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**ECONOMIC EVALUATION OF THE
ENTERPRISE FINANCE
GUARANTEE (EFG) SCHEME**

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The views and interpretation expressed are those of the authors alone and do not necessarily reflect the views of BIS or Government.

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Executive Summary

EFG was introduced in January 2009 in response to the credit crunch, as a comprehensive and wide-ranging replacement for the long established Small Firms Loan Guarantee (SFLG) scheme. The rationale for both schemes has been to address the market failure in the provision of debt finance, whereby viable businesses are unable to obtain normal commercial loans, because they lack adequate security or a proven financial track record.

Objectives of research

Building on the early assessment of EFG undertaken in 2009¹, the principle objective of this research is to determine the actual economic impact of EFG for a cohort of borrowers who obtained an EFG backed loan in 2009. Choosing the 2009 cohort was important to allow sufficient time for the impact of the scheme to be observed using a variety of indicators, including changes to employment, sales, productivity and exports. To determine the effectiveness of EFG, comparisons are made with other borrowers and non-borrowers to assess whether EFG contributed to the businesses success.²

In addition to these business-level benefits, an assessment is also made of the overall costs and benefits to the economy using Cost Benefit Analysis. Economic benefits are measured by the value of additional economic output (GVA) attributed to the EFG loan by finance additional businesses that are unlikely to displace other businesses. Economic costs are measured as the opportunity cost of finance and the level of defaults that are not recovered.

Methodology

This evaluation uses businesses self-reported assessment of business performance and scheme impact. The changes to business performance analysis also used econometric techniques to control for any differences in the EFG recipient businesses compared to the general population. Although the survey comparison groups were originally matched to the EFG recipient group it was necessary to statistically adjust for this using a three-way weight which took account of sector, age and initial size of businesses in 2009. This enabled businesses that accessed EFG supported loans to be 'matched' to businesses with similar characteristics that did not receive an EFG loan.

In total, 1,399 businesses were surveyed including 500 EFG supported businesses and 899 unassisted businesses. The unassisted group included 194 businesses that had

¹ www.bis.gov.uk/files/file54076.doc

² The borrowing group is the key comparison group as businesses do not seek finance as an end objective, but to use the finance to fund a specific purpose e.g. working capital or investment in new plant and machinery. Nevertheless it is also useful to compare EFG businesses to non-borrowing businesses, although these businesses are likely to have different characteristics to businesses seeking finance.

accessed a loan in 2009 and a control group of 705 businesses that had no external finance in that year.

The survey was designed to collect information on additionality including finance deadweight and market displacement amongst EFG supported businesses and more generally assess their growth orientation, employment and sales growth, as well as changes to profitability and exporting. There were also questions covering more subjective business impacts, opinions on the effectiveness of the scheme and levels of satisfaction.

The Cost-Benefit Analysis (CBA) was carried out using HMT Best Practice as highlighted in the Green Book.³ The Cost-Benefit Analysis was conducted using figures gathered from the evaluation survey as well as from BIS Management Information.

Key Findings

Rationale

The rationale for EFG at addressing an identified market failure restricting potentially viable businesses from raising finance is valid

The results demonstrate that small businesses lacking security to act as collateral was an issue for many EFG businesses. 83 per cent of users indicate they would not have been able to obtain a loan without EFG which shows the scheme is well targeted with low levels of self-reported deadweight. The survey results confirm the proportion of EFG businesses with collateral available to offer was significantly lower than other borrowing businesses, especially the availability of business collateral.

The reduction in the availability of finance during the recession makes the existence of EFG an important source of finance for businesses that would otherwise be refused finance

- The prevailing economic conditions and tighter finance conditions in 2009 suggest the scheme was especially important as a greater proportion of businesses reported they had fewer finance options available to them compared to the previous SFLG scheme. The two previous SFLG studies had found rates of finance additionality of 76 per cent (2006) and 70 per cent (1999), but finance additionality under the EFG scheme is now higher at 83%. The Early Stage EFG assessment⁴ also found that EFG represented 91 per cent of the total finance package secured by firms, compared with 48 per cent for SFLG, also suggesting a greater importance of the government backed loan as a result of the tighter supply of finance in 2009.

Opinions on scheme design and operation

Timeliness of obtaining the loan was an issue for EFG borrowers in 2009, but may not be the case now

³ www.hm-treasury.gov.uk/data_greenbook_index.html

⁴ www.bis.gov.uk/files/file54076.doc

- More than half of businesses regarded a three month time period in obtaining finance as being important for their business and nearly one quarter would notice some business effect for loan decisions taking longer than one month. However, in 2009 timeliness was one area where EFG did not perform well, with 63 per cent of EFG borrowers reporting they waited up to one month or more, compared with just 48 per cent of other borrowers. This may now no longer be the case due to policy changes introduced in August 2010.

The BIS premium appears to be set at the right level

- The survey asked about the additional BIS premium⁵ that EFG businesses pay every year in addition to interest payments to their lenders. The survey suggests that 2 per cent did appear to be the correct level, since nearly four out of ten businesses claimed they would have been deterred from drawing down the loan if the BIS premium was raised to 3 per cent.

Business improvements

EFG borrowers appear to have fared well in terms of employment and sales growth compared to non-borrowers, but grew at a lower rate than other borrowers.

- Descriptive statistics show over the period 2009-2012 sales growth of EFG businesses grew by 33 per cent, compared with 35 per cent for other borrowers and 25 per cent for non-borrowers. For employment growth, EFG recipient businesses grew by 21 per cent, compared with 31 per cent for other borrowers and 11 per cent for non-borrowers.

However, controlling for business characteristics, growth levels are similar to other businesses including other borrowing businesses.

- Econometric analysis revealed that these effects were explained by differences in business and owner characteristics, for instance EFG businesses are generally younger than other businesses. Having an EFG loan itself (nor the loan amount) was not a statistically significant factor explaining changes in business performance. The implication of these results is that EFG **creates a level playing field for the supported businesses to realise their growth potential**, but that business growth itself is very similar to the comparison group of other businesses.⁶ EFG is not supporting inferior quality businesses. The key contribution of EFG is in removing the impediment of lack of finance to the growth process.
- An interesting finding relevant for future targeting of the scheme is that loans used for investment purposes, were significantly more likely to be associated with employment and sales growth, compared with loans primarily used for working capital.

Economic effectiveness

EFG has created additional economic output and employment.

⁵ Equivalent to 2 per cent of the outstanding loan amount.

⁶ EFG does not subsidise the business and the level of the BIS premium is fairly small as a proportion of the finance amount so as not to significantly impede the business.

- After accounting for deadweight and displacement, the estimated benefits to the economy over a 2-3 year time duration from the 6,700 participants drawing down an EFG loan in 2009 are:
 - 6,500 additional jobs created, equivalent to 0.96 jobs per recipient business
 - 12,375 additional jobs saved, equivalent to 1.84 jobs per recipient business

These jobs have generated:

- Gross Value Added of £567m from jobs created (equivalent to £84,400 per business funded)
- Gross Value Added of £704m from jobs saved (equivalent to £104,600 per business funded)

Benefit to the economy

Overall, EFG has provided a net benefit to the UK economy.

- For businesses that were offered and obtained an EFG loan in 2009, the economic benefits (measured through GVA) from additional economic activity created and saved are estimated to be of £1,270m. The economic costs of operating the scheme which includes the opportunity cost of finance, additional default costs and administration costs are estimated to be £178m. Subtracting the costs from the benefits, gives a **net economic benefit of £1.1bn**. This therefore shows there was a considerable welfare gain to the UK economy in operating the EFG scheme during the credit crunch.⁷
- Standardising the figures into Benefit Cost Ratios (BCR) to allow comparisons with other schemes show:
 - a Societal benefit cost ratio of 7.1, which is favourable compared to other business support interventions.⁸
 - a Public Money Benefit Cost Ratio of 16.4.⁹
 - a Net economic benefit per exchequer pound ratio of 33.5.¹⁰
- For each year of operation the scheme delivers a net economic return and the ratio of benefits to costs increases substantially across the three years of operation considered (2009-11). If a longer time period is considered, the benefits are even larger. This reflects costs being front loaded with the majority of the defaults occurring in the first few years, whilst economic benefits continue over many years.

⁷ Sensitivity analysis where just the GVA from jobs created is included also shows a net positive benefit to the economy of £370m giving greater confidence in the findings that EFG is providing a net benefit to the economy overall.

⁸ This is based on including GVA from jobs created and saved. If the economic benefits are restricted to jobs created, the Societal BCR is 3.1.

⁹ If the economic benefits are restricted to jobs created, the Public Money BCR is 11.5.

¹⁰ If the economic benefits are restricted to jobs created, the net economic benefit per exchequer pound is 11.7

This will therefore overstate the relative costs of the scheme, leading to the central scenario of the CBA being a conservative assessment.

- The exchequer cost of operating the scheme from loans offered and drawn down in 2009 amounted to £34m up to the start of 2012. The scheme appears to be a cost effective way of creating additional employment compared to other SME interventions due to the relatively low cost of £5,000 per additional job created.

Conclusion

This research provides evidence for a continued role of a Government loan guarantee scheme for SMEs such as EFG:

- This evaluation provides evidence confirming the rationale for the EFG scheme, namely that it is being targeted at small businesses affected by lack of security that would otherwise not be able to access conventional bank loans, and this is especially important when the supply of credit is constrained in the economy.
- The supported businesses are not ailing or weaker than other businesses in terms of their growth performance. Their subsequent business performance is at least as good as other borrowing businesses, but EFG acts as an enabling catalyst for these businesses affected by lack of collateral or track record to help them fulfil their growth potential. However, EFG loan default rates are significantly higher than commercial borrowing rates which does indicate lenders are right to be more cautious to lending to these businesses. Default rate are lower under EFG than the previous SFLG scheme which may suggest the BIS cap on lender default payments give greater incentives for lenders to identify viable businesses, as well as the ability to take security. This is despite economic conditions being significantly worse than when the previous SFLG evaluation was undertaken.
- At current, albeit low levels of take-up, the scheme appears to be very cost effective, in terms of the net economic benefits. These benefits were shown to be positive for every year of operation of the scheme and it was demonstrated that they increased over time. Whilst EFG loans only make up around 1-2% of the total SME term lending market, levels of finance deadweight for these businesses is currently very low, and the quality of the businesses funded is largely comparable to other borrowing businesses that can access conventional funding. However, expanding EFG further by relaxing the entry requirements could lead to more businesses benefiting from the scheme, but this needs to be offset against higher finance deadweight and possibly lower quality businesses using the scheme, which could reduce the reported Benefit Cost Ratios.

1 Introduction

This is the first full evaluation of the Enterprise Finance Guarantee (EFG) scheme which was introduced in January 2009 to provide additional lending to businesses having difficulties raising finance during the credit crunch.¹¹ The evaluation builds on the earlier analysis undertaken by the authors in the EFG Early Assessment.¹² The early stage assessment provided an early indication of the likely benefits of the scheme, although these results were only based on the first few months of operation in 2009. Accordingly impacts were not fully evident across this period and the data was not subjected to econometric analysis against comparison groups, nor was any Cost Benefit Analysis (CBA) undertaken to assess overall cost effectiveness.

This evaluation report more fully considers the impact of the loan on the whole 2009 cohort of EFG users by analysing the results of a telephone survey of a sample of beneficiaries. This survey tracked business performance for the period 2009-2012 and provides estimates on which to assess these economic impacts against a comparison group of non-user businesses.

1.1 Overview of the EFG scheme

The Enterprise Finance Guarantee (EFG) is a loan guarantee scheme designed to facilitate additional bank lending to viable SMEs¹³ lacking adequate security or financial track record to obtain a normal commercial loan. It is a targeted measure to be used by lenders on a discretionary basis and is not a replacement for commercial lending. EFG currently accounts for around 1% to 2% of total bank term lending to SMEs.

EFG provides loans, overdrafts and invoice finance facilities of £1,000 and £1 million.

Background

EFG was introduced in January 2009, as a replacement for the long established SFLG scheme (created in 1981) to address the deteriorating economic conditions at the time as the recession and credit crunch stuck. There was considerable evidence showing a decrease in new commercial lending to SMEs and a greater proportion of SMEs being

¹¹ Several comprehensive evaluations have been undertaken on the Small Firms Loan Guarantee (SFLG) scheme, which was last evaluated in 2010 for a 2006 cohort of businesses. Economic Evaluation of The Small firms Loan Guarantee (SFLG) Scheme, Marc Cowling, IES, January 2010 and An evaluation of the Small Firms Loan Guarantee Scheme, KPMG, March 1999

¹² Early Stage Assessment of the Impact if the Enterprise Finance Guarantee (EFG) on recipient Businesses, Gordon Allinson, Ian Stone, Paul Braidford and Maxine Houston
<http://www.bis.gov.uk/files/file54076.doc>

¹³ EFG is aimed at SMEs. The scheme supports businesses with a turnover of up to £41 million (until recently the limit was £25m). Some sectoral exclusions apply.
<http://www.bis.gov.uk/policies/enterprise-and-business-support/access-to-finance/enterprise-finance-guarantee/efg-business-sectors>

rejected for finance as shown by the Bank of England Agents and Credit Conditions Surveys.¹⁴

EFG shares many of the policy features of the previous SFLG but makes it available to a greater number and range of businesses affected by tighter access to finance conditions. For instance, EFG provides loans up to £1 million compared to an upper limit of £250,000 for SFLG. In addition, EFG supported businesses with a turnover of up to £25 million (now £41 million) compared to £5.6 million under SFLG. Unlike SFLG, EFG loans can be used to convert an overdraft into a loan. As such EFG was nearly 2.5 times larger in scale in 2009 compared to the previous SFLG scheme in 2008 in terms of the number of loans drawn down.¹⁵

To date (October 2012) EFG has generated 19,527 (£2bn) loan offers, of which 17,092 (£1.73bn) have been drawn upon. The Enterprise Finance Guarantee will continue until 2014-15, providing up to £600 million of additional lending to around 6,000 SMEs each year and, subject to demand, over £2 billion in total over the next 4 years.¹⁶ EFG now aims to help such SMEs seeking finance for investment and growth as the economy recovers.

Application Process

Businesses do not apply directly to the Government or bank for an EFG loan. Businesses seeking debt finance approach lenders¹⁷ in anticipation of a normal loan. The lender will typically assess the business against their normal commercial lending criteria for instance with regard to the viability of the business, the ability to service the loan, and the availability of existing security, in order to determine whether they wish to lend. If the business meets the bank's normal lending criteria but lacks track record and/ or collateral, the business may be suitable for an EFG loan. A diagram representing the application process is shown in more detail in Appendix 1.

Decision-making on individual loans is fully delegated to participating lenders and integrated with the commercial decision to lend. BIS plays no role in the application or decision making process. There is no automatic entitlement to receive a guaranteed loan.

Conditions of the loan and the Government Guarantee

The main difference between an EFG loan and a normal loan is the Government-backed guarantee. The guarantee provides protection to the lender in the event of default by the

¹⁴ For instance, the October 2008 Bank of England Agents report provided evidence that of the firms making some use of external finance, the majority report conditions have tightened, which was statistically different from the survey carried out in November 2007, in which a majority had not reported tighter conditions. Furthermore, the November Agents report confirmed "Contacts reported a tightening in their own credit conditions since September".

¹⁵ Around 2,500 SFLG loans were drawn down in 2008 compared to 6,168 EFG loans drawn in 2009.

¹⁶ These are the nominal values at the time of making the loan offer and this convention is followed throughout sections 1-6. In section 7, the numbers are converted to real figures to take into account of inflation and discounting is then applied to convert values to their Net Present Value (NPV).

¹⁷ There are presently 45 approved lenders <http://www.bis.gov.uk/policies/enterprise-and-business-support/access-to-finance/enterprise-finance-guarantee/efg-list-of-lenders>

borrower, by providing a 75% guarantee for the remaining balance for each loan in their EFG portfolio. However, the maximum value of government exposure to defaults is set at 9.75% of the scheme value, meaning that banks are exposed to all of the remaining bad debts after this limit is reached. This was predominantly driven by state aid requirements, but in practice helps ensure banks have no incentive to lend to unviable businesses. It is important to note that the Government guarantee does not provide insurance for the borrower in the event of their inability to repay the loan.

The interest rate charged and any other fees and charges applied to the loan are a commercial matter for the lender. In addition to this the borrower pays quarterly a premium equivalent to 2% of the annual outstanding loan amount to BIS for the lifetime of the loan, which partially covers the cost of providing the guarantee.¹⁸ The possible term of the loan is between 3 months and ten years.

Unlike SFLG, EFG allows lenders to take security, including personal guarantees, in connection with an EFG backed loan. The practice of taking personal guarantees from business owners and others associated with a business is an established mechanism for ensuring a degree of personal commitment to the repayment of the loan by the business and, in EFG, this means that there is a three-way sharing of risk between borrower, lender and the Government. The exception from normal commercial practice is that lenders are not permitted to take a direct charge over a principal private residence for a new EFG backed loan.

The scheme involves a variety of different facilities, not just for new loans, but also refinancing of existing loans, conversion of overdrafts into loans and other circumstances in agreement with the lender.

1.2 Rationale and objectives of EFG

The purpose of such an instrument is to address the long established market failure in the provision of debt finance to SMEs which requires SMEs to provide evidence of track record or collateral to address asymmetric information between the lender and the business. Thus, EFG provides 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. Economic uncertainty can increase lenders aversion to risk, making the availability of collateral and evidence of a track record more important factors in the decision to lend.

EFG is therefore seen as operating at the margins of commercial lending and is not designed to replace mainstream lending decisions. However, EFG is often used as part of an overall package of finance that borrowers put together. It is estimated that EFG accounts for roughly 1-2% of all SME lending by value, although formed nearly 3% of the SME lending market in 2009 due to the tighter credit conditions and build up of demand.

The policy emphasis is very much focused on the provision of additional finance to businesses experiencing financial constraints. Nevertheless, by enabling additional lending to businesses this is likely to provide benefits to the economy by sustaining and

¹⁸ The BIS premium was discounted to 1.5% for premiums due and successfully collected in 2009. It reverted to 2% from 1 January 2010.

creating jobs, enabling new business start-ups, enhancing productivity and enabling exports. EFG will thus help contribute to the Government's objective of facilitating growth, as well contributing to the ambition to make the UK the best place in Europe to start, finance and grow a business.

1.3 Objectives of research

The principal objective of the economic evaluation is to provide a robust quantitative assessment of the economic effectiveness of EFG and to assess whether it is addressing market failures in the supply of finance to SMEs. The findings are therefore relevant to justify the existence of the scheme and inform the ongoing design of the scheme to ensure value for money.

Several fundamental questions need to be asked of borrowers to determine whether the scheme is functioning in the intended manner (i.e. additional funding for viable businesses that are finance constrained). To this end the research asks businesses about the extent to which they have collateral that could be used for a secured loan and ultimately what they believed about their chances of obtaining an alternative loan without EFG (finance additionality). A further question considers whether EFG businesses are in direct competition with other businesses and therefore the degree to which improvements in business performance resulted in an increase in market share at the expense of competitors (displacement).

The research establishes whether EFG loans have maintained or produced increases in business performance, compared to a comparison group. The performance measures examined are: Sales change; Employment change; Productivity change; changes in profit ratios and changes in the share of exports accounted for by sales.

In addition to determining whether the average business improved the report also considers the wider impact for the scheme as a whole on the UK economy. In terms of economic benefits, there are gains in terms of additional economic output through increased employment and sales, net of finance additionality and displacement. This must be off set against the economic costs.

The net costs to the Exchequer are also considered. This assessment includes the claims made against the government guarantee; recoveries from defaulting businesses; and the income from the 2% BIS premium. There are also other gains in terms of increased income tax and national insurance from employment gains.

The report also aims to show measures of user satisfaction with the operation of the EFG scheme and the associated terms and conditions of the finance obtained. This includes the level of interest rates and BIS premium as well as the conduct of the lender.

1.4 Methodology

This evaluation uses businesses self-reported assessment of business performance and scheme impact.¹⁹ Telephone interviews were conducted by IFF Research during January

¹⁹ Further details of the survey design and sampling frame are contained in Appendix 1.

to March 2012 with businesses who had been offered an EFG loan in 2009, alongside a matched sample of non-users from the general business population. The comparison sample group was matched to the EFG group in terms of company legal status and broad industry sector (to one level SIC). In total, 1,399 businesses were surveyed including 500 EFG supported businesses and 899 unassisted businesses. The unassisted group included 194 businesses that had accessed a loan in 2009 and a control group of 705 businesses that had no external finance in that year.²⁰

The survey was designed to collect information on additionality including finance deadweight and market displacement amongst EFG supported businesses and more generally assess their growth orientation, employment and sales growth, as well as changes to profitability and exporting. There were also modules covering more subjective business impacts, opinions on the effectiveness of the scheme and levels of satisfaction.

In order to identify the 'true' impact of EFG, it was necessary to take into account key differences in characteristics between the sample groups. Although the survey comparison groups were originally matched to the EFG 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 in 2009. This enabled businesses that accessed EFG supported loans to be 'matched' to businesses with similar characteristics that did not receive an EFG loan. Where descriptive statistics are reported for the survey, the figures are adjusted to take into account this weighting.

When assessing finance additionality²¹, the EFG recipient group is compared against businesses who received a conventional bank loan. To assess the wider contribution of the scheme, the EFG group is compared to two comparison groups; conventional borrowers and non-borrowers.²²

The Cost-Benefit Analysis (CBA) is carried out using HMT Best Practice as highlighted in the Green Book.²³ The Cost-Benefit Analysis was conducted using figures 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 Gross Value Added figures.

There are some limitations of this approach. The first limitation relates to the fact that results are self-reported by interviewees and subject to error in terms of their recall and expression of opinions, rather than presenting absolute clarity and accuracy. The other aspect of using a survey method is that any result from the survey will only be an estimate and particularly in grossing up figures for the population, this will produce a wide range of possible values, between more pessimistic lower impacts and more optimistic upper estimates.

²⁰ External finance is used for a specific purpose within a business (investment or working capital), and so businesses seeking finance may have different characteristics to the wider population of businesses.

²¹ Finance additionality refers to the availability of conventional bank loans

²² Although an additional number of comparison groups were identified, it was not possible to analyse these in practice due to small sample numbers.

²³ http://www.hm-treasury.gov.uk/data_greenbook_index.html

Further limitations in the evaluation as a whole are that our focus rests entirely on recipients of the loan, without taking into account how many businesses failed to secure any finance through this route or what subsequently happened to those businesses. The evaluation also only includes those businesses that survived up to the survey point, which is to say that some weaker businesses will have received support and would have received some short term benefits, but these are unknown. To this end this report quantifies benefits for known survivors only for the two to three year period used in the Cost Benefit Analysis.

One final remark is that this study is based on the 2009 cohort of EFG users, reflecting the time at which the scheme was introduced. As such questions relating to the operation of the scheme relate to this period of adjustment to the new scheme, rather than reflecting any improvements to the scheme made in subsequent years.

1.5 Structure of report

The report provides more background on the types of businesses and characteristics of business owners in Section 2. The following section describes the use of the scheme, including discussion of user satisfaction. Section 4 assesses the extent to which the contribution of the EFG loan is additional and whether outcomes would have been achieved in the absence of the loan. In section 5 the impact of the scheme is assessed, in comparison with other borrowers and a control group of non-borrowers. Section 6 details the costs associated with administering the scheme and providing the government guarantee covering defaults. The results of the cost benefit analysis are presented in section 7 and show the benefits net of deadweight and displacement, as well as the net position after accounting for the costs revealed in the previous section. Conclusions are shown in section 8.

2 Profile of borrowers

2.1 Introduction

This section provides a profile of all the borrowers that formed part of the 2009 cohort of interviewees from which the sample was taken. Information on these businesses is held by Capital for Enterprise Ltd (CfEL), the Non Departmental Body responsible for managing the operation of the scheme on behalf of the government. As such this information gives the complete picture of borrowers, rather than the partial information from the sample. This is supplemented by our survey, particularly in terms of the profile of owners.

Information about businesses that lenders did not put forward as candidates for EFG is not known. Although there will certainly be many more businesses that are considered for the scheme, but which never progress, either because of the business itself, or decisions made by the lender. As such information only comes from participating businesses.

In 2009 there was a total of 7,414 loan offers made by lenders, worth a total of £759 million. Businesses are not obligated to take up these offers and indeed 6,724 offers were drawn upon by businesses, indicating that nearly 700 businesses receiving an offer had either shelved their project or resolved their quest for finance through other channels. It is these 6,724 businesses that formed the population from which the sample was drawn and upon which estimates of impacts of the whole scheme are based.²⁴

The total value of EFG offers that were accepted by the 6,724 businesses in 2009 was £682million. Some of these businesses (1.9 per cent) did not draw down all of their funds, either because they did not need the full amount, or had found alternative finance. This means that a total of £669 million was drawn.

2.2 EFG loans and terms

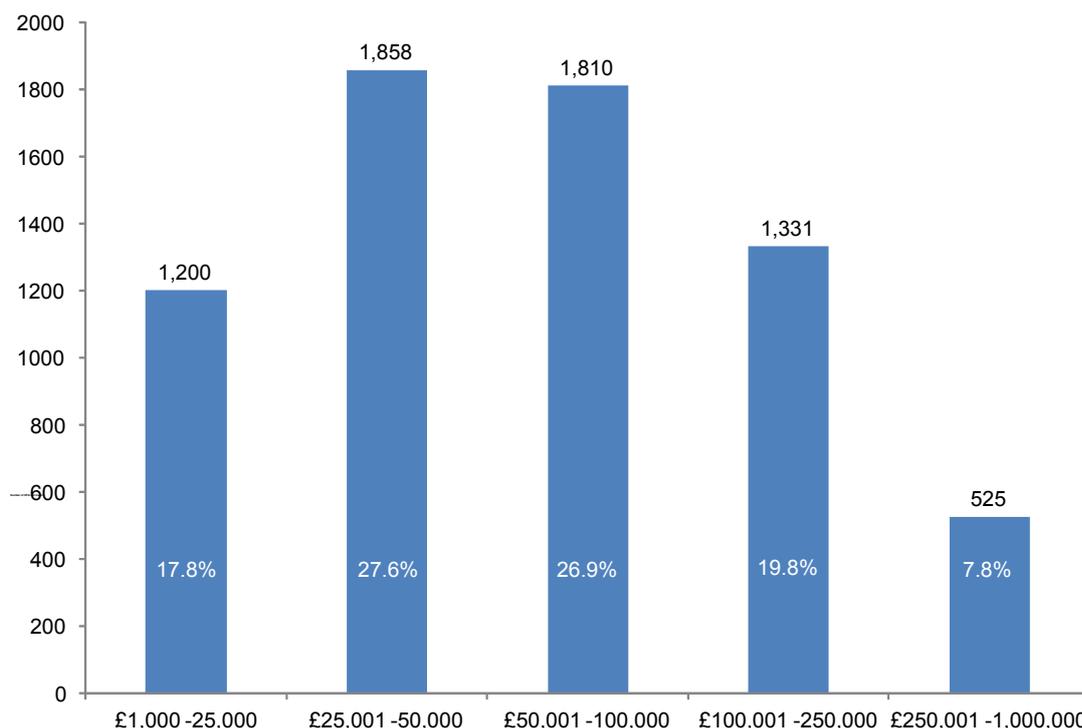
Monitoring information suggests that the scheme has some levels of repeat business. There was some continuity between SFLG and EFG, with 274 borrowers (4 per cent) identified as previously having had an SFLG loan. There was also evidence that 439 businesses (7 per cent) had made a second (or more) EFG application. As well as revealing some satisfaction with the scheme and its predecessor, this might tell us that the majority of EFG borrowers either do not need to seek any more finance, or alternatively, they subsequently obtain further finance without recourse to the scheme, suggesting banks may now regard them as less risky propositions.

Figure 1 shows the amounts borrowed by participating companies. In particular we draw attention to the two changes in thresholds. The maximum amount has increased from £250,000 under SFLG to £1,000,000 under EFG, while the lower threshold has now fallen

²⁴ Publicly available statistics (<http://www.bis.gov.uk/policies/enterprise-and-business-support/access-to-finance/enterprise-finance-guarantee/efg-statistics>) show that there were 6,168 offers drawn down in 2009 and the balance of offers were drawn down in early 2010.

from the SFLG minimum of £5,000 to £1,000. While these new thresholds would seem to encompass more possible borrowers it has in practice done little at the bottom of the market, with only 26 borrowers (0.4 per cent) receiving less than £5,000. However, there does appear to be very substantial additional benefits for businesses seeking larger amounts. A total of 525 businesses (7.8 per cent) were now able to borrow more than £250,000, suggesting that there was indeed demand from SMEs for the threshold to be raised, possibly due to the tighter finance conditions observed in 2009.

Figure 1 Loan amounts borrowed by EFG participants (2009)



Terms of borrowing

Table 1 shows the terms under which EFG businesses received offers. The variation in the cost of finance does vary considerably and as noted elsewhere these matters are a commercial consideration between banks and borrowing businesses, rather than conditions set by government. While interest rates are paid on the outstanding balance, fees only apply in arranging the loan. The arrangement fees charged are not inconsiderable amounts but are broadly in line with the wider commercial SME lending market.

There are clear and distinct patterns shown in the table, with the cost of finance being greatest for smaller loans, as conventional bank finance would suggest (smaller loans generally go to smaller businesses, with the risk of default generally decreasing by size of firm). The average interest rates for small loans (£1,000-25,000) were nearly double the rate for larger loans (>£250,000). The length of borrowing varied less by the amount, but smaller loans appeared to be over shorter terms. The average business borrowed at an

interest rate of nearly 6 per cent per annum, with an arrangement fee of 2 per cent and borrowed for 76 months²⁵.

