UNIVERSITY OF OXFORD

Said Business School

Addressing Gaps in the Financing of UK Entrepreneurial Ventures


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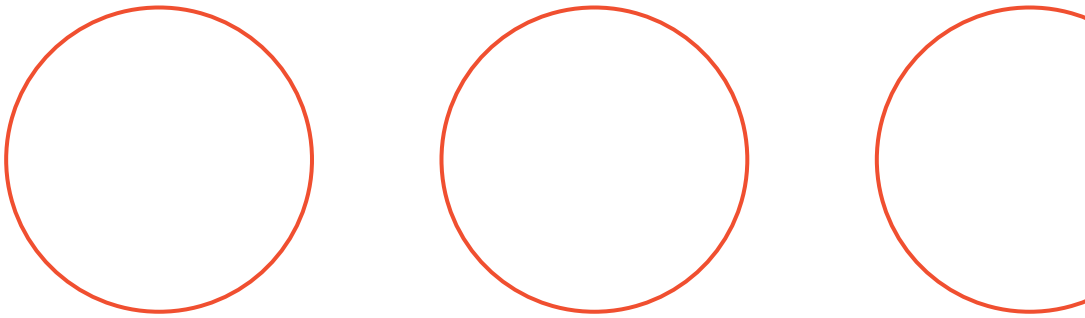
Contents

A report about the research and learning outcomes related to the Barclays' Early Career Development Fellow Scholarship at Saïd Business School, University of Oxford



Executive summary

Entrepreneurship is widely considered the engine of modern economic growth. While the UK economy has a strong track record of starting new companies, financing remains a key challenge for them, potentially diminishing their beneficial role in the economy. Startups need money to grow, and yet many of them face considerable difficulties in raising capital from banks, venture capitalists, and public markets. Policymakers are striving to address these challenges by improving access to capital markets, but the effectiveness and implications of their policies remain largely unknown. Adding further complexity, the financial sector is undergoing radical transformation, such as the rise of Fintech, or the advent of distributed ledger technology, i.e. the "Blockchain". Given these considerations, there is a strong necessity to critically assess the prevailing financing gaps in the UK economy.

The objective of this report is to summarise several of the initiatives undertaken by Saïd Business School, University of Oxford, in collaboration with Barclays Bank, to better understand the financing issues facing UK startups. This collaboration emerged as a result of Barclays' generous support for an Early Career Development Fellow position at Oxford Saïd.

The initiatives can be broadly classified into three types of activities:

(i) New academic research on financing gap issues

(ii) The joint UK Scale-up policy report

(iii) A variety of discussion forums that ensure the dissemination of key research ideas

Together these initiatives reflect a significant effort to raise awareness of the UK financing gap issue, point towards areas for improvement, and make recommendations to develop a strong entrepreneurial funding ecosystem in the UK.

The first section of this report describes recent academic studies on three different topics in the area of entrepreneurial finance: (i) The effect of deregulation of public and private equity markets, (ii) New funding opportunities via Blockchain using initial coin offerings (ICO), and (iii) Debt financing of venture-backed companies.

The first study is by Anantha Krishna Divakaruni, the holder of the Barclays Early Career Development Fellow position. The Divakaruni (2019) paper looks at the role of public and private equity markets for entrepreneurial ventures. For this, he looks at capital markets in the US that experienced some important regulatory changes, and its implications on entrepreneurial fundraising. A key takeaway from this study is that lessons from policy changes in these advanced markets can inform the current UK debate about the role of such markets. The study looks specifically at the Jumpstart Our Business Startups (JOBS) Act, which sought to improve access to US capital markets by easing disclosure requirements for going public and removing restrictions on raising private equity. Although the JOBS Act was a major overhaul of US securities laws in recent decades, the study finds an increase in the costs of issuing public and private equity following the Act. These higher costs are due to increased information asymmetries between firms and investors from reduced disclosure and restricted access of private markets to sophisticated investors only. Moreover, reduced disclosure has encouraged cash-starved firms to go public, causing an overall decline in the quality of US capital markets. These findings provide important lessons to policymakers who might be contemplating similar measures to improve access to capital markets in the UK.

The second study, by Divakaruni, Hellmann and Montag, is currently still under way. It looks at new fundraising opportunities that have emerged with technological advances in computing and cryptographic data storage. Known as 'distributed ledger' or 'Blockchain', this technology has spurred a new form of financing for entrepreneurs known as Initial Coin Offerings (ICO). Investing in an ICO provides rights to ownership or royalties to a blockchain-based project, and is different from traditional equity investments that represent ownership in the firm itself. As such, ICOs hold the promise of offering entrepreneurs who lack access to conventional financing an easier and quicker means to raise capital.

There is considerable controversy about the benefits and downsides of this new financing method. ICOs gained prominence since 2015, probably reached their peak in 2018, and have an uncertain future. In principle they hold the promise of disrupting parts of the established venture capital (VC) model. They also pose significant risks to investors due to lack of monitoring provisions or legal recourse and the constant threat of hacking. While these concerns have led many to dismiss ICOs as temporary hype, the question remains whether ICOs can reduce fundraising costs and democratise finance. A brand new strand of academic literature is trying to comprehend this financial innovation, yet there remains a general lack of understanding of the information structure of ICOs, the characteristics of ICO founders, and the signalling mechanisms used to attract investors. Our ongoing study seeks to understand how legitimate entrepreneurs can signal their intent and credibility in this young and risky ICO environment. We consider this line of inquiry novel and important, as it informs us about a phenomenon, we know very little about, namely the birth of new financial market structures, and especially their informational architecture.

