", which includes senior managers and directors.	No corresponding regulation
<i>Information disclosure (2)</i>	Under the Market Abuse Regulation, listed companies are also under an obligation to, as soon as possible, disclose any "inside information" to the market; "inside information" is defined as information that is precise, not generally available and relating either to the shares or the issuer of the shares that would, if it were public, have a significant effect on the price of the company's shares	No corresponding regulation
<i>Corporate governance (1)</i>	Listed public companies must comply with the 2018 UK Corporate Governance Code. This applies to all companies with securities listed on the premium segment of the Official List, whether these are incorporated in the UK or not. The most recent edition of the Code was published in July 2018 and applies to financial years beginning on or after 1 January 2019.	No corresponding regulation
<i>Corporate governance (2)</i>	AIM companies must state the corporate governance code they are applying, how they comply with that code and where they depart from the code they must provide an explanation of the reasons for that departure	No corresponding regulation
<i>Share pledge</i>	In publicly traded companies, share pledges must be disclosed to the market if they are granted by directors or senior managers	No corresponding regulation

<i>Share transfers and exit</i>	Shares of listed companies must be freely transferable, unless the Financial Conduct Authority (FCA) agrees to restrictions on transfer (in exceptional circumstances). A restriction on the transfer of such shares is generally permitted where the shareholder or a person interested in the shares has failed to respond to a notice requiring him or her to disclose the nature and extent of his or her interests. This restriction is normally included in the company's articles. Companies quoted on AIM may also restrict transfers of shares where they wish to limit the number of shareholders in a particular country, to ensure that they do not become subject to foreign statutes or regulations	Private companies can impose restrictions on the transfer of shares. Such restrictions often provide that shares must be offered to existing shareholders before being transferred to third parties. A private company's articles can also provide that the directors can refuse to register the transfer of shares to persons that they do not approve. The articles may also set out pre-emption rights.
<i>Notifying the regulatory authority about changes in shareholding</i>	Under the Financial Conduct Authority's (FCA's) Disclosure Guidance and Transparency Rules, the shareholders of both Official List and UK AIM companies must inform the company when their voting rights reach, exceed or fall below 3%, or any whole percentage figure above 3% (that is, 4%, 5% and so on). These rules also apply to AIM companies incorporated in the UK. The company must then notify the FCA of the change and announce the changes to the market. AIM companies must also include details of any shareholders holding 3% or more of the company's voting rights on their website (and keep this up to date).	No corresponding regulation
<i>Material transactions</i>	Material transactions carried out by a listed company require the prior approval of shareholders. For an AIM company, no shareholder approval is required for substantial transactions or related party transactions, but such transactions must be announced to the market. In the case of a reverse takeover (that is, where a listed company acquires a business, an unlisted company or assets	No such approval is required for private companies

where any one of the percentage ratios under the Listing Rules/AIM Rules is 100% or more or that would result in a fundamental change in the business or a change in the board or voting control of the listed company), shareholder approval is required for both Official List and AIM companies.

Takeovers

Acquisitions of public companies are subject to the City Code on Takeovers and Mergers This is rarely the case for private companies

Annex B

Factors driving initial public offers in the UK

In this section, we investigate the macroeconomic determinants of the evolution of companies floating their shares in UK public markets, in particular the issuance of shares through initial public offers (IPOs). We therefore seek to understand the factors influencing the observed decline in the number of shares issued through IPOs in the UK between 1985 and 2019. We obtain IPO data for the period under consideration from Thomson One Banker. For each IPO, we collect information on issue date, total proceeds, number and type of shares offered, the offer price, whether the issuance is UK only or includes a foreign tranche and whether the issuance is from a UK or non-UK entity. We eliminate IPOs with no information on proceeds, IPOs with no SICs, IPOs where there are more than 30 days between the issuance dates of a pair of UK and foreign tranches and (global) IPOs that do not lead to the issuing entity being listed on a UK public market platform or exchange. We also eliminate duplicates, which may occur in the case of UK and foreign tranche offerings. Finally, we eliminate IPOs from REITs and funds. Macroeconomic data are obtained from the World Bank Database. Our empirical approach is a multivariate regression framework and we estimate the following model:

$$IPO_t = \alpha + \beta_1 PMI_t + \beta_2 ROL_t + \beta_3 PEG_t + \beta_4 FDI_t + \beta_5 GDP_t + \beta_6 SMT_t + \beta_7 SMC_t + \beta_8 TOBIN_t + \beta_9 VOL_t + \varepsilon_t \quad (B1)$$

