Small Firms in the Credit Crisis: Evidence from the UK Survey of SME Finances.

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Executive Summary

The UK Survey of SME Finances (UKSMEF) 2008 is the latest in a series of SME finance surveys. These surveys are based on representative samples of 2,500 UK businesses with less than 250 employees. Business owners were interviewed by telephone about the finances they have used or applied for in the last 3 years, their financial relationships, the characteristics of the business and personal details. Fieldwork for UKSMEF 2008 was carried out between 10th September and 20th November 2008.

The analysis in the report looks at the demand for finance, default risk, the supply of finance, start-ups and financial relationships. The analysis compares finances in 2008 with earlier findings from UKSMEF 2004. The main aim is to provide a comprehensive assessment of the impact of the credit crisis on access to finance among UK SMEs.

Demand for Finance (Chapter 3)

Analysis of financial products used in the last 3 years show a decline in SMEs use of loans since 2004. Notably the use of overdrafts is down by one-fifth in 2005-2008 (42.5%) compared to 2001-2004 (52.9%). The use of term loans fell by one-third in 2005-2008 to 16.4% from 24.3% in 2001-2004. Also the use of asset finance (leasing and hire purchase agreements) fell by about one-fifth from 26.9% in 2001-2004 to 20.5% in 2005-2008.

The report also notes that:

- Credit cards were the most widely used financial product in both 2001-2004 (55.3%) and 2005-2008 (54.4%); this level of usage appears to be stable over time.
- Use of invoice finance (factoring and invoice discounting; a source of working capital for larger SMEs) fell by about a quarter from 3% of SMEs in 2001-4 to 2.2% in 2005-8.
- Use of equity finance appears to have changed little at around 3%.
- Over a third of SMEs used credit from their suppliers (trade credit: which was a topic introduced in UKSMEF 2008).

However there are increases in the use of loans from friends and family members. In particular:

- The use of loans from friends increased from 5.6% in 2001-4 to 7.0% in 2005-8.
- The use of loans from family members increased from 9.8% in 2001-4 to 14.4% in 2005-8
- However there is a reduction in the use of loans from owners of the business from 12.9% in 2001-4 to 10.2% in 2005-8.
Another potential source of internal funds is the cash reserves held by the business in a deposit account. Here the report finds that the average amount held on deposit fell from £68,359 in 2004 to £31,550 in 2008 – a drop of 54%. At the same time, in 2008, more SMEs were using their deposits to help fund working capital (from 16.5% in 2004 to 20.2% in 2008) or to fund a specific project/fixed capital (from 8.3% to 11.9%).

Analysis of the demand for finance, i.e., finances used or applied for in the last 3 years, also shows consistent declines since 2004. Specifically:

- Demand for overdrafts fell by 15% (9% points) from 59.1% in 2001-2004 to 50.2% in 2005-2008.
- Demand for term loans fell by 20% (5.5% points) from 28.1% in 2001-2004 to 22.6% in 2005-2008.
- Demand for leasing and hire-purchase agreements fell by 25% (8% points) from 31.4% in 2001-2004 to 23.5% in 2005-2008.
- Demand for invoice finance (factoring and invoice discounting) and equity finance remained broadly stable.

The vast majority (over 90%) of businesses with no demands for loans report they had no need for the finance. However, in 2007-2008, there was an increase in business owners not applying for loans because they believed they would be rejected (discouraged borrowers). Specifically:

- 87.7% of business owners that felt discouraged from applying for an overdraft in 2005-8 report this happened in 2007-2008 as opposed to only 12.3% in 2005-7.
- Similarly, 54.8% felt discouraged from applying for a term loan in 2007-2008 as opposed to 45.2% in 2005-7.

In contrast, had 2007-2008 been a typical year, only a third of all instances of discouragement in 2005-8 would have been expected in 2007-2008. This suggests business owners were more pessimistic in 2007-2008 about their chances of making successful loan applications.

Default Risk (Chapter 4)

SMEs became riskier in 2008 as the outlook for the economy worsened. Analysis of Dun and Bradstreet risk ratings, which relate to predictions that the business will fail in the year ahead, show that:

- The percentage of firms with a low probability of going out of business in the year ahead (low risk firms) has declined from 58%, in 2004, to 11.5%, in 2008.
- In contrast, the percentage of average risk firms has increased from 31.9%, in 2004, to 63.3%, in 2008, and the percentage of high risk firms has increased from 4.4% to 21.7%.
Regarding credit histories the report also found that:

- The percentage of businesses which did not make unauthorized excesses on their overdraft facility fell from 71.5% in 2003-4 to 63.8% in 2007-8.
- There is a corresponding increase in those exceeding their overdraft limit more than twice from 14.3% in 2003-4 to 17.8% in 2007-8.

This suggests small firms experienced greater cash-flow problems in 2007-8 due, for example, to declining orders and late payments from customers. However, there was no increase in businesses falling into arrears on term loans between 2003-4 and 2007-8: the effect of the credit crisis on financially delinquency was at a nascent stage.

Supply of Finance (Chapter 5)

Loan rejections

Rejection rates show a clear increase over time: in 2001-4 4.2% of SMEs with overdraft demands were rejected outright; in 2005-8 this figure had risen to 10.9% and, among applicants in 2008, the rejection rate was 15.3%. Also, 6.1% of SMEs with term loan demands were rejected outright in 2001-4; this figure increased to 9.4% in 2005-8 and 16.3% among applicants in 2008.

Higher risk firms tended to be the most affected by tightening credit conditions. Among high risk SMEs, the rejection rate for overdrafts increased from 5.8% in 2001-2004 to 14.9% in 2005-8 (22.4% among applicants in 2008). Also, for a high risk SME, the likelihood of being denied a term loan increased from 3.7% in 2001-4 to 13.3% in 2005-8 (13.5% among applicants in 2008) an almost four-fold increase. However it is also noted that while no minimal risk firms with term loan demands were rejected in the 2004 sample, 2.8% were rejected in 2005-8 and, among applicants in 2008, the rejection rate was 15.5%.

In contrast to bank loans, rejection rates for leasing and hire-purchase agreements appear to have been largely unaffected by the credit crisis: 2.7% of applicants in 2008 were turned down compared with 3% in 2001-4.

Analysis of the distribution of bank loan rejections in 2005-8 shows that 73.5% of all overdraft rejections in that period took place in 2007-2008. Also 81.2% of all term loan rejections in the period 2005-8 took place in 2007-2008. If 2007-2008 had been an unexceptional year only one-third of all rejections in 2005-8 would have been expected in 2007-2008.

Looking at reasons for rejection, overdraft rejections due to the firm having no security/collateral have more than doubled in 2005-2008 (accounting for 9.5% of overdraft rejections; up from 4.1% in 2001-4); and rejections due to the firm’s industry being too risky have almost doubled in 2005-8 (from 2.4%, in 2001-4, to 4.6% in 2005-8).
Regarding term loans:

- 14% of SMEs denied term loans in 2005-8 report the reason for this was that they had no security (there were no corresponding cases in the sample for 2001-4).
- 12.8% report insufficient security as the reason for rejection in 2005-8, a more than three-fold increase from 2001-4 (4%).
- Also 14% of SMEs denied term loans in 2005-8 said the reason they were given was that their industry is too risky up from 2.3% in 2001-4.
- Lack of profitability registered for the first time in 2005-8, accounting for 15.7% of term loan rejections.
- Notably there was a large increase in the percentage of firms reporting no reason was given for their being denied a term loan (22.7% in 2005-8 versus 4.1% in 2001-4).

This analysis suggests lenders have become more risk averse in 2005-8 being less willing to lend to businesses without collateral or those which are considered to be in risky industries.

The consequences of rejection also seem to have become more serious in recent times:

- In 2001-4 the majority of firms denied term loans (58.5%) managed to get funding from elsewhere. However, only 26.9% of previously rejected firms found an alternative source of funding in 2005-8.
- Also less than 1 in 20 firms denied a term loan in 2001-4 had to drop their plans as a consequence of being denied a term loan compared to 1 in every 2 in 2005-8.
- There are also large increases in the proportion of firms having to resort to internal finance after rejection (from 3.2% in 2001-4 up to 11.5% in 2005-8) or which got into serious difficulties (from 4.1% in 2001-4 up to 10.7% in 2005-8).

**Loan amounts**

- The average size of overdraft facilities follows a U-shape over time starting at £36,495 in 2001-4 falling to £30,420 in 2005-8 and rising to £47,360 among applicants in 2008.
- Minimal risk SMEs have experienced an increase of 46% in their overdraft facilities since 2001-4 with an average facility standing at around £230,000 among applicants in 2008.
- Also an average overdraft facility for low risk firms was over £145,000 in 2008 which represents a six-fold increase from 2001-4.
- On the other hand, high risk firms have experienced a 75% decrease in the average size of their overdraft facilities since 2001-4 which stood at just under £15,000 among applicants in 2008.

The U-shape trend in size of overdraft facilities is consistent with data on aggregate overdraft lending to small businesses collected by the BBA. These data show falls in overdraft lending in 2006-7 and increases in 2008. However the analysis in the report suggests that lower risk firms are the beneficiaries of these increases with higher risk firms either being offered smaller overdraft facilities or denied one altogether.
The average size of term loans show an upward trend since 2001-4: among applicants in 2008 the average size was £183,202 versus £145,804 in 2005-8 and £102,120 in 2001-4.

Across risk ratings minimal risk firms have benefitted from the largest increases: the average size of loans to these firms has trebled from 2001-4 to just under £1m among 2008 applicants.

However high risk firms have experienced a reduction of over 50% since 2001-4 in the average size of term loans made to those applying in 2008 (down to just over £70,000 from £153,000).

The upward trend in average term loan size is again consistent with BBA statistics which show aggregate term lending to small businesses grew by 8% in 2006-7 and by 10% in 2007-8. However, again the analysis in the report points to lower risk firms receiving increased amounts with higher risk firms either receiving reduced amounts or being denied loans altogether.

**Cost of loans**

- Margins on overdrafts have increased on average from 2.4% points over base in 2001-4 to 3.4% points over base in 2005-8 (4.4% points over base among applicants in 2008).
- Minimal risk firms have seen a sharp increase in overdraft margins, among applicants in 2008, which increased to 2.5% points over base from around 1.3% points over base in 2005-8 and 1.6% points in 2001-4.
- Margins paid by higher risk firms have also increased since 2001-4 from around 2% points over base up to 3.7% points over base among those which applied in 2008.

Margins over base for term loans are also on an upward trend:

- These margins have risen from 2.2% points over base, in 2001-4, to 2.8% points over base in 2005-8 and to 3.7% points over base among applicants in 2008.
- Margins among minimal risk firms appear to be stable if not slightly lower among applicants in 2008 (around 1.4% points over base from around 1.6-7% points over base prior to this).
- In contrast: margins paid by average risk firms have increased to 4.2% points over base in 2008 from 1.9% points over base in 2001-4.
- And those paid by high risk firms stood at 4% points over base among applicants in 2008 up from 2.5% points over base in 2001-4.

Across different types of loan, margins are higher in 2008 for most types of firm. Underlying these increases was the higher cost of capital incurred by banks in 2008 and increased levels of default risk. Indeed, the increases in margins tended to be greater among average or high risk firms compared to lower risk firms.
The average arrangement fee for an overdraft increased from £243 in 2001-4 to £442 among 2008 applicants, an increase of over 80%. Minimal and high risk firms actually experienced a decrease in overdraft arrangement fees in 2008: these fell to £647 in 2008 from £969 in 2001-2004 among minimal risk firms; and to £148 from £510 among high risk firms. However fees paid by low risk firms increased from £136 in 2001-4 to £793 among applicants in 2008.

The average arrangement fee for a term loan increased from £1,023 in 2001-2004 to £1,468 in 2008 – a 43% increase. Arrangement fees paid by minimal risk firms which applied in 2008 were over 7 times higher than those paid in 2001-4 (£5,826 versus £827).

Average arrangement fees on leasing and hire-purchase agreements (asset finance) more than doubled from £614 in 2001-4 to £1,387 among applicants in 2008. Across risk ratings minimal, low and average risk firms paid higher asset finance fees on average in 2008 compared to 2001-4. However, among high risk firms, average asset finance fees fell from £3,919 in 2001-4 to £1,871 among applicants in 2008.

This analysis indicates that arrangement fees, for different types of loans, were higher among applicants in 2008. Perhaps surprisingly arrangement fees increased among low risk firms and fell among high risk firms: the opposite might have been expected since high risk firms need more rigorous screening implying higher administrative costs. One explanation may be that the low risk loans involved more collateral which would increase the legal costs in setting up the loan.

**Incidences of loan collateral**

Incidences of collateral on overdrafts fell from 25.8% in 2001-2004 to 19.5% in 2005-2008. However, incidences of collateral rose again to 24.4% among applicants in 2008. Minimal and low risk rated firms showed the greatest increase in incidences of collateral on overdrafts in 2008: 59.4% (minimal risk) and 39.3% (low risk) posted collateral on overdrafts compared to 33.3% and 21.8% respectively in 2001-4.

Overall incidences of collateral on term loans appear stable over time with just under 40% of these loans involving collateral. However, incidences of collateral on term loans appear to have increased sharply among minimal risk applicants from 45.9% in 2001-4 up to 67% among applicants in 2008.

A common finding for both overdrafts and term loans is that incidences of collateral have increased most among lower risk firms. One explanation for this result is that minimal/low risk firms may have been more willing to offer collateral in 2008 to maintain a good supply of loans at lower interest rates in the face of increased uncertainty and lender risk aversion. This view is supported by the previous evidence that the availability and cost of loans to lower risk firms which applied in 2008 was better relative to higher risk firms.
Econometric analysis (Appendix 2)

The aim of the econometric analysis is to estimate direct effects of the credit crisis on access to finance. These direct effects relate to whether there has been a tightening of credit supply in 2008 holding firm risk constant (whereas the summary analysis, in chapter 5 of the report, relates to aggregate effects of the credit crisis due to tighter conditions on the supply-side and increased default risk). These effects are estimated by differences in access to finance between applicants in 2008 and those that did not apply in 2008, controlling for differences in firm risk. Estimates are obtained for: loan rejections (among firms which used or applied for loans); loan amounts; loan margins; arrangement fees; and whether the loan involved collateral (collateralisation).

Among firms which used or applied for loans in 2005-8, those which applied for loans in 2008 were more likely to be rejected than firms with the same level of risk but which did not apply in 2008. Specifically, applicants in 2008 were 0.9% points more likely to be denied an overdraft (\(\rho=0.061\)) and 3.4% points more likely to be denied a term loan (\(\rho=0.000\)) holding risk factors constant.

Applicants in 2008 received overdraft facilities which were about 50% larger (\(\rho=0.000\)) compared to those received by firms with similar levels of risk but which did not apply in 2008. Specifically, minimal risk firms that applied for overdrafts in 2008 received facilities that were over 70% higher (\(\rho=0.021\)) than those obtained by otherwise similar firms which did not apply in 2008. The corresponding increase for low risk firms is 86% (\(\rho=0.0001\)). And the increase for average risk firms is 54% (\(\rho=0.0147\)). However there is no corresponding increase in overdraft facilities among high risk firms which applied in 2008 (\(\rho=0.7151\)).

Also, there is no difference in term loan amounts received by applicants in 2008, compared to amounts received by otherwise similar firms which did not apply in 2008, at any levels of risk. Similarly, both overdraft and term loan margins are no higher among applicants in 2008 compared to margins paid by otherwise similar firms which did not apply in 2008.

Regarding arrangement fees, those for overdrafts are almost 21% higher (\(\rho=0.014\)) among applicants in 2008 compared to otherwise similar businesses which did not apply in 2008. Also term loan arrangement fees are almost 38% higher (\(\rho=0.097\)) among applicants in 2008, relative to those which did not apply in 2008, holding risk factors constant. Concluding with collateralisation, firms which applied for overdrafts in 2008 were about 7% points (\(\rho=0.079\)) more likely to have posted collateral on the loan
compared to firms with the same level of risk but which did not apply in 2008. However, the corresponding effect for term loans is statistically insignificant ($p > 0.10$).

The results for loan rejections, arrangement fees and collateral indicate that tighter credit supply in 2008 made it harder for firms to access loans regardless of any changes in firm risk. In other words, even had firm risk remained constant in 2008, firms would still have found it harder/more costly to access loans. In contrast the finding of increased overdraft facilities, among applicants in 2008, is consistent with the increases in overdraft lending in 2008 reported by the BBA. However, lower risk firms were the main beneficiaries of these increases; facilities for high risk firms were unchanged.

In contrast there is no evidence that the credit crisis has directly affected margins on either overdrafts or term loans. That is not to say that the credit crisis has had no impact here. However, it suggests that increased levels of risk in 2008 underlie the observed increases in loan margins. This highlights the importance of further analysis on the issue of how the credit crisis has affected firm risk and thence access to finance (indirect effects).

**Start-ups (Chapter 6)**

Start-ups tend to have higher failure rates, shorter track records and fewer assets, to offer as loan collateral, than established firms making them riskier to lenders. This may lead to a reliance on the entrepreneur’s personal savings and other non-market/internal sources of finance to fund start-ups even in good economic times. Indeed, during the credit crisis, it would be expected that start-ups were particularly badly affected by the reduced availability of credit.

In this context, the average amount of finance used at start-up in 2006-8 declined by more than a third to £21,199 from £33,232 in 2002-4. Also, the main source of finance at start-up, in both periods, is the entrepreneur’s personal savings. However, in 2006-8, the use of personal savings increased by over 10% (7.4% points) to 76.8% from 69.4% in 2002-4. Less than half the percentage of entrepreneur’s in 2006-8 used a mortgage on their home compared to 2002-4 (3.1% down from 6.5%). This reflects falling house prices and fears of negative equity. Regarding market/external sources, the use of bank loans to fund start-ups fell by almost 40% (8% points) in 2006-8 down to 12.4% from 20.4% in 2002-4.

Regarding the problems experienced when starting the business, 21% of start-ups report problems with finding sources of finance in 2006-8 compared with 14.5% in 2002-4 (a 45% increase). However incidences of problems with the cost of finance appear to be largely stable since 2002-4 at around 10-11%. The two other areas which show an
increase in the incidences of problems are finding customers and competition from other firms. Notably, there has been an 80% increase in the proportion of start-ups reporting competition from other firms as a problem (from 15.4% in 2002-4 to 28.1% in 2006-8).

Financial relationships (Chapter 7)

Financial relationships provide banks with a means for producing information about their customers. This leads to better access to finance, than would otherwise be the case, among customers, such as SMEs, whose information is sparse or opaque. This explains why relationships between banks and SMEs are typically long and monogamous. However policy makers in the UK have had ongoing concerns about the lack of competition in the supply of banking services to SMEs. In particular the supply of SME banking services is highly concentrated in the Big 4 banks (Royal Bank of Scotland Group, Lloyds TSB, HSBC and Barclays) and very few SMEs ever switch banks.

In this context, the report finds that 71.1% of SMEs in 2005-8 had one of the Big 4 banks as their main bank compared to 77.3% in 2001-4 – a fall of 8% (or 6.2% points). The banks outside the Big 4 making the biggest inroads into the market are the Alliance and Leicester (4.8% market share in 2005-8 compared with 1% in 2001-4) and the Co-operative Bank (2.9% in 2005-8 up from 0.5% in 2001-4). It is noted however that the data were collected before 2 developments affecting competition: Lloyds TSBs takeover of HBOS to form Lloyds Banking Group and the part-nationalisation of Royal Bank of Scotland Group and Lloyds Banking Group.

Regarding satisfaction with banks, overall the majority of SMEs are satisfied with the service provided by their bank. However levels of dissatisfaction have increased among loan applicants in 2008 regarding the availability of finance and, to a lesser extent, bank charges. At the same time, there was an increase in business owners reporting they were very dissatisfied with the bank’s understanding of their business.

The market solution to an unsatisfactory relationship is to seek an alternative finance provider. Here the report finds that, in both 2001-4 and 2005-8, just over 7% of SMEs switched their main bank. However, among loan applicants in 2008, the switching rate increased to 11.5%. Notably, switching due to being refused finance by the previous bank has increased from 4.3% in 2001-4 to 28.9% among 2008 applicants.

Conclusions (Chapter 8)

In 2008, SMEs were riskier, more likely to be denied loans and paid more for their loans, although average loan amounts were higher among lower risk firms. Lack of collateral was also an issue suggesting the basis for Enterprise Finance Guarantees is sound; and more businesses were denied loans due to their sector being too risky. In addition to government policy, these findings point to a need for banks to evaluate businesses on their individual merits, rather than relying too much on the availability of collateral or sector, to ensure good businesses caught up in the downturn are not being deprived of
credit. In this regard, relationship lending has an important role in allocating credit instead of an over-reliance on remote scoring systems or collateral.

However, poorer access to finance in 2008 is not entirely explained by increased levels of risk. Other analysis in this report indicates that businesses would still have been more likely to be denied credit in 2008 even had risk remained constant. This finding points to a tightening of credit supply regardless of changes in firm risk. By implication, policies designed to help banks in the credit crisis, such as re-capitalisation, are important alongside specific business support.

A final point is that relationships between banks and businesses have a tendency to breakdown in a crisis: this happened in the recession of the early 1990s. The available evidence suggests that the current crisis is no different in this regard. Whereas the Bank of England brokered improved relationships between banks and small businesses during the last recession this role now falls to the Enterprise Directorate in the Department for Business, Innovation and Skills. Given the importance of information flows in small business finance, it is vital for economic recovery that improved communications are promoted as effectively under the current arrangements.
1. Introduction

The UK Survey of SME Finances (UKSMEF) is a series of surveys which provide a close analysis of Small and Medium-Sized Enterprises (SMEs), their owners and access to finance. The surveys are based on large, representative samples of UK businesses with less than 250 employees. UKSMEF was conceived and developed by the Centre for Small and Medium-Sized Enterprises (CSME), Warwick Business School: the first survey was carried out by CSME in 2004 with funding from a large consortium of private and public sector organizations led by the Bank of England. A second survey was conducted by the University of Cambridge in 2007 and the third was again carried out by CSME in 2008 with funding from the ESRC and Barclays Bank. Two spin-off surveys, looking at the financing of ethnic minority businesses and social enterprises, were carried out in 2005 and 2006 by the DTI/Small Business Service. UKSMEF has provided a wealth of information for policy makers on a range of specific issues including female entrepreneurs, ethnic minority businesses and social enterprises.

The planning for the latest survey, UKSMEF 2008, began late in the summer of 2007 around the time the first effects of the credit crisis were being felt, most notably, the collapse of Northern Rock. Whilst UKSMEF 2008 was not designed specifically as a survey about the credit crisis, we knew that it would provide valuable information about the impact of the credit crisis on SME finances. However, the speed and scale of the events that took place in autumn 2008 could not have been foreseen: just days after fieldwork commenced on 10th September 2008, Lehman Brothers collapsed. This led to a sharp rise in money market rates and a virtual freeze in inter-bank lending due to fears that more banks would fail. As a consequence, a principal source of funds for loans to businesses and individuals all but dried up.

Small businesses, which rely on bank loans for their external financing needs, were particularly vulnerable. Indeed, the available evidence at the time, from the Federation of Small Businesses (FSB), suggested small businesses were: finding it increasingly difficult to obtain finance; seeing the withdrawal of promised finance; experiencing sharp increases in loan interest rates; and were having facility fees imposed. The reports suggested that even firms with good credit histories were not immune to these problems (see FSB, 2008). Countering some of these claims, the British Bankers’ Association (BBA) reported that bank lending to small businesses actually increased in 2008.

Regardless, the scale of the policy response, in autumn 2008, to salvage the banking system, get banks lending again and thereby stave of a severe recession, was unprecedented. In the UK this included: a major rescue package for the banking system consisting of £50bn in capital for banks, £100bn in short term loans and £250bn in loan guarantees; a series of large cuts in the Bank of England base rate which fell from 5% down to 0.5% by March 2009; and a £20bn fiscal stimulus. Policies designed specifically to help SMEs, announced in January 2009, included a £1.3bn loan guarantee scheme for small businesses (Enterprise Finance Guarantee) and £10bn in guarantees for short term loans to medium sized businesses (Working Capital Scheme).

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1 FSB (2008), Number Crunching the Credit Crunch, www.fsb.org.uk (23rd October 2008)
In this context, the aim of this report is to provide quantitative evidence regarding the impact of the credit crisis on the availability and cost of finance to SMEs. It is out-with the scope of this research to assess the effectiveness of policy in tackling the effects of the credit crisis. Fieldwork for UKSMEF 2008 finished on 20th November 2008 before the autumn policies would have had much impact and before the introduction of the loan guarantee schemes in January 2009. However, follow-up research is planned for early 2010 which will provide information on how the situation has changed since 2008.

