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The Future of Funding for Small and Medium-Sized Enterprises in the UK

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Abstract

This paper examines the changing landscape of funding for SMEs in the UK. The primary theme of the paper is rapid change - especially the systemic changes instigated by the global financial crisis and the use of new technologies. While mainstream banks continue to be the dominant players in terms of the overall volume of small business lending, these incumbents are beginning to face significant competitive challenges which are likely to boost competition. While this new environment will produce greater levels of competition in the marketplace for small business funding it is likely to present greater regulatory challenges for policy makers given the profusion of new financial providers offering a wider array of financial products to SMEs. This paper aims to synthesise, delineate and consider some of the key issues likely to confront SMEs, regulators and policy makers in the years to come. However, economic uncertainty caused by Brexit means that assessing these issues with any kind of precision is highly problematic.

1. Introduction

Small and medium-sized enterprises (SMEs), especially growth-oriented SMEs, are widely perceived to be instrumental in driving economic growth and productivity within economies (OECD, 2010; Mason and Brown, 2013). According to the Federation of Small Business, SMEs constitute an important element of the UK's economy. There are in the region of 5.4 million SMEs in the UK who together employ 24.3m people and account for 99% of all UK businesses. They represent approximately 60% of employment and roughly 50% of total private business revenue. According to the British Banking Authority, their banking business is worth some £2 billion in revenue and SME business loan balances are around £90 billion (Chalmers, 2016). By any standards, this is a sizeable market providing a strong incentive for lenders to target.

Despite this, many SMEs often face quite intractable problems obtaining access to finance. Dating back to the 1930s when the MacMillian Report noted the difficulties SMEs encounter when obtaining finance, the issue of SME funding has been a strong concern for UK policy makers for almost a century[1] (Hughes, 1997). Indeed, a large body of literature notes the perennial problems that new and young and firms face when accessing finance (Cassar, 2004; Udell, 2015). Smaller firms are unlikely to have substantial assets to act as security against borrowings and many, particularly newer start-ups, may not have a long-standing relationship with a bank (Berger and Udell, 2002; 2006). Additionally, unlike larger firms, SMEs may not have audited financial statements, which further increases 'informational friction'

[1] This noted the particular difficulties SMEs face when attempting to raise capital – the so-called "MacMillian Gap" (Brown and Lee, 2014).

between borrowers and lenders (Berger and Frame, 2007). In the UK, this problem has been accentuated since the global financial crisis (GFC) by the removal of localised decision-making structures within banks (Degrsye et al, 2015), which has led to more mechanistic assessments of SME credit ratings, further favouring larger firms (Lee and Brown, 2016). However, it is important to state that not all firms deserve the finance they apply for, nor is there definitive evidence of the existence of a funding gap for SMEs. The challenge for policymakers is to ensure that finance goes to firms likely to help the national economy, without providing excess capital to firms which are not creditworthy.

Since the GFC the market for small business finance has changed markedly. Since 2008 UK SMEs have witnessed a marked decline in lending to small businesses by UK banks who traditionally dominate this market (Cowling et al, 2013; North et al, 2013). Due to the impact of the GFC, lending to small firms by the main banks evaporated as many of the banks desperately started to rebuilt their balance sheets and minimised any high-risk lending[2]. However, since 2008 there has been significant changes to the market for small business funding which has led to increased levels of new entrants coupled with the emergence of alternative forms of small business lending such as peer-to-peer lending and crowdfunding (Bruton et al, 2015; Fraser et al, 2015). These new entrants are beginning to offer new forms of finance whilst simultaneously offering more competition within the sector. In a relatively short space of time the market for small business lending has undergone a systematic transformation (Nesta, 2016). In fact, the banking sector is now very different from the situation in days before the GFC.

[2] Around 80% of all lending to SMEs is accounted for by the four major banks (Fraser et al, 2015).