Table 1 Terms of borrowing by amount borrowed

Amount borrowed	Average Interest rate	Average fees	Fees as % of loan value	Av. Loan terms (months)
£1000-25000	8.1%	£560	3.3%	65
£25001-50000	6.2%	£880	2.4%	76
£50001-100000	5.3%	£1,650	2.3%	83
£100,001-250000	4.7%	£2,770	1.8%	79
>£250,000	4.1%	£8,290	1.7%	76
Average	5.8%	£1,980	2.0%	76

2.3 Business profile of EFG borrowers

Table 2 shows the age of businesses using EFG in 2009. It is evident that many businesses were clearly in the start-up category (0-1 years) possibly reflecting that these businesses were most likely to lack track record or collateral, while businesses in the next four years of trading were very evenly distributed. The category of five or more years exists in part because of the SFLG implementation of recommendations from the Graham review to limit the scheme to businesses less than five years. This was in effect between 2006 and 2008, but since its abolition it is clear that there was substantial demand from these businesses possibly reflecting the tighter credit conditions that occurred in 2009.

The table also shows the size of loans offered to businesses, according to their age. Younger businesses tended to seek smaller amounts of finance, while older businesses sought larger amounts of finance.

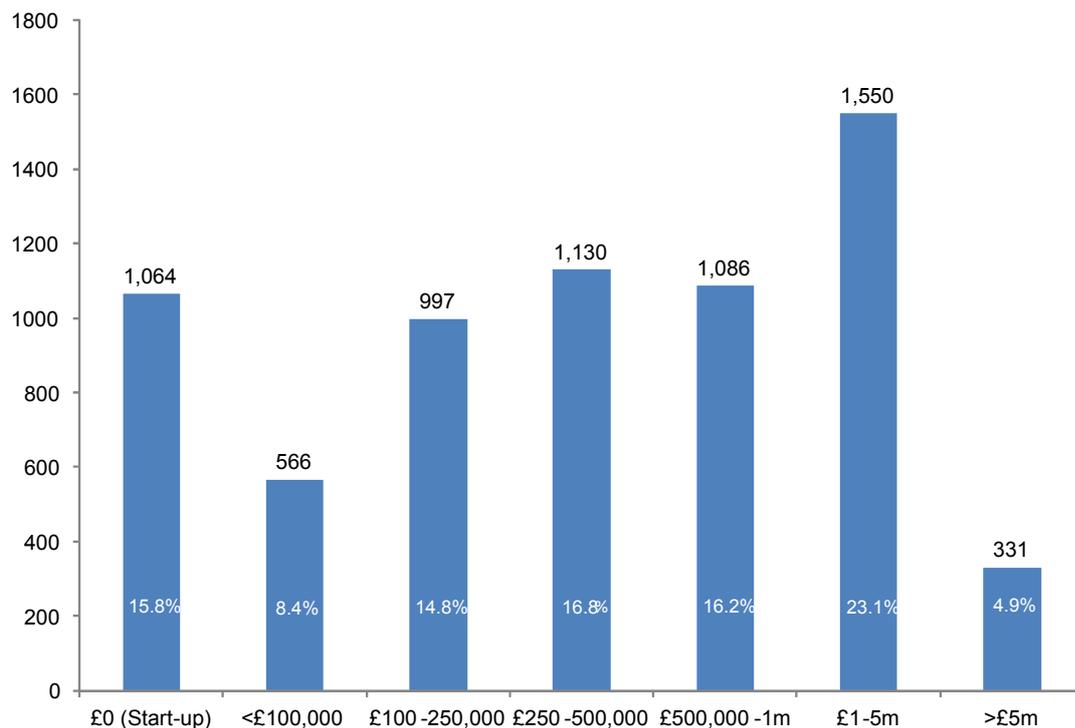
Table 2 Age of businesses

	Frequency	Average loan amount
0-1 years	22.1%	£70,400
1-2 years	6.8%	£67,810
2-3 years	7.0%	£78,220
3-4 years	6.8%	£79,370
4-5 years	6.7%	£95,300
5+ years	50.6%	£126,610

Figure 2 shows size of EFG borrowers, expressed in terms of their sales turnover in 2009. Since the purpose of borrowing for many businesses was to start their business then many businesses (16%) were unable to supply sales figures. The businesses tended to be substantial businesses, with a median turnover size of £560,000 and only 5% below the VAT threshold of £68,000. The relaxing of the £5.6million threshold under SFLG rules, enabled a further 270 businesses (5%) to participate in the scheme.

²⁵ A very large proportion of businesses (nearly one third) were repaying their loan over the maximum permitted period of 120 months.

Figure 2 Turnover size of EFG user businesses (2009)



Administrative data only records turnover, rather than employee numbers, but some indication of employee numbers comes from our survey sample. Figure 3 shows the number of employees per business, expressed in terms of standard SME sizebands and to some extent makes for an easier understanding of the size of EFG recipients. There were relatively few EFG borrowers with no employees (only 7 per cent), although this group constitute nearly three quarters of the SME population, but their borrowing needs are usually more modest and perhaps not appropriate for EFG lending. There were higher proportions of micro businesses with 1-4 employees (28 per cent) and 5-9 employees (22 per cent). The most frequently occurring sizeband was for small businesses 10-49 employees (39 per cent). Medium-sized businesses were less well represented (3 per cent), in keeping with the small numbers reported for higher turnover above. The median size of EFG borrowers was seven employees and the mean 14.3 employees, rather higher than for the SME population as a whole.

Figure 3 Number of employees in EFG businesses in 2009

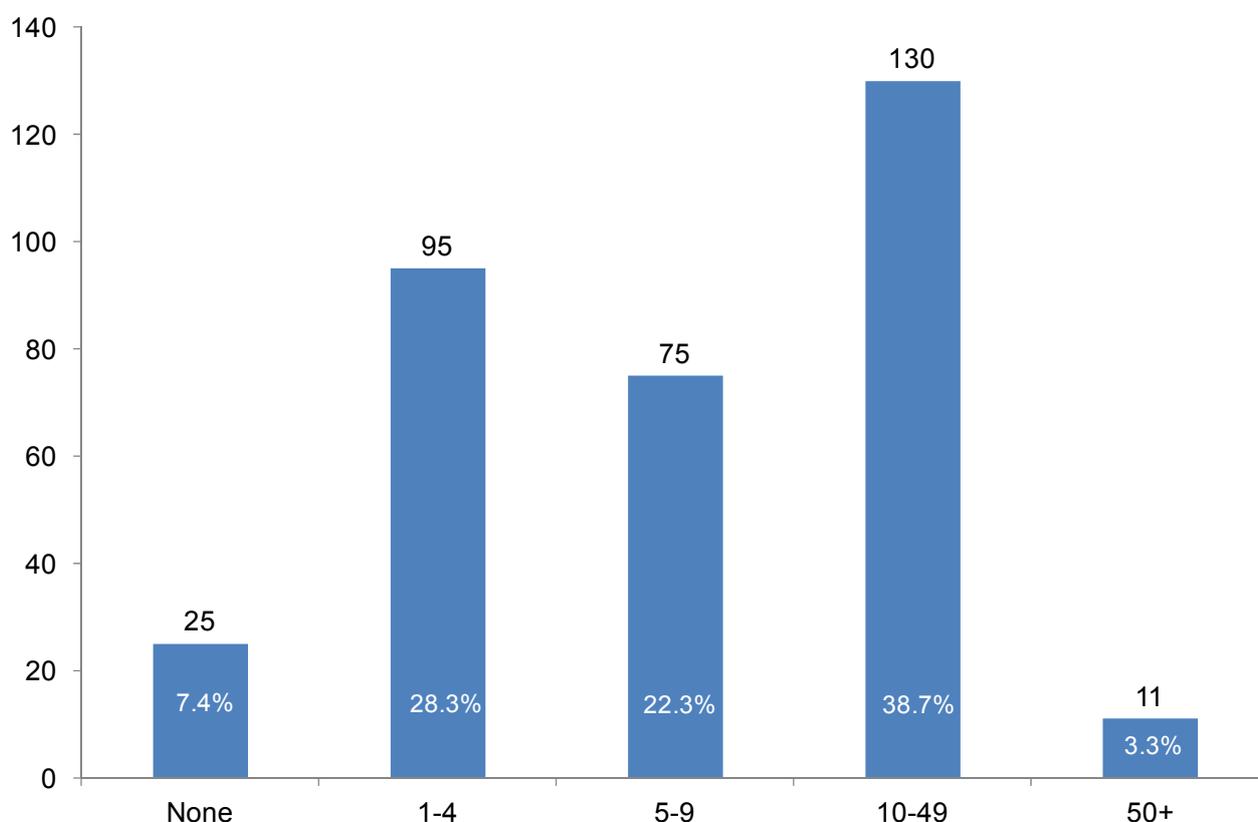


Table 3 shows the size of borrowing, according to the size of business. The relationship is very clear, in that larger businesses were seeking more finance, although the scale of project and level of ambition varied considerably within categories. The exception to this trend was the large amounts sought by companies just starting their business and this was possibly because of the larger nature of investment needed to start their business.

Table 3 Average loan by Sales turnover

Sales Turnover (2009)	Average loan amount
£0 (Start-up)	£71,210
£1-100,000	£38,930
£100,000-250,000	£47,710
£250,000-500,000	£60,550
£500,000-1,000,000	£83,910
£1,000,000-5,000,000	£157,700
>£5,000,000	£401,830

Representativeness of EFG loans compared to the SME population

The following analysis (Table 4-Table 6) compares the 2009 EFG population with statistics based on the 2009 SME population²⁶. Each table shows the number of EFG clients per 10,000 businesses and 10,000 employees to indicate the extent to which EFG clients are distributed within the wider business population. Because of the variation in business size for certain categories, the fairest measure is shown in the third column, comparing EFG relative to employee numbers. EFG data lends itself to three types of simple comparison: Legal status; Industry sector and Geographical region.

As already indicated, EFG is not intended to meet the entire demand for finance by SMEs. Whilst EFG covers around 1-2% of the SME bank lending market, the overall coverage for all SMEs is less than one per cent, because most SMEs do not seek finance. Expressing this in terms of employees shows that there will be 3 employees in EFG recipient businesses for every 10,000 employees in SMEs.

Table 4 shows that larger limited companies receive more EFG loans per business, with nearly three times more than partnerships and more than ten times as many as sole proprietors. This may reflect larger companies being more likely to use dedicated finance advisers who are more likely to be able to raise the prospect of using EFG in the lending process. Expressed in terms of employees the relative size of each legal type of business restores near parity, although sole proprietors are slightly less likely to receive EFG.

Table 4 Representativeness of legal sectors

	No. per 10,000 businesses	No. per 10,000 employees
Companies	39.4	3.0
Partnerships	13.6	3.0
Sole proprietors	3.2	2.5
TOTAL	13.9	2.9

Table 5 shows the representativeness of EFG borrowers in terms of sectors. Some of the lower participation may be partly explained by sectoral exclusions from EFG. After controlling for the size of some larger sectors, the rate per employee varies considerably, this may reflect lenders propensity to lend to particular sectors, the availability of collateral in particular sectors or the demand for finance from different business sectors.

²⁶ <http://webarchive.nationalarchives.gov.uk/+http://stats.bis.gov.uk/ed/sme/>

Table 5 Sector representativeness

	No. per 10,000 businesses	No. per 10,000 employees
A, B Agriculture, Hunting and Forestry; Fishing	3.6	1.4
C, E Mining and Quarrying; Electricity, Gas and Water Supply	15.2	1.0
D Manufacturing	36.0	3.8
F Construction	6.4	3.0
G Wholesale and Retail Trade; Repairs	31.1	3.6
H Hotels and Restaurants	45.8	4.2
I Transport, Storage and Communication	8.1	1.5
J Financial Intermediation	1.3	0.1
K Real Estate, Renting and Business Activities	12.7	3.4
M Education	6.1	2.9
N Health and Social work	6.3	1.3
O Other Community, Social and Personal Service Activities	6.6	2.5
TOTAL	13.9	2.9

Table 6 shows the representativeness of EFG borrowers in terms of English regions and devolved nations. In terms of employees, all of the devolved nations achieve relatively higher rates of participation than all parts of England except for the North East. The lowest rates of participation correspond to some of the most prosperous regions (London, South East and East of England), which may reflect availability of collateral in those regions and therefore lending occurs through conventional sources.²⁷

Table 6 Representativeness of UK regions

	No. per 10,000 businesses	No. per 10,000 employees
Northern Ireland	5.6	20.3
North East	16.4	12.6
Wales	16.7	10.9
Scotland	15.2	8.3
South West	16.6	6.2
Yorkshire and The Humber	12.4	4.8
West Midlands	17.0	4.1
East Midlands	16.8	4.0
North West	16.0	3.9
East of England	14.7	3.5
South East	13.2	3.3
London	9.3	2.0
TOTAL	13.9	2.9

²⁷ The South East and London has higher house prices.

Table 7 shows the extent to which EFG accommodated particular types of businesses, namely social enterprises²⁸ and businesses from deprived areas. There was a significant difference in terms of the incidence of social enterprises among the different subsamples, with EFG having the lowest representation of businesses describing themselves as social enterprises.

There was no significant difference between the subsamples in terms of whether the business was from a deprived area. This was in contrast with the SFLG study, which found that businesses in deprived areas benefitted more than other businesses through their SFLG loan in terms of the loan being more likely to: (i) be a loan of last resort; (ii) have higher finance additionality and (iii) have higher project additionality. None of these results were evident for EFG, with assisted businesses from deprived areas being no different to other businesses. This may reflect tighter credit conditions being more prevalent across a wider set of businesses than previously.

Table 7 Inclusiveness of EFG for different business types

	EFG %	Non-borrowing comparison	Borrowing comparison %	All business average	Chi-squared significance
Social Enterprise	25.9	32.9	35.6	30.8	.001
Deprived area	11.3	13.8	6.2	11.8	.117

The business characteristics of the EFG population are described in this section, while the characteristics of the comparison groups are excluded. The achieved subsamples of other loan users and general SMEs were both different from the EFG user group, but these effects were controlled for with a three way weighting of sector, age and size. As such the unweighted profiles of other borrowers and general users are less meaningful.

2.4 Business practices of borrowers

This subsection considers the extent to which some key business and management practices of EFG businesses are similar to other borrowers and the general business population to assess whether there are differences in business quality. In some areas like increased use of formal management practices EFG is shown to be different to other businesses, including other loan users.

Figure 4 shows the frequency of responses to whether businesses used formal business practices, as well as the use of cutting edge technology. Several of these results were statistically significant, with differences evident among the subsamples and the highest reported incidence of adoption among the EFG group. Regular management accounts, a website for trading, formal business plan, written HR policy and adoption of cutting edge technologies were all statistically significant. Some of these formal measures will be in

²⁸ Being a social enterprise is self-reported, and this definition may differ to other widely used definitions of social enterprise.

response to a banks request for such practices, most notably a business plan to outline the purpose of loan funds, although adoption among EFG users was 15 percentage points higher than for other loan users.

Figure 4 Use of formal business practices

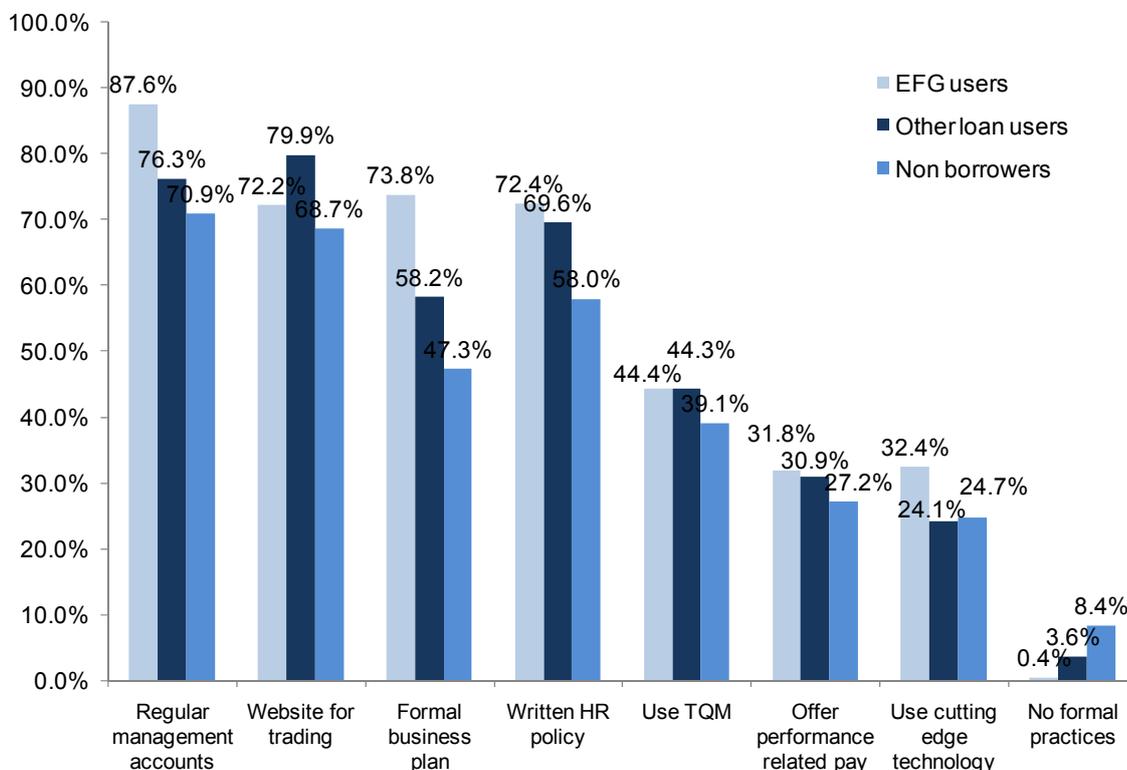


Figure 5 shows the extent to which different types of business believed they had intensive competition from other businesses. This could show possible displacement effects. There were no significant differences between the three subsamples and the graph shows only small differences between the levels of intensity.

Figure 5 Competition in main markets

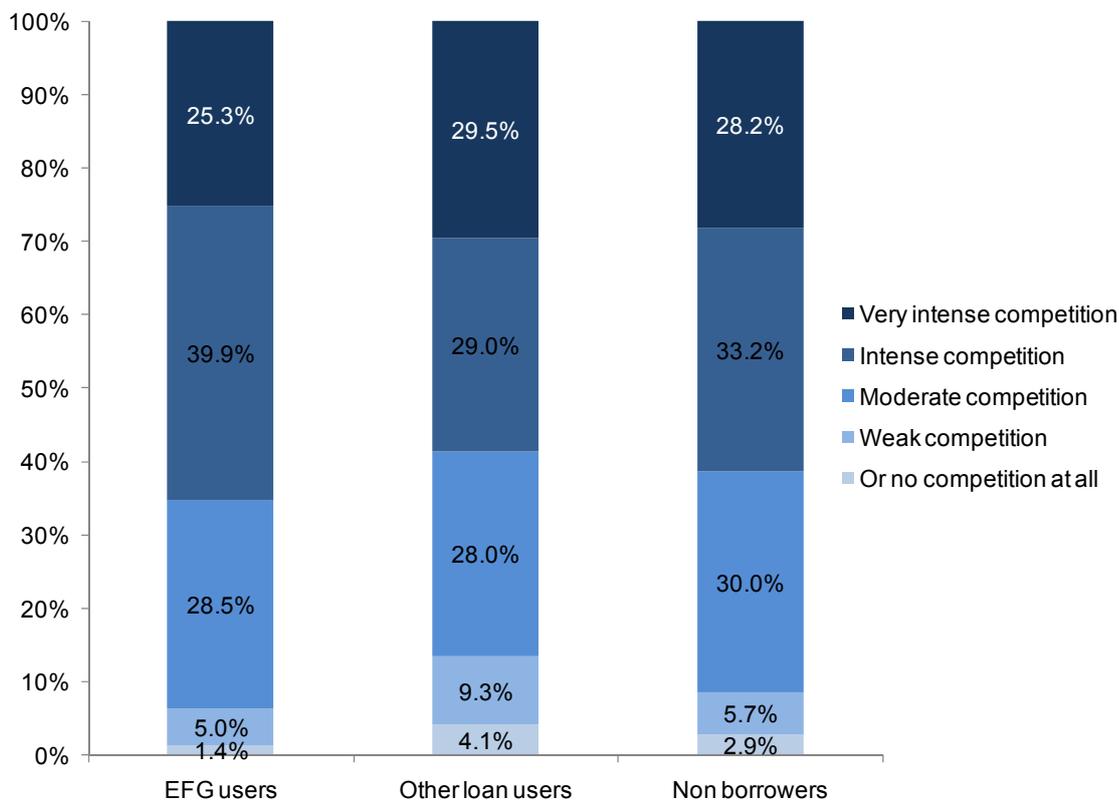
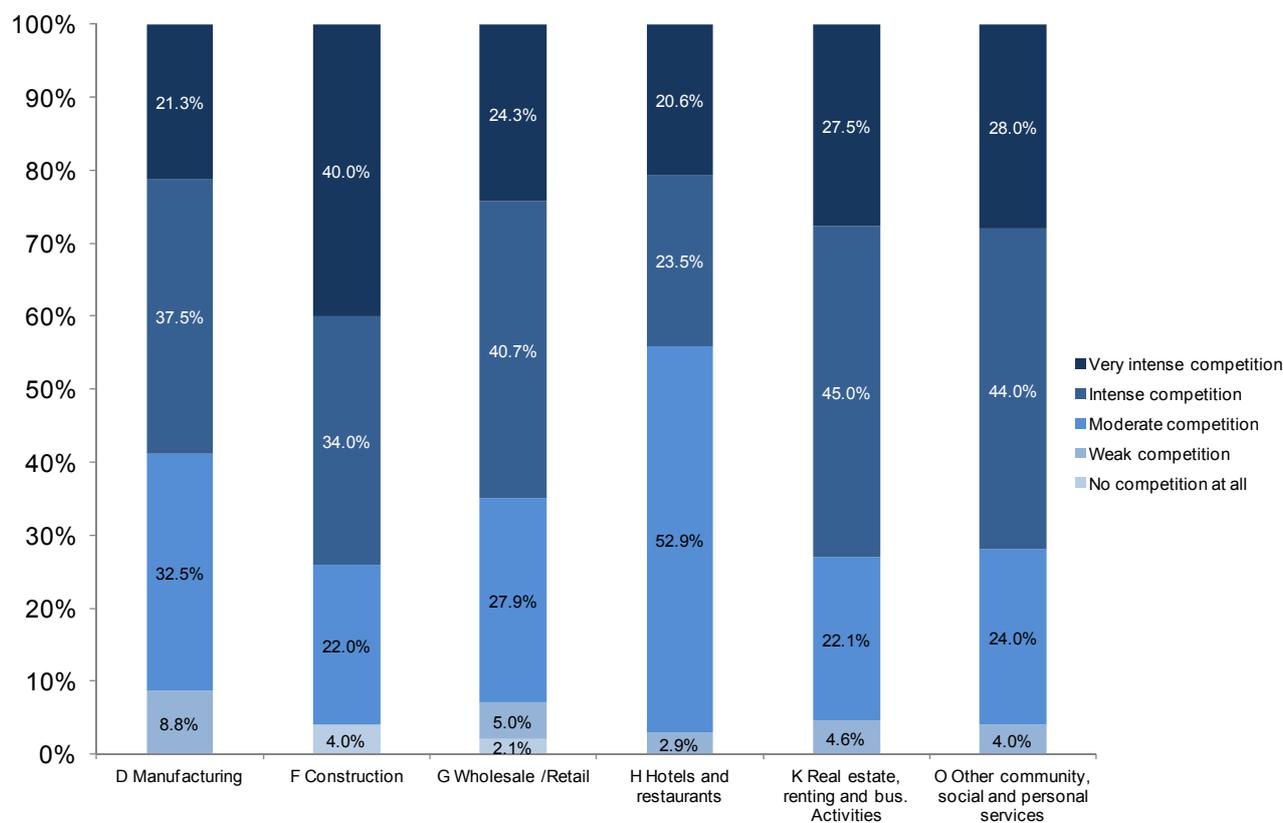


Figure 6 shows the extent of competition for different types of EFG businesses, considering the effects of sector on competition and six sectors are shown where sufficient sample sizes ($n > 25$) existed. The graph is perhaps best read by combining both very intense and intense competition, which identifies a clear difference for Hotels and restaurants as operating in a less competitive environment, followed by manufacturing and wholesale and retail.²⁹ The other three sectors record very similar numbers, although construction has rather more responses of very intense competition.

²⁹ The Hotels and restaurants sector is usually associated with being a highly competitive sector with a high business churn rate, so these findings appear to be counter intuitive. For instance, ONS Business Demography 2010 statistics show the hotels and catering sector has the lowest 5 year survival rate of new business start-ups compared to all other sectors. It is possible that EFG recipient businesses have either found a niche within the wider market or they under estimate the scale of competition they face in their sector.

Figure 6 Competition in main markets by sector (EFG borrowers only)



2.5 Ownership Characteristics

The main scheme administrative database captures information about businesses rather than owners, so the only information about the owners and directors of EFG businesses comes from the telephone survey. In some respects the ownership characteristics are important to the business, inasmuch as younger owners may be less able to offer personal guarantees. In other instances we are interested in ownership because it reveals whether EFG allows equal access to all types of owner.

Table 8 shows the inclusiveness of EFG in terms of underrepresented owners. The scheme does not specifically attempt to confer positive discrimination on underrepresented groups, but nor should there be any bias against these groups. Survey evidence suggests that there are no significant differences between the subsamples in terms of female-led businesses and owners with a disability. For ethnic minority led businesses (EMB), significantly lower proportions of EFG borrowers compared with the general SME population were ethnic minority led businesses (6 per cent compared to 11 per cent), although the opposite was reported by the SFLG study which indicated an overrepresentation of EMB. Although the evidence from the survey seems to indicate that EMB businesses are under-represented, BIS recently estimated the whole EMB population to be just 6.3 per cent of SMEs, a proportion very close to the survey results.³⁰

³⁰ <http://www.bis.gov.uk/assets/biscore/enterprise/docs/e/11-1077-estimates-women-ethnic-minority-led-social-enterprises-in-uk.pdf>

Table 8 Inclusiveness of EFG for underrepresented owners

	EFG %	Non-borrowing comparison %	Borrowing comparison %	All business average	Chi-squared significance
Female-led	41.5	44.7	36.4	42.2	.200
Ethnic minority-led	5.8	12.6	11.3	9.9	.005
Disabled	8.4	8.8	8.8	8.7	.982

Figure 7 shows the age profile of borrowers compared with the general population. The proportions of older owners (55+) are relatively low for EFG clients (24 per cent), compared with other borrowers (31 per cent) and much lower than for the general SME population (37 per cent). The results are statistically significant, and may suggest older business owners have greater access to collateral and track record and so will have less of a need for an EFG loan.

Figure 7 Age profile of EFG users

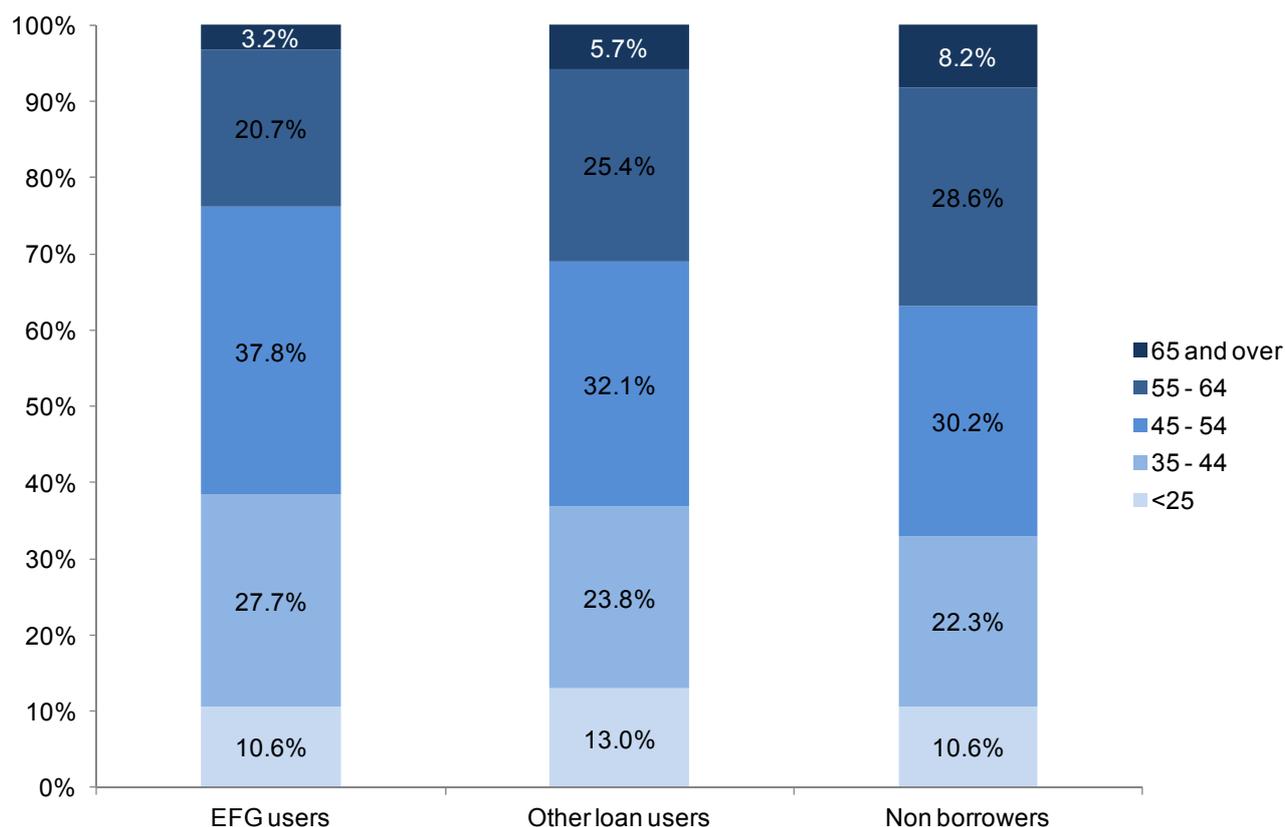


Figure 8 shows the management experience of business owners. The evidence suggests that EFG owners are somewhat less experienced than other business owners, which may in part be a corollary of the fact that it supports proportionately more young owners. These results are statistically significant.