The structure of the remainder of the report is as follows. In the next chapter the data and methods used to measure the effects of the credit crisis are discussed briefly. In chapter 3 there is analysis of the use of financial products and demand for finance. Chapter 4 looks at how default risk has increased in 2008. In chapter 5 attention turns to the effects of the credit crisis on the supply of finance. This involves analyses of credit outcomes for applicants in 2008 compared to those with demands for credit in earlier periods. These comparisons are made across SMEs with different characteristics to show which types of business have been most affected by the credit crisis. In chapter 6 a special analysis of start-ups is presented. The analysis concludes in chapter 7 by looking at financial relationships: principally, who do SMEs bank with, how satisfied are they with the service they receive from these banks and how likely are they to switch banks? Chapter 8 presents some overall conclusions drawn from the analysis. Additional analysis of business/owner characteristics and an econometric analysis of the effects of the credit crisis on access to finance are presented in Appendices 1 and 2 respectively. Appendix 3 (written by IFF Research Ltd) discusses the survey methodology in detail.
2. Data and Methods

Using data from UKSMEF 2004 and 2008 it is possible to compare how access to finance has changed from the height of the credit boom to the depths of the credit crisis (Fraser, 2005\(^2\), provides a full report on the findings of UKSMEF 2004). In the surveys, respondents are asked about finances used or applied for in the three years prior to the interview: so responses in UKSMEF 2004 relate to finance applied for or used in the period 2001-2004 and, for UKSMEF 2008, to the period 2005-2008. Among the responses to UKSMEF 2008, it is also possible to identify applications for finance in 2008. It is therefore possible to track access to finance for the periods 2001-2004, 2005-2008 and, specifically, among those firms that applied for finance in 2008. Comparing access to finance for the 2008 applicants with access to finance in earlier periods provides a measure of the effects of the credit crisis. Analysis is presented for different types of firm to show how these effects vary across the SME population.

The first part of the analysis (chapter 3) relates to the demand for finance: in particular the use of financial products and the demand for external finance. The second part (chapter 4) looks at changes in the risk characteristics of SMEs by analyzing Dun and Bradstreet risk ratings. This is an important pre-cursor to understanding changes in the supply of finance which is examined in the third part (chapter 5). Specifically looked at here are: the availability of finance (loan rejections and loan amounts); the cost of obtaining loans (loan margins and arrangement fees); and incidences of collateral on loans. The fourth part of the analysis (chapter 6) looks at issues to do with the financing of business start-ups. The fifth and final part (chapter 7) examines relationships between SMEs and their banks.

Comparisons of business and owner characteristics in 2004 and 2008, including businesses which applied for finance in 2008, are presented in Appendix 1. This analysis relates to changes in firm risk, supplementing the analysis of risk ratings, and may further help to explain changes in access to finance. Appendix 2 contains an econometric analysis of the effects of the credit crisis on access to finance controlling for changes in firm risk and financial relationships (direct effects). This allows testing of whether credit conditions would have been tighter in 2008 regardless of increased risk levels.

Fieldwork for both UKSMEFs 2004 and 2008 were carried out using Computer Assisted Telephone Interview (CATI) methods by IFF Research Ltd, a London based market research agency (see Appendix 3 for details of the survey methodology). Each UKSMEF survey contains a sample of 2,500 firms corresponding to populations of 3.6m SMEs in 2004 and 4.4m SMEs in 2008\(^3\). In the following analysis the data are weighted to be representative of the SME population.


\(^3\) The survey excluded the following sectors: Financial Services – which falls outside of the scope of the study; and, due to very small numbers in the population, Mining and Quarrying, Electricity, Gas and Water Supply.
3. The Demand for Finance

The analysis in this chapter begins by looking at the use of financial products from commercial sources (external finance) and how this has changed between 2004 and 2008. It then turns to the use of internal finance supplied by friends, family and owners; in this context the use of deposit accounts is also examined as savings are another potential source of internal funding. Then the analysis looks at demands for external finance: specifically demands for overdrafts, term loans, leasing and hire-purchase agreements, invoice finance and equity finance, in 2004 and 2008. This analysis relates to firms which have used or applied unsuccessfully for external finance i.e., firms which have external finance requirements whether or not these requirements were met. The chapter concludes by examining the reasons why businesses did not have external finance demands: that is, whether they had no need for it or, despite having needs, felt discouraged from applying.

3.1 Use of external finance

Chart 3.1: % of SMEs using financial products in the last 3 years

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Notes: The base is all SMEs
2001-4: n=3,625,416 (unweighted n=2,500)
2005-8: n=4,430,825 (unweighted n=2,500)
Credit cards were the most widely used financial product in both 2001-2004 (55.3%) and 2005-2008 (54.4%); this level of usage appears to be stable over time.

Overdrafts were the second most widely used financial product but their use is down by one-fifth in 2005-2008 (42.5%) compared to 2001-2004 (52.9%).

Equally the use of term loans fell by one-third in 2005-2008 (16.4%: down from 24.3% in 2001-2004).

And use of asset finance (leasing and hire purchase agreements) has also fallen by about one-fifth (from 26.9% in 2001-2004 down to 20.5% in 2005-2008).

5.7% of SMEs used grants in 2005-8 down from 6.4% in 2001-4.

Use of invoice finance (factoring and invoice discounting: a source of working capital for larger SMEs) fell by about a quarter from 3% of SMEs in 2001-4 to 2.2% in 2005-8.

Use of equity finance appears to have changed little, remaining around 3%.

Over a third of SMEs used credit from their suppliers (trade credit: which was a topic introduced in UKSMEF 2008).

This chart shows a broadly consistent decline in the use of financial products from commercial sources in 2005-2008. The following chart notes concomitant increases, among SMEs with loan demands, in the use of loans from some non-commercial sources of finance.

3.2 Use of internal finance

Chart 3.2: % of SMEs using loans supplied by friends, family or owners in last 3 years

Base: SMEs which used or applied for term loans
2001-4: n=998,333 (unweighted n=1,062)
2005-8: n=1,002,644 (unweighted n=900)
The use of loans from friends increased from 5.6% in 2001-4 to 7.0% in 2005-8. The use of loans from family members increased from 9.8% in 2001-4 to 14.4% in 2005-8. However there is a reduction in the use of loans from owners of the business from 12.9% in 2001-4 to 10.2% in 2005-8.

Another potential source of internal funds is the cash reserves held by the business in a deposit account. In this context, the following charts looks at the percentage of SMEs which held a deposit account in the last 3 years, amounts held on deposit in 2004 and 2008 and the reasons for holding funds on deposit.

Chart 3.3: % of SMEs with a deposit account in the last 3 years

Notes: The base is all SMEs
All firms
2004: n=3,625,416 (unweighted n=2,500)
2008: n=4,430,825 (unweighted n=2,500)
Employees
2004: 0, n=2,207,255 (unweighted n=506); 1-9, n=1,185,266 (unweighted n=773); 10-49, n=211,493 (unweighted n=773); 50-249, n=21,401 (unweighted n=448).
2008: 0, n=3,253,140 (unweighted n=393); 1-9, n=991,140 (unweighted n=931); 10-49, n=161,070 (unweighted n=702); 50-249, n=25,475 (unweighted n=469).

- The percentage of SMEs with a deposit account is relatively stable at 41.4% in 2001-2004 and 38.5% in 2005-2008.
- However there is a 15% (8.2% point) drop in the use of deposit accounts among SMEs with 1-9 employees.

The fall in deposits among SMEs with 1-9 employees may reflect a fall in surplus cash in this group. Indeed, analysis in Appendix 1 suggests firms in this size band were less profitable in 2008.
Chart 3.4: Average amounts held on deposit by SMEs

Notes: The base is SMEs with a deposit account.

All firms
2004: n=1,300,000 (unweighted n=1,300)
2008: n=1,400,000 (unweighted n=1,116)

Employees
2004: 0, n=613,788 (unweighted n=139); 1-9, n=544,868 (unweighted n=346); 10-49, n=140,806 (unweighted n=504); 50-249, n=14,795 (unweighted n=311).
2008: 0, n=914,621 (unweighted n=110); 1-9, n=358,399 (unweighted n=323); 10-49, n=89,195 (unweighted n=387); 50-249, n=16,503 (unweighted n=296).

- The average amount held on deposit fell from £68,359 in 2004 to £31,550 in 2008 – a drop of 54%.
- This fall is reflected across all sizes of business.

Businesses may hold funds in deposit accounts for a variety of reasons: these are studied in the following chart.
Chart 3.5: Reasons for holding a deposit account

Notes: The base is SMEs with a deposit account.
All firms
2004: n=1,300,000 (unweighted n=1,300)
2008: n=1,400,000 (unweighted n=1,116)

Respondents may offer multiple reasons for holding a deposit account.

- The percentage of SMEs holding a deposit account to earn additional interest increased from 28.2% in 2004 to 39.8% in 2008.
- There are also increased percentages in SMEs holding deposit accounts for tax/national insurance purposes (from 18.6% in 2004 to 26.8% in 2008) and as a buffer against a rainy day (from 30.5% to 36.6%).
- Equally, in 2008, more SMEs were using their deposits to help fund working capital (from 16.5% in 2004 to 20.2% in 2008) or to fund a specific project/fixed capital (from 8.3% to 11.9%).

In 2008, an increased percentage of SMEs used their cash reserves to fund fixed or working capital. However, the amount of cash reserves available for doing this was also lower on average in 2008. Given the worsening economic situation in 2008, it is unsurprising that more firms were saving as a buffer against a rainy day.
3.3 Demand for external finance

The following chart looks at changes in the demand for external finance i.e., businesses which have used or applied unsuccessfully for external finance in the last 3 years. That is, businesses with external finance demands include those with unmet requirements.

Chart 3.6: % of SMEs applying for or using external finance in the last 3 years

% of Businesses with Finance Demands

- Demand for overdrafts fell by 15% (9% points) from 59.1% in 2001-2004 to 50.2% in 2005-2008.
- Demand for term loans fell by 20% (5.5% points) from 28.1% in 2001-2004 to 22.6% in 2005-2008.
- Demand for leasing and hire-purchase agreements fell by 25% (8% points) from 31.4% in 2001-2004 to 23.5% in 2005-2008.
- Demand for invoice finance (factoring and invoice discounting) and equity finance remained broadly stable.

Lower demands for external finance may reflect an absence of need due, for example, to there being no plans to grow the business or because there are sufficient amounts of cheaper internal sources of funds. However, it is also possible that the business owner needed external finance but did not apply due to the belief they would be turned down anyway. Businesses in this latter group are known as discouraged borrowers⁴. They

are important because viable businesses in this group represent potentially wasted opportunities.

This chapter therefore concludes by looking at the reasons for not using or applying for external finances: specifically, this analysis relates to overdrafts, term loans and leasing and hire-purchase agreements.

Chart 3.7: Reasons for not using or applying for overdrafts, term loans and leasing and hire-purchase agreements in the last 3 years (%)

<table>
<thead>
<tr>
<th>Reason</th>
<th>2001-4</th>
<th>2005-8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overdrafts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No need</td>
<td>91.0%</td>
<td>93.6%</td>
</tr>
<tr>
<td>Felt discouraged</td>
<td>2.5%</td>
<td>2.9%</td>
</tr>
<tr>
<td>Other</td>
<td>6.5%</td>
<td>4.5%</td>
</tr>
<tr>
<td>Term Loans</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No need</td>
<td>93.4%</td>
<td>93.4%</td>
</tr>
<tr>
<td>Felt discouraged</td>
<td>2.9%</td>
<td>2.4%</td>
</tr>
<tr>
<td>Other</td>
<td>4.9%</td>
<td>3.4%</td>
</tr>
<tr>
<td>Leasing and Hire-Purchase Agreements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No need</td>
<td>93.9%</td>
<td>93.9%</td>
</tr>
<tr>
<td>Felt discouraged</td>
<td>1.8%</td>
<td>3.4%</td>
</tr>
<tr>
<td>Other</td>
<td>4.3%</td>
<td>4.1%</td>
</tr>
</tbody>
</table>

Base: SMEs which did not use or apply for loans.
2001-4: Overdrafts n=1,521,836 (unweighted n=773); term loans n=2,670,623 (unweighted n=1,468); leasing and hire-purchase agreements n=2,530,432 (unweighted n=1,242);
2005-8: Overdrafts n=2,270,984 (unweighted n=951); term loans n=3,520,144 (unweighted n=1,638); leasing and hire-purchase agreements n=3,406,217 (unweighted n=1,353).

- The large majority, over 90%, of businesses without finance demands report they had no need for finance: this situation appears largely unchanged between 2001-4 and 2005-8.
- The percentage of businesses reporting they felt discouraged represents a small minority of those not using or applying for loans – typically less than 3%.

Whilst discouragement levels are low, compared to other reasons for not using or applying for loans, the following chart suggests that owners were more likely to feel discouraged in 2007-2008 than in 2005-7.

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5 Discouraged borrowers exist because: i) making loan applications costs time and money; and ii) information asymmetries may result in banks making mistakes when screening applications resulting in viable businesses being denied finance (Kon and Storey, 2003). Viable businesses may feel discouraged from applying for loans if application costs and/or screening errors are sufficiently high, even if the opportunity would be better exploited using a commercial loan than other sources of finance.
Chart 3.8: Distribution of discouragement in 2005-2008

Notes: The base is discouraged borrowers in 2005-8.
Overdrafts, n=65,085 (unweighted n=22); term loans, n=97,446 (unweighted n=40); leasing and hire-purchase agreements, n=19,760 (unweighted n=16).

- 87.7% of business owners that felt discouraged from applying for an overdraft in 2005-8 report this happened in 2007-2008 as opposed to only 12.3% in 2005-7.
- Similarly, 54.8% felt discouraged from applying for a term loan in 2007-2008 as opposed to 45.2% in 2005-7.
- Also 76.3% felt discouraged from applying for a leasing or hire-purchase agreement in 2007-2008 compared with 23.7% in 2005-7.

Had 2007-2008 been a typical year, it would be expected that a third of all instances of discouragement in 2005-8 took place in 2007-2008. Regarding overdrafts and term loans, statistical tests indicate that significantly more than a third of all instances of discouragement occurred in 2007-2008. Therefore, for bank loans at least, this analysis suggests business owners were more pessimistic in 2008 about their chances of making successful loan applications. There may have been a reluctance to spend time and money on loan applications due to the increased likelihood in 2008 that the business would be rejected (see chapter 5).
Chapter 3: Summary of key findings

Use of financial products
- Credit cards were the most widely used financial product in both 2001-2004 (55.3%) and 2005-2008 (54.4%); this level of usage appears to be stable over time.
- Overdrafts were the second most widely used financial product but their use is down by one-fifth in 2005-2008 (42.5%) compared to 2001-2004 (52.9%).
- Equally the use of term loans fell by one-third in 2005-2008 (16.4%; down from 24.3% in 2001-2004).
- And use of asset finance (leasing and hire purchase agreements) has also fallen by about one-fifth (from 26.9% in 2001-2004 down to 20.5% in 2005-2008).
- Use of invoice finance (factoring and invoice discounting: a source of working capital for larger SMEs) fell by about a quarter from 5% of SMEs in 2001-4 to 2.2% in 2005-8.
- Use of equity finance appears to have changed little, remaining around 3%.

Use of internal finance
- The use of loans from friends increased from 5.6% in 2001-4 to 7.0% in 2005-8.
- The use of loans from family members increased from 9.8% in 2001-4 to 14.4% in 2005-8.
- The average amount held on deposit fell from £68,359 in 2004 to £31,550 in 2008 – a drop of 54%.
- In 2008, more SMEs were using their deposits to help fund working capital (from 16.5% in 2004 to 20.2% in 2008) or to fund a specific project/fixed capital (from 8.3% to 11.9%).

Demand for finance
- Demand for overdrafts fell by 15% (9% points) from 59.1% in 2001-2004 to 50.2% in 2005-2008.
- Demand for term loans fell by 20% (5.5% points) from 28.1% in 2001-2004 to 22.6% in 2005-2008.
- Demand for leasing and hire-purchase agreements fell by 25% (8% points) from 31.4% in 2001-2004 to 23.5% in 2005-2008.
- 87.7% of business owners that felt discouraged from applying for an overdraft in 2005-8 report this happened in 2008 as opposed to only 12.3% in 2005-7.
- Similarly, 54.8% felt discouraged from applying for a term loan in 2008 as opposed to 45.2% in 2005-7.
4. Default Risk

To understand changes in the supply of finance it is important to look firstly at the risk profiles which underpin these changes. This is because banks use estimates of default risk as the basis for individual lending decisions: riskier firms are more likely to be denied loans. Also banks require capital to absorb losses on loan portfolios. As levels of risk increase in aggregate, more capital is required to cushion losses on existing loans. Consequently there is less capital for new lending.

In this context, the following chart examines changes in Dun and Bradstreet SME risk ratings between 2004 and 2008. These ratings are based on predictions of the likelihood of business failure over the 12 months following the forecast. These predictions were made using a proprietary scoring model developed by Dun and Bradstreet.

Chart 4.1: Risk of business failure in the next 12 months

- The distribution of risk ratings has shifted significantly upwards in 2008 compared to 2004.
- In particular, the percentage of low risk firms has declined from 58%, in 2004, to 11.5%, in 2008.
- In contrast, the percentage of average risk firms has increased from 31.9%, in 2004, to 63.3%, in 2008, and the percentage of high risk firms has increased from 4.4% to 21.7%.

Notes: The base is all SMEs
2004: n=3,625,416 (unweighted n=2,500)
2008: n=4,430,825 (unweighted n=2,500)
The current crisis has had two stages: a financial crisis leading to a drought in wholesale funding markets; an ensuing recession as credit became less available to consumers and businesses to fund purchases of goods and services. Along with the recession, an increase in aggregate default risk would be expected as businesses struggle with reduced demand. This is reflected in the risk ratings which show a much higher predicted level of business failure in 2008-9 compared to 2004-5. This is consistent with the gloomy predictions for the UK economy in 2009 made by economic forecasters.\(^6\)

The increase in aggregate default risk has a feedback effect on bank lending since, under Basel II regulatory capital rules, banks are required to hold capital in proportion to the probability of default on loan portfolios. Therefore as levels of risk increase on existing loan portfolios, in the absence of offsetting capital injections, banks have less capital to back new lending. In other words, the initial reductions in lending due to the crisis in financial markets are amplified by higher regulatory capital requirements in the recession that follows (so called ‘pro-cyclicality’).\(^7\)

Equally, estimates of default risk form the basis for individual lending decisions. Typically, these estimates are derived from a scoring model which uses ‘hard’ information on the business, owner and bank account to predict the likelihood of default. Lenders also gauge risk using ‘soft’ information, such as the character and reliability of the business owner, which can be observed by a bank manager over the course of a financial relationship (see Appendix 2). However measured, greater risk means a reduced likelihood of obtaining a loan.

A key input into credit scoring models is the credit history (business and personal) of the loan applicant. A poor credit history is a strong signal that the applicant will be financially delinquent again in the future. Accordingly, the following charts look at credit histories in the year before the survey. In particular, these charts look at instances where: the business exceeded its overdraft facility without the bank’s authorization; and the business fell into arrears on a term loan.

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\(^7\) In response to this criticism the UK Government’s current review of banking regulation is proposing moving to a counter-cyclical regulatory capital regime which would require banks to hold more capital in good times which would then be available to maintain lending in bad times.
Chart 4.2: Number of unauthorized excesses on an overdraft facility in the last 12 months

The percentage of businesses which did not make unauthorized excesses on their overdraft facility fell from 71.5% in 2003-4 to 63.8% in 2007-8.

There is a corresponding increase in those exceeding their overdraft limit more than twice from 14.3% in 2003-4 to 17.8% in 2007-8.

This increase in unauthorized overdraft excesses suggests rising cash-flow problems due, for example, to declining orders and late payments from customers. Indeed, in October 2008 the FSB reported that over half its members had seen an increase in payment times in the last year and, at any given time, were owed £30,000 on average from customers. Also, where overdraft limits have been reduced due to tighter credit conditions, businesses may find it hard to operate within their new limit.

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8 FSB (2008), Number Crunching the Credit Crunch, www.fsb.org.uk (23rd October 2008)
Chart 4.3: Number of times business fell into arrears on a term loan in the last 12 months

Number of times business failed to make loan repayments

- The chart shows there has been little change in the number of firms falling into arrears on loan repayments.
- Indeed the vast majority of firms, well over 90%, had not fallen into arrears in the last 12 months.

Whilst the level of unauthorized overdraft excesses showed some increases, the level of loan arrears was unchanged in 2007-8; it was too early in the financial crisis for there to be a significant impact on credit histories. This is in stark contrast to the significant upward shift in the risk of business failure predicted for 2008-9 (see Chart 4.1); the basis for this increase is the economic downturn, forecasted for 2008-9, rather than poor credit histories in 2007-2008. However, instances of overdraft excesses and loan arrears are likely to have increased in 2009 as the effects of the recession took hold.

In view of the tighter conditions in money markets, and the increased level of default risk predicted for 2008-9, it would be expected that credit became less available and more costly in 2008. This leads naturally to the analysis of the supply of finance in the following chapter.

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9 Further research, planned for 2010, will look at this issue by studying credit histories in 2009.
10 The econometric analysis in Appendix 2 looks at the direct effects of the credit crisis on access to finance holding demand-side risk constant i.e. the effects of tighter supply-side conditions. The summary analysis in chapter 5 relates to aggregate effects of the credit crisis due to increased default risk and tighter supply-side conditions.
Chapter 4: Summary of key findings

Default risk (likelihood of business failure in 2008-9)
- The percentage of low risk firms has declined from 58%, in 2004, to 11.5%, in 2008.
- In contrast, the percentage of average risk firms has increased from 31.9%, in 2004, to 63.3%, in 2008, and the percentage of high risk firms has increased from 4.4% to 21.7%.

Credit histories (financial delinquency in 2007-8)
- The percentage of businesses which did not make unauthorized excesses on their overdraft facility fell from 71.5% in 2003-4 to 63.8% in 2007-8.
- There is a corresponding increase in those exceeding their overdraft limit more than twice from 14.3% in 2003-4 to 17.8% in 2007-8.
- There was little change in the number of firms falling into arrears on loan repayments in 2007-8.
5. The Supply of Finance

In this chapter analysis is presented for the availability and cost of finance. In particular, this involves an analysis of rejection rates, loan amounts, cost of loans and collateral requirements in the periods 2001-4 and 2005-8. The chapter concludes by placing problems with the availability and cost of finance in the context of other issues faced by the business.

The expectation, prior to starting the analysis, is that credit became less available, more expensive and subject to greater collateral requirements in 2008 as credit conditions tightened and levels of default risk increased. The analysis that follows is based on bank loans (overdrafts and term loans) and leasing and hire-purchase agreements since these are the main sources of loans for SMEs.

5.1 Loan rejections

This analysis looks at incidences of loan rejections as a proportion of businesses with loan demands. Rejection rates are studied in aggregate and across different types of SME by size, risk ratings, sector, region and other key groups (high growth firms, start-ups, female- and ethnic minority-led firms). The analysis begins with overdraft rejections followed by term loan rejections and finally, by way of contrast, rejections for leasing and hire-purchase agreements.

5.1.1 Overdrafts

Chart 5.1: % of SMEs which had an overdraft application rejected outright in the last 3 years

![Rejection Rates (Overdrafts: By Firm Size and Risk Rating)](chart.png)
Aggregate overdraft rejection rates show a clear increase over time: in 2001-4 4.2% of SMEs with overdraft demands were rejected outright; in 2005-8 this figure had risen to 10.9% and, among applicants in 2008, the rejection rate was 15.3%.

Further analysis by firm size suggests this increase is mainly borne by smaller firms with less than 10 employees.

In particular, the rejection rate among firms with no employees increased from 4.9% of SMEs with overdraft demands in 2001-4 to 12% in 2005-8 (17.4% among applicants in 2008); and, among firms with 1-9 employees, it went from 2.9%, in 2001-5, to 9.6% in 2005-8 (15.4% among applicants in 2008).

In contrast, rejection rates among firms with 10 or more employees appear to have remained at a stable low level over time.

Among minimal risk firms the rejection rate increased from 0.4% in 2001-4 to 1.7% in 2005-8 (6.2% among applicants in 2008).

Among average risk firms the rejection rate increased from 5.1% in 2001-4 to 9.4% in 2005-8 (11.7% among applicants in 2008).

And among high risk SMEs, the rejection rate increased from 5.8% in 2001-2004 to 14.9% in 2005-8 (22.4% among applicants in 2008).

However, among low risk firms the rejection rate appears to have fallen over time (from 3.8% in 2001-4 to 3% in 2005-8).
Chart 5.2: % of SMEs which had an overdraft application rejected outright in the last 3 years by industry

Notes: The base is SMEs with overdraft demands (i.e., used or applied for an overdraft in the 3 years before the survey) 2001-4: Agriculture, Hunting and Forestry, n=79,449 (unweighted n=132); Manufacturing, n=108,547 (unweighted n=147); Construction, n=433,248 (unweighted n=254); Wholesale/Retail, n=364,254 (unweighted n=285); Hotels and Restaurants, n=47,253 (unweighted n=136); Transport, Storage and Communications, n=83,354 (unweighted n=152); Real Estate, Renting and Business Activities, n=756,674 (unweighted n=342); Health and Social Work, n=89,650 (unweighted n=126); Other Community, Social and Personal Service Activities, n=179,076 (unweighted n=170).