Indeed, the emergence of new sources of funding is also challenging well-established theoretical principles like the famous "pecking order" theory of funding preferences (Myers and Majluf, 1984). To avoid losing control of a business, this theory suggests firms will choose first to use internal finance, then debt finance and will only reluctantly use equity finance as a last resort (Frank and Goyal, 2003). While this principle seems to hold for larger firms it does not always apply to smaller growth oriented firms firms (Vanacker and Manigart, 2010). Indeed, alternative sources of finance appear to be making financial choices for firms much more complex than ever before (Brown et al, 2015; Bruton et al, 2015).

Given the importance of SMEs together with the rapidly changing landscape facing them, this paper wishes to examine the implications of these changes for SMEs, regulators and policy makers. It begins, by examining the nature of the recent changes within the small business lending market. It then examines the issues which are likely to influence future changes in small business finance. It ends with some implications for SMEs, regulators and policy makers in the years to come.

2. Recent Developments: The "New Normal" and the Rise of Alternative Finance

Since the GFC, the funding landscape for SMEs has undergone significant transformation. Up until 2015 there was a pervasive contraction of credit to the extent problems accessing funding have become the "new normal" for many SMEs (OECD, 2015). These problems have been particularly acute for innovative SMEs and those located in peripheral parts of the UK (Lee et al, 2015; Lee and Brown, 2016). Despite the fact that only one in seven SMEs seek external bank lending (Fraser et al, 2015), these firms typically are the most growth-oriented firms who generate the majority of new employment (Brown and Lee, 2014; Anyadike-Danes et al, 2015). Added to the problems of accessing bank finance is the complex issue of "discouragement" which can often dissuade strong businesses from seeking bank credit for fear of being declined (Freel et al, 2012). Therefore, the lack of funding for growth-oriented SMEs coupled with the reluctance to seek external funding may have impeded economic growth within the UK economy since the GFC (Cowling et al, 2012; Brown and Lee, 2014). Owing to this some observers commented that the so-called "funding escalator" for SMEs had broken (North et al, 2013).

This post-GFC era witnessed a number of policy initiatives designed to rebuild the banking sector to assist SME lending. During this time, and despite these difficulties, the funding landscape for SMEs is beginning to alter which appears to be increasing the levels of competition within the SME funding marketplace. For example, the Bank of England introduced new regulations aimed at easing entry into the UK's banking sector. The BofE introduced a simplified two stage process with lower capital requirements for setting up banks in 2013. This was specifically designed to increase competition within the UK's banking sector and since this time new so-called "challenger banks" have entered the UK banking sector such as Atom, Virgin, Mondo and Metro. Metro bank was issued with the first new banking license for over 150 years (The Economist, 2010). Many of these banks have specifically targeted the SME lending market which is heavily dominated by the big main UK banks, Barclays, HSBC, RBS and Lloyds. Given that the four largest UK banks still have a combined market share of 80% for general purpose loans for SMEs (British Business Bank, 2016), the so-called “challenger banks” have as yet to make substantive in-roads into the market for small business lending.

In parallel with the introduction of these new operating guidelines aimed at increasing competition within the banking sector has been the rapid emergence of alternative sources of finance. Again, a key driver behind the growth of these new forms of finance has been the heavily deregulated nature of the UK’s finance sector which has given rise to the massive growth of the so-called fin-tech sector. These “alternative” sources of finance have proliferated in the UK in recent years (British Business Bank, 2014), with market research suggesting approximately 20,000 SMEs in 2015 raised alternative finance through online channels (Nesta, 2016). Many growth-oriented SMEs are now increasingly turning to new internet-enabled financial providers to fulfill their external financing requirements.

