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ECONOMIC EVALUATION OF THE SMALL FIRMS LOAN GUARANTEE (SFLG) SCHEME

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Executive Summary

Objectives of SFLG

The SFLG was the government's primary debt finance instrument, which was established in 1981. SFLG seeks to address the market failure in the provision of debt finance by providing a Government guarantee to banks in cases where a business with a viable business plan is unable to raise finance because they can not offer security for their debt and/ or lack a track record. This rationale still underpinned the SFLG at the time of the evaluation. The key characteristics of the scheme is the government guarantee (the proportion of the outstanding loan balance covered by the government in the event of loan default) and the government premium (paid by businesses).

Over the last decade, take up of the scheme has averaged around 4,500 loans per year, although there have been fluctuations between individual years.

In January 2009, SFLG was replaced by the Enterprise Finance Guarantee (EFG), which opened the scheme to a wider number of businesses, with the specific objective to facilitate new bank lending in response to the Credit Crunch.

The specific rationale for assisting SMEs is the evidence that they are more likely to be affected by market failures that act as a barrier to accessing finance. At a more strategic level, commitment to assisting viable SMEs to raise finance is underpinned by evidence that the ease of accessing finance is a key driver of productivity through its impact on investment, enterprise and innovation. They also tend to make a high, and disproportionate, contribution to net job generation; that they are a major contributor to new innovation and technological development, and; they play an important part in the development of new markets. In addition, smaller businesses are also major players in the socio-economic system as agents in the regeneration of deprived areas, and employers of under-represented groups in the labour market. All these potential benefits are supported through SFLG by easing the flow of investment funds to smaller businesses that are credit constrained.

Objectives of research

The main objective of this research is to provide a comprehensive assessment of the wider economic impact of SFLG arising from supported businesses being able to access loans that they would otherwise not have received.

The impact of SFLG is assessed on a number of business outcomes including employment change, sales change, labour productivity, likelihood to export, propensity to introduce new products and processes.

An assessment is also made of the overall cost effectiveness of the SFLG to the Exchequer and the economy in terms of additional Gross Value Added (GVA). In addition, other economic benefits such as enhanced innovation capability, increased use of technology and productivity gains are assessed. These take account of the extent to which businesses would have obtained finance in the absence of the scheme (finance additionality) and business deadweight and displacement effects in markets.

Methodology

The research uses a comparison group methodology to assess the counterfactual. In other words, it assesses the outcomes achieved by assisted businesses compared to what would have happened to those businesses in the absence of SFLG.

The counterfactual was established by constructing a matched sample to compare the performance outcomes of those accessing SFLG supported loan as against a sample of similar businesses not accessing SFLG loans. Matching was done on the age of business, sector and size at the point of loan issue in 2006.

In total, 1,488 businesses including 441 SFLG supported businesses and 1,047 unassisted businesses were surveyed. Survey responses were analysed using a mixture of statistical approaches including econometric modelling to control for any sample differences.

Key Findings

Overview

- The rationale for SFLG is still valid. There remains a need for supporting viable small businesses with a lack of security and/ or track record.
- The scheme is well targeted with high levels of self-reported additionality.
- SFLG has created a level playing field for credit constrained businesses allowing them to achieve performance levels on par to otherwise similar unconstrained businesses. There is no evidence that SFLG businesses are of a lower quality compared to similar businesses that are not credit constrained.
- A conservative cost benefit analysis of SFLG covering the first two years benefits of loans obtained in 2006 show the overall benefits outweigh the cost to the economy in terms of GVA.
- There are other economic benefits attributable to SFLG supported lending, particularly in terms of sales growth, exports and jobs. The

scheme appears to be a particularly cost effective way of creating additional employment. Further benefits may also accrue in the future as supported businesses appear to be more orientated towards growth, and many are seeking to develop new products and services.

Scheme impact:

Holding business characteristics constant, SFLG businesses:

- Are 6% more likely to export than similar non-borrowing businesses.
- Are 17% more likely to use new technology, and 24% more likely to use "cutting edge technology" than similar borrowing firms
- Are equally as productive as similar borrowing and non borrowing businesses.
- Grew at a similar rate to other businesses in terms of sales, but grew more quickly in terms of employment than businesses that did not borrow. At the sample mean, this equates to 1.45 additional jobs.
- Furthermore, ethnic minorities led businesses and those located in deprived areas are overrepresented in SFLG compared to similar businesses that borrow.

Benefit to the economy

- Even with conservative assumptions, SFLG is found to have a net benefit to the economy over the first two years of businesses receiving an SFLG loan. For every £1 spent, there is a return of £1.05 to the economy through additional economic output as measured by GVA.
- There will be additional benefits lasting beyond the initial two year time period and so this assessment underestimates the potential benefits from the scheme.

Employment

- The 3,100 SFLG supported businesses in 2006 have created between 3,550 to 6,340 additional jobs in the two years following receipt of the loan, at a cost of between £5,500 to £10,000 per additional job.

Sales

- The 3,100 SFLG supported businesses in 2006 have created between £75m and £150m additional sales over two years.

Exports

- The 3,100 SFLG supported businesses in 2006 SFLG were responsible for £33m exports per annum.[1]

Other

- Other benefits were identified such as increased propensity to export and innovate, but it was not possible to quantify these benefits.

Conclusion

- The basic rationale for SFLG is supported and it appears to a cost-effective way of supporting additional economic activity in the small business sector. On this basis, the recommendation is that a debt guarantee scheme in a similar design to SFLG should remain in place for the foreseeable future.
- As many of the potential benefits of SFLG supported lending to credit constrained businesses might occur beyond the initial two years, and this may underplay the true net benefits, there is a case to be made for tracking supported businesses beyond this time horizon. This could be achieved by using this study to create a panel of SFLG supported businesses and tracking them from this point onwards.
- As a significant minority of SFLG supported businesses are seeking to innovate and/or expand into new geographical, particularly international, markets, there may be a case for SFLG supported businesses to be offered advisory support programmes in parallel with their financial support.
- Policy-makers should be clear that the main reported reason for SFLG lending by the businesses themselves is lack of collateral, not lack of a sufficient track record.

[1] It is not possible to estimate the proportion of export growth attributable to SFLG.

1 Introduction

Objectives of SFLG

The Small Firms Loan Guarantee (SFLG) was first established in 1981 and was the Government's principal debt finance instrument that supports access to finance for small businesses. Throughout the scheme's history tens of thousands of businesses have been supported through SFLG, with around 4,500 businesses supported per year in the last decade.

SFLG sought to address the market failure in the provision of debt finance to SMEs by providing a Government guarantee to the lender in cases where a business has a viable business plan but does not have a track record or is unable to offer sufficient security for their debt. The guarantee covers up to 75% of qualifying loans of amounts up to £250,000. In return for the guarantee, the borrowing business pays BIS an annual premium of two per cent of the outstanding balance of the loan, assessed and paid quarterly. Businesses can not apply for SFLG directly, as SFLG operates as a tool for the lender to use at their discretion alongside their normal commercial lending practices.[2] SFLG is therefore seen as operating at the margins of commercial lending and is not designed to replace mainstream lending decisions. However, SFLG is often used as part of an overall package of finance that borrowers put together. It is estimated that SFLG accounts for roughly 1% of all SME lending by value.

Since January 2009, SFLG has since been replaced by the Enterprise Finance Guarantee (EFG). EFG is a temporary scheme which is designed to help viable businesses raise the finance they need during the current economic recession. EFG shares many of the design features of SFLG but makes it available to a greater number of businesses. For instance, EFG provides loans up to £1 million compared to an upper limit of £250,000 for SFLG. In addition, EFG supports businesses with a turnover of up to £25 million compared to £5.6 million under SFLG. Unlike SFLG, EFG loans can be used to convert an overdraft into a loan.

Objectives of research

The objectives of this research are to assess the performance of SFLG in respect to the December 2005 Graham Review changes, which imposed an age limit on businesses eligibility of 5 years, and removed sector restrictions in

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[2] Throughout this report the term 'SFLG Loan' is used to denote commercial loans guaranteed by the SFLG scheme. It is the banks and not the government that provides the loan to the business.

key service sectors (amongst other operational and administrative changes). These changes were implemented in 2006 but the "Five year rule" was later abolished in the Enterprise Strategy (2008).

The specific objective of this evaluation is to assess the impact of SFLG on a number of business outcomes and through a Cost-Benefit Analysis, determine whether the scheme is cost effective to the economy. In particular, the evaluation focuses on the impact of SFLG on business growth, labour productivity, and propensity to introduce new technology and innovation and also market internationalisation.

The last time SFLG was comprehensively evaluated was in 1999 by KPMG[3], although there have been a number of reviews since then including the Graham Review.[4] The evaluation builds on the earlier analysis undertaken by the author (SFLG Early Assessment). A detailed summary of this analysis is contained in appendix 1. The Early Assessment provided an indication of how the changes introduced by the Graham Review were being implemented using qualitative evidence from key stakeholders, analysis of secondary data and management information.

Methodology

This evaluation uses businesses self-reported assessment of business performance and scheme impact. Telephone interviews were conducted by OMB[5] during August to September 2008 with businesses who had received an SFLG loan in 2006, alongside a matched sample of non-users from the general business population. The comparison sample group was matched to the SFLG group in terms of company legal status and broad industry sector (to one level SIC). In total, 1,488 businesses were surveyed including 441 SFLG supported businesses and 1,047 unassisted businesses. The results from this survey are published separately in the "Small Firms Loan Guarantee Scheme (SFLG) Recipient and Comparison Group Survey Results" report.

The survey was designed to collect information on additionality including finance deadweight and market displacement amongst SFLG supported businesses and more generally, growth orientation, employment and sales growth, product and process innovation, prior labour market history of the business owner, geographic market focus and internationalisation.

In order to identify the 'true' impact of SFLG, it was necessary to take into account key differences in characteristics between the sample groups.

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3 An evaluation of the Small Firms Loan Guarantee Scheme, KPMG, March 1999

4 http://www.hm-treasury.gov.uk/graham_review_loan_guarantee.htm

5 A specialist survey company

Although the survey comparison groups were originally matched to SFLG recipient group it was necessary to also statistically adjust for this using a three-way weight which took account of sector, age and initial size of businesses. This enable businesses that accessed SFLG supported loans to be 'matched' to businesses with similar characteristics that did not receive an SFLG loan. In the descriptive statistics section of this report, the figures are adjusted to take into account this weighting and **these findings may differ from the unweighted results** contained in the "Small Firms Loan Guarantee Scheme (SFLG) Recipient and Comparison Group Survey Results" report.

When assessing finance additionality[6], the SFLG recipient group is compared against businesses who received a conventional bank loan. To assess the wider contribution of the scheme, the SFLG group is compared to two comparison groups; conventional borrowers and non-borrowers.[7]

The Cost-Benefit Analysis (CBA) is carried out using HMT Best Practice as highlighted in the Green Book.[8] The Cost-Benefit Analysis was conducted using findings gathered from the evaluation survey as well as from Management Information provided by the Enterprise Directorate of the Department of Business, Innovation and Skills, and other, secondary, sources for tax and benefit data and Gross Value Added figures.

Structure of report

The report is structured as follows; in Chapter 2 finance and project additionality is assessed. Chapter 3 reports on the use of SFLG for three under-represented groups of small businesses; female led businesses, ethnic minority led businesses, and businesses operating in deprived areas. In Chapter 4 the impact of the scheme on business performance is investigated. Chapter 5 contains information on the costs of the scheme. The results from the Cost-Benefit Analysis (CBA) are presented in chapter 6, whilst conclusions are drawn in Chapter 7.

About the author

Marc Cowling is Principal Economist at the Institute for Employment Studies where he leads the Institutes work on the applied econometric analysis of the functioning of labour and capital markets. He has published widely in the area of entrepreneurship and small business, and been an expert witness to the House of Lords Finance Sub-Committee, the Sainsbury Review of Science and Innovation and the Graham Review of SFLG. He has recently presented his

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6 Finance additionality refers to the availability of conventional bank loans

7 Although an additional number of comparison groups were identified, it was not possible to analyse these in practice due to small sample numbers.

8 http://www.hm-treasury. gov.uk/data_greenbook_index.html

research on partial credit guarantees to the World Bank and on public policy in equity markets to the United Nations. He is also Visiting Professor at Exeter Business School.

2 Finance and Project Additionality

Summary of main findings

- SFLG businesses are generally aware of the scheme prior to application and are more likely to apply for it than wait for it to be offered by their bank.
- The majority (81%) of SFLG recipients receive SFLG on their first loan application.
- For a majority (76%) of SFLG recipients, there were no alternative sources of finance available to them.
- This is confirmed by 79% of SFLG recipients reporting the bank would probably, or definitely not, have given them a loan without SFLG.
- Micro businesses[9] are most likely to be credit rationed in debt markets, suggesting the rationale for SFLG is appropriate.
- Just under half (49%) of businesses would definitely, or probably not, have proceeded with their project without SFLG.

Introduction

This chapter presents the findings from the evaluation survey which addresses the key issues of finance additionality[10], project additionality[11], and also the use of SFLG funds.

As this evidence mainly relates to SFLG recipients i.e. the "treatment group", the main body of evidence presented refers only to those businesses who received finance through the SFLG. It is important to establish the extent to which SFLG recipient businesses were credit rationed in terms of their ability to access conventional bank loans, the process by which businesses ended up

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[9] Less than 10 employees

[10] Finance additionality refers to whether finance is available from other commercial sources. The provision of finance that is not additional from other sources may be seen as a waste of scarce resources available to the government since it would have occurred in the absence of the programme.

[11] Project additionality refers to whether the project would have happened at all, its scale, scope and timing in the absence of funding.

with an SFLG loan, and the nature of any potential impacts on the business had they not been able to access an SFLG loan. However, additional questions were asked to both SFLG businesses and a comparison group of non-SFLG businesses who had successfully applied for a conventional bank loan.

It is important to acknowledge that these results on finance and project additionality are **based on the business' own assessment and are not those of the lender**. That might particularly affect results like whether the reason for using the SFLG was because of lack of collateral or lack of a track record. Results might have been subject to 'impression management', with respondents preferring not to mention a poor credit history.