2005-8: Agriculture, Hunting and Forestry, n=104,422 (unweighted n=107); Manufacturing, n=169,941 (unweighted n=129); Construction, n=380,358 (unweighted n=226); Wholesale/Retail, n=337,860 (unweighted n=286); Hotels and Restaurants, n=87,484 (unweighted n=115); Transport, Storage and Communications, n=150,530 (unweighted n=122); Real Estate, Renting and Business Activities, n=588,177 (unweighted n=329); Health and Social Work, n=117,347 (unweighted n=108); Other Community, Social and Personal Service Activities, n=288,806 (unweighted n=149).

Applied in 2008: Agriculture, Hunting and Forestry, n=38,567 (unweighted n=44); Manufacturing, n=49,195 (unweighted n=49); Construction, n=131,822 (unweighted n=98); Wholesale/Retail, n=158,402 (unweighted n=135); Hotels and Restaurants, n=29,111 (unweighted n=43); Transport, Storage and Communications, n=19,040 (unweighted n=47); Real Estate, Renting and Business Activities, n=276,755 (unweighted n=151); Health and Social Work, n=40,148 (unweighted n=46); Other Community, Social and Personal Service Activities, n=75,313 (unweighted n=65).

- Overdraft rejection rates by industry also show a tendency to increase over time.
- Rejection rates for manufacturing firms have more than doubled from 4.4% in 2001-2004 to 9.3% in 2005-8 (14.2% among applicants in 2008).
- Rejection rates for construction firms have more than quadrupled from 3.7% in 2001-2004 to 15.2% in 2005-8 (16.2% among applicants in 2008).
- And Wholesale/Retail firms are six times more likely to be denied an overdraft in 2005-2008 (16%) compared to 2001-2004 (2.6%); and ten times more likely among applicants in 2008 (26.3%).
- Rejection rates for Hotels and Restaurants are broadly stable between 2001-4 and 2005-8 (at 10.1% and 10.8% respectively). However, rejection rates are more than double this rate among applicants in 2008 (24.7%)
Most regions have experienced large increases in overdraft rejection rates between 2001-4 and 2005-8.

For example, rejection rates in London have increased from 6.6% of SMEs with overdraft demands in 2001-4 to 18.6% in 2005-8 (19.5% among applicants in 2008); those in the West Midlands have gone from 4.8% in 2001-4 to 9.8% in 2005-8 (15.3% among applicants in 2008); and those in Scotland have risen from 3.1% in 2001-4 to 5.7% in 2005-8 (16.9% among applicants in 2008).

However, rejection rates in the North West and North East have undergone the largest increases: in the North West the rejection rate has risen from 0.9% in 2001-4 to 9.8% in 2005-8 (18.4% among applicants in 2008); and in the North East, starting from 1.9% in 2001-4, the rejection rate rose to 36.1% of SMEs with overdraft demands (23.9% among applicants in 2008).

In contrast, the rejection rate fell in the South West from 7.9% of SMEs with overdraft demands in 2001-4 to 4.1% in 2005-8, although it is higher again among applicants in 2008 (11.2%).
The following chart reports findings for the following other types of SME:

- High growth firms (sales growth of 30% or more per annum).
- Start-ups (aged less than 2 years).
- SMEs with a female principal owner (‘female’).
- SMEs with a principal owner from an ethnic minority group (‘ethnic minority’).

Chart 5.4: % of SMEs which had an overdraft application rejected outright in the last 3 years by other groups

Notes: The base is SMEs with overdraft demands (i.e., used or applied for an overdraft in the 3 years before the survey)
2001-4: High growth, n=597,588 (unweighted n=406); start-up, n=127,489 (unweighted n=93); female, n=383,589 (unweighted n=276); ethnic minority, n=146,243 (unweighted n=78).
2005-8: High growth, n=228,851 (unweighted n=169); start-up, n=257,266 (unweighted n=79); female, n=373,696 (unweighted n=271); ethnic minority, n=305,521 (unweighted n=290).
Applied in 2008: High growth, n=87,997 (unweighted n=77); start-up, n=149,899 (unweighted n=50); female, n=122,590 (unweighted n=115); ethnic minority, n=110,155 (unweighted n=107).

- High growth firms were over twice as likely to be denied an overdraft in 2005-2008 (10.4%) compared to 2001-2004 (4.5%); compared to 2001-4 applicants in 2008 were over 4 times more likely to be rejected (19.2%).
- Start-ups were almost four times more likely to be denied an overdraft in 2005-8 (15.1%) compared to 2001-4 (3.9%); and among applicants in 2008 21.6% were rejected.
- Female led businesses were over twice as likely to be denied an overdraft in 2005-8 (11.8%) compared to 2001-2004 (5%); and, again, the rejection rate is higher still among applicants in 2008 (26.9%).
- Interestingly, rejection rates among ethnic minority led businesses appear to have fallen from 16.8% in 2001-2004 to 13.3% in 2005-8 (and 8.4% among applicants in 2008).
The following chart looks at businesses which were offered a smaller overdraft than requested (partial rejections)

Chart 5.5: % of SMEs which were offered a smaller overdraft facility than requested in the last 3 years

- 15.8% of applicants in 2008 were offered a lower overdraft than requested: this compares with 10.5% of firms with overdraft demands in 2005-8 and 7.6% in 2001-4.
- Notably, over a fifth of applicants in 2008 (20.2%), in the 1-9 employee size band, were offered a lower overdraft than requested; partial rejection rates for this group were 11.3% in 2005-8 and 8.6% in 2001-4.
- Also 16.3% of minimal risk firms which applied in 2008 were offered a lower overdraft than requested compared to only 6.6% in 2005-8 and 9.3% in 2001-4.
The final chart in this section looks at the distribution of overdraft rejections, in the period 2005-8, between 2005-7 and 2007-2008. If each year in this period had been unexceptional, it would be expected that around a third of all rejections occurred in any given year. However, in view of the credit crisis it would be expected that more than a third of all rejections in 2005-8 occurred in 2007-2008.

Chart 5.6: Distribution of overdraft rejections in 2005-8

Notes: The base is SMEs that were either denied an overdraft outright or offered a smaller one than requested.
Outright rejection: n=243,213 (unweighted n=95)
Partial rejection: n=233,652 (unweighted n=110)

- 73.5% of outright overdraft rejections, between 2005 and 2008, took place in 2007-2008\(^{11}\).
- 63% of partial overdraft rejections, between 2005 and 2008, took place in 2007-2008\(^{12}\).

In other words, 2007-2008 was no ordinary year since significantly more than a third of all overdraft rejections (outright and partial), between 2005 and 2008, took place in 2007-2008.

\(^{11}\) A binomial probability test that a third of all outright overdraft rejections took place in 2008 was strongly rejected (p=0.000).
\(^{12}\) A binomial probability test that a third of all partial overdraft rejections took place in 2008 was strongly rejected (p=0.000).
5.1.2 Term loans

Chart 5.7: % of SMEs which had a term loan application rejected outright in the last 3 years

Rejection Rates (Term Loans: By Firm size and Risk Rating)

Notes: The base is SMEs with term loan demands (i.e., used or applied for a term loan in the 3 years before the survey).

- 6.1% of SMEs with term loan demands were rejected outright in 2001-4; this figure increased to 9.4% in 2005-8 and 16.3% among applicants in 2008.
- Analysis by firm size suggests that smaller firms (less than 50 employees) have experienced the largest increases in rejection rates: notably, rejection rates among firms with 1-9 employees have increased almost three-fold from 2.5% in 2001-4 to 6.6% in 2005-8 (14.5% among applicants in 2008).
- Analysis by risk ratings suggest that even firms with minimal levels of risk have experienced a steep increase in the chances of being denied a term loan in 2008: none of these firms with term loan demands in the 2004 sample were rejected; 2.8% were rejected in 2005-8; and among applicants in 2008 the rejection rate was 15.5%.
For an average risk SME the likelihood of being denied a term loan increased from 2.1% in 2001-4 to 5.3% in 2005-8 (16.5% among applicants in 2008).
Among high risk SMEs this likelihood increased from 3.7% in 2001-4 to 13.3% in 2005-8 (13.5% among applicants in 2008) an almost four-fold increase.

Notes: The base is SMEs with term loan demands (i.e., used or applied for a term loan in the 3 years before the survey).
2001-4: Agriculture, Hunting and Forestry, n=35,795 (unweighted n=63); Manufacturing, n=48,371 (unweighted n=92); Construction, n=150,467 (unweighted n=120); Wholesale/Retail, n=178,797 (unweighted n=172); Hotels and Restaurants, n=40,027 (unweighted n=115); Transport, Storage and Communications, n=40,053 (unweighted n=90); Real Estate, Renting and Business Activities, n=391,427 (unweighted n=196); Health and Social Work, n=35,088 (unweighted n=97); Other Community, Social and Personal Service Activities, n=98,981 (unweighted n=121).
2005-8: Agriculture, Hunting and Forestry, n=38,076 (unweighted n=51); Manufacturing, n=92,152 (unweighted n=81); Construction, n=164,984 (unweighted n=133); Wholesale/Retail, n=179,931 (unweighted n=163); Hotels and Restaurants, n=55,153 (unweighted n=88); Transport, Storage and Communications, n=94,243 (unweighted n=76); Real Estate, Renting and Business Activities, n=180,477 (unweighted n=158); Health and Social Work, n=53,952 (unweighted n=89); Other Community, Social and Personal Service Activities, n=143,877 (unweighted n=91).
Applied in 2008: Agriculture, Hunting and Forestry, n=14,649 (unweighted n=18); Manufacturing, n=24,395 (unweighted n=25); Construction, n=33,633 (unweighted n=44); Wholesale/Retail, n=52,709 (unweighted n=58); Hotels and Restaurants, n=18,142 (unweighted n=28); Transport, Storage and Communications, n=17,571 (unweighted n=25); Real Estate, Renting and Business Activities, n=39,648 (unweighted n=59); Health and Social Work, n=21,390 (unweighted n=25); Other Community, Social and Personal Service Activities, n=34,889 (unweighted n=33).

Firms in: Construction; Wholesale/Retail; Hotels and Restaurants; Transport, Storage and Communications; and Real Estate, Renting and Business Activities have higher rejection rates in 2005-8, and/or among 2008 applicants, compared to other industries.
Notably, among applicants in 2008, rejection rates were: 17.6% in Wholesale/Retail; 37.2% in Real Estate, Renting and Business Activities; and 78.4% in Transport, Storage and Communications.
Firms in: Agriculture, Hunting and Forestry; Manufacturing; Health and Social Work; and Other Community, Social and Personal Service Activities appear to have low and stable rejection rates for term loans.
Chart 5.9: % of SMEs which had a term loan application rejected outright in the last 3 years by region

Rejection Rates (Term Loans: By Region)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>London</td>
<td>0.9%</td>
<td>19.4%</td>
<td>10.8%</td>
</tr>
<tr>
<td>South East</td>
<td>0.3%</td>
<td>4.6%</td>
<td>1.8%</td>
</tr>
<tr>
<td>South West</td>
<td>0.0%</td>
<td>3.1%</td>
<td>2.0%</td>
</tr>
<tr>
<td>West Midlands</td>
<td>2.2%</td>
<td>22.6%</td>
<td>16.9%</td>
</tr>
<tr>
<td>East Midlands</td>
<td>3.1%</td>
<td>18.0%</td>
<td>12.1%</td>
</tr>
<tr>
<td>East</td>
<td>0.0%</td>
<td>6.8%</td>
<td>0.0%</td>
</tr>
<tr>
<td>North West</td>
<td>9.9%</td>
<td>0.8%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Yorkshire &amp; Humberside</td>
<td>0.0%</td>
<td>2.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>North East</td>
<td>23.7%</td>
<td>2.1%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Scotland</td>
<td>6.8%</td>
<td>12.1%</td>
<td>5.0%</td>
</tr>
<tr>
<td>Wales</td>
<td>2.0%</td>
<td>10.0%</td>
<td>2.0%</td>
</tr>
<tr>
<td>Northern Ireland</td>
<td>0.0%</td>
<td>10.0%</td>
<td>2.0%</td>
</tr>
</tbody>
</table>

Notes: The base is SMEs with term loan demands (i.e., used or applied for a term loan in the 3 years before the survey).

2001-4: London, n=238,521 (unweighted n=82); South East, n=151,513 (unweighted n=93); South West, n=76,253 (unweighted n=105); West Midlands, n=57,374 (unweighted n=92); East Midlands, n=69,011 (unweighted n=98); East, n=105,497 (unweighted n=102); North West, n=82,376 (unweighted n=97); Yorkshire and Humberside, n=78,007 (unweighted n=93); North East, n=23,577 (unweighted n=71); Scotland, n=56,202 (unweighted n=85); Wales, n=60,667 (unweighted n=85); Northern Ireland, n=40,010 (unweighted n=63).

2005-8: London, n=103,524 (unweighted n=69); South East, n=125,094 (unweighted n=102); South West, n=98,309 (unweighted n=87); West Midlands, n=96,207 (unweighted n=89); East Midlands, n=49,495 (unweighted n=77); East, n=160,242 (unweighted n=76); North West, n=116,037 (unweighted n=81); Yorkshire and Humberside, n=60,203 (unweighted n=64); North East, n=42,960 (unweighted n=67); Scotland, n=50,433 (unweighted n=58); Wales, n=76,963 (unweighted n=78); Northern Ireland, n=23,178 (unweighted n=52).

Applied in 2008: London, n=39,275 (unweighted n=29); South East, n=46,514 (unweighted n=38); South West, n=37,474 (unweighted n=35); West Midlands, n=15,036 (unweighted n=26); East Midlands, n=10,925 (unweighted n=28); East, n=15,036 (unweighted n=21); North West, n=35,415 (unweighted n=30); Yorkshire and Humberside, n=21,599 (unweighted n=23); North East, n=5,326 (unweighted n=32); Scotland, n=11,610 (unweighted n=17); Wales, n=8,403 (unweighted n=19); Northern Ireland, n=4,186 (unweighted n=17).

- In most regions term loan rejection rates were higher in 2005-8, or among applicants in 2008, than in 2001-4 (although comparisons are hindered by the fact that there are several regions and time periods for which the sample had no recorded rejections).
- Notably in the West Midlands the rejection rate was 57.4% among applicants in 2008 compared to 4.6% in 2001-4.
- Also, in the South East, 0.3% of SMEs with term loan demands were rejected in 2001-4 rising to 10.8% in 2005-8 (28.4% among applicants in 2008); and in the North West the rejection rate increased from 2% in 2001-4 to 16.9% in 2005-8 (23.7% among applicants in 2008).
- However, the rejection rate fell in the East Midlands from 4.8% of SMEs with term loan demands in 2001-4 to 3.1% in 2005-8 (2% among applicants in 2008).
Chart 5.10: % of SMEs which had a term loan application rejected outright in the last 3 years by other groups

- Among other groups, term loan rejection rates are consistently higher in 2005-8 compared to 2001-4.
- However rejection rates do not seem, in general, to have increased any further among 2008 applicants.
- Indeed, rejection rates among female led businesses among applicants in 2008 are only 4.9% compared to 10.5% in 2005-8.
- An exception to this pattern is start-ups, among which applicants in 2008 had a one in three chance of being denied a term loan outright compared to a less than one in five chance in 2005-8 and a one in five hundred chance in 2001-4.

Notes: The base is SMEs with term loan demands (i.e., used or applied for a term loan in the 3 years before the survey)
2001-4: High growth, n=262,831 (unweighted n=245); start-up, n=69,368 (unweighted n=64); female, n=141,335 (unweighted n=160); ethnic minority, n=91,611 (unweighted n=54).
2005-8: High growth, n=118,928 (unweighted n=100); start-up, n=129,634 (unweighted n=45); female, n=174,887 (unweighted n=150); ethnic minority, n=128,617 (unweighted n=160).
Applied in 2008: High growth, n=44,763 (unweighted n=40); start-up, n=30,184 (unweighted n=46); female, n=29,966 (unweighted n=46); ethnic minority, n=26,646 (unweighted n=51).
Chart 5.11: % of SMEs which were offered a smaller term loan than requested in the last 3 years

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>All firms</td>
<td>4.3%</td>
<td>5.9%</td>
<td>6.0%</td>
<td>6.0%</td>
</tr>
<tr>
<td>0</td>
<td>5.0%</td>
<td>5.0%</td>
<td>6.0%</td>
<td>6.0%</td>
</tr>
<tr>
<td>1-9</td>
<td>2.9%</td>
<td>2.9%</td>
<td>2.9%</td>
<td>2.9%</td>
</tr>
<tr>
<td>10-49</td>
<td>5.1%</td>
<td>6.0%</td>
<td>4.8%</td>
<td>4.8%</td>
</tr>
<tr>
<td>50-249</td>
<td>3.0%</td>
<td>6.0%</td>
<td>6.0%</td>
<td>7.6%</td>
</tr>
<tr>
<td>Minimal risk</td>
<td>16.2%</td>
<td>4.4%</td>
<td>9.4%</td>
<td>4.2%</td>
</tr>
<tr>
<td>Low risk</td>
<td>5.9%</td>
<td>7.6%</td>
<td>7.6%</td>
<td>5.9%</td>
</tr>
<tr>
<td>Average risk</td>
<td>7.1%</td>
<td>2.9%</td>
<td>2.9%</td>
<td>2.9%</td>
</tr>
<tr>
<td>High risk</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Notes: The base is SMEs with term loan demands (i.e., used or applied for a term loan in the 3 years before the survey).

All firms
2001-4: n=1,019,006 (unweighted n=1,066)
2005-8: n=1,002,644 (unweighted n=900)
Applied in 2008: n=257,025 (unweighted n=315)

Employees
2001-4: 0, n=460,903 (unweighted n=119); 1-9, n=452,280 (unweighted n=303); 10-49, n=92,702 (unweighted n=372); 50-249, n=13,121 (unweighted n=272).
2005-8: 0, n=653,102 (unweighted n=86); 1-9, n=269,376 (unweighted n=277); 10-49, n=67,033 (unweighted n=293); 50-249, n=13,133 (unweighted n=244).
Applied in 2008: 0, n=148,420 (unweighted n=23); 1-9, n=82,008 (unweighted n=87); 10-49, n=21,037 (unweighted n=97); 50-249, n=5,561 (unweighted n=108).

Risk Rating
2001-4: minimal risk, n=43,768 (unweighted n=140); low risk, n=562,880 (unweighted n=439); average risk, n=310,514 (unweighted n=343); high risk, n=80,282 (unweighted n=129).
2005-8: minimal risk, n=13,588 (unweighted n=66); low risk, n=79,106 (unweighted n=252); average risk, n=509,851 (unweighted n=321); high risk, n=245,213 (unweighted n=117).
Applied in 2008: minimal risk, n=2,467 (unweighted n=27); low risk, n=22,278 (unweighted n=89); average risk, n=126,632 (unweighted n=111); high risk, n=60,939 (unweighted n=37).

- Instances of businesses being offered smaller term loans than requested appear low and relatively stable: this happened to 4.3% of SMEs with term loan demands in 2001-4; 5.4% in 2005-8; and 5.9% of applicants in 2008.
- However, notably 16.2% of term loan applicants in 2008, in the 1-9 employee size band, were partially rejected compared with only 6% in 2005-8 and 2.9% in 2001-4.
- And, among low risk firms, 9.4% of applicants in 2008 were offered less than requested compared with 3.4% in 2005-8 and 4.8% in 2001-4.

The analysis of term loan rejections concludes by looking at the distribution of rejections in the period 2005-8 between 2005-7 and 2007-2008. Again, the expectation is that more than a third of all rejections occurred in 2007-2008 due to the credit crisis.
Chart 5.12: Distribution of term loan rejections in 2005-8

Notes: The base is SMEs that were either denied a term loan outright or offered a smaller one than requested.
Outright rejection: n=94,029 (unweighted n=36)
Partial rejection: n=53,889 (unweighted n=36)

- 81.2% of outright term loan rejections, between 2005 and 2008, took place in 2007-2008\textsuperscript{13}.
- 76% of partial term loan rejections, between 2005 and 2008, took place in 2007-2008\textsuperscript{14}.

In other words, 2007-2008 was no ordinary year for the supply of term loans either since significantly more than a third of all term loan rejections (outright and partial), between 2005 and 2008, took place that year.

\textsuperscript{13} A binomial probability test that a third of all outright term loan rejections took place in 2008 was strongly rejected ($p<0.000$).
\textsuperscript{14} A binomial probability test that a third of all partial term loan rejections took place in 2008 was strongly rejected ($p=0.000$).
5.1.3 Leasing and hire-purchase agreements

Chart 5.13: % of SMEs which had a leasing or hire-purchase agreement application rejected outright in the last 3 years

Rejection Rates (Leasing and Hire Purchase Agreements: By Firm Size and Risk Rating)

Notes: The base is firms with demands for leasing and hire-purchase agreements (i.e., used or applied for a leasing or hire-purchase agreement in the 3 years before the survey).

All firms
2001-4: n=1,137,042 (unweighted n=1,271)
2005-8: n=1,040,784 (unweighted n=1,159)
Applied in 2008: n=426,020 (unweighted n=629)

Employees
2001-4: 0, n=364,076 (unweighted n=85); 1-9, n=410,465 (unweighted n=265); 10-49, n=107,895 (unweighted n=393); 50-249, n=14,128 (unweighted n=287).
2005-8: 0, n=603,285 (unweighted n=78); 1-9, n=329,822 (unweighted n=332); 10-49, n=89,412 (unweighted n=416); 50-249, n=18,264 (unweighted n=333).
Applied in 2008: 0, n=245,792 (unweighted n=31); 1-9, n=116,041 (unweighted n=133); 10-49, n=52,198 (unweighted n=244); 50-249, n=11,989 (unweighted n=221).

Risk Rating
2001-4: minimal risk, n=64,153 (unweighted n=191); low risk, n=451,618 (unweighted n=368); average risk, n=293,656 (unweighted n=315); high risk, n=67,207 (unweighted n=140).
2005-8: minimal risk, n=25,995 (unweighted n=119); low risk, n=115,057 (unweighted n=343); average risk, n=548,573 (unweighted n=424); high risk, n=214,162 (unweighted n=128).
Applied in 2008: minimal risk, n=15,733 (unweighted n=76); low risk, n=42,943 (unweighted n=182); average risk, n=224,316 (unweighted n=234); high risk, n=102,532 (unweighted n=63).

- Rejection rates for leasing and hire-purchase agreements are low: typically 3% or less.
- Overall, there is no apparent increase in these rejection rates in 2005-8 or among applicants in 2008.
- The exception here is high risk firms among which group 10.2% with demands for leasing and hire-purchase agreements were rejected in 2005-8 (10.5% among applicants in 2008) compared with only 2.8% in 2001-4.
Chart 5.14: % of SMEs which were offered a smaller leasing or hire-purchase agreement than requested in the last 3 years

- Instances of businesses being offered smaller leasing or hire-purchase agreements than requested are very low: this happened to less than 1% of SMEs in 2005-8, and applicants in 2008, with demands for this type of finance compared to 1.5% in 2001-4.
- Among low risk firms there was a relatively sharp drop in partial rejections from 2.7% in 2001-4 to 0.2% in 2005-8 (0.6% among applicants in 2008).

Rejection rates, both outright and partial, are much lower for leasing and hire-purchase agreements compared to overdrafts and term loans. Equally, rejection rates do not display the upward trend that was evident for bank loans (except for high risk firms) suggesting the availability of asset finance has been relatively unaffected by the credit crisis. One explanation is that the direct effects of the credit crisis, on balance sheets...
and funding sources, will have affected banks more than specialist asset financiers. Another reason is that collateral is not required to obtain a leasing or hire-purchase agreement, since the loan is secured on the asset being funded, whereas bank loans may be subject to collateral requirements. As the following section highlights lack of collateral has increasingly become a reason for being denied a bank loan.

5.2 Reasons for, and consequences of, rejection

The following analysis is conducted among the sample of firms which were denied bank loans. It looks at the reasons for rejection (as reported by the business owner) and the consequences of rejection (term loans only) for the business. Due to the small sample available for this analysis, no attempt is made to separate out the applicants in 2008 from the rest of the UKSMEF 2008 sample.

Chart 5.15: Reasons for overdraft rejection

- Overdraft rejections due to the firm having no security/collateral have more than doubled in 2005-2008 (accounting for 9.5% of overdraft rejections; up from 4.1% in 2001-4).
- Rejections due to applying for too much have also shown a relatively large increase of over 60% (4.6% points) from 7.5% in 2001-4 to 12.1% in 2005-8.
- And rejections due to the firm’s industry being too risky in the lender’s opinion have almost doubled from 2.4% in 2001-4 to 4.6% in 2005-8.
This analysis suggests lenders have become more risk averse in 2005-8 being less willing to lend to businesses without collateral, those asking for large amounts or those which are considered to be in risky industries.