The third study by Inna (2016) explores the use of debt by startups and looks at the considerations of lenders in providing such financing. While theory suggests that debt may not be suitable or easy to obtain for early stage companies, evidence suggests that 'venture debt' is in fact increasingly becoming available to startups. Inna (2016) adds to the growing body of literature on venture debt by examining whether the tendency of VCs to reinvest in portfolio companies has any bearing on the provision of venture debt. The study finds that VC reinvestment does indeed have a positive effect on a portfolio firm's ability to secure debt financing. This suggests that investing alongside VCs can help minimise the risk to lenders and provides a strong case for the establishment of a vibrant venture debt market in the UK.

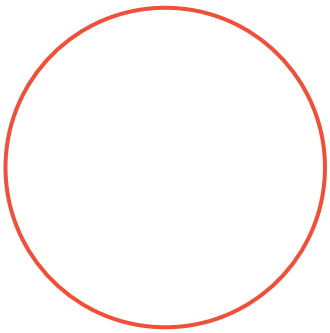
The second section discusses a 2016 study titled 'Scale-up UK: growing businesses, growing our economy' that assesses the quality of the UK startup environment for financing scale-ups. The study explores why the strong financing ecosystem in the UK, which is increasingly able to support early stages, has found it difficult to cultivate successful scale-ups. The report identifies issues affecting the growth of startups into scale-ups and makes recommendations to develop a strong entrepreneurial ecosystem that can overcome these issues. The report found that UK investors tend to focus on early-stage investments that has caused a major funding gap for later-stage funding needed for startups to grow. There is, however, room for improvement, as the UK is well-positioned to attract funding from outside, especially the US, and can also make structural changes to facilitate large-scale funding and improve access to capital markets. In total, the report identifies six key areas where changes are

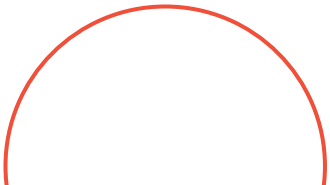
needed to address the scale-up problem facing the UK:

1. Facilitate larger VC funds.
2. Develop expertise and networks among investors.
3. Promote venture debt as a complement to VC financing.
4. Improve access to stock markets.
5. Encourage markets for the trading of private company shares.
6. Facilitate systematic data collection on the financing of scale-ups.

Since the publication of this report in 2016, the UK economy seems to have taken note, and several institutional developments in the recent past have already improved the availability of scale-up financing.

The third section discusses a series of outreach events that are related to the financing of entrepreneurs. Some of these events were hosted by Barclays, such as the Barclays Davos breakfast session that featured Dean Peter Tufano as a guest speaker. Some were co-hosted, such as the roundtable reporting the results from the Scale-Up report. Others still were hosted by Saïd Business School, and involved the participation of key representatives from Barclays, such as several of the Oxford Entrepreneurship Policy Roundtables. Also included in this category are several highly successful MBA guest talks by Barclays experts, as well as a memorable debate at the Oxford Union.





1. Insights from academic research

Highlights

- Deregulation of US public markets in 2012 increased issuance costs and incentivised cash-starved firms to go public.
- Blockchain-based funding has become popular in recent years as it lowers transaction costs and democratises financing.
- VC funding increases a startup's prospects of raising debt financing.

1.1. The regulation of capital markets: implications of policy change in the US

For decades scholars have written extensively about how firms raise capital from public equity markets. The economic importance of these markets stems from the fact that they are an important source of financing for firms. Besides public markets, firms raise capital in private markets through private placements (PP) and private investments in public equity (PIPE). Private markets have become increasingly important due to a growing dissatisfaction with public markets. Yet, this important funding mechanism is usually ignored by scholars, even though relevant data has become available in recent years.

There has been a sharp decline since the mid-90s in initial public offerings (IPO) and publicly listed firms in the United States (US). Prior studies attribute this downtrend to high rate of acquisitions of listed firms and high costs of disclosure, particularly for smaller companies (Gao et al. 2013; Doidge et al. 2017). This rapid decline compelled US lawmakers to find ways to simplify the going public process, leading to the biggest regulatory reform of capital markets in the US through the "Jumpstart Our Business Startups" (JOBS) Act. Enacted in 2012, the JOBS Act reduced disclosure costs by introducing new on-ramping regulations and made it easier for so-called emerging growth companies (EGC) to go public. Alongside, restrictions on the marketing of private equity offerings were constraining smaller firms that depend on these markets for capital. The JOBS Act removed these restrictions by allowing the solicitation of private offerings through any medium.

The research by Anantha Divakaruni (2019) builds on the premise that there exists a bigger equilibrium between public and private equity markets, and analyses the impact of the JOBS Act on fundraising across both markets. The findings of the study are best understood in two parts, namely (i) market choices, and (ii) issuer costs and quality.

	Primary equity markets	Secondary equity markets
Fundraising choices for:	Private company	Public company
Private market	Private placement (PP)	Private investment in public equity (PIPE)
Public market	Initial public offering (IPO)	Secondary public offering (SPO)

The first part of the study employs a simple but powerful taxonomy (see table above) to understand market choices as shown above. Following the JOBS Act, IPO activity increased while PP activity decreased among firms with greater capital needs, suggesting that firms were eager to take advantage of reduced disclosure and go public rather than stay private. This is evident from the fact that the average age of firms going public and the time required for them to complete the IPO process has dropped significantly since the Act was passed (see Figure 1). However, the growth in IPO activity was short-lived only until mid-2015, suggesting that there was pent-up demand for accessing public markets.