Finance additionality

Finance additionality: Ability to get a loan without SFLG

A high proportion of businesses would not have received a loan from their bank if it was not for SFLG. Finance additionality is an important issue in the context of the rationale for SFLG as businesses are required to have exhausted all other potential debt funding routes before be considered for SFLG. On this, the results suggest only 6 per cent of SFLG borrowers indicated that their bank would have given them a loan without SFLG, and a further 15 per cent suggested that this was a probable outcome. In total 79% of SFLG loans are additional and only 21 per cent of SFLG businesses are non-additional, although it is not possible to assess whether business owners' judgement was correct about being able to access conventional loans. Interestingly, no significant differences were apparent by age of business, or industry sector, but size of business did matter. On this, micro businesses indicated that they were more likely to have definitely got a conventional loan than SMEs (14 per cent compared to four per cent).

Reasons given for taking out an SFLG loan

According to businesses themselves, a lack of security was given as the main reason for using an SFLG loan. Sixty-three per cent of SFLG businesses reported using SFLG because they lacked security as they were in the start-up phase. A further 16 per cent reported they had exhausted all their available collateral and 19 per cent had an insufficient track record. Interestingly, lack of sufficient track record was cited by a greater proportion of older businesses (greater than 3 years) than young businesses (23 per cent compared to 14 per cent). The same was true for exhausted all available collateral with 23 per cent of older businesses compared to only six per cent of young businesses citing this as their primary reason for using SFLG lending. In summary, the results suggest that availability of collateral is the main reason for banks moving businesses onto SFLG rather than track record.

Business applying specifically for an SFLG loan

Businesses are generally aware of SFLG and in some cases are more likely to specifically apply for an SFLG loan rather than wait for it to be offered by the bank. 63 per cent of SFLG recipients specifically applied for an SFLG loan, and 29 per cent were offered a loan on the proviso that they would take out an SFLG loan guarantee. In theory businesses should not be able to apply directly to an SFLG loan but this finding could indicate that financial advisers are advising firms to apply for such a loan.

Older businesses greater than 3 years old were significantly (at the 5 per cent level) more likely to specifically apply for an SFLG loan (63 per cent compared to 62 per cent for less than 3 year old businesses) and less likely to be offered a loan under SFLG (26 per cent compared to 33 per cent). This suggests a greater awareness of SFLG amongst older businesses. At the sector level, no significant differences between manufacturing, construction and services were apparent. However, micro businesses (less than 10 employees) were found to be significantly less likely to specifically apply for an SFLG loan than SMEs in general (45 per cent compared to 67 per cent). This suggests that there is greater awareness of SFLG amongst larger sized SMEs.

Number of times businesses applied for funding before receiving for an SFLG guaranteed loan

For the majority of SFLG applicants, this was their first loan application. For 81 per cent of SFLG recipients, this was their first loan application. A further five per cent made one previous finance application, five per cent two previous funding applications, and four per cent more than two funding applications. There were significant differences according to age of business, with young businesses (less than 3 years old) being more likely to have the SFLG loan as their first loan application (89 per cent compared to only 75 per cent for greater than 3 year old businesses). Again there are no significant differences across industry sectors or employment size. Thus it appears that most SFLG supported businesses obtain SFLG at the point of their first loan application, and this is even prevalent for younger businesses. It is important to note that in theory businesses do not apply directly for an SFLG loan, rather it is offered to them by the lender.

Econometric analysis highlights three interesting findings. Firstly, that age of business is positively and significantly associated with having more funding applications prior to receiving their SFLG loan. Secondly, businesses' in less deprived areas (i.e. more wealthy localities) are also more likely to make multiple funding applications prior to their SFLG loan. And thirdly, that limited liability businesses are marginally (at the 10 per cent level of significance) more likely to make multiple funding applications.

Alternative sources of finance available

SFLG has high finance additionality with only a small proportion of businesses reporting alternative sources of finance available to them. Seventy-six per cent of SFLG recipients had no alternative sources of finance available to them at the point of loan application. For 15 per cent of businesses, alternatives were available. There were no significant differences for age, sector, legal status, etc. suggesting that the availability of alternative sources of finance is fairly randomly distributed across the SFLG population or is accounted for by unobserved differences in quality of the business not captured by the survey data. However, micro businesses (less than 10 employees) have a 12 per cent lower probability of having alternative sources of finance available. This implies that micro businesses are the most likely to be rationed in debt markets and SFLG is an appropriate instrument for helping these businesses raise finance.

Where alternative sources of finance were available to SFLG recipients, bank finance was reported to be the most frequent source. Thirty-six per cent of those businesses who indicated that alternative sources of finance were available to them suggested that a secured bank loan was available. This represents five per cent of all SFLG loan recipients. The second most prominent external source of alternative funding was bank overdraft (11 per cent of those who indicated alternatives were available), unsecured bank loan (8 per cent) and factoring or business angel funding (6 per cent). For internal or closer sources, loans or equity from directors or shareholders (18 per cent) or family and friends (8 per cent) were the most important alternative sources. Only a very small proportion of businesses reported venture capital, leasing or trade credit as alternative sources of finance available to them.

In theory, SFLG is designed to be a scheme of last resort with the BIS premium leading to SFLG being slightly more expensive than conventional bank loans. The availability of alternative sources of funding may indicate that businesses use SFLG to complement a package of finance.

Awareness of SFLG prior to approaching bank

SFLG recipients are more aware of SFLG prior to approaching the bank than the comparison borrowing group. Whilst 57 per cent of SFLG recipient businesses knew of the scheme prior to their loan application, only 21 per cent of the comparison group did. This might suggest that awareness is unevenly distributed amongst the SME population. On age of business, awareness of SFLG is fairly evenly distributed in the SFLG population across young and older businesses. This is not the case for the borrowing comparison group, where only three per cent of young businesses were aware of SFLG compared to 32 per cent of older businesses.

On business size, micro businesses, in both groups, were less likely to have been aware of SFLG prior to their loan application. The econometric analysis shows that:

- Businesses with limited liability legal status are 43 per cent more likely to have been aware of SFLG prior to approaching the bank
- Micro businesses were 28 per cent more likely more likely to have been aware of SFLG prior to approaching the bank
- Comparison group businesses were 41 per cent less likely to have known about SFLG prior to approaching the bank.

Timing of when bank mentioned SFLG

SFLG was discussed early on in the application process. For sixty-six per cent of SFLG borrowers, the bank mentioned SFLG at the first point when they discussed their loan. For a further 22 per cent the bank did so during the loan application process, and for four per cent it was mentioned at the end of the application process. There were significant differences according to age of the business with 73 per cent of young businesses discussing SFLG right at the beginning of their application compared to only 61 per cent of older businesses. Business size was also a distinguishing feature with a higher proportion of SMEs discussing SFLG right at the beginning of their application with banks than micro businesses (68 per cent compared to 57 per cent). There were no significant differences across sector. The econometric analysis shows that:

- limited liability status is associated with a 21 per cent higher probability of having discussed SFLG right at the beginning of the loan application process,
- young businesses (less than 3 years old) had a 12 per cent higher probability of discussing SFLG at the earliest point in their application process.

Applying for alternative sources of funding

Of the businesses which indicated that a secured bank loan was available to them, only half (50 per cent) actually applied for one. The comparable figures for unsecured bank loans were 20 per cent, overdrafts 29 per cent, loans or equity from directors or shareholders 25 per cent, family and friends 20 per cent, and business angels 20 per cent. No business who perceived that venture capital, factoring, or trade credit was available to them actually applied for it.

Success in obtaining alternative sources of funding

Of those businesses who perceived that secured bank loans were available to them, and actually applied, 33 per cent were turned down for any finance. For all other sources applied for, businesses got at least some of the finance. For external sources, every business got all the finance they requested. For internal sources, directors and shareholders, family and friends, businesses were less likely to get all the money they sought.

Proportion of funding accounted for by SFLG Loan

SFLG forms a significant part of an overall package of finance. The average proportion of total funding accounted for by SFLG was 48 per cent of the total funding raised. The median was between 30 per cent and 50 per cent. One quarter of SFLG loans accounted for less than 26 per cent of total funding and one quarter for 70 per cent or more. This suggests that even for the minority of businesses that had alternative sources of funding and successfully applied for them, that the SFLG loan still accounted for a substantial proportion of their total funding.

Project additionality: Overall

For a majority of businesses their loan was critical to them in terms of starting up in the first place or making the specific investment they sought funding for. A total, 32 per cent of all businesses with a loan (SFLG and non-SFLG borrowers) would definitely not have gone ahead with their project in the absence of their loan. A further 20 per cent would probably not have proceeded, and 10 per cent possibly not proceeded. In contrast, 19 per cent would definitely have proceeded with their project and 14 per cent probably gone ahead with it. Thus, for the majority of businesses their loan was critical for them in terms of starting up in the first place or making the specific investment they sought funding for.

Comparing SFLG to the borrowing comparison group, 49 per cent of SFLG businesses would definitely, or probably, not have proceeded with their project compared to 64 per cent of the non-SFLG comparison group. It is also the case, although only at the 10 per cent level of significance, that young business's (less than two years old) are more likely to definitely proceed with their project (21 per cent to 19 per cent) than older businesses. Yet young business willingness to proceed is only prevalent amongst SFLG borrowers. For the borrowing comparison group of businesses, the reverse is the case with older businesses being more likely to definitely proceed with their projects. This suggests that young SFLG businesses are more willing, or able, to adjust the scale of their projects if they cannot access the full amount of investment funding. In contrast, 70 per cent of the young borrowing comparison businesses would definitely, or probably, not proceeded with their project.

There were no significant differences by business size or industry sector in aggregate, although differences between micro and SME businesses in the non-SFLG comparison group are more marked than in the SFLG group, with micro businesses in the comparison group much more likely to proceed with their projects than SMEs in the absence of a loan. Amongst the SFLG group, micro businesses were more likely to definitely not proceed than SMEs (34 per cent compared to 29 per cent). The econometric analysis shows that:

- service sector businesses were marginally (at the 10 per cent level of significance) less likely to have proceeded with their project anyway
- micro businesses were less likely to have proceeded with their projects
- the comparison group of conventional borrowers were less likely to have proceeded with their projects in the absence of their loan.

Project additionality: Timing

SFLG is helping businesses to start their investments earlier. Without SFLG nearly half of businesses projects would have been carried out later. Amongst all borrowing businesses, only four per cent would have gone ahead with their project at an earlier date in the absence of their loan, 45 per cent at a later date, and 49 per cent at the same time. Importantly, although four per cent of SFLG businesses would have proceeded earlier, no comparison businesses would have done this. And 46 per cent of SFLG businesses, compared to only 39 per cent of comparison businesses would have delayed the start of their projects. This suggests that SFLG is helping businesses to start their investments earlier.

In relation to business age, older SFLG businesses were more likely to activate their projects at a later date than younger SFLG businesses (51 per cent compared to 38 per cent). The reverse was true for comparison businesses (32 per cent compared to 52 per cent). This suggests that potential borrowing constraints tend to hold back established SFLG businesses and young conventional borrowers.

On business size, 48 per cent of SFLG SMEs, compared to only 36 per cent of SFLG micro businesses, would have held back the timing of their projects. In contrast, only 45 per cent of SFLG SMEs would have continued at the same time compared to 60 per cent of SFLG micro businesses. On balance, access to SFLG loans is more important to timing for SMEs than for very small, micro, businesses. For the comparison group of conventional borrowers no business size effects were apparent. The econometric analysis shows that:

- only legal status was a significant determinant of the timing decision in the absence of their loan with limited liability businesses being 16 per cent more likely to delay their projects.

- No significant differences were evident between the ‘treatment’ or comparison groups.

Project additionality: Scale

Finance is less important to investment scale in terms of numbers of businesses affected, but has a bigger impact on scale in terms of business affected compared to businesses that accessed to conventional loans. More comparison businesses than SFLG businesses indicated that their projects would have been smaller (44 per cent compared to 32 per cent), and more SFLG businesses indicated that the scale would have remained very similar without their loan (64 per cent compared to 56 per cent of comparison businesses).

On business age, older SFLG businesses were more likely to indicate that in the absence of their loan their project would have been smaller in scale compared to young businesses (35 per cent compared to 26 per cent). This contrasts with the comparison group where younger businesses were considerably more likely to suggest a smaller scale than older businesses (80 per cent compared to 24 per cent). On business size, no clear differences were apparent in the comparison group. But in the SFLG group SMEs were more likely to indicate that their project would have been smaller in scale than micro businesses (37 per cent compared to 12 per cent). The econometric analysis shows that:

- limited liability businesses were 24 per cent more likely to cut the scale of their projects
- construction businesses were 32 per cent more likely to downsize the scale of their projects (although this latter effect was only significant at the 10 per cent level).
- No differences were apparent between the SFLG and comparison groups.

The aggregate data show for comparison group businesses their investment would have been 10-25 per cent smaller, whereas for SFLG businesses the median was 25-50 per cent. This suggests that SFLG is much more important to investment scale, than for businesses with access to conventional loans.

Project additionality: Scope

SFLG businesses were more likely to have narrowed the scope of their projects than comparison businesses. 22 per cent of SFLG businesses reported lowering the scope of the project compared to 15 per cent in the comparison group. However, comparison group businesses were more likely to have proceeded on a broader scope than SFLG businesses (11 per cent compared to 3 per cent).

The econometric analysis shows that:

- Older SFLG businesses were more likely than younger SFLG businesses (25 per cent compared to 18 per cent) to have proceeded on a narrower scope.
- Larger SFLG recipient SMEs were more likely to have proceeded with their projects on a narrower scale than micro SFLG businesses (27 per cent compared to 5 per cent).
- Only limited liability legal status had a significant effect on project scope, narrowing the scope by 15 per cent.
- No differences were apparent between SFLG and the comparison businesses.

Other points

Assistance provided by bank in loan application or business plan

In terms of leveraging bank expertise in funding applications, a higher proportion of SFLG businesses got assistance on their loan application and business plan. 43 per cent of SFLG recipients compared to just 16 per cent of comparison group got support with their loan application from the bank, and also with their loan application and business plan (21 per cent compared to 15 per cent). More than twice as many comparison businesses had no bank help with either their loan application or their business plan (63 per cent compared to 26 per cent). This suggests that an important benefit for SFLG businesses is leveraging professional bank expertise in supporting the process of accessing funding, an area in which many smaller businesses are lacking in skills and expertise.