Table B1 provides the definitions, computation methods and sources of all variables employed in Model B1. The table also includes brief explanations of the relevance of the variables and the expected relationship between the explanatory variables and the delisting decision.

Table B1. Variables

This table defines the variables used in Model B1. The variables are defined and specified under the 'Definition and Computation'; the 'Database' column outlines the sources of data used to compute each variable; the 'Hypothesis' column discusses the relevance of the selected variables; and the 'Relationship' column extrapolates from corresponding hypotheses to predict whether a variable's relationship with the decision to delist is positive or negative.

Variable	Definition and computation	Database	Hypothesis	Relationship
$IPO1_t$	This is the first IPO proxy employed and it is computed as the natural logarithm of the number of IPOs in the UK in year t .	Thomson One Banker		
$IPO2_t$	This is the second IPO proxy employed and it is computed as the natural logarithm of the IPO proceeds in the UK in year t .	Thomson One Banker		
$IPO3_t$	This is the third IPO proxy employed and it is computed as the IPO count in the UK scaled by lagged number of listed firms in the UK.	Thomson One Banker and World Bank Database		
$IPO4_t$	This is the fourth IPO proxy employed and it is computed as the IPO counts in the UK scaled by lagged UK GDP.	Thomson One Banker and World Bank Database		
PMI_t	Protecting minority investors: this is a proxy for the robustness of provisions protecting minority investors and it is obtained from the World Bank Database for the years it is provided: 2004 to 2019.	World Bank Database	Quality of legal investor protections: countries with robust legal protections for investors are expected to have a higher level of IPO activity (see Doidge et al., 2013).	Positive
ROL_t	Rule of law: this is a World Bank Governance indicator and it is obtained from the World Bank Database for the	World Bank Database	Quality of legal investor protections: countries with robust legal protections for investors are expected	Positive

	years it is available: from 1995 onwards.		to have a higher level of IPO activity (see Doidge et al., 2013).	
PEG_t	Private equity growth: proxy for growth in private equity financing in the UK, computed as the annual percentage growth in the number of UK private equity funds.	Thomson One Banker	Private equity financing is a major alternative to financing through IPOs; thus, IPOs are expected to be impacted by the evolution of private equity funds and financing (see Stulz, 2019).	Negative
FDI_t	Global foreign direct capital inflow in year t scaled by global GDP for year t .	World Bank Database	Financial openness: the extent of financial openness in a country's economy is also a factor in the volume of IPO its companies issue. This is because if it allows for an unimpeded flow of investment, foreign direct investment can spur the creation and listing of new businesses that otherwise might not have emerged in a more illiberal investment environment (see Doidge et al., 2013).	Positive
$GDPG_t$	Growth in GDP per capita, computed as the annual percentage change in GDP per capita.	World Bank Database	Level of economic development: economic development drives venture building and, by extension, the registration of new firms (see Beck et al., 2000; Doidge et al., 2013).	Positive
SMT_t	UK stock market turnover (liquidity proxy), computed as the real value of stocks traded in year t divided by the market cap for year t .	World Bank Database	Level of economic development: economic development drives venture building and, by extension, the registration of new firms. Market quality: higher liquidity of	Positive

