Methodology Consultation

Assessing the Unmet Demand for SME Debt Finance

February 2016

@britishbbank

www.british-business-bank.co.uk

Contents

Introduction and Consultation Questions

The British Business Bank is a government-owned business development bank dedicated to making finance markets work better for smaller businesses at all stages of their development: starting up, scaling up and staying ahead.

We aim to combine our expertise and government funding to increase access to finance for the smaller businesses that need it most, by understanding where finance can be most usefully channelled.

The British Business Bank would like to consult with interested stakeholders on appropriate methodologies for assessing the unmet demand for SME debt finance. This report outlines an initial approach that we have developed for quantifying the number of SMEs rejected for new debt finance and the value of these applications. The results of this are detailed in our Small Business Finance Markets 2015/16 report[1].

One proposed extension of the methodology is outlined in this paper and seeks to identify those SMEs within that rejected group that could have been viable propositions for funding, either in a commercial and/or economic context.

In launching this consultation, we are therefore seeking to constructively build on our current analysis and we are particularly interested in suggestions for alternative methodologies or additional data sources.

The specific questions where we would like to discuss with stakeholders are outlined below and provide the context for engagement, where we are seeking to either ratify or improve on our proposed methodology.

Specific questions that we would like to discuss with interested parties are:

1. **Feedback on our proposed methodology and suggestions for additional sources of data that would supplement the data from SME Finance Monitor**

2. **Suggestions for alternative methodologies that would enable us to estimate unmet viable demand for SME debt finance**

3. **Suggestions for practical alternative sources of data that would enable us to undertake those alternative methodologies**

This note provides some more background on, and explains how to respond to the consultation, as well as setting out our proposed methodology.

[1] http://british-business-bank.co.uk/research/small-business-finance-markets-report-201516/

How to Respond

We would welcome the opportunity to discuss the questions raised with all interested parties – lending providers, market observers (including representative bodies) or academic researchers – particularly if additional data or insight can improve the outcome of the analysis. Please contact us using the details below, after which we hope to set up bilateral discussions.

Responses or comments should be submitted to the British Business Bank by 31st March 2016, after which we will draw together the outcomes of the consultation.

Contact Details:

Sarah Bingham – Senior Manager / Economist

Email: sarah.bingham@british-business-bank.co.uk

Telephone: 020 3772 1349

Background to the Consultation

Small Business and the Economy

The British Business Bank published its second annual report on the state of Small Business Finance Markets on 2nd February 2016. The report highlights that while flows of finance to smaller businesses have improved, structural issues remain that restrict access to finance for some SMEs. Improving access to finance is essential, because smaller businesses are important to the economy and can play a crucial role in improving UK productivity.

The analysis covered in the Small Business Finance Markets report informs the British Business Bank's strategy for the coming year, helping to ensure that resources are focused on areas that can achieve the greatest impact for the economy. This is achieved by:

- Identifying the characteristics of SMEs that are most affected by market failures[2].
- Estimating the size of the problem that affects these SMEs in terms of their inability to raise finance.

Problems in the Access to Finance Market for SMEs

Information Asymmetries

Market failures affecting smaller business access to finance are well documented and often relate to imperfect information that prevents optimal lending decisions being made. Specifically, in the case of lending decisions, a potential finance provider needs to assess whether a business can, and will, service any funding that is provided. The lender faces a cost in obtaining this information which may exceed the value of the possible income that can be generated from making the loan. Therefore, lenders often look at previous track record as an imperfect indicator of future performance and/or seek to take security to de-risk the lending. Both of these may not be available in all cases, leading to some potentially viable businesses not being able to obtain finance.

However, information asymmetries can also affect demand for finance by smaller businesses. For example, smaller businesses may perceive that their chances of successfully applying for finance are lower than they are in reality, leading to latent demand for finance, or they may not appreciate the benefits of using finance to achieve their business ambitions.

This means that due to both supply and demand side factors, there are potentially productive businesses that are not maximising their prospects due to a lack of external finance which, subsequently, acts as a drag on possible economic output.

---

[2] An imperfection in the market mechanism that prevents the achievement of economic efficiency. HMT Green Book.

Externalities

The risks attached to lending to some SMEs may, in certain cases, be higher than is acceptable on a commercial basis, particularly in relation to possible returns from providing finance. For example, providing funding to new starts can be high risk given that only around 50% will survive for four years. However, new businesses are crucial for the economy; they can facilitate productive churn, spur innovation and stimulate competition. Therefore, the wider benefits of providing funding may outweigh the private returns to the finance provider, leading to sub-optimal provision of finance.