Young SFLG businesses get more bank support with loan applications and business planning than older SFLG businesses (27 per cent compared to 17 per cent). A similar result, for SFLG businesses, is found in relation to business size with micro SFLG businesses more likely to get bank support for loan applications and business planning than SMEs (26 per cent compared to 20 per cent).

The age result also holds for the comparison businesses, with 22 per cent of young businesses getting support for loan applications and business planning compared to only 11 per cent of older businesses. However, no substantial differences were obvious for business size in the comparison group.

Conclusion

On balance, the findings suggest that the majority of SFLG borrowing is finance additional to that which would have occurred in the absence of the scheme, and, for the most part, it appears to be functioning in the manner for which it is designed. That is to say it is allowing businesses without collateral and/or a substantive track record to access loans which they would not have received otherwise. In terms of the relative balance of factors causing this market failure, the evidence suggests that lack of collateral is far more significant than track record.

3 Under-represented Groups

Summary of main findings

- Ethnic led businesses and those from deprived areas are over-represented within SFLG
- SFLG lending is more likely to be a last resort for businesses in deprived areas
- Higher proportions of female and ethnic led businesses use SFLG to fund a start-up
- Finance additionality is higher for deprived area businesses than for other SFLG businesses
- Lack of collateral was a more important reason for women and ethnic led businesses accessing SFLG

Introduction

The extent to which under-represented groups of small businesses have accessed SFLG supported loans is considered in this section. The two groups considered are female-led businesses and ethnic minority led businesses. In both cases these businesses are defined as being female led or ethnic minority led if a majority of the directors are from the relevant groups (i.e. female or ethnic minorities). In addition, the extent to which smaller businesses operating in deprived areas are accessing SFLG supported loans is investigated. In this case businesses operating in one of the 15 per cent most deprived Super Output Areas in the England based on the 2007 multiple index of deprivation.

Table 3.1: Incidence of under-represented groups

	SFLG %	Non-borrowing comparison %	Borrowing comparison %	All business average %	Chi-squared Significance [12]
Female Led	34.0	42.3	46.9	39.9	0.513
Ethnic Minority Led	13.4	19.3	8.0	16.7	0.001
Deprived Area	14.1	12.6	8.4	12.9	0.005

Table 3.1 shows no significant differences are apparent across the SFLG and two comparison groups in terms of female-led businesses. For ethnic minority led businesses (EMB), significantly higher proportions of SFLG borrowers than conventional borrowers were ethnic minority led businesses (13 per cent compared to 8 per cent), and even higher proportions of non-borrowing businesses were ethnic minority businesses (19 per cent). The relative incidence of businesses operating in deprived areas was significantly different with more SFLG supported businesses being located in a deprived area than was the case for either of the comparison groups. The difference was very substantial when comparing SFLG businesses to conventional borrowing businesses (14 per cent compared to 8 per cent). This might suggest that businesses operating in deprived areas have fewer assets to place as collateral in order to access a conventional bank loan. Equally, this might apply to ethnic minority businesses when seeking to access bank loans. The following section explores in more detail how these under-represented groups came to access SFLG supported loans.

[12] The Chi-Squared significance in this case refers to the statistical probability that the proportion of businesses, here female led or ethnic minority led, or operating in a deprived area, are different across three groups from the norm (SFLG, non-borrowing control, and borrowing control). In the case of female led the significance is 0.513 which means that no statistical difference is identified across the three groups. For ethnic owned and operating in a deprived area the significance levels at 0.001 and 0.0005 imply that the observed differences across groups are significant.

Specifically apply for an SFLG loan

Businesses in deprived areas and those led by ethnic minority groups are more likely to specifically apply for an SFLG loan. This contrasts with female led businesses which are less likely to apply specifically for an SFLG loan than the average for the SFLG sample. In contrast, female led businesses are more likely than average to be offered a loan on the proviso that they take out an SFLG guarantee.

First funding application

Businesses operating in deprived areas have to go through a much longer search for external finance, and SFLG supported lending is more likely to be a last resort. The average for the SFLG sample in terms of this being their first funding application was 81 per cent. The proportion was higher, at 85 per cent for female led businesses, and much lower, at 74 per cent, for deprived area businesses.

Purpose for seeking finance

Across all three under-represented groups of businesses the purchase of an asset was a much more common reason for seeking external funding than was the case across the whole SFLG population. On average, 41 per cent of SFLG supported loans were related to starting up a business. This was much higher for ethnic minority businesses (69 per cent) and female businesses (53 per cent).

Alternative sources of funding available

Finance additionality is higher for businesses in deprived areas and amongst ethnic minority businesses but not the case for female led businesses. On average, 15 per cent of businesses accessing SFLG supported loans indicated that alternative sources of finance were available to them at the point of application for their SFLG loan. Yet this was less likely to be the case for deprived area businesses (10 per cent) or ethnic minority businesses (10 per cent).

Project additionality

SFLG is important for promoting the flow of finance to businesses operating in deprived areas. Around half (52 per cent) of all projects supported by SFLG loans would not have proceeded if it was not for SFLG. A similar figure was found for female led businesses. In contrast, only 41 per cent of projects developed by ethnic minority businesses would have been abandoned. But 57 per cent of projects from businesses in deprived areas would not have gone ahead.

Awareness of SFLG

Female led businesses had a lower awareness of SFLG. On average, 57 per cent of SFLG supported businesses were aware of SFLG prior to their loan application. Slightly higher proportions, 63 per cent, of SFLG borrowers in deprived areas had prior awareness of SFLG, and slightly lower proportions of ethnic minority businesses, 54 per cent, did. Awareness was lowest amongst female led businesses at 53 per cent.

Reason for use of SFLG loan

Lack of collateral is more of a concern for ethnic led businesses, and lack of track record is more of an issue for businesses in deprived areas. Lack of collateral was cited by 79 per cent of businesses, although relies on businesses perceptions. Perhaps surprisingly, this proportion was lower for deprived area businesses at 76 per cent. Yet it was higher for female led businesses, 82 per cent, and much higher for ethnic led businesses at 90 per cent.

Conclusion

SFLG appears to be of assistance to under-represented groups as ethnic minority led businesses and those from deprived areas are over-represented within SFLG. There are additional benefits as higher proportions of female and ethnic led businesses use SFLG to fund a start-up compared to conventional loans. Finance additionality is also higher for deprived area businesses than for other SFLG businesses.

4 Benefits of SFLG

Summary of main findings

SFLG has created a level playing field for finance constrained businesses, and allowed them to achieve performance levels that are similar to businesses able to access conventional bank loans. In the absence of SFLG, these businesses would:

- have created fewer jobs
- be less likely to export
- be less likely to introduce new or improved products or services
- less likely to adopt cutting-edge technologies.

Introduction

In this chapter of the report evidence is presented on the benefits of the scheme to the business outcomes.

For the first part of the analysis the reporting outcomes and impacts for SFLG recipient businesses are compared against the comparison group of businesses that had accessed conventional bank loans. This allows an assessment to be made of the quality of SFLG businesses. No statistical difference between SFLG businesses and this comparison group may be viewed as a positive outcome since it implies that SFLG is not being used to support inferior quality businesses. This is then followed up by a second comparison group of non-borrowing businesses, which allows some assessment to be made of the benefits of bank finance overall to businesses looking to grow.

The benefits considered include the use of the loan for:

- Introduction of new or improved products or services
- Introduction of new or improved processes
- Introduction of new technology
- Reduced costs
- Increased sales
- Increased productivity
- Business outcomes

- Future growth prospects

This is followed by an assessment of the gross economic benefits:

- Employment change (2006 to 2008)
- Sales turnover change (2006 to 2008)
- Labour productivity change (2006 to 2008) and labour productivity
- Likelihood of exporting
- Geographic market focus
- Introduced new or improved products or services
- Business use of cutting-edge technology

Within each of the following sections, the weighted descriptive statistics are reported first. However, these differences may be explained by differences in sample characteristics between the comparison groups. The analysis of impact that follows then assesses the difference between the sample groups holding all other factors constant using econometric modelling techniques.

The following table summarises the impact of the SFLG against the borrowing and non borrowing comparison groups holding all other factors constant:

Table 4.1 Summary of impact: SFLG against borrowing and non borrowing comparison groups

Performance Measure	Borrowing Comparison Group	Non-Borrowing Comparison Group
Loan use		
New or improved product/service	0	NA
New or improved processes	0	NA
New technology	+17%	NA
Reduced costs	0	NA
Increased sales	0	NA
Increased productivity	0	NA
Contribution of loan to business outcomes	0	NA
Contribution of loan to future growth prospects	0	NA
Economic Performance		
Employment change	0	+1.45 jobs
Sales change	0	0
Productivity change	0	0
Productivity	0	0
Exporter (yes)	0	+6%
Exporting intensity	0	0
Geographic market reach	0	0

Introducing new or improved products/services	0	+43%
Improving products/services	0	+47%
Introducing new and improving existing products/services	0	+64%
Uses cutting-edge technology	+24%	+15%
Future growth intentions	0	+20%

Introduction of new or improved products or services

SFLG recipient businesses are equally likely to have introduced new or improved products and services compared to the borrowing comparison group. 53 per cent of SFLG businesses compared to 54 per cent of the borrowing comparison group have directly benefitted from receiving a loan in terms of being able to introduce new, or improved, products and services. The difference is not statistically different when other factors are taken into account.

The regression estimates show that young businesses per se (less than 3 years old) are 24 per cent less likely to have introduced new or improved products or services, suggesting that more established businesses are more likely to use their loans to develop their product or service portfolio.

Construction businesses are 32 per cent less likely to have used their loans for developing or improving their products or services, and service sector businesses marginally less likely (-12 per cent at the 10 per cent level of significance), suggesting higher levels of innovation in manufacturing associated with bank lending. This is interesting as manufacturing businesses are over-represented on SFLG compared to the overall population of smaller businesses in the UK.

The results suggest that size is no barrier to product or service development, but there is an age effect whereby very young businesses do not tend to borrow for product or service development.

Likelihood of new or improved products or services introduced:

- Young businesses are 24 per cent less likely to compared to older businesses

- Construction businesses are 32 per cent less likely to than manufacturing businesses
- Service sector businesses are 12 per cent less likely to than manufacturing businesses
- No difference between SFLG and borrowing comparison group

Introduction of new or improved processes

SFLG recipient businesses are equally likely to have introduced new or improved processes compared to the borrowing comparison group. 35 per cent of SFLG businesses and 33 per cent of borrowing comparison group businesses introduced new or improved processes as a direct result of their loan, although this is not statistically different when other factors are taken into account.

Businesses with limited liability legal status are 29 per cent less likely to introduce new, or improved, processes, and that very young businesses are 18 per cent less likely to. There were no significant differences between size of business, industry sector or relative deprivation.

Likelihood of introducing new or improved processes:

- Limited liability companies are 29 per cent less likely to than partnerships and sole traders
- Young businesses are 18 per cent less likely compared to older businesses
- No difference between SFLG and comparison group

Introduction of new technology

SFLG businesses are more likely to introduce new technology compared to other borrowing businesses. 35 per cent of SFLG businesses compared to 31 per cent of borrowing comparison group businesses associated their lending with the introduction of a new technology. The econometric model shows the magnitude of this difference is large with SFLG businesses being 17 per cent more likely to introduce new technology compared to the borrowing comparison businesses. This might suggest that SFLG lending, by relaxing borrowing constraints, can stimulate new technology introduction to a degree over and above that which would have been achieved otherwise. This is consistent with lenders (i.e. banks) finding it more difficult to adequately assess the risk associated with new technologies, and in the absence of collateral are less willing to lend against such propositions.

Young businesses (less than 3 years old) were 15 per cent, less likely to introduce new technologies. There was also a negative relationship between relative deprivation and the introduction of new technologies (i.e businesses located in deprived areas were less likely to introduce new technologies).

There is no evidence that a businesses' legal status, size, or industry sector affected the propensity to introduce new technology. Likelihood of introducing new technology:

- Young businesses are 15 per cent less likely than older businesses
- SFLG businesses are 17 per cent more likely than the comparison group businesses

Reduced costs

There is no statistical difference between SFLG businesses and comparison group for using the loan to reduce costs. Although the data shows more borrowing comparison group businesses (30 per cent) than SFLG businesses (23 per cent) used their loans to lower the cost base in their business, once other factors are controlled for this difference is insignificant. However, limited liability businesses are 20 per cent less likely to use their loan for cost reduction purposes but no differences were identified by size, age, sector or relative deprivation. Likelihood of cost reduction:

- Limited liability companies are 20 per cent less likely than partnership or sole traders
- No difference between SFLG businesses and comparison group

Increased sales

There is no statistical difference between SFLG businesses and borrowing comparison group for using the loan to increase sales. Although borrowing to help promote sales growth was marginally more prevalent amongst the borrowing comparison group of businesses (61 per cent compared to 56 per cent) this was not statistically significant once other factors were taken into account.

Young businesses (less than 3 years) were 14 per cent less likely to borrow to help increase sales and service sector businesses were also 14 per cent less likely to. There were no statistical differences between legal status, business size or relative deprivation.

Likelihood of increased sales:

- Young businesses are 14 per cent less likely compared to older businesses
- Service sector businesses 14 per cent less likely compared to manufacturing businesses
- No difference between SFLG businesses and comparison group.

Increased productivity

There is no statistical difference between SFLG businesses and borrowing comparison group for using the loan to increase productivity. 42 per cent of SFLG businesses compared to 45 per cent of borrowing comparison businesses indicated that their loan helped them benefit from increased productivity, although there was no difference once other factors were taken into account.

Only age of business was found to be significant. Younger businesses (less than 3 years) were found to be 10 per cent less likely to associate their loan with increased productivity.

Likelihood of increased productivity:

- Young businesses are 10 per cent less likely than older businesses
- No difference between SFLG businesses and comparison group.

The contribution of loan to business outcomes

There is no statistical difference between SFLG businesses and borrowing comparison group in the perceived contribution of the loan to business outcomes. SFLG businesses were more likely to state that they would have achieved similar business outcomes without their loan than the borrowing comparison group (9 per cent compared to 4 per cent). However, they were less likely to feel that they could have achieved similar outcomes as rapidly (30 per cent compared to 39 per cent). In addition, SFLG businesses were more likely to indicate that they would have achieved some, but not all, business outcomes without their loan than the comparison businesses (17 per cent compared to 13 per cent). It was also the case that SFLG businesses were more likely to feel that they would probably not have achieved similar business outcomes without their loan than comparison businesses (21 per cent compared to 14 per cent), but less likely to feel that they definitely would not have achieved similar business outcomes (22 per cent compared to 27 per cent). However, none of these differences were significant once other factors were taken into account.