			shares in public markets should motivate companies to choose public market financing over private market options (see Beck et al., 2000; Doidge et al., 2013).	
SMC_t	UK stock market cap is computed as the stock market capitalisation scaled by GDP.	World Bank Database	Level of economic development: economic development drives venture building and, by extension, the registration of new firms. Market quality: higher liquidity of shares in public markets should motivate companies to choose public market financing over private market options (see Beck et al., 2000; Doidge et al., 2013).	Positive
$TOBIN_t$	Country-level Tobin's Q, computed as the market-cap-weighted median of FTSE 100 companies Tobin's Q (ratio of total assets minus the book value of equity plus the market value of equity to the book value of total assets).	WRDS – Compustat	A Tobin's Q value higher than one implies that the UK's companies in aggregate are valued higher than their replacement costs. Therefore, it is expected that companies are inclined to issue IPOs in such an environment (see Bekaert et al., 2007; Doidge et al., 2013).	Positive
VOL_t	Proxy for market quality is captured through the level of price volatility and is computed as the yearly standard deviation of daily FTSE 100 index returns.	Yahoo Finance	Higher volatility means higher market risk, and thus companies are less likely to raise capital through public markets when price volatility is excessive.	Negative

In Table B2, we provide descriptive statistics for all the variables used in Model B1. These statistics are relevant for interpreting the estimation results reported in Table B3.

Table B2. Descriptive statistics

The table presents the mean and standard deviation estimates of the variables included in Model B1. The definitions of all the variables are provided in Table 4.

Variable	Mean	St. dev
$IPO1_t$	3.726	1.205
$IPO2_t$	21.547	1.037
$IPO3_t$ (*100)	3.189	2.781
$IPO4_t$ (*100)	6.031×10^{-8}	6.04662×10^{-8}
ROL_t	1.712	0.071
PEG_t (%)	10	5.160
FDI_t (%)	43.510	24.101
$GDPG_t$ (%)	4.701	3.216
SMT_t (%)	61.282	30.016
SMC_t (%)	107.909	22.907
$TOBIN_t$	1.639	0.676
VOL_t	0.040	0.016

Table B3 reports the estimation results of Model B1. All variables (except dummies) are standardised because they have different scales. Standardising also helps us to directly compare various determinants. The standard errors are robust to heteroscedasticity and autocorrelation. We have four IPO proxies and, hence, we estimate Model B1 for each of these variables separately.

Table B3. The drivers of initial public offers in the UK

The table reports coefficient estimates from the estimation of the following time series regression model:

$$IPO_t = \alpha + \beta_1 PMI_t + \beta_2 ROL_t + \beta_3 PEG_t + \beta_4 FDI_t + \beta_5 GDP_t + \beta_6 SMT_t + \beta_7 SMC_t + \beta_8 TOBIN_t + \beta_9 VOL_t + \varepsilon_t$$

The definitions of all variables are provided in Table B1. Panels A, B, C and D report the results for various IPO proxies. Standard errors are robust to heteroscedasticity and autocorrelation. *, ** and *** denote statistical significance at 0.1, 0.05 and 0.01 levels respectively.

Panel A

Dependent Variable: $IPO1_t$		
Variable	Coefficient	t-statistic
α	0.303***	6.47
PMI_t	0.608***	5.59
ROL_t	0.084*	1.89
PEG_t	-0.075**	-2.13
FDI_t	-0.061	-1.14
$GDPG_t$	0.799***	4.25
SMT_t	-0.001	-0.01
SMC_t	-0.010	-0.13
$TOBIN_t$	0.876***	5.51

VOL_t	-0.183***	-4.71
Adjusted R ²	79%	

Panel B

Dependent Variable: $IPO2_t$		
Variable	Coefficient	t-statistic
α	-0.058	-0.46
PMI_t	0.458*	1.92
ROL_t	0.169	1.32
PEG_t	-0.322***	-3.76
FDI_t	-0.204**	-2.34
$GDPG_t$	1.236***	4.06
SMT_t	0.334	1.17
SMC_t	0.468***	2.89
$TOBIN_t$	0.349	1.10
VOL_t	-0.276***	-3.07
Adjusted R ²	76%	

Panel C

Dependent Variable: $IPO3_t$		
Variable	Coefficient	t-statistic
α	0.036	0.14
PMI_t	0.624*	1.85
ROL_t	-0.0003	-0.01
PEG_t	-0.146***	-3.50
FDI_t	-0.280**	-2.21
$GDPG_t$	0.927**	2.34
SMT_t	0.550**	2.12
SMC_t	-0.190	-1.03
$TOBIN_t$	2.079***	8.80
VOL_t	-0.447***	-3.44
Adjusted R ²	76%	