So what are alternative forms of finance? These are new forms of funding such as crowdfunding, peer-to-peer lending and invoice trading. Recent market research shows that the market for these new forms of funding grew to £3.2bn in 2015 (Nesta, 2016). These forms of funding appear to play an increasingly important role in enabling SMEs to obtain credit. For example, debt-based crowdfunding (also known as peer-to-peer lending) supplied the equivalent of 13.9% of new bank loans to UK SMEs in 2015, suggesting it can no longer be considered a marginal actor in terms of SME funding (Atz and Bholat, 2016; Nesta, 2016). Plus, equity crowdfunding is now the second fastest growing source of alternative finance in the UK, providing SMEs with £245m in funding in 2015 and acting as a critical funding source for innovative UK start-ups (Brown et al, 2015). An additional reason for examining these new funding sources concerns their recipients. Prima facie, these newer forms of funding appear to appeal to high growth firms who make a disproportionate impact to the economy but who sometimes encounter restrictions when accessing credit (Vanacker and Manigart, 2010; Mason and Brown, 2013) and often obtain credit on unfavourable terms (Rostamkalaei and Freel, 2016).

Alternative funding such as peer-to-peer lending and equity crowdfunding appear to offer a significant challenge to the operational models of traditional bank and equity funding. Indeed, some claim that they herald the "disintermediation of the finance market", enabling small firms to directly connect with new investors (Harrison, 2016, p. 4). Although both fall under the umbrella term of alternative finance, the dynamics of these two forms of crowdfunding are quite distinctive. Debt crowdfunding, also known as peer-to-peer lending or marketplace funding, consists of secured and unsecured debt-based transactions between institutions, retail actors and businesses conducted via Internet-based platforms. In many respects, this is a natural progression from mainstream banking with several layers of bureaucracy removed. Unlike banks, these platforms are not subject to capital requirements and do not run branches, thus they can offer competitive rates to both borrowers and lenders. Equity crowdfunding, on the other hand, involves the sale of registered securities, mostly by early stage firms, to both retail and professional investors via Internet-based platforms. These platforms are in essence mini "stock markets" for start-ups and enable professional and retail investors to invest directly in start-ups rather than going through regulated stock markets. Unlike traditional forms of funding, this potentially provides growth-oriented start-ups with capital very quickly.

While debt and equity crowdfunding are undoubtedly enhancing the supply of funding to credit-constrained UK SMEs, they clearly have potentially wide-ranging implications for the firms that obtain funding through these mechanisms and for the customers who invest in them. In terms of the former, we know little about the types of firms receiving these forms of funding, their reasons for seeking such funding, or the impact of this funding on firm development and growth. This raises important questions concerning the longevity and benefits of crowdfunding. Similarly, in terms of the latter, we know very little about the types of investors who invest through crowdfunding platforms, their rationale for doing so, or their expectations about their likely return on investment. Again, this raises questions concerning the rationality of investors and issues of investor protection.

Table 1: Transition from Traditional to Newer forms of SME Funding

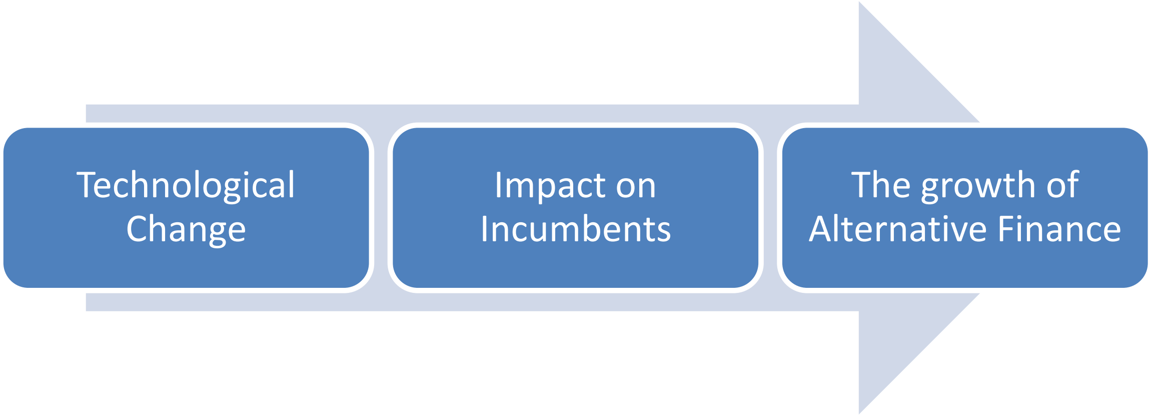
Type of Firm	**Traditional Types of Finance (pre-GFC)**	**Newer Sources of Finance (post-GFC)**
Start-Ups and micro firms (less than 10 employees)	Friends, family, founders, credit cards, business angels, VCs	Seed funding from accelerators, rewards and equity crowdfunding
Small Firms (between 10 and 49 employees)	Banks, business angels, VCs	Equity crowdfunding, peer-to-peer lenders
Medium-Sized Firms (between 50-249)	Banks, VCs, private equity, IPOs	Challenger banks, peer-to-peer lenders, equity crowdfunding