Figure 8 Management experience of owners

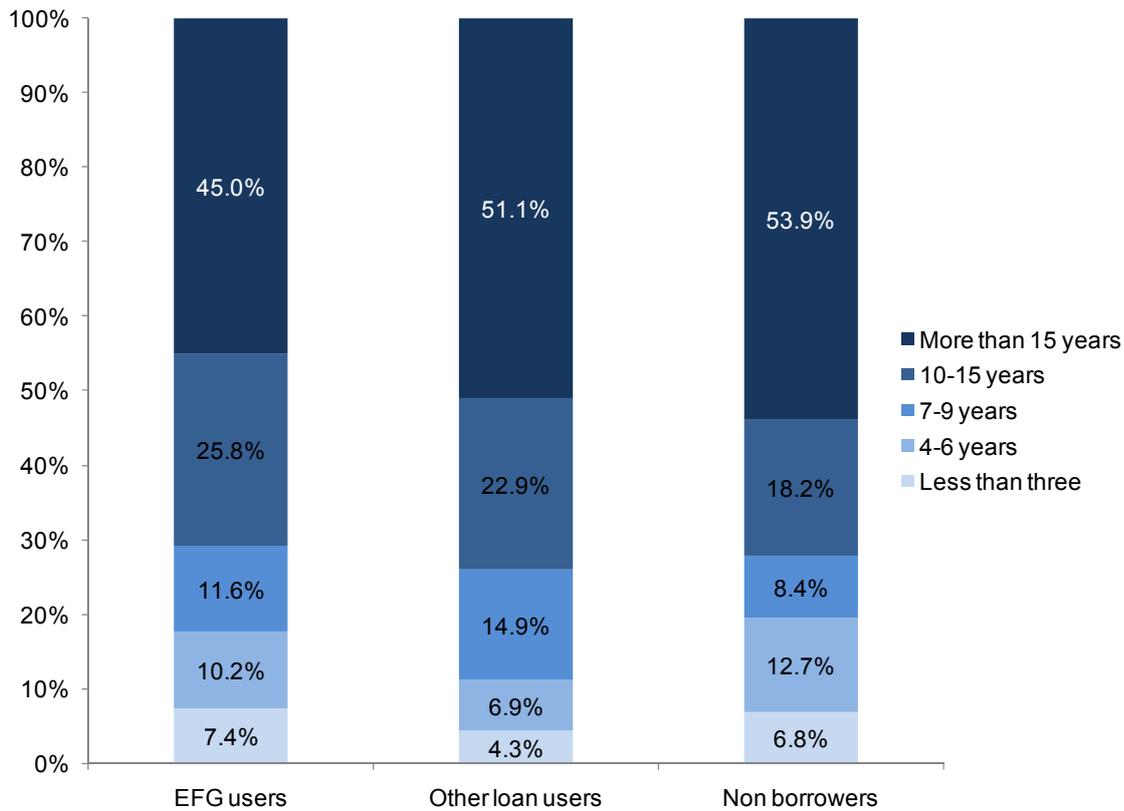
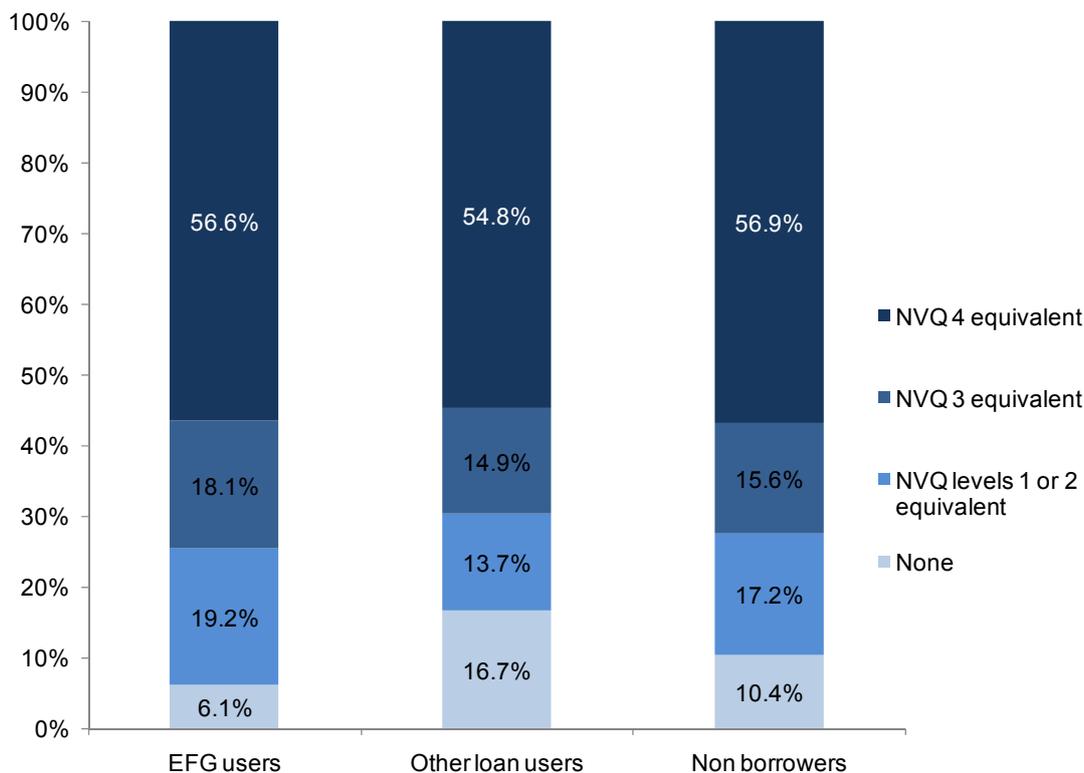


Figure 9 shows the qualifications of owners. In the graph the differences appear very slight, especially when comparing proportions of degree educated owners. However, there are some differences regarding the no qualifications category where the results are statistically significantly different with EFG borrowers being less likely to have no qualifications.

Figure 9 Qualifications of owners



There was no evidence of EFG borrowers being any more affected by the impacts of the recession than other businesses. The telephone survey found that performance of all businesses was more subdued between 2007-2009, but EFG businesses performed no worse. A more thorough econometric treatment of the effects of loans on business performance is shown in Section 5.

Table 9 Sales change 2007-2009 and 2009-12 by borrowing status

	Sales change 2007-2009 (%)	Sales change 2009-2012 (%)
EFG borrowers	8.4	33.4
Non borrowers	10.1	24.7
Other borrowers	6.7	35.2

2.6 Conclusions

- In 2009, 6,724 businesses were offered an EFG loan to the value of £668m.
- Changes to eligibility criteria over SFLG have made for a more inclusive scheme and allowed more businesses to participate, as well as making more finance available:

- Increasing the size of participating businesses above the £5.6m sales threshold to £25m turnover allowed a further 270 businesses to participate.
- Increasing the size of loan from £250,000 to £1million enabled 525 businesses to obtain additional finance.
- EFG was accessed equally by different legal forms of business, but varied considerably by region and sector.
- Survey evidence suggested that EFG businesses tended to be more likely to use formalised management practices than other businesses.
- There was no difference among owner characteristics in terms of gender, or disability, but the owners of EFG recipient businesses may be less likely to be from an ethnic minority group and be a social enterprise. Whilst ethnic minority groups and social enterprises are not specifically excluded from using EFG, it is unclear why uptake for these groups is lower. EFG recipient businesses are also distinct in being run by slightly younger owners with fewer years of management experience.

3 Customer Journey

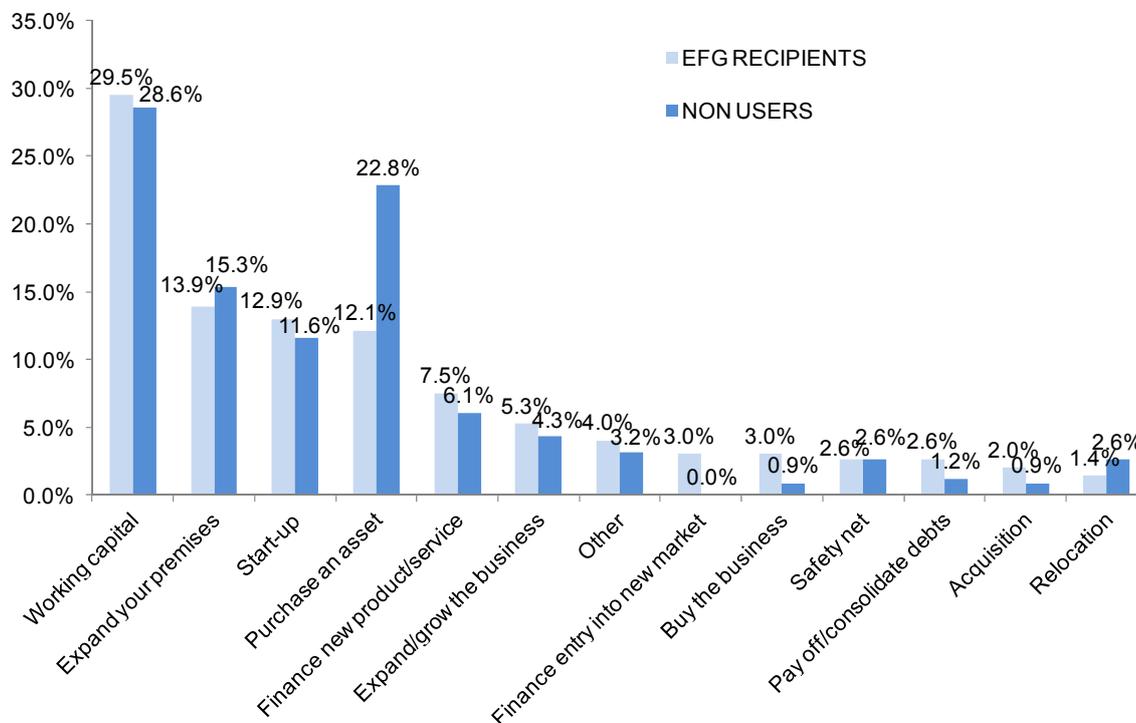
Respondents were asked a number of questions relating to seeking finance and the application process. The section begins with a discussion of awareness of the EFG scheme and a consideration of finance alternatives and the extent to which EFG was part of an overall package of finance. The role of the bank in obtaining EFG, the levels of satisfaction with the finance offer and interaction with lender is also covered.

3.1 The Finance-Seeking Process

3.1.1 Main Reason For Seeking Finance

Figure 10 draws a comparison between EFG borrowers and other businesses, in terms of their main reason for seeking external finance.³¹ The results are very similar for many of the categories, with little observable variation between EFG recipients and non-users. The one notable difference was for a greater proportion of other borrowers to seek finance for the purchase of an asset. If anything, these results were rather more homogenous than the SFLG study, which found very substantial differences (e.g. for start-up SFLG users (57%), non-users (8%)).

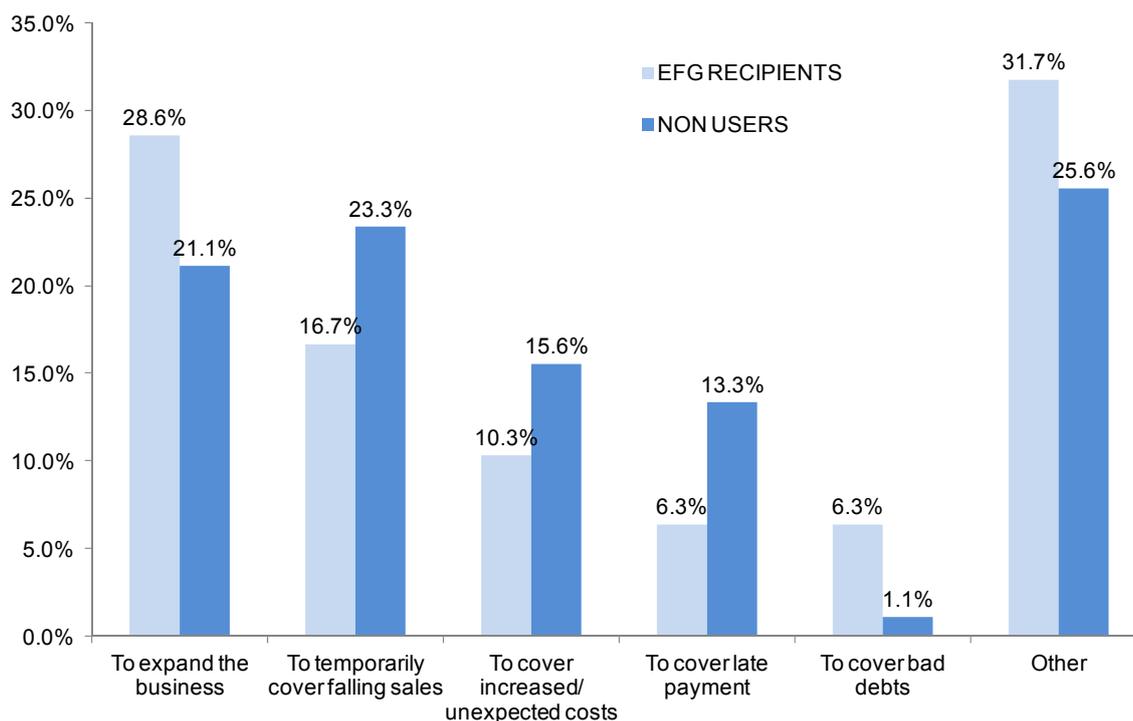
Figure 10 Main reason for seeking external finance



³¹ In practice businesses are likely to be seeking finance for multiple objectives and the questionnaire asked about the prevalence of all reasons, as well as for the main purpose.

The questionnaire then asked a supplementary question probing for greater detail for the reason for seeking *working capital*. There was interest in this area, because of the possibility that EFG was being used to support businesses that were not inherently sustainable. Although the results are not statistically significant³², the observable results in Figure 11 show that EFG was rather more likely to reflect the positive reason of expanding the business, while reporting lower incidence of more negative reasons (temporarily falling sales, cover increased costs, covering late payment).

Figure 11 Reason working capital was sought



3.1.2 Awareness of EFG scheme

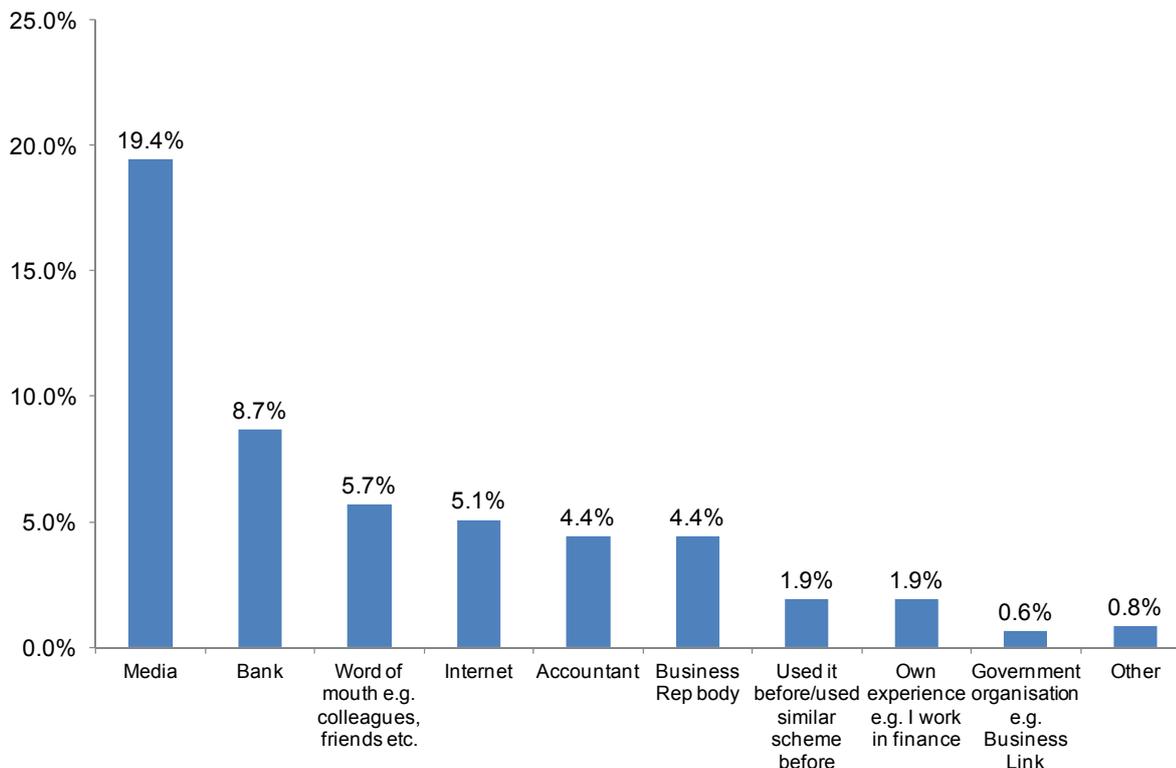
EFG recipients are more aware of EFG prior to approaching the bank than the borrowing comparison group. EFG users and non-users were asked whether they were aware of the EFG scheme before approaching the bank for finance. More than half of EFG users (53%) had heard of the scheme beforehand, compared with less than one third of non users (30%). The pattern of replies was therefore as expected, indicating that the EFG recipients were more likely to have heard to the scheme before they applied to the bank. It is unclear whether this was because they knew they were more likely to be the intended target group for the scheme and therefore more receptive to the offer of EFG or whether by having prior knowledge of the scheme, this influenced the lender to offer an EFG loan to the business. There were no significant differences between the types of user accessing EFG in terms of size, age or sector, suggesting relatively even awareness, at least in terms of the recollection of the sample.

Figure 12 shows where businesses heard about EFG, which is instructive in terms of informing continued publicity of the scheme, although to some extent these responses are associated with the launch, rather than current awareness. Awareness through the media

³² χ^2 p=0.06

was the most likely source of information, for nearly one in five businesses. Other sources of information were mentioned by less than one in ten businesses, with banks themselves being the next most important answer.

Figure 12 Sources of information about EFG



3.1.2 Alternative sources of finance

The majority of surveyed businesses indicated that they had no alternative sources of finance other than EFG. 18 per cent indicated that they had any alternative and less than 4 per cent applied for an alternative. Table 10 shows the different alternatives that respondents indicated were available to them. The percentages are for the whole sample of 500 EFG recipient businesses, rather than for those indicating they believed an alternative was available. Consequently every row returns a low value because so few businesses believed there to be any alternative available to them.

Where alternative sources of finance were available to EFG recipients, bank finance was reported to be the most frequent source. Nearly half of those with an alternative claimed they could have obtained a different secured loan. Banks were also popular, in terms of overdrafts and unsecured loans. Only three applied for a secured loan and just two applied for the extension of an overdraft. Only very small numbers (less than 1 per cent) had considered other options and very few of these options had been applied for. This question did also highlight the extent to which personal resources (directors/family and friends) were considered and these informal sources of borrowing also received little interest.

Table 10 Sources of finance

	Available	Applied for
A business bank loan – secured	8.6%	0.6%

An overdraft	3.2%	0.4%
A business bank loan - unsecured	1.8%	0.0%
Loans or equity from directors or shareholders	1.0%	0.2%
Asset finance	1.0%	0.0%
Business angel	0.8%	0.2%
Loan unspec. Unsecured/secured	0.8%	0.0%
Re-mortgaging	0.8%	0.0%
Venture capital	0.6%	0.2%
Factoring	0.6%	0.2%
Stock finance	0.6%	0.0%
Family and friends	0.4%	0.0%
Leasing	0.4%	0.0%
Investors unspec. inc. self-funding	0.4%	0.0%
Government schemes	0.4%	0.0%
Other	1.6%	0.0%

In theory, EFG is designed to be lending of last resort with the BIS premium leading to EFG being slightly more expensive than conventional bank loans. As such the low incidence of alternatives confirms the notion of this being finance of last resort in practice.

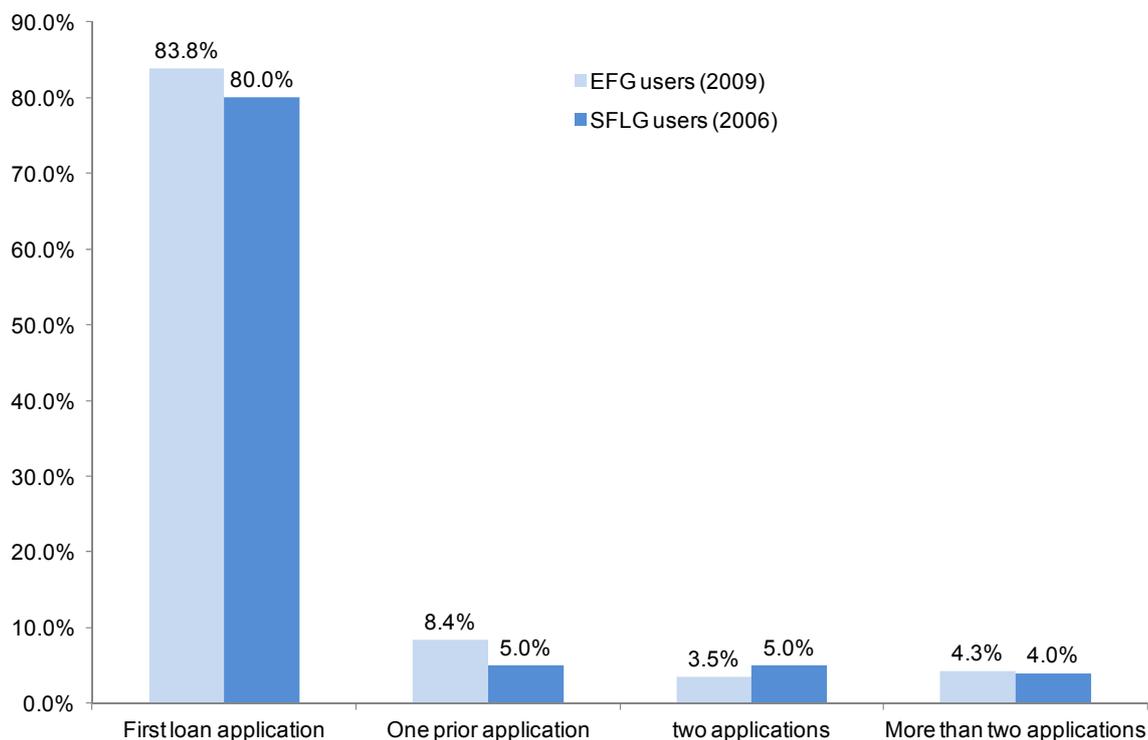
To the extent that alternatives are mentioned there is the sense that EFG is part of package of finance that businesses assemble, rather than it being the sole constituent. The SFLG study found that the government backed scheme accounted for 48 per cent of the total finance raised. Indeed, for one quarter of businesses the loans accounted for less than 25 per cent of total finance. This exact question was not asked in our 2012 survey, but if the evidence from Table 10 is correct then it would appear that EFG borrowers in 2009 were extremely finance constrained.

The early stage assessment conducted in 2009 (n=362) found that nearly 30 per cent of EFG borrowers were offered the full amount they sought by their lender. The average proportion of their finance package from EFG was just 91 per cent, compared with 48 per cent for SFLG. In this regard, the Early stage assessment corroborates our findings here, in that businesses appeared more constrained by the SME finance market in 2009, or perhaps that lending was better targeted on borrowers with no other finance options available, although either of these explanations serves to justify the fundamental rationale for the scheme.

3.1.3 Number of loan applications

Figure 13 shows the number of loan applications that had been made before a government guaranteed loan was secured. For both EFG and SFLG it is evident that four-fifths of successful applicants were directed towards the appropriate product for their very first application. All types of company, both young and old, smaller and larger were equally successful in their first application. Roughly one in ten of successful applicants under both EFG and SFLG had made two or more loan applications before being referred to the government backed loan. It must also be remembered that previously unsuccessful attempts at borrowing may have resulted in developmental learning by businesses, such that a more robust business case was presented when the business finally succeeded.

Figure 13 Number of loan applications before EFG secured

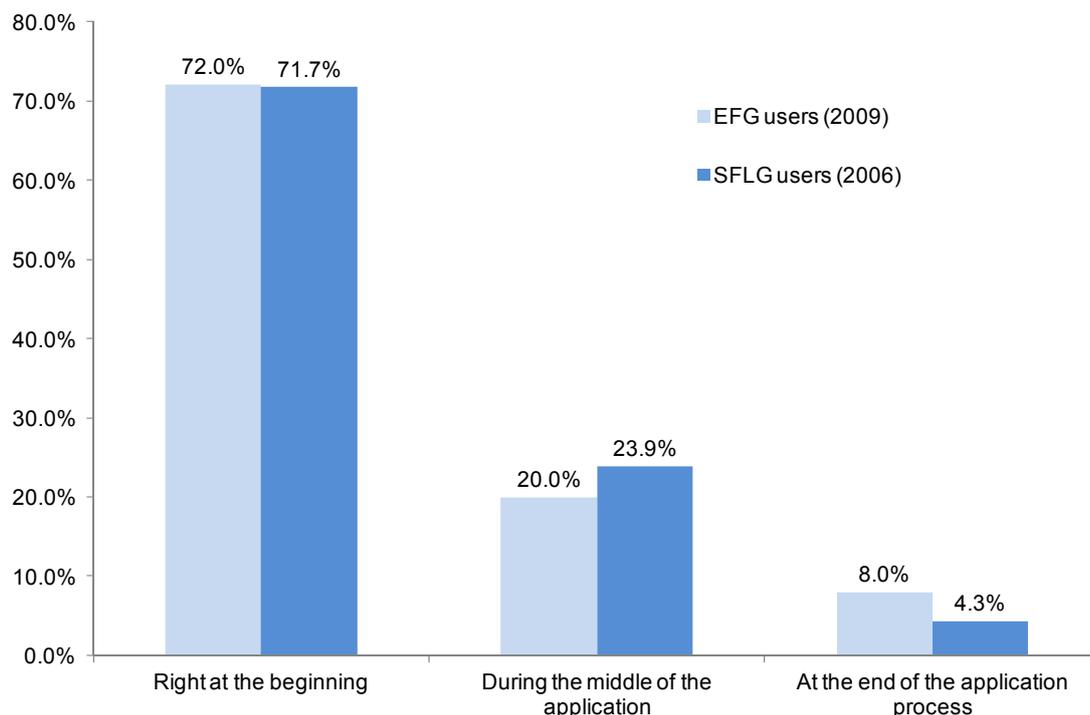


3.2 The loan application

3.2.1 The specific EFG application

EFG was discussed early on in the application process. Figure 14 shows that the possibility of a loan guarantee tended to be introduced into conversations early in the process for both EFG and SFLG loans. For either scheme this occurred nearly three times out of four. The implications of this timing are important because of the added element of the BIS premium of 2% associated with EFG and its consequences for borrowers in terms of the cost of finance. These implications are most relevant where EFG was introduced as a possibility towards the end of the process. Less than one quarter of businesses discussed EFG in the middle of discussions and less than one in ten businesses recalled that the lender did not discuss the possibility of a guaranteed loan until the end of the period. There were no significant differences according to the age or size of businesses, with bank practices being consistent for all types of EFG client.

Figure 14 Point when EFG was first discussed with lender



3.3 Satisfaction with bank service

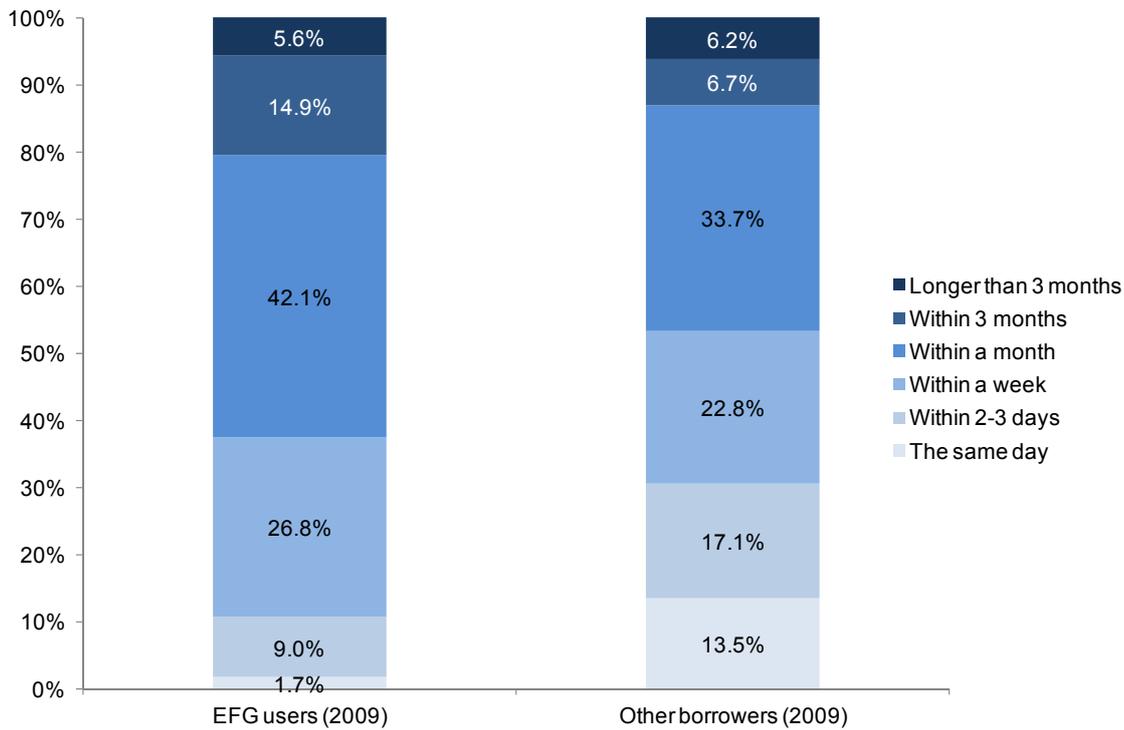
EFG users and non-users who obtained a loan were asked to rate various aspects of the loan application process. This section draws together evidence relating to the speed of borrowing, the levels of satisfaction and whether the conditions and service associated with the loan were appropriate to the business.