Chart 5.16: Reasons for term loan rejection

<table>
<thead>
<tr>
<th>Reason for Rejection (Term Loans)</th>
<th>2001-2004</th>
<th>2005-2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Security</td>
<td>14.0%</td>
<td>4.0%</td>
</tr>
<tr>
<td>Insufficient Security</td>
<td>12.8%</td>
<td>4.0%</td>
</tr>
<tr>
<td>Poor Personal Credit History</td>
<td>4.0%</td>
<td>1.5%</td>
</tr>
<tr>
<td>Poor Business Credit History</td>
<td>1.5%</td>
<td>2.5%</td>
</tr>
<tr>
<td>No Credit History</td>
<td>2.5%</td>
<td>3.7%</td>
</tr>
<tr>
<td>Applied for too much</td>
<td>6.2%</td>
<td>2.3%</td>
</tr>
<tr>
<td>Inadequate Business Plan</td>
<td>14.0%</td>
<td>3.3%</td>
</tr>
<tr>
<td>Industry too Risky</td>
<td>15.7%</td>
<td>4.1%</td>
</tr>
<tr>
<td>Lack of Profitability</td>
<td>22.7%</td>
<td>15.7%</td>
</tr>
<tr>
<td>No Reason</td>
<td>14.0%</td>
<td>16.7%</td>
</tr>
<tr>
<td>Other</td>
<td>2.1%</td>
<td>70.8%</td>
</tr>
<tr>
<td>Don't know</td>
<td>0%</td>
<td>5.3%</td>
</tr>
</tbody>
</table>

Notes: The base is SMEs which were denied a term loan altogether in the 3 years prior to the survey.
2001-4: n=83,578 (unweighted n=56)
2005-8: n=118,196 (unweighted n=62)

Businesses may report more than one reason for rejection.

- 14% of SMEs denied term loans in 2005-8 report the reason was that they had no security (there were no corresponding cases in the sample for 2001-4).
- Also 12.8% report insufficient security as the reason for rejection in 2005-8, a more than three-fold increase from 2001-4 (4%).
- 14% of SMEs denied term loans in 2005-8 said the reason they were given was that their industry is too risky up from 2.3% in 2001-4.
- Lack of profitability also registers for the first time in 2005-8 accounting for 15.7% of term loan rejections.
- Notably there is a large increase in the percentage of firms reporting no reason was given for their being denied a term loan: 22.7% in 2005-8 versus 4.1% in 2001-4.
- There is also a significant decrease in ‘other’ (unclassified) reasons for rejection in 2005-8 (down to 15.7% as compared to 70.8% in 2001-4).
As with overdrafts, these reasons for rejection suggest that banks were less willing to make loans in the absence of, or with insufficient, collateral/security and/or to firms in risky industries. The absence of a track-record also appears to be an issue regarding term loans with banks much more uncertain in 2005-8 about business-owners with no credit history. Again, this evidence points to banks making more cautious lending decisions in 2005-8. The deteriorating situation in the real economy is shown by a lack of profitability appearing as one of the main reasons for rejection in 2005-8.

The increase in firms reporting they were not given a reason for rejection is worrying since it suggests a deterioration in communications between banks and businesses. An aggravating factor here may be the widespread use of automated scoring systems to screen applicants which can easily lead to a ‘computer says no’ culture in the bank. However, without proper feedback, the rejected business will have little idea about how to increase their chances of success with their next application. Such a breakdown in communications can be ill-afforded at the current time with funding hard to come by and the quality of applications therefore paramount. Banks clearly can play an active role in helping their customers improve their loan applications and part of this involves giving proper feedback on the reasons for rejection. A broader and more detailed look at financial relationships is provided in chapter 7.

The issue of a lack of collateral as an obstacle to obtaining finance is longstanding and underlies policy interventions such as Small Firms Loan Guarantees (SFLGs), currently replaced by Enterprise Finance Guarantees. The issue of collateral is returned to later in this chapter.

Chart 5.17: Consequences of term loan rejections

Notes: The base is SMEs which were denied a term loan altogether in the 3 years prior to the survey.
2001-4: n=83,578 (unweighted n=56)
2005-8: n=118,196 (unweighted n=62)
In 2001-4 the majority of firms denied term loans (58.5%) managed to get funding from elsewhere.

- However only a relatively small minority of previously rejected firms found an alternative source of funding in 2005-8 (26.9%).
- Also only 7.2% of firms denied term loans in 2005-8 were eventually able to go ahead with their plans compared with 28.7% in 2001-4.
- Less than 1 in 20 firms denied a term loan in 2001-4 had to drop their plans as a consequence of being denied a term loan.
- However, in 2005-8, the proportion of firms which had to drop their plans rose 10-fold to almost 1 in 2.
- There are also large increases in the proportion of firms having to resort to internal finance after rejection (from 3.2% in 2001-4 to 11.5% in 2005-8) or which got into serious difficulties (from 4.1% in 2001-4 to 10.7% in 2005-8).

This analysis further highlights the increased difficulties being faced by less credit-worthy businesses in raising finance. The withdrawal of sub-prime lenders from the market in 2009, such as Cattles, will only exacerbate these problems. In the absence of market sources, those fortunate to have access to internal sources of finance will be in a better position to proceed with their plans or even stave off serious difficulties.

5.3 Loan amounts

In this section the availability of finance is further examined from the perspective of loan amounts received by firms which made successful applications. This analysis begins with the size of overdraft facilities received (in aggregate, by firm size, risk ratings, industry and other groups) followed by analysis of term loan amounts.
5.3.1 Size of overdraft facilities

Chart 5.18: Average size of overdraft facility

Notes: The base is SMEs with an overdraft facility.

All firms
2001-4: n=1,800,000 (unweighted n=1,576)
2005-8: n=1,600,000 (unweighted n=1,244)

Applied in 2008: n=595,844 (unweighted n=561)

Employees
2001-4: 0, n=916,372 (unweighted n=225); 1-9, n=687,306 (unweighted n=458); 10-49, n=143,763 (unweighted n=534); 50-249, n=17,076 (unweighted n=359).
2005-8: 0, n=1,100,000 (unweighted n=138); 1-9, n=419,816 (unweighted n=426); 10-49, n=88,739 (unweighted n=392); 50-249, n=15,045 (unweighted n=288).

Applied in 2008: 0, n=357,076 (unweighted n=48); 1-9, n=187,825 (unweighted n=182); 10-49, n=43,552 (unweighted n=189); 50-249, n=7,390 (unweighted n=142).

Risk Rating
2001-4: minimal risk, n=70,283 (unweighted n=247); low risk, n=1,000,000 (unweighted n=643); average risk, n=545,255 (unweighted n=489); high risk, n=123,452 (unweighted n=181).
2005-8: minimal risk, n=35,801 (unweighted n=95); low risk, n=119,854 (unweighted n=329); average risk, n=876,657 (unweighted n=479); high risk, n=364,822 (unweighted n=144).

Applied in 2008: minimal risk, n=11,367 (unweighted n=39); low risk, n=46,941 (unweighted n=162); average risk, n=316,706 (unweighted n=211); high risk, n=190,122 (unweighted n=61).
The average size of overdraft facilities follows a U-shape trend over time starting at £36,495 in 2001-4 falling to £30,420 in 2005-8 and rising to £47,360 among successful applicants in 2008.

In particular successful larger applicants in 2008 (with 50-249 employees) obtained overdraft facilities with an average size of just under £1m compared to just under £0.5m in 2001-4.

In contrast, firms with no employees (which make up the majority of SMEs) have actually experienced falls in the size of their overdraft facilities from an average of £15,901 in 2001-4 to £7,996 in 2005-8 (£10,858 among applicants in 2008):

- Minimal risk SMEs have experienced an increase of 46% in their overdraft facilities since 2001-4 with an average facility standing at around £230,000 among applicants in 2008.
- Also an average overdraft facility for low risk firms was over £145,000 among applicants in 2008 which represents a six-fold increase from 2001-4.
- On the other hand, high risk firms have experienced a 75% decrease in the average size of their overdraft facilities from an average of £57,969 in 2001-4 to just under £15,000 among applicants in 2008.

The U-shape trend in size of overdraft facilities is consistent with data on aggregate overdraft lending to small businesses collected by the BBA. These data show falls in overdraft lending in 2006-7 and increases in 2008. However the analysis in this report (including the analysis of rejection rates) suggests that lower risk firms are the beneficiaries of these increases with higher risk firms either being offered smaller overdraft facilities or denied one altogether.

Chart 5.19: Average size of overdraft facility by industry

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15 See BBA Statistics Releases 107/07 and 069/08: www.bba.org.uk
Notes: The base is SMEs with an overdraft facility.
2001-4: Agriculture, Hunting and Forestry, n=72,434 (unweighted n=119); Manufacturing, n=94,621 (unweighted n=134); Construction, n=333,224 (unweighted n=228); Wholesale/Retail, n=313,871 (unweighted n=266); Hotels and Restaurants, n=37,289 (unweighted n=120); Transport, Storage and Communications, n=64,182 (unweighted n=138); Real Estate, Renting and Business Activities, n=610,044 (unweighted n=306); Health and Social Work, n=80,817 (unweighted n=111); Other Community, Social and Personal Service Activities, n=158,035 (unweighted n=154).
2005-8: Agriculture, Hunting and Forestry, n=67,181 (unweighted n=73); Manufacturing, n=131,671 (unweighted n=107); Construction, n=260,375 (unweighted n=188); Wholesale/Retail, n=237,162 (unweighted n=219); Hotels and Restaurants, n=67,352 (unweighted n=86); Transport, Storage and Communications, n=126,383 (unweighted n=98); Real Estate, Renting and Business Activities, n=417,399 (unweighted n=260); Health and Social Work, n=97,446 (unweighted n=87); Other Community, Social and Personal Service Activities, n=232,189 (unweighted n=126).
Applied in 2008: Agriculture, Hunting and Forestry, n=31,086 (unweighted n=35); Manufacturing, n=39,649 (unweighted n=41); Construction, n=78,392 (unweighted n=83); Wholesale/Retail, n=101,456 (unweighted n=107); Hotels and Restaurants, n=27,732 (unweighted n=36); Transport, Storage and Communications, n=16,654 (unweighted n=40); Real Estate, Renting and Business Activities, n=200,518 (unweighted n=125); Health and Social Work, n=30,787 (unweighted n=39); Other Community, Social and Personal Service Activities, n=69,568 (unweighted n=55).

- Looking across sectors there is evidence of a general increase in average overdraft facilities among applicants in 2008.
- Notably, among manufacturing firms, the average facility among applicants in 2008, at £76,529, was 55% higher than in 2001-4 (£49,248).
- And, among firms in Transport, Storage and Communication, the average facility was almost 3 times higher among applicants in 2008 compared to 2001-4 (£63,317 versus £23,098).

Chart 5.20: Average size of overdraft facility by region
Notes: The base is SMEs with an overdraft facility.

2001-4: London, n=354,110 (unweighted n=126); South East, n=318,081 (unweighted n=151); South West, n=153,781 (unweighted n=147); West Midlands, n=105,192 (unweighted n=125); East Midlands, n=109,781 (unweighted n=154); East, n=147,164 (unweighted n=146); North West, n=134,279 (unweighted n=139); Yorkshire and Humberside, n=128,243 (unweighted n=126); North East, n=57,976 (unweighted n=121); Scotland, n=104,044 (unweighted n=134); Wales, n=86,580 (unweighted n=114); Northern Ireland, n=65,287 (unweighted n=93).

2005-8: London, n=346,383 (unweighted n=110); South East, n=220,232 (unweighted n=128); South West, n=122,631 (unweighted n=110); West Midlands, n=162,369 (unweighted n=133); East Midlands, n=68,626 (unweighted n=102); East, n=133,065 (unweighted n=87); North West, n=150,138 (unweighted n=112); Yorkshire and Humberside, n=126,057 (unweighted n=85); North East, n=44,903 (unweighted n=94); Scotland, n=113,362 (unweighted n=95); Wales, n=83,934 (unweighted n=106); Northern Ireland, n=62,487 (unweighted n=81).

Applied in 2008: London, n=130,339 (unweighted n=58); South East, n=74,335 (unweighted n=58); South West, n=44,903 (unweighted n=53); West Midlands, n=60,114 (unweighted n=61); East Midlands, n=24,661 (unweighted n=42); East, n=29,208 (unweighted n=40); North West, n=70,287 (unweighted n=46); Yorkshire and Humberside, n=56,377 (unweighted n=38); North East, n=16,822 (unweighted n=43); Scotland, n=43,435 (unweighted n=49); Wales, n=35,304 (unweighted n=47); Northern Ireland, n=10,058 (unweighted n=26).

- Firms in most regions have experienced increased overdraft facilities between 2001-4 and 2005-8 and/or among applicants in 2008.
- For example, an average overdraft facility in the South East increased from £29,546 in 2001-4 to £31,587 in 2005-8 (£68,144 among applicants in 2008); in the South West average facilities went from £30,792 to £42,212 (£82,536 among applicants in 2008); and in Scotland average facilities rose from £48,489 to £52,922 (£74,123 among applicants in 2008).
- In contrast average facilities in London fell from £29,003, in 2001-4, to £19,181 in 2005-8 (£20,529 among applicants in 2008); in the West Midlands average facilities fell from £49,872 to £21,304 (£23,019 among applicants in 2008); and the largest fall was in Yorkshire and Humberside where an average facility fell from £74,344, in 2001-4, to £26,243 in 2005-8 (£31,308 among applicants in 2008).

Chart 5.21: Average size of overdraft facility by other groups
Notes: The base is SMEs with an overdraft facility.

2001-4: High growth, n=490,646 (unweighted n=369); start-up, n=97,693 (unweighted n=75); female, n=340,583 (unweighted n=252); ethnic minority, n=131,906 (unweighted n=71).
2005-8: High growth, n=186,827 (unweighted n=139); start-up, n=144,378 (unweighted n=51); female, n=271,661 (unweighted n=216); ethnic minority, n=219,201 (unweighted n=214).
Applied in 2008: High growth, n=67,363 (unweighted n=64); start-up, n=83,548 (unweighted n=32); female, n=93,399 (unweighted n=93); ethnic minority, n=86,914 (unweighted n=80).

- Across other groups there is again evidence of increases in the size of overdraft facilities among applicants in 2008.
- In particular average overdraft facilities among female led businesses in 2008, at £28,840, are almost double their level in 2001-4 (£17,191).
- And an average facility for an ethnic minority led firm which applied in 2008 (£51,972) is almost 3 times higher than 2001-4 (£19,497).
- However facilities for high growth firms have fallen from an average of £51,960 in 2001-4 to £30,885 in 2005-8 and £34,265 among applicants in 2008.

5.3.2 Size of term loans

Chart 5.22: Average size of term loan
Notes: The base is SMEs with term loans.

All firms
2001-4: n=742,068 (unweighted n=816)
2005-8: n=530,657 (unweighted n=582)
Applied in 2008: n=194,827 (unweighted n=243)

Employees
2001-4: 0, n=317,012 (unweighted n=75); 1-9, n=341,948 (unweighted n=226); 10-49, n=72,418 (unweighted n=297); 50-249, n=10,691 (unweighted n=218).
2005-8: 0, n=322,889 (unweighted n=44); 1-9, n=155,386 (unweighted n=159); 10-49, n=42,629 (unweighted n=198); 50-249, n=9,753 (unweighted n=181).
Applied in 2008: 0, n=120,009 (unweighted n=18); 1-9, n=54,504 (unweighted n=62); 10-49, n=15,910 (unweighted n=73); 50-249, n=4,404 (unweighted n=89).

Risk Rating
2001-4: minimal risk, n=29,120 (unweighted n=107); low risk, n=443,723 (unweighted n=340); average risk, n=200,634 (unweighted n=269); high risk, n=48,011 (unweighted n=87).
2005-8: minimal risk, n=4,942 (unweighted n=42); low risk, n=48,385 (unweighted n=172); average risk, n=285,949 (unweighted n=213); high risk, n=113,773 (unweighted n=89).
Applied in 2008: minimal risk, n=1,452 (unweighted n=19); low risk, n=16,796 (unweighted n=70); average risk, n=103,448 (unweighted n=91); high risk, n=44,276 (unweighted n=27).

- The average size of term loans show an upward trend since 2001-4: among applicants in 2008 the average was £183,202 versus £145,804 in 2005-8 and £102,120 in 2001-4.
- All firm sizes appear to have benefitted from these increases with, in particular, firms with 9 or less employees seeing a doubling in loan sizes since 2001-4.
- Across risk ratings it appears that minimal risk firms have benefitted from the largest increases: the average size of loans to these firms has trebled from about a £¼m in 2001-4 to just under £1m among 2008 applicants.
- However high risk firms have experienced falling term loan amounts: from an average of £153,135 in 2001-4 amounts fell by 45% to £84,618 in 2005-8 and £70,888 among applicants in 2008.

The upward trend in average term loan size is again consistent with BBA statistics which show aggregate term lending to small businesses grew by 8% in 2006-7 and by 10% in 2007-8. However, again the analysis points to lower risk firms being the beneficiaries of these increases with higher risk firms, in contrast, either receiving reduced amounts or being denied loans altogether.
Chart 5.23: Average size of term loan by industry

Notes: The base is SMEs with term loans.
2001-4: Agriculture, Hunting and Forestry, n=21,146 (unweighted n=45); Manufacturing, n=30,529 (unweighted n=74); Construction, n=108,280 (unweighted n=85); Wholesale/Retail, n=144,859 (unweighted n=142); Hotels and Restaurants, n=31,681 (unweighted n=93); Transport, Storage and Communications, n=23,548 (unweighted n=70); Real Estate, Renting and Business Activities, n=295,201 (unweighted n=152); Health and Social Work, n=24,081 (unweighted n=75); Other Community, Social and Personal Service Activities, n=62,744 (unweighted n=80).
2005-8: Agriculture, Hunting and Forestry, n=15,373 (unweighted n=26); Manufacturing, n=42,751 (unweighted n=45); Construction, n=58,701 (unweighted n=63); Wholesale/Retail, n=111,518 (unweighted n=111); Hotels and Restaurants, n=40,737 (unweighted n=62); Transport, Storage and Communications, n=55,950 (unweighted n=48); Real Estate, Renting and Business Activities, n=96,204 (unweighted n=101); Health and Social Work, n=38,770 (unweighted n=63); Other Community, Social and Personal Service Activities, n=70,653 (unweighted n=63).
Applied in 2008: Agriculture, Hunting and Forestry, n=10,937 (unweighted n=12); Manufacturing, n=12,727 (unweighted n=14); Construction, n=16,480 (unweighted n=37); Wholesale/Retail, n=37,866 (unweighted n=45); Hotels and Restaurants, n=16,706 (unweighted n=24); Transport, Storage and Communications, n=16,181 (unweighted n=19); Real Estate, Renting and Business Activities, n=30,295 (unweighted n=47); Health and Social Work, n=20,301 (unweighted n=20); Other Community, Social and Personal Service Activities, n=33,335 (unweighted n=25).

- Across sectors, there is a general increase in average term loans sizes since 2001-4.
- In particular, compared to 2001-4, average loan sizes among applicants in 2008 have increased by around five-fold among Construction firms, firms in Hotels and Restaurants and those in Transport, Storage and Communications.
- In contrast Wholesale/Retail firms have experienced a decrease of 40% in the average size of term loans since 2001-4 (down to £73,389 among applicants in 2008 from £125,910 in 2001-4).
Chart 5.24: Average size of term loan by region

Notes: The base is SMEs with term loans.
2001-4: London, n=189,228 (unweighted n=58); South East, n=103,895 (unweighted n=64); South West, n=57,677 (unweighted n=86); West Midlands, n=39,419 (unweighted n=73); East Midlands, n=50,256 (unweighted n=73); East, n=69,529 (unweighted n=80); North West, n=44,918 (unweighted n=76); Yorkshire and Humberside, n=63,704 (unweighted n=72); North East, n=15,418 (unweighted n=55); Scotland, n=52,077 (unweighted n=80); Wales, n=50,684 (unweighted n=69); Northern Ireland, n=25,219 (unweighted n=48).
2005-8: London, n=50,435 (unweighted n=37); South East, n=79,311 (unweighted n=68); South West, n=45,386 (unweighted n=63); West Midlands, n=67,622 (unweighted n=53); East Midlands, n=27,466 (unweighted n=49); East, n=84,364 (unweighted n=47); North West, n=46,445 (unweighted n=51); Yorkshire and Humberside, n=30,431 (unweighted n=45); North East, n=9,095 (unweighted n=43); Scotland, n=33,454 (unweighted n=41); Wales, n=40,270 (unweighted n=45); Northern Ireland, n=9,028 (unweighted n=28).
Applied in 2008: London, n=29,580 (unweighted n=22); South East, n=42,752 (unweighted n=31); South West, n=20,173 (unweighted n=27); West Midlands, n=12,783 (unweighted n=17); East Midlands, n=8,740 (unweighted n=20); East, n=18,844 (unweighted n=16); North West, n=25,436 (unweighted n=23); Yorkshire and Humberside, n=17,601 (unweighted n=16); North East, n=4,538 (unweighted n=26); Scotland, n=4,341 (unweighted n=12); Wales, n=6,237 (unweighted n=14); Northern Ireland, n=2,984 (unweighted n=11).

- Term loan amounts have increased on average across most regions.
- For example, in London the average term loan increased from £53,051 in 2001-4 to £215,918 in 2005-8 (£274,725 among applicants in 2005-8); in the North West they increased from £119,706 to £208,181 (£248,082 among applicants in 2008); and in Northern Ireland the average term loan went from £72,255 in 2001-4 to £299,254 in 2005-8 (£366,960 among applicants in 2008).
Chart 5.25: Average size of term loan by other groups

Notes: The base is SMEs with term loans.
2001-4: High growth, n=201,743 (unweighted n=201); start-up, n=56,754 (unweighted n=52); female, n=103,669 (unweighted n=117); ethnic minority, n=61,651 (unweighted n=35).
2005-8: High growth, n=75,531 (unweighted n=69); start-up, n=59,277 (unweighted n=27); female, n=92,927 (unweighted n=98); ethnic minority, n=78,862 (unweighted n=94).
Applied in 2008: High growth, n=41,297 (unweighted n=31); start-up, n=21,370 (unweighted n=12); female, n=24,157 (unweighted n=35); ethnic minority, n=18,803 (unweighted n=37).

- Analysis of other groups also suggests an increasing trend in the size of term loans since 2001-4.
- In particular the average size of term loans to ethnic minorities has increased five-fold to £344,779 among applicants in 2008.
- And the average term loan among start-up applicants in 2008 (£147,588) was more than twice the average size of loans in 2001-4 (£62,210).
- However the average size of term loans to high growth firms shows little change.

5.4 Cost of loans

The first set of charts, in this section, examine changes in interest charges on overdrafts and term loans (in aggregate and by sub-groups). Following this, analysis is presented regarding changes in arrangement fees.
5.4.1 Overdraft margins

Chart 5.26: Average margins over base rates on overdrafts

Margins over Base (% Points) (Overdrafts: By Firm Size and Risk Rating)

Notes: The base is SMEs with an overdraft facility.
All firms
2001-4: n=1,800,000 (unweighted n=1,576)
2005-8: n=1,600,000 (unweighted n=1,244)
Applied in 2008: n=595,844 (unweighted n=561)
Employees
2001-4: 0, n=916,372 (unweighted n=225); 1-9, n=687,306 (unweighted n=458); 10-49, n=143,763 (unweighted n=534);
50-249, n=17,076 (unweighted n=359).
2005-8: 0, n=1,100,000 (unweighted n=138); 1-9, n=419,816 (unweighted n=426); 10-49, n=88,739 (unweighted n=392);
50-249, n=15,045 (unweighted n=288).
Applied in 2008: 0, n=357,076 (unweighted n=48); 1-9, n=187,825 (unweighted n=182); 10-49, n=43,552 (unweighted n=189); 50-249, n=7,390 (unweighted n=142).
Risk Rating
2001-4: minimal risk, n=70,283 (unweighted n=247); low risk, n=1,000,000 (unweighted n=643); average risk, n=545,255
(unweighted n=489); high risk, n=123,452 (unweighted n=181).
2005-8: minimal risk, n=35,801 (unweighted n=95); low risk, n=119,854 (unweighted n=329); average risk, n=876,657
(unweighted n=479); high risk, n=364,822 (unweighted n=144).
Applied in 2008: minimal risk, n=11,367 (unweighted n=39); low risk, n=46,941 (unweighted n=162); average risk,
n=316,706 (unweighted n=211); high risk, n=130,122 (unweighted n=61).