Regulation

The introduction of regulations or other government interventions may have unintended consequences leading to inefficient outcomes in markets. For example, whilst regulations designed to improve financial stability are required, they may raise the cost of finance resulting in less use of finance by smaller businesses.

Market Power

Lack of competition between market participants may prevent markets operating effectively. This may lead to a lower availability of finance, or a rise in the price of finance resulting in less finance being provided to smaller businesses.

It is important to recognise that in many cases, businesses' inability to obtain finance does not represent a problem in the market.

The Extent of Unmet Demand for SME Debt Finance

The basic concept for assessing a finance gap is to quantify the extent of the market failure. This is inherently difficult to do. Not only are there the interacting structural factors that affect the optimal supply and demand of finance to SMEs, but there are different types of finance against which to assess potential gaps. Complex modelling of supply and demand factors pertaining to all funding options would be required to assess the finance gap fully, where sufficient data is unlikely to be available.

The initial methodology developed by the British Business Bank is the first phase that we are seeking to consult on and focuses on traditional debt products – loans and overdrafts from a bank – which helps to reduce some of the complexities associated with calculating an overall finance gap.

The basis of the analysis (a fuller overview of the methodology is provided in the next section) uses self-reported survey data to analyse rejections for debt finance. The number of SMEs unsuccessful in their new loan or overdraft application is identified using SME Finance Monitor data.[3] These SMEs are then distributed according to the value of new debt finance applied for,

[3] http://bdrc-continental.com/products/sme-finance-monitor/

based on the application value band reported by the SME. The value of rejections is obtained by multiplying the number of SMEs in each value band by the mid-point of that band.

The next step of analysis is crucial for considering the extent of the market failure, i.e. the size of the finance gap or 'potential viability' of rejected applicants.

Conceptually, there are a number of ways in which viability could be assessed (further detail is provided in the next section), all of which will have pros and cons. A proxy for potential viability could be adopted, for example, if the business generates profits. However, this information would have been available to finance providers at the time of assessing the finance application. Alternatively, the value of external finance that could be sustainably supported by SMEs could be estimated. This considers a wider concept of demand, but bases sustainable levels on existing size of business, therefore not allowing for growth or new starts.

The current approach adopted by the British Business Bank extends the analysis of SME Finance Monitor data and assesses the self-reported reasons for rejection. The proportion of reasons that imply a potential information asymmetry is applied to the headline volumes and values for rejected new debt applications. This has the advantage of directly linking viability to a source of market failure. All methodologies have shortcomings and we appreciate that the drawbacks of this approach are the focus on one source of market failure and the reliance of SMEs to understand why they were rejected.

Proposed Methodology – Analysis of New Debt Applications

The following is an overview of the principles underlying the current methodology. We have highlighted questions where additional data or insight can improve the analysis and/or robustness of outcomes. We have also reviewed other published approaches which serve as a benchmark for our analysis.

Data Source

Finance gap analysis is derived from SME Finance Monitor data and aims to (a) quantify the value of rejected loan applications and (b) assess viability of those rejected applications, i.e. where is it most likely that a market failure prevented the provision of finance. A ten quarter SME FM data set is used, which provides a larger underlying sample size than focusing on one quarter or year.

Only a small percentage of SMEs have some kind of 'funding event' in a 12 month period and our analysis is concentrated on those SMEs rejected for finance. When the data is cut to focus on rejected SMEs, the underlying sample size reduces significantly. Therefore, the ten quarter dataset helps to ensure sufficient response counts in the relevant cuts of data. Response counts would be higher if we used a longer back data set. However, ten quarters balances the need to obtain sufficient sub-samples without significantly compromising the current relevance of analysis.

Funding Event

Headline SME FM data suggest that around 16% of SMEs experienced any form of borrowing event YEQ2 2015. Any borrowing event covers situations initiated by either a bank or an SME and includes: repaying a facility early or cancelling, renegotiation of a facility, going through an annual review process and applying for a new facility. Success rates across all borrowing events are relatively high (and generally over 70%), apart from when the SME is applying for a new loan or overdraft.

Application rates for new loans and overdrafts are much lower (generally flat and below 3% of SMEs over the last 10 quarters for each of new loans and overdrafts). For the purposes of analysis of demand for new finance in the context of market failures, we are more interested in this narrower definition (i.e. a <u>new</u> loan or overdraft). In terms of the wider funding events (inc. renewals), where SMEs have established a borrowing relationship with a bank, the continuation or adjustment of the facility is more likely to be successful if a change is proposed or requested.

Definition of Success

SME FM has four broad outcomes from a borrowing event:

1. Offered what wanted and took it,

2. Have facility after issues,

3. Took other funding, and

4. No facility after issues.

SME FM combines the first two categories to refer to 'success', i.e. offered what wanted and took it and have facility after issues.