Panel D

Dependent Variable: $IPO4_t$		
Variable	Coefficient	t-statistic
α	0.162	0.46
PMI_t	0.319	0.67
ROL_t	-0.041	-0.58
PEG_t	-0.088*	-1.83
FDI_t	-0.251	-1.41
$GDPG_t$	0.917	1.67
SMT_t	0.651*	1.84
SMC_t	-0.279	-1.07
$TOBIN_t$	2.201***	5.81
VOL_t	-0.465***	-2.71

Adjusted R²

77%

The estimation results are generally consistent across panels; therefore, we focus our discussion of the estimates on Panels A and B only. This is because the IPO variables that are the subject of the estimations in Panels A and B capture the impact of the determinants on the nominal (number of IPOs) and economic (pound value of proceeds) values of IPO activities respectively. Hence, between the two sets of results we capture the essence of the two main dimensions of IPO activity.

The results reported in Panels A and B suggest that PMI_t and ROL_t (in Panel A only) are significantly and positively related to both the nominal and economic IPO proxies ($IPO1_t$ and $IPO2_t$). These two variables (PMI_t and ROL_t) are proxies for the quality of the legal protections investors are afforded in the UK (see Table B1) and thus the positive and statistically significant estimates suggest that companies are more likely to float their stocks in UK public markets in an environment with good governance ratings, which would include high levels of investor legal protection. Companies floating their shares in public markets with robust investor legal protections is linked to companies being aware of the fact that investors are more likely to purchase shares in markets offering robust legal protections. The estimates, which are consistent with our expectations, are outlined in Table B1. Similarly, $GDPG_t$ is also significantly and positively associated with $IPO1_t$ and $IPO2_t$. This means that companies are likely to choose to raise finances in public markets over alternative (private) financing methods (e.g. private equity) when the economy is buoyant. This is because economic development is one of the factors that drive financial market activities and the registration of new firms.

Private equity financing is a major alternative to public market financing through IPOs; therefore, the negative relationship between PEG_t and both IPO proxies can be explained by the overall market trend and momentum effects. In particular, growth in private equity financing suggests a reduction in the number of companies raising funding in public markets through the issuance of IPOs. Another way to look at this is that the more there are private equity financing opportunities available to companies, the more favourable private equity financing terms are for companies (through competition effects), thus making this more attractive as a financing source than public markets.

$TOBIN_t$ is a proxy for the level of market valuation the average UK company enjoys relative to its book value. The aggregate UK plc is considered to be overvalued if the overall $TOBIN_t$ is higher than 1. Thus, a plausible explanation for the positive and significant association between $TOBIN_t$ and both IPO proxies, as reported in Table B3, is that UK companies are more likely to raise funds in public markets when they believe that the shares in public markets are overvalued, which would suggest that they also expect a level of overvaluation of their shares. This is not surprising as, in this case, companies are more likely to obtain a higher price for their IPOs.

Finally, we detect a negative relationship between VOL_t and IPO proxies. VOL_t is a proxy for stock market volatility, i.e. market/price risk. Therefore, this result indicates that companies are less likely to float their shares in UK public markets when there is a high price risk in the public markets. This result is expected and consistent with the findings reported

in Annex C below. In Table C3, the estimates show that companies are more likely to exit public markets and choose private funding sources over public financing when their shares are subject to a high level of price volatility in public markets. Thus, high price volatility is a critical determinant of companies deciding to raise finances in either public or private markets.

The results reported in Table A2.3 are also economically significant. As an example, a one standard deviation shock to PEG_t and VOL_t reduces $IPO1_t$ by 2.4% ($-0.075 \cdot 1.205 / 3.726$) and 6% ($-0.183 \cdot 1.205 / 3.726$) respectively. A one standard deviation shock to $GDPG_t$ and $TOBIN_t$ in turn increases $IPO1_t$ by about 25% ($0.799 \cdot 1.205 / 3.726$) and 28% ($0.876 \cdot 1.205 / 3.726$) respectively. These economic effects are significant. However, we advise caution in interpreting the magnitude of the economic effects due to potential unavoidable econometric (endogeneity) concerns.