- Margins on overdrafts have increased on average from 2.4% points over base in 2001-4 to 3.4% points over base in 2005-8 (4.4% points over base among applicants in 2008).
- The smallest SMEs have seen the biggest increase in their overdraft margins: in 2008 firms with no employees paid on average 6.3% points over base compared to 3.7% points in 2005-8 and 2.5% points in 2001-4.
- Minimal risk firms have seen a sharp increase in margins, among applicants in 2008, which increased to 2.5% points over base from around 1.3% points over base in 2005-8 and 1.6% points in 2001-4.
- Margins paid by higher risk firms have also increased since 2001-4 from around 2% points over base up to 3.7% points over base among those which applied in 2008.
Chart 5.27: Average margins over base rates on overdrafts by industry

Margins over Base (% Points) (Overdrafts: By Industry)

- Across sectors overdraft margins have also, in general, increased over time.
- Notably: margins paid by Wholesale/Retail firms have increased to 5.2% points over base among applicants in 2008 from 2.1% points in 2001-4; margins were 4.8% points over base in 2008 among Transport, Storage and Communication firms up from 1.6% points over base in 2001-4; and among Other Community, Social and Personal Service Activities average margins stood at 12.4% points over base in 2008 compared to 3% points in 2001-4.
- In contrast, average margins paid by Manufacturing, Construction and Real Estate, Renting and Business Activities firms appear relatively stable over time and those among Health and Social Work firms have fallen.

Notes: The base is SMEs with an overdraft facility.
2001-4: Agriculture, Hunting and Forestry, n=72,434 (unweighted n=119); Manufacturing, n=94,621 (unweighted n=134); Construction, n=333,224 (unweighted n=228); Wholesale/Retail, n=313,871 (unweighted n=266); Hotels and Restaurants, n=37,289 (unweighted n=120); Transport, Storage and Communications, n=64,182 (unweighted n=138); Real Estate, Renting and Business Activities, n=610,044 (unweighted n=306); Health and Social Work, n=80,817 (unweighted n=111); Other Community, Social and Personal Service Activities, n=158,035 (unweighted n=154).
2005-8: Agriculture, Hunting and Forestry, n=67,181 (unweighted n=73); Manufacturing, n=131,671 (unweighted n=107); Construction, n=260,375 (unweighted n=188); Wholesale/Retail, n=237,162 (unweighted n=219); Hotels and Restaurants, n=67,352 (unweighted n=86); Transport, Storage and Communications, n=126,383 (unweighted n=98); Real Estate, Renting and Business Activities, n=417,399 (unweighted n=262); Health and Social Work, n=97,446 (unweighted n=87); Other Community, Social and Personal Service Activities, n=232,189 (unweighted n=126).
Applied in 2008: Agriculture, Hunting and Forestry, n=31,086 (unweighted n=35); Manufacturing, n=39,649 (unweighted n=41); Construction, n=78,392 (unweighted n=83); Wholesale/Retail, n=101,456 (unweighted n=107); Hotels and Restaurants, n=27,732 (unweighted n=36); Transport, Storage and Communications, n=16,654 (unweighted n=40); Real Estate, Renting and Business Activities, n=200,518 (unweighted n=125); Health and Social Work, n=30,787 (unweighted n=39); Other Community, Social and Personal Service Activities, n=69,568 (unweighted n=55).
There is no consistent pattern in how overdraft margins have changed over time across regions: in some regions there were large increases; in other regions margins remained stable or fell.

In particular, in the East Midlands, average margins rose from 1.3% points over base in 2001-4 to 4.9% points in 2005-8 (8.2% points among applicants in 2008); in Yorkshire and Humberside average margins went from 1.7% points over base in 2001-4 to 7.3% points in 2005-8 (11.8% points among applicants in 2008); and in Wales margins went from 3.3% points to 4.3% points (5.3% points among applicants in 2008).

However in London margins fell from 2.9% points over base in 2001-4 to 1.7% points in 2005-8 (2.6% points among applicants in 2008; in the South West they fell from 2.3% points over base to 1.9% points (2.3% points among applicants in 2008); and they went from 2.1 % points over base in 2001-4 to 1.7% points in 2005-8 (1.8% points among applicants in 2008) in the West Midlands.
There is no consistent pattern in overdraft margins over time for the other groups reported in the above chart.

Among high growth firms, average margins were 2.2% points over base among applicants in 2008 which is similar to the level in 2001-4 but lower than in 2005-8 (3.1% points over base).

Average margins for female led businesses were 3.2% points in 2008 which is higher than in 2001-4 (2.1% points over base) but below the average of 5.4% points over base in 2005-8.

And among ethnic minority led firms margins have fallen consistently since 2001-4 from 3.4% points over base down to 2.7% points over base among applicants in 2008.

In contrast, margins paid by start-ups have increased from 2.8% points over base in 2001-4 to 5% points over base in 2008.
5.4.2 Term loan margins

Chart 5.30: Average margins over base rates on term loans

Average margins over base for term loans also display an upward trend: these margins have risen from 2.2% points over base, in 2001-4, to 2.8% points over base in 2005-8 and to 3.7% points over base among applicants in 2008.

These increases appear to be concentrated in smaller SMEs: among those with no employees, margins have more than doubled from 2% points over base in 2001-4 to 4.5% points over base in 2008; and among firms with 1-9 employees, average margins were 3.1% points in 2008 from 2.3-4% points over base in 2001-4 and 2005-8.
However, among firms with 10 or more employees, average margins have fallen since 2001-4 from around 2.1-2.2% points over base to around 1.5-1.7% points over base in 2008.

Margins among minimal risk firms also appear to be stable if not slightly lower among applicants in 2008 (around 1.4% points over base from around 1.6-7% points over base prior to this).

In contrast: margins paid by average risk firms have increased to 4.2% points over base in 2008 from 1.9% points over base in 2001-4.

And those paid by high risk firms stood at 4% points over base among applicants in 2008 up from 2.5% points over base in 2001-4.

Chart 5.31: Average margins over base rates on term loans by industry

Notes: The base is SMEs with a term loan.
2001-4: Agriculture, Hunting and Forestry, n=21,146 (unweighted n=45); Manufacturing, n=30,529 (unweighted n=74); Construction, n=108,280 (unweighted n=85); Wholesale/Retail, n=144,859 (unweighted n=142); Hotels and Restaurants, n=31,681 (unweighted n=93); Transport, Storage and Communications, n=23,548 (unweighted n=70); Real Estate, Renting and Business Activities, n=295,201 (unweighted n=152); Health and Social Work, n=24,081 (unweighted n=75); Other Community, Social and Personal Service Activities, n=62,744 (unweighted n=80).
2005-8: Agriculture, Hunting and Forestry, n=15,373 (unweighted n=26); Manufacturing, n=42,751 (unweighted n=45); Construction, n=58,701 (unweighted n=63); Wholesale/Retail, n=111,518 (unweighted n=111); Hotels and Restaurants, n=40,737 (unweighted n=62); Transport, Storage and Communications, n=55,950 (unweighted n=48); Real Estate, Renting and Business Activities, n=96,204 (unweighted n=101); Health and Social Work, n=38,770 (unweighted n=63); Other Community, Social and Personal Service Activities, n=70,653 (unweighted n=63).
Applied in 2008: Agriculture, Hunting and Forestry, n=10,937 (unweighted n=12); Manufacturing, n=12,727 (unweighted n=14); Construction, n=16,480 (unweighted n=37); Wholesale/Retail, n=37,866 (unweighted n=45); Hotels and Restaurants, n=16,706 (unweighted n=24); Transport, Storage and Communications, n=16,181 (unweighted n=19); Real Estate, Renting and Business Activities, n=30,295 (unweighted n=47); Health and Social Work, n=20,301 (unweighted n=20); Other Community, Social and Personal Service Activities, n=33,335 (unweighted n=25).
Looking across industries, some sectors show increases in average term loan margins some are stable and some show falling margins over time.
In particular, margins paid by Construction firms have increased to 4% points over base, among applicants in 2008, from 2.4% points over base in 2001-4.
Also margins paid by firms in Other Community, Social and Personal Service Activities have increased from 2.1% points over base in 2001-4 up to 10.5% points over base in 2008.
In contrast, average margins paid by manufacturing firms in 2008 were 2% points over base down from 3.9% points over base in 2005-8 (but above their level of 1.6% points over base in 2001-4).
And average margins paid by firms in Transport, Storage and Communications fell from 3.6% points over base in 2001-4 to 1.6% points over base among applicants in 2008.

Chart 5.32: Average margins over base rates on term loans by region

Notes: The base is SMEs with term loans.
2001-4: London, n=189,228 (unweighted n=58); South East, n=103,895 (unweighted n=64); South West, n=57,677 (unweighted n=86); West Midlands, n=39,419 (unweighted n=73); East Midlands, n=50,256 (unweighted n=73); East, n=69,529 (unweighted n=80); North West, n=44,918 (unweighted n=76); Yorkshire and Humberside, n=63,704 (unweighted n=72); North East, n=15,418 (unweighted n=55); Scotland, n=32,077 (unweighted n=60); Wales, n=50,684 (unweighted n=69); Northern Ireland, n=25,219 (unweighted n=48).
2005-8: London, n=50,435 (unweighted n=37); South East, n=79,311 (unweighted n=68); South West, n=45,386 (unweighted n=63); West Midlands, n=67,622 (unweighted n=53); East Midlands, n=27,466 (unweighted n=49); East, n=84,364 (unweighted n=47); North West, n=46,445 (unweighted n=51); Yorkshire and Humberside, n=30,431 (unweighted n=45); North East, n=9,095 (unweighted n=43); Scotland, n=33,454 (unweighted n=41); Wales, n=40,270 (unweighted n=45); Northern Ireland, n=9,028 (unweighted n=28).
Applied in 2008: London, n=29,580 (unweighted n=22); South East, n=42,752 (unweighted n=31); South West, n=20,173 (unweighted n=27); West Midlands, n=12,783 (unweighted n=17); East Midlands, n=8,740 (unweighted n=20); East, n=18,844 (unweighted n=16); North West, n=25,436 (unweighted n=23); Yorkshire and Humberside, n=17,601 (unweighted n=16); North East, n=4,538 (unweighted n=26); Scotland, n=4,341 (unweighted n=12); Wales, n=6,237 (unweighted n=14); Northern Ireland, n=2,984 (unweighted n=11).
The direction of term loan margins is mixed over regions: some regions have experienced increases; other regions appear more stable.

In particular there were increases in London, where the average term loan margin rose from 2% points over base in 2001-4 to 3.4% points in 2005-8; in the East Midlands margins increased from 1.9% points to 4.9% points over base; in Yorkshire and Humberside they went from 2.3% points to 7.8% points over base (11% points among applicants in 2008); and in the North East they increased from 1.5% points to 2.5% points over base (3% points over base among applicants in 2008).

In contrast, average term loan margins appear stable in the South East, East of England, North West, Scotland and Northern Ireland.

And in the West Midlands they fell from 2.7% points over base in 2001-4 to 1.3% points over base in 2005-8, before rising again to 2.9% points over base among applicants in 2008.

Chart 5.33: Average margins over base rates on term loans by other groups

Notes: The base is SMEs with a term loan.
2001-4: High growth, n=201,743 (unweighted n=201); start-up, n=56,754 (unweighted n=52); female, n=103,669 (unweighted n=117); ethnic minority, n=61,651 (unweighted n=35).
2005-8: High growth, n=75,531 (unweighted n=69); start-up, n=59,277 (unweighted n=27); female, n=92,927 (unweighted n=98); ethnic minority, n=78,862 (unweighted n=94).
Applied in 2008: High growth, n=41,297 (unweighted n=31); start-up, n=21,370 (unweighted n=12); female, n=24,157 (unweighted n=35); ethnic minority, n=18,803 (unweighted n=37).
• There is no consistent trend in term loan margins among other groups.
• Term loan margins are on average higher among high growth firms and female led businesses which applied in 2008.
• In contrast, margins among start-ups are lower in 2008 compared to 2005-8 (2.9% points) and 2001-4 (2.5% points).
• Also, among ethnic minority led businesses average margins were higher in 2005-8 compared to 2001-4 (2.8% points over base versus 1.2% points) but were only 2% points over base among applicants in 2008.

5.4.3 Margins on leasing and hire-purchase agreements

Chart 5.34: Average margins over base rates on leasing and hire-purchase agreements

Notes: The base is SMEs with a leasing or hire-purchase agreement.
All firms
2001-4: n=390,095 (unweighted n=553)
2005-8: n=247,353 (unweighted n=408)
Applied in 2008: n=114,481 (unweighted n=279)
Employees
2001-4: 0, n=148,751 (unweighted n=28); 1-9, n=169,585 (unweighted n=107); 10-49, n=62,388 (unweighted n=224); 50-249, n=9,370 (unweighted n=194).
2005-8: 0, n=103,259 (unweighted n=13); 1-9, n=107,049 (unweighted n=108); 10-49, n=29,332 (unweighted n=145); 50-249, n=7,713 (unweighted n=142).
Applied in 2008: 0, n=36,798 (unweighted n=6); 1-9, n=50,350 (unweighted n=58); 10-49, n=21,584 (unweighted n=105); 50-249, n=5,729 (unweighted n=110).
Risk Rating
2001-4: minimal risk, n=30,621 (unweighted n=116); low risk, n=222,134 (unweighted n=201); average risk, n=103,267 (unweighted n=152); high risk, n=32,095 (unweighted n=76).
2005-8: minimal risk, n=10,191 (unweighted n=48); low risk, n=36,482 (unweighted n=132); average risk, n=122,811 (unweighted n=147); high risk, n=30,691 (unweighted n=40).
Applied in 2008: minimal risk, n=7,173 (unweighted n=32); low risk, n=24,349 (unweighted n=97); average risk, n=50,720 (unweighted n=99); high risk, n=20,432 (unweighted n=26).
• Average margins on leasing and hire-purchase agreements doubled from 1.2% points over base in 2001-4 to 2.4% points over base in 2005-8.
• However, margins are actually lower among applicants in 2008 averaging 2% points over base.
• Among firms with no employees the average margin increased from 1% point over base in 2001-4 to 3.7% points over base in 2005-8. However, among applicants in 2008, the margin was only 1.4% points over base.
• Among firms with 1-9 employees, margins are stable between 2001-4 and 2005-8 (1.3-1.5% points over base) but among applicants in 2008 the average margin was 2.5% points over base.
• Margins among average risk firms increased from 0.8% points over base in 2001-4 to 2.7% points over base in 2005-8 (3.1% points over base among applicants in 2008).
• Surprisingly, margins among high risk firms seem to have fallen.

Across different types of loan, margins are higher in 2008 for most types of firm. Underlying these increases was the higher cost of capital incurred by banks in 2008 and increased levels of default risk. Indeed, the increases in margins tended to be greater among average or high risk firms compared to lower risk firms.

5.4.4 Arrangement fees

The following charts look at changes in arrangement fees paid by SMEs to obtain overdrafts, term loans and asset finance (in aggregate, by size and by risk-ratings).

Chart 5.35: Average arrangement fees on overdrafts
Small Firms in the Credit Crisis: Evidence from the UK Survey of SME Finances

Notes: The base is SMEs with an overdraft facility.

All firms
2001-4: n=1,800,000 (unweighted n=1,576)
2005-8: n=1,600,000 (unweighted n=1,244)
Applied in 2008: n=595,844 (unweighted n=561)

Employees
2001-4: 0, n=916,372 (unweighted n=225); 1-9, n=687,306 (unweighted n=458); 10-49, n=143,763 (unweighted n=534); 50-249, n=17,076 (unweighted n=359).
2005-8: 0, n=1,100,000 (unweighted n=138); 1-9, n=419,816 (unweighted n=426); 10-49, n=88,739 (unweighted n=392); 50-249, n=15,045 (unweighted n=288).
Applied in 2008: 0, n=357,076 (unweighted n=48); 1-9, n=187,825 (unweighted n=182); 10-49, n=43,552 (unweighted n=142).

Risk Rating
2001-4: minimal risk, n=70,283 (unweighted n=247); low risk, n=1,000,000 (unweighted n=643); average risk, n=545,255 (unweighted n=489); high risk, n=123,452 (unweighted n=181).
2005-8: minimal risk, n=35,801 (unweighted n=95); low risk, n=119,854 (unweighted n=329); average risk, n=876,657 (unweighted n=479); high risk, n=364,822 (unweighted n=144).
Applied in 2008: minimal risk, n=11,367 (unweighted n=39); low risk, n=46,941 (unweighted n=162); average risk, n=316,706 (unweighted n=211); high risk, n=130,122 (unweighted n=61).

- The average arrangement fee for an overdraft has increased from £243 in 2001-4 to £442 among 2008 applicants, an increase of over 80%.
- Firms with 1-9 employees have experienced the biggest relative increase in arrangement fees: fees among applicants in 2008 (£739) increased by over 140% compared to 2001-4 (£306).
- Minimal and high risk firms have actually experienced a decrease in overdraft arrangement fees in 2008: these fell to £647 in 2008 from £969 in 2001-2004 among minimal risk firms; and to £148 from £510 among high risk firms.
- However arrangement fees paid by low risk and average risk firms have increased among applicants in 2008.
- In particular low risk applicants in 2008 paid on average facility fees of £793 compared to only £136 in 2001-4.

Chart 5.36: Average arrangement fees on term loans

Arrangement Fees (Term Loans)
Notes: The base is SMEs with a term loan.

All firms
2001-4: n=742,068 (unweighted n=816)
2005-8: n=530,657 (unweighted n=582)
Applied in 2008: n=194,827 (unweighted n=243)

Employees
2001-4: 0, n=317,012 (unweighted n=75); 1-9, n=341,948 (unweighted n=226); 10-49, n=72,418 (unweighted n=297); 50-249, n=10,691 (unweighted n=218).
2005-8: 0, n=322,889 (unweighted n=44); 1-9, n=155,386 (unweighted n=159); 10-49, n=42,629 (unweighted n=198); 50-249, n=9,753 (unweighted n=181).
Applied in 2008: 0, n=120,009 (unweighted n=8); 1-9, n=54,504 (unweighted n=62); 10-49, n=15,910 (unweighted n=73); 50-249, n=4,404 (unweighted n=89).

Risk Rating
2001-4: minimal risk, n=29,120 (unweighted n=107); low risk, n=443,723 (unweighted n=340); average risk, n=200,634 (unweighted n=269); high risk, n=48,011 (unweighted n=87).
2005-8: minimal risk, n=4,942 (unweighted n=42); low risk, n=48,385 (unweighted n=172); average risk, n=285,949 (unweighted n=213); high risk, n=113,773 (unweighted n=89).
Applied in 2008: minimal risk, n=1,452 (unweighted n=19); low risk, n=16,796 (unweighted n=70); average risk, n=103,448 (unweighted n=91); high risk, n=44,276 (unweighted n=27).

- The average arrangement fee for a term loan has increased by 43% from £1,023 in 2001-2004 to £1,468 among applicants in 2008.
- Firms with 1-9 employees experienced a 220% increase from £982 in 2001-4 to £3,144 among applicants in 2008.
- Arrangement fees paid by minimal risk firms which applied in 2008 were over 7 times higher than those paid in 2001-4 (£5,826 versus £827).

Chart 5.37: Average arrangement fees on leasing and hire-purchase agreements
Notes: The base is SMEs with a leasing or hire-purchase agreement.

All firms
2001-4: n=390,095 (unweighted n=553)
2005-8: n=247,353 (unweighted n=408)
Applied in 2008: n=114,461 (unweighted n=279)

Employees
2001-4: 0, n=148,751 (unweighted n=28); 1-9, n=169,585 (unweighted n=107); 10-49, n=62,388 (unweighted n=224); 50-249, n=9,370 (unweighted n=194).
2005-8: 0, n=103,259 (unweighted n=13); 1-9, n=107,049 (unweighted n=108); 10-49, n=29,332 (unweighted n=145); 50-249, n=7,713 (unweighted n=142).
Applied in 2008: 0, n=36,798 (unweighted n=6); 1-9, n=50,350 (unweighted n=58); 10-49, n=21,584 (unweighted n=105); 50-249, n=5,729 (unweighted n=110).

Risk Rating
2001-4: minimal risk, n=30,621 (unweighted n=116); low risk, n=222,134 (unweighted n=201); average risk, n=103,267 (unweighted n=152); high risk, n=32,095 (unweighted n=76).
2005-8: minimal risk, n=10,191 (unweighted n=48); low risk, n=36,482 (unweighted n=132); average risk, n=122,811 (unweighted n=147); high risk, n=30,691 (unweighted n=40).
Applied in 2008: minimal risk, n=7,173 (unweighted n=32); low risk, n=24,349 (unweighted n=97); average risk, n=50,720 (unweighted n=99); high risk, n=20,432 (unweighted n=26).

- Average arrangement fees on leasing and hire-purchase agreements more than doubled from £614 in 2001-4 to £1,387 among applicants in 2008.
- However, it seems that smaller firms have borne most of this increase: in particular average fees for firms with no employees increased almost 10-fold from £241 in 2001-4 to £2,105 among applicants in 2008.
- In contrast, among firms with 50-249 employees, average fees went from £1,351 in 2001-4 to £647 among applicants in 2008.
- Across risk ratings minimal, low and average risk firms paid higher fees on average in 2008 compared to 2001-4.
- However, among high risk firms, average fees fell from £3,919 in 2001-4 to £1,871 among applicants in 2008.

This analysis indicates that arrangement fees, for different types of loans, were higher among applicants in 2008. Perhaps surprisingly arrangement fees increased among low risk firms and fell among high risk firms: the opposite might have been expected since high risk firms need more rigorous screening implying higher administrative costs. One explanation may be that the low risk loans involved more collateral which would increase the legal costs in setting up the loan. This is an issue explored in the following section.

5.5 Loan collateral

Supplying collateral on a loan provides lenders with a means of recovering some or all of its losses in the event that the borrower defaults. If the borrower defaults the lender can sell the assets to make good the non-repayment of the loan.

A simple view of the role of collateral is that banks require it from observably riskier businesses (implying that incidences of collateral will be highest among high risk firms). However, another explanation for the role of collateral is based on the view that banks have imperfect information about the borrower's default risk (which is known to the borrower implying asymmetric information). In that case collateral may be offered by low risk businesses to signal their type to lenders: since low risk firms are less likely to default, their owners may be more willing to offer collateral in return for a loan with a lower interest rate (see Han, Fraser and Storey, 2009\textsuperscript{16}, for a discussion of the role of collateral).

\textsuperscript{16} Han, L., Fraser, S., and Storey, D.J. (2009), ‘The Role of Collateral in Entrepreneurial Finance’, Journal of Business Finance and Accounting, 36(3), 424-455.
collateral in entrepreneurial finance). Here, it would be expected that incidences of collateral are higher among low risk businesses.

In recent years collateral requirements have become less frequent as lenders have developed better techniques for identifying small business default risk (e.g., credit/behavioural scoring). However collateral is still usually required on larger loans (above £25-30,000). In the context of the credit crisis, it would be expected that incidences of collateralisation increased on average among 2008 applicants in view of the greater uncertainty about business prospects in 2008-9.

Chart 5.38: % of SMEs posting collateral on overdrafts

Notes: The base is SMEs with an overdraft facility.

All firms
2001-4: n=1,800,000 (unweighted n=1,576)
2005-8: n=1,600,000 (unweighted n=1,244)
Applied in 2008: n=595,844 (unweighted n=561)

Employees
2001-4: 0, n=916,372 (unweighted n=225); 1-9, n=687,306 (unweighted n=458); 10-49, n=143,763 (unweighted n=534); 50-249, n=17,076 (unweighted n=359).
2005-8: 0, n=1,100,000 (unweighted n=138); 1-9, n=419,816 (unweighted n=426); 10-49, n=88,739 (unweighted n=392); 50-249, n=15,045 (unweighted n=288).
Applied in 2008: 0, n=357,076 (unweighted n=48); 1-9, n=187,825 (unweighted n=182); 10-49, n=43,552 (unweighted n=189); 50-249, n=7,390 (unweighted n=142).

Risk Rating
2001-4: minimal risk, n=70,283 (unweighted n=247); low risk, n=1,000,000 (unweighted n=643); average risk, n=545,255 (unweighted n=489); high risk, n=123,452 (unweighted n=181).
2005-8: minimal risk, n=35,801 (unweighted n=95); low risk, n=119,854 (unweighted n=329); average risk, n=876,657 (unweighted n=479); high risk, n=364,822 (unweighted n=144).
Applied in 2008: minimal risk, n=11,367 (unweighted n=39); low risk, n=46,941 (unweighted n=162); average risk, n=316,706 (unweighted n=211); high risk, n=130,122 (unweighted n=61).
- Incidences of collateral on overdrafts fell from 25.8% in 2001-2004 to 19.5% in 2005-2008 before rising again to 24.4% among applicants in 2008.
- By firm size, incidences of collateral on overdrafts are highest among larger firms reflecting their demand for larger facilities.
- By risk ratings, it is interesting to note that it is the minimal and low risk rated firms which have shown the greatest increase in incidences of collateral on overdrafts in 2008.
- Specifically, incidences of collateral have increased to 59.4% (minimal risk) and 39.3% (low risk), among applicants in 2008, from 33.3% and 21.8% respectively in 2001-4.