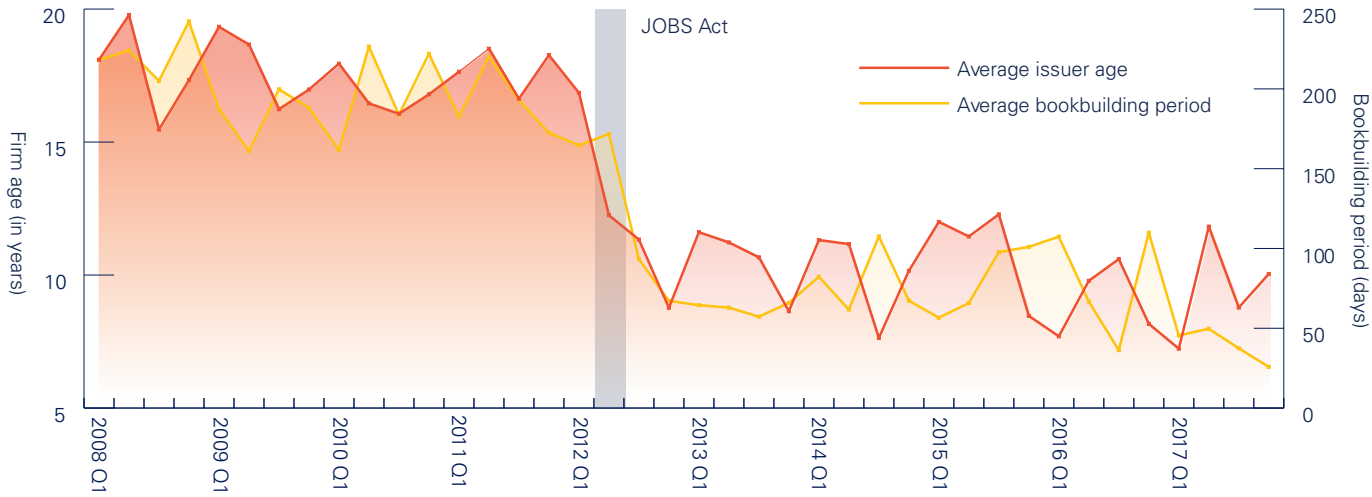


Figure 1: Firm age (years) and duration (i.e. time between filing and offer completion / withdrawal) of firms going public in the period surrounding the JOBS Act. Source: Divakaruni (2019)

The paper also explores the secondary markets for raising equity and finds strong evidence that firms continue to use the regulatory exemptions of the JOBS Act to raise funds through SPOs. These companies also raise considerable funds using PIPEs. These findings provide new perspective on how private markets complement public markets rather than compete with them.

Overall, the results show that while deregulation of public markets had a significant effect on equity fundraising, the deregulation of private markets under the JOBS Act had relatively little effect on firms' going public decision. This is because private equity markets have grown substantially in the last 20 years, and there is no evidence to suggest that the JOBS Act contributed to any further increase in private fundraising. Thus, the study documents several aspects of private equity markets that were previously not well understood.

To assess whether the JOBS Act did improve access to public markets as envisioned by policymakers, the second part of the study examines its effects on the cost of issuing public equity. The direct issuance cost (i.e. underwriter fees) for IPOs is unaffected, but increases for the SPOs of EGCs after the JOBS Act. EGCs also experience greater indirect cost of issuance (i.e. underpricing) for both IPOs and SPOs. The paper also examines at the direct costs of PPs and PIPEs but does not find any cost reduction post-JOBS. This leads to the overall conclusion that the costs of issuing public equity did not reduce after the JOBS Act as reduced disclosure contributed to greater informational asymmetries between EGCs and investors.

Lastly, the paper examines the quality of firms going public after the Act and evaluates how they fare relative to pre-JOBS issuers that did not have access to the Act's disclosure exemptions. Analysis suggests that the Act incentivised cash-starved firms to go public rather than remain private. EGCs rely mainly on the cash raised in the IPO and the additional capital raised through SPOs and PIPEs. However, the lack of oversight has allowed them to use the proceeds to repay debt and pay executives rather than invest in firm growth. Consequently, EGCs perform much worse than pre-JOBS issuers and face the risk of financial distress

even after going public. These results suggest that the JOBS Act has altered the dynamics of fundraising in US capital markets by allowing firms of poorer quality to go public.

Summary of findings: Implications of the JOBS Act

- Increased propensity among firms eligible for IPO disclosure and registration exemptions (known as emerging growth companies or EGCs, for short) to go public rather than stay private.
- Greater secondary offering activity (both public and private) among EGCs compared to firms that went public prior to the Act.
- Increase in direct and indirect issuance costs of public offerings. Direct costs (underwriting fees) for EGCs have increased by up to $2.56 million on average whereas indirect costs (underpricing) increased by $7-14 million on average. These higher costs are due to increased information asymmetries between EGCs and investors owing to reduced disclosure allowed by the Act. Alternatively, the Act may be incentivising firms of poorer quality to go public provided they compensate the market for increased risk and uncertainty.
- Up to 77% of EGCs are cash-starved firms at the time of their IPO and are unable to use the offer proceeds to improve their financial situation.

1.2. Funding blockchains: the emergence of Initial Coin Offerings

Small, entrepreneurial firms are considered an important source of job creation and economic growth. Yet, small firms are characterised by relatively high information asymmetries and face difficulties raising capital from outside investors. These frictions also restrict their access to capital unless they are based in an entrepreneurial hub like Silicon Valley and have personal ties to prospective venture capital (VC) investors.

Recent advances in computing, particularly the development of distributed ledger technology called "blockchain", have introduced a new form of financing known as initial coin offerings (ICO). ICOs are a mechanism for fundraising through the sale of blockchain-based securities called "tokens", and have become a major alternative source of capital for entrepreneurs (Howell et al., 2018). Tokens sold in an ICO represent rights to ownership or royalties to a blockchain-based project, and are fundamentally different from traditional equity securities that represent ownership in the company itself (Conley, 2017). As such, ICOs offer entrepreneurs that lack access to financing an easier and quicker means to raise capital.