Annex C

Why do public companies go private? The UK evidence

In this section, we investigate the factors that may contribute to companies that are already public choosing to voluntarily delist. Our main dataset, obtained from Thomson One Banker, includes companies delisted from UK trading platforms, such as AIM and the London Stock Exchange's main market, between 1999 and 2019. The initial sample includes 782 delisted firms. We then use news reports from Factiva referencing the delistings to classify the sample companies into the following: a) voluntarily delisted companies; b) companies delisted from AIM due to transfers to the main market; c) companies delisted due to M&A activity; and d) companies that are involuntarily delisted, e.g. due to bankruptcy or breaching exchange rules. The classification yields 328 (42%) voluntarily delisted companies, 62 (8%) companies delisted due to transfer to the main market, 233 (30%) companies delisted due to M&A activity and 159 (20%) companies that were involuntarily delisted for various reasons. Our analysis focuses on the voluntarily delisted companies.

The data from Thomson One Banker includes the company name and 6-digit CUSIP number as company identifiers. However, in our main data sources for the variables, such as WRDS and Bloomberg, a number of relevant variables do not have the CUSIP number as an identifier for international stocks. Therefore, for each voluntarily delisted firm, we collect ISINs from the Fame database and obtain all the other required variables (see Table C1) used in the study by using the ISINs in WRDS and Bloomberg. We also exclude 83 firms because relevant data for these firms could not be obtained; thus, the total number of voluntarily delisted companies used in the study is 245.

We employ a multivariate logit regression framework to estimate the effects of a series of determinants on the voluntary delisting decisions of the 245 companies retained for the analysis. In the framework, these companies form the treated group of companies; therefore, we need to identify an equal number of 'control' companies that have been publicly listed for a similar number of years as the treated group of companies but that have not delisted from the public markets. In order to ensure comparability, we match each member of the treated group of companies to a control company using market capitalisation. Thus, our total sample size is 490 companies. The conditional logit regression model we estimate is as follows:

$$Delisted_i = \alpha + \beta_1 ROA_i + \beta_2 MB_i + \beta_3 LEV_i + \beta_4 CAPEX_i + \beta_5 SEO_i + \beta_6 LnVOL_i + \beta_7 INT_i + \beta_8 STD_i + \beta_9 BETA_i + \varepsilon_i \quad (C1)$$

Table C1 provides the definitions, computation methods and sources of all variables employed in Model C1. The table also includes brief explanations of the relevance of the variables and the expected relationship between the explanatory variables and the delisting decision.

Table C1. Variables

This table defines the variables used in Model C1. The variables are defined and specified under 'Definition and computation'; the 'Database' column outlines the sources of data used in computing each variable; the 'Hypothesis' column discusses the relevance of the selected variables; and the 'Relationship' column extrapolates from corresponding hypotheses to predict whether a variable's relationship with the decision to delist is positive or negative.

Variable	Definition and computation	Database	Hypothesis	Relationship
$Delisted_i$	The dependent variable in Model C1. A dummy variable that equals 1 for delisted companies and 0 otherwise.	Thomson One Banker		
ROA_i	Return on asset, computed as EBIT divided by total assets for firm i .	WRDS – Compustat	Agency costs: firms with low growth prospects are more likely to go private (see Doidge et al., 2010; Lehn and Poulsen, 1989).	Negative
MB_i	Market to book ratio, computed as market value divided by book value for firm i .	WRDS – Compustat	Access to capital/capital restructuring: low growth and highly leveraged firms with low probability of raising capital are more likely to go private (see Bharath and Dittmar, 2010; Leuz et al., 2008).	Negative
LEV_i	Leverage, computed as total debt divided by total asset for firm i .	WRDS – Compustat	Access to capital/capital restructuring: low growth and highly leveraged firms with low probability of raising capital are more likely to go private (see Bharath and Dittmar, 2010; Leuz et al., 2008).	Positive
$CAPEX_i$	Capital expenditure scaled by sales.	WRDS – Compustat	Access to capital/capital restructuring: low growth and highly leveraged firms with low probability of raising capital are more likely to go private (see Bharath and Dittmar, 2010; Leuz et al., 2008).	Negative
SEO_i	Seasoned equity offering; this is a dummy equalling 1 if company i has raised equity capital in the past and	Factiva	Access to capital/capital restructuring: low growth and highly leveraged firms with low probability of raising capital are more likely	Negative