Chart 5.39: % of SMEs posting collateral on term loans

Notes: The base is SMEs with a term loan.
All firms
2001-4: n=742,068 (unweighted n=816)
2005-8: n=530,657 (unweighted n=582)
Applied in 2008: n=194,827 (unweighted n=243)
Employees
2001-4: 0, n=317,012 (unweighted n=75); 1-9, n=341,948 (unweighted n=226); 10-49, n=72,418 (unweighted n=297); 50-249, n=10,691 (unweighted n=218).
2005-8: 0, n=322,889 (unweighted n=44); 1-9, n=155,386 (unweighted n=159); 10-49, n=42,629 (unweighted n=198); 50-249, n=9,753 (unweighted n=181).
Applied in 2008: 0, n=120,009 (unweighted n=18); 1-9, n=54,504 (unweighted n=62); 10-49, n=15,910 (unweighted n=73); 50-249, n=4,404 (unweighted n=89).
Risk Rating
2001-4: minimal risk, n=29,120 (unweighted n=107); low risk, n=443,723 (unweighted n=340); average risk, n=200,634 (unweighted n=269); high risk, n=48,011 (unweighted n=87).
2005-8: minimal risk, n=4,942 (unweighted n=42); low risk, n=48,385 (unweighted n=172); average risk, n=285,949 (unweighted n=213); high risk, n=113,773 (unweighted n=69).
Applied in 2008: minimal risk, n=1,452 (unweighted n=19); low risk, n=16,796 (unweighted n=70); average risk, n=103,448 (unweighted n=91); high risk, n=44,276 (unweighted n=27).
Overall incidences of collateral on term loans appear stable over time with just under 40% of these loans involving collateral. Larger firms are more likely to have collateral on their term loans due to their demand for larger loans. Incidences of collateral on term loans appear to have increased sharply among minimal risk applicants from 45.9% of loans in 2001-4 to 67% of loans among applicants in 2008.

A common finding for both overdrafts and term loans is that incidences of collateral have increased most among lower risk firms. One explanation for this result is that minimal/low risk firms may have been more willing to offer collateral in 2008 to maintain a good supply of loans at lower interest rates in the face of increased uncertainty and lender risk aversion. This view is supported by the previous evidence in this chapter that the availability of loans, and loan margins, were better for lower risk firms which applied in 2008 relative to higher risk firms.

The following chart shows the types of assets used as collateral on term loans.

Chart 5.40: Type of assets used as collateral on term loans

![Chart 5.40: Type of assets used as collateral on term loans](image)

Notes: The base is all SMEs with term loans involving collateral.
2001-4: n=294,625 (unweighted n=438)
2005-8: n=226,490 (unweighted n=358)
Applied in 2008: n=79,851 (unweighted n=141)

- The use of personal property (e.g., the entrepreneur's family home) has fallen from about half of all collateralised loans in 2001-4 down to a third of these loans among applicants in 2008.
- Also, the use of business securities and property as collateral has increased since 2001-4.
The high percentage of collateral in the form of personal property reflects the high proportion of sole traders in the SME population (in which case there is no distinction between business and personal assets: see Appendix 1). Whilst the use of personal property as collateral has fallen, there is still a significant minority of business owners who could potentially lose assets such as a family home if they were unable to repay their loans.

5.6 Business problems

This chapter concludes by looking at how problems with the supply of finance compare with other issues encountered in running the business. This analysis compares the percentage of business owners reporting critical problems with different aspects of running the business. In this context, business owners were asked to score the extent of their problems on a scale of 1-10, where 1 equates to no problem and 10 equates to a critical problem. The point of studying businesses with critical problems is that these are businesses which could be on the verge of failing due to their difficulties.

Chart 5.41: % of SMEs reporting critical problems with different aspects of running the business

Notes: The base is all SMEs
2004: n=3,625,416 (unweighted n=2,500)
2008: n=4,430,825 (unweighted n=2,500)
• The largest increases in critical problems between 2004 and 2008 are in the areas of getting orders and finance.
• Specifically there has been an almost 90% (1.6% point) increase in incidences of critical problems with getting orders from 1.8% in 2004 to 3.4% in 2008; this reflects falling consumer demand in 2008.
• Also the increase in incidences of critical problems with the availability and/or cost of finance is over 130% (1.7% points) from 1.3% in 2004 to 3% in 2008.
• However coping with red-tape is consistently the area causing the highest incidences of critical problems, affecting 4.5-4.6% of SMEs in 2004 and 2008.

The final chart compares critical financial problems with another barometer of the financial crisis: the spread between LIBOR, the rate at which banks lend to each other, and the Bank of England base rate. The following chart shows how critical financial problems and LIBOR spreads co-evolved during the events of autumn 2008.

Chart 5.42: Critical problems with finance (left-scale) and 3 month sterling LIBOR-Base rate spreads (right-scale) between 10th September 2008 and 20th November 2008

Notes: The base is all SMEs by interview week.
10-15th Sept: n=209,807 (unweighted n=124)
16-22nd Sept: n=575,726 (unweighted n=389)
23-29th Sept: n=242,715 (unweighted n=177)
30th Sept-6th Oct: n=247,645 (unweighted n=182)
7-13th Oct: n=202,203 (unweighted n=126)
14-20th Oct: n=199,228 (unweighted n=95)
21-27th Oct: n=776,311 (unweighted n=273)
28th Oct-3rd Nov: n=444,292 (unweighted n=206)
4-10th Nov: n=996,812 (unweighted n=400)
11-17th Nov: n=475,047 (unweighted n=443)
18-20th Nov: n=61,041 (unweighted n=85)
• Both LIBOR spreads and critical problems with finance followed an upward trend following the collapse of Lehman Brothers on September 15\textsuperscript{th} 2008.
• Both LIBOR spreads and critical problems with finance peaked shortly after the UK government announced a major rescue package for the banking system on October 8\textsuperscript{th} 2008.
• Soon after the rescue package was announced, LIBOR spreads began to follow a downward trend; however, levels of critical problems with finance were more volatile reflecting ongoing uncertainty among business owners regarding their finances.
• On 6\textsuperscript{th} November 2008, the Bank of England reduced its base rate from 4.5% to 3%, the lowest level at the time since 1955: after this, both LIBOR spreads and critical problems with finance followed a steady downward trend.

This final chart shows a close link between the events in financial markets in autumn 2008 and business owners’ assessments of their financial difficulties. In particular there is a suggestion that, in the wake of the tumult caused by the collapse of Lehman Brothers, the unprecedented steps taken by the government and Bank of England were successful in returning confidence to both money markets and business owners.
Chapter 5: Summary of key findings

Overdraft rejection rates
- Aggregate overdraft rejection rates show a clear increase over time: in 2001-4 4.2% of SMEs with overdraft demands were rejected outright; in 2005-8 this figure had risen to 10.9% and, among applicants in 2008, the rejection rate was 15.3%.
- The rejection rate among firms with no employees increased from 4.9% of SMEs with overdraft demands in 2001-4 to 12% in 2005-8 (17.4% among applicants in 2008); and, among firms with 1-9 employees, it went from 2.9% in 2001-5 to 9.6% in 2005-8 (15.4% among applicants in 2008).
- Among minimal risk firms the rejection rate increased from 0.4% in 2001-4 to 1.7% in 2005-8 (6.2% among applicants in 2008).
- Among average risk firms the rejection rate increased from 5.1% in 2001-4 to 9.4% in 2005-8 (11.7% among applicants in 2008).
- And among high risk SMEs, the rejection rate increased from 5.8% in 2001-2004 to 14.9% in 2005-8 (22.4% among applicants in 2008).
- However, among low risk firms the rejection rate appears to have fallen over time (from 3.8% in 2001-4 to 3% in 2005-8).

Term loan rejection rates
- 6.1% of SMEs with term loan demands were rejected outright in 2001-4; this figure increased to 9.4% in 2005-8 and 16.3% among applicants in 2008.
- Analysis by firm size suggests that smaller firms (less than 50 employees) have experienced the largest increases in rejection rates; notably, rejection rates among firms with 1-9 employees have increased almost three-fold from 2.5% in 2001-4 to 6.6% in 2005-8 (14.5% among applicants in 2008).
- Analysis by risk ratings suggest that even firms with minimal levels of risk have experienced a steep increase in the chances of being denied a term loan in 2008: none of these firms with term loan demands in the 2004 sample were rejected; 2.8% were rejected in 2005-8; and among applicants in 2008 the rejection rate was 15.5%.
- For an average risk SME the likelihood of being denied a term loan increased from 2.1% in 2001-4 to 5.3% in 2005-8 (16.5% among applicants in 2008).
- Among high risk SMEs this likelihood increased from 3.7% in 2001-4 to 13.3% in 2005-8 (13.5% among applicants in 2008) an almost four-fold increase.

Reasons for rejection
- Overdraft rejections due to the firm having no security/collateral have more than doubled in 2005-2008 (accounting for 9.5% of overdraft rejections; up from 4.1% in 2001-4).
- Overdraft rejections due to applying for too much have also shown a relatively large increase of over 60% (4.6% points) from 7.5% in 2001-4 to 12.1% in 2005-8.
- And overdraft rejections due to the firm’s industry being too risky in the lender’s opinion have almost doubled from 2.4% in 2001-4 to 4.6% in 2005-8.
- 14% of SMEs denied term loans in 2005-8 report the reason was that they had no security (there were no corresponding cases in the sample for 2001-4).
- Also 12.8% denied term loans report insufficient security as the reason for rejection in 2005-8, a more than three-fold increase from 2001-4 (4%).
- 14% of SMEs denied term loans in 2005-8 said the reason they were given was that their industry is too risky up from 2.3% in 2001-4.
- Lack of profitability also registers for the first time in 2005-8 accounting for 15.7% of term loan rejections.

Consequences of rejection
- In 2001-4 the majority of firms denied term loans (58.5%) managed to get funding from elsewhere.
- However only a relatively small minority of previously rejected firms found an alternative source of funding in 2005-8 (26.9%).
- Also only 7.2% of firms denied term loans in 2005-8 were eventually able to go ahead with their plans compared with 28.7% in 2001-4.
- Less than 1 in 20 firms denied a term loan in 2001-4 had to drop their plans as a consequence of being denied a term loan.
- However, in 2005-8, the proportion of firms which had to drop their plans rose 10-fold to almost 1 in 2.
- There are also large increases in the proportion of firms having to resort to internal finance after rejection (from 3.2% in 2001-4 to 11.5% in 2005-8) or which got into serious difficulties (from 4.1% in 2001-4 to 10.7% in 2005-8).
### Loan amounts
- The average size of overdraft facilities follows a U-shape trend over time starting at £36,495 in 2001-4 falling to £30,420 in 2005-8 and rising to £47,360 among successful applicants in 2008.
- Minimal risk SMEs have experienced an increase of 46% in their overdraft facilities since 2001-4 with an average facility standing at around £230,000 among applicants in 2008.
- Also an average overdraft facility for low risk firms was over £145,000 among applicants in 2008 which represents a six-fold increase from 2001-4.
- On the other hand, high risk firms have experienced a 75% decrease in the average size of their overdraft facilities from an average of £57,969 in 2001-4 to just under £15,000 among applicants in 2008.
- The average size of term loans show an upward trend since 2001-4: among applicants in 2008 the average was £183,202 versus £145,804 in 2005-8 and £102,120 in 2001-4.
- Across risk ratings minimal, low and average risk firms paid higher fees on leasing and hire purchase agreements in 2008 compared to 2001.
- In particular low risk applicants in 2008 paid on average facility fees of £793 compared to only £442 among successful applicants in 2008.

### Loan margins
- Margins on overdrafts have increased on average from 2.4% points over base in 2001-4 to 3.4% points over base in 2005-8 (4.4% points over base among applicants in 2008).
- Minimal risk firms have seen a sharp increase in overdraft margins, among applicants in 2008, which increased to 2.5% points over base from around 1.3% points over base in 2005-8 and 1.6% points in 2001-4.
- Average overdraft margins paid by higher risk firms have also increased since 2001-4 from around 2% points over base to up to 3.7% points over base among those which applied in 2008.
- Average margins over base for term loans also display an upward trend: these margins have risen from 2.2% points over base, in 2001-4, to 2.8% points over base in 2005-8 and to 3.7% points over base among applicants in 2008.
- Term loan margins among minimal risk firms appear to be stable if not slightly lower among applicants in 2008 (around 1.4% points over base from around 1.6%-7% points over base prior to this).
- In contrast: term loan margins paid by average risk firms have increased to 4.2% points over base in 2008 from 1.9% points over base in 2001-4.
- And those paid by high risk firms stood at 4% points over base among applicants in 2008 up from 2.5% points over base in 2001-4.
- Average margins on leasing and hire-purchase agreements doubled from 1.2% points over base in 2001-4 to 2.4% points over base in 2005-8.
- However, these margins are actually lower among applicants in 2008 averaging 2% points over base.
- Margins on leasing and hire-purchase agreements among average risk firms increased from 0.8% points over base in 2001-4 to 2.7% points over base in 2005-8 (3.1% points over base among applicants in 2008).

### Arrangement fees
- The average arrangement fee for an overdraft has increased from £243 in 2001-4 to £442 among 2008 applicants, an increase of over 80%.
- Minimal and high risk firms have actually experienced a decrease in overdraft arrangement fees in 2008: these fell to £647 in 2008 from £969 in 2001-2004 among minimal risk firms; and to £148 from £510 among high risk firms.
- However overdraft arrangement fees paid by low risk and average risk firms have increased among applicants in 2008.
- In particular low risk applicants in 2008 paid on average facility fees of £793 compared to only £136 in 2001-4.
- The average arrangement fee for a term loan has increased by 43% from £1,023 in 2001-2004 to £1,468 among applicants in 2008.
- Term loan arrangement fees paid by minimal risk firms which applied in 2008 were over 7 times higher than those paid in 2001-4 (£5,826 versus £827).
- Average arrangement fees on leasing and hire-purchase agreements more than doubled from £614 in 2001-4 to £1,387 among applicants in 2008.
- Across risk ratings minimal, low and average risk firms paid higher fees on leasing and hire-purchase agreements in 2008 compared to 2001-4.
- However, among high risk firms, these fees fell from £3,919 in 2001-4 to £1,871 among applicants in 2008.
Loan collateral
- Among applicants in 2008, incidences of collateral on overdrafts have increased to 59.4% (minimal risk firms) and 39.3% (low risk firms) from 33.3% and 21.8% respectively in 2001-4.
- Incidences of collateral on term loans appear to have increased sharply among minimal risk applicants from 45.9% of loans in 2001-4 to 67% of loans among applicants in 2008.

Business problems
- The largest increases in critical problems between 2004 and 2008 are in the areas of getting orders and finance.
- Specifically there has been an almost 90% (1.6% point) increase in incidences of critical problems with getting orders from 1.8% in 2004 to 3.4% in 2008; this reflects falling consumer demand in 2008.
- Also the increase in incidences of critical problems with the availability and/or cost of finance is over 130% (1.7% points) from 1.3% in 2004 to 3% in 2008.
- However coping with red-tape is consistently the area causing the highest incidences of critical problems, affecting 4.5-4.6% of SMEs in 2004 and 2008.
- Both LIBOR spreads and critical problems with finance followed an upward trend following the collapse of Lehman Brothers on September 15th 2008.
- Both LIBOR spreads and critical problems with finance peaked shortly after the UK government announced a major rescue package for the banking system on October 8th 2008.
- Soon after the rescue package was announced, LIBOR spreads began to follow a downward trend; however, levels of critical problems with finance were more volatile reflecting ongoing uncertainty among business owners regarding their finances.
- On 6th November 2008, the Bank of England reduced its base rate from 4.5% to 3%, the lowest level at the time since 1955: after this, both LIBOR spreads and critical problems with finance followed a steady downward trend.
6. Start-ups

Start-ups are viewed by policy makers as a valuable source of new jobs, innovation and competition leading ultimately to economic growth and gains in productivity. However, start-ups have higher failure rates, shorter track records and fewer assets, to offer as loan collateral, than established firms making them appear riskier to lenders. This may lead to a reliance on the entrepreneur’s personal savings and other non-market/internal sources of finance to fund start-ups even in good economic times. Indeed, during the credit crisis, it would be expected that start-ups were particularly badly affected by the reduced availability of credit as banks scaled down their exposure to losses on risky loans. In this context, the following aspects specific to start up finance are examined:

- Amount of finance used at start-up
- Sources of finance at start-up
- Main problems at start-up

In this analysis start-ups are firms aged two years or less so the data here only relates to the 2 year periods prior to the respective surveys in 2004 and 2008.

The following charts show amounts and sources of finance used at start-up

Chart 6.1: Amount of finance used to fund the business at start-up

Notes: The base is SMEs aged two years or less.
2002-4: n=251,759 (unweighted n=147).
2006-8: n=528,783 (unweighted n=160).
Chart 6.2: Sources of finance used at start-up

<table>
<thead>
<tr>
<th>Sources of Finance Used at Start-Up</th>
<th>2002-2004</th>
<th>2006-2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal savings</td>
<td>69.4%</td>
<td>76.6%</td>
</tr>
<tr>
<td>Mortgage on home</td>
<td>6.5%</td>
<td>0.3%</td>
</tr>
<tr>
<td>Loan from friends and family</td>
<td>12.7%</td>
<td>8.7%</td>
</tr>
<tr>
<td>Equity from friends and family</td>
<td>1.3%</td>
<td>0%</td>
</tr>
<tr>
<td>Bank loan</td>
<td>20.4%</td>
<td>12.4%</td>
</tr>
<tr>
<td>Venture capital</td>
<td>0%</td>
<td>0.3%</td>
</tr>
</tbody>
</table>

Notes: The base is SMEs aged two years or less.  
2002-4: n=251,759 (unweighted n=147).  
2006-8: n=528,783 (unweighted n=160).

- The average amount of finance used at start-up in 2006-8 declined by more than a third to £21,199 from £33,232 in 2002-4.
- The main source of finance at start-up, in both periods, is the entrepreneur’s personal savings.
- However, in 2006-8 the use of personal savings increased by over 10% (7.4% points) to 76.8% from 69.4% in 2002-4.
- Less than half the percentage of entrepreneurs in 2006-8 used a mortgage on their home compared to 2002-4 (3.1% down from 6.5%). This reflects falling house prices and fears of negative equity.
- Regarding market/external sources, the use of bank loans to fund start-ups has fallen by almost 40% (8% points) in 2006-8 down to 12.4% from 20.4% in 2002-4.
- The use of all other sources of finance has also fallen with notably there being no cases of venture capital backed start-ups in the sample for 2006-8.

The following chart presents entrepreneurs’ views as to the problems they experienced in starting their business across a range of different business activities.
Small Firms in the Credit Crisis: Evidence from the UK Survey of SME Finances

Chart 6.3: Problems experienced at start-up

<table>
<thead>
<tr>
<th>Problem</th>
<th>2002-04</th>
<th>2006-08</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finding sources of finance</td>
<td>14.5%</td>
<td>21.0%</td>
</tr>
<tr>
<td>Cost of finance</td>
<td>11.3%</td>
<td>10.1%</td>
</tr>
<tr>
<td>Finding customers</td>
<td>31.3%</td>
<td>37.1%</td>
</tr>
<tr>
<td>Competition from other firms</td>
<td>28.1%</td>
<td>25.9%</td>
</tr>
<tr>
<td>Red-tape</td>
<td>26.8%</td>
<td>18.8%</td>
</tr>
<tr>
<td>Cost of premises</td>
<td>14.6%</td>
<td>5.3%</td>
</tr>
<tr>
<td>Lack of advice/support</td>
<td>5.3%</td>
<td>5.2%</td>
</tr>
<tr>
<td>Business planning</td>
<td>0%</td>
<td>15.4%</td>
</tr>
</tbody>
</table>

Notes: The base is SMEs aged two years or less.
2002-4: n=251,759 (unweighted n=147).
2006-8: n=528,783 (unweighted n=160).

Respondents may report multiple problems.

- 21% of start-ups report problems with finding sources of finance in 2006-8 compared with 14.5% in 2002-4 (a 45% increase).
- However incidences of problems with the cost of finance appear to be largely stable since 2002-4 at around 10-11%.
- The two other areas which show increased problems are finding customers and competition from other firms.
- Notably, there has been an 80% increase in the proportion of start-ups reporting competition from other firms as a problem (from 15.4% in 2002-4 to 28.1% in 2006-8).
- On an encouraging note, fewer start-ups had problems with the cost of premises or a lack of support.

This evidence suggests start-ups have found it increasingly hard to find sources of finance leading to an increased reliance on the entrepreneur’s personal savings and the use of lower amounts of finance at start-up. However problems with the cost of finance have not, in the views of entrepreneurs, increased. This is consistent with the previous evidence on term loan margins paid by start-ups (if not overdraft margins). Reductions in demand, from consumers and other businesses, are making it harder for start-ups to find customers leading to increased competition to attract customers. In short, start-ups have had things much harder overall in recent years.
Chapter 6: Summary of key findings

Amounts and sources of finance used at start-up
- The average amount of finance used at start-up in 2006-8 declined by more than a third to £21,199 from £33,232 in 2002-4.
- The main source of finance at start-up, in both periods, is the entrepreneur’s personal savings.
- However, in 2006-8 the use of personal savings increased by over 10% (7.4% points) to 76.8% from 69.4% in 2002-4.
- Less than half the percentage of entrepreneurs in 2006-8 used a mortgage on their home compared to 2002-4 (3.1% down from 6.5%). This reflects falling house prices and fears of negative equity.
- Regarding market/external sources, the use of bank loans to fund start-ups has fallen by almost 40% (8% points) in 2006-8 down to 12.4% from 20.4% in 2002-4.
- The use of all other sources of finance has also fallen with notably there being no cases of venture capital backed start-ups in the sample for 2006-8.

Problems at start-up
- 21% of start-ups report problems with finding sources of finance in 2006-8 compared with 14.5% in 2002-4 (a 45% increase).
- However incidences of problems with the cost of finance appear to be largely stable since 2002-4 at around 10-11%.
- The two other areas which show increased problems are finding customers and competition from other firms.
- Notably, there has been an 80% increase in the proportion of start-ups reporting competition from other firms as a problem (from 15.4% in 2002-4 to 28.1% in 2006-8).
- On an encouraging note, fewer start-ups had problems with the cost of premises or a lack of support.
7. Financial Relationships

Relationships are very important in the context of SME finances: essentially, they allow finance providers to produce information about the creditworthiness of their customers that may be otherwise missing. This may lead to financial relationships between banks and SMEs which are long and monogamous. In return for maintaining stable long-term relationships with their finance providers, creditworthy businesses may therefore expect better access to finance\(^\text{17}\). These relationships are crucial in a time of crisis when businesses are likely to need patient support from their finance providers. However, evidence from the last recession in the early 1990s suggests that relationships between banks and SMEs actually deteriorated, with complaints that banks were too quick to foreclose on loans and that they did not fully pass on reductions in base rates\(^\text{18}\).

Before the current credit crisis the policy debate centred on the lack of competition in the supply of banking services to SMEs in the UK. This culminated in a report and recommendations made by the Competition Commission in 2002 with the aim of promoting competition in the supply of business accounts and overdrafts\(^\text{19}\). These recommendations included so-called ‘behavioural remedies’ to promote fast and error free switching between banks and remove the bundling of services such as loans and current accounts. In view of the importance of relationships in SME banking, however, a major criticism of the Competition Commission’s application of the principles of perfect competition in this context is that it is misguided and possibly even harmful to the supply of loans to SMEs\(^\text{20}\).

The analysis therefore concludes by looking at financial relationships and, where possible, how relationships have been affected by the credit crisis. This analysis covers: the degree of market concentration in the Big 4 banks (Royal Bank of Scotland Group, Lloyds TSB, HSBC and Barclays); the number of finance providers used by SMEs; main methods used by SMEs to communicate with their bank; levels of satisfaction across a range of services provided by the business’s main bank; and concludes with bank switching rates and reasons for switching.

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\(^{17}\) Although this may not translate into cheaper finance if the information produced by the finance provider is proprietary and is therefore not shared with other finance providers. Indeed, higher margins and banking charges may be seen as the quid pro quo for producing the information which leads to an otherwise better supply of finance.


\(^{19}\) See Competition Commission (2002), The Supply of Banking Services by Clearing Banks to SMEs.