It is feasible that SMEs receiving a facility after issues have not received optimal funding. For example, they may have wanted a larger amount of funding to implement growth plans, but didn't have track record to demonstrate the new level of performance or collateral to de-risk the transaction for the bank. Alternatively, the terms (length, rate of interest etc) may be sub-optimal and impede the intended purpose of that funding, maybe because a higher proportion of cashflow will need to be used to service the facility than had been originally anticipated. Therefore, where this group (or a sub-set of this group) is excluded from analysis, we may be underestimating the scale of any market failure.

Definition of Rejection

Defining SMEs that were rejected requires further consideration. Those SMEs who ended their funding event without a facility have clearly been rejected. However, in relation to the specific facility applied for, those who took 'other funding' have also been rejected in terms of the original facility applied for.

Looking at response counts for new loan rejections alone, a small proportion of SMEs that took other funding (c10%) went on to get an alternative type of facility (this does not include other or don't know responses). Arguably, the structural problem here is either the awareness of different types of funding or the ability to determine the most appropriate type of funding to initially apply for. However, they could still be considered 'successful' in having obtained some form of funding and are therefore excluded from the definition of rejection. Applicable SMEs are not added back into the definition of success to retain consistency with the SME Finance Monitor definition, meaning that successful and rejected applicants under this methodology do not total 100% (although are greater than 90%).

Those providing an 'other' or 'don't know' response (25%) are also excluded from the definition of rejection.

The majority of responses for new loan rejections (c65%) suggest that either a loan/equity was obtained from family or friends or funding under a personal name was obtained. Our analysis of rejected applications includes the initial rejections for both these categories, where it can be considered that the lending decision through the original lender/commercial process has failed, but in both cases, some form of funding was ultimately provided either through a non-commercial process or by superficially changing the profile of the borrower.

Determining the Number of SMEs Rejected

The number of SMEs that sought a new loan or overdraft facility is identified, and the proportions that were successful and rejected (as per definitions above) are calculated.

Relevant percentages and proportions are applied to BIS business population[4] estimates to obtain absolute numbers of SMEs applying for a new loan/overdraft, and those that were successful or rejected.

SME FM provides information on the value band of the facility applied for. In order to obtain a value for rejected loan applications, the number of unsuccessful SMEs (no facility, family/friends or personal name) in each value band is obtained. This is then multiplied by the mid-point value for each value band (a figure of £5m is used for the £5m+ value band). The average loan value is used to obtain a value for SMEs that state that they do not know the value of facility applied for or were not willing to provide this.

The above method is used for both rejected loan and overdraft applications.

Removing Double Counting

If the values of rejected loan application and overdraft applications were summed, it is likely that some double counting of rejections would be included. For example, an SME may have been rejected for a loan (or overdraft) and then applied for an overdraft (or loan) as an alternative within the same 12-month period. Equally, the SME may have required both types of facility and the sum of those values.

To provide cautious estimates of the value of rejected finance, the value of any multiple application is removed from the analysis, using the following principles:

- SME was successful in applications for both loan and overdraft – no action is required because neither application will be counted as unsuccessful.

- SME was successful in loan application, but not overdraft – the value of the unsuccessful overdraft is removed.

- SME was unsuccessful in loan application, but successful in obtaining an overdraft – the value of the unsuccessful loan is removed.

- SME was unsuccessful in applications for both loan and overdraft – the mid-point of the value of rejected loan and overdraft applications from the relevant group is removed.

Discouraged SMEs

SMEs that need finance but are discouraged from applying are not included in the analysis because we do not have information on the type or size of facility that they would have applied for. Additional information from the application process would also be necessary based on the current approach to estimating viability. However, this means that calculations for unmet demand for finance will be an underestimate.

---

[4] https://www.gov.uk/government/statistics/business-population-estimates-2015

British Business Bank Segments

The above analysis is also conducted for the BBB segments: start-up, scale-up and stay ahead. Variables are coded to divide SMEs seeking a new facility into one of the segments. The start-up segment includes all SMEs trading up to 5 years. The scale-up segment includes SMEs trading for more than 5 years with some kind of growth ambition. The stay ahead segment includes SMEs trading for more than 5 years with no growth ambition.

Determining 'Viability'

Not all rejected loan applications will be a result of a market failure. In many cases, the decision made by the bank (or other lending provider) will be legitimate based on their assessment of an SME's ability to service the loan requested.

Where a market failure is evident, a number of 'symptoms' of this are typically noted:

- Lack of track record to verify performance and ability to service loan.
- Lack of collateral to de-risk the lending.