Evidence suggests that younger businesses (less than 3 years old) benefit from more definitive business outcomes being associated with lending, and that these outcomes could be achieved more quickly. However, other results suggest that the contribution of new lending to business outcomes is fairly randomly distributed across industry sectors, different size classes, and other characteristics.

Contribution of loan to business outcomes:

- Young businesses helped to achieve outcomes over and above that they would have achieved and quicker (than older businesses)

- No difference between SFLG businesses and borrowing comparison group.

The contribution of loan to future growth prospects

SFLG businesses are more likely to believe that the future growth prospects have been enhanced by their loan than non-borrowing comparison group businesses. 81 per cent of SFLG businesses felt that their loan had made a positive contribution to their future growth prospects compared to 78 per cent of comparison businesses.

The contribution of loans to future growth prospects is randomly distributed across businesses characteristics[13]. The only exception was that SFLG (and non-SFLG borrowing businesses) were more likely to report a growth orientation for the future.

Contribution to future growth prospects:

- SFLG businesses had a 20 per cent higher probability of being growth orientated going forward than non-borrowing businesses.

Economic Performance

Having considered how the SFLG group compared to the borrowing comparison group on a variety of indicators of loan use, the focus of the following section is on more tangible measures of business performance. The performance measures considered here are:

- Employment change (2006 to 2008)
- Sales turnover change (2006 to 2008)
- Labour productivity change (2006 to 2008) and productivity
- Likelihood of exporting
- Geographic market focus
- Introduced new or improved products or services
- Business use of cutting-edge technology.

It is important to note that these measures are based or are derived from responses given by the business them selves. In this section the analysis is

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[13] The regression model was found to be poorly specified.

also broadened to include a second comparison group of businesses who had not accessed any conventional bank loans.

Employment change

SFLG Businesses grew at a similar rate to conventional borrowing businesses but at a faster rate than non borrowing businesses. Taking other factors into account, this equates to 1.45 extra jobs in SFLG (and conventional borrowing) businesses compared to non-borrowing businesses.

Initial employment size is associated with lower employment growth. The coefficient on the regression implies that for every one per cent increase in initial employment size, growth will be 1.14 per cent lower. In short, smaller businesses grow faster measured in employment terms.

It is also the case that younger businesses grow more slowly compared to older businesses. The coefficient on the age variables implies that a one per cent increase in start of period age would increase employment growth by 0.14 per cent.

Limited liability legal status businesses were also associated with higher employment growth, but industry sector did not appear to make any significant difference or relative deprivation. The key finding was that non-borrowing comparison businesses grew their employment more slowly than either SFLG businesses or borrowing comparison businesses, which were no different from one another.

- Businesses with larger employment in 2006 grew more slowly
- Older businesses grew at a faster rate than younger businesses
- Limited liability businesses grew at a faster rate than partnership or sole traders
- The 'no borrowing' comparison group grew more slowly than the SFLG and borrowing comparison group.

Sales change

There were no significant differences between the sales growth of SFLG businesses and either of the two comparison groups. Although the data shows SFLG recipient businesses sales turnover grew more quickly than comparison group businesses, this can be explained by sample characteristics.

SFLG businesses grew by 138 per cent between 2006 and 2008. This compares to 66 per cent in the non-borrowing comparison group and 96 per cent in the borrowing comparison group. The median SFLG business grew sales by 71 per cent compared to 25 per cent and 33 per cent in the non-borrowing and borrowing comparison groups. In all groups the median was substantially lower than the average, highlighting the fact that a few rapid growth businesses were pulling the all business averages upwards.

The regression model also shows that businesses that were larger in the starting time period (2006) grew their sales at a slower rate. The coefficient implies that for every one per cent larger sales a business had in 2006, their sales growth rate would be 0.11 per cent lower by 2008. In short, smaller businesses grew their sales faster over the period measured.

Unlike the employment growth model, no age relationship was found, suggesting that younger businesses grew at similar rates to older businesses. Legal status played no affect, nor did relative deprivation, although there was marginal evidence (at the 10 per cent level of significance) that construction businesses grew faster.

- Businesses with higher sales in 2006 grew more slowly
- Construction businesses grew marginally more quickly than service or manufacturing businesses
- No significant differences were found between the SFLG group and the two comparison groups.

Labour productivity growth

There were no significant difference between the productivity growth of SFLG businesses and either of the two comparison groups. Any of the following observed differences can be explained by sample characteristics. For instance, the data shows that SFLG businesses grew their labour productivity by an average of 63 per cent, and this compares to 59 per cent amongst the non-borrowing comparison businesses and 12 per cent amongst the borrowing comparison businesses. At the median, labour productivity growth was highest amongst non-borrowing comparison businesses at 61 per cent compared to 44 per cent amongst SFLG businesses, whilst borrowing comparison businesses recorded negative growth of 33 per cent.

The regression model shows that businesses with higher labour productivity in the initial time period grew more slowly in the following two years. The coefficient implies that for every one per cent more efficient a business was in 2006, their productivity grows 0.84 per cent more slowly over the period. This suggests that there is an element of catch up for the businesses that begin with lower labour productivity, and that productivity improvements are harder to achieve when businesses are already operating at a relatively efficient level.

The only other significant findings were that businesses with limited liability legal status achieved higher growth in labour productivity over the period, and marginal evidence that service sector businesses had lower productivity growth rates. No significant differences were found according to age of business or relative deprivation.

- Businesses with higher labour productivity in 2006 grew more slowly
- Limited liability businesses grew at a faster rate than partnerships or sole traders
- Service sector businesses grew marginally more slowly than construction or manufacturing businesses
- No significant differences were found between the SFLG group and two comparison groups.

Labour productivity

There is also no evidence that SFLG businesses are less productive than comparable borrowing group of businesses in 2008 or 2006. This is an important finding as it suggests SFLG is not being used to support inferior quality businesses.

Other findings suggest larger businesses are less productive than smaller businesses. The service sector is found to have higher labour productivity levels than other sectors, and productivity was positively related to age, peaking at around twelve years trading, after which productivity levels then declined.

- Smaller businesses are more productive than larger businesses.
- No significant differences were found between the SFLG group and two comparison groups.

Exporters and exporting intensity

SFLG businesses are more likely to export than non borrowing businesses although there is no difference in export intensity. 23 per cent of SFLG businesses export compared to 17 per cent of the non-borrowing comparison group and 15 per cent of the borrowing comparison group. In terms of exporting intensity, defined as the share of total sales accounted for by exports, SFLG businesses had an export share of 26 per cent of total sales, non-borrowing comparison businesses 32 per cent and borrowing comparison businesses 10 per cent.[14] Controlling for sample characteristics shows SFLG

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[14] The regression model shows that business age is associated with increasing exporting intensity up to a point, but it then tails off. Exporting intensity is found to peak between the ages of twelve and fifteen years in the life-cycle of small businesses.

Construction businesses are found to have the lowest exporting intensity, and service businesses also have lower exporting intensity than manufacturing businesses. There is a business size effect, and the relationship is negative implying that exports are a more important component of total sales for smaller businesses. Limited liability legal status is also associated businesses were 6% more likely to export than the no borrowing comparison group but were similar to the borrowing comparison group of businesses

Younger businesses were seven per cent less likely to export than older businesses. Micro businesses (less than 10 employees) were also 26 per cent more likely to export (although this was only significant at the 10 per cent level), and that businesses with limited liability legal status were 22 per cent more likely to export. Not surprisingly, construction businesses were 14 per cent less likely to export and service sector businesses 20 per cent less likely to export than manufacturers.

- Young businesses were seven per cent less likely to export (than older businesses)
- Micro businesses were marginally more likely to export (than larger businesses)
- Construction businesses were 14 per cent less likely to export than manufacturing businesses
- Service businesses were 20 per cent less likely to export than manufacturing businesses
- The no borrowing comparison group were six per cent less likely to export than the SFLG group or the borrowing comparison group.

Geographic market reach

No significant differences were found between the SFLG group and the two comparison groups. Geographical market reach is measured in the context of where businesses main customers are located. The measure has five spatially ordered categories including local (within 20 miles), regional, UK, EU, and outside EU. The data shows that 50 per cent of all businesses (50 per cent SFLG) operated locally, 14 per cent regionally (13 per cent SFLG), 26 per cent at a UK level (30 per cent SFLG), 2 per cent in EU markets (3 per cent SFLG), and 3 per cent in international markets outside the EU (3 per cent SFLG). The econometric analysis shows there are no differences between the SFLG businesses and the two comparison groups in terms of geographical market reach.

Younger businesses are marginally less likely to enter wider geographical markets. Larger sized SMEs are significantly more likely to operate outside of their locality. Limited liability businesses also operate more widely, as do

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with higher exporting intensity, but relative geographical deprivation is associated with lower exporting intensity. No significant differences between SFLG and comparison groups were found.

manufacturing businesses. Young businesses are less likely to enter wider geographical markets than older businesses.

- Micro businesses are more likely to enter wider geographical markets than larger businesses
- Limited liability businesses are more likely to enter wider geographical markets than partnerships or sole traders
- Construction businesses are less likely to enter wider geographical markets than manufacturing businesses
- Service businesses are less likely to enter wider geographical markets than manufacturing businesses
- No significant differences were found between the SFLG group and the two comparison groups.

Introduced new or improved products or services

SFLG Businesses are more likely to introduce new or improved products or services in the last two years. 18 per cent of businesses introduced new products or services (18 per cent SFLG group), 11 per cent improved existing products or services (11 per cent SFLG), 25 per cent did both (34 per cent SFLG), and 47 per cent did none of the above (37 per cent SFLG).

Econometric analysis shows there are significant differences across SFLG and the two comparison groups. The no borrowing comparison group was found to have a 43 per cent lower chance of introducing a new product or service, a 47 per cent lower chance of introducing an improved product or service, and a 64 per cent lower chance of doing both compared to SFLG businesses. Therefore, borrowing businesses (SFLG and borrowing comparison) are significantly more likely to be introducing new or improved products or services, or both, than doing nothing.

The regression results also show that micro businesses (less than 10 employees) are more likely to be introducing new or improved products or services, but that age of business does not matter. Limited liability businesses were also more likely to be introducing improved products or services, or both new and improved products or services.

- Construction businesses have a lower chance of any new or improved products or services compared to service and manufacturing businesses
- Micro businesses were substantially more likely to be introducing new or improved products or services compared to larger businesses

- Limited liability businesses were more likely to be introducing new or improved products or services compared to partnerships and sole traders
- The no borrowing comparison group were 43 per cent less likely to be introducing a new product or service, 47 per cent less likely to be improving a product or service, and 64 per cent less likely to be doing both than the SFLG group or the borrowing comparison group.

Business use of cutting-edge technology[15]

SFLG businesses are significantly more likely to adopt cutting-edge technologies. 42% of SFLG businesses use cutting-edge technologies compared to 28 per cent of the no borrowing comparison group, and 17 per cent of the borrowing comparison group.

Regression analysis shows the no borrowing comparison group were 15 per cent less likely and the borrowing comparison group were 24 per cent less likely to be using cutting-edge technology than SFLG businesses. These probability differences are large in magnitude and suggest that banks, in the normal course of their small business lending, find it difficult to adequately assess the risk of new technologies. Risk-averse banks would then require collateral against such lending, which increases the number of innovative businesses that are channelled through to SFLG. In this sense, SFLG is functioning well within the overall banking system as businesses that have high new technology adoption rates are supported by the SFLG and are then able to create wider economic benefits to society.

The regression results also show that legal status mattered as limited liability businesses were 16 per cent more likely to use cutting-edge technologies. Sector was also important as construction businesses were 17 per cent less likely than manufacturing or service sector businesses. There was no significant variation across age or size of business.

- Construction businesses were 17 per cent less likely to use cutting-edge technology than service or manufacturing businesses
- The no borrowing comparison group were 15 per cent less likely to be using cutting-edge technology and the borrowing comparison group 24 per cent less likely to be using cutting-edge technology than the SFLG group.

[15] defined as a novel technology or one not widely used in their industry sector

Growth objectives

SFLG businesses are more likely to have growth objectives. The issue of whether finance additional and non-displacing SFLG businesses are more likely to be growth orientated than other businesses is considered. Previous research has established a link between growth orientation, strategic direction, and actual achieved growth (Gavron et al., 1998; Bosma et al., 2004; Durand and Coeurderoy, 2001; Ensley et al., 2002; Reid and Smith, 2000).

Table 4.2: Future growth orientations

Growth objectives	SFLG (additional and non-displacing)	Non-additional and displacing SFLG businesses	All other businesses
Remain the same size	9.4	17.8	26.7
Grow smaller	2.1	2.0	3.3
Grow moderately	46.7	49.8	47.9
Grow substantially	40.2	28.9	18.4
Other	1.6	1.5	3.8
Total	100.0	100.0	100.0

The above table shows business growth intentions for the future. Finance additional and non-displacing SFLG businesses are the most likely to want to grow substantially. The differences in growth intentions are large with 40 per cent of SFLG (additional and non-displacing) businesses have substantial growth as a strategic objective compared to only 29 per cent of non-additional and displacing SFLG businesses and only 18 per cent of all other businesses.

Conclusion

It is important to note that the 'no observable differences' in the performance indicators between SFLG recipients and businesses should be interpreted as positive. This is because it suggests that SFLG recipients are not disadvantaged or advantaged compared to businesses receiving conventional bank loans. SFLG is allowing credit constrained businesses to operate on a level playing field with businesses that access conventional loans. Furthermore, due to the high level of finance additionality (reported in chapter 2), SFLG can be seen as correcting a market failure, by allowing businesses that may be credit rationed to access the finance they need for investment. Furthermore, SFLG businesses are statistically more likely to introduce new technology compared to other businesses, which will lead to wider economic benefits.