ICOs have gained prominence since 2015 and have disrupted the standard VC model of financing. In the past two years, over 5,000 startups have raised more than $16 billion using ICOs (see Figure 2), as they seem to have characteristics that appeal to entrepreneurs over traditional VC financing (Dell'Erba, 2018). First, there is no prerequisite to provide equity in return for capital raised in an ICO. Second, ICOs can be marketed to a worldwide audience of investors, thus bypassing the legal and jurisdictional hurdles faced by VC investors. Third, ICOs benefit from numerous crypto-exchanges that allow the trading of tokens post-ICO.

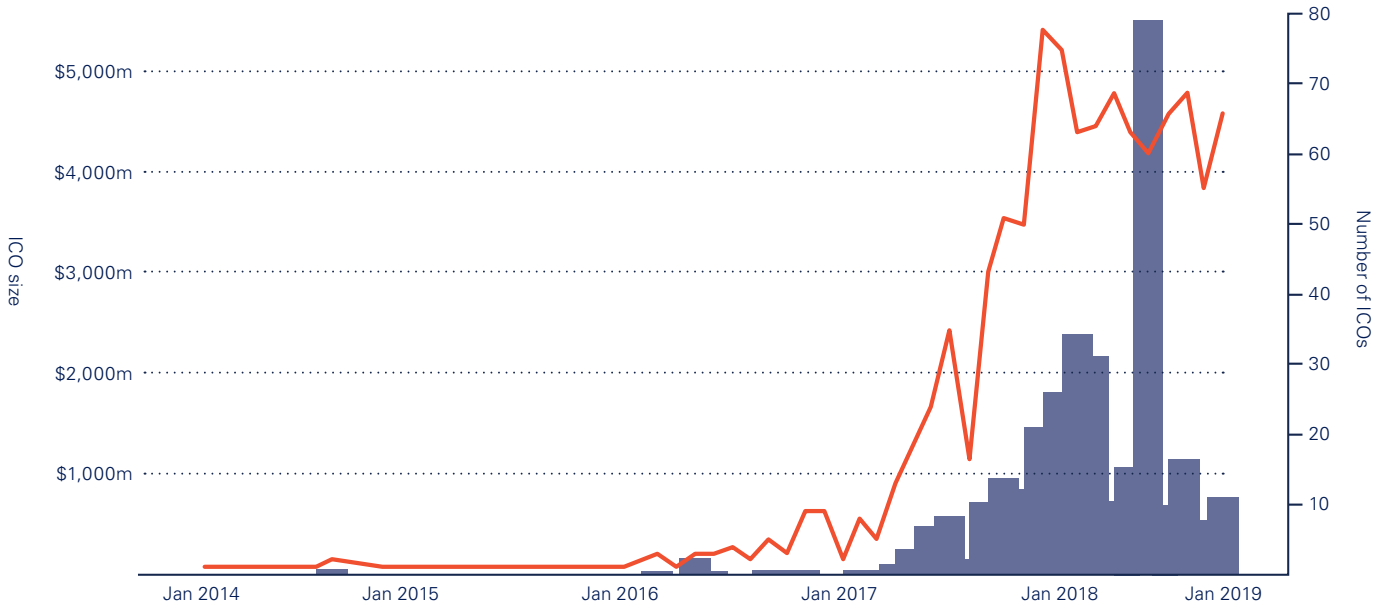


Figure 2: ICO funding by month. Source: Coindesk

On the other hand, ICOs present significant risks that compromise investor protection. For instance, investors have little say over the use of ICO proceeds and cannot monitor or influence the entrepreneur (Venegas, 2017). Legal recourse is also lacking should the entrepreneur opt to cash out instead of using the proceeds to build a successful venture. Moreover, ICOs provide an early liquidity event under very limited information (unlike the case with IPOs), which has caused high volatility in the token aftermarket (Kaal and Dell'Erba, 2018).

Whereas these concerns and bad practices have led many to dismiss ICOs as temporary hype, the fact that ICOs reduce transaction costs and democratise finance means that the underlying mechanisms cannot be simply dismissed. A new strand of literature has emerged in recent years trying to comprehend this financial innovation. However, as ICO firms are much younger and do not use the services of intermediaries (e.g. investment banks), there is a lack of understanding on the information structure of ICOs, the characteristics of ICO founders, and the credibility of signalling mechanisms adopted by them to attract investors.

We am currently investigating these important questions in an ongoing research project. Our leading research question concerns the credibility of the underlying venture versus the credibility of the ICO founder team. The early days of ICOs were marred by allegations of fraud, and there is clear evidence for some of it. At the same time there are legitimate companies looking to exploit the new fundraising opportunities afforded by the ICO process. Our project plans to uncover the mechanism of how legitimate players can signal their intent in such a noisy environment, and how the market establishes credible signalling and certification processes over time. We consider this line of inquiry novel and important, as it informs us about something, we know very little about, namely the birth of new financial market structures, and especially their informational architecture.

We expect to find useful and insightful answers to these questions in the coming months, and aim to publish the findings in a leading finance journal.

1.3. The growing importance of venture debt

Prior literature notes issues such as information asymmetries and insufficient cash flows are particularly severe among startups, which limit their ability to meet the standards required for lending. Thus, one would expect that startups, which are usually quite risky, are unlikely to be financed by debt.

Contrary to these expectations, evidence shows that startups can obtain loans in the form of "venture debt", and use a mix of equity and debt to finance their operations (Ibrahim, 2010; Hochberg et al., 2014). While the size of venture debt market is hard to determine given the opacity of private lending, Fischer and De Rassenfosse (2011) estimate that over $3 billion is issued as venture debt every year (see also Figure 3).

Similarly, Robb and Robinson (2014) show that startups rely on venture debt for about 25% of their capital needs.