	zero otherwise.		to go private (see Bharath and Dittmar, 2010; Leuz et al., 2008).	
$LnVOL_i$	Trading volume proxy for firm i , computed as the natural logarithm of the number of shares traded in the year leading to delisting.	WRDS – Compustat	Liquidity: liquid stocks have lower transaction costs and are therefore more likely to be in demand, thus helping the firm to achieve its aim of fund raising (see Engel et al., 2007).	Negative
INT_i	Intangible assets, computed as the currency value of intangible assets as a proportion of the value of total assets.	WRDS – Compustat	Information asymmetry: companies with high levels of information asymmetry are more likely to go private. Pricing intangible assets is highly subjective and the stocks of companies with high levels of intangible assets are more likely to be affected by information asymmetry (see Kashefi Pour and Lasfer, 2013).	Positive
STD_i	Volatility, computed as the standard deviation of daily stock returns for firm i .	WRDS – Compustat	Volatility and financial visibility: stocks that receive low interest from investors are more likely to be volatile and thus they are more likely to go private (see Kashefi Pour and Lasfer, 2013).	Positive
$BETA_i$	Market beta for stock i , computed as the covariance between market and stock return divided by the market variance.	Bloomberg	High levels of exposure to the economy: companies with excessively volatile stocks are less suitable for public market listings because of the nature of their businesses – partly due to their exposure to the economy and partly due to the way they are financed (see Kashefi Pour and Lasfer, 2013).	Positive

Table C2. Mean statistics for delisted and control firms

The table presents the mean estimates of the main variables for the treated and control groups of company shares. We employ the standard two-sample t-test to test the null hypothesis that the differences between the two groups' variables are each zero. The treated sample includes 245 companies that voluntarily exited UK public markets between 1999 and 2019. Control companies are selected by matching the market capitalisation of each voluntarily delisted company with the market capitalisation of a company that remained public using the date of delisting, thus yielding an additional 245 control companies and a combined total of 590 companies. * and *** indicate the rejection of the null hypotheses at statistical significance levels of 0.1 and 0.01 respectively.

Variable	Delisted Firms	Control Firms	Difference (Delisted – Control)
ROA_i	0.02	0.07	-0.05***
MB_i	1.47	3.44	-1.97***
LEV_i	0.22	0.15	0.07***
$CAPEX_i$	0.04	0.05	-0.01
$LnVOL_i$	16.99	17.61	-0.61
INT_i	0.22	0.19	0.03
STD_i	0.05	0.03	0.02*
$BETA_i$	1.09	1.07	0.02*

The estimates and statistical test results presented in Table C2 suggest that ROA_i and MB_i are higher for the control group companies. On the other hand, the treated group's firms have higher LEV_i , STD_i and $BETA_i$. These results may indicate that firms with lower profitability and higher risk are more likely to voluntarily exit UK public markets. The picture that appears to be emerging here is that the group of companies likely to delist their shares face a challenging public market, while they are also prone to being highly leveraged, perhaps as a result of not being successful enough in raising financing through public equity. This conjecture is formally tested by estimating Model C1; the results are presented in Table C3.