Compared to the general SME comparison group (i.e. those who had not accessed loan finance), SFLG businesses were found to perform better on a number of business performance indicators including employment growth, exporting, the introduction of new or improved products or services, and use of cutting-edge technologies. Furthermore, SFLG and the conventional borrowing group perform similarly across a range of business performance measures. Again, this suggests that SFLG has created a level playing field for businesses that were initially finance constrained, and importantly helped them achieve performance outcomes that would have been unachievable in the absence of the scheme.

5 Costs of SFLG

The main cost to Government of SFLG is meeting the cost of loan defaults. The 2007/08 SFLG annual report shows the total amount paid out by the Government on demands from SFLG loan defaults was £69.3 million in 2007/08. This resulted from 1,759 loans that defaulted with an average cost of £39,410.

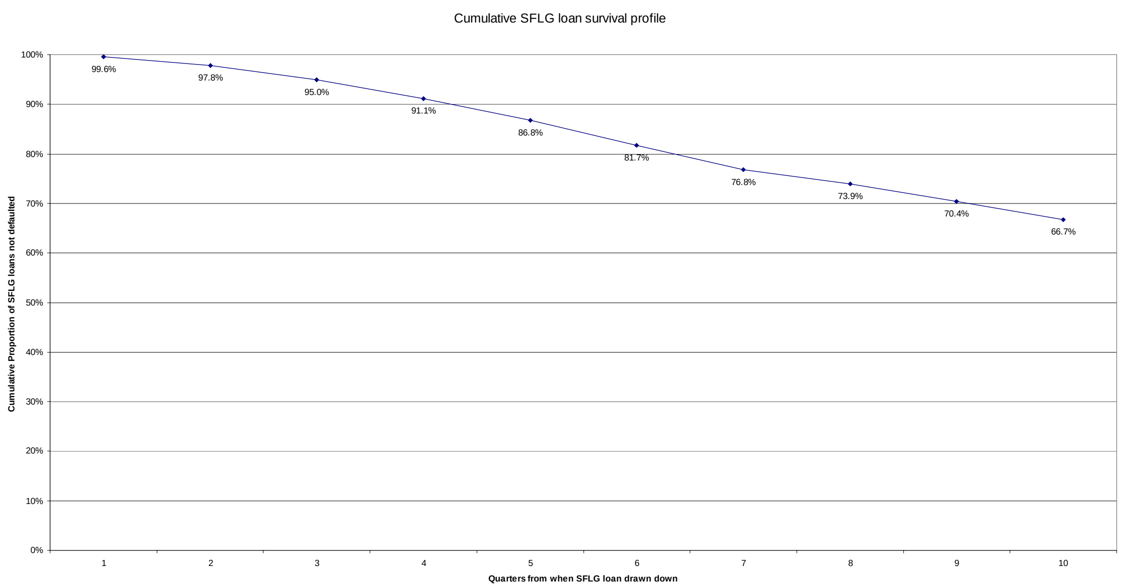
Recoveries arise when a lender's demand against the SFLG guarantee has been settled and the lender subsequently recovers funds from the borrower, which may occur following liquidation of businesses assets. During 2007/08 BIS has recovered previous demands with a total value of £1.2 million, or around two per cent of the demand settlement payments made in the year.

In comparison, the 2006/07 SFLG annual report shows the total value of claims made from defaults, arising from loans originally guaranteed over the preceding ten years, was £66 million, net of the premiums paid by borrowers and recoveries arising from demands previously settled.

However, due to fluctuations in the number of SFLG loans drawn down each year, and defaults occurring throughout the life of the loan, it is necessary to estimate the default costs of loans solely made in 2006. To do this, a cohort of loans drawn down in Q2 2006 was taken from BIS Management Information to assess the proportion defaulting over each quarter of the life of the loan.

The graph below shows the cumulative survival profile of SFLG loans drawn down in Q2 2006. After 2 years (8 quarters) 73.9% of the loans issued in Q2 2006 had not defaulted, suggesting 26.1% had defaulted. From this profile it is possible to estimate the cost of SFLG loans drawn down in 2006, in the first two years of the scheme.

Fig. 5.1: SFLG Loan default profile



Source: BIS Management Data

- Number of new SFLG loans made in 2006 (calendar year). 3,100
- Average value of SFLG loans made in 2006. £79,500

Previous research on the SFLG, reported by Cowling and Mitchell (2003), for the period 1984-1998, showed that default rates were much higher in this period at 45 per cent of total loans issued. The contributing factors identified for influencing default rates were:

- higher interest rates on loans,
- GDP growth (Higher GDP growth meant that more marginal businesses were accessing loans)
- use of SFLG for working capital rather than longer-term investment

The estimated gross default cost of the 810 SFLG loans drawn down in 2006 that did not survive up to quarter 9 (i.e. more than 2 years) is £41.8m.[16] To estimate the net cost of default, administration costs incurred by BIS need to be taken into account and the costs need to be offset from the revenue generated by the BIS premium income[17]. Administration costs are estimated to be around £1m, whilst the premium income is £7.8m. This suggests the net

[16] The Government guarantee covers 75% of the value of the remaining loan value.

[17] 2 per cent of the outstanding balance paid quarterly

costs of SFLG to BIS are £35m over the first two years of the programme of loans taken out in 2006.

Table 5.1: Summary table of net SFLG costs to Exchequer[18]

Item	£
Cost of called in guarantees	(41,799,000)
Administration costs	(1, 000,000)
Premium income	7,772,000
Net SFLG Costs	(35,027,000)

Source: BIS Management Data

These costs can be considered as interim as they relate to the first 1.5 to 2.5 years of the duration of the SFLG loan received in 2006. SFLG loans can last up to ten years with the mean average loan being eight years and median loan term six years. Therefore the costs that are estimated are not the entire costs. In practice, this disadvantages the benefits from the scheme as defaults are likely to peak in the first two years of the programme but benefits are likely to continue going forward.

[18] Financial figures in parentheses indicate a cost to government.

6 Economic Evaluation

The likely costs and benefits of SFLG to the economy are listed below:

Benefits:

- net jobs created
- net increase in sales (and GVA)
- net gains in productivity
- net increase in export earnings

Costs

- Programme costs (administration and cost of defaults)

The table below provides a summary of the main findings:

Table 6.1: Economic cost and benefits

Item	Estimated Unit	Benefits per £1 incurred and cost per job created
Costs		
Net Exchequer cost of default and scheme administration adjusted for premium income	£35,027,400	
Benefits		
Net jobs created (excluding entrepreneur)	3,550 – 6,340	£5,560 - £9,933 per job
Net additional sales	£74,812,000 - £149,625,000	£2.12 - £4.14
Net additional Gross Value Added Multiplier (0.329)	£24,613,000 - £49,103,000	£0.70 - £1.40
Net additional labour productivity	£10,958,000 - £21,917,000	£0.32 - £0.62
Net exporting (per annum)	£32,695,000	£0.93
Gross Economic benefit	£36,779,000	£1.05
Net Economic Benefit (based on the midpoint of £1.05 for net additional GVA multiplied by the net exchequer cost of SFLG adjusted for this net exchequer cost) Equivalent to a net return of +5 per cent.	**£1.75m**	**£1.05**

Caveats

The economic benefits are likely to be an underestimate of the full benefits because:

- The evaluation only considers the benefits and costs over the first two years since businesses received an SFLG loan. Costs are likely to peak in year two but benefits are likely to be ongoing into the future.
- Only conservative assumptions are used e.g. median rather than mean average effects, and programme costs are net cost to BIS rather than net cost to government. Revenue flow backs to the Exchequer attributed to additional jobs created are substantial and are estimated at around £7m per annum.

- Any benefits from businesses that defaulted within the first two years are ignored.
- Wider benefits such as the positive externalities arising from using cutting edge technology are not quantified.
- The evaluation relates to a time when the "5 year rule" was in operation which restricted SFLG to businesses aged less than 5 years old. Younger businesses are likely to have higher probability to default than older businesses leading to higher scheme costs. The 5 year rule was reversed by the 2008 Enterprise Strategy.

It is also important to note that this evaluation relies on business owners self reported outcomes and assessment of scheme's impact rather than using administrative measurements of business performance. It is acknowledged that business owners may not be able to give an accurate assessment, but this issue is common in all business support evaluations and careful questionnaire design attempts to minimise this.

Economic aditionality methodology

In calculating the costs and benefits to the economy from SFLG, the analysis focuses on the period 2006 (when the loans were made) to 2008 (when the survey data was collected). This leads to the contribution of SFLG to the recipient businesses themselves, and the wider economy, assessing the performance change of businesses in the two years since receiving their loan.

It is important to acknowledge that the economic evaluation assesses the effectiveness of the scheme by assessing the additional benefits that would not have occurred in the absence of the programme and off sets them against the gross costs of running the scheme. Chapter 2 shows not all SFLG supported businesses could be categorised as finance additional as some indicated that other alternative sources of funding were available to them at the point at which they accessed their SFLG loan. The actual proportion of non-finance additional SFLG borrowers was 16.5 per cent and so these businesses are excluded from the benefit side of the calculations. There is also market displacement of existing business activity, particularly at the local level. The estimates also excluded SFLG businesses who indicated that if they ceased trading immediately, all of their sales would be taken up by a UK based company within one year. This leaves a net figure of 55.3 per cent of the total SFLG business sample for 2006 that are finance additional and not likely to have displaced existing business activity.

In actual numbers, of the 3,102 SFLG supported loans made in 2006, 26 per cent (810) defaulted within two years of issue. This leaves a 'live' business total of 2,292 businesses. Of theses businesses only 55 per cent are finance additional and their activities are not displacing other businesses which leave benefits accruing on a total of 1,268 businesses.

Net jobs created

The mean and median change in the number of jobs between 2006 and 2008 was estimated for additional businesses (i.e. finance additional and non-displacing businesses). The mean average employment change is 7.1 (full-time equivalent jobs), whilst the median employment change is 4.0 (full-time equivalent jobs) per SFLG supported business over the two year period. However, not all of the job creation can be attributed to the SFLG loan. To adjust for this the survey asked businesses to indicate the relative contribution they felt that their SFLG loan made to their performance change over the period. The relative contribution was found to be in the bounded category of 60-80 per cent. The net contribution is calculated at the lower bound, midpoint, and upper bound of the relative contribution band.

Table 6.2: Employment change

Variable	Mean per business	Median per business
Total employment change per additional + non-displacing business	7.1	4.0
Per cent attributed to SFLG:		
60 per cent	4.3	2.4
70 per cent	5.0	2.8
80 per cent	5.7	3.2
Annualised at midpoints	2.5	1.4

From the employment change table above, the net contribution to employment growth between 2006 and 2008 of SFLG backed loans can be estimated and is within the bounds of 2.80 and 5.00 (full-time equivalent) jobs. This figure can then be multiplied by the 1,268 businesses in the total SFLG portfolio for 2006 which are finance additional and non-displacing. This gives an estimate of between **3,550 and 6,340 extra jobs** (or 1,775 to 3,170 extra jobs per annum).

To provide some context, the last full SFLG evaluation (KPMG, 1999) estimated mean additional employment as falling within a range of 0.3 (assuming very high displacement) to 2.4 (assuming no displacement). Other employment growth studies have reported annualised jobs created per business ranging from 0.64 in deprived areas to 7.0 in instrument electronics, although the typical value lies between 1.15 and 2.75 (see Westhead and Cowling, 1995, for a review of early studies and Meager et al., 2003, for a more recent review). This might suggest that SFLG is attracting more growth orientated businesses.

Net sales change

Median sales change (in finance additional and non-displacing businesses) over the two years is estimated at £295,000 per SFLG supported business. But not all the sales growth can be attributed to the SFLG loan. In this case the relative contribution was found to be in the bounded class of 20-40 per cent. Three figures are presented using 20 per cent for the lower boundary, 30 per cent as the mid point and 40 per cent contribution for the upper boundary.

Table 6.3: Sales change

Variable	Median per business
Total sales change per additional + non-displacing business	£295,000
Per cent attributed to SFLG:	
20 per cent	£59,000
30 per cent	£88,000
40 per cent	£118,000
Annualised at midpoints	£44,000

From the sales change table above, the net contribution to sales growth between 2006 and 2008 of SFLG backed loans is estimated to be within the bounds of £59,000 and £118,000 per business. This can be multiplied by the number of businesses that are financial additional and non displacing (1,268). This gives an estimate of between £74,812,000 and £149,624,800 extra sales for SFLG over two years from loans taken out in 2006 (or £37,406,000 to £74,624,800 extra sales per annum).

To provide context, the previous evaluation (KPMG, 1999) generated an additional sales estimate of between £16,900 and £29,500 per business, less than the annualised estimate of £44,000 reported above in Table 6.3.

Gross Value Added (GVA)[19]

From the sales change table above, it is also possible to derive and estimate of GVA based on ratios drawn from the Annual Business Inquiry which are

[19] GVA represents the incomes generated by economic activity and comprises:

- compensation of employees (wages and salaries, national insurance contributions, pension contributions, redundancy payments etc);
- gross operating surplus (self-employment income, gross trading profits of partnerships and corporations, gross trading surplus of public corporations, rental income etc).

disaggregated by size class of business[20]. The relevant ratio (of GVA to sales turnover) is estimated at 0.329 for SMEs, and the bounded additional sales figures are adjusted accordingly

Table 6.4: GVA change

Net additional sales	£74,812,000 - £149,625,000
Net additional Gross Value Added Multiplier (0.329)	£24,613,000 - £49,103,000

Net gains in productivity

The median change in labour productivity between 2006 and 2008 (in finance additional and non-displacing businesses) is £43,211 per SFLG supported business. Again not all performance change can be attributed to the SFLG loan but as labour productivity is a derived variable, this information was not generated from the evaluation survey. In this case the relative contribution for sales change, which was found to be in the bounded class of 20-40 per cent was used. So of the total labour productivity change per business, only 20-40 per cent was attributed to the SFLG.

Table 6.5: Labour productivity change

Variable	Median per business
Total labour productivity change per additional + non-displacing business	£43,211
Per cent attributed to SFLG:	
20 per cent	£8,642
30 per cent	£12,963
40 per cent	£17,285
Annualised at midpoints	£6,482

The net contribution to labour productivity growth between 2006 and 2008 of SFLG backed loans is estimated to be within the bounds of £8,642 and £17,285 per additional business. This figure can then be multiplied by the 1,268 finance additional and non displacing businesses in the SFLG portfolio for 2006, which

20 Although it is possible to estimate GVA directly by asking businesses about wage costs and profits, this evaluation used a simpler approach by deriving it from reported sales turnover. This is consistent with other evaluations in this area. It is not known which approach may be more accurate.

gives a bounded estimate of between **£10,958,000 and £21,917,000 extra labour productivity** (or £5,479,000 to £10,958,000 extra labour productivity per annum).