3.2.3 Speed of bank reaching a decision

Figure 15 shows the differences in response times for lenders under normal borrowing conditions and for EFG. EFG borrowers report significantly longer times for lending decisions to be made. This is especially apparent in timescales within 2-3 days, with nearly one-third of other borrowers claiming decisions were reached in fewer than three days, while just one in ten EFG recipients reported such speedy service. Although a significant difference is evident across the distribution of answers, there is less difference in proportions reporting lending decisions of more than one month. Since having readily available finance may be time critical for the business then longer borrowing times will have an adverse effect of businesses. Further to this question, borrowers were asked what impact borrowing times had on their business (Figure 16).³³

³³ A 20-day EFG loan application processing target was introduced in August 2010. All the main lenders signed up to this commitment. The target starts when the lender has received all necessary information from the applicant for the credit application to be considered. If prior to the loan application, due diligence needs to be undertaken, the processing target will commence when the due diligence has been completed.

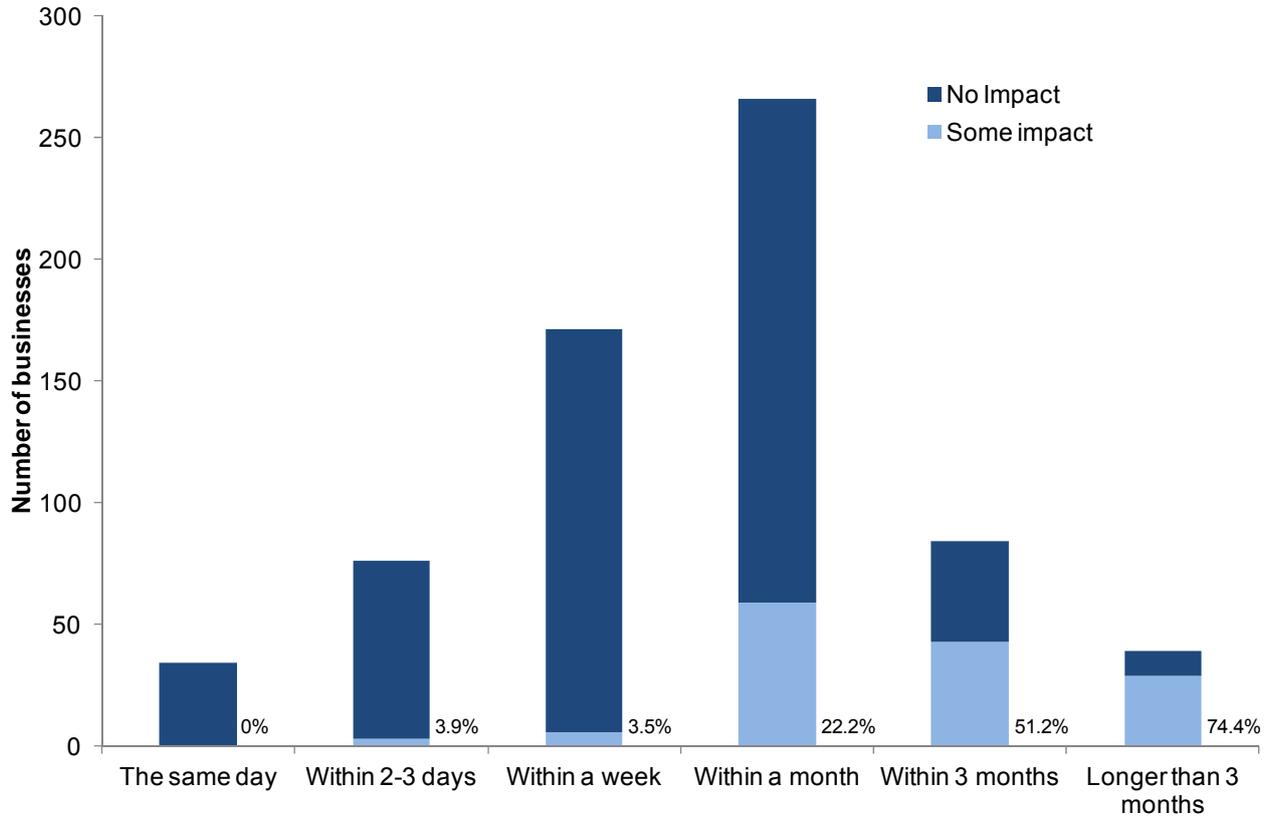
Figure 15 Self-reported speed of bank lending



In total the time taken to make a decision was reckoned to have adversely affected trading for 20% of businesses.³⁴ Figure 16 shows that longer lending decisions are more closely related to adverse impact on businesses, very much as one might expect. For decisions taking longer than one month trading was believed to have been affected by more than half of businesses in the survey.

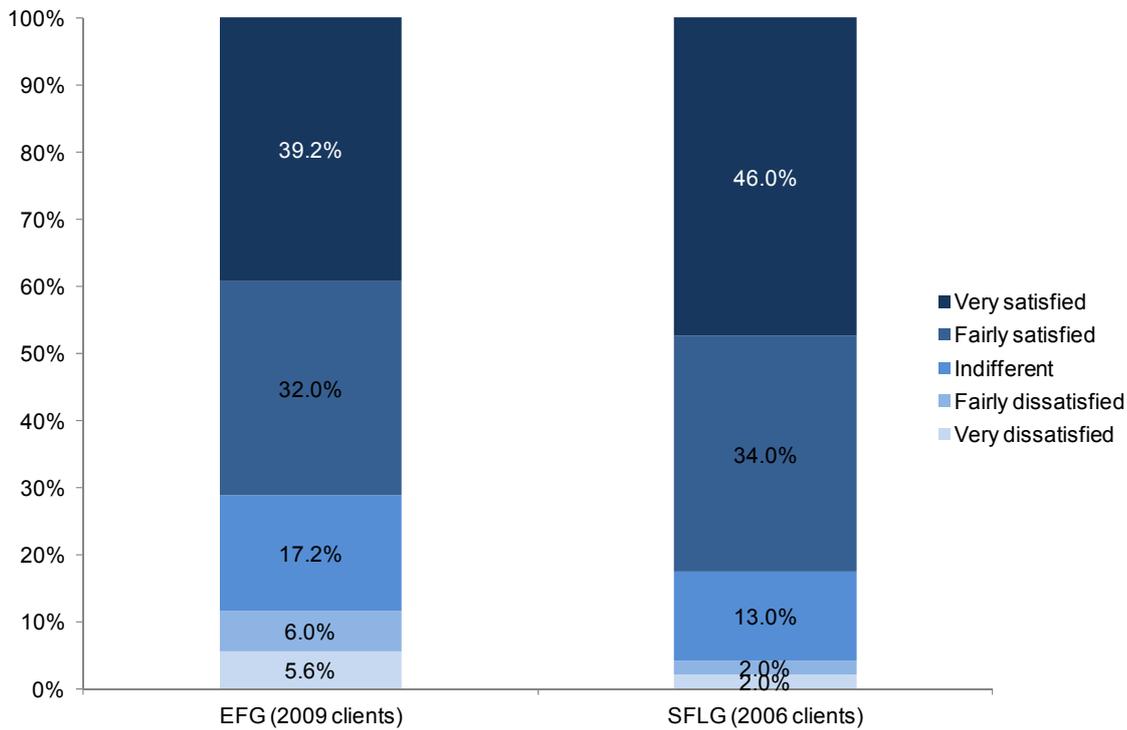
³⁴ This figure may be prone to survival bias, as businesses experiencing lengthy delays may no longer be in business.

Figure 16 Impact on business of lending decision time



Overall users of EFG tended to be satisfied with their loan. Just over 70% of businesses recorded levels of *fairly satisfied* or *very satisfied*. Figure 17 draws a comparison between levels of satisfaction for EFG and SFLG. Ratings for SFLG were more positive in terms of reported satisfaction, but it is not clear that EFG users are experiencing actual lower levels of customer service from lenders, or instead are reporting negative sentiments about current banking practices. Therefore, we cannot ascertain whether EFG itself is associated with inferior levels of satisfaction compared to the previous scheme.

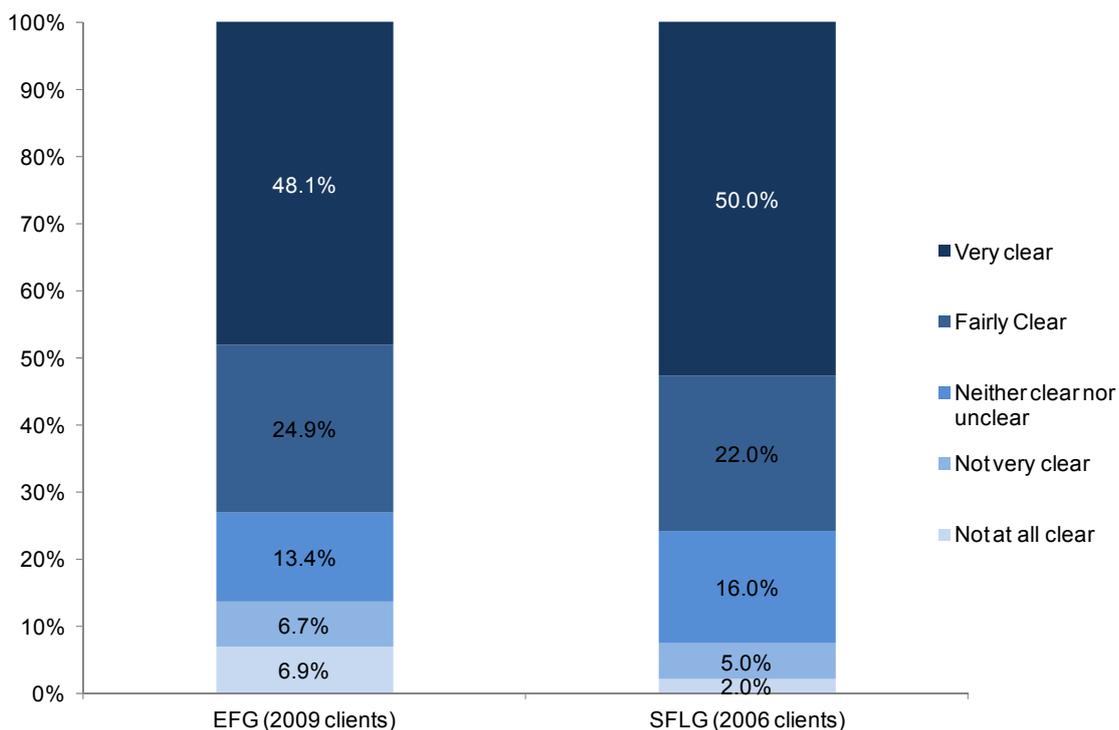
Figure 17 Overall satisfaction with loan



The survey also asked questions about the degree to which borrowers received a careful explanation of what the scheme entailed and the extent to which banks made the borrowers commitments clear.

Figure 18 shows more than 70 per cent of borrowers for both EFG and SFLG believed that the government guarantee had been fairly clearly or very clearly explained to them.

Figure 18 Rating of clarity of explanation of guarantee by bank



A similar question asked whether banks had satisfactorily explained that EFG borrowers remained liable for the loan, but that the bank received a guarantee for the loan. Seven out of every ten EFG borrowers believed that their bank had explained their 100% liability for the loan.

The current level of the BIS premium remains set at the same level as 2009 at 2% per annum of the outstanding balance.³⁵ Businesses are therefore exposed to a cost of finance including both the interest rate of the lending banks and the BIS premium and there may be some sensitivity among borrowers to the level of the BIS premium and overall cost of the finance.

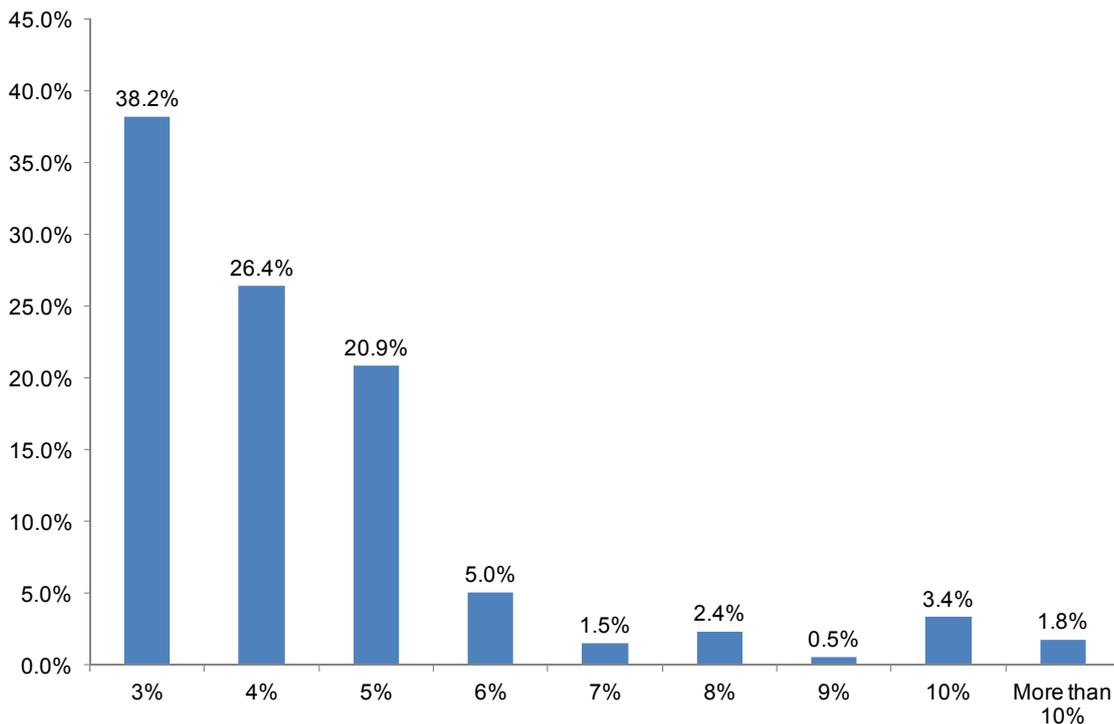
Figure 19 shows that an increase of the premium from 2% to 3% would discourage nearly one in four borrowers from having opted for an EFG loan. If this finding reflects the actual behaviour of EFG borrowers³⁶ then it is clear that the current 2% threshold does appear to be correctly set. Only 14% of borrowers would have tolerated a rate in excess of 5%.

It might seem reasonable that the responses are inversely related to the bank interest rates, so that those with the lowest tolerance to premium increases are exposed to the highest level of interest rates. However this was not the case, with different tolerances to the BIS threshold all being subject to very similar interest rates and by analogy interest rates themselves would appear to have been set appropriately.

Figure 19 Ceiling of BIS premium tolerated by EFG borrowers

³⁵ The BIS premium was temporarily discounted to 1.5% for premiums due and successfully collected in 2009. It reverted to 2% from 1 January 2010. The temporary reduction reflected the particular issues faced by businesses at the time.

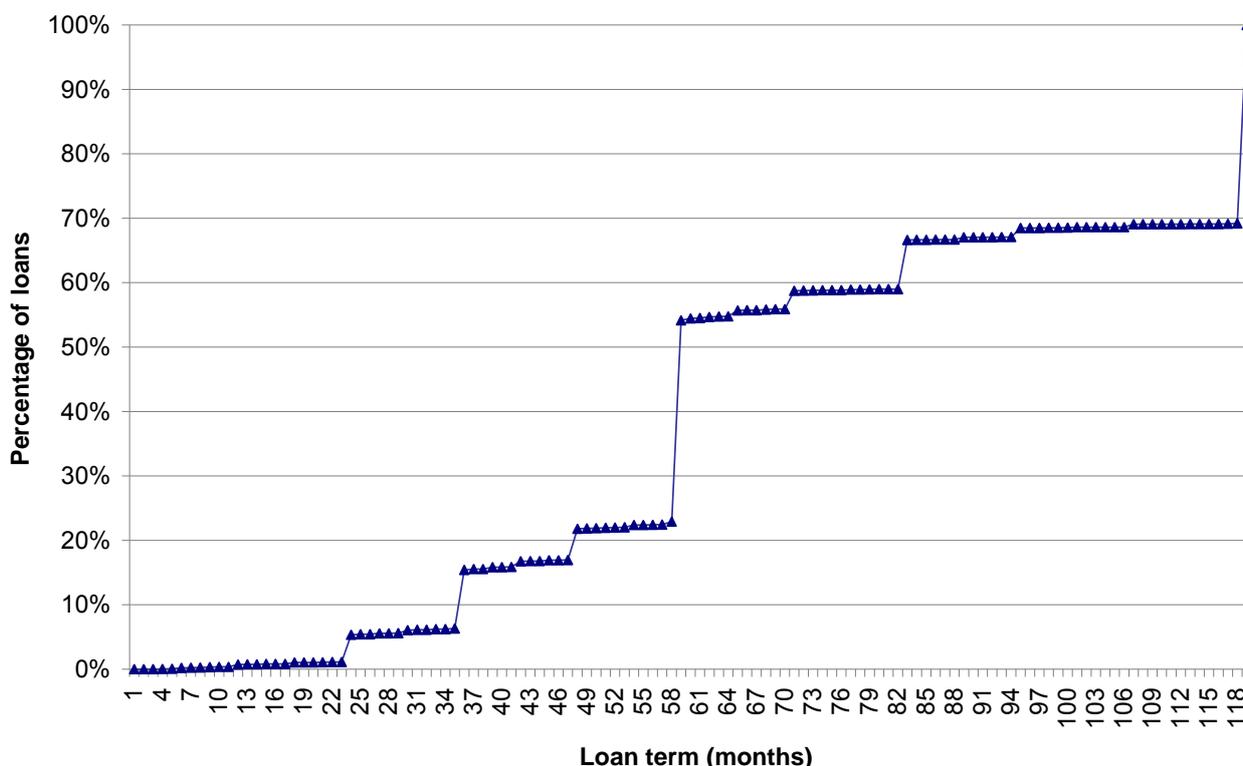
³⁶ Survey respondents may have an inherent incentive to reply with a lower figure than they would actually tolerate, especially if they may require an EFG backed loan in the future.



A further question asked whether EFG borrowers considered the BIS premium to be good value for money. Nearly one quarter (23 per cent) said they believed the premium to represent poor value for money, compared with 2 in 5 businesses that believed the loan to be good value for money, with a sizeable one-third being ambivalent. Evidently, a sizeable number of businesses believed the BIS premium did not represent good value for money, although these responses are somewhat contradictory when examining other variables. Non-Finance additional businesses chose EFG when a conventional loan was available, yet precisely the same proportion of these businesses believed the premium represented bad value for money.

One further element of the terms of the loan was the length of time over which the loan was to be repaid. Figure 20 shows the cumulative frequency of loans according to the term of the loan. Overall, the graph shows very few loans over a short time horizon, with a tendency towards longer loans. There are two noticeable steps in the increase in frequency, the first at 5 years and the second at 10 years and both of these account for nearly one-third of all clients. Because the loan term is distributed in this manner the calculation of costs (Section 6) accounts for individual repayment schedules.

Figure 20 Cumulative percentage of loans by loan term

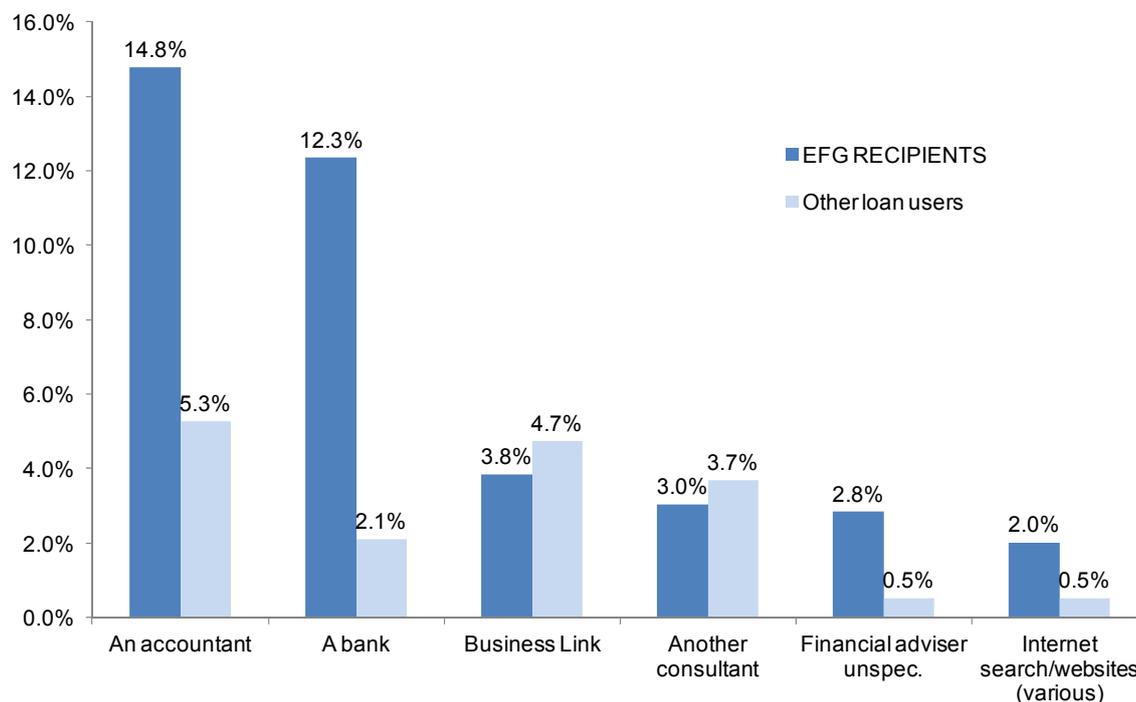


3.4 Sources of External Advice Used

Businesses were asked whether they had used any external sources of information, advice or support to help them raise finance in 2009. EFG borrowers were nearly twice as likely to have used external business support advice compared with other borrowers. While 36 per cent of EFG borrowers had used some external sources of information, only 18 per cent of other borrowers were similarly inclined to do so. Although the propensity to seek advice is clearly greater for the EFG borrowers, this still only applies in a minority of cases, with nearly two-thirds of the EFG group opting to use internal resources to solve problems. This may explain why prior awareness of EFG was higher in the EFG user group compared to the other loan user comparison group.

Figure 21 shows the main types of advice used by loan recipients, expressed as a percentage of all businesses. The principal differences between EFG users and other borrowers was in terms of a much greater use of accountants and banks as a resource for support. Other borrowers were slightly more likely to use Business Link or other consultants, but these differences were small. Altogether, the use of types of support was very low compared with other surveys (e.g. SBS), but this question did ask specifically about the development of the business as opposed to operational support which often recognises the role of accountants as auditors and advisers.

Figure 21 Sources of advice



The survey also asked about the extent to which businesses themselves make plans for their future. Businesses were asked whether they had a business plan in 2009 and whether that plan had been reviewed by a third party. Table 11 shows that EFG businesses were more likely to have a business plan and for that plan to have been vetted by someone else and both these results are statistically significant. Taken together these results indicate that EFG businesses would appear to be better prepared than other borrowers in terms of planning for their future and in terms of seeking advice.

Table 11 Business plans

	Had a business plan in 2009	Business plan was reviewed by third party
EFG RECIPIENTS	89.1%	65.1%
Other loan users	76.7%	49.0%

3.5 Conclusions

There was little difference between EFG borrowers and other borrowers, in terms of the reason they were seeking finance. However, there was some reported difference in prior awareness of EFG, which was higher among EFG users (53 per cent), compared with non-users (30 per cent).

Alternative sources of funding were not considered by the majority of EFG recipient businesses. Just 18 per cent believed they had an alternative to EFG, but less than 4 per cent had actually applied for other finance. The earlier EFG Early assessment revealed that in 2009 EFG formed the majority of the finance deal with only 9 per cent of total finance raised coming from other sources. This contrasted with the SFLG scheme in 2006, where 52 per cent of the total finance raised came from other sources. This suggests that the SME finance market had changed considerably in 2009 compared to

The study did not consider aspects of customer service associated with borrowing, but did comment on two important areas of scheme design (the BIS premium) and operation (the speed of lending):

- The speed of lending under EFG was reported to be slower than for SFLG. Nearly half of other borrowers (47.6 per cent) had to wait up to one month for their loan, compared with 62.6 per cent of other borrowers. Longer waiting times had implications for businesses and 51 per cent of businesses were affected for decisions taking more than one month. This may no longer be an issue due to policy changes introduced in August 2010.
- The majority of businesses believed that the BIS premium was set at an appropriate level. Substantial numbers (38 per cent) believed that a rate of 3 per cent was too high and therefore that the existing rate of 2 per cent was tolerable and any higher rate would have deterred them from participation. However, since the 2 per cent premium represents an additional cost of finance 23 per cent of EFG users believed that the BIS premium represented poor value for money.

EFG recipient businesses were better prepared than other businesses for their loan, in terms of being more likely to have a business plan and having had this plan vetted by a third party.

4 Finance and Project Additionality

This chapter presents the findings from the evaluation survey which addresses the key issues of finance additionality³⁷ and project additionality³⁸ which is important for assessing the net impact of the scheme. This evidence mainly relates to EFG recipients, rather than other borrowers or the general SME population. This is because we want to demonstrate the extent to which activity is additional in order to determine an accurate set of benefits for the scheme for the Cost Benefit Analysis. It is also important to establish the extent to which EFG recipient businesses were credit rationed in terms of their ability to access conventional bank loans, the process by which businesses ended up with an EFG loan, and the nature of any potential impacts had they not been able to access a loan.

It should be acknowledged that the results associated with finance and project additionality are based on the self-reported perceptions and recall of borrowers, rather than representing the views of lenders.³⁹ This point is especially relevant when reporting on business perceptions concerning the views of their lender, particularly with regard to collateral or track record.

4.1 Finance additionality

4.1.1 Finance additionality: Ability to get a loan without EFG

A large majority of businesses would not have received a loan from their bank if it was not for EFG. Finance additionality is an important issue in the context of the rationale for EFG as it is not meant to replace normal commercial lending. On this, the results suggest only 6 per cent of EFG borrowers indicated that their bank would have given them a loan without EFG, and a further 13 per cent suggested that this was a probable outcome. In total 82 per cent of EFG loans are additional and only 18 per cent of EFG 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 and size of business.

The level of finance additionality is broadly similar to the SFLG scheme, but is higher, possibly reflecting the tighter financing conditions in 2009. The 2009 SFLG study indicated additionality of 79%, suggesting that the views of businesses on lender practices are much the same under EFG.

The survey also asked unconstrained businesses why they chose EFG, rather than opting for other finance for which they were eligible. Figure 22 shows that most responses were related to the superiority of the EFG offer, either in terms of better terms (e.g. less

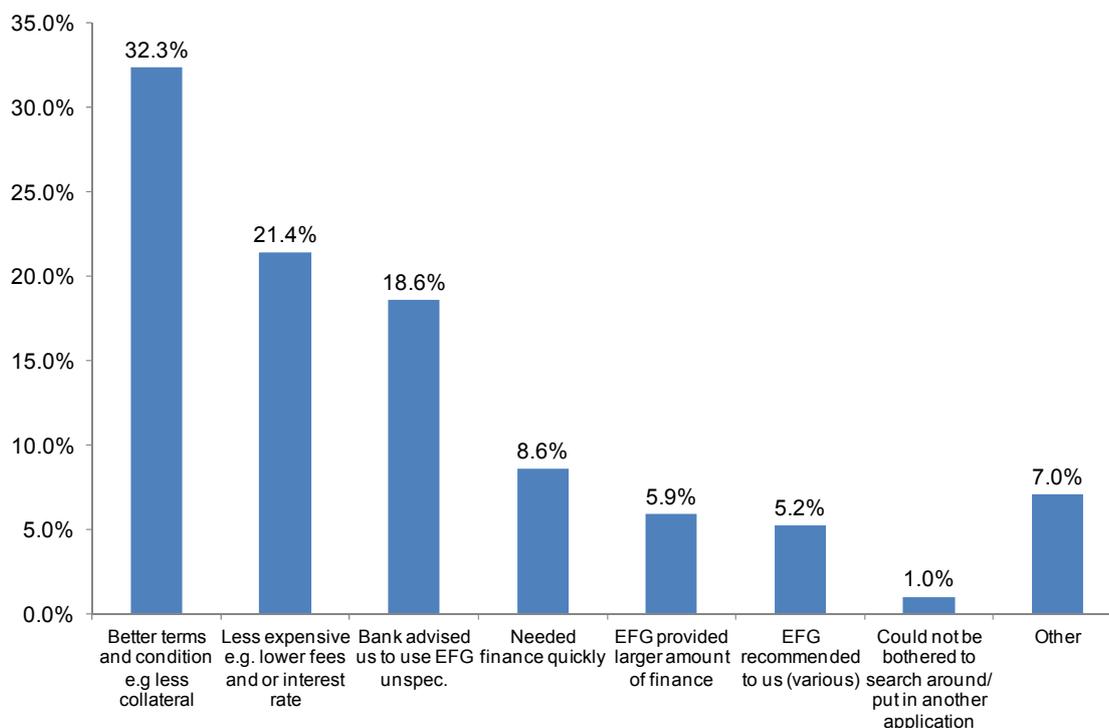
³⁷ Finance additionality refers to whether finance is available from other commercial sources. The provision of finance that is not additional from other sources may be seen as a waste of scarce resources available to the government since it would have occurred in the absence of the programme.

³⁸ Project additionality refers to whether the project would have happened at all, its scale, scope and timing in the absence of funding.

³⁹ For every EFG loan made, lenders have to declare that the loan is additional and would not be made under their normal lending criteria.

collateral), lower fees and interest rates, quicker access to finance and the availability of a larger amount of finance. This may suggest for a small proportion of borrowers (6 per cent), the business may have chose to withhold offering security or offered less security to the bank.

Figure 22 Reasons why unconstrained businesses chose EFG



Finance non-additional businesses might reasonably be considered to be more robust businesses with better prospects for the future, since lenders were offering other options, while EFG finance additional businesses had previously struggled to find borrowing opportunities and could be considered to be riskier propositions with possibly lower future growth prospects. The survey evidence did not support the fact that finance additional businesses performed any better after EFG support. Table 12 shows that finance additional businesses did tend to ask for proportionately slightly more finance related to their sales, while growing by rather less than the non-additional businesses. The small number of businesses reporting they definitely had access to other finance had grown by the largest amount.