Apart from the market research and scoping undertaken by Nesta (2016), our lack of knowledge of the market for alternative finance generally means that very little is known about these issues at present. What we do know is that these developments are likely to have a strong influence on the way firms in future structure their levels of external finance. Table 1 above illustrates the manner in which these new forms of funding are offering greater levels of choice to SMEs in the UK. It is also likely that greater levels of new entrants within the funding marketplace for SMEs will increase competition and conceivably reduce the costs of borrowing for some. However, further work will be needed before this contention can be verified.

3. Future Influences

Having reviewed recent developments within the present day market for SME funding, we shall now examine some of the likely drivers of change over the next decade. Given the fluid nature of technology and government regulation, these cannot obviously contain any robust forecasts or predictions. Instead, we wish to highlight the issues which are likely to shape the future of funding for SMEs up to the mid 2020s. Broadly speaking, we have broken down the main drivers of change into three main thematic categories (see Figure 1 below).

Figure 1: Major Drivers of SME Funding



A key point to make is the fundamentally inter-connected nature of these issues. The impact of technological change on the funding landscape is difficult to underestimate. Not only has it enabled new competitors to quickly enter the market, it has also revolutionised the manner in which lending transactions take place. This has undoubtedly enhanced the nature of accessing funding within SMEs (Brown et al, 2015). Technological change is likely to have a longer-term structural impact on the market for SME lending, bringing further fin-tech entrants into the marketplace. At the present time relatively new fin-tech providers such as Crowdcube and Lending Circle are some of the fastest growing businesses in the UK.

Given the growth of these companies it has already been noted by others than institutional investors are already beginning to encroach into these new funding channels (Nesta, 2016). Plus, over time and given the likely increase in usage and growth of entrants, it seems likely that consolidation of the industry will increasingly take place as banks begin to acquire smaller alternative financial providers for their brand names and technical expertise.

Not only that but technological change is likely to massively shape existing SME incumbent lenders. Indeed, existing banks are likely to begin replicating the streamline structures and systems embedded in these new financial providers, resulting in even greater growth of the market and increased competition. At present, many of the major banks in the UK operate with fairly antiquated IT systems. Over time as banks replace their technological infrastructure, their new systems will be able to offer much faster levels of service to their customers. This could in time erode some of the advantages that newer alternative forms of finance, such as peer-to-peer lenders, have over their traditional counterparts.

The continued growth of alternative finance seems a near certainty, especially if the UK continues to embrace its heavily deregulated policy environment. Over time awareness levels of alternative sources of finance will begin to strengthen. At present, only around 20% of SMEs are aware of alternative financial providers (Wright and Fraser, 2014). However, given the rapidly moving nature of this marketplace this is almost impossible to predict with any certainty. While less than 1% of SMEs used these forms of finance in 2014 – by 2015 this had already risen to around 2.5% according to analysis of the recent Longitudinal Small Business Survey. On this growth trajectory, it seems fair to assume that by the mid-2020s the level of usage will make alternative finance a very mainstream source of funding.