This general productivity enhancing effect of financial capital is consistent with earlier, UK based, empirical work on small business production functions (see Cowling, 2003) which showed that the majority of small businesses need to grow to become more efficient.

Net increase in export earnings

Exporting generates a flow of foreign earnings into the UK economy and thus adds to UK Gross Domestic Product (GDP). It is important to note that the survey did not collect data on exporting in previous time periods, and so it is not possible to assess whether SFLG led to an increase in exporting activity. However, it is possible to assess the value of exports from additional SFLG businesses based on the export intensity.

Table 6.6: Exporting and export intensity

Variable	
Exporting proportion of additional + non-displacing SFLG businesses	27.9 per cent
Export intensity for exporting additional + non-displacing SFLG businesses (export % of total sales)	7.7 per cent
Median value of exports per business	£92,520

The table shows that 27.9 per cent of additional SFLG businesses have international sales. Of these businesses, the median exporting intensity is 7.7 per cent of their total sales. For the median business, this equates to £92,520 of export sales. To arrive at a total exporting contribution the number of SFLG exporting, additional and non-displacing, businesses is calculated as 353 gives a total export sales contribution of £32,696,000.

Benefits to the Exchequer

SFLG not only has benefits to the economy but also leads to revenue flow backs to the Exchequer through tax receipts associated with higher employment and sales and also through welfare savings. **These figures are not used in the economic cost benefit analysis** but are useful to consider the net cost to the Government of operating SFLG.

Tax receipts associated with higher employment and sales

Table 6.7: Tax and National Insurance Receipts

Item	Estimated unit	Revenue Flow backs per £ incurred
Net additional income tax (based on standard production function capital / labour decomposition 2/3rds labour and 1/3 capital) and average tax rate of 20%	£4,938,000 - £9,850,000	£0.14 - £0.28
Net additional income tax (based on net jobs created*median wage *tax rate)	£6,213,000 - £11,095,000	£0.18 – £0.31
Net additional national insurance (based on standard production function capital / labour decomposition 2/3rds labour and 1/3 capital) and average NI rate of 11%	£2,716,000 - £5,418,000	£0.08 - £0.15
Net additional national insurance (based on net jobs created*median wage *NI rate)	£3,925,000 - £7,009,000	£0.11 - £0.20

Table 6.7 estimates the revenue flow backs to the Exchequer associated with additional employment in supported SFLG businesses. The two components are income tax associated with new employment and national insurance contributions by the employee. The implied net additional income tax, using the most conservative estimate, is £7.4m, and the implied net additional national insurance contribution is £4m.

Welfare savings

Prior to starting their business, 3 per cent of SFLG entrepreneurs were unemployed (equivalent to 92 people per annum). The 'typical' SFLG entrepreneur entering from unemployment is 40 years old and male.

In addition, a further 3 per cent were inactive in the labour market. This is equivalent to 98 people per annum.

The single persons with no dependents Job Seekers Allowance (JSA) in 2006 was £60.50 per week (£3,146 per annum) and including other benefits was £127.38 per week (£6,623.76 per annum). For a married person with two dependent children, the equivalent figures are JSA £60.50 (£3,100 per annum) and including other benefits £316.62 per week (£16,500 per annum). Due to the complexities of the in-work tax and benefit system, and because there was no data of actual income derived from running the business, the estimates use the JSA allowance as the measure of the welfare savings attributed to a previously unemployed individual moving out of unemployment into their own business. The lower bound of £3,100 per annum per previously unemployed person now running a business supported by an SFLG loan is used, although it is recognised that this is likely to be an under-estimate of the true welfare savings. The total welfare savings are estimated to be is £ 289,400 per annum.

No information is available on the average duration of unemployment of SFLG loan recipients, and so it is assumed that an individual would have found a job in the waged sector after 12 months, so the welfare saving only accrues for one year.[21]

There is no information about the precise circumstances of those entrepreneurs who were previously inactive in the labour market, although it is likely that additional welfare savings would accrue as they become active in running their own business. This accounts for 92 people. If they received welfare benefits during their spell of inactivity, which subsequently either diminish, or disappear altogether, then this would represent a saving to the Exchequer. No attempt is made to estimate these welfare savings.

Table 6.8: Estimated Exchequer Revenue Flow backs

Item	Estimated Revenue Flow backs per net £ incurred
Net SFLG Cost Incurred	35,027,400
Net Additional Income Tax associated with employment additionality	7,356,000
Net Additional National Insurance associated with employment additionality	4,028,000
Net Additional Welfare Savings associated with formerly unemployed entrepreneurs	290,000
Net SFLG Cost taking into account revenue flowbacks to the exchequer	23,354,000

From Table 6.8, it is noted that if revenue flowbacks to the Exchequer are taken into consideration then the net costs of SFLG decrease substantially, even using the most conservative estimates available. The implied net cost to the exchequer would decline by £11.6m. It is also important to note that this revenue flow back estimate does not allow for any additional VAT contribution associated with net additional sales, or any contribution arising from exports. This is avoided as it would require additional estimates of whether consumers are making additional purchases or simply shifting expenditure from one basket

21 Where alternative information is not available, the Department for Work and Pensions uses a similar a similar assumption for average job duration (Review of the DWP Cost Benefit Framework and how it has been applied, Department for Work and Pensions, Working Paper No 40, David Greenberg and Genevieve Knight

http://research.dwp.gov.uk/asd/asd5/WP40.pdf of goods and services to other containing products and services from SFLG supported businesses.

7 Conclusions

Summary

Even with conservative assumptions, SFLG is found to have a net benefit to the economy over the first two years of businesses receiving an SFLG loan. There will be additional benefits lasting beyond the initial two year time period and so this assessment underestimates the potential benefits from the scheme.

Table 7.1: Economic and Exchequer cost-benefit summary

Item	£
Net Economic Benefit or Cost	
Economic Benefits of SFLG (Additional GVA)	36.8m
Costs of SFLG	35m
Net Economic Benefit (Economic Benefit minus cost)	**1.8m**
Net Exchequer Benefit or Cost	
Costs of SFLG	35m
Revenue flow backs (e.g. taxes from additional output)	11.7m
Net Exchequer Cost of SFLG accounting for revenue flow backs to Exchequer	**23.4m**

Report findings

This study has used a matched sample to evaluate the economic costs and benefits of SFLG over the two year period 2006 to 2008 from loans taken out in 2006. Issues relating to finance additionality and market displacement were considered in order to quantify, the additional economic benefits of SFLG supported lending using a detailed Cost-Benefit Analysis. These aspects are of great importance as SFLG is targeted at small businesses with viable lending propositions, but who cannot access conventional bank loans due to a lack of adequate collateral and/or an insufficient track record.

Rationale for scheme

SFLG is well targeted with more than three-quarters (76 per cent) of SFLG supported loans being finance additional in the sense that these businesses could not have accessed conventional bank loans. This proportion is higher than the 70 per cent reported in the previous evaluation (KPMG, 1999). Aggregated to the whole SFLG population, this would imply that around 2,400 additional small businesses got loans in 2006 than they would have in the absence of the scheme. In the absence of SFLG, this would have resulted in around half of their intended investment projects not proceeding, and significant numbers being scaled down or delayed.

An interesting finding was that in four out of five (79 per cent) of businesses themselves reported a lack of adequate collateral as the main reason given by the banks for referring them onto SFLG. This figure was higher than the 73 per cent reported in the previous 1999 evaluation but is at a comparable level. This suggests lack of track record appears to be a relatively minor issue in the banks' lending decision.

From these findings, the relative importance of collateral has increased since 1999. The question as to why collateral is still important after a decade of substantial increases in house prices and housing wealth is confusing. For many entrepreneurs housing wealth is the primary form of collateral used for securing loans.

One explanation is that banks are risk-averse, and require full collateral as security. The evidence clearly shows that SFLG lending is often used as part of a larger package of funding comprising of secured and unsecured loans. Entrepreneurs facing risk-averse banks exhaust all their collateral against conventional lending. Then faced with a requirement for additional funding, businesses seek finance through SFLG. This may suggest the amount of funds required for investment has risen faster than the growth in housing wealth.

Economic effectiveness

The evidence shows that SFLG has created a level playing field in that businesses supported through SFLG lending achieve similar performance levels to those able to access conventional bank loans and the wider business population in general. By removing the credit constraint, previously constrained businesses are able to compete and perform as well (and in terms of introducing new technologies better) compared to unconstrained businesses. Furthermore, SFLG businesses are more likely to be looking to grow, suggesting that further benefits may accrue in the future.

However, the provision of SFLG has costs associated with it, in particular the cost of loan defaults covered by the Government guarantee. These are substantial (£35m over the first two years of the programme of loans taken out in 2006). To quantify whether the economic benefits outweigh the costs of the scheme a detailed Cost-Benefit Analysis was conducted.

Using this approach the evidence suggests that SFLG supported businesses generate substantial levels of additional sales and jobs compared to what would have happened in the absence of the programme.

Central estimates suggest that for every £1 spent on SFLG the additional sales attributable directly to SFLG would be around £3.13 (totalling £112m), of which £1.05 would be Gross Value Added (totalling £37m). This is positive suggesting there is an overall benefit to the economy of operating the SFLG scheme.

The directly attributable increase in net employment is around 2,292 at a cost of £7,750 per job. This is lower cost per job figure than the previous evaluation which reported a net (inflation adjusted) cost per additional job of £17,500.

Although the costs of running SFLG to BIS over the first two years are estimated to be £35m, taking into account revenue flow back from additional taxation, the net cost to government of running the scheme is £23m.

On balance, the evidence as a whole points to the conclusion that the SFLG is being used and administered in an appropriate way in the sense that it is being targeted at smaller businesses who, on the whole, have viable lending propositions and who could not access conventional bank loans due to problems of collateral and, to a lesser degree, track record. It is also the case that SFLG does appear to create a level playing field as supported businesses are then able to match (or better) the performance of otherwise similar unsupported businesses. In terms of its overall economic viability, the Cost-Benefit Analysis also suggests that SFLG, at this scale of operations, and with these levels of additionality, is a viable option for promoting access to debt finance to constrained smaller businesses.

Since its inception in 1981, SFLG has been subject to high default rates, although in a historical context, current default rates are actually quite low. Previous research has shown that default rates rise when the cost of capital increases, but also when the economy is buoyant. This is interpreted as affecting the quality of borrower (entrepreneur) whereby more marginal lower quality people may want to start a new business when the economy is growing. It was also the case that SFLG loans for working capital were substantially more likely to default than loans for physical investment. On this latter issue, the last evaluation recommended that working capital loans were excluded in the future.

The Graham Review changes cannot be ignored either, as they refocused SFLG lending towards younger firms, although this constraint was later removed by the Enterprise Strategy.

Impact of scheme on subgroups

The study also identified a number of interesting findings on SFLG use for particular types of businesses.

For instance, the study found that younger businesses were less likely to have proceeded with their investment project in the absence of SFLG, that banks were more supportive in terms of helping with business planning and their loan application, and that younger businesses achieved better outcomes and more quickly than older businesses.

For micro businesses, the study found that they were the most likely to be rationed in terms of not being able to access conventional bank loans, that they were more likely to have abandoned their proposed investment without their SFLG supported loan and that they were more likely to be introducing new or improved products or services. In addition, banks were also very supportive in terms of business planning and the loan application process.

For businesses in deprived areas, the results also show high levels of finance additionality, and a much higher incidence of investments going ahead that would not have done so in the absence of SFLG, where conventional lending was particularly constrained by lack of track record.

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Appendix 1: Early Assessment of SFLG[22]

1. Summary & Key Findings of Early Assessment

- This early assessment uses evidence from in depth qualitative interviews with lenders and other stakeholders including business representative bodies and advisors, academic experts and officials responsible for SME access to finance in their regions. It also draws on a literature review of wider evidence and secondary analysis of surveys of small businesses and entrepreneurs and management information.
- This assessment does not represent an evaluation of SFLG, which is reported earlier; rather it was commissioned as a prelude to the main evaluation to understand the effects of the introduction of changes to scheme from December 2005. Whilst it captures and presents suggestions by individual stakeholders on possible improvements to SFLG the authors of this report would like to make clear these in themselves do not constitute recommendations to Government on how SFLG should be changed.
- From our qualitative interviews with bank officers, academics, RDA access to finance officers, and wider small business representatives, there was consensus that the rationale for SFLG is still valid in that there were still informational problems in advancing loans to start-up and smaller businesses. This is supported by the authors own analysis of small business surveys and the Global Entrepreneurship Monitor which suggests that between five and twenty per cent of loan applications are turned down and the most common reasons are lack of adequate collateral and/or lack of track record.

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[22] Undertaken by Marc Cowling (Institute for Employment Studies), Francis Greene (Warwick Business School) and Debbie Evitts (Consultant). The authors would firstly like to thank all the bank staff who gave up their valuable time to support us in this research. In addition we would particularly like to thank George Bramley, the BIS project manager for his incisive inputs, guidance and support at all stages of this project. We also thank the rest of the BIS team (including Linda Oldfield, Mark Hambly, Gina Martinelli and Helene Keller) who provided data, guidance and comment at various stages of the production of this report. Others who provided valuable inputs were the members of the steering group who oversaw the report from inception to final edits, in particular John Spence, Mike Young and Richard Roberts. At IES we would particularly like to thank Claire Tyers, who gave us guidance on the qualitative interviewing, Richard James who did the editing, Louise Paul and Denise Hassany who did the typing and Jim Hillage who ensured IES quality standards were met. We would also like to thank all the various stakeholders who gave up their valuable time to help us with our qualitative interview schedules, and to all the SMEs who participated in our recall survey.