Table 12 Finance additionality and business performance

	Sales change 2009-12	Loan value/sales (%)
Yes definitely	54.8%	11.8%
Yes probably	14.9%	7.7%
Possibly	31.8%	8.1%
Probably not	25.1%	7.6%
Definitely not	36.9%	8.9%
Finance additional	24.5%	8.7%
Finance non-additional	32.8%	8.3%

Reasons given for taking out an EFG loan

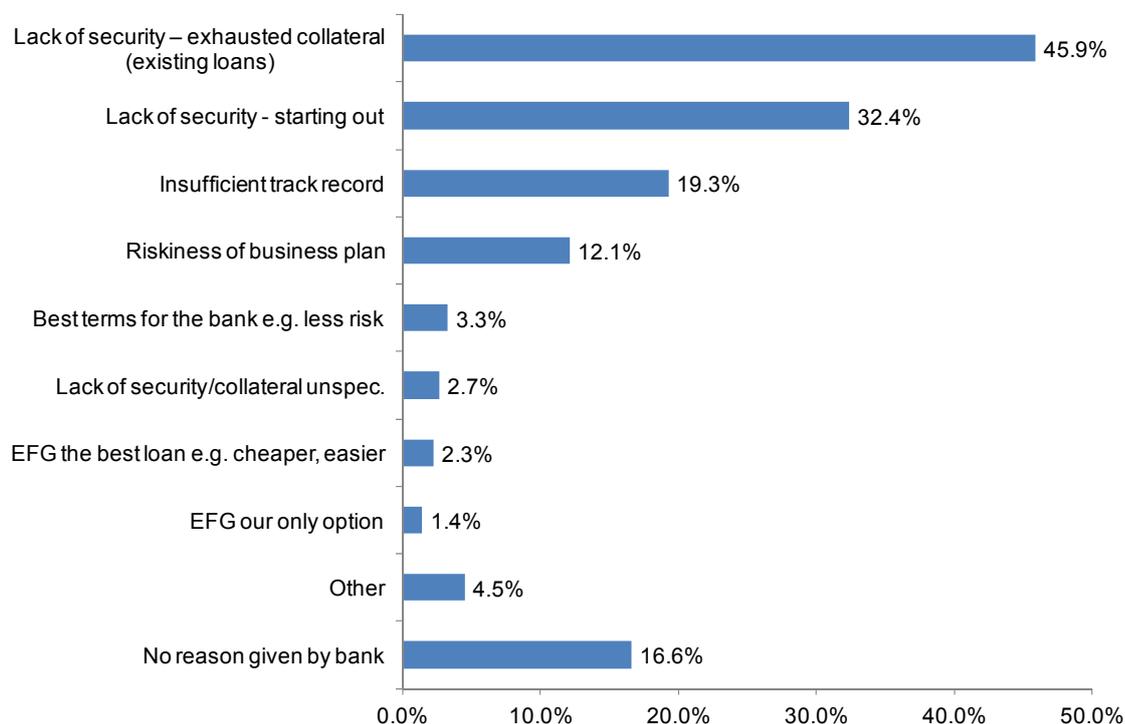
Figure 23 records interviewee recollection of the reasons banks offered for EFG being appropriate. Nearly one sixth of businesses indicated that no reason was forthcoming. Lenders are required to explain the EFG scheme to applicants and provide applicants with written details, including information on the additional premium paid to BIS.⁴⁰ However, the majority of surveyed users indicated that one or more reasons were cited by the bank to explain why they represented a higher category of risk to the lender. Nearly one half of the businesses indicated that the reason was a lack of security, in that they had exhausted their collateral on existing loans. One third of the businesses indicated a lack of security at starting out. Quite naturally, some of the younger businesses were told they lacked sufficient security for mainstream lending, while older businesses were often directed towards EFG because they had already exhausted their collateral due to existing loans. Insufficient track record was mentioned by nearly one in five businesses and the riskiness of the business plan was reported by 12%. The most striking difference was for the type of sector and riskiness of the sector, where *other businesses*⁴¹ (42%) were very much more likely to have been offered this explanation than *production* (18%) and *services* (20%). Overall, the reasons were more closely associated with collateral, rather than the riskiness of the trading position of the business and its future prospects.

An investigation into the actual interest rates corroborates these results to a degree. Those businesses that may be regarded as non-additional had an interest rate of 5.50 per cent, compared with 5.46 per cent for the finance additional businesses. This marginal difference suggests that banks regard the prospects of both groups with the same degree of risk. A more telling difference emerged from the results associated with the availability of collateral. The non-additional businesses indicated that they had collateral in 62 per cent of cases, compared with just 47 per cent of finance additional businesses. In total the non-additional business had in total nearly three times more collateral than they needed, compared with just 36 per cent of finance additional businesses.

⁴⁰ This information is produced automatically through the EFG Portal which is used to process EFG loan applications.

⁴¹ Other businesses covered the Standard Industrial Classifications **A** (Agriculture, Forestry and Fishing) and **F** (Construction)

Figure 23 Reasons offered by bank for taking out an EFG loan



Taken together, all the rows of Figure 23 would seem to indicate that banks had good reason to offer EFG, regarding the surveyed users as ideal candidates for a scheme targeted at businesses that posed slightly greater risks than might be considered under normal lending.

Availability of collateral

In addition to considering the headline result of finance additionality, there is value in exploring the underlying collateral and track record to understand whether EFG and other borrowers were distinctively different in this regard.

The proportion of EFG businesses with collateral was significantly lower, with only 49 per cent, compared with 78 per cent of other borrowers. Figure 24 shows the amount of collateral available from EFG businesses was also significantly lower. EFG borrowers were proportionately more likely to only have smaller amounts of collateral, with 20 per cent of EFG borrowers only able to call on amounts up to £25,000, whereas for other borrowers just 8 per cent had such a low limit. At the upper end of the distribution there were proportionately fewer EFG borrowers, with just 16 per cent being able to access more than £250,000, compared with 32 per cent of other borrowers.

The value of collateral available is of course only an issue where the value of the loan exceeds the available collateral and such an excess was evident in 53 per cent of EFG borrowers. For those seeking more money than they could guarantee, the amount sought was three times the level of collateral available.

Figure 24 Value of collateral available to borrowers

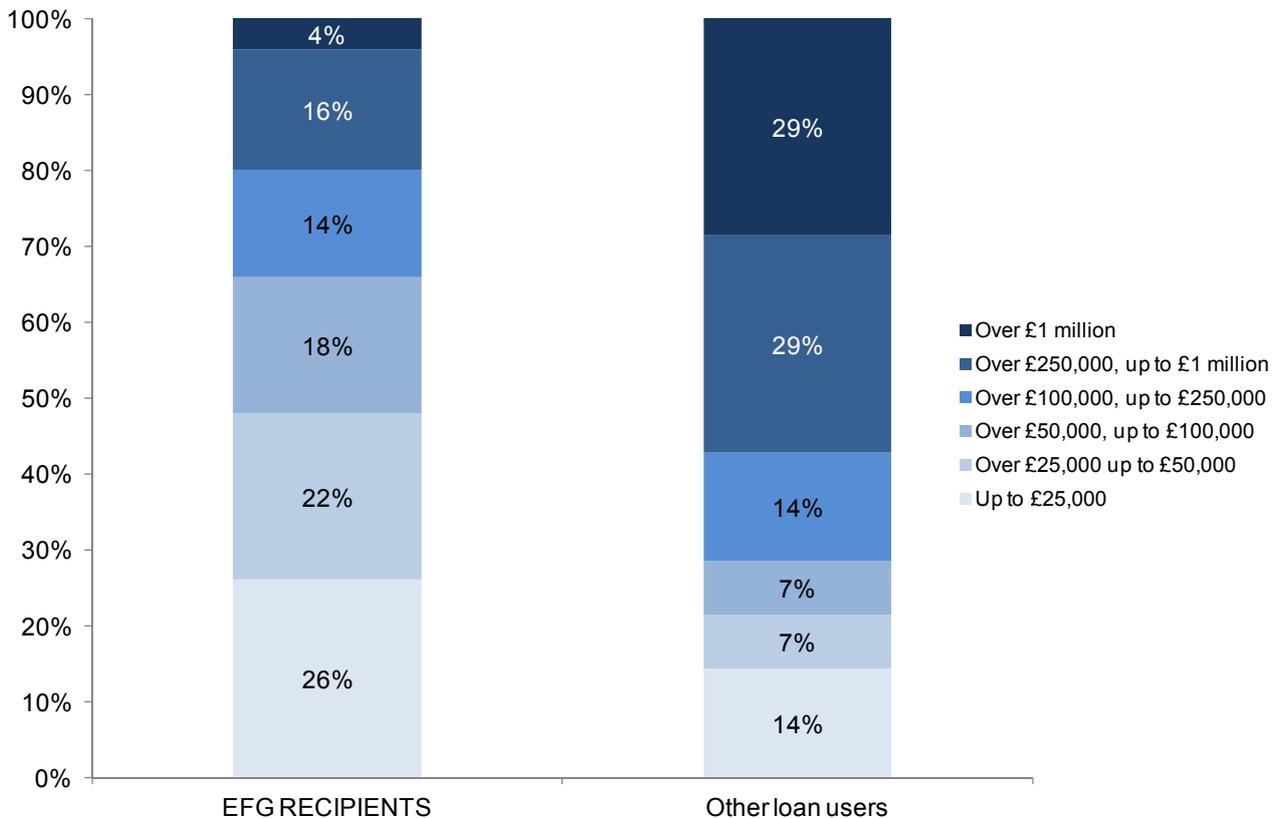


Figure 25 shows the type of collateral available to borrowers, in terms of the proportions of borrowers with that option available to them. The overall pattern is that EFG businesses are much more likely to resort to personal forms of collateral, while other businesses have more business collateral. Nearly 40 per cent of other businesses could offer collateral in the form of business premises, compared to just 20 per cent of EFG borrowers and this difference was statistically significant. Just over one-third of EFG borrowers could provide a form of other personal collateral, compared with just 20 per cent of other businesses and this difference was statistically significant.

Because the first five columns represent multiple categories, a clearer picture is evident by considering whether collateral was exclusively business, personal or both possibilities. Two thirds of other loan businesses would resort to business collateral only, while this figure was just under 30 per cent for EFG borrowers. More than half (55 per cent) of EFG borrowers could only offer personal collateral, compared with just over one-quarter (27 per cent) of other businesses. More than twice as many EFG borrowers (16 per cent) could provide business and personal collateral (7 per cent). Interpreting the figures it is likely that the difference arises not from the fact that other borrowers lack personal collateral, simply that since they are able to provide business collateral relatively easily, there is no need to resort to personal collateral. For EFG borrowers the story is also clear, but here there are so few businesses with sufficient business collateral, that there is nothing left but to offer personal collateral.

Figure 25 Type of collateral available to borrowers

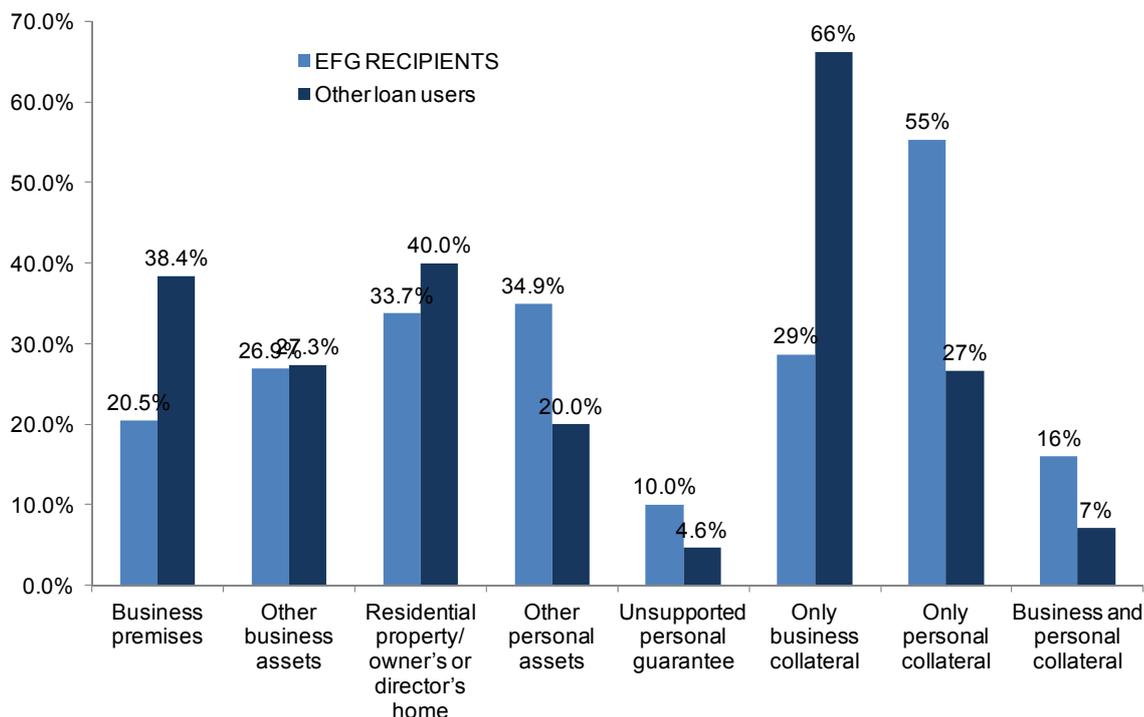
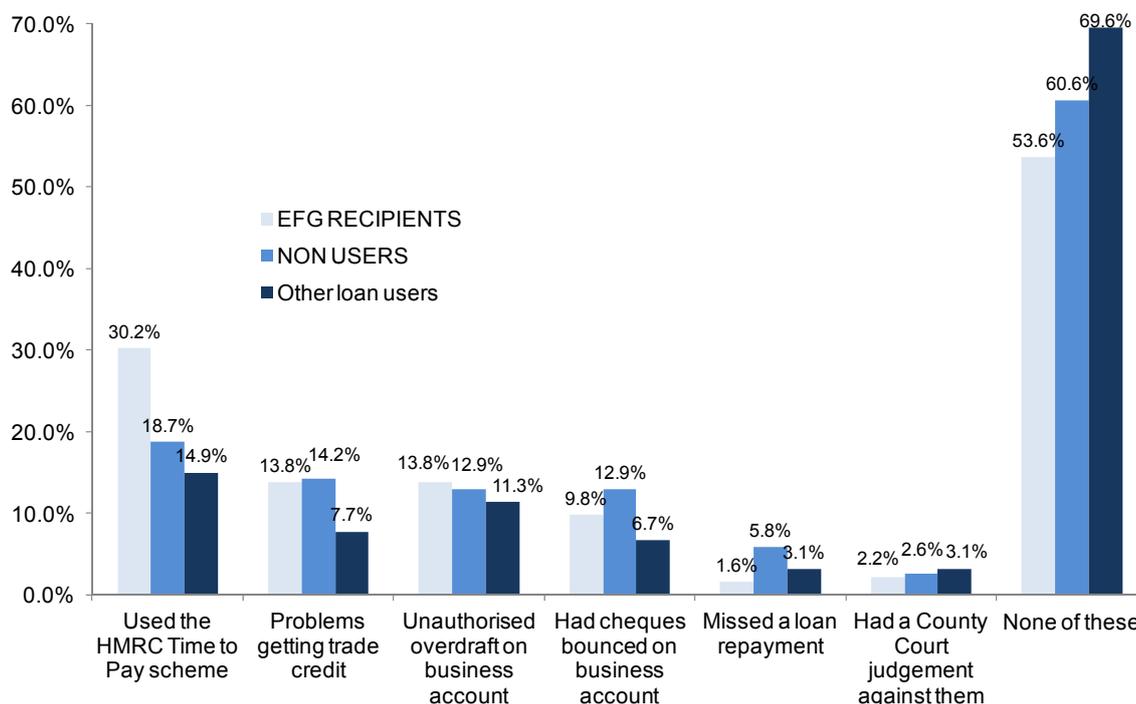


Figure 26 shows different aspects of business practice that indicate pressure on cashflow and ability to meet demands from creditors. Nearly half of EFG businesses (46 per cent) had at least one such difficulty, compared with just over 30 per cent for other borrowers and 39 per cent for other SMEs. For many of the individual factors EFG is no worse than other businesses and most of the overall difference stems from a greater use of HMRC time to pay scheme.⁴²

⁴² It is unclear what is driving this result. Whilst it is possible that the using time to pay scheme may have highlighted the existence of EFG, it is probably explained by factors that influence the use of the Time to pay scheme also influence the likelihood of using EFG, e.g. use of accountants.

Figure 26 Credit worthiness of businesses

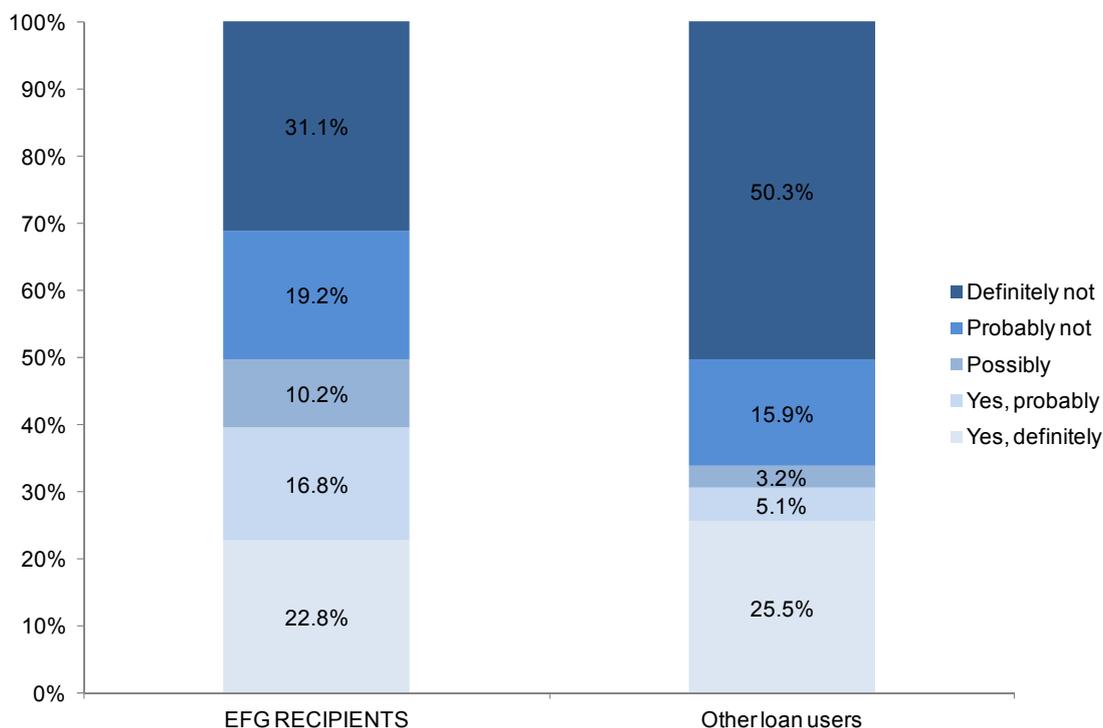


4.2 Project additionality

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. Figure 27 shows that a majority of EFG borrowers and other borrowers would have not proceeded with their project in the absence of their loan. Over 30 per cent of EFG borrowers would have definitely not have proceeded and a further one in five of EFG borrowers would probably not have proceeded. This compares with just over half of other borrowers not proceeding without their loan and one in six probably not proceeding. These results are similar to the SFLG study, but with a more determined guarantee scheme group that would still attempt to progress their projects and a more wary control group of other borrowers.

The only difference by type of business was by sector, where businesses in the “*other*” sector were more confident, while production and especially *services* businesses were more restrained and cautious. Only 18 per cent of other businesses would have not gone ahead, compared with 44 per cent of production businesses and 55 per cent of *service* businesses.

Figure 27 Project additionality – would you have gone ahead?



Project additionality: Timing

EFG is helping businesses to start their investments earlier. For those businesses that would have started their projects in the absence of funding they were asked about the timing of their project and whether they would have started sooner or later. Without EFG nearly half of businesses projects would have been carried out later. Amongst all borrowing businesses, only three per cent would have gone ahead with their project at an earlier date in the absence of their loan, 49 per cent at a later date, and 49 per cent at the same time. Comparison businesses would appear to have been less deterred in terms of timing, but it is to be remembered that fewer of these businesses would have chosen to progress at all.

Table 13 When would you have started your project?

	EFG RECIPIENTS	Other loan users
Earlier	2.5%	0.0%
Later	49.1%	36.5%
At the same time	48.5%	63.5%

Project additionality: Scale

Businesses may also have looked to change the scale of their business plans if they had not been able to secure EFG finance. The EFG Early Assessment, therefore, in addition to questions about timing, asked those respondents who indicated they would have gone ahead with their original business plans in the absence of EFG about how they thought it would have impacted on the scale of these plans.

Many respondents indicated that they would have found it difficult, if they still planned to move forward, to reduce the scale of their investment – for example, those intending to

buy an existing business or expand their premises – while others would have found this less of a challenge. This is reflected in the results shown in Table 14. Respondents were equally split between those who would have endeavoured to maintain their investment plan at the same scale as previously planned, and those who would have reduced the scale. Very few would have increased the scale of investment. Of those who would have reduced the scale of their investment, over 40 per cent would have reduced it by 25 per cent or more, indicating that EFG facilitated substantially higher levels of investment.

Table 14 Changes to investment plans in the absence of EFG

Change to scale of plan	% respondents
Larger	2.6
The same scale	48.7
Smaller	48.7 ⁴³
Up to 10% smaller	4.6
11-25% smaller	11.8
26-50% smaller	14.5
51-75% smaller	3.9
More than 75%	2.6

Additionality: current scale of business operations

Without EFG funding, some businesses may have been forced to decrease the overall scale of their current operations, in addition to cutting any investment plans. The majority of respondents (73 per cent) indicated that this was indeed the case, with around 20 per cent of all businesses reporting that the scale of their operations would have been at least halved (Table 15).

Table 15 Change in scale of current operations in the absence of EFG

Change in scale of operations	% respondents
No change	27.5
Up to 10 % smaller	14.1
11-25% smaller	16.6
26-50% smaller	19.2
51-75% smaller	6.4
More than 75%	16.3

4.3 Conclusion

On balance, the findings suggest that the majority of EFG borrowing is finance additional to that which would have occurred in the absence of the scheme, and, for the most part, EFG 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 simply being unable to offer

⁴³ 48.7% of responses indicated smaller plans, but not all could say by how much (only 37.4% could provide an estimate).

security is much more prevalent than lack of track record as a reason for using the scheme.

- Finance additionality was high, with only 18.4 per cent of EFG borrowers able to find alternative forms of finance. However, of those with alternative sources of funding available many of these businesses chose EFG because it was preferential to a conventional loan, offering better terms and conditions, or demanding less security.
- EFG businesses tended to have less collateral available to them than other borrowers. The median collateral for EFG was between £50,000 -£100,000, compared with £250,000 -£500,000 for other borrowers. EFG borrowers were also more constrained in terms of the source of available capital, with 29 per cent able to offer business assets as collateral, while 66 per cent of other borrowers had business assets available as collateral.

5 Impact of EFG on Business Performance

5.1 Introduction

In this section of the report evidence is presented on the benefits of the scheme on individual business performance. This includes the prevalence of self-reported benefits in the sub-samples, as well as the more objective measures of actual business performance (sales, employment, productivity, exports and profit).

For the first part of the analysis (Section 5.1) our discussion concerns the differences between EFG borrowers and other borrowers, in terms of the extent to which they attribute changes in their business to their EFG loan. Respondents were asked a series of eight related questions:

- Impact on employment
- Impact on sales
- Impact on survival
- Introduction of new or improved products or services
- Increased productivity (value added per employee)
- Introduction of new or improved processes
- Reduced costs
- Starting or increasing exporting

This is followed by other questions which are also self-reported, but are phrased differently to elicit more particular responses concerning **effectiveness**, rather than recording the prevalence of phenomena. Accordingly they are ordinal variables, giving a sense of how fully progress has been made towards improvements in assisted businesses, with responses varying from low to high intensity. The first three measures are again drawing comparisons between borrowers, while the latter three make comparisons between both groups of borrowers and the unassisted control group.

- Contribution of loan to existing business outcomes
- Contribution of loan to future growth prospects
- Contribution of loan to survival prospects
- Introduced new or improved products or services

- Introduction of new processes
- Future growth intentions

This is followed by a second type of analysis which assesses changes in key business metrics. Our survey recorded a baseline position in the year of receiving the loan (2009) and a follow-up three years later (2012). These reported figures are based on observed differences between the two periods and give an accurate impression of the changes among the subsamples, rather than being based on more subjective self-reported measures. The variables we will consider here are:

- Employment change (2009 to 2012)
- Sales turnover change (2009 to 2012)
- Productivity change (2009 to 2012)
- Profitability and change in profits (2009 to 2012)
- Likelihood of exporting and export change (2009 to 2012)

Within each of these respective sections (5.3.1-5.3.5), the weighted descriptive statistics are reported first, followed by econometric analysis to assess whether obtaining an EFG loan explained these changes.

5.2 Self-reported business benefits

Figure 28 shows the extent to which loan recipients believed that they had experienced benefits directly as a result of having received their loans. The immediate pattern that emerges is that a greater proportion of EFG recipients report benefits compared with other loan users. As well as there being observable differences, some were also statistically significant. Changes to employment, sales, business survival and exporting all exhibit a significant difference between the EFG loan group and the comparison group of other borrowers.

Four out of five EFG businesses report experiencing some benefits in terms of increased employment, sales, as well as enabling the business to survive. For other loan recipients the figures are nearly ten percentage points lower. For both groups these three measures stood clear as the most prevalent self-reported benefits. New or improved products or services were referred to by just over half of respondents, while increased productivity was mentioned by just under half. Four out of ten indicated that they had introduced new or improved processes as a result of the loan. Less than one third of businesses reported that they had reduced costs as a result of the loan. Only a small minority of businesses reported increases in exporting.

Figure 28 Frequencies of self-reported benefits

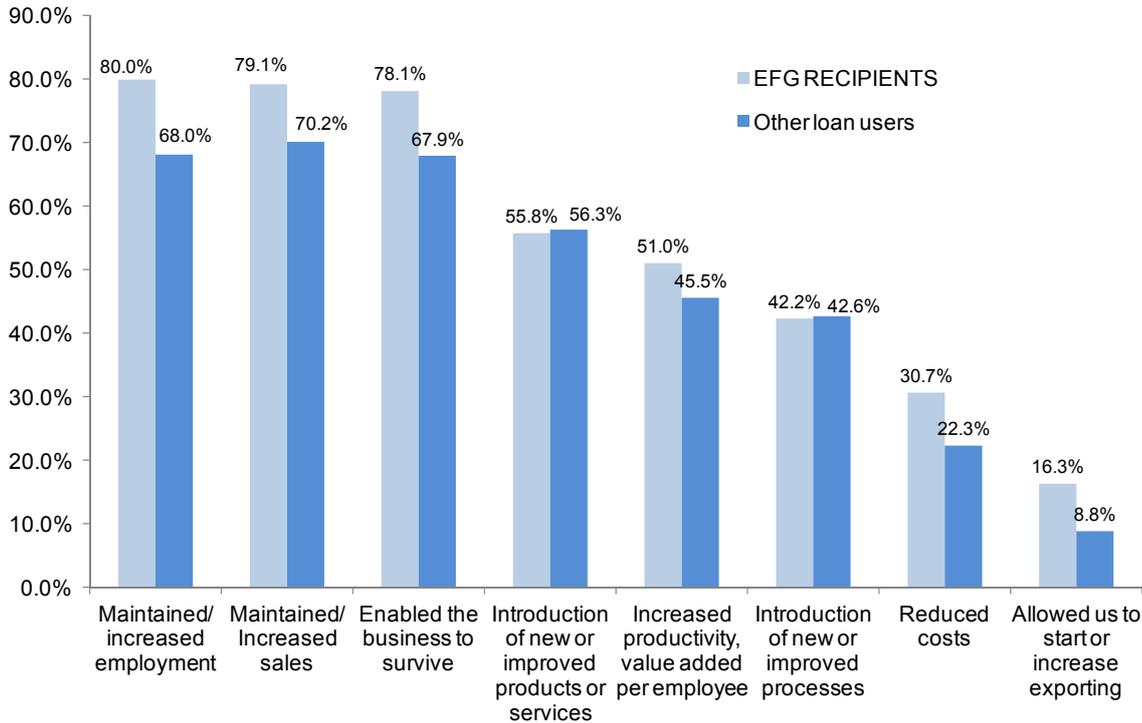
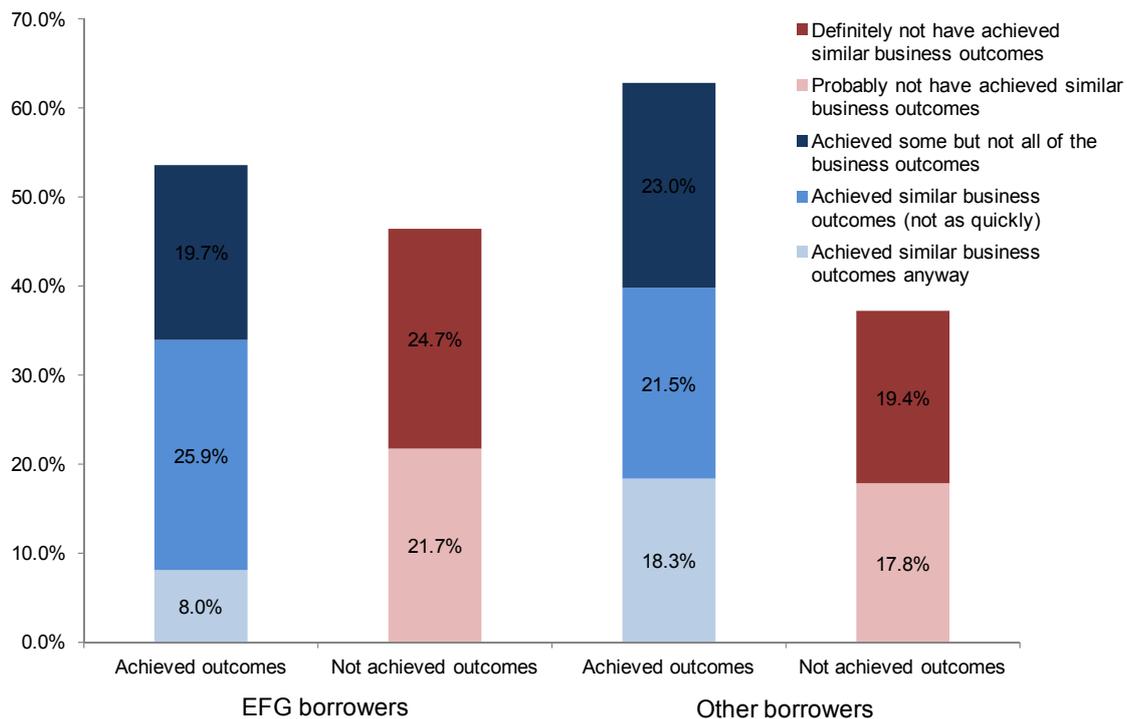


Figure 29 shows EFG borrowers were less than 10 percentage points likely to suggest they would have achieved similar outcomes as quickly. The cumulative percentage of outcomes that would have been achieved for EFG was 54%, compared with 63% for other borrowers suggesting EFG enabled proportionately more outcomes than would have otherwise been possible.