The above discrepancy between theory and observation suggests that debt for startups may work differently than debt issued to more mature companies. To investigate these differences, a study was conducted by Kaushal Inna, a student in the MSc in Financial Economics program at Oxford Saïd (2014-16). The study explores two ways in which venture debt may differ from traditional loans: (i) considerations of lenders, and, (ii) the role of debt relative to equity.

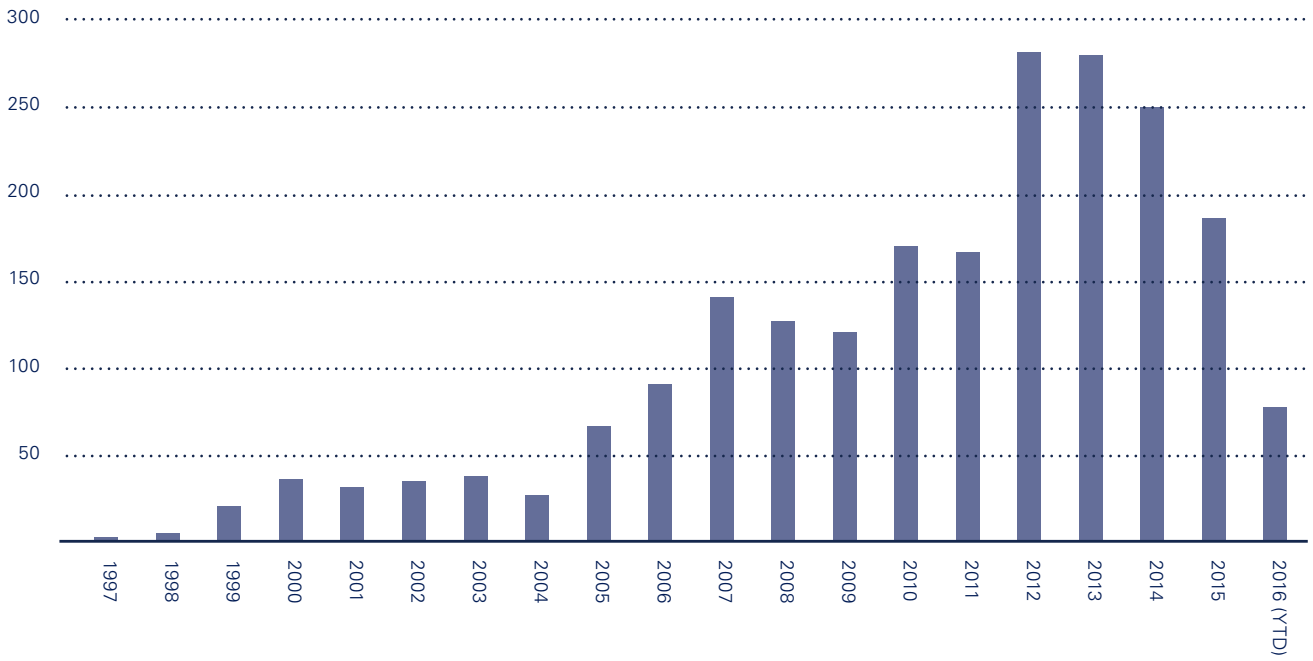


Figure 3: Venture debt deal volume ($ millions) per year. Source: Inna (2016)

Prior studies show that VC-backing substitutes for cash flow deficits in startups, and allows the provision of venture debt on the expectation that lenders will get paid from future equity investments (Fischer and De Rassenfosse, 2011; Hochberg et al., 2014). Inna (2016) adds to this literature by focusing on a key VC characteristic – fidelity – i.e. the willingness to reinvest in portfolio companies. Kaushal argues that a VC's decision to reinvest signals its commitment and belief in the venture, which may alleviate agency concerns among prospective lenders. In addition, reinvestment raises the VC's credibility as an implicit guarantor of repayment.

Using a sample of 39,019 venture deals between 1997-2016, Inna (2016) shows that VC fidelity has a positive effect on a startup's likelihood of obtaining venture debt. The study also considers the issue of whether venture debt complements or substitutes equity financing. The study finds that a VC equity round in a given year increases the prospects of the startup raising venture debt in the following 12 months. This suggests that venture debt complements VC equity funding as lenders prefer to invest alongside VCs to minimise risk.

These findings highlight the important mediating role played by VCs between lenders and startups. Since debt complements VC equity, policies that promote the VC industry should also provide greater access to debt for young, entrepreneurial firms. Thus, venture debt can play a major role in shaping a country's VC landscape by serving as an additional source of funding for early stage companies. Further research is needed to determine the factors driving venture lending and develop policies to improve its availability and growth.

2. Scale-up report

The Barclays Scale report (Barclays, 2016) was a unique cooperation between academics at the University of Cambridge and Oxford, convened by Barclays.

Oxford contributors

- **Thomas Hellmann**,
  DP World Professor of Entrepreneurship and Innovation, Saïd Business School, University of Oxford
- **Denis Frydrych**,
  former Policy Research Associate, Saïd Business School
- **Carolyn Hicks**,
  former Researcher, Saïd Business School
- **Christian Rauch**,
  Assistant Professor of Finance, American University of Sharjah (formerly Barclays Fellow at Saïd Business School)

Highlights

To facilitate greater financing support for UK startups:

- Promote larger UK VC funds that are capable of funding scale-ups.
- Encourage UK investors to develop sector expertise and cross-border networks.
- Promote a venture debt market to complement VC financing.
- Encourage firms to list on the London Stock Exchange and develop a secondary private equity market.