Chart 7.1: % of SMEs whose main bank is either Royal Bank of Scotland/Natwest, Lloyds TSB, HSBC or Barclays (Big 4)

SMEs Banked with a Big 4 Bank (By Firm Size and Risk Ratings)

<table>
<thead>
<tr>
<th>Employees</th>
<th>Risk Rating</th>
<th>2001-4</th>
<th>2005-8</th>
</tr>
</thead>
<tbody>
<tr>
<td>All firms</td>
<td>Minimal risk</td>
<td>77.3%</td>
<td>71.1%</td>
</tr>
<tr>
<td></td>
<td>Low risk</td>
<td>74.1%</td>
<td>74.1%</td>
</tr>
<tr>
<td></td>
<td>Average risk</td>
<td>81.8%</td>
<td>81.8%</td>
</tr>
<tr>
<td></td>
<td>High risk</td>
<td>85.2%</td>
<td>85.2%</td>
</tr>
<tr>
<td>0</td>
<td>Minimal risk</td>
<td>82.5%</td>
<td>82.5%</td>
</tr>
<tr>
<td></td>
<td>Low risk</td>
<td>82.7%</td>
<td>82.7%</td>
</tr>
<tr>
<td></td>
<td>Average risk</td>
<td>78.5%</td>
<td>78.5%</td>
</tr>
<tr>
<td></td>
<td>High risk</td>
<td>80.8%</td>
<td>80.8%</td>
</tr>
<tr>
<td>1-9</td>
<td>Minimal risk</td>
<td>89.1%</td>
<td>89.1%</td>
</tr>
<tr>
<td></td>
<td>Low risk</td>
<td>90.1%</td>
<td>90.1%</td>
</tr>
<tr>
<td></td>
<td>Average risk</td>
<td>95.2%</td>
<td>95.2%</td>
</tr>
<tr>
<td></td>
<td>High risk</td>
<td>99.3%</td>
<td>99.3%</td>
</tr>
<tr>
<td>10-49</td>
<td>Minimal risk</td>
<td>93.1%</td>
<td>93.1%</td>
</tr>
<tr>
<td></td>
<td>Low risk</td>
<td>94.2%</td>
<td>94.2%</td>
</tr>
<tr>
<td></td>
<td>Average risk</td>
<td>97.9%</td>
<td>97.9%</td>
</tr>
<tr>
<td></td>
<td>High risk</td>
<td>99.6%</td>
<td>99.6%</td>
</tr>
<tr>
<td>50-249</td>
<td>Minimal risk</td>
<td>96.8%</td>
<td>96.8%</td>
</tr>
<tr>
<td></td>
<td>Low risk</td>
<td>97.7%</td>
<td>97.7%</td>
</tr>
<tr>
<td></td>
<td>Average risk</td>
<td>99.4%</td>
<td>99.4%</td>
</tr>
<tr>
<td></td>
<td>High risk</td>
<td>99.8%</td>
<td>99.8%</td>
</tr>
</tbody>
</table>

Notes: The base is all SMEs with a current account
2001-4: n=3,523,873 (unweighted n=2,448)
2005-8: n=4,139,332 (unweighted n=2,405)

Employees
2001-4: 0, n=2,138,321 (unweighted n=483); 1-9, n=1,155,394 (unweighted n=756); 10-49, n=208,758 (unweighted n=761); 50-249, n=21,401 (unweighted n=448).
2005-8: 0, n=3,001,478 (unweighted n=362); 1-9, n=953,915 (unweighted n=879); 10-49, n=158,484 (unweighted n=696); 50-249, n=25,454 (unweighted n=468).

Risk Rating
2001-4: minimal risk, n=201,544 (unweighted n=406); low risk, n=2,025,639 (unweighted n=1,030); average risk, n=1,104,120 (unweighted n=758); high risk, n=158,727 (unweighted n=219).
2005-8: minimal risk, n=132,112 (unweighted n=223); low risk, n=429,031 (unweighted n=645); average risk, n=2,226,707 (unweighted n=890); high risk, n=753,241 (unweighted n=259).

- 71.1% of SMEs in 2005-8 had one of the Big 4 banks as their main bank compared to 77.3% in 2001-4 – a fall of 8% (or 6.2% points).
- These falls are reflected consistently across different sizes of firm and levels of risk.
- Notably however minimal risk firms show an 18% drop (or 14.8% points) in using one of the Big 4 as their main bank from 82.5% in 2001-4 down to 67.7% in 2005-8.

The previous chart shows that there has been some reduction in the concentration of SME banking among the Big 4 banks suggesting increased competition. Further analysis of the data shows that the banks outside the Big 4 making the biggest inroads into the market are the Alliance and Leicester (4.8% market share in 2005-8 compared with 1% in 2001-4) and the Co-operative Bank (2.9% in 2005-8 up from 0.5% in 2001-4). Minimal risk firms appear to have been the most willing to move away from the Big 4 perhaps due to attractive offers from non Big 4 banks eager to gain profitable customers. Nonetheless the Big 4 still dominate the market across the board.
The data were collected before the full impact could be felt of two key developments affecting competition in SME banking, namely: Lloyds TSBs takeover of HBOS to form Lloyds Banking Group (which required a waiver of competition rules by the UK Government); and the part-nationalisation of Royal Bank of Scotland Group and Lloyds Banking Group (the taxpayer now owns 70% and 43.5% of these banks respectively). Both were seen as necessary steps at the time to help prevent the collapse of the banking system over-riding competition issues. However, already there are renewed concerns that lack of competition is resulting in businesses being charged excessive loan margins and fees\(^\text{21}\).

Chart 7.2: Distribution of the number of finance providers

<table>
<thead>
<tr>
<th>Number of Finance Providers</th>
<th>2001-4</th>
<th>2005-8</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1.9%</td>
<td>0.6%</td>
</tr>
<tr>
<td>1</td>
<td>58.0%</td>
<td>69.3%</td>
</tr>
<tr>
<td>2</td>
<td>30.8%</td>
<td>23.9%</td>
</tr>
<tr>
<td>3</td>
<td>7.6%</td>
<td>5.5%</td>
</tr>
<tr>
<td>4</td>
<td>0.7%</td>
<td>1.2%</td>
</tr>
<tr>
<td>5</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>6</td>
<td>0.4%</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

Notes: The base is all SMEs
2001-4: n=3,625,416 (unweighted n=2,500)
2005-8: n=4,430,825 (unweighted n=2,500)

- 69.3% of SMEs used a single finance provider in 2005-8 compared to 58% in 2001-4.
- The percentage of SMEs using two finance providers fell from 30.8% in 2001-4 to 23.9% in 2005-8.
- Instances of using multiple finance providers are rare overall but rarer still in 2005-8.

This analysis suggests that fewer firms are using more than one finance provider in 2005-8. In other words relationships have become more concentrated in fewer suppliers. Further analysis shows that this reflects a reduction in the number of financial products being used: in 2001-4 a typical SME most frequently used 3 financial products compared with only 2 in 2005-8.

\(^{21}\) ‘Darling threatens banks over loans’, Financial Times, July 27\textsuperscript{th} 2009.
Channels of communication are important as they affect the quality of the relationship between business owners and finance providers. In this context the following chart looks at the main method used by the business owner to communicate with their bank.

Chart 7.3: Main method used by business owner to communicate with their bank

- Visiting a branch remains the main method of communication between SMEs and banks, although it applies to only 39.9% in 2005-8 compared to 45.7% in 2001-4.
- Also incidences of communicating principally by telephone have fallen from 30% in 2001-4 to 23.6% in 2005-8.
- On the other hand almost double the percentage of SMEs communicated mainly through the internet in 2005-8 (29.4%) compared to 2001-4 (15.2%).

The previous chart suggests there is less face to face contact between banks and business owners with, instead, an increased reliance on remote/automated channels of communication. This remoteness would not be expected to enhance the quality of relationships with banks or, indeed, help the flow of finance to the firm.

Leading on from this, the following series of charts look at levels of satisfaction with various aspects of the service provided by the firm’s main bank.
Fewer owners were very satisfied with the availability of finance in 2005-8 (22%), compared to 2001-4 (33.7%), although more were fairly satisfied in 2005-8 (38.2% versus 29.3% in 2001-4).

Among loan applicants in 2008, levels of dissatisfaction with the availability of finance have increased: then, 12.8% were very dissatisfied compared to 4.5% in 2001-4; and 12.7% were fairly dissatisfied compared with 7.1% in 2001-4.
Chart 7.5: Levels of satisfaction with main bank: bank charges

- Levels of satisfaction with bank charges are more stable than was the case for the availability of finance.
- However, among loan applicants in 2008, there is a higher percentage reporting they were fairly dissatisfied with bank charges (27.2% versus 20.4% in 2001-4).
Notes: The base is all SMEs with a current account.
2001-4: n=3,523,873 (unweighted n=2,448)
2005-8: n=4,139,332 (unweighted n=2,405)
Applied in 2008: n=925,227 (unweighted n=822)

- There is little change in levels of satisfaction or dissatisfaction with the range of services provided by the bank.

Chart 7.7: Levels of satisfaction with main bank: competence of staff
Notes: The base is all SMEs with a current account.
2001-4: n=3,523,873 (unweighted n=2,448)
2005-8: n=4,139,332 (unweighted n=2,405)
Applied in 2008: n=925,227 (unweighted n=822)

- There is little change in levels of satisfaction or dissatisfaction with the competence of bank staff.

Chart 7.8: Levels of satisfaction with main bank: efficiency of service

Notes: The base is all SMEs with a current account.
2001-4: n=3,523,873 (unweighted n=2,448)
2005-8: n=4,139,332 (unweighted n=2,405)
Applied in 2008: n=925,227 (unweighted n=822)

- There is little change in levels of satisfaction or dissatisfaction with the efficiency of the service provided by the bank.
Chart 7.9: Levels of satisfaction with main bank: understanding of customer’s business

The chart shows an increase, among loan applicants in 2008, in the percentage of business owners who were very dissatisfied with the bank’s understanding of their business (9.1% versus 5% in 2001-4).

The majority of business owners are satisfied with the service provided by their bank: this remains true among loan applicants in 2008. Perhaps unsurprisingly the main areas where business owners have become more dissatisfied with their bank are with the availability of finance and, to a lesser extent, with bank charges. There has also been an increase in business owners reporting they were very dissatisfied with the bank’s understanding of their business. This is not likely to be helped by remote channels of communication.

The market solution to an unsatisfactory relationship is to seek an alternative finance provider. However limited competition may restrict choices here and switching costs may induce inertia. In this context the following chart shows bank switching rates and reasons for switching.
Chart 7.10: % of SMEs which switched banks in the last 3 years and reasons for switching

Switched Banks and Reasons for Switching

- In both 2001-4 and 2005-8, just over 7% of SMEs switched their main bank.
- However, among loan applicants in 2008, 11.5% have switched banks.
- The main reason for switching is general dissatisfaction with the service provided by the previous bank but this reason has declined in importance (from 36.7% in 2001-4 to 26.6% among loan applicants in 2008).
- On the contrary switching due to being refused finance by the previous bank has increased markedly from 4.3% in 2001-4 to 28.9% among loan applicants in 2008.

Comparisons between 2001-4 and 2005-8 suggest the actions taken by the Competition Commission to make it easier for SMEs to switch banks have had no effect on switching rates\(^\text{22}\). However, among loan applicants in 2008, switching rates are higher which suggests the credit crisis may have forced SMEs to seek alternative providers of finance. Indeed, among loan applicants in 2008, the main reason for switching banks was due to being refused finance by their previous bank. This underlines once more the importance of stable relationships in SME banking and that businesses are only likely to switch when relationships breakdown due to poor service or the refusal of finance.

\(^{22}\) The Competition Commission 2002 proposed a number of behavioural remedies to increase competition in SME banking. This included measures to promote fast and error free switching with rules that most switches be made within 4-5 days and for the use of portable credit histories.
Chapter 7: Summary of key findings

Banking with the Big 4
- 71.1% of SMEs in 2005-8 had one of the Big 4 banks as their main bank compared to 77.3% in 2001-4 – a fall of 8% (or 6.2% points).
- These falls are reflected consistently across different sizes of firm and levels of risk.
- Notably however minimal risk firms show an 18% drop (or 14.8% points) in using one of the Big 4 as their main bank from 82.5% in 2001-4 down to 67.7% in 2005-8.

Methods of communication with main bank
- Visiting a branch remains the main method of communication between SMEs and banks, although it applies to only 39.9% in 2005-8 compared to 45.7% in 2001-4.
- Also incidences of communicating principally by telephone have fallen from 30% in 2001-4 to 23.6% in 2005-8.
- On the other hand almost double the percentage of SMEs communicated mainly through the internet in 2005-8 (29.4%) compared to 2001-4 (15.2%).

Satisfaction with main bank
- Fewer owners were very satisfied with the availability of finance in 2005-8 (22%), compared to 2001-4 (33.7%), although more were fairly satisfied in 2005-8 (38.2% versus 29.3% in 2001-4).
- Among loan applicants in 2008, levels of dissatisfaction with the availability of finance have increased: then, 12.8% were very dissatisfied compared to 4.5% in 2001-4; and 12.7% were fairly dissatisfied compared with 7.1% in 2001-4.
- Among loan applicants in 2008, there is a higher percentage reporting they were fairly dissatisfied with bank charges (27.2% versus 20.4% in 2001-4).
- Among loan applicants in 2008, in the percentage of business owners who were very dissatisfied with the bank’s understanding of their business (9.1% versus 5% in 2001-4).

Bank switching
- In both 2001-4 and 2005-8, just over 7% of SMEs switched their main bank.
- However, among loan applicants in 2008, 11.5% have switched banks.
- The main reason for switching is general dissatisfaction with the service provided by the previous bank but this reason has declined in importance (from 36.7% in 2001-4 to 26.6% among loan applicants in 2008).
- On the contrary switching due to being refused finance by the previous bank has increased markedly from 4.3% in 2001-4 to 28.9% among loan applicants in 2008.
8. Conclusions

The report began with an apparent contradiction. On the one hand small businesses reported a steep reduction in the availability of finance in 2008. On the other hand banks reported lending to small businesses actually grew in 2008. Analysis of UKSMEF data shows that both sides are right to some extent. In particular loan rejection rates have increased significantly in 2008 especially among higher risk firms. At the same time average loan amounts have increased among applicants in 2008. However lower risk firms, at least those with collateral, were the main beneficiaries of these increases: higher risk businesses, which would have found it relatively easy to access loans during the credit boom, are finding their supply of credit substantially reduced. Banks have been under pressure to maintain lending at 2007 levels: it would seem they lent larger secured loans to low risk borrowers whilst reducing credit availability to higher risk borrowers and those without collateral.

On one level, a return to more cautious lending practices is to be applauded not least if future crises are to be avoided. However, the recession brought about by the financial crisis has significantly raised levels of risk in the SME population. In fact, the SME population is currently made up of predominantly higher risk businesses in contrast to the low levels of risk during the credit boom. This change is due not to a sudden prevalence of unsound business models or poor business practices but to the reduced demand which is affecting most sectors in the economy. The point is that economic recovery will suffer if good businesses caught up in the downturn are deprived of credit.

This seems non-contentious. Nevertheless, businesses operating in sectors badly hit by the recession, such as retailers and property firms, are increasingly finding themselves assessed primarily on the basis of sector rather than the individual merits of their business plans. The availability of collateral may compensate for the high levels of risk perceived by the bank in these cases but those with insufficient collateral are likely to find themselves financially constrained. Indeed, the analysis highlighted that the applicant’s industry and lack of collateral have increased as reasons for being denied loans in recent times. The basis for Enterprise Finance Guarantees appears sound23.

Banks have a role here too: along with government intervention, there needs to be a greater emphasis on risk assessment methods which evaluate each business on its individual merits rather than relying too much on sector or the availability of collateral. In any case, the success or failure of the business is primarily down to the qualities of the business owner; not all of these qualities can be easily measured as inputs to a computer model. Equally, secured lending is concerned only with the quality of the balance sheet. The suggestion here is that credit allocation should rely more on close relationships between banks and businesses than on remote scoring systems or collateral. In short, banks need to work more closely with their small business customers to ensure the right businesses are getting credit.

23 The scheme is designed to support ‘viable companies that are at the margins of commercial lending because they have insufficient security or their proposal involves a higher risk of loss at default.’ (www.berr.gov.uk)
However, poorer access to finance in 2008 is not entirely explained by increased levels of risk. Other analysis in this report indicates that businesses would still have been more likely to be denied credit in 2008 even had risk remained constant (see Appendix 2). This finding points to a tightening of credit supply regardless of changes in firm risk. By implication, policies designed to help banks in the credit crisis, such as re-capitalisation, are important alongside specific business support.

Also, the minority of lower risk firms that remain have not been immune to the effects of the credit crisis. The analysis here indicates these firms were more likely to be denied loans in 2008 although their levels of rejection were much lower than for higher risk firms. Lower risk firms have also increasingly had to offer collateral to obtain loans perhaps to signal their underlying creditworthiness. This may seem a relatively small price for maintaining a good supply of credit. However, it represents an additional strain on business owners, in already difficult times, especially if a family home is at risk. Equally, creditworthy businesses with insufficient collateral may be denied loans altogether. Again, government loan guarantees for businesses seem warranted.

The cost of loans is also higher for all types of businesses. Higher loan margins may be justified by the higher cost of capital and increased levels of default risk. On the other hand, arrangement fees are related to the administrative costs of organizing the loan; the case for large increases here seems less clear. One argument that banks might put forward is that riskier firms require more rigorous checks before lending: this means greater administrative costs in 2008 given the higher levels of risk. However, analysis presented in this report suggests that arrangement fees would still have been higher among applicants in 2008 even had levels of risk stayed the same as in previous years (see Appendix 2).

Inevitably there will be renewed concerns about a lack of competition in SME banking. Indeed, the Treasury are already applying pressure on banks to reduce loan margins and arrangement fees to more affordable levels. Hanging over the major banks is the threat of another inquiry by the Competition Commission. The irony is inescapable: it was only last September that the government waived competition rules to pave the way for Lloyds TSB to takeover HBOS.

One important lesson from the recession in the early 1990s is that relationships between banks and businesses have a tendency to breakdown in a crisis. There is no reason to suppose the current crisis is any different judging by the claims and counter claims emanating from representatives of banks and small businesses. Indeed, the evidence from UKSMEF points to increased levels of dissatisfaction with banks in 2008, with lack of understanding by banks a part of the problem. Also, more businesses are changing their bank because they were refused finance.

For several years following the last recession the Bank of England played a pivotal role in brokering improved relationships between banks and small businesses. The Bank was effective in this role due to its standing and influence in both the banking and SME communities. However the Bank is no longer involved in issues of SME access to

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24 Although under the rules of Enterprise Finance Guarantees lenders are allowed to seek personal guarantees and/or other security.
finance and responsibility in this area now lies with the Enterprise Directorate, part of the Department for Business, Innovation and Skills. Given the importance of information flows in small business finance, it is vital that improved communications are promoted as effectively under the current arrangements.

It is out-with the scope of this report to assess whether the panoply of business support policies implemented by the government are working. Initial doubts about the effectiveness of Enterprise Finance Guarantees\(^{27}\) appear to have been allayed\(^{28}\) and, despite the Treasury’s concerns about the cost of loans, SMEs seem to be feeling the benefits of lower interest rates\(^{29}\). However, it is too early to say with any confidence that small businesses are through the worst of the crisis; recent falls in bank lending to non-financial corporations and fears of a prolonged recession only add to this uncertainty\(^{30}\). Follow-up research planned for 2010 may provide more timely answers about how the situation is developing.

\(^{27}\) See ‘Banks are getting by; pity about the customers’, The Economist, 12\(^{\text{th}}\) March 2009, which highlighted concerns that not all banks were making EFG funds available to businesses quickly enough.

\(^{28}\) See ‘Criticism of scheme for SMEs dies down’, Financial Times, June 3\(^{\text{rd}}\) 2009.

\(^{29}\) FSB statistics show that 25% of small businesses reported the cost of finance as a big problem in June 2009 compared to 40% at the end of 2008 (\texttt{www.fsb.org.uk}).

Appendix 1: Business and Owner Characteristics

Comparisons of Dun and Bradstreet risk ratings in 2004 and 2008 were presented in chapter 4. In this appendix further comparisons of business and owner characteristics in 2004 and 2008 are made. In particular, the following characteristics are looked at:

- Firm size (employees)
- Personal and business assets
- Firm age
- Profitability (return on assets)
- Leverage (debt-asset ratio)
- Industry
- Legal form
- Human capital of the business owner (formal qualifications and business experience)

These factors are important in understanding changes in access to finance since, along with risk ratings, they underlie risk assessments made by finance providers in deciding whether to lend to businesses and on what terms. The relationships between risk factors and access to finance are examined in detail in Appendix 2.

Chart A1.1: Average firm size (number of employees)

Notes: The base is all SMEs
2004: n=3,625,416 (unweighted n=2,500)
2008: n=4,430,825 (unweighted n=2,500)
Applied in 2008: n=971,191 (unweighted n=840)
The percentage of businesses with no employees increased from 60.9% in 2004 to 73.4% in 2008. However, among businesses which applied for loans in 2008 the percentage of businesses with no employees is only 63.2%.

Correspondingly, the percentage of businesses with 1-9 employees fell from 32.7% in 2004 to 22.4% in 2008 but remains relatively high (29.4%) among businesses which applied for loans in 2008.

Chart A1.2: Average business and personal assets

Average business assets are relatively stable between 2004 and 2008 (£264,020 versus £253,354).

However businesses which applied for loans in 2008 had average business assets worth £398,716.

Similarly personal assets appear relatively stable between 2004 and 2008 (£374,499 versus £342,792).

In this case, however, owners of businesses which applied for loans in 2008 had only £276,702 worth of personal assets on average.
Chart A1.3: Average business age

- The average business age in the 2004 sample is 18.4 years compared with only 16 years in the 2008 sample.
- The average business age among businesses which applied for loans in 2008 is 15.5 years.

Notes: The base is all SMEs
2004: n=3,625,416 (unweighted n=2,500)
2008: n=4,430,825 (unweighted n=2,500)
Applied in 2008: n=971,191 (unweighted n=840)
Average profitability is stable between 2004 and 2008 (profit \div assets = 3.7).
- However profitability appears to be lower among businesses which applied for loans in 2008.
- Also, levels of profitability are consistently higher among smaller firms.
- However, there is a relatively large drop in profitability among firms with 1-9 employees: in this group the return on assets fell from 2.82 in 2004 to 2.42 in 2008 (1.45 among loan applicants in 2008).
Chart A1.5: Debt-asset ratio

Debt-assets ratios are stable at around 0.6 in 2004 and 2008.

However leverage is higher among businesses which applied for loans in 2008 (debt-asset ratio=1.2).

This pattern is repeated consistently across firms of different sizes.
Notes: The base is all SMEs
2004: n=3,625,416 (unweighted n=2,500)
2008: n=4,430,825 (unweighted n=2,500)
Applied in 2008: n=971,191 (unweighted n=840)

- The distribution of businesses across different sectors appears relatively stable between 2004 and 2008.
- However there appears to be relatively fewer businesses in Real Estate, Renting and Business Activities in 2008 compared to 2004 (25.5% versus 36.9%).
- Also, among businesses which applied for loans in 2008, there appear to be relatively more firms in Wholesale/Retail (19.4%) compared to the whole 2008 sample and the 2004 sample (12.7% and 15.7% respectively).
Chart A1.7: Distribution of SMEs across legal forms

- The distribution of firms across different legal forms is stable between 2004 and 2008 and among businesses which applied for loans in 2008.
- In particular, almost two-thirds of SMEs are sole traders and around one-in-four are limited companies.
Fewer owners have no academic qualifications in 2008 compared to 2004 (11.2% versus 15%).

Also, only 8.8% of owners of businesses which applied for loans in 2008 had no academic qualifications.

12.4% of owners of businesses which applied for loans in 2008 had A-levels/Scottish Highers as their highest formal qualification compared with only 9.7% in the whole 2008 sample and 8.6% in 2004.

Also 18.8% of owners of businesses which applied for loans in 2008 had an NVQ as their highest formal qualification compared with 16.1% in the whole 2008 sample and 13.1% in 2004.

Fewer business owners which applied for loans in 2008 had a postgraduate degree (6.8%) compared to 11.6% in the whole 2008 sample and 9.6% in 2004.
Levels of business experience among owners have fallen from 20.2 years on average in 2004 to 16.2 years on average in 2008.

Experience levels among owners whose businesses applied for loans in 2008 (15.7 years) appear to be similar to the level in the whole 2008 sample.
Appendix 2: Econometric Analysis

The aim of the econometric analysis in this appendix is to estimate direct effects of the credit crisis on access to finance. These direct effects relate to whether there has been a tightening of credit supply in 2008 holding firm risk constant\textsuperscript{31}. These effects are estimated by differences in access to finance between applicants in 2008 and those that did not apply in 2008, controlling for differences in firm risk. Estimates are obtained for: loan rejections (among firms which used or applied for loans); loan amounts; loan margins; arrangement fees; and whether the loan involved collateral (collateralisation).

In the context of SME lending, banks assessments of risk, and hence decisions whether to lend and on what terms, are made principally on the basis of: the availability of collateral (asset based lending); predictions of the likelihood of default made using information about the business/owner and/or the management of a current account (credit and behavioural scoring respectively); or information gathered during a relationship between the bank and business (relationship lending).

The risk controls used in the following analysis therefore include: owner's wealth and firm assets (reflecting the availability of collateral); business and owner characteristics (which are used in credit scoring); financial ratios (again, used in credit scoring); financial delinquency (missed loan repayments, associated with a poor credit score, and unauthorized overdraft excesses, associated with a poor behavioural score); Dun and Bradstreet risk ratings; and financial relationship variables (length of relationship and number of finance providers). Regional variations in the demand and supply of finance are captured using dummy variables for the region in which the business is located. The loan margin, arrangement fee and collateral equations include additional controls for the characteristics of the loan.

The data in the following analysis is drawn from UKSMEF 2008 and relates to finances used or applied for in 2005-8.