Figure 29 Contribution of loan to business outcomes



There was no observable difference between EFG and other borrowers, in terms of substantial differences in any of the three responses. More than 60% of both types of borrowers attributed improved growth prospects to the loan, while just 5% and 3% of EFG and other borrowers, respectively, believed their prospects had worsened.

Table 16 Contribution of loan to future growth prospects (post 2009)

	Improved	No change	Worsened
EFG RECIPIENTS	61.8%	33.1%	5.1%
Other loan users	65.1%	31.8%	3.1%

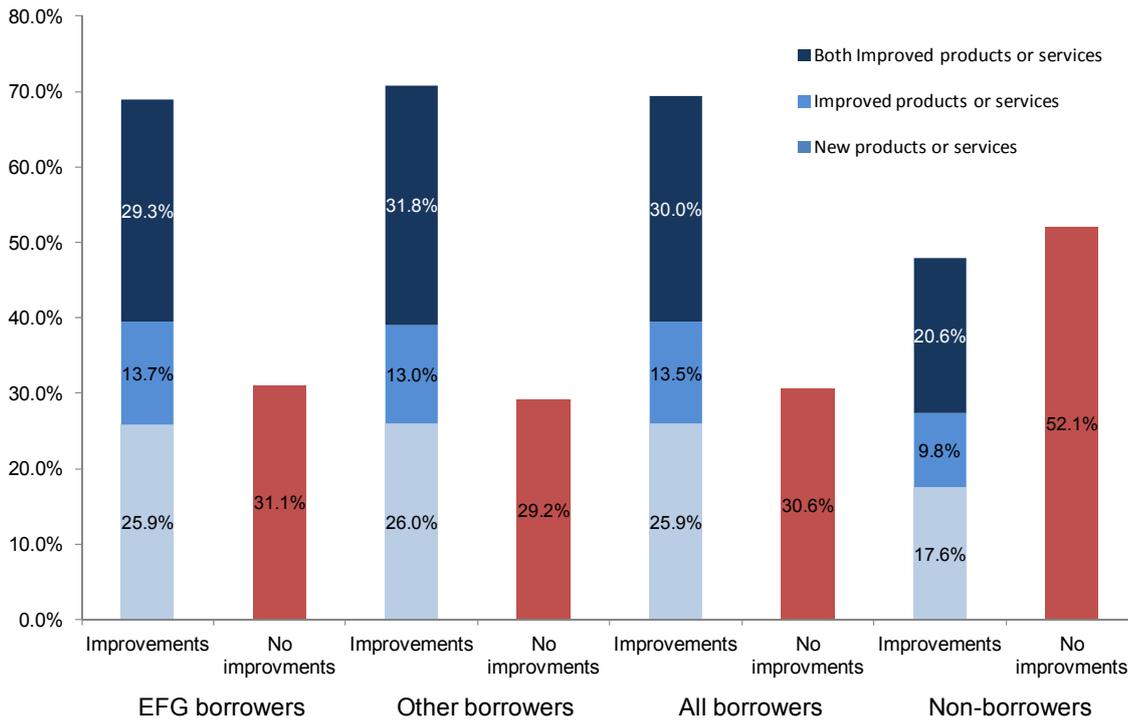
Both sets of results from EFG borrowers and other borrowers suggest that loans had contributed to better survival in 67% and 60% of cases, respectively. Survival prospects for EFG had improved more than for other borrowers. Only a minority of businesses believed that their prospects had worsened. These results corroborate the findings shown in Figure 28, albeit that a differently worded question yielded slightly lower proportions of support for EFG as having helped survival.

Table 17 Contribution of loan to survival prospects (post 2009)

	Improved	No change	Worsened
EFG RECIPIENTS	66.8%	28.1%	5.1%
Other loan users	59.9%	36.4%	3.7%

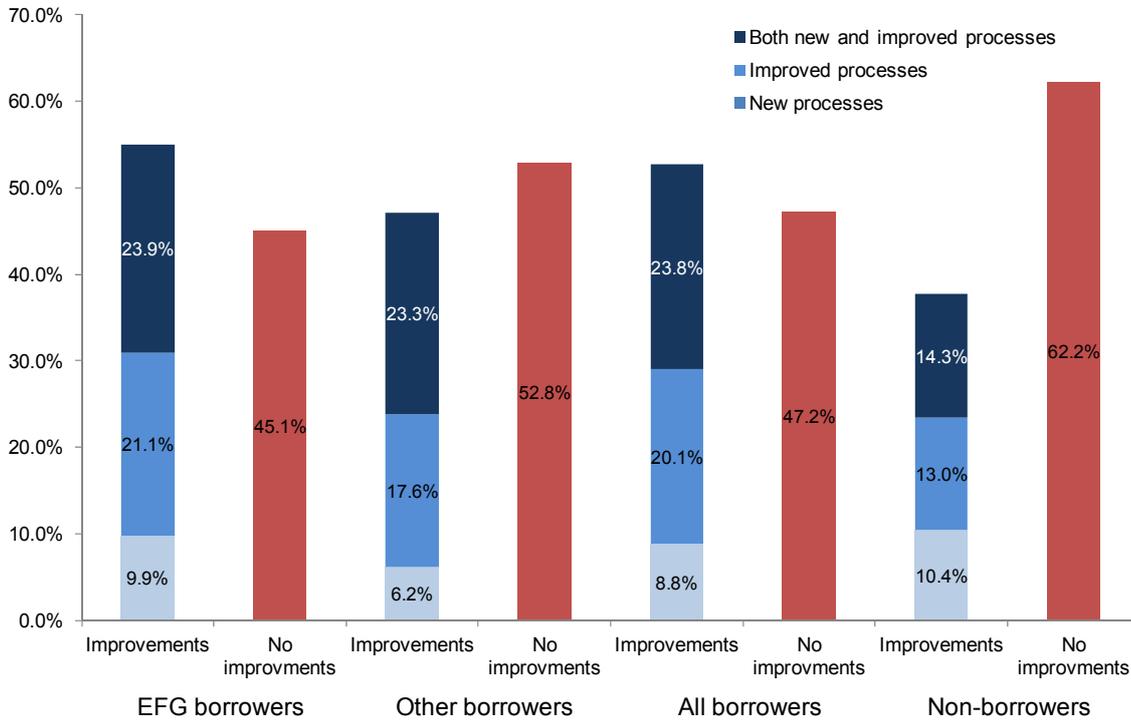
All Borrowing businesses were more likely to introduce new or improved products and services. Only 48% of non-borrowers had introduced new products and services, compared with nearly 70% of borrowers. Just over one quarter (26%) of borrowing businesses had introduced new products or services, compared with 18% of non-borrowers. There was only a marginal difference (four percentage points) between borrowers and non-borrowers in terms of improved products and services. For both improved products and services there was a nine percentage point difference between borrowers and non-borrowers. There was little to separate borrowers from non-borrowers with regard to the introduction of new products or services.

Figure 30 Introduced new or improved products or services



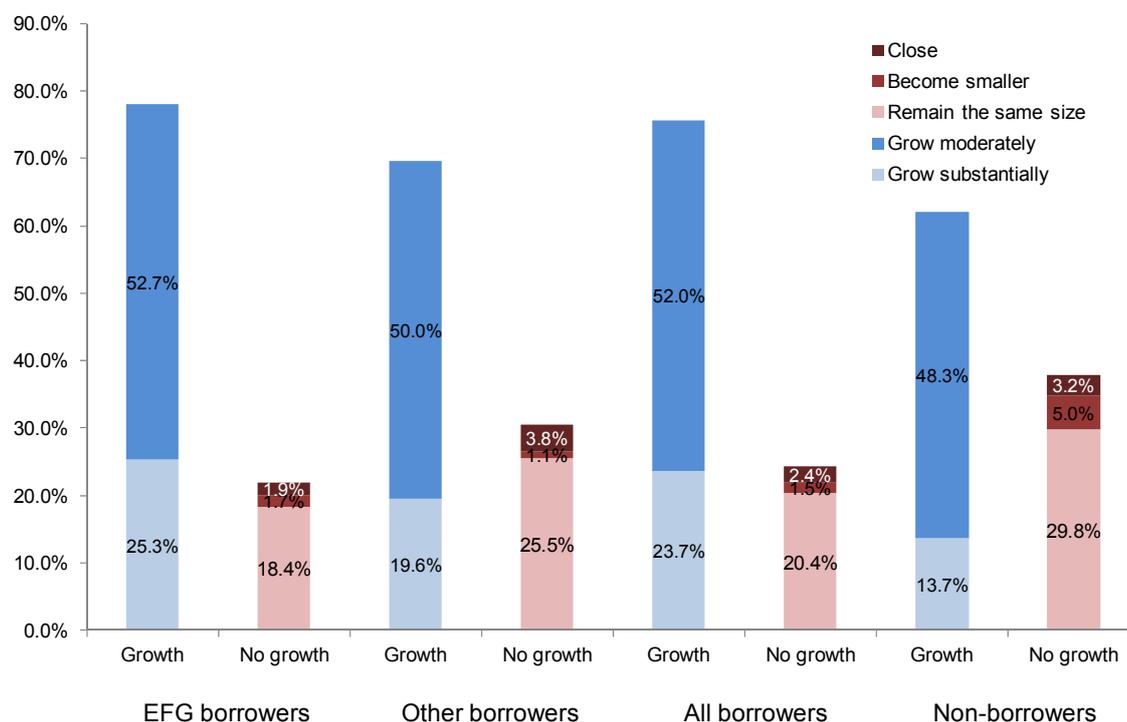
Both types of borrowing businesses were more likely to introduce new and improved processes into their businesses. More than half of borrowers had introduced new products or services into their businesses, compared with just 38% of non-borrowers. Few businesses (10 per cent or less) from any group indicated that they had only introduced new processes and it was rather more likely that they had introduced improved processes. While there are clearly demonstrable benefits to borrowing, the EFG exhibit a higher propensity (seven percentage points) to introduce new or improved processes than other borrowers.

Figure 31 Introduced new or improved processes



Borrowing businesses were more likely to state that they had growth objectives for the future. Nearly three quarters of borrowers indicated that they wanted to grow their business in the future, compared with only half of non-borrowers. EFG borrowers are rather more likely to suggest growth than other borrowers, particularly substantial growth. This question only asks about future growth, rather than making any attribution of these objectives to receiving the loan and consequently it may not be possible to say that this growth orientation is the result of receiving EFG.

Figure 32 Growth objectives (post 2012)



5.3 Economic performance

Having considered how the EFG group compared to the borrowing comparison group on a variety of indicators of loan use, the focus of this section is on more tangible measures of business performance, albeit based on responses from a telephone survey rather than directly from filed accounts. The different metrics are first described and then analysed. For all these measures there are both growing and declining businesses and the descriptive figures show both, as well as the net position. The descriptive statistics comment on the entire survey sample and do so for the purposes of comparison with the other two groups. The findings use a three way weight to match EFG recipients against the comparison groups. Section 7 should be consulted for information regarding the entire 2009 cohort excluding deadweight and displacing businesses.

Table 18 - Table 22 show breakdowns of change in some detail, reporting on the relative frequency of growth among the sample. Actual change is disaggregated into increases and decreases to illustrate the scale of growth and contraction and then the net change is shown. The relative change over 2009-2012 is also shown, with 2009 figures as the denominator.

In this section the analysis is also broadened to include a second comparison group of businesses who had not accessed any conventional bank loans. An econometric model is used to determine the extent to which EFG compares with both these groups in terms of performance. In addition to a descriptive analysis, a regression was performed for each measure of performance change (2009-12). This analysis tests whether a number of business and owner characteristics were statistically significant and whether they explained the performance change. Business characteristics included the size, sector, age of business, and social enterprise status, while owner characteristics were the age of owner and their years of experience and whether they were degree educated. Holding all these factors constant allows an assessment of the net impact of EFG to be made, as

otherwise some of the performance differences could be explained by the different sector or age characteristics of the EFG recipient business.

Summary of impact

Controlling for business characteristics, **no significant differences between EFG and other borrowers or non-borrowing businesses for any of the measures was found.** Therefore, there is no evidence of EFG businesses being of a lower (or higher) quality than the back ground population of businesses.

5.3.1 Employment change (2009-2012)⁴⁴

Table 18 shows the descriptive statistics for employment change across the period 2009-2012. The proportion of businesses increasing employment over the period was more than two thirds for all borrowers, while only 56 per cent for non-borrowers. Other loan users appeared to fare slightly better than EFG users, with more respondents (five percentage points) indicating employment growth.

Among businesses with employment gains, EFG businesses performed better than other businesses, increasing their employment base by 60 per cent, compared with an increase of less than half for other businesses. However, this was compensated for by slightly larger losses among those businesses losing workers, such that the net position saw employment growth of just over 20 per cent for EFG recipients, compared with more than 30 per cent for other borrowers, both outperforming non-borrowers who recorded growth of just 10 per cent.

Table 18 Employment change (2009-2012)

	EFG recipients	Other loan users	Non-borrowers
Proportion businesses increasing	67.4	73.0	55.8
Proportion same/decreasing	32.6	27.0	44.2
Average increase % (weighted)	60.1	48.6	46.6
Average decrease % (weighted)	-32.9	-26.3	-28.0
Net change % (weighted)	21.2	31.3	10.6
Average employment change (number of employees)	3.0	8.4	2.1

The regression (see Appendix 1) showed that there are no differences between the EFG recipients, other loan users and the non-borrowers in terms of employment change (2009-2012), nor was the size of the loan important in explaining employment change. However, the purpose of loan finance was a significant variable in explaining employment change. Loans granted for investment purposes grew by 20 per cent more than businesses seeking a loan for working capital.

Additionally, a number of business and ownership characteristics were statistically significant in explaining employment change. In particular younger businesses grew faster (those aged less than four years grew 24 per cent faster than those older than four years)

⁴⁴ Although these increases appear large during a period of negative and constrained economic growth between 2009 and 2012, they are not including employment (and sales) that are lost from businesses that have closed down. It is worth noting that although the relative change is substantial, the absolute change is relatively small, with EFG businesses only gaining three additional employees on average.

and businesses with younger owners grew faster.⁴⁵ Owners with degrees were also associated with higher growth (degree holding owners grew by more than 28 per cent, compared with owners without degrees).

5.3.2 Sales change

Table 19 shows that sales change had similarly high proportions of businesses improving as for employment in each subsample. The distribution also follows a similar pattern, with non-borrowers reporting the lowest proportion (60 per cent), followed by EFG recipients (72 per cent) and other borrowers (78 per cent).

The scale of sales change also follows the same pattern as for employment, helping to confirm the robustness of these findings. Growing EFG businesses increased their sales by nearly 70 per cent, while other businesses grew their sales by roughly 50 per cent. However, EFG fared slightly worse in terms of lost sales and the net position showed very little difference between EFG borrowers and other borrowers, although both were nearly ten percentage points ahead of non-borrowers.

Table 19 Sales change (2009-2012)

	EFG recipients	Other loan users	Non-borrowers
Proportion businesses increasing	71.7	78.2	60.7
Proportion same/decreasing	28.3	21.8	39.3
Average increase % (weighted)	69.1	52.4	48.7
Average decrease % (weighted)	-24.5	-20.3	-20.3
Net change % (weighted)	33.4	35.2	24.7
Average Sales change	£402,000	£525,000	£379,000

The regression model (see Appendix 1) showed no differences between the EFG recipients, other loan users and the non-borrowers in terms of sales change (2009-2012), nor was the size of the loan important in explaining changes in sales. However, the purpose of loan finance was a significant variable in explaining sales change. Loans granted for investment purposes grew by 22 per cent more than businesses seeking a loan for working capital.

Additionally, a number of business and ownership characteristics were statistically significant in explaining employment change. In particular younger businesses grew faster (those aged less than four years grew 41 per cent faster than those older than four years) and businesses with a younger owner grew faster. Owners with degrees were also associated with higher growth (degree holding owners grew by more than 16 per cent, compared with owners without degrees).

5.3.3 Labour productivity growth⁴⁶

A majority of businesses have experienced increases in productivity between 2009 and 2012 for each subsample, with a slightly lower proportion of EFG borrowers reporting productivity growth, compared with other businesses. Productivity gains themselves are

⁴⁵ All older owner-manager age groups reported a negative co-efficient, with those in the 45-54 age group particularly less disposed to growth.

⁴⁶ This study uses a crude measure of labour productivity estimated by dividing sales by number of employees.

most substantial among the EFG group (more than £10,000 per employee per business) higher than other borrowers at -£13,000 per employee per business. While employment change among other borrowers was strong, sales growth was relatively weak and consequently productivity in some other borrowers had fallen over time.

Table 20 Labour productivity change (2009-2012)

	EFG recipients	Other loan users	Non-borrowers
Proportion businesses increasing	55.1	60.7	63.9
Proportion same/decreasing	44.9	39.3	36.1
Average increase % (weighted)	63.3	26.8	50.3
Average decrease % (weighted)	-36.2	-28.1	-35.9
Net change % (weighted)	8.5	-9.7	7.3
Average productivity change	£10,500	-£13,200	£8,000

The regression analysis showed only one variable is statistically significant and that is the age of the business. Younger businesses saw a larger change in productivity compared to older businesses. Businesses aged more than 4 years old in 2009 had a £29,189 lower change in productivity compared to younger businesses aged up to 4 years old. There are also no differences between the EFG recipients, other loan users and the non-borrowers in terms of the labour productivity levels (2009-2012). This indicates **that there is no evidence that EFG businesses are less productive than comparable borrowing group of businesses in 2012 or 2009**. This is an important finding as it suggests EFG is not being used to support inferior quality businesses.

5.3.4 Exporting intensity

The first row of Table 21 shows the proportion of businesses exporting in 2012, revealing very little difference between EFG businesses and others. Comparison between subsamples is hampered by a lack of observations in 2009 for other borrowers. However, there are rather more observations for EFG businesses and non-borrowers, making these estimates more reliable.

EFG exporters did appear to have improved very substantially, with two-thirds improving and the relative change in exports for EFG businesses as a whole was an improvement of 55 per cent.

Table 21 Changes in exporting (2009-2012)

	EFG recipients	Other loan users *	Non-borrowers
% exporters (2012)	23.6%	-	20.1%
Proportion businesses increasing	68.4%	-	50.0%
Proportion same/decreasing	31.6%	-	50.0%
Average increase % (weighted)	276.4	-	207.7
Average decrease % (weighted)	-78.9	-	56.2
Net change % (weighted)	55.1	-	40.0
Average exports change	£279,000	-	£227,000

* Fewer than five observations

The regression analysis indicated two variables are statistically significant: size and the dummy variable of owner managers aged 45 to 54 years old. Owner managers aged 45 to 54 years old saw a £650,689 lower change in exporting intensity compared to those owner

managers aged up to 44 years old. In other words, the owner-managers aged 45 to 54 years old performed worse than the younger owner-managers. A unit change in size saw a £46,261 change in exporting. Thus, the larger the size of the firm is associated with greater positive changes in exporting. There are no differences between the EFG recipients, other loan users and the non-borrowers in terms of change in exporting (2009-2012).

5.3.5 Profitability

Three quarters of businesses reported a profit in 2012, with a profit ratio of approximately 10 per cent. More EFG businesses had improved profits than other borrowers or non-borrowers. The absolute and relative increase in profits was one area where other businesses outperformed EFG, growing average profit and increasing it more compared with the 2009 baseline.

Table 22 Changes in profitability (2009-2012)

	EFG recipients	Other loan users	Non-borrowers
% reporting profit (2012)	76.0%	71.7%	76.5%
profit ratio ⁴⁷ (2012)	10.7%	8.7%	12.8%
Proportion businesses increasing	61.3	51.5	43.1
Proportion same/decreasing	38.7	48.5	56.9
Average increase % (weighted)	1427	367	244
Average decrease % (weighted)	-147	-166	-366
Net change % (weighted)	127	235	-128
Average profits change	£48,000	£72,000	£61,000

Only one variable is statistically significant in explaining change in profitability with the regression model. Owner managers aged 45 to 54 years old reported a £121,033 lower change in profits compared to owner-managers aged up to 44 years old. There are no differences between the EFG recipients, other loan users and the non-borrowers in terms of the change in profitability (2009-2012).

5.4 Conclusion

The analysis covering the self-reported descriptions of impact suggested EFG users believed they had benefitted more from their investment of finance than other borrowers. A greater proportion of EFG users indicated they believed the loan had contributed to increased employment, sales and the chances of survival, compared with non-borrowers, although slightly lower than for other borrowers.

Although the descriptive analysis suggested that there were benefits for EFG over and above non-borrowers, these results proved not to be significant in the econometric models testing for business performance improvements. The returns from EFG loans were generally positive, but in no scenario were they statistically significant, in contrast to the findings from the SFLG study which found there to be benefits shared by all borrowers, including EFG users. The significant explanatory factors for growth were other reasons such as the age of business, age of manager, rather than the source of finance. One policy-relevant finding was that loans for investment were significantly more likely to be

⁴⁷ This figure is the profit ratio (profit divided by turnover) in 2012, rather than changes in the profit ratio.

associated with employment and sales growth, compared with loans primarily used for working capital.

Ultimately these results suggest that EFG users are no different to the comparison groups in terms of performance. Where there may be concern that the scheme is supporting weaker or failing businesses this is not proven by the evidence, although neither can it be seen that lenders are backing superior quality businesses. Where the difference lies is in terms of access to finance, and in particular availability of collateral. It can be considered that EFG is allowing credit constrained businesses to operate on a level playing field with businesses that can access conventional loans due to the availability of collateral. Furthermore, due to the high level of finance additionality (reported in Section 4), EFG can be seen as correcting a market failure, by allowing businesses that may be credit rationed due to lack of collateral to access the finance they need.

6 Exchequer Costs

This section presents the costs to the Exchequer of operating the EFG scheme for the 2009 cohort, based on actual known values (size of the loan fund, number of borrowers, borrowing term, default rates and recovery rates) from BIS Management Information systems. These figures therefore relate to the entire population of EFG borrowers in 2009, rather than an estimate based on the survey sample. The final cost involves the cost of loan defaults and administration of the scheme, offset by the income from the BIS premium. Each of these elements are discussed separately below.

In order to arrive at a cost for the scheme for EFG loans taken out in 2009 we are limiting the analysis to a period up to January 2012, choosing to synchronise the costs presented with the benefits which are derived from the January 2012 survey. Calculations for defaults and the BIS premium income relate to outstanding balances based on loan terms specific to individual borrowers (i.e. 3 months to 10 years).

6.1 Defaults

The main cost to the Government of operating EFG is meeting the cost of loan defaults. Although the government guarantee for individual loans stands at 75 per cent of the outstanding balance, there is a cap on default payments for the scheme set at 9.75 per cent of the lending amount. Once the cap is exceeded then the government is in effect bearing no more of the risk and any further risk falls entirely on lenders. This is a change from the previous SFLG scheme where the government covered 75% of the outstanding balance of all the loans that defaulted.

A cohort of EFG loans drawn down between January and June 2009 was taken from BIS Management Information to assess the proportion defaulting over each quarter of the life of the loan. Figure 33 shows the cumulative survival profile of EFG loans drawn down in this period. From this profile it is possible to estimate the cost of defaulted EFG loans drawn down in 2009, in the first three years of the scheme, up to January 2012 and use these in the cost benefit calculations.⁴⁸

The three lines on the graph show the surviving proportions of the number of EFG loans, their monetary value and the number of SFLG loans over a similar timescale. After 3 years (12 quarters), 72 per cent of the EFG loans had not defaulted, which stands at a higher level than under the SFLG scheme. However, comparability is hampered by the fact that EFG and SFLG operated with different terms and conditions for participating businesses and with different prevailing economic conditions.

Given that the economic conditions are more difficult in the current environment than when SFLG was operating, a lower default rate under EFG is surprising. This may reflect changes in the design of the policy compared to SFLG. For instance, the Government cap on lender default payments may encourage lenders to better target EFG at viable businesses. Alternatively the ability for lenders to take security under an EFG loan may

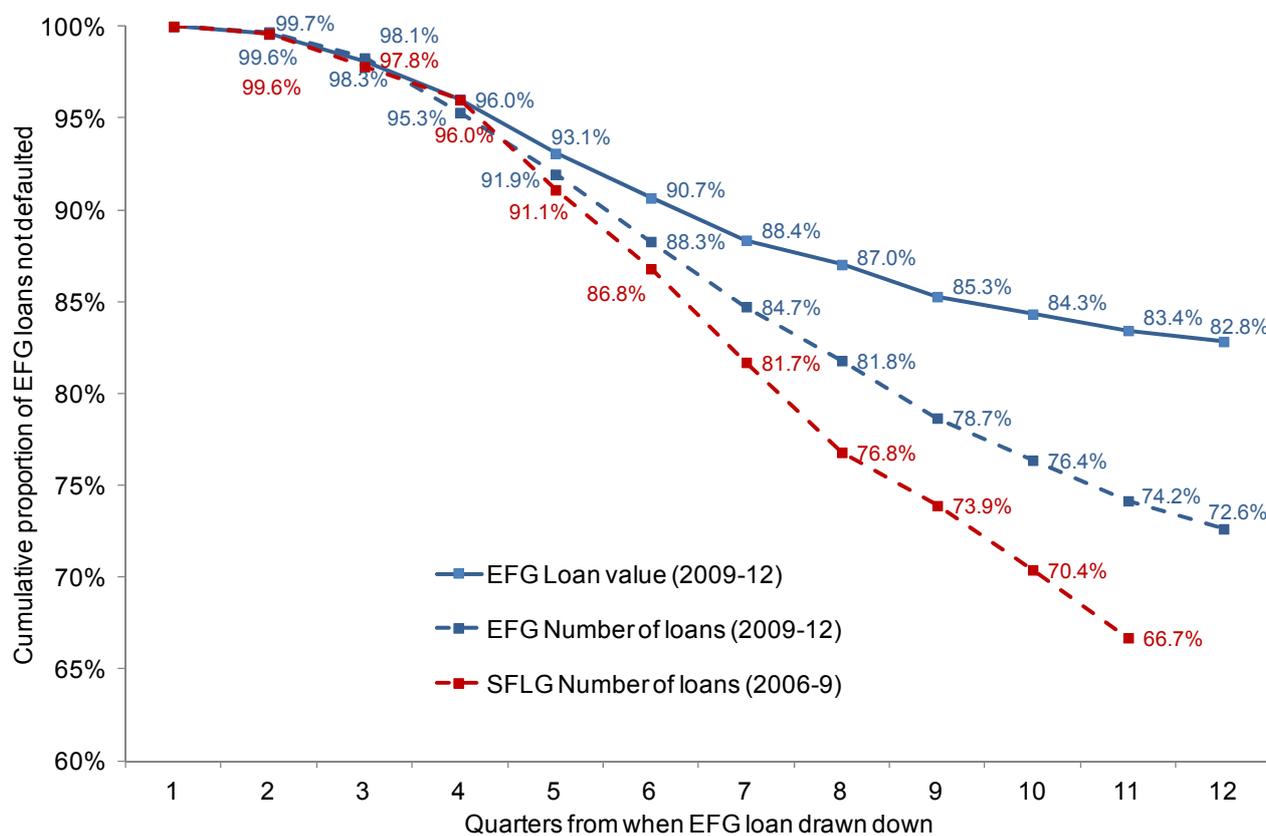
⁴⁸ Because funds were drawn down over a period of six quarters (January-March 2010 to April-June 2011), the presentation of costs includes eight quarters of information, although these timings are not synchronised.

also help to discourage businesses from defaulting.⁴⁹ However, despite a lower default rate than by historical standards it is clear that EFG default rates are considerably higher than commercial SME lending and represent lending to riskier businesses. Whilst it is difficult to get comparable data on commercial loan default rates, it is suggested that, typical default rates on secured lending are less than 3% on a corporate loan book, and slightly higher on loans to SMEs at around 4%.⁵⁰

A more accurate picture of the financial liability of defaults comes from focusing on the monetary value of defaults. The fact that there are proportionately lower defaults in terms of monetary value than the numbers of loans indicates that it is smaller loans that are defaulting.

The estimated nominal gross default cost of the EFG loans drawn down in 2009 that did not survive until January 2012 is £104.2m, with government exposure to 75 per cent of this amount being £78.1m, but capped at £65.3m.⁵¹

Figure 33 EFG Loan survival profile



Source: BIS Management Data

There are also some administration costs represented by the management of the scheme by Capital for Enterprise Ltd (CfEL).⁵² These costs are recurrent for every year for the

⁴⁹ SFLG default rates were also higher when the five year rule was in operation, which excluded older businesses from being able to use SFLG.

⁵⁰ Graham Review of the Small Firms Loan Guarantee Scheme Interim Report 2004

⁵¹ The Government guarantee covers 75% of the value of the remaining loan value, capped at a level of 9.75% of the aggregate total from all borrowers.

⁵² CfEL is the arms length body responsible for delivering EFG on behalf of BIS.

whole of the scheme and as such each year represents the costs of that cohort. It is estimated that the 2009 cohort incurred administration costs of around £800,000 over the life of the EFG loan. This is made up of Capital for Enterprise (CfEL) staff costs (including wages, pensions, employer National Insurance Contributions and other staff costs including training, travel and subsistence), IT, building, legal costs and also costs in operating the portal required for delivering the scheme.