The UK has experienced an increase in entrepreneurial activity in recent decades. Access to early stage financing and the availability of entrepreneurial talent have led to an increase in the number of startups. Despite the significant rise in entrepreneurship, concerns over the lack of growth among UK startups and 'success stories' have been raised for quite some time. This has pushed policymakers to find solutions that can facilitate the growth of startups into scale-ups. A startup evolves into a scale-up when it succeeds in delivering its proven product/service to a wider audience, usually through market penetration and geographic expansion.

Scale-ups are considered vital to the entrepreneurial sector as they have greater potential to create jobs and contribute significantly to the UK economy. Hence identifying the mechanisms that can produce more scale-ups and sustain them over time is crucial.

To understand these issues and develop policy recommendations to address the scale-up problems facing the UK, Barclays launched the "Scale-up UK" programme in 2015. The aim of this initiative was to identify specific issues plaguing UK startups that were limiting their progression to the scale-up stage. For

this purpose, Barclays teamed up with Saïd Business School at the University of Oxford. A team of researchers at Oxford Saïd examined the financial challenges affecting UK scale-ups. Their findings and recommendations to resolve the UK scale-up problem were published in a report titled "Scale-up UK: Growing Businesses, Growing our Economy". The study's key recommendations are summarised below:

Challenge	Recommendations
Smaller funds: venture capital (VC) funds in the UK are smaller than their US counterparts. Smaller size means that UK funds focus mostly on early-stage rounds (that are typically smaller) and lack the capabilities to participate in later-stage rounds requiring larger investments.	• The UK requires larger VC funds that exceed by at least £200-350m in size. • UK VC funds must invest for longer periods and support their portfolio firms across multiple funding rounds. • UK VC funds must develop sector-specific expertise, both within and outside the UK.
Expertise: UK VC funds lack enough sector-specific experience. There are also slow to developing ties with experienced players in other markets.	• Linking up with experienced international VC firms (especially US-based) is highly recommended. • Policymakers and the British Business Bank (BBB) must engage with European fund-of-funds to attract more investments.
Debt access: UK startups lack access to adequate debt financing. In comparison, US startups have access to venture debt provided by select banks and specialised VC debt funds.	• UK banks and VC funds must develop capabilities to offer debt financing for startups. • The government must resolve all uncertainties pertaining to the offering of venture debt.
Exit prospects: limited exit opportunities exist for investors in UK startups due to limited depth and liquidity in UK stock markets.	• The London Stock Exchange (LSE) must cater to scale-ups by building the necessary expertise, tie-up with other bourses to enhance market depth and liquidity, engage with institutional investors, and promote greater analyst coverage of the segment.
Private markets: The private trading of shares (of VC-funded UK startups) is small, and VC participation in these secondary private markets is very limited.	• Policymakers should develop legislation that can help create more private trading venues and attract a critical mass of investors in secondary shares. • The regulation and tax policy on secondary share transactions must be revamped to foster greater participation.
Monitoring: Mechanisms and data collection efforts that can facilitate monitoring of the scale-up ecosystem are lacking.	• Metrics to evaluate scale-up progress should focus on valuation, investor expertise, and syndication networks. • Tie-ups between policymakers, academics, and industry participants to establish best practices and data sharing are strongly encouraged.