- All stakeholder groups interviewed believed that the devolvement of decision making to the lenders from DTI central team on eligibility for SFLG has achieved its intended outcomes. There was broad agreement amongst lenders and wider stakeholders (business representative bodies and support organisations, academic experts) that it had reduced bureaucracy and administrative burdens on both lenders and borrowers resulting in dramatically reduced loan turnaround times which bring decisions into line with conventional loans. A recent international comparative study concluded that SFLG is widely perceived to be top of the international league as far as ease of administration, minimising bureaucracy and providing supportive technology (Heron and Co, 2007)
- The majority, but not all, those interviewed did not consider the introduction of Five Year Rule as a change for the better, and the general feeling was that the rules about what constitutes a new business are too basic and restrictive. It was felt that it excluded older businesses about to enter a growth trajectory or where there had been substantial changes in management team or change of ownership who would otherwise meet SFLG criteria. The economic case presented was that lenders in these circumstances would have insufficient information on entrepreneurial capability to assess proposals and would seek collateral and in the absence of sufficient collateral would be being unwilling to lend. It was felt that the Five Year Rule therefore, should be removed so that SFLG became a product that focused on growth. These considerations were taken into account in the Enterprise Strategy, published in March 2008, which announced a relaxation of the 5 Year Rule to allow for older, growth orientated, small businesses.
- There was a view that the use of SFLG may be suboptimal because of:
    - Poorly presented business propositions which are not bespoke enough and fail to contain enough detail about the entrepreneur, the business, and the proposed investment and
    - Low visibility of SFLG amongst both borrowers who would be eligible and amongst loan officers
- There were proposals for innovative use of SFLG to enable the development of new lending products for graduate entrepreneurs, internationalising small businesses, and technology based firms.
- The reduction in the volume of lending in 2006 – after the introduction of the Graham Review changes - appears to be due to a combination of benign economic conditions making credit more accessible, above average use of the scheme in the preceding year due to widening sector eligibility and the introduction of the five year rule.
- The next chronological stage of the evaluation, the value for money study, provides information about the characteristics of those that received SFLG – including take up by women and ethnic minority led businesses – as well as estimates of the net economic benefit to the economy provided by SFLG.

2. Introduction

The UK Small Firms Loan Guarantee Scheme (SFLG) was introduced in 1981 to promote the flow of debt finance to smaller firms with viable proposals, but without collateral to secure loans against, and to encourage banks to expand lending to this sector by demonstrating to them that they are missing out on viable lending opportunities. Since its inception, the SFLG has undergone a series of changes and modifications to its operation and operational parameters, the most recent being the adoption of many of the Graham Review recommendations post-December 2005.

The introduction of the SFLG in the UK in 1981 marked a fundamental shift in policy intervention which is mirrored worldwide. Historically, public policy intervention in credit markets relevant to smaller firms took the form of direct, and directed, lending programmes (Honahan, 2008). But this form of intervention, as in the UK, has been largely replaced by government backed loan (credit) guarantees. Throughout the world in excess of 2,000 schemes exist in around 100 countries (Green, 2003). Nearly all OECD countries have some form of loan guarantee scheme targeted at filling a perceived gap in private sector credit provision. Whilst the direct goal is to expand credit supply, many schemes have indirect objectives such as job creation, innovation and enhancing productivity as is the case in the UK. The advantage of loan guarantee schemes, over direct government lending, is that, 'the risk sharing element with profit orientated intermediary banks generates an independent creditworthiness hurdle for borrowers, and can also help bring transparency' and, 'operational efficiency may be improved' (Honahan, 2008).

Rationale (Economic Case) for Small Firm Loan Guarantee

The core rationale for the SFLGS is based on the following three main sets of economic arguments based around imperfect information, imperfect markets and positive externalities.

Imperfect Information

Information asymmetries can occur because the borrower is more likely to know about the potential success of their business proposition than the lender and their ability to repay the loan (i.e. likelihood to default). This can lead to adverse selection if banks are unable to sort good risks from bad at the point of loan application. These information problems can result in a sub-optimal allocation of funds (since some good projects may not get funded, or some potentially successful projects may fail due to insufficient funds being lent). To mitigate for imperfect information lenders often make judgements based upon:

- Available security for the loan
- Track record of the applicant
- Proxy information about the applicant where the characteristics of the borrower or project type are unobservable (e.g. size of firm, and age of firm as proxies for risk of default)

Credit rationing based on such criteria may give rise to sub-optimal funding allocations and may be more acute for particular types of firms and entrepreneurs e.g. potential start-ups, small firms, those from disadvantaged communities.

Imperfect Markets

Due to the high fixed costs of entry, financial institutions may leave segments of the potential market under-served (e.g. entrepreneurs from disadvantaged communities). Also small firms/ entrepreneurs have limited credit market bargaining power.

Externalities

It is argued that there are positive externalities from the government intervening in the market for small firms finance by providing SFLG:

- The public return from the activities of small firms - as an important source of growth for the economy and in terms of value added and employment both at present and in the future - may be greater than the private benefit to the individual/ small firm.
- Social benefits from regeneration of depressed areas may significantly exceed the financial returns to the private investor.

Evidence for Current Rationale for SFLG

Providers of debt finance often have limited information about the quality of business proposals put forward to them by pre-start entrepreneurs and younger businesses. This creates a problem for them as they find it more difficult to properly assess risk when evaluating such proposals. To address this information gap, finance providers often request collateral to secure against a loan. UK evidence (Cowling, 1999), shows that only 21.0 per cent of small business loans required no security, and that the majority of loans in excess of £20,000 were fully collateralised. This can lead to an undersupply of credit to smaller business and pre-start entrepreneurs who do not have collateral or lack a sufficient track record (Stiglitz and Weiss, 1981). That is some entrepreneurs (firms) with apparently viable lending propositions do not get access to credit, or receive relatively unfavourable terms when they do (Blanchflower and Oswald, 1998; Cowling, 2008). The SFLG, whilst not a product per se that small businesses can apply for, allows lending institutions to advance more loans to firms without collateral and/or a sufficient track record.

More general small business (and nascent entrepreneur) surveys tends to suggest that anywhere between five and twenty per cent of loan applications are turned down, and the most common reasons are lack of adequate collateral and/or lack of track record (see Surveys of SME Finance and Annual Small Business Surveys, and the GEM UK survey of working age adults designed to measure entrepreneurial activity). The authors analysis of these surveys estimate that between 16,000 and 25,000 existing small business with a formal business plan and apparently good track record of growth fail to get any or all of the finance they are seeking, although the actual numbers of finance rejections is much higher at 480,000 according to the SME Finance Survey (2004). In addition the GEM UK survey shows many pre-start entrepreneurs are absolutely constrained hence they fail to start at all. The most constrained small businesses historically have been identified as those with a growth orientation, younger businesses, and small businesses run by younger entrepreneurs. Surveys of established businesses also have found regional disparities in both the provision of unsecured lending and refusal rates. More recent evidence (SME Finance Survey, 2007) shows that the most constrained were younger firms, smaller firms and those run by entrepreneurs with low academic qualifications. Assuming these findings hold, then social welfare can be improved by providing a government backed loan guarantee if (a) entrepreneurial talent is more widely distributed than wealth endowments, and, (b) there are potential positive externalities to be exploited from the entrepreneurial dynamism of undercapitalised entrepreneurs.

The Graham Review

As this early stage assessment is examining the effects of changes to SFLG made as a result of the Graham Review it is first necessary to outline what the Review was tasked to do, the evidence brought to bear and how the Review arrived at the conclusions and recommendations it made. The Review was commissioned by the Chancellor and Secretary of State for Trade and Industry in December 2003 with a brief to examine the structure and rules of SFLG and assess whether SFLG 'is sufficient to tackle the barriers faced by start-ups and small businesses'.

The Review concluded that barriers to accessing finance were more acute for start-ups and early stage businesses. The Review recommended:

- SFLG be focused specifically on smaller businesses that had been trading for less than five years (the 5 Year Rule).
- All small businesses eligible for SFLG should have access to loans up £250,000.
- The delegation of decision-making and operational control to lenders.

3. Purpose of Review

This review was commissioned to (a) provide an assessment of the impact of the changes introduced to SFLG from 2006 as a result of the Graham Review; (b) to inform the Enterprise Strategy published with March 2008 budget – which included the decision to relax the 5 Year Rule, the evidence for which is included in this report; and (c) inform the design of a full value for money evaluation of the Small Firm Loan Guarantee (the last evaluation being in 1999 since which SFLG has changed significantly).

The BIS Enterprise Directorate has commissioned this qualitative assessment (with some additional quantitative elements) to answer the question: What has been the impact of the main Graham Review changes?

- The effects of the five year rule restricting eligibility to SMEs up to five years old;
- Procedural simplification and eligibility criteria:
- Delegating decisions to lenders;

It also:

- Examined factors which are likely to have played important roles in the observed reduction in lending volumes in 2006-07 compared to previous years.
- Sought views on the emerging the credit crunch
- Provides a baseline for the full Value for Money evaluation of SFLG which examines the economic impact of assistance to small businesses in calendar year 2006. It does this by repeating the econometric analysis undertaken in KPMG (1999) evaluation of SFLG for the period between the last evaluation and the introduction of the Graham Review changes in 2006. It will look at the impact of SFLG eligibility criteria which will facilitate our understanding of how the new criteria fit in a historical and current context.
- Examined whether the underpinning economic rationale for SFLG needs refreshing and develop testable hypotheses for the planned economic impact assessment.

Our approach

The early assessment draws on the following evidence:

- Literature review, consultations with academic experts and secondary analysis of GEM (2005) and other UK datasets
- In depth qualitative interviews with key informants including during the period December 2007 to March 2008:
    - Bank officials in the six main lenders namely Lloyds TSB, HSBC, National Australia Bank Group (comprising Clydesdale and Yorkshire Bank), Barclays, HBoS and Royal Bank of Scotland, including:

        - 12 experienced loan officers with sufficient experience capable of commenting on the SFLG pre and post introduction of Graham Review changes. The typical level of experience ranged from 10 to 30 years lending experience, so we are confident respondents had considerable knowledge about their banks lending procedures, small business customers and SFLG.
        - 6 Seniors Officials responsible for small business lending
        - 4 Credit analysts
    - Wider stakeholders including business representative bodies, business support providers and academic experts
    - Recall survey of young businesses who sought finance in 2006 who had participated in the 2006-07 Annual Small Business Survey to provide contextual information.
- Analysis of Management Information on recipients of loans guaranteed for the period 2000-2005 to provide continuity of evidence between the last evaluation and the value for money study which will look at benefits accrued to recipients of SFLG backed loans in 2006.

Common topics covered interviews across all stakeholder included:

- Rationale for SFLG – is the current economic rationale (economic case) for SFLG still valid or needs adapting to reflect changes in the finance market.
- Administration of SFLG – have the changes in the administration of SFLG introduced as a result of Graham Review recommendations resulted in their intended outcomes.
- Effects of eligibility changes as a result of the Graham Review – in particular the affects of the introduction of the five year rule.
- Potential impacts of the emerging credit crunch – views were sought on the likely impacts of the credit crunch on likely use of SFLG which had only started to emerge when the interviews were undertaken. This study does not provide any specific evidence on the impact on the credit crunch on small businesses.
- Potential beneficiaries of SFLG pre-and-post Graham Review – interviewees were asked which types of businesses they felt benefited from SFLG
- Take-up and default on SFLG – views were sought on the factors that determined take up and default rates.
- The future of SFLG – views were sought on the future need for SFLG and the scope for future modifications to the scheme.

4. What has been the impact of the main Graham Review changes?

Five Year Rule

The rationale for the five year rule was banks should know enough about a business and its operations and capability after five years and so information based problems (one of the key SFLG eligibility requirements) would be substantially reduced. Further, it was considered that most viable businesses might be expected to have built up assets within their businesses which could be posted against future borrowing. Thus the 5 Year Rule in essence, was the purest form of publicly supported loan guarantee intervention in that it tackled the end of the market (i.e. new and young firms) that suffer most from information-based and collateral problems, and hence had the potential to achieve the highest level of additionality.

The 5 Year Rule was not widely considered to be a change for the better in the banking community and amongst wider stakeholders. Though there was support for it from senior officers at least one bank. The consensus is for an extension of the Rule to allow smaller business about to embark on a growth trajectory to be supported, as they are still likely to face collateral constraints despite having viable propositions. There was also fairly widespread support amongst bank officials interviewed for the SFLG rules to be changed to accommodate business succession, which is widely perceived to be a critical point in a smaller businesses life-cycle, and to allow share purchase.

In general, the feeling in the banking community, particularly at senior levels, is that the rules about what constitutes a new business are too basic and restrictive and could be widened to capture new ownership of trading businesses.

The case presented by lenders for relaxing the 5 Year Rule and allowing older businesses access to SFLG is based on:

- Small firm growth (and growth opportunity) is not linear: Critical growth points occur randomly through the life-cycle of a small business as new, and comparatively large-scale, investment opportunities present themselves. In such cases, it is unlikely that the existing asset base of a small firm is sufficiently large to fully securitise this scale of external funding. Large, and random, investment opportunities also cause information gaps as banks know less about the ability of the management team to operate successfully at a much larger scale.

- Top management team changes redefine the firm: Behavioural information built up over time by banks is of less value when the top management team changes and is less able to tell a lending officer much about the future direction and/or performance of a small firm. Under certain conditions a change of ownership might create conditions where banks perceive information asymmetries would cause additional risk. The justification for SFLG to be extended to cover changes in the top management team would be that the new team have ambitious growth plans, which would pass normal loan evaluation and assessment criteria, but for the fact that they outstrip the asset base available within the firm.

These considerations were taken into account in the Enterprise Strategy, published in March 2008, which announced a relaxation of the 5 Year Rule to allow for older, growth orientated, small businesses.

Procedural simplification and delegating decisions to lenders

This question has two interlinked parts to it. Firstly, has the devolution of operational responsibility to lenders improved the administration of SFLG and reduced the bureaucratic burden? Secondly, have the institutional changes implemented by BIS and Capital for Enterprise Limited supported a more streamlined administrative process? A recent international 'Review of SME Loan Guarantee Programs' by Heron & Co, 2007 for Industry Canada placed the UK SFLG at the top of the international league as far as ease of administration, minimising bureaucracy and providing supportive technology are concerned. This view was supported by all our stakeholder groups. There were clear benefits to smaller firms with dramatically reduced loan turnaround times which bring the loan decision time into line with conventional loans which is an important factor in determining their choice of finance.