6.2 Recoveries and BIS premium

Not all loan defaults necessarily represent the full value of their outstanding balance written off and in some cases it is possible to recover some or all of the outstanding funds. Recoveries and security realisations are attempted by banks **before** an EFG default claim is submitted to BIS. They are therefore not included in the Exchequer cost calculations.⁵³

To offset some of the costs of operating EFG, BIS charges an annual premium of 2 per cent per annum, paid quarterly on the outstanding balance for every period of trading. As such the premium income is earned for every period where the business does not default. The income stream from the BIS premium also ceases in the advent of early repayments. The total of premium income for the twelve quarters after loans were drawn was £22.1m.

6.3 Summary of Exchequer costs

Table 23 shows the costs for each of the elements discussed above. The net costs of the scheme to Government are estimated to be £34.0m for the first three years after draw down of loans. This is equivalent to a cost of £5,000 per supported business. These costs only can be considered as interim as there are further defaults beyond the three year period considered, albeit at a considerably reduced failure rate, as well as further BIS premiums due for every quarter of survival. Ultimately, these costs therefore overstate the relative costs of the scheme. This is because costs are frontloaded with the majority of the defaults occurring in the early years of operation, but there is a continued income stream from the BIS premium occurring up to ten years.

Table 23 Summary of net EFG costs to Exchequer (to December 2011)⁵⁴

	£
Cost of called in guarantees	(55,573,000)
Administration costs	(800,000)
Premium income	22,705,000
Net EFG Costs	(33,669,000)
Net costs per recipient business	(5,000)

Source: BIS Management Data. (Costs are in nominal terms)

The income and expenditure **directly** associated with the scheme is set out in Table 23, but an alternative presentation is possible showing the indirect flow-backs to the

⁵³ For the 2009 cohort it is estimated that nearly £5.0m was recovered by lenders prior to claiming the Government guarantee.

⁵⁴ A comparison of this table for operation of the scheme for five years (2009-2013) is presented in Appendix 4

exchequer as a result of taxation and national insurance occurring as a result of increased employment. This wider alternative scenario is shown in Appendix 3.

7 Economic Cost Benefit Analysis

This section assesses the overall economic impact of EFG, and whether there is a welfare gain to the economy from operating the scheme. For this to be the case, economic benefits must outweigh economic costs. If this is not the case and economic costs are greater, there is an overall loss to the economy from operating the scheme.

This section first identifies the economic benefits arising from a number of different areas: net jobs created and saved; net increase in sales (and GVA); net gains in productivity; net increase in export earnings, as well as making an assessment of the likely economic costs of operating the scheme.

The following section (7.1) draws together both costs and benefits in Table 24 to summarise the scale of impacts, as well as quantifying the benefits in a value for money measure relative to costs. Section 7.2 explains the methodology used to produce these cost benefit figures and key assumptions used. Section 7.3, shows the specific calculations undertaken. Section 7.4 reviews the economic costs, which differ from the Exchequer cost by taking into account the opportunity cost of capital and lost resources through defaults from finance additional businesses.

The main estimates shown all relate to the period from 2009 to 2012, as this is based on actual loan default rates and survey responses of actual additional business growth covering the same period. A further scenario is shown in Appendix 2 which projects these results for a further two years to create a five year assessment. These different approaches highlight the fact that costs of the scheme are somewhat frontloaded, where failing businesses default on loans create high costs in the early years, while in later years the value of loan defaults per year falls dramatically but the benefits are assumed to continue among surviving businesses.

7.1 Headline impacts

Table 24 shows the headline results for the whole section, bringing together all the results in summary form. Each row shows the total benefit or cost, as well as signposting to the succeeding table in which the more detailed calculation of these figures is derived. Commentary on each of the tables appears next to that table.

For every result EFG outperformed SFLG, but this is largely because the scale of lending is so much higher, with more than twice as many participating businesses in 2009. For this reason, a more illuminating comparison can be made by comparing the average value per business and here too EFG outperformed SFLG on a large number of measures largely due to a lower level of defaults and slightly higher finance additionality figure.⁵⁵

As well as detailing the individual results from later subsections, Table 24 also shows the gross economic benefit, given by the Gross Value Added, as well as the economic costs. The estimated net impact for the scheme for three years was a net economic benefit of £1.1 bn showing a considerable net welfare improvement from the operation of the scheme.

⁵⁵ The SFLG CBA used a different methodology and so the CBA results are not directly comparable to this evaluation.

Table 24 Economic and cost benefits derived for whole EFG programme (Central Scenario)

Item	Estimated Total	Per business
Net jobs created (excluding entrepreneur) <i>(Table 25)</i>	6,500 jobs	0.96 jobs
Net Jobs saved (excluding entrepreneur) <i>(Table 26)</i>	12,400 jobs	1.84 jobs
Net additional sales created <i>(Table 27)</i>	£1344m	£200,000
Net additional Gross Value Added (jobs created) <i>(Table 28)</i>	£567m	£84,000
Net additional Gross Value Added (jobs saved) <i>(Table 29)</i>	£704m	£105,000
Net additional labour productivity <i>(Table 30)</i>	£332m	£49,000
Net exporting <i>(Table 31)</i>	£460m	£290,000
Gross Economic benefit <i>(Table 28) and (Table 29)</i>	£1,270m	£189,000
Economic costs <i>(Table 32 & Table 33 + admin. costs)</i>	£178m	£26,500
Net Economic Benefit <i>(Table 34)</i>	£1,092m	£162,000
Net economic Benefit NPV <i>(Table 34)</i>	£1,059m	£158,000
Societal Benefit Cost ratio <i>(GVA created and saved)</i>	7.1	-
Public Money Benefit Cost ratio <i>(GVA created and saved)</i>	16.4	-
Net economic benefit per exchequer pound Benefit Cost ratio <i>(GVA created and saved)</i>	33.5	

These figures relate to the 2009 cohort of 6,724 businesses. Costs and benefits are for a duration of 2-3 years, between the loan being offered and the survey point in early 2012.

7.2 Methodology

7.2.1 Background

In calculating the costs and benefits to the economy from EFG, the analysis focuses on the period from January 2009 (when the first loans were made) to January 2012 (when the survey data was collected). This includes the contribution of EFG to the recipient businesses themselves, and the wider economy, assessing the performance change of businesses in the three years since receiving their loan.

The economic evaluation assesses the net position for the economy, rather than considering the aggregated gross benefits for participating businesses. There are two important considerations in terms of arriving at the net impact, namely the level of finance additionality and extent to which the growth of EFG supported businesses displaces other businesses in the economy. Section 4 shows a proportion of EFG supported businesses could be categorised as deadweight as some indicated that other alternative sources of funding were available to them at the point at which they accessed their EFG loan. The actual proportion of non-finance additional EFG borrowers was 18.4 per cent.

Displacement was estimated using two standard questions in the telephone survey. Firstly, businesses were asked whether they competed with local and national firms and secondly they were asked whether if they ceased trading immediately, all of their sales would be taken up by a UK based company within one year. The number of businesses that indicated all their sales would be taken up by local competitors was 24.5 per cent. The combined figure for finance additional non-displacing businesses is such that either or

both of these conditions may be true and this estimates a net figure of 61.0 per cent for the sample.

Having produced these net figures, further adjustments are necessary to accommodate the fact that not all businesses in the population have survived. Some 72.6 per cent of the earliest borrowing businesses in 2009 were still trading and 84.7 per cent of the latest draw downs were still trading. The weighted average for survival was 75.6 per cent. While the costs for these businesses are included, none of the benefits are included, which underestimates the benefits as it fails to recognise some interim benefits among failed businesses.

For each sets of calculations on business performance, figures from the questionnaire are used to estimate the degree to which interviewees believed the EFG loan was responsible for growth. This attribution of impact recognises the fact that some of the change might be due to further injections of finance or other intervention in the intervening years, rather than solely recognising EFG as the sole contributor to changes in business performance.

This method is slightly different to the previous SFLG evaluation, although follows the same convention of accounting for additionality, displacement etc which makes it largely comparable. The difference is apparent in the 2009 SFLG evaluation macro approach of using average values for the benefit calculations. This study uses a micro data approach of using individual survey responses on business growth for those businesses which are finance additional and are non-displacing. I.e. the survey responses from businesses that could have obtained finance elsewhere or are likely to take sales away from other businesses in the economy are excluded from the following figures. This approach is more accurate as there is less rounding errors, but does mean the business performance figures used in this section differ to those already presented in chapter 5.

All figures in this section are presented having accounted for the effects of inflation to show their real value at the end of 2011 using the HMT GDP deflator.⁵⁶ The economic net benefit figures in table 34 are then discounted using the HMT Green book rate of 3.5% to show their Net Present Value (NPV).

7.3 Economic benefits

7.3.1 Net jobs created and saved

The gross estimated change in jobs from the survey evidence was 848 jobs, based on 137 observations of non-displacing finance additional businesses for which attribution data was also available. The level of attribution to the EFG loan for employment change was 68 per cent. Table 25 shows additional deductions for failed businesses and non additional and displacing businesses, as well as increasing the sample estimate to represent the population as a whole. These estimates indicate that the 2009 EFG cohort was responsible for the creation of 6,500 jobs, equivalent to 0.96 additional jobs per business.

⁵⁶ http://www.hm-treasury.gov.uk/data_gdp_fig.htm

Table 25 Employment created

Observations of employment change (A)	275
Jobs created (B)	572
Average jobs created i.e. B/A (C)	2.08
Total EFG population (D)	6,724
Surviving businesses (E)	75.6%
Additional and non-displacing businesses (F)	61.0%
Total change for EFG population 2009 (DxExF)x(B/A)	6,453
Average jobs change per supported business	0.96

The previous SFLG study produced a wide estimate with lower and upper bounds of between 3,550 and 6,340 extra jobs, an average of 4,945 jobs. With 3,104 participating businesses in 2006 the scheme was responsible for creating 1.59 jobs per business. Total jobs created were therefore lower for SFLG, because of the smaller scale of the scheme, although there was a relatively larger contribution per assisted business.⁵⁷

Table 25 only considers the attributed jobs gains, but EFG is also to be recognised as providing stability in businesses to help them retain staff and save jobs during the recession. Table 26 repeats the above method for jobs saved produces a figure of 1,097 additional non-displacing jobs saved for the sample (this is equivalent to 3.99 jobs saved per EFG recipient), translating into an estimated 12,375 jobs saved for the EFG population and 1.84 jobs per business after adjusting for survival and displacement. Estimates of jobs saved are known to be somewhat overinflated and in this instance this would be equivalent to 28 per cent of the 2009 employment base. Notwithstanding that this may be high with businesses overestimating the possible reduction in employment, it must be acknowledged EFG is likely to be responsible for saving a very substantial number of jobs that would otherwise be lost during the difficult economic conditions of 2009.

Table 26 Jobs saved

Observations of employment change (A)	275
Jobs saved (B)	1,097
Average jobs saved i.e. B/A (C)	3.99
Total EFG population (D)	6,724
Surviving businesses (E)	75.6%
Additional and non-displacing businesses (F)	61.0%
Total change for EFG population 2009 (DxExF)x(B/A)	12,375
Average jobs change per supported business	1.84

7.3.2 Net sales change

Sales change over the period 2009-2012 was calculated using a different methodology to capture the benefits to the business of sales for all trading after the EFG intervention (i.e.

⁵⁷ The SFLG evaluation did not report on jobs saved.

2009, 2010 and 2011, rather than just the snapshot of the 2011 survey). The starting point of sales change quoted in the survey was used to represent the sales for the twelve months of 2011, while there were up to a further two years of missing values to be estimated.⁵⁸ Earlier years were profiled assuming that sales change was linear. Thereafter the process of additionality and attribution was repeated as above.

There were 163 records in the sample which provided data for the attribution of sales and included cases where sales had increased, as well as others where sales had fallen. Some of these values were judged to be outliers that were upwardly inflating the total and the top 5 per cent of values were removed.

Gross sales increases in 2011 were £69.5m, with estimates of £40.5m in 2010 and £11.4m in 2009. The level of attribution quoted by the sample varied because of weightings in each year, but was always above 70 per cent. Table 27 shows additional deductions for failed businesses and non additional and displacing businesses. These estimates indicate that the 2009 EFG cohort was responsible for the creation of additional sales of more than £1,344m, over the three year period, equivalent to £200,000 per business.

Table 27 Sales change

	2009	2010	2011
Observations of sales change (A)	205	214	214
Gross sales increase for respective years for sample (B)	£11.4m	£40.45m	£69.53m
Average sales increase i.e. B/A (C)	£55,609	£189,019	£324,907
Total EFG population (D)	6,168	6,724	6,724
Surviving businesses (E)	98.9%	87.0%	75.6%
Additional and non-displacing businesses (F)	61.0%	61.0%	61.0%
Attribution to EFG (G)	77.5%	73.1%	70.7%
Deflator (H)	0.9476	0.9738	1.00
Total change for EFG population 2009 (DxExFxGxH)x(C/A)	£151.9m	£480.0m	£712.4m
Average sales change per business	£24,630	£71,392	£105,947

The previous SFLG study produced a wide estimate with lower and upper bounds of between £74,812,000 and £149,624,800 extra sales, an average of £112,218,400. With 3,104 participating businesses in 2006 the scheme was responsible for creating additional sales of £36,152. Counting just the 2011/12 sales a fair comparison from the EFG businesses would be an average sales change of £101,729, nearly three times greater.⁵⁹ Therefore, both the average sales increase and the smaller scale of the scheme combine to produce a much lower overall yield for SFLG than found in the present study.

⁵⁸ Businesses drawing their loan in early 2009 would quote sales for the preceding 12 months, an estimate would be made for 2009 sales, 2010 sales, until 2011 sales would be captured in the survey in early 2012. In some cases less than two years, because some of the 2009 cohort did not draw on their offer until 2010.

⁵⁹ This figure may be lower due to the five year rule which targeted SFLG at younger (and smaller) businesses.

7.3.3 Gross Value Added (GVA)

From employment change above (Table 25), it is also possible to derive an estimate of additional GVA created.⁶⁰ The table shows additional GVA accruing in each of the three years from 2009 to 2011. This method uses known values of GVA from a secondary source (Annual Business Inquiry) then multiplies through the employment change by specific SME sector GVA for each individual business. This resulted in a total GVA change of £567m over the three years, or £84,400 per business.

Table 28 GVA change based on jobs created

	2009	2010	2011
Observations of employment change (A)	264	275	275
Jobs created (B)	107	339	572
GVA from jobs created (C)	£5.14m	£16.03m	£26.23m
Average GVA (jobs created) per business i.e. C/A (D)	£19,460	£58,310	£95,360
Total EFG population (E)	6,168	6,724	6,724
Surviving businesses (F)	98.9%	87.0%	75.6%
Additional and non-displacing businesses (G)	61.0%	61.0%	61.0%
Deflator (H)	0.9476	0.9738	1.00
Total change for EFG population 2009 (ExFxGxH)x(C/A)	£68.6m	£202.6m	£295.8m
Average GVA per business	£11,120	£30,130	£44,000

An employment based GVA calculation is used here to harmonise with other studies to provide a better comparison (Table 36). The SFLG study used an entirely different methodology based on sales change. The overall sales figures were adjusted by applying a universal rate of GVA to sales turnover of 0.329⁶¹ across all businesses, rather than matching SME GVA sector data to individual businesses. The results for the 2006 cohort were £36.9 million for the population, an average of just £11,874 per business. Using a sales based method for EFG the results were still much higher at £39,000 per business.

Jobs saved

Table 29 repeats the process above for jobs saved. It is conservatively assumed that the effects of EFG in terms of saving jobs only persists for twelve months after the loan is received, rather than for the full three years. Nevertheless the timing of the loans does mean that impacts are evident across 2009-11. Since the number of jobs saved is so much greater than the number of jobs created, the overall GVA saved is much greater,

⁶⁰ 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).

Although it is possible to estimate GVA directly by asking businesses about wage costs and profits, this evaluation used a simpler approach. GVA is calculated here by multiplying changes in employee numbers by sectoral averages of GVA at the economy level.

⁶¹ It is known that employment based estimates of GVA are likely to give higher estimates of GVA than estimates based on sales turnover. Timing will also explain differences in the GVA figures between the EFG and SFLG evaluation, as this evaluation is using the latest available data.

despite effects persisting for only twelve months. The total GVA from jobs saved was £703.5m or an average of £104,600 per assisted business.

Table 29 GVA change based on jobs saved (12 months)

	2009	2010	2011
Observations of employment change (A)	264	275	17
Jobs saved (B)	521	560	16
GVA from jobs saved (C)	£25.79m	£27.56m	£0.71m
Average GVA (jobs saved) per business i.e. C/A (D)	£97,700	£100,200	£41,800
Total EFG population (E)	6,168	6,724	556
Surviving businesses (F)	98.9%	87.0%	75.6%
Additional and non-displacing businesses (G)	61.02%	61.02%	61.02%
Deflator (H)	0.9476	0.9738	1.00
Total change for EFG population 2009 (ExFxGxH)x(C/A)	£344.5m	£348.3m	£10.7m
Average GVA per business	£55,848	£51,797	£19,269

7.3.4 Net gains in productivity

Table 30 shows the changes in sales and employment, as well as the increase in productivity over the period 2009-12. The table shows the sales and employment, from which the average productivity is derived. This average is then multiplied by the number of participating EFG businesses, net of survivors and non additional non displacing businesses. Productivity change for the 2009 cohort was an average of £49,400 per business.

Table 30 Productivity change

Attributable sales increase (A)	£684m
Attributable employment increase (B)	6,453
Productivity change (<i>Weighted average=A/B</i>) (C)	£106,000
Surviving businesses (D)	76.4%
Additional and non-displacing businesses (E)	61.0%
Population size (F)	6,724
Total change in productivity (CxDxExF)	£332.2m
Average change in productivity	£49,400

The results for the 2006 SFLG cohort were rather more modest, with an average of £12,964 per business or £16,437,000 for the whole population.

7.3.5 Net increase in export earnings

Exports change over the period 2009-2012 uses a similar method to sales, capturing the benefits of exporting change accruing for three years.

Exports increased between 2009-12 by £37.5m based on 60 observations. The level of attribution to EFG for sales from Table 27 was applied to the 60 exporting businesses and this was used as a proxy for attribution of the scheme to overseas sales as well. Table 31

shows additional deductions for failed businesses and non additional businesses. These estimates indicate that the 2009 EFG cohort was responsible for the creation of additional exports of more than £460m, over the three year period, equivalent to £290,000 per exporting business.

Table 31 Exports change

	2009	2010	2011
Gross exports increase NPV for three years (A)	£1.9m	£12.5m	£23.0m
Number of exporting businesses (B)	60	60	60
Average exports (C) B/A	£32,418	£208,373	£383,295
EFG exporting businesses (D)	1,456	1,587	1,587
Surviving businesses (E)	98.9%	87.0%	75.6%
Non finance additional (F)	81.6%	81.6%	81.6%
Attribution to EFG (sales attribution as proxy) (G)	77.5%	73.1%	70.7%
Deflator (H)	0.9476	0.9738	1.00
Total change for EFG population 2009 (DxExFxGxH)x (B/A)	£27.9m	£167.1m	£265.3m
Average exports change per exporting business	£19,207	£105,278	£167,194

The SFLG evaluation found a slightly higher proportion of exporters (27.9 per cent), but with a lower proportion of sales represented by exports (7.7 per cent compared with 30.0 per cent for the EFG 2009 cohort).

7.4 Economic costs

While Section 6 focused on the cost to the exchequer of operating the scheme it is also possible to quantify the economic cost which includes costs not just to the Exchequer but also to the wider economy.

The 2009 evaluation of SFLG followed the same methodology of the previous 1999 evaluation by estimating the economic costs as the costs of delivery plus the total exchequer costs of default. Many other evaluations of finance schemes follow this approach by using the Exchequer cost as a proxy for the wider economic cost.⁶² However the HMT Green Book is clear that economic “costs should be expressed in terms of relevant opportunity costs” which means exchequer cost is not equivalent to economic cost. The approach used for estimating economic cost follows the approach undertaken by Ecorys evaluating the DWP growth fund⁶³ which is a loan fund to disadvantaged borrowers. This provides further support and precedence for adopting this approach for estimating economic cost rather than using the Exchequer cost.

The Economic costs of EFG are assumed to include:

- Opportunity cost of additional funds
- Cost of additional resources lost (from loan defaults)

⁶² For instance the Evaluation of Community Development Finance Initiatives (CDFIs)

⁶³ Evaluation Of The DWP Growth Fund Revised Final Report http://www.hm-treasury.gov.uk/d/evaluation_growth_fund_report.pdf

- Administration costs of operating the scheme

The first component of economic cost is the opportunity cost of capital, which represents the expected rate of return foregone by banks as a result of resources being diverted to and tied up in EFG borrowing instead of being used for other uses or lending. The opportunity cost of lending is reduced each year as recipient businesses pay back the capital on their loans, so that it can then be relented by the bank.

Table 32 shows the opportunity cost of capital for the first three years of the scheme. In each year the actual declining balance of the outstanding loan portfolio is shown for 2009-2011.⁶⁴

Since we are only concerned with finance additional businesses⁶⁵ the outstanding balance is only considered for 82.6% of businesses, as indicated by questionnaire findings. The opportunity cost is then calculated by multiplying the finance additional figure by a rate of 8.5 per cent⁶⁶, which is an estimated private sector cost of capital. This is a very conservative assumption used to estimate of the cost of capital and assumes EFG is displacing other lending in the economy.⁶⁷ This 8.5 per cent rate is then applied to the declining balance of funds accounted for the scheme in every subsequent year to show how those funds could alternatively be used. The micro data approach calculates quarterly totals, which are then shown as a cumulative annual total in the table. The total of opportunity cost for three years is £86.9m.

Table 32 Opportunity cost of capital

	Year 1 (2009)	Year 2 (2010)	Year 3 (2011)
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⁶⁴ This is based on the size of loan and repayment schedule from the scheme administration microdata. The aggregate figures are then adjusted for by accounting for defaults and early repayments.

⁶⁵ Non-finance additional businesses would have obtained finance in the absence of the scheme, so there is no additional lending occurring.

⁶⁶ The Green Book recommends that the Social Discount Rate (SDR), 3.5%- representing the value society attaches to present as opposed to future consumption should be used as the standard real discount rate. However, complexity arises under EFG as the Government uses private sector resources to deliver the scheme which has a risk element. The opportunity cost of using private sector resources may be greater than the social discount rate. Based on UK market evidence using the Capital Asset Pricing model and wider international evidence, a Committee on Climate Change paper suggests a real post-tax weighted average cost of capital (WACC) of around 7-10%. Taking a mid-point suggests a figure of 8.5% is the most appropriate figure to use to estimate the private sector opportunity cost of capital. See the following link for more information:

<http://hmccc.s3.amazonaws.com/Time%20preference,%20costs%20of%20capital%20and%20hiddencosts.pdf>

⁶⁷ A less conservative assumption would be to estimate a cost of capital of 3.5% to reflect EFG lending being 100% additional and not displacing other business lending. Whilst EFG is facilitating additional lending, this evaluation uses the conservative assumption which over estimates the opportunity cost of capital tied up in EFG.

Outstanding balance ⁶⁸	£575,299,000	£439,546,000	£284,293,000
Finance additional balance	£475,197,000	£363,065,000	£234,826,000
Opportunity cost (@8.5%)	£24,932,000	£37,492,000	£24,540,000

The second component of economic cost relates to the additional loan defaults that have resulted from the operation of EFG. Default costs reflect resources lost to the economy from making banks lend to unviable businesses. For instance, whilst a factory will have an alternative use and can be sold by the bank to cover the debt, other assets (such as marketing materials) will have no alternative uses and are lost to the economy in the event of a business defaulting. Based on earlier evidence finance additional loans would not otherwise have received any finance and as such any defaults should be considered an economic cost. Table 33 shows the level of defaults in the three years from January 2009 to December 2011. Again the business level microdata is used, in combination with survey evidence to deduce a finance additional default value for the population. However, not all this money is entirely lost to the economy since there are some recoveries involved through reclaiming security. It is estimated that approximately 7 per cent of the value of defaults is recovered.⁶⁹ The cost of defaults is rather greater than the opportunity cost and for three years this equates to £90.5m.

Table 33 Cost of additional resources lost through defaults by year

	Year 1 (2009)	Year 2 (2010)	Year 3 (2011)
Value of loan defaults ⁷⁰	£28,065,000	£61,758,000	£28,037,000
Finance additional defaults	£23,182,000	£51,012,000	£23,159,000
Recoveries (@ 7%)	£1,623,000	£3,571,000	£1,621,000
Cost of resources lost	£21,559,000	£47,441,000	£21,538,000

Comparing these two costs, it is possible to see that the effect of defaults and opportunity cost is somewhat uneven across the three years. In the case of opportunity costs this is because the size of the loan portfolio is still growing in 2009 as borrowers take up their offers throughout the year, while the size of the portfolio peaks in 2010 as all offers have been taken up, before it starts to fall in 2011 and subsequent years because of repayments. The cost of defaults in 2010 is more than double than 2009 because of the combination of the total size of the portfolio and the effect of higher proportion of default in earlier years, which leads to a further fall in 2011.

Table 34 brings together all the benefits and costs and shows the net benefits when costs have been deducted. The economic costs include the opportunity cost of additional finance, as well as the costs of additional defaults and together these amount to £178m. The table shows GVA created separately from GVA from jobs saved so that an assessment can be made of each, as well as a combined measure. The gross GVA resulting from jobs created is £567m, such that net benefits were £389m. Adding the jobs saved there is a further £703m GVA, producing net benefits of 1,092m.

⁶⁸ Outstanding balance at year end. Opportunity cost calculated on a quarterly basis.

⁶⁹ This is an underestimate of the true level of recoveries as not all recoveries are recorded on the BIS administrative data due to banks making recoveries in the first instance.

⁷⁰ This is the full loan amount that is defaulted rather than the 75% of the loan the government guarantees under EFG.

The table also show the discount rate factor and the net present value of the net benefits given above. After applying the standard HMT recommended discount rate of 3.5%, the net benefits from jobs created is £368m, while the net benefits for jobs created and saved is £1,059m.

Table 34 Cost Benefit Analysis

	Year 1 (2009)	Year 2 (2010)	Year 3 (2011)	3 year total
GVA created	£68,614,000	£202,627,000	£295,843,000	£567,085,000
GVA saved	£344,472,000	£348,286,000	£10,714,000	£703,471,000
Opportunity cost	(£24,832,000)	(£37,492,000)	(£24,540,000)	(£86,864,000)
Cost of resources lost	(£21,559,000)	(£47,441,000)	(£21,537,000)	(£90,537,000)
Administration cost	(£800,000)	-	-	(£800,000)
Costs total	(£47,191,000)	(£84,933,000)	(£46,077,000)	(£178,201,000)
Net Benefits (GVA created)	£21,423,000	£117,694,000	£249,866,000	£388,883,000
Net Benefits (GVA created and saved)	£365,894,000	£465,980,000	£260,480,000	£1,092,354,000
Discount rate (3.5%)	1.00	0.966	0.934	-
Net Benefits (GVA created) NPV	£21,423,000	£113,714,000	£233,253,000	£368,390,000
Net Benefits (GVA created and saved)	£365,894,000	£450,222,000	£243,161,000	£1,059,277,000

Table 35 presents figures using a number of standardised Benefit Cost Ratios (BCR) which allow these results to be compared on a consistent basis to other Cost Benefit Analysis. Three different BCR measures are used.

The “societal” BCR indicates the social return on investment made by society, including costs incurred by both the Government and the private sector. It is measured as the gross economic benefits as a ratio of the total economic cost:

$\text{Societal BCR} = \text{NPV Gross Economic Benefits} / \text{Total Economic Costs}$
--

The “Public Money” BCR indicates the benefit per pound of government spending. The calculation is as follows:

$\text{Public money BCR} = (\text{NPV Gross Economic Benefits} - \text{NPV Private Costs}) / \text{NPV Total Exchequer Cost}$

The final measure is a Net economic benefit per exchequer pound ratio. This is a targeted measure which shows the level of economic benefits per pound of Government Expenditure:

$\text{Net economic benefit per exchequer pound} = \text{NPV Net Economic Benefits} / \text{NPV Total Exchequer Costs}$

Table 35 Benefit Cost Ratios

	3 Year total ratios
Society BCR (GVA created)	3.1
Society BCR (GVA created and saved)	7.1
Public Money BCR (GVA created)	11.7
Public Money BCR (GVA created and saved)	16.4
Net Economic Benefit per Exchequer Pound BCR (GVA created)	11.7
Net Economic Benefit per Exchequer Pound BCR (GVA created and saved)	33.5

7.5 Conclusions

From a cohort of around 6,700 recipients that drew down an EFG loan in 2009, from 2009 to the start of 2012 EFG has:

- Created 6,500 additional jobs, equivalent to 0.96 jobs per business
- Saved 12,400 additional jobs, equivalent to 1.84 jobs per business

In terms of economic output:

- An additional £567m of GVA has been created, equivalent to £84,400 per business
- An additional £703.5m of GVA has been saved, equivalent to £104,600 per business

Under the central scenario which includes the economic benefits from additional employment created and saved, the net economic impact of the scheme is found to be positive with large economic benefits of £1.1bn after taking into account the economic costs of operating the scheme. This results in a societal benefit to cost ratio of 7.1. For every £1 it costs the Government to operate the scheme, there are economic benefits of £33.50.

Sensitivity analysis also confirms positive benefits of £370m if the economic benefits are restricted to just additional output created. This further strengthens the main finding that EFG is having a positive benefit to the economy. In this case, the societal benefit to cost ratio is lower at 3.1. Similarly, for every £1 it costs the Government to operate the scheme, there are economic benefits of £11.70.

8 Conclusions

This evaluation has considered a number of different aspects of the EFG scheme and has provided an assessment of its effectiveness. The first consideration is whether the rationale for the scheme is valid, namely the demand for finance from potentially viable business that are credit-rationed due to a lack of collateral or track record, and whether the scheme is accurately targeting this group. The scheme design and its operation can also affect uptake and use of the scheme and remarks concerning these effects are drawn together. The overall effectiveness of EFG on business performance and the wider economy is also discussed.