The continued growth of alternative sources of debt-based finance will hinge on the effectiveness of credit risk modelling and underwriting in peer-to-peer lenders. Indeed, some observers like Lord Turner have claimed that these issues could be potentially disastrous for investors in alternative finance providers such as peer-to-peer companies. He claimed that if peer-to-peer firms fund small businesses rejected by UK banks then they could encounter big losses if the firms cannot fulfil their repayments. Because of this adverse selection problem only a small minority of firms seeking some forms of alternative finance currently receive it. Similarly, the massive growth of equity crowdfunding will hinge on the level of investor returns and "exits" achieved by investors. Going forward, time will tell if these new sources of finance are efficient and robust allocators of capital.

4. Policy Context

Policy issues are likely to heavily shape the future of funding for SMEs in the UK. As mentioned previously, the UK has been something of a laboratory experiment for deregulation within the sphere of funding. While the internet has had a major "disruptive" influence on the market for small business lending which has generated the development of the market for alternative sources of funding for SMEs, it has been the UK's deregulated and liberal environment which has enabled it to grow so rapidly. Nothing within the political or economic environment suggests that this is likely to change in the next decade. Indeed, governments in advanced economies are under strong pressure to alleviate the difficulties confronting access to finance in SMEs resulting in various credit guarantee schemes being implemented such as the UK's Enterprise Finance Guarantee Scheme (van der Schans, 2015). Going forward, it is likely that the policy context will remain broadly supportive of promoting further access to funding for growth-oriented SMEs.

There have been a number of significant policy agendas in this area. These have included:

Efforts to address apparent **regional disparities in the supply of finance** – such as the Northern Powerhouse Investment Fund – which are predicated on the idea that geographical variation in access to finance still exist, particularly for firms with growth potential. While there is some empirical support for this idea (see Lee and Brown, 2016) past attempts to create regional funds have often found it hard to achieve the scale necessary to make productive investments (Nightingale et al., 2009)

- New efforts to help **develop and integrate FinTech companies into the banking system**.[3] As Mark Carney has argued, FinTech will have impacts both in terms of competition amongst firms and the supply of credit, but also in terms of financial stability. The UK is positioning itself as a world leader in this area, but doing so will have both significant advantages and potential risks. But growth in the FinTech sector could help create a more diverse banking system, potentially supporting a wider and more competitive set of firms to grow (Hutton & Lee, 2013).

The 'Elephant in the Room' for the policy context on SME lending is, of course, **the economic impact of Brexit**. Clearly, there is great uncertainty both in the scale of the impact and its long-term ramifications. Most SMEs are too small to seek financing in Europe, and are reliant on domestic providers of finance. But Brexit will likely have three main influences on SME lending. The first is the most direct, as European programmes aimed at increasing access to finance are ended, such as the recent

[3] http://www.bankofengland.co.uk/publications/Pages/speeches/2016/914.aspx

intervention of the European Investment Bank in Funding Circle, the crowdfunding provider. We do not know whether the UK government will intervene to replace these investments. Second, there will be regulatory effects and it is likely that the UK may benefit from being potentially open and flexible with regards to financial innovation, building on its reputation in fin-tech – although this openness comes with significant risks. The UK is already by far the largest market for alternative sources of finance in Europe and this is likely to continue for the foreseeable future (Nesta, 2016). The final impact is likely to be most severe: the likely negative impact on the national economy will reduce demand for finance and the potential returns to investment. This is likely to lead to a reduction in aggregate lending as the economy moves to a lower long-term growth rate. As a result of this, Brexit could eventually re-ignite calls for much greater policy activism to help stimulate demand for lending by SMEs.