From our bank interviews, respondents generally felt that the devolution of operational decision-making had many benefits to them and this was supported by wider stakeholders who believed that it was appropriate for the banks to take greater ownership of the SFLG decision-making process. These included speeding up their administrative processes for loan approval at their end and with BIS, superior information and data collection and collation, and enhanced access to eligibility information through the web portal. It was also the case that banks were able to form dedicated SFLG teams to administer SFLG loans, and that it was much easier to incorporate SFLG into their overall strategic decision-making regarding their small business offerings. To quote an SME support provider: "the scheme was too bureaucratic whilst devolution should have empowered the banks". At an administrative level, one of the perceived strengths of SFLG, from a banks perspective, is its simplicity and ease of understanding for them and their small business customers.

5. Factors affecting use of SFLG

Quality of Business Propositions

SFLG will always be a small part of what banks do for smaller businesses. However, use of SFLG may be sub optimal due to poorly presented business propositions and as such do not provide sufficient information to meet their lender's criteria. Bank officers reported many potential, and existing, entrepreneurs simply do not understand the requirements of financiers. The main problem, as far as bank lending officers were concerned, was that business proposals were not bespoke enough, and did not contain enough detail to give the banker an accurate insight into the business, the entrepreneur, and the proposed investment. Financial information, in particular, was often out of line with what banks know about small businesses from their own customer data. This is a demand-side issue for smaller firms.

Wider stakeholders expressed concern that significant supply-side barriers still existed for a minority of smaller businesses, and they most often referred to a lack of collateral, transaction costs and the availability of advisory support to help in the development of funding applications. They also identified a lack of awareness of alternative funding routes, and poor quality of propositions as a barrier to accessing finance. Therefore, wider stakeholders believed that SFLG take-up could be expanded if entrepreneurs took more advice and care with the preparation of their funding proposals and that this would lead to a greater willingness on the part of banks to lend, particularly through vehicles such as SFLG. One final point made by wider stakeholders, albeit in a relatively benign and unchanging small business sector, was that they saw no specific increase in demand (or funding constraints) from under-represented groups such as women, entrepreneurs in disadvantaged areas and ethnic minorities. This latter issue is addressed explicitly in the VFM evaluation.

Introduction of Five Year Rule

Bank officers broadly felt that the decline in take-up after the introduction of changes recommended by the Graham Review were due to the restricting eligibility to businesses up to five years old. Analysis of the MI data suggests that SFLG take-up was above trend levels in the years running up to the December 2005 changes. To this end, the post-Graham period appeared unnaturally low as SFLG take-up fell dramatically, and with immediate effect. This is set against a general perception, amongst all stakeholders, that economic conditions up to the onset of the credit crunch were relatively benign and that the stock and composition of the small business sector had remained essentially unchanged.

Visibility of SFLG

One commonly held view across all stakeholders was that branding and visibility was crucial to ensuring that SFLG was considered as an option for appropriate smaller businesses. From a bank perspective, there was a limited awareness and understanding of SFLG across branch networks. From wider stakeholder groups there was concern that discouraged borrowers for whom SFLG might be an appropriate means of securing external debt funding are simply not aware of SFLG. It was suggested by some bank staff that SFLG pamphlets should be reintroduced throughout branch networks to raise awareness amongst bank staff and potential and existing customers who might benefit from SFLG.

SME experiences of seeking external finance

The review draw on both existing surveys of entrepreneurs and SMEs with regards to accessing finance (Global Entrepreneurship Monitor, Annual Small Business Survey and SME Finance Survey) and recall survey of young small businesses identified in the 2006 Annual Small Business Survey similar to types of businesses SFLG is aimed. The recall survey involved postal questionnaires to 177 possible respondents of which 41 responded.

The key findings from our literature review were:

- Banks debt finance remains the single largest source of external finance for new and existing businesses. (Annual Small Business Survey, 2005)
- There are variations in the demand for, and supply of, debt capital across geographic regions. (Annual Small Business Survey, 2005)
- Between 10 per cent and 20 per cent of small businesses do not receive all (or any) of the external debt finance they sought. (SME Finance Survey, 2004)
- Only a minority of new businesses have borrowing requirements that exceed banks unsecured lending limits (circa £25,000). (Global Entrepreneurship Monitor UK, 2005)

The key findings from the Recall Survey were:

- All had sought finance of which 22 percent more than once;
- The main four main reasons: working capital/cash flow (35 per cent); buying land/buildings (21 per cent); acquiring capital equipment/vehicles (16 per cent) and improving buildings (eight per cent).
- The majority (84 per cent) of the owner-managers also explored different potential sources of such finance. The typical number of alternatives they considered was two, making up just under 40 per cent of owner-managers. The mean average (2.94) and just over a fifth of owner-managers considered three options whilst another 15 per cent considered four and also five options, respectively.
- Over 50 per cent of them took less than seven days to explore their finance options, with nearly 35 per cent taking just two days.

- Just under 70 per cent of loan decisions were made within a week of initial application, and 90 per cent within a month.
- Table 1 presents the main factors that influence the choice of external finance. Cost has the highest average rating in terms of importance, followed by 'loss of control' and 'ease of access'.

Table 1: Factors influencing choice of external finance

Factors	Mean	Std. Dev
Cost	4.83	0.45
Loss of control issues	4.72	0.59
Ease of access	4.69	0.53
Duration of funding	4.42	0.87
Probability of success	4.33	0.96
Collateral requirements	4.29	1.00
Speed of application process	4.08	1.23
Information requirements	3.94	1.16
Length of relationship with potential provider	3.67	1.15

Source: IES Recall Survey (n=41)

Economic climate and SFLG demand

Econometric analysis of the management information data for loans issued during the period 2000-2005[23] indicates that SFLG demand was very sensitive to the cost of borrowing. This, in part, reflects the fact that this was an era of low interest rates and a very competitive lending market. In the current climate we might expect that SFLG demand would fall as banks cost of borrowing rises in the credit crunch. It was also found that the state of the economy was an important factor in demand for SFLG lending. Here we note that as the economy slows down SFLG demand will tend to rise.

Bank officers interviewed indicated[24] that as the credit crunch unfolds **availability will be reduced and the cost of debt finance will increase** as lenders tighten their lending policies in response to the credit crunch. The implications according to bank officers for potential entrepreneurial and existing small business seeking a bank loan will find it harder to obtain and, even if successful, will find it higher cost than previously. It is likely that banks will take a view that the whole market is riskier now than it was before the crisis according to senior officers and credit sanctioners. It is also the case

[23] Using the same analysis techniques as the KPMG (1998) Evaluation of Small Firm Loan Guarantee Scheme

[24] Interviews with bank officials took place when the credit crunch was beginning to emerge and therefore their answers reflect what they felt would be the implications of the credit crunch on the provision of debt finance to small businesses.

that more small firms will fail the initial test of having enough cash flow to service a loan. This means that banks will be more likely to ask for fully secured loans, and, more small firm loan applications will be rejected at the serviceability (ability to repay) stage. The amount of security required by banks is likely to be higher than that anticipated by the entrepreneur, in that they will use forced sale value rather than perceived current market value. The economic reality for banks and smaller firms is:

- the general risk of all firms in the economy is higher
- cash flows, and hence ability to service a loan, are falling
- asset values are falling
- debt is more difficult to access and higher cost.

The implications of this are:

- smaller firms are more likely to default on loans.
- more smaller firms will suffer from collateral constraints as asset prices fall
- more smaller firms with good quality investments are likely to be rationed
- more small firms will fail the ability to service a loan test

According to senior bank officers interviewed it is likely given the present economic circumstance, that there will be an increase in the number of smaller firms who have (longer-term) viable lending propositions, but are constrained by a lack of collateral as cash flows decline. Importantly, bank officers suggested that this will impact more widely across the whole small business sector, not just early stage and young firms, as banks will tighten their lending policies across the board in line with greater levels of economic uncertainty and a reduced ability to repay loans. In parallel, there is likely to be a 'shake-out' in the small business sector as inefficient firms exit when faced with falling demand and rising borrowing costs. Bank officers suggested that in recessions the average quality of borrower (and smaller business in general) rises as the weak and inefficient fail.

Given the unique economic events we are currently experiencing, it may be that there will be an increase in SFLG appropriate loans even within the 5 Year Rule, according to senior bank officers. But there is also a strong economic case for extending the age rule to encompass older small businesses who might be facing increasing difficulty in securing external debt finance for reasons that are unrelated to their personal circumstance and real creditworthiness (i.e. they are faced with an unanticipated, exogenous, macroeconomic shock). However, bank staff have pointed out that as cash flows are falling, smaller firms are increasingly less likely to be able to meet loan repayments, thus fewer propositions will pass the serviceability test.

6. Is the rationale for SFLG still valid?

All stakeholders interviewed felt the basic rationale for SFLG is still valid

Banks, from their perspective, made a strong case that there are **still problems in advancing loans to small businesses and start-up entrepreneurs, with viable business propositions, due to lack of appropriate information on the business and the individual (or ownership team).** One potential solution to mitigating information based problems is the adoption of sophisticated credit assessment techniques using the limited information they have available to model (a) ability to repay, and (b) risk of default. Even using these techniques, banks are only comfortable lending up to a certain amount on an unsecured basis. Therefore, these credit assessment techniques have not fully mitigated this problem.

Other stakeholders, particularly financial intermediaries and those from the wider business support community, generally arrive at the same conclusions as banks. Academics generally split into two camps on this question, although the majority were supportive of the general rationale for SFLG and its validity in the current market for small business finance: a minority argued on theoretical grounds, that banks are now more sophisticated in their credit assessment techniques that all good firms (entrepreneurs) would get loans under conventional circumstances. Yet the broad body of empirical evidence suggests that (a) credit rationing is a genuine (albeit sometimes relatively minor) phenomenon in the real world, (b) that it impacts on smaller and younger firms disproportionately, (c) that wealth (collateralisable assets) is (are) not a particularly good indicator of entrepreneurial talent, (d) that all banks are not equally as good at assessing lending proposals, and (e) that adverse selection (identifying good firms) is more of a concern to banks than moral hazard (firms doing riskier things once they have got a loan).

The original rationale for SFLG, at its inception in 1981, was to stimulate the flow of loan funds to smaller firms with (a) a short, or no, track record, (b) insufficient collateral, and, (c) to demonstrate to banks that lending to the small business sector could be profitable. The wider case for support was justified on the basis that small firms were the largest contributor to net job generation. The original rationale was supported from various reviews which have since shown that SFLG had promoted higher levels of bank lending to the small business sector, increased job generation and supported better use of information in the bank lending decision. The Graham Review narrowed the focus of SFLG to those younger small businesses with the greatest likelihood of facing information based problems when seeking a bank loan.

The rationale for SFLG on the basis of this assessment might be refined as follows to reflect:

- Information failures are not limited to younger businesses, but can also occur for established businesses in certain contexts
    - Change of ownership – banks felt that changes in senior personnel effectively increased their risk in that the entrepreneurial capabilities of the new team were unknown. A particular case would be business

succession where the original founder exits and takes capital out of the business.

  - Entering new markets and new growth strategies - banks felt that there was additional risk associated with established firms entering new markets, or shifting to a growth orientated strategy due to uncertainty about the ability of the top management team to manage future growth.

- Focus on growth – to a large degree growth opportunity is fairly random for smaller firms. Not only can information failures reoccur, but bank officers have suggested that firms falling outside the 5 Year Rule were potentially as likely to suffer from collateral constraints. Research also indicates that strong externalities exist (e.g. more value added, more employment) that support the re-inclusion of firms older than five years who are seeking to grow substantially.

The case for relaxing the 5 Year Rule is based on a widespread acceptance that the economy is losing out on positive externalities that might be generated by established businesses embarking on a growth trajectory which lack the collateral to finance that growth.

7. Suggestions for the future

The general consensus amongst stakeholders, within and outside the banking community, was that the basic SFLG worked well and its rationale was still justified going forward. With the exception of the Five Year Rule stakeholders felt there was no need to change the core SFLG offer which serves the needs of businesses with good propositions but lack either track record or collateral to secure a loan. However, banks did identify three specific types of small business and entrepreneurs who the parameters for SFLG might be specifically varied. The first was recent graduate entrepreneurs. The second exporters (or small businesses with international market ambitions), and the third technology based businesses. Provision was, however, made in the Graham Review changes for lending institutions to propose innovative products which could tap into SFLG backed guarantees.

The case put forward by banks for a specific graduate SFLG was to help overcome issues relating to accumulated students debt, a lack of assets, and third a lack of informal human capital and work experience. The wider economic case for supporting graduate entrepreneurship relates to evidence of superior business performance and their ability to identify and commercialise potential innovations.

Stakeholders also identified what they perceived as a gap in the market for debt finance for firms wishing to internationalise. In particular, they saw significant advantages from supporting this type of activity, including knowledge spill-overs and foreign currency earnings. The general view was that a specialist SFLG might need to have an extended maximum loan term and an increased maximum loan amount. Banks considered that this option might also allow for a higher premium level in return for a high guarantee level, and a longer capital repayment holiday.

A third potential specialist SFLG was advanced by banks, and would explicitly target technology businesses who suffer from additional informational problems when approaching banks for funding as banks are unable to judge the viability of the technology. There is also additional risk associated with offering new products to market. Whilst technology businesses are most often associated with equity based risk capital, it is equally true that in most cases equity comes as a package of finance. It is also the case that the majority of entrepreneurs have a strong dislike to equity investments in their companies.

There already exists a mechanism by which banks can propose innovative uses of SFLG, but first of all they need to adapt or develop products targeted at these groups. In the absence of collateral firms applying for funding through these types of products, would naturally qualify for SFLG.

8. Conclusions

Graham Review Changes

The changes made to SFLG on the basis of the Graham Review -with the exception of the Five Year Rule - were seen as positive development by stakeholders and to have generated significant benefits to both lenders and borrowers. Both lenders and borrowers benefited from reduced bureaucracy and quicker decision making which is now in line with the decision time for non-SFLG loans.

The general consensus – with the exception of two interviewees – was to relax the five year rule. It was felt that excluded growth orientated older businesses that would have previously been eligible for SFLG and making SFLG available to these businesses would refocus SFLG on growth.

Reduction in take up of SFLG in 2006

The reduction in the volume of lending in 2006 – after the introduction of the Graham Review changes - appears to be due to a combination of benign economic conditions making credit more accessible, above average use of the scheme in the preceding year due to widening sector eligibility and the introduction of the five year rule.