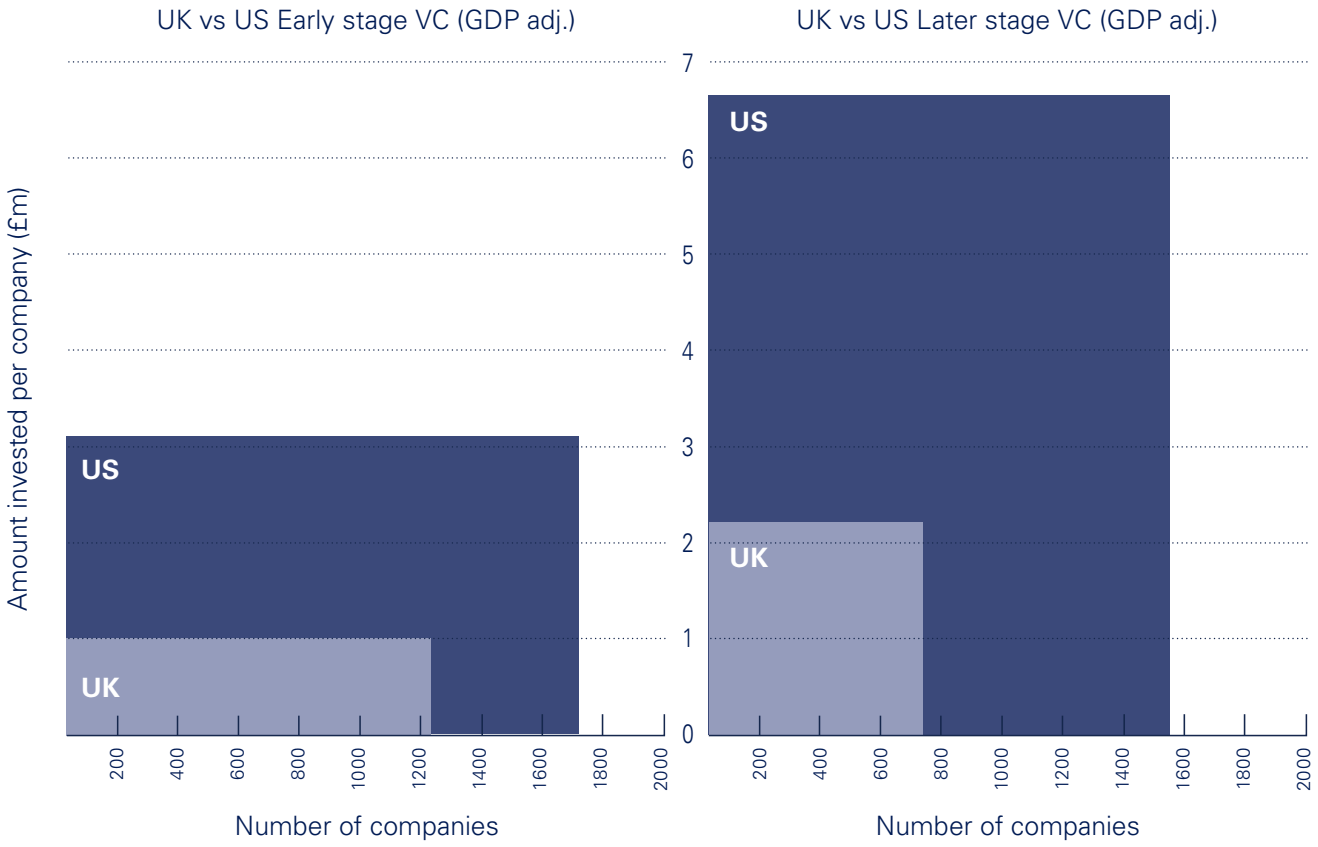


Figure 4: Average investment vs. no. of companies (US/UK). Source: Hellmann et al. (2016)

The scale-up report was well received and discussed at the 2015 World Economic Forum (WEF) in Davos. The report proved instrumental in driving forward the "Scale-up Britain" initiative, which aims to help UK startups by improving access to finance and revamping laws that impair growth.

3. Outreach events

As part of the Financing Gap project, Oxford Saïd and Barclays have collaborated on a series of outreach events that all focused on delivering the message about the importance of financing entrepreneurial ventures to a variety of audiences. Here is a list of some of the most important events in this series:

1. Barclay's Davos Breakfast
2. The Scale-up Challenge: A Road Map for the UK
3. From Startup to Scale-up: Financing Growth
4. Equity Crowdfunding
5. Building Fintech ecosystems: Emerging Trends and Policy Implications
6. Barclays MBA guest talks
7. Barclay's Oxford Union Debate

3.1 Barclays Davos breakfast

Held in Davos, Switzerland, on 23 February 2015.

The breakfast event was led by Anthony Jenkins, Barclays CEO. The theme was "Unlocking entrepreneurship: working together to create an inspired global community." The invited guest speaker was Dr Peter Tufano, Dean of Saïd Business School. The event discussed the challenges of entrepreneurship education, technological change, startups versus scale-ups, social change and access to finance. The event received considerable media coverage.

3.2 The Scale-up Challenge: A road map for the UK

Joint Barclays, Oxford and Cambridge Roundtable, held at Saïd Business School, Oxford University, on 11 May 2016.

This event included an open forum panel discussion and a closed doors roundtable event among industry experts and academics. The event was to accompany the launch of the scale-up report, discussed under section 2 of this report. The focus of the event was the dissemination of the key findings in the report.

The open forum panel discussion was moderated by Richard Phelps, Managing Director at Barclays, who also led the development of the scale-up report. The distinguished panellists were Sherry Coutu (Founder, Scale-Up Institute), Marcus Stuttard (Head of AIM, London Stock Exchange), and Keith Morgan (CEO, British Business Bank). The open forum was followed by a closed door roundtable discussion among approximately 30 industry experts and academics.

It should be noted that we know from private sources that some attendees (whose names shall remain anonymous) first met during this roundtable and began discussing policies for scale-up financing. These discussions eventually led to the announcement in the Chancellor's 2016 Autumn statement of a new £400M facility at the British Business Bank to foster the creation of later-stage VC funds. The scale-up report and the roundtable discussion also played into the government's so-called "Patient Capital Review". All these efforts eventually led to the announcement in the Chancellor's 2017 Autumn statement of an increase of over £2B in the capital of the British Business Bank, to be allocated to entrepreneurial growth companies.

3.3 From startup to scale-up: Financing growth

Oxford Entrepreneurship Policy Roundtable, held at Saïd Business School, Oxford University, on 29 May 2015

The Oxford Entrepreneurship Policy Roundtable (OXEPR) is an annual event that seeks to provide valuable insights on entrepreneurship by bringing together reputed policymakers, industry experts, and academics. The event focuses on a unique theme each year and is led by Prof Thomas Hellmann. Barclays has been an active participant in the roundtables and has made significant contributions to the ideas exchanged during discussions. Participants identify impending challenges facing the industry and discuss ways to resolve them through effective policy recommendations and industry practices.

The inaugural 2015 OXEPR focused on the scale-up problem and examined a broad range of issues facing young companies as they evolve from being startups to scale-ups. The Roundtable explored ways in which VCs could be more involved in creating scale-ups, and the potential role of public markets and institutional investors in creating a healthier ecosystem for scale-ups.

The Barclays representatives at this roundtable were Dean Duffy and Richard Heggie. The sponsorship from Barclays for this workshop is also gratefully acknowledged. The roundtable laid the conceptual foundations for the Barclays Scale-up reported discussed in the second part of this report. The outcome of the roundtable also resulted in another academic policy work (Duruflé, Hellmann and Wilson, 2018).

3.4 Equity crowdfunding

Oxford Entrepreneurship Policy Roundtable, held at Saïd Business School, Oxford University, on 20 May 2016

The concept of "crowdfunding" (using online platforms to enable large numbers of people to invest small amounts in new ventures) has increasingly drawn attention, most recently for its possible role in providing equity funding to startups. The majority of crowdfunding is currently still in the form of donations, lending, or reward/product crowdfunding (ca. 90%), not equity. However, this is changing rapidly with the opening up of securities legislation in a number of countries. The global equity crowdfunding model reports the second highest annual growth rate, behind the peer-to-peer lending model in the crowdfunding market. To date, the UK has been the leader in equity crowdfunding.