5. Conclusions

The SME funding landscape is experiencing rapid change, as the long-term fallout from the GFC and technological change lead to both regulatory change and new business opportunities. Plus, the uncertainty caused by Brexit means that assessing these issues with any kind of precision is highly problematic. What we do know is that growth-oriented SMEs will continue to grow even at times of great economic uncertainty, such as during the current pre-Brexit period[4]. Ensuring these firms can obtain growth finance is therefore crucial. Technological change is opening up new funding avenues, but it remains to be seen whether this is going to the firms which face credit rationing now, and whether they will address market failures or simply replace existing channels of lending. The creation of new online internet-enabled platforms peer-to-peer lending fin-tech firms has lead to the disintermediation of the finance market for these rapidly growing elements of the SME finance market. While there is no consensus on the existence of a general funding gap for SMEs, there is some concern about the potential for small firms with high growth potential, in particular those introducing innovations, to access the finance they need.

Underlying the discussion above is a number of core assumptions which need to be clarified.

- Mainstream banks will become a smaller part of the market for general purpose small business lending catering primarily to larger less risk medium-sized enterprises.
- Start-ups and riskier more innovative small companies will increasingly pursue alternative finance (both debt and equity modes) rather than traditional debt funding through banks.
- Alternative sources of finance will become more synonymous with existing larger institutions such as banks.
- Technology will continue to rapidly re-configure the funding market for SMEs further developing sources of alternative finance.

[4] All the evidence on high growth firms from a range of studies shows these firms manage to maintain strong growth even during recessionary periods (Anyadike-Danes et al, 2015; Bamiatzi and Kirchmaier, 2014; Mason and Brown, 2013).

- SMEs will begin to embrace a wider array of financial providers for different types of debt and equity-based funding.
- Government policy will continue to remain de-regulated and liberalised in the UK.
- More competition is gradually changing the funding landscape for SME lending and will eventually create a more diversified market for SME borrowers
- Finally, we can speculate that the UK's "laissez-faire" deregulatory approach towards its financial system will -in all likelihood- continue post-Brexit. However, increased uncertainty in the run to Brexit is likely to lead to a weakening of economic growth which will reduce demand for aggregate lending in the short-to-medium term.

References

Anyadike-Danes, M., Hart, M., & Du, J. (2015). Firm dynamics and job creation in the United Kingdom: 1998–2013. *International small business journal*, *33*(1), 12-27.

Atz, U and Bholat, D. (2016) Peer-to-peer lending and financial innovation in the United Kingdom, Bank of England Staff Working Paper No. 598.

Berger, A. N., & Frame, W. S. (2007). Small business credit scoring and credit availability. *Journal of small business management*, *45*(1), 5-22.

Berger, A. N., & Udell, G. F. (2002). Small business credit availability and relationship lending: The importance of bank organisational structure. *The Economic Journal*, *112*(477), F32-F53.

Berger, A. N., & Udell, G. F. (2006). A more complete conceptual framework for SME finance. *Journal of Banking & Finance*, *30*(11), 2945-2966.

Bamiatzi, V. C., & Kirchmaier, T. (2014). Strategies for superior performance under adverse conditions: A focus on small and medium-sized high-growth firms. *International Small Business Journal*, *32*(3), 259-284.

British Business Bank. (2014). *Equity Crowdfunding in the UK: Evidence from the Equity Tracker.* British Business Bank, Sheffield.

British Business Bank (2016) Small Business Finance Markets, 2015/16, British Business Bank, Sheffield.

Brown, R., Mawson, S., Rowe, A., & Mason, C. (2015). Harnessing the Crowd: The Demand-Side Dynamics of Equity Crowdfunding in Nascent Entrepreneurial Ventures, Centre for Responsible Banking & Finance, University of St Andrews WP 15-009. http://www.st-andrews.ac.uk/business/rbf/workingpapers/RBF15_009.pdf

Bruton, G., Khavul, S., Siegel, D., & Wright, M. (2015). New Financial Alternatives in Seeding Entrepreneurship: Microfinance, Crowdfunding, and Peer-to-Peer Innovations. *Entrepreneurship Theory and Practice*, *39*(1), 9-26.