The current British Business Bank approach utilises responses from SME Finance Monitor on reasons for rejection, where specific variables pertain to lack of security and insufficient track record (including new business). While the underlying response count is relatively low (particularly at the segmented level) and needs to be treated with some caution, we can use these responses to determine a qualitative assessment of where a rejected application for finance was due to one of the characteristics of an access to finance market failure.

Where SMEs respond to this question, there are a number that do not know the reason for rejection or cannot remember etc. Within this group, it is important to consider an estimate of the finance gap. In the absence of other information, variables from SME Finance Monitor are used to assess where an SME should have had encouraging information to present to a prospective lender, but they were unsuccessful in their application. Namely, the SME needs to respond positively to all of the following: producing a business plan, quarterly or monthly management accounts, and at least breaking even. In addition, the SME would need to report that they had not missed any loan repayments/had an unauthorised overdraft/cheques bounced etc.

The proportion of viable SMEs can be estimated using the above methods, where they provide lower and upper bounds. Due to positive responses being required for each of the variables used for the upper bound assessment, there is little difference between the lower and upper bounds (less than 5% in most cases). Given reduced response counts in this analysis, all SMEs that 'took other funding' are included within the analysis.

Benchmarking against other Methodologies

Given the difficulties in assessing viability, it is important to compare the estimates derived from SME FM to other benchmarks that provide indications on structural problems for SMEs accessing finance. We recognise that other methodologies and attempts at valuing the finance gap have been made and that our analysis can be sense-checked against these benchmarks.

A 2013 staff working paper from the European Commission makes an ex-ante assessment of the EU SME Initiative. In the report, there is an assessment of SME financial gaps in the EU. This methodology also draws from survey data, noting that, "Survey data, with all their limitations, are used extensively in studies on financing gaps when time and data constraints prevent the quantitative assessment of demand and supply through deep analyses of the data."

The methodology adopted in the working paper aims to identify the number of financially viable SMEs – benefitted from turnover growth in the last six months – that were unsuccessful in obtaining loan financing. Unsuccessful is determined by need and, therefore, does not differentiate between SMEs that have or have not applied for a loan. The value of the financing gap is determined by deriving an average loan amount that is or would have been requested.

The working paper indicates a comparatively higher finance gap for the UK than that suggested by our analysis, bearing in mind that the £4bn value for rejected new debt applications is not adjusted for 'viability'. This difference may be partly explained by the earlier time period for which the analysis was undertaken, when cyclical factors were compounding underlying structural issues in SME access to finance. The estimated interval for the SME loan financing gap was €1.3bn - €8.8bn for the UK during 2009 - 2011. It is worth noting that the upper bound reflects the definitions outlined above (e.g. positive turnover growth in last six months and unsuccessful, where unsuccessful is based on need). The lower bound represents the debt finance needs of high growth SMEs unsuccessful in obtaining loan finance.

A different approach was considered in the RBS Independent Lending Review (2013), completed by Sir Andrew Large. Here, the funding gap was estimated by assessing UK SME debt capacity compared with actual bank lending to UK SMEs. UK SME debt capacity was considered in the context of the level of bank debt that SMEs could prudently support, based on Debt Service Coverage Ratio of 1.5 and pricing at economic cost. This methodology estimated that the funding gap in 2013 was c£30bn -£35bn. Again, cyclical factors were likely to have increased the size of the gap in 2013, so it is reasonable to expect that this gap would have reduced since 2013.

Data on the appeals process, which commenced in 2011, is another way of assessing a possible benchmark for potential viability within rejected applications. Data collection is in its fifth year, with the report noting that, "Appeals numbers continue to be steady and the overturn rate continues to fall." The report indicates that in year 1 (Apr 2011 – Mar 2012), the overturn rate was 39.5% (32.6% excluding credit cards) compared with 24.4% (17.5% excluding credit cards) for the six months ending September 2015, giving support for the view that a small but significant percentage of rejected loans may be viable.

Furthermore, the 2014 full year appeals process report notes that, "In terms of the size of lending, size of company and the relation that this has to the number of declines, appeals, and overturns, […] those SMEs who have the resource and the experience to have more informed discussions with lenders tend to do better than others." The data suggest that overturn rates are highest for smaller businesses with a turnover of less than £100k and for businesses that request lending values of less than £10k. Indeed, the reasons for rejection appear to be different for loan requests below and above £25k.

Legal notice

This publication is available from british-business-bank.co.uk.

Any enquiries regarding this publication should be sent to:
British Business Bank plc
Foundry House
3 Millsands
Sheffield S3 8NH

BBB 011114 34