Proponents say that equity crowd funding will allow businesses to raise capital faster and more efficiently. While there are many opportunities for the various types of crowdfunding to provide new and much needed sources of finance, there are also a number of challenges and potential pitfalls, particularly for equity crowdfunding and for non-accredited investors.

The Barclays representative at this roundtable was Jordan Heim. The roundtable helped to increase the international understanding of equity crowdfunding. For example, one of the attendees returned to his home country, and successfully pushed through new legislation introducing equity crowdfunding to Finland.

3.5 Building Fintech ecosystems: Emerging trends and policy implications

Oxford Entrepreneurship Policy Roundtable, held at Saïd Business School, Oxford University, on 17 May 2019

The theme of the most recent OXEPR was the emerging role of fintech and its implications on the broader financing ecosystem. Participants discussed recent trends and challenges affecting fintech ventures and the role of government in promoting them.

Fintech is disrupting many areas of finance including payments, lending, and wealth management by offering novel and improved solutions over existing products. Traditional areas like insurance and regulatory compliance have become ripe for technological disruption, creating new areas such as Insurtech and Regtech. Yet, discrepancies in financial markets and regulation has meant that fintech ventures are slow to scale up and unable to realise their full potential. Consequently, policymakers face challenges in shaping the fintech landscape:

(i) Resistance to change among incumbents,

(ii) Ensure healthy competition between incumbent financial firms and fintech entrants,

(iii) Facilitate experimentation while ensuring stability of the financial system.

The roundtable explored the above challenges faced by fintech ventures and policymakers, and devise appropriate policy responses to address these issues. The Barclays representative was Andrew Elphick. His numerous interactions with the Oxford team had helped to prepare the roundtable. We expect to derive an academic research paper on the basis of these interactions in and around this roundtable event.

3.6 Barclays MBA guest talks

As part of the relationship between Barclays and Oxford Saïd, we invited several Barclays experts as class speakers to our MBA classes. This provided an informal exchange of ideas with a large group of MBA students and increased the visibility of Barclays with a group of future business leaders. The following guest speaker events were held:

- Arian Lewis: 25 May 2017
- Andrew Elphick: 28 May 2018
- Andrew Elphick: 28 Feb 2019

During his talk to the MBA class in May 2017, Arian Lewis discussed Barclays' approach to working with Fintech entrepreneurs. On the basis of Barclays' experience with opening the RISE accelerator program across the world, the class discussion focused on the business challenges of engaging FinTech entrepreneurs, how Barclays approach fit into the broader financial ecosystem, and how different ecosystems required different strategic approaches.

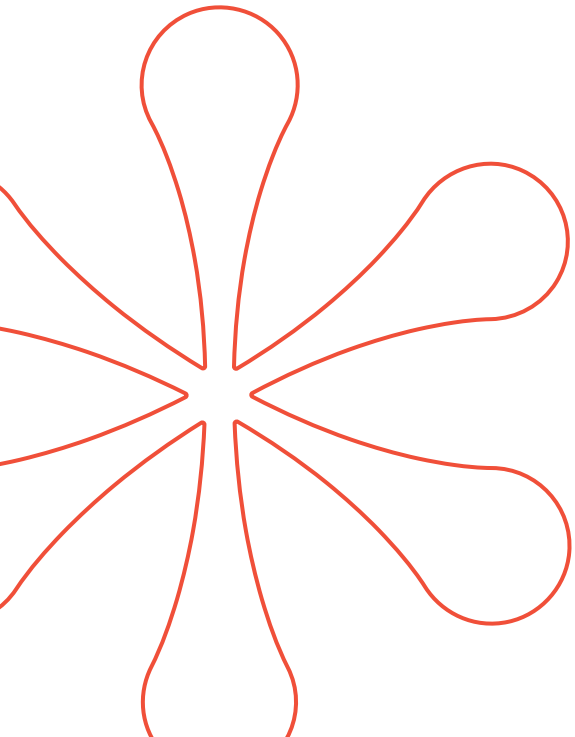
For his talk to the MBA class in May 2018 and again February 2019, Andrew Elphick explained the broader challenges of established financial institutions, such as Barclays, to innovate and face market disruption. The vision of Barclays RISE is clearly customer-centric, with a focus on disruptive innovation while at the same time maintaining efficiency. The leadership at Barclays RISE clearly understands that cooperation with young startups is inevitable, and majority of this cooperation is aimed at solving problems encountered by the bank's various divisions (retail banking, investment banking, lending, credit cards etc.). In addition, startups that seek to develop next generation technologies in areas like blockchain, artificial intelligence, cloud computing, and payments are also actively encouraged by RISE.

Building on Andrew's experience of managing an entire portfolio of innovation activities, the class explored not only the interface of Barclays with entrepreneurs, but also the challenges of how to manage the strategic insights with the broader Barclays community. The discussion focused on the delicate balance of being both entrepreneurial and prudent, and how large organisations can attract and retain their entrepreneurial talent.

3.7 Barclays Oxford Union Debate

Held at the Oxford Union, 11 May 2016.
Barclays hosted a debate at the Oxford Union, which has been a mecca for student debates since 1823. Harold Macmillan, former UK Prime Minister, and former officer of the Oxford Union, called it "the last bastion of free speech in the Western World."

The event was opened by a speech by Anthony Jenkins, Barclays CEO. The panel was chaired by Professor Thomas Hellmann. The discussants were Julia Groves of the UK Crowdfunding Association, Will Hutton, the Principal of Hertford, and Founder of Big Innovation Centre, Jason Kingsley, serial entrepreneur and founder of Rebellion, and Rebecca McNeill from Barclays. The statement for debate was "This house believes that the UK government has a prime responsibility for solving the funding gap." The event was considered a great success by panellists and students alike.



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