Cassar, G. (2004). The financing of business start-ups. *Journal of Business Venturing*, *19*(2), 261-283.

Chalmers, G (2016) The future of banking for SMEs: the battle for relevance, https://www.bba.org.uk/news/insight/the-future-of-banking-for-smes-the-battle-for-relevance/#.V2gqp_krIdV

Cowling, M., Liu, W., & Ledger, A. (2012). Small business financing in the UK before and during the current financial crisis. *International Small Business Journal*, *30*(7), 778-800.

Degryse, H., Matthews, K., & Zhao, T. (2015). *SMEs and access to bank credit: Evidence on the Regional Propogation of the Financial Crisis in the UK, CESIFO Working Paper No. 5424.*

The Economist (2010) “Computer says no”, *The Economist,* July 22nd 2010.

Frank, M. Z., & Goyal, V. K. (2003). Testing the pecking order theory of capital structure. *Journal of financial economics*, *67*(2), 217-248.

Fraser, S., Bhaumik, S. K., & Wright, M. (2015). What do we know about entrepreneurial finance and its relationship with growth?. *International Small Business Journal*, *33*(1), 70-88.

Freel, M., Carter, S., Tagg, S., & Mason, C. (2012). The latent demand for bank debt: characterizing "discouraged borrowers". *Small Business Economics*, *38*(4), 399-418.

Harrison, R. (2016) Crowdfunding and the revitalisation of the early stage risk capital market: catalyst or chimera? In (ed) Harrison, R. Crowdfunding and Entrepreneurial Finance, Routledge: London.

Hughes, A. (1997). Finance for SMEs: A UK perspective. *Small Business Economics*, *9*(2), 151-168.

Hutton, W. and Lee, N. (2012) The city and the cities: finance, ownership and the geography of recession *Cambridge Journal of Regions, Economy and Society*, 5 (3). 325-337.

Lee, N. and Brown, R. (2016) Innovation, SMEs and the liability of distance: the demand and supply of bank funding in peripheral UK regions *Journal of Economic Geography*. ISSN 1468-2702

Lee, N. and Sameen, H and Cowling, M. (2015) Access to finance for innovative SMEs since the financial crisis *Research Policy*, 44 (2). 370-380.

Mason, C., & Brown, R. (2013). Creating good public policy to support high-growth firms. *Small Business Economics*, *40*(2), 211-225.

Myers, S. C., & Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics*, *13*(2), 187-221.

Nesta (2016) Pushing Boundaries: The 2015 UK Alternative Finance Industry Report, National Endowment for Technology, Science and Arts: London.

Nightingale, P. et al. (2009) *From funding gaps to thin markets*. London: NESTA

North, D., Baldock, R., & Ullah, F. (2013). Funding the growth of UK technology-based small firms since the financial crash: are there breakages in the finance escalator?. *Venture Capital*, *15*(3), 237-260.

OECD, (2010) SMEs, Entrepreneurship and Innovation, OECD, Paris.

Rostamkalaei, A., & Freel, M. (2016). The cost of growth: small firms and the pricing of bank loans. *Small Business Economics*, *46*(2), 255-272.

Udell, G. F. (2015). SME Access to Intermediated Credit: What Do We Know, and What Don't We Know?. Reserve Bank of Australia, Conference Volume.

van der Schans, D. (2015). The British Business Bank's role in facilitating economic growth by addressing imperfections in SME finance markets. *Venture Capital*, (ahead-of-print), 1-19.

Vanacker, T. R., & Manigart, S. (2010). Pecking order and debt capacity considerations for high-growth companies seeking financing. *Small Business Economics*, *35*(1), 53-69.

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