Table C3. Logit Regression Results

This table reports coefficient estimates from the following conditional logit regression model:

$$Delisted_i = \alpha + \beta_1 ROA_i + \beta_2 MB_i + \beta_3 LEV_i + \beta_4 CAPEX_i + \beta_5 SEO_i + \beta_6 LnVOL_i + \beta_7 INT_i + \beta_8 STD_i + \beta_9 BETA_i + \varepsilon_i$$

$Delisted_i$ is a dummy variable equalling 1 for delisted companies and 0 for control companies. Control firms are selected by matching the market capitalisation of each voluntarily delisted company with the market capitalisation of a public company of a similar age. All variables are as defined in Table C1. Marginal effects are computed as the mean of marginal effects across company shares. The treated sample includes 245 companies that voluntarily exited UK public markets between 1999 and 2019. Control companies are selected by matching the market capitalisation of each voluntary delisted company with the market capitalisation of a company that remained public using the date of delisting, thus yielding an additional 245 control companies and a combined total of 590 companies. * and *** denote statistical significance at 0.1 and 0.01% levels respectively.

Variable	Coefficient	Marginal Effects	t-value
α	3.202***		3.39
ROA_i	-1.221**	-0.241	-1.99
MB_i	-0.022*	-0.004	-1.81
LEV_i	1.354***	0.371	4.81

$CAPEX_i$	-1.007	-0.203	-0.59
SEO_i	-1.391***	-0.178	-4.95
$LnVol_i$	-0.214***	-0.040	-3.83
INT_i	0.396	0.079	0.39
STD_i	1.307	0.261	1.01
$Beta_i$	-0.364	-0.082	-0.67
McFadden's R^2	16%		
McKelvey-Zavoina R^2	62%		
Veall-Zimmermann R^2	31%		

Table C3 reports the coefficient estimates for Model C1. ROA_i , MB_i , LEV_i , SEO_i and $LnVol_i$ are shown to be statistically significant determinants of the companies' decision to voluntarily delist from UK public markets between 1999 and 2019. Consistent with the univariate analysis presented in Table A1.2, ROA_i and MB_i are negatively linked to $Delisted_i$ and LEV_i is positively linked to $Delisted_i$. Thus, our argument about the impact of firm profitability and risk profile on the delisting decision is supported by these results. The negative and statistically significant coefficient estimates capturing the relationships between $LnVol_i$ and SEO_i , on the one hand, and $Delisted_i$, on the other, also suggest that companies with higher stock market liquidity and previous public financing experience are less likely to voluntarily exit UK public markets. Next, we discuss the marginal effects observed for each of the statistically significant coefficient estimates.

The marginal effects are the most important estimation results as they allow us to see the economic significance of the explanatory variables for the delisting decision for companies that delisted from UK public markets between 1999 and 2019. In particular, they show an increase in the probability of delisting if the explanatory variable increases by one standard deviation, conditional on all other explanatory variables being at their unconditional means. Based on the marginal effects, a one standard deviation negative (positive) shock on ROA_i increases (decreases) the probability of delisting by about 24%. The implication of this estimate is that companies with high levels of profitability are less likely to voluntarily delist from public markets. This is linked to companies with high growth opportunities being more likely to obtain cheap financing through their participation in public markets. The 0.371 marginal effect estimated for LEV_i suggests that a one standard deviation shock on the leverage variable increases the probability of delisting by 37%. This further suggests that companies that are heavily leveraged are more inclined to voluntarily exit public markets. $LnVol_i$ has a marginal effect of -0.04, suggesting that companies with more liquid shares are 4% less likely to delist from public markets relative to those that are not as liquid. This outcome is connected to liquid shares having lower transaction costs and therefore being more likely to be in demand – this helps companies to achieve their aim of financing. Therefore, companies with liquid shares are less likely to voluntarily delist their shares.

The marginal effect of SEO_i is -0.178, suggesting that companies that have successfully made at least one seasoned equity offer in the past are 17% less likely to voluntarily delist their shares. Finally, the results show that stocks with higher MB_i levels are 0.4% less likely to make a delisting decision. It is evident that the variables with statistical significance also have economic significance (except MB_i). We report three versions of R^2 to show the explanatory power of Model C1. Overall, the model has high explanatory power.

McFadden's R^2 is 16%, which is smaller than the McKelvey-Zavoina R^2 (62%) and Veall-Zimmermann R^2 (31%). This is expected as the value of McFadden's R^2 tends to be remarkably lower than the value of the other R^2 s.

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