Rationale for scheme

This evaluation suggests the rationale for the scheme is still valid. The results show that small businesses lacking security to act as collateral was an issue for many EFG businesses. The survey results confirm the proportion of EFG businesses with collateral available to offer was significantly lower than other borrowing businesses, especially the availability of business collateral. Figure 24 showed that few EFG borrowers had smaller amounts of collateral available, the median for EFG was between £50,000 - £100,000, compared with £250,000 - £500,000 for other borrowers. EFG borrowers were also more constrained in terms of the source of their capital, with only 29 per cent being able to only offer business assets as collateral (and therefore use personal assets instead), compared with 66 per cent of the more asset-rich other borrowers being able to back their borrowing with business assets only. Only a minority of EFG recipients (around 6%) had access to alternative finance sources, but chose to use EFG due to better terms and conditions that resulted from lower collateral requirement.

One possible concern for the scheme might be that lenders are using the government guarantee to support businesses they would normally support, creating very substantial deadweight. However, EFG appears to be well targeted on the intended group of businesses that would not otherwise have obtained a loan. The headline figure of 83 per cent of EFG borrowers would not have otherwise been able to obtain finance through other channels confirms this. If anything this finding is more remarkable, given the previous SFLG evaluation in 2009 suggested a figure of 76 per cent and the 1999 evaluation a figure of 70 per cent. Although these figures are based on the declarations of borrowers, rather than lenders, our judgement would be that EFG appears to be appropriately targeted, perhaps even more so than SFLG due to the tougher economic conditions and tighter supply of finance in 2009. For the EFG borrowers in 2009, this translates to an additional 3,700 businesses being helped compared to the previous SFLG scheme in 2008.

The expansion of the SFLG scheme into EFG may also be heralded as a success in terms of maintaining the rationale of the scheme but adjusting it to meet the prevailing economic conditions. New provisions in the scheme have enabled larger businesses to take part⁷¹, as well as larger loan offers. These new criteria allowed an additional 800 businesses to participate in the scheme and survey evidence suggests that the underlying policy

⁷¹ Lifting the previous restriction of businesses with less than £5.6m in turnover.

rationale was not compromised, since 89 per cent of these larger businesses were finance additional.

The prevailing economic conditions in 2009 provided further justification for the operation of the scheme, because survey evidence from respondents suggested a tighter supply of finance. This was represented in higher finance additionality in our survey, as well as EFG forming a larger proportion of the total finance package than previously. For instance, EFG represented 91 per cent of the total finance package compared with 48 per cent for SFLG.

At the same time, expansion of the scheme has not been at the expense of a greater number of defaults. Defaults although substantially higher than commercial borrowing levels remain lower than the previous scheme despite tougher economic conditions. This may reflect improvements in the design of the scheme over SFLG such as the ability to take security and the cap on lender default payments, but more importantly it also confirms the scheme is targeted at viable businesses, albeit riskier businesses that lack collateral which banks are rightly more cautious about.

Opinions on scheme design and operation

While much of this report is given over to a discussion about the benefits of the scheme to participating businesses, as well as the wider economy, there are also some considerations of how the scheme operates and whether there can be any improvements in terms of the service received. Elements of customer service were not considered, but those aspects of the operation of the scheme on business were covered. Since we surveyed EFG users in 2009 then these findings may not be true of subsequent cohorts and there may have been some subsequent improvements in service.

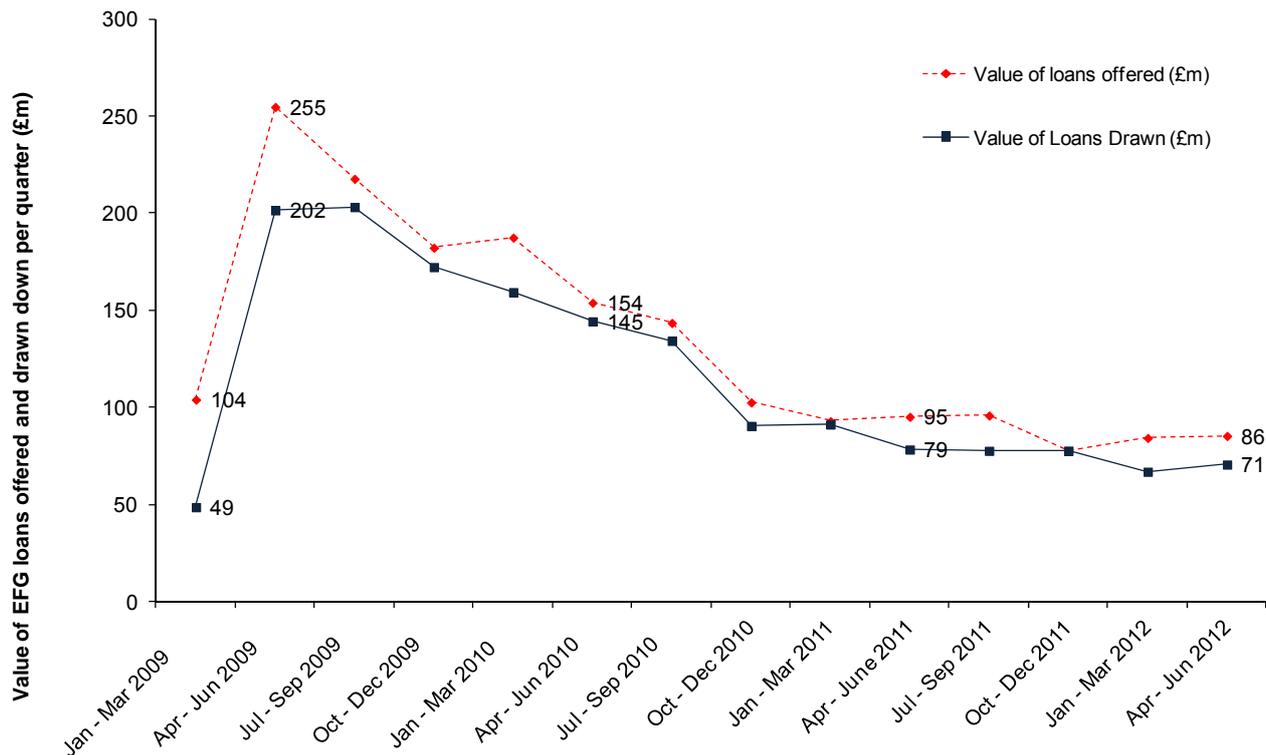
The timeliness of lending was important, with many businesses requiring finance for their project within a particular timeframe. More than half of businesses regarded three months as having a notable impact on their business and nearly one quarter would notice some business effect for loan decisions taking one month. However, in 2009 timeliness was one area where EFG did not perform well, with 62.6 per cent of EFG borrowers waiting for up to one month or more, compared with just 47.6 per cent of other borrowers. This may not be an issue now as a 20-day EFG loan application processing target was introduced in August 2010. All the main lenders have signed up to this commitment.

The survey also asked about the additional 2 per cent BIS premium that EFG businesses pay every year in addition to payments to their lenders. The survey found that 2 per cent did appear to be the correct level, since nearly four out of ten businesses report they would have been deterred from taking up their loan by a rate of 3 per cent. It is unclear if this would reflect their actual behaviour; given many of the businesses report no other sources of finance being available.

The survey also revealed that prior awareness of EFG may have led to greater number of businesses using the scheme, perhaps because the owner/ finance manager could mention it to bank staff as part of their normal application for bank finance. Given the recent decline in EFG usage (Figure 34)⁷², this finding may have implications for greater promotion of EFG to the wider business community going forward.

Figure 34 Value of EFG loans offered and drawn down

⁷² The quarterly volume of EFG loans was highest shortly after the launch of the scheme, with offers of £255m. This has steadily fallen to offers of £86m between April and June 2012.



Business improvements

Econometric analysis revealed EFG recipient businesses were no different in employment or sales growth between 2009 to 2012, compared to other businesses. The implication of these results is that EFG creates a level playing field for the supported businesses to realise their growth potential, but that business growth itself is very similar to the peer group of other businesses. The key contribution of EFG is in removing the impediment of finance to the growth process.

One policy-relevant finding was that loans for investment were significantly more likely to be associated with employment and sales growth, compared with loans primarily used for working capital. This may have implications for how the scheme is targeted in the future if the economy recovers, to ensure maximum impact.

Economic effectiveness

The Cost Benefit Analysis used in this evaluation suggests EFG has generated a net benefit to the economy overall. From a cohort of around 6,700 recipients that drew down an EFG loan in 2009, EFG has generated £1.1bn of economic benefits after taking into account the economic costs of operating the scheme. EFG has helped sustain economic activity during the difficult economic conditions between 2009-2012, as well as helping businesses to expand. From businesses that drew down an EFG loan in 2009, the scheme has created and saved 18,800 additional jobs up to the start of 2012. The results also suggest the scheme to be relatively cost effective with a societal benefit to cost ratio of 7.1. For every £1 it costs the Government to operate the scheme, there are economic benefits of £33.50.

It is important to acknowledge that in 2009 EFG had a key role in saving economic activity and employment, due to the tough economic conditions at the time. Around two thirds of the credited additional employment is due to jobs saved rather than new additional jobs

created. Although there was a positive impact on new employment creation, it is smaller than jobs saved.

Sensitivity analysis also confirms positive benefits of £370m if the economic benefits are restricted to just additional output created, which further strengthens the main finding that EFG is having a positive benefit to the economy. In this case, the societal benefit to cost ratio is lower at 3.1, but is still positive. Under this scenario, for every £1 it costs the Government to operate the scheme, there are economic benefits of £11.70.

To some extent these calculations underestimate the full benefits as taking a longer 5 year perspective shows even larger benefits. This reflects costs being front loaded with defaults occurring in the first few years, whilst benefits are likely to continue over many years.

It is important to acknowledge that these positive cost benefit ratios, relate to the scale of the programme at the time. The coverage of EFG on the wider SME lending market is very small, as it is targeted at businesses at the margins of the bank lending decision that lack collateral or a track record. In 2009, EFG formed around 3% of the SME term loan market, but this has now declined to around 1-2%. The evaluation results suggest at current levels of take-up, the scheme appears to be very cost effective in terms of net economic benefits due to low levels of finance deadweight and relatively lower defaults than historically. However, it is important to acknowledge that expanding EFG further could lead to more businesses benefiting from the scheme, but this will need to be offset against higher finance deadweight or lower quality businesses, which could reduce the reported high Benefit Cost Ratios.

Relative effectiveness

Table 36 compares EFG with other evaluations of business support schemes for SMEs in terms of the cost of jobs created and saved and the societal BCR where available, as well as providing further comparison to the previous SFLG scheme. Care should be taken into interpreting these results due to differences in cost benefit methodology and time period under consideration.

Based on these figures EFG appears to be more cost effective than the previous SFLG scheme. This is probably due to a lower default rate and greater need for the scheme in the tougher economic environment which lead to lower finance deadweight.⁷³ The results also suggest that EFG appears to perform well in terms of cost of job creation for other reports considered, as well as surpassing CDFIs in terms of cost per job saved. EFG also appears more successful than other SME schemes in terms of the societal BCR measure and is on par with societal BCR for RDA business interventions.

⁷³ The previous SFLG evaluation just focused on additional jobs/ GVA created so is not directly comparable to the overall EFG evaluation results. Comparing just GVA from jobs created is a much fairer comparison.

Table 36 Comparison with economic effectiveness with other SME schemes

	Cost per job created	Cost per job saved	Cost per job created/saved	Gross benefits	Economic cost	Societal BCR <i>(Gross Benefits/economic cost)</i>	Time period
EFG	£5,200	£2,700	£1,800	£1,231m	£172m	7.1	3 years
SFLG ⁷⁴	£7,750	-		£24.6m-£49.1m GVA created	£35m (represented by exchequer cost)	0.7-1.4	2 years
CDFIs ⁷⁵	£8,820	£8,863		£174m GVA created £254m saved = £428m	No information given		
Business Link local service ⁷⁶	£11,578			over a six-month period additional value-added is £362.5m	overall cost of operating the network for six months at around £150m	2.26	12-18 months.
RDA (business interventions) ⁷⁷			£14,221	£7,690.4 from jobs created and saved	£1,053.0m	7.3	

Summary

This evaluation provides evidence to support the rationale for the EFG scheme, namely that it is being targeted at small businesses who lack collateral and would otherwise not be able to access conventional bank loans without being backed by the government guarantee. Having enabling businesses to access a loan the subsequent performance of these businesses is at least equal to other borrowers, indicating that EFG has helped created a level playing field for them to fulfil their potential. At existing levels of utilisation, this evaluation finds EFG to be cost effective with a societal Benefit Cost ratio of 7.1. For every £1 it costs the Government to operate the scheme, there are estimated economic benefits of £33.50. Based on our cost benefit analysis calculations, we can report that the EFG was a viable and cost effective policy for helping finance constrained smaller businesses in 2009 to access debt finance to support growth and cashflow.

⁷⁴ <http://www.bis.gov.uk/files/file54112.doc>

⁷⁵ <http://www.bis.gov.uk/assets/biscore/enterprise/docs/10-814-evaluation-community-development-finance-institutions>

⁷⁶ <http://www.bis.gov.uk/files/file40289.doc>

⁷⁷ <http://www.berr.gov.uk/files/file50735.pdf>

Whilst EFG lending only covers a small proportion of the total SME term lending market, expanding EFG further by relaxing the entry requirements could lead to more businesses benefiting from the scheme. This may need to be offset against higher finance deadweight and possibly lower quality businesses using the scheme, which could reduce the high reported Benefit Cost Ratios.

Appendix 1 Survey methodology

Fieldwork

The research was conducted by IFF Research via telephone interviews with businesses who had received an EFG backed loan in 2009 and also with a matched sample of non-EFG users from the general business population. The non-user sample was matched in terms of business age, legal status of business i.e. whether limited or unlimited and by broad business sector. The 'non-user' businesses were sourced from Dun & Bradstreet's business database.

The main fieldwork was conducted during February and March 2012 and the average interview duration during fieldwork was around 25 minutes for users and 16 minutes for non-users. The questionnaire was fully piloted prior to the start of the main fieldwork.

Table 37 below shows the number of sample records available, the number of EFG businesses for whom we were able to source a telephone number for (using both automated and manual telephone look-up approaches), the approximate number of records lost due to unusable sample (unobtainable telephone number, duplicate records etc.) and the number of interviews completed within each of the sample groups along with the associated response rates. Response rates have been calculated by dividing the number of completed interviews by the total number of contacts for which a definite outcome was achieved during the fieldwork period.

Table 37 Survey Coverage

	EFG Users	Non-Users
SAMPLE CLEANING		
Total in-scope records provided (guaranteed/repaid)	6,504	11,306
Telephone number found	3,398	n/a
CATI SCREENING		
Selection for CATI	3,398	11,306
Unusable – ineligible for interview, business contact details incorrect, number unobtainable, etc.	855	1,495
ACHIEVED INTERVIEWS/RESPONSE RATE		
Total useable sample	2,543	9,811
Sample with a definite outcome (completed interview, refusal, terminated interview)	709	2,254
Interviews achieved	500	899
Response rate (%)	71%	41%

The achieved sample of users (Table 38) and non-users (Table 39) were weighted by age of business, turnover and broad sector (production / service / other) to reflect the population of EFG users overall, based on the database of recipients.

Table 38 EFG users

		Up to £1m		£1,000,001 to £5m		Over £5m	
		Unweighted number	Weighted number	Unweighted number	Weighted number	Unweighted number	Weighted number
Up to 4 years	Production	25	26	4	6	0	0
	Service	132	173	14	19	3	2
	Other sectors	9	17	3	4	0	0
Over 4 years	Production	56	22	30	23	2	6
	Service	121	106	55	50	16	13
	Other sectors	15	16	14	14	1	3

Table 39 Non users

		Up to £1m		£1,000,001 to £5m		Over £5m	
		Unweighted number	Weighted number	Unweighted number	Weighted number	Unweighted number	Weighted number
Up to 4 years	Production	40	46	8	9	4	1
	Service	135	314	12	32	5	3
	Other sectors	15	33	3	6	0	0
Over 4 years	Production	91	40	34	41	21	11
	Service	281	190	107	91	71	24
	Other sectors	47	29	16	28	9	1

Econometric analysis

Regression analysis was performed on the percentage employment growth (2009-2012), and then sales turnover growth (2009-2012) against business experience of the owner managers, the age of the owner managers, and whether or not the owner managers possessed a degree. Additionally, the reason for seeking finance – investment reasons versus cash flow was included. A dummy variable was included of whether the business was older than four years old; the size of the business as measured by the number of employees, and whether the business was a social enterprise were also incorporated into the models. As with standard practice the sectoral dummy variables of the main business activities were included.

Table 40 OLS Regression Models Relating to percentage employment growth and percentage sales turnover growth ⁷⁸

	Employment Growth (%)	Sales Turnover Growth (%)
Constant	2.151 (0.122)	18.807 (1.012)
10 to 15 years of experience	-15.971 (-1.512)	-4.303 (-0.416)
More than 15 years of experience	0.320 (0.029)	6.330 (0.573)
Age OM 45 to 54 years old	-21.240 (-2.269)^b	-22.042 (-2.353)^b
Age OM 55 to 64 years old	-11.152 (-0.915)	-1.570 (-0.135)
Age OM 65 years, or older	-34.528 (-1.494)	-9.547 (-0.414)
Degree	27.696 (3.520)^a	16.213 (2.074)^b
Investment reason	19.527 (2.384)^b	21.698 (2.696)^a
Business Older than 4 years	-23.679 (-2.833)^a	-40.590 (-4.936)^a
Size	-0.262 (-1.794)^c	-0.154 (-1.060)
Social Enterprise	3.042 (0.352)	-5.795 (-0.632)
EFG User	16.944 (1.387)	1.045 (0.090)
Other loan user	32.383 (2.774)^a	16.281 (1.401)
Amount of EFG Loan	-3.191E10 (-0.025)	0.000 (1.242)
Amount of EFG loan ²	5.892E6 (0.069)	-1.082E-10 (-0.900)
SIC A and E (Agriculture etc)	7.223 (0.216)	79.889 (2.301)^b
SIC C (Manufacturing)	29.087 (1.821)^c	32.678 (1.951)^c
SIC G (Retail & wholesale)	10.465 (0.681)	28.709 (1.770)^c
SIC H (Hotels etc)	5.545 (0.291)	2.130 (0.100)
SIC I (Transport etc)	28.242 (1.256)	25.368 (1.093)
SIC K (Real Estate etc)	12.652 (0.830)	30.397 (1.883)^c
SIC MNO	20.374 (1.209)	24.121 (1.344)
R ²	0.152	0.186
Adjusted R ²	0.107	0.134
F Test	3.345^a	3.550^a
N	411	347

Excluded comparisons: Businesses who have not used EFG or other loans; Up to 9 years of experience; Age OM up to 44 years old; and, SIC F Construction.

Overall, the model is statistically significant (F Test), offering some predictive power in explaining changes in employment growth and sales growth. However, these specifications only explain a small proportion of changes (R²=15% for employment and R²=19 per cent for sales), leaving most change unexplained.

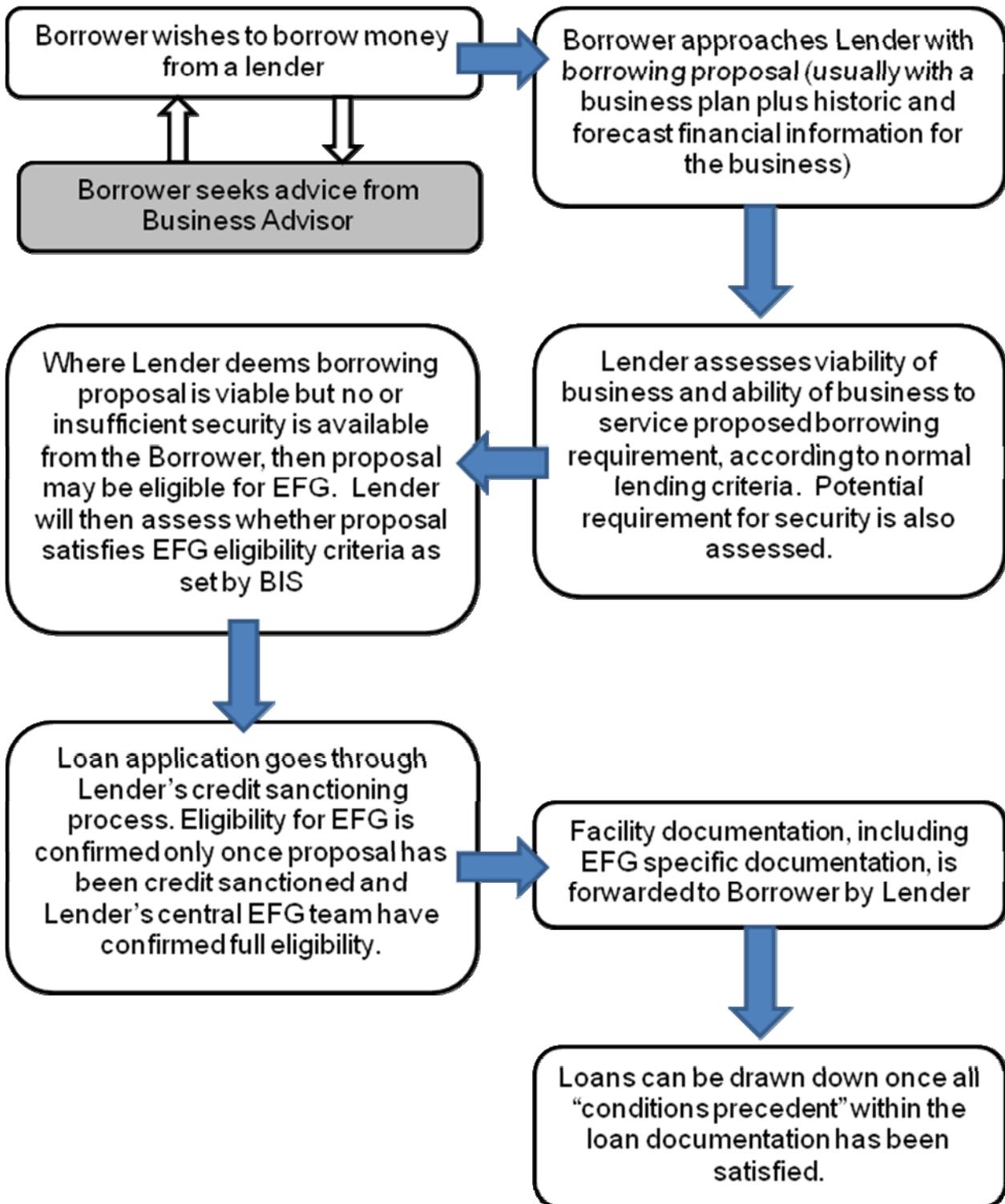
In terms of our results, attention focuses upon variables which are statistically significant at the 0.05 level, or better, and we look at both sets of results together. Businesses which were *more than four years old* in 2009 grew by 24 per cent and 41 per cent less than younger businesses with regard to employment and sales turnover, respectively. Businesses which had used other loans grew by 32 per cent more than those businesses

⁷⁸ ^a significance <0.01, ^b significance <0.05, ^c significance <0.10

which had not used other loans or EFG. However, there was no statistically significant relationship in the model of sales turnover growth. Owner managers aged 45 to 54 years old saw their businesses grow by 21 per cent, and 22 per cent less than the businesses of younger owner managers for employment and sales turnover, respectively. Owner managers with degrees saw their businesses grow by 28 per cent and 16 per cent more than the corresponding businesses of those without degree-educated owners for employment and sales turnover, respectively. Businesses where they were seeking finance for investment reasons grew by 20 per cent and 22 per cent more than businesses which sought finance for cash flow reasons for employment and sales turnover, respectively.

Perhaps most importantly an EFG loan was found not to be significant in explaining either employment growth or sales growth. The size of the loan and also the squared term which was included to capture possible non-linear relationships but neither were statistically significant in both of the sets of results. Thus, the magnitude of the EFG finance received by businesses does not have any bearing upon the two business performance measures.

Appendix 2 Application process



Appendix 3 Exchequer costs with flowbacks

EFG 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 EFG.

Table 41 estimates the revenue flow backs to the Exchequer associated with additional employment in supported EFG businesses. The three components are income tax associated with new employment, national insurance contributions by the employee and employers National Insurance. The data covers revenue flow backs over a three year period (2009-2012) in line with the earlier analysis, which assumes persistence of the attributed jobs created. The implied net additional income tax is £42.1m, the implied net additional Employee NI contribution is £23.5m, while employers NI is £27.7m.

Table 41 Tax and National Insurance Receipts⁷⁹

Variable	Estimated unit	Estimated Revenue Flow backs per net £ incurred
Net additional income tax (<i>based on net jobs created*tax rates for deciles of income</i>)	42,074,000	£1.25
Net additional Employee NI (<i>based on net jobs created* NI rates for deciles of income</i>)	23,472,000	£0.70
Net additional Employers NI (<i>based on net jobs created* NI rates for deciles of income</i>)	27,697,000	£0.82

From Table 42, it is noted that if revenue flowbacks to the Exchequer are taken into consideration then the net costs of EFG change substantially. Because of the scale of estimated employment gains there is a net benefit to the exchequer of £59.5m. 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 of goods and services to other containing products and services from EFG supported businesses.

⁷⁹ Benefit expenditure savings are ignored from the calculations. The SFLG study also included a small amount of benefits savings from some entrepreneurs moving from benefits to start their business. This question was not asked in the 2012 survey and so this amount is omitted.

Table 42 Estimated Exchequer revenue flow backs

	Estimated Revenue Flow backs per net £ incurred
Net EFG Cost Incurred	(33,669,000)
Net Additional Income Tax associated with employment additionality	42,074,000
Net Additional Employee National Insurance associated with employment additionality	23,472,000
Net Additional Employers National Insurance associated with employment additionality	27,697,000
Net EFG Cost taking into account revenue flowbacks to the exchequer	59,574,000

Appendix 4 Five year scenario

The main CBA presented in this report is for three full years of operation (January 2009 to January 2012), because this was based on actual survey evidence conducted at this time. However, it is possible to extrapolate for a further two years to present an alternative case of five full years of operation, running from January 2009 to December 2013. Table 43 and Table 44 shows the costs of the scheme, with the first three years (2009-2011) repeated from early tables, adding in 2012 and 2013. Opportunity costs in 2012 and 2013 fall substantially in Table 43 because of the falling number of active loans and the reduced repayments outstanding. Table 44 shows the cost of finance additional defaults and this also continues to fall, as the default rate decelerates further, combined with a smaller balance outstanding. Although the scenario only extends five years, these trends will continue, with falling costs for every successive year for the 2009 EFG cohort.

Table 43 Opportunity cost of capital (2009-13)

	Year 1 (2009)	Year 2 (2010)	Year 3 (2011)	Year 4 (2012)	Year 5 (2013)
Outstanding balance	£575,299,000	£439,546,000	£284,293,000	£177,434,000	£91,226,000
Finance additional balance	£475,197,000	£363,065,000	£234,826,000	£146,561,000	£75,353,000
Opportunity cost (@8.5%)	£24,932,000	£37,492,000	£24,540,000	£14,874,000	£8,109,000

Table 44 Cost of additional resources lost through defaults by year (2009-13)

	Year 1 (2009)	Year 2 (2010)	Year 3 (2011)	Year 4 (2012)	Year 5 (2013)
Value of loan defaults	£28,065,000	£61,758,000	£28,037,000	£12,754,000	£6,431,000
Finance additional defaults	£23,182,000	£51,012,000	£23,159,000	£10,535,000	£5,312,000
Recoveries (@ 7%)	£1,623,000	£3,571,000	£1,621,000	£737,000	£372,000
Cost of resources lost	£21,559,000	£47,441,000	£21,537,000	£9,798,000	£4,940,000

The only additional benefits associated with the 2009 cohort operating until 2013 are those associated with the jobs created. Since the effects of the jobs saved was conservatively assumed to only persist for twelve months then they remain at the levels indicated in the body of the report (Table 29). In the fourth year of the scheme (2012) there would be expected to be a cumulative total of 8,420 jobs, equivalent to a GVA of £397m and in the fifth year (2013) these figures would be 10,319 jobs and a GVA of £498m.

Table 45 brings together the economic costs and benefits for five years, showing the totals for the first three years from Table 34 and adding columns for 2012 and 2013. Costs are declining, while benefits are increasing and the overall result is a societal BCR of 9.82.

Table 45 Net EFG Benefits (NPV)

	Years 1-3 (2009-11)	Year 4 (2012)	Year 5 (2013)	5 year total
GVA Created	£567,085,000	£396,656,000	£498,494,000	1,462,235,000
GVA saved	£703,471,000	-	-	£703,471,000
Opportunity cost	(£86,864,000)	(14,874,000)	(8,109,000)	(109,848,000)
Cost of resources lost	(£90,537,000)	(9,798,000)	(4,940,000)	(105,275,000)
Administration cost	(£800,000)			(£800,000)
Costs total	(£178,201,000)	(24,672,000)	(13,049,000)	(215,923,000)
Net Benefits (GVA created)	£388,883,000	371,984,000	485,445,000	1,246,312,000
Net Benefits (GVA created and saved)	£1,092,354,000	371,984,000	485,445,000	1,949,783,000
Discount rate (3.5%)	varies	0.9019	0.8714	
Net Benefits (GVA created) NPV	£368,390,000	334,593,000	423,017,000	1,126,899,000
Net Benefits (GVA created and saved) NPV	£1,059,277,000	335,493,000	423,017,000	1,817,787,000

The exchequer costs discussed in Section 6 also change across a further two years, with additional failures drawing on the government guarantee, while being offset by more premium income from businesses that continue to operate (Table 46). The cap for government guarantees was set at 9.75% of the portfolio, equivalent to just over £65 million and by December 2013 total guarantees of £64 million should have been paid⁸⁰. The cost of additional guarantees continued to be greater than the premium income and therefore the direct exchequer cost increased to a level of £35 million.

Table 46 Summary of net EFG costs to Exchequer (to December 2013)

	£
Cost of called in guarantees	(64,261,000)
Administration costs	(800,000)
Premium income	29,644,000
Net EFG Costs	(35,417,000)
Net costs per business	(5,300)

⁸⁰ The scenario set out in the main body of the report involves actual default rates, whilst these figures involve projections of loan defaults and premium income receipts.

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