\textsuperscript{31} Analysis of indirect effects, which relate to the effects of the credit crisis on firm risk and thence access to finance, are currently being researched by the author.
Table A2.1: Determinants of loan rejections

<table>
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<th>Overdrafts (marginal effects)</th>
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<th>Term loans (marginal effects)</th>
<th>p-value</th>
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<td>1-9 employees</td>
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### Small Firms in the Credit Crisis: Evidence from the UK Survey of SME Finances

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<td>Yorks and Humbs</td>
<td>-0.0077</td>
<td>0.258</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Log likelihood

<table>
<thead>
<tr>
<th></th>
<th>N=707</th>
<th>Log likelihood= -108.52697</th>
<th>$\chi^2 (p\text{-value})=0.000$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N=372</td>
<td>Log likelihood= -42.990366</td>
<td>$\chi^2 (p\text{-value})=0.000$</td>
</tr>
</tbody>
</table>

### Notes:

1. Estimated by probit with Huber-White robust standard errors.
2. $p\text{-values}$ from robust standard errors. *, ** and *** denote significance at the 10%, 5% and 1% levels respectively.
3. Qualifications relate to the owner's highest formal qualification.
4. Base region: East of England
5. Region dummies were excluded from the term loan equation due to multicollinearity.
Among firms which used or applied for loans in 2005-8, those which applied for loans in 2008 were more likely to be rejected than firms with the same level of risk but which did not apply in 2008.

Specifically, applicants in 2008 were 0.9% points more likely to be denied an overdraft ($\rho=0.061$) and 3.4% points more likely to be denied a term loan ($\rho=0.000$) holding risk factors constant.

Businesses with greater assets, or whose owners are more wealthy (net worth), are less likely to be denied overdrafts. This suggests the availability of collateral is an important determinant of whether or not businesses are denied overdrafts.

More profitable firms are less likely to be denied an overdraft but more likely to be denied a term loan. The latter result is counter-intuitive but may reflect the pursuit of riskier opportunities among highly profitable firms.

Also counter-intuitive is the finding that firms with greater amounts of debt (debt-asset ratio) are less likely to be denied overdrafts. However this may reflect a reverse causation issue with firms having higher debt-asset ratios because their overdraft applications were successful.

Looking at owner characteristics, it is notable that businesses with female principal owners are more likely to be denied overdrafts and term loans than otherwise similar businesses with male principal owners. In particular businesses with female principal owners are about 3.6% points more likely to be denied an overdraft than their male principal owned counterparts.

Equally businesses with ethnic minority principal owners are about 2.8% points more likely ($\rho=0.051$) to be denied an overdraft than otherwise similar male owned businesses.

As expected, firms which have exceeded overdraft limits and/or been late with loan repayments (financial delinquency) are more likely to be denied overdrafts and term loans.

Also firms with higher risk ratings (average risk/high risk) are more likely to be denied overdrafts than firms with minimal risk ratings.

Regarding financial relationships, longer relationships are associated with a reduced likelihood of overdraft rejection but, surprisingly, an increased likelihood of term loan rejection.
Table A2.2: Determinants of (log) loan amounts\(^1\)

<table>
<thead>
<tr>
<th></th>
<th>Overdrafts (marginal effects)</th>
<th>(p)-value(^2)</th>
<th>Term loans (marginal effects)</th>
<th>(p)-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied for loan in 2008</td>
<td>0.49943***</td>
<td>0.000</td>
<td>0.033331</td>
<td>0.805</td>
</tr>
<tr>
<td><strong>Availability of collateral</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Log business assets</td>
<td>0.332096***</td>
<td>0.000</td>
<td>0.570977***</td>
<td>0.000</td>
</tr>
<tr>
<td>Log net worth</td>
<td>0.028955</td>
<td>0.180</td>
<td>0.01148</td>
<td>0.640</td>
</tr>
<tr>
<td><strong>Business characteristics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-9 employees</td>
<td>0.299301</td>
<td>0.116</td>
<td>0.456145</td>
<td>0.141</td>
</tr>
<tr>
<td>10-49 employees</td>
<td>0.815216***</td>
<td>0.000</td>
<td>0.599389*</td>
<td>0.074</td>
</tr>
<tr>
<td>50-249 employees</td>
<td>1.487587***</td>
<td>0.000</td>
<td>0.620042</td>
<td>0.115</td>
</tr>
<tr>
<td>Log business age</td>
<td>0.129798**</td>
<td>0.038</td>
<td>0.014269</td>
<td>0.866</td>
</tr>
<tr>
<td>Partnership</td>
<td>0.279499</td>
<td>0.175</td>
<td>-0.2108</td>
<td>0.531</td>
</tr>
<tr>
<td>Ltd Liability Partnership</td>
<td>0.533089</td>
<td>0.101</td>
<td>-0.19193</td>
<td>0.588</td>
</tr>
<tr>
<td>Ltd Liability Co.</td>
<td>0.655144***</td>
<td>0.000</td>
<td>0.261873</td>
<td>0.258</td>
</tr>
<tr>
<td><strong>Financial ratios</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Return on assets</td>
<td>-0.00192</td>
<td>0.402</td>
<td>-0.00749</td>
<td>0.706</td>
</tr>
<tr>
<td>Debt-asset ratio</td>
<td>0.01037</td>
<td>0.102</td>
<td>0.019518***</td>
<td>0.001</td>
</tr>
<tr>
<td><strong>Owner characteristics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>O-levels(^3)</td>
<td>-0.26972</td>
<td>0.193</td>
<td>-0.5523</td>
<td>0.104</td>
</tr>
<tr>
<td>A-levels</td>
<td>0.154588</td>
<td>0.410</td>
<td>-0.25966</td>
<td>0.469</td>
</tr>
<tr>
<td>HND</td>
<td>-0.24828</td>
<td>0.262</td>
<td>-0.1975</td>
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</tr>
<tr>
<td>NVQ</td>
<td>-0.23785</td>
<td>0.203</td>
<td>-0.49999</td>
<td>0.161</td>
</tr>
<tr>
<td>Professional qualification</td>
<td>-0.24203</td>
<td>0.164</td>
<td>-0.32141</td>
<td>0.340</td>
</tr>
<tr>
<td>Undergraduate degree</td>
<td>-0.21781</td>
<td>0.173</td>
<td>-0.40812</td>
<td>0.218</td>
</tr>
<tr>
<td>Postgraduate degree</td>
<td>-0.1755</td>
<td>0.400</td>
<td>-0.32629</td>
<td>0.305</td>
</tr>
<tr>
<td>Diploma</td>
<td>-0.51567</td>
<td>0.215</td>
<td>-0.8989</td>
<td>0.411</td>
</tr>
<tr>
<td>Apprenticeship/trade qualification</td>
<td>-0.3532</td>
<td>0.723</td>
<td>0.156975</td>
<td>0.770</td>
</tr>
<tr>
<td>Teaching qualification</td>
<td>0.748915**</td>
<td>0.011</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other qualification</td>
<td>0.534593</td>
<td>0.461</td>
<td>-0.57229</td>
<td>0.530</td>
</tr>
<tr>
<td>Financial qualification</td>
<td>0.168166</td>
<td>0.125</td>
<td>-0.11978</td>
<td>0.472</td>
</tr>
<tr>
<td>Log business experience</td>
<td>0.030823</td>
<td>0.694</td>
<td>-0.01694</td>
<td>0.882</td>
</tr>
<tr>
<td>Log owner’s age</td>
<td>0.1051</td>
<td>0.694</td>
<td>0.350278</td>
<td>0.372</td>
</tr>
<tr>
<td>Female principal owner</td>
<td>-0.57561***</td>
<td>0.000</td>
<td>-0.07458</td>
<td>0.695</td>
</tr>
<tr>
<td>Ethnic minority principal owner</td>
<td>0.1764</td>
<td>0.229</td>
<td>-0.13634</td>
<td>0.597</td>
</tr>
<tr>
<td><strong>Delinquency and risk ratings</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Financial delinquency | -0.15772 | 0.229 | -0.24284 | 0.231
Low risk | 0.147305 | 0.400 | -0.45244** | 0.046
Average risk | -0.00901 | 0.959 | -0.33684 | 0.178
High risk | -0.16093 | 0.473 | -0.19295 | 0.547

**Financial relationships**

Log relationship length | 0.035135 | 0.541 | -0.1145 | 0.125
2 finance providers | -0.04143 | 0.689 | -0.03269 | 0.838
3 finance providers | -0.21625 | 0.147 | 0.020952 | 0.918
4 finance providers | -0.48644* | 0.054 | -0.04308 | 0.904
5 finance providers | 0.60546 | 0.197 | 0.535447 | 0.146

**Sector**

2 Digit SIC codes (p-value) | 0.000 | 0.000

**Region**

East Midlands | 0.007239 | 0.972 | 0.267352 | 0.404
London | -0.08116 | 0.742 | 0.557559 | 0.166
North East | -0.10561 | 0.628 | 0.018767 | 0.951
Northern Ireland | -0.25972 | 0.313 | -0.04598 | 0.909
North West | -0.02018 | 0.921 | 0.069973 | 0.826
Scotland | 0.241178 | 0.267 | 0.348628 | 0.295
South East | 0.006284 | 0.973 | 0.086117 | 0.770
South West | -0.07508 | 0.733 | 0.024696 | 0.935
Wales | 0.113969 | 0.550 | -0.30062 | 0.436
West Midlands | -0.03613 | 0.853 | 0.062295 | 0.862
Yorks and Humbs | -0.12654 | 0.575 | 0.289009 | 0.309

\[ N=882 \]
\[ \text{Adj. R-sq= 0.6052} \]
\[ F(97, 784) (p\text{-value})=0.000 \]

\[ N=422 \]
\[ \text{Adj. R-sq= 0.5665} \]
\[ F(89, 332) (p\text{-value})=0.000 \]

**Notes:**

1. Estimated by linear regression with Huber-White robust standard errors.
2. p-values from robust standard errors. *, ** and *** denote significance at the 10%, 5% and 1% levels respectively.
3. Qualifications relate to the owner’s highest formal qualification.
4. Base region: East of England
Applicants in 2008 received overdraft facilities which were about 50% larger ($p=0.000$) compared to those received by firms with similar levels of risk but which did not apply in 2008.

However, there is no difference in term loan amounts received by applicants in 2008, compared to amounts received by otherwise similar firms which did not apply in 2008.

The other main determinants of overdraft amounts are: business assets; legal form (limited liability company); owners’ qualifications; female principal owner; financial relationships (number of finance providers); and sector.

In particular, it is notable that businesses with female principal owners received overdrafts that were about 58% smaller ($p=0.000$) than those received by otherwise similar businesses with male principal owners.

The main determinants of term loan amounts are: business assets; firm size (number of employees); debt-asset ratios; and sector.

For example, a 1% increase in business assets is associated with an approximately 0.57% increase in the size of term loans received.

The following model looks at loan amounts again but seeks to identify which types of firm experienced increases in loan amounts in 2008. To achieve this loan amounts are regressed on whether the loan application was made in 2008 interacted with risk levels. Estimates from this model are reported in the following table; estimates of the effects of other business and owner characteristics are similar to the previous sets of estimates and are, accordingly, omitted from the table.
Table A2.3: Determinants of (log) loan amounts: interaction model

<table>
<thead>
<tr>
<th></th>
<th>Overdrafts (marginal effects)</th>
<th>Term loans (marginal effects)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied for loan in 2008</td>
<td>0.702486**</td>
<td>0.321856</td>
<td>0.426</td>
</tr>
<tr>
<td>Low risk</td>
<td>0.11636</td>
<td>-0.22024</td>
<td>0.484</td>
</tr>
<tr>
<td>Average risk</td>
<td>0.092575</td>
<td>-0.15258</td>
<td>0.674</td>
</tr>
<tr>
<td>High risk</td>
<td>0.194683</td>
<td>-0.47201</td>
<td>0.297</td>
</tr>
<tr>
<td>Applied for loan in 2008×low risk</td>
<td>0.03997</td>
<td>-0.47201</td>
<td>0.297</td>
</tr>
<tr>
<td>Applied for loan in 2008×average risk</td>
<td>-0.25374</td>
<td>-0.24792</td>
<td>0.586</td>
</tr>
<tr>
<td>Applied for loan in 2008×high risk</td>
<td>-0.7954**</td>
<td>-0.02848</td>
<td>0.963</td>
</tr>
<tr>
<td>N=882</td>
<td>F(100, 781)</td>
<td>F(89, 332)</td>
<td></td>
</tr>
<tr>
<td>Adj. R-sq=0.6079</td>
<td>(p-value)=0.000</td>
<td>(p-value)=0.000</td>
<td></td>
</tr>
<tr>
<td>N=422</td>
<td>Adj. R-sq=0.5665</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(p-value)=0.000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes:
1. Estimated by linear regression with Huber-White robust standard errors.
2. p-values from robust standard errors. *, ** and *** denote significance at the 10%, 5% and 1% levels respectively.

- These estimates imply that minimal risk firms that applied for overdrafts in 2008 received facilities that were over 70% higher (the coefficient on ‘Applied for loan in 2008’: $p=0.021$) than those obtained by otherwise similar firms which did not apply in 2008.
- The corresponding increase for low risk firms is 86% (the sum of the coefficients on ‘Applied for loan in 2008’, ‘Low risk’ and ‘Applied for loan in 2008×low risk’: $p=0.0001$).
- And the increase for average risk firms is 54% ($p=0.0147$).
- However there is no corresponding increase in overdraft facilities among high risk firms which applied in 2008 (the sum of the coefficients on ‘Applied for loan in 2008’, ‘High risk’ and ‘Applied for loan in 2008×high risk’ is insignificantly different from zero: $p=0.7151$).
- Also, across all risk levels, there was no increase in term loan amounts among applicants in 2008 compared to firms of similar risk levels which did not apply in 2008.
Table A2.4: Determinants of loan margins\(^1\)

<table>
<thead>
<tr>
<th></th>
<th>Overdrafts (marginal effects)</th>
<th>(p)-value(^2)</th>
<th>Term loans (marginal effects)</th>
<th>(p)-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied for loan in 2008</td>
<td>0.019602</td>
<td>0.947</td>
<td>0.278965</td>
<td>0.275</td>
</tr>
<tr>
<td><strong>Availability of collateral</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Log business assets</td>
<td>-0.04206</td>
<td>0.627</td>
<td>-0.23981**</td>
<td>0.014</td>
</tr>
<tr>
<td>Log net worth</td>
<td>-0.0629</td>
<td>0.518</td>
<td>0.082668</td>
<td>0.246</td>
</tr>
<tr>
<td><strong>Business characteristics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-9 employees</td>
<td>-0.7149</td>
<td>0.452</td>
<td>-2.11678**</td>
<td>0.041</td>
</tr>
<tr>
<td>10-49 employees</td>
<td>-0.97143</td>
<td>0.347</td>
<td>-3.00861***</td>
<td>0.006</td>
</tr>
<tr>
<td>50-249 employees</td>
<td>-0.83162</td>
<td>0.437</td>
<td>-2.83364**</td>
<td>0.011</td>
</tr>
<tr>
<td>Log business age</td>
<td>-0.08397</td>
<td>0.605</td>
<td>0.302711*</td>
<td>0.052</td>
</tr>
<tr>
<td>Partnership</td>
<td>0.638716</td>
<td>0.489</td>
<td>1.346296**</td>
<td>0.028</td>
</tr>
<tr>
<td>Ltd Liability Partnership</td>
<td>1.022831</td>
<td>0.270</td>
<td>1.322529</td>
<td>0.102</td>
</tr>
<tr>
<td>Ltd Liability Co.</td>
<td>1.17772**</td>
<td>0.047</td>
<td>1.245634**</td>
<td>0.020</td>
</tr>
<tr>
<td><strong>Financial ratios</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Return on assets</td>
<td>-0.00088</td>
<td>0.814</td>
<td>0.002059</td>
<td>0.937</td>
</tr>
<tr>
<td>Debt-asset ratio</td>
<td>0.002349</td>
<td>0.826</td>
<td>-0.01134*</td>
<td>0.074</td>
</tr>
<tr>
<td><strong>Owner characteristics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>O-levels(^3)</td>
<td>0.122003</td>
<td>0.843</td>
<td>0.321325</td>
<td>0.697</td>
</tr>
<tr>
<td>A-levels</td>
<td>1.009284</td>
<td>0.145</td>
<td>-0.25506</td>
<td>0.739</td>
</tr>
</tbody>
</table>
### Small Firms in the Credit Crisis: Evidence from the UK Survey of SME Finances

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient 1</th>
<th>Coefficient 2</th>
<th>Coefficient 3</th>
<th>Coefficient 4</th>
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<tbody>
<tr>
<td>HND</td>
<td>0.114341</td>
<td>0.876</td>
<td>-0.28225</td>
<td>0.690</td>
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<tr>
<td>NVQ</td>
<td>0.574188</td>
<td>0.426</td>
<td>-0.60582</td>
<td>0.458</td>
</tr>
<tr>
<td>Professional qualification</td>
<td>0.185398</td>
<td>0.747</td>
<td>0.206894</td>
<td>0.762</td>
</tr>
<tr>
<td>Undergraduate degree</td>
<td>-0.08104</td>
<td>0.885</td>
<td>-0.16704</td>
<td>0.803</td>
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<tr>
<td>Postgraduate degree</td>
<td>0.250471</td>
<td>0.679</td>
<td>0.145218</td>
<td>0.836</td>
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<tr>
<td>Diploma</td>
<td>-0.51857</td>
<td>0.727</td>
<td>-0.07756</td>
<td>0.933</td>
</tr>
<tr>
<td>Apprenticeship/trade qualification</td>
<td>-1.95887</td>
<td>0.054</td>
<td>-0.56657</td>
<td>0.620</td>
</tr>
<tr>
<td>Teaching qualification</td>
<td>6.994752***</td>
<td>0.000</td>
<td>10.41056***</td>
<td>0.000</td>
</tr>
<tr>
<td>Other qualification</td>
<td>-2.38664</td>
<td>0.192</td>
<td>10.41056***</td>
<td>0.000</td>
</tr>
<tr>
<td>Financial qualification</td>
<td>-0.2568</td>
<td>0.398</td>
<td>-0.17409</td>
<td>0.566</td>
</tr>
<tr>
<td>Log business experience</td>
<td>-0.30868</td>
<td>0.314</td>
<td>0.143967</td>
<td>0.592</td>
</tr>
<tr>
<td>Log owner’s age</td>
<td>0.611897</td>
<td>0.528</td>
<td>-0.21458</td>
<td>0.824</td>
</tr>
<tr>
<td>Female principal owner</td>
<td>-0.30948</td>
<td>0.581</td>
<td>-0.12557</td>
<td>0.770</td>
</tr>
<tr>
<td>Ethnic minority principal owner</td>
<td>0.189854</td>
<td>0.711</td>
<td>-0.7188</td>
<td>0.109</td>
</tr>
</tbody>
</table>

**Delinquency and risk ratings**

| Financial delinquency                         | 0.474193      | 0.268         | 0.761784**    | 0.043         |
| Low risk                                      | 0.022876      | 0.959         | 0.159876      | 0.725         |
| Average risk                                  | 0.815582*     | 0.090         | 0.374888      | 0.444         |
| High risk                                     | 1.277961**    | 0.045         | 0.303622      | 0.623         |

**Financial relationships**

| Log relationship length                       | 0.174542      | 0.227         | -0.01659      | 0.908         |
| 2 finance providers                           | -0.40675      | 0.186         | 0.066679      | 0.819         |
| 3 finance providers                           | -0.8521       | 0.027**       | -0.12228      | 0.785         |
| 4 finance providers                           | -0.84345      | 0.298         | 0.820286      | 0.400         |
| 5 finance providers                           | 1.397963      | 0.198         | 0.205891      | 0.862         |

**Sector**

| 2 Digit SIC codes (p-value)                   | 0.000         | 0.000         | 0.000         | 0.000         |

**Region**

| East Midlands                                 | 1.269159**    | 0.044         | -0.39657      | 0.496         |
| London                                        | 0.090407      | 0.901         | 0.208873      | 0.809         |
| North East                                    | 1.291286*     | 0.054         | -0.23028      | 0.712         |
| Northern Ireland                              | 1.154522*     | 0.085         | -0.18062      | 0.801         |
| North West                                    | 0.194277      | 0.750         | -0.33022      | 0.494         |
| Scotland                                      | 0.80473       | 0.246         | -0.27288      | 0.614         |
| South East                                    | 1.249773**    | 0.030         | -0.57612      | 0.302         |
| South West                                    | -0.08501      | 0.887         | -0.09954      | 0.863         |
| Wales                                         | 1.603216**    | 0.020         | 0.51628       | 0.416         |
| West Midlands                                 | 0.499351      | 0.423         | -0.89654      | 0.213         |
Both overdraft and term loan margins are no higher among applicants in 2008 compared to margins paid by otherwise similar firms which did not apply in 2008.

The main determinants of overdraft margins are: legal form – limited liability companies paying on average about 1.2% points more than sole traders; owner qualifications – those with teaching qualifications paying on average 7% points more than those with no formal qualifications; risk ratings – average risk firms paying about 0.8% points more, and high risk firms paying 1.3% points more, than minimal risk firms; sectors; and location – notably Welsh firms paid 1.6% points more than firms located in the East of England.

The main determinants of term loan margins are: business assets; firm size (employees); legal form; owner qualifications; financial delinquency; and sectors.

Specifically: firms with 10-49 employees paid on average 3% points less, and those with 50-249 employees paid around 2.8% points less, than firms with no employees; owners with other (unclassified) qualifications paid 10.4%
points more than owners with no formal qualifications; firms with missed loan repayments and/or unauthorized overdraft excesses (financial delinquents) paid about 0.76% points more than non-delinquents; and margins on fixed rate loans were around 0.77% points lower than variable rate loans.

Table A2.5: Determinants of (log) loan arrangement fees

<table>
<thead>
<tr>
<th></th>
<th>Overdrafts (marginal effects)</th>
<th>p-value(^2)</th>
<th>Term loans (marginal effects)</th>
<th>p-value</th>
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<tbody>
<tr>
<td>Applied for loan in 2008</td>
<td>0.208483**</td>
<td>0.014</td>
<td>0.379066*</td>
<td>0.097</td>
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<tr>
<td>Availability of collateral</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Log business assets</td>
<td>0.089222***</td>
<td>0.002</td>
<td>0.007142</td>
<td>0.944</td>
</tr>
<tr>
<td>Log net worth</td>
<td>-0.00045</td>
<td>0.983</td>
<td>0.049935</td>
<td>0.314</td>
</tr>
<tr>
<td>Business characteristics</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-9 employees</td>
<td>-0.08427</td>
<td>0.613</td>
<td>-0.06671</td>
<td>0.925</td>
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<tr>
<td>10-49 employees</td>
<td>-0.07628</td>
<td>0.684</td>
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<tr>
<td>50-249 employees</td>
<td>0.137976</td>
<td>0.534</td>
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<td>Log business age</td>
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<td>0.053465</td>
<td>0.717</td>
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<td>Return on assets</td>
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<td>Debt-asset ratio</td>
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**Small Firms in the Credit Crisis: Evidence from the UK Survey of SME Finances**

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**Delinquency and risk ratings**

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<th>p-value</th>
<th>Coefficient</th>
<th>p-value</th>
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**Region**

<table>
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<tr>
<th>Region</th>
<th>Coefficient</th>
<th>p-value</th>
<th>Coefficient</th>
<th>p-value</th>
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## Small Firms in the Credit Crisis: Evidence from the UK Survey of SME Finances

### Loan characteristics

<table>
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<tr>
<th></th>
<th>Yorks and Humbs</th>
<th>0.135541</th>
<th>0.562</th>
<th>0.184939</th>
<th>0.728</th>
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<td>Unsecured</td>
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<td>Variable interest rate</td>
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<td>Fixed interest rate</td>
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<tr>
<td>Log size of loan</td>
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<td>0.000</td>
<td>0.650449***</td>
<td>0.000</td>
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</table>

\[ N=610 \quad \text{Adj. R-sq=0.6129} \quad F(108, 501) (p-value)=0.000 \]
\[ N=290 \quad \text{Adj. R-sq=0.4417} \quad F(105, 184) (p-value)=0.000 \]

### Notes:

1. Estimated by linear regression with Huber-White robust standard errors.
2. \( p \)-values from robust standard errors. **, ** and *** denote significance at the 10%, 5% and 1% levels respectively.
3. Qualifications relate to the owner’s highest formal qualification.

- Overdraft arrangement fees are almost 21% higher \((p=0.014)\) among applicants in 2008 compared to otherwise similar businesses which did not apply in 2008.
- Also term loan arrangement fees are almost 38% higher \((p=0.097)\) among applicants in 2008, relative to those which did not apply in 2008, holding risk factors constant.
- The other main determinants of overdraft arrangement fees are: business assets; legal form (partnership); profitability (return on assets); owner qualifications (teaching qualifications); financial relationships (number of finance providers); sector; and loan characteristics (unsecured and size of loan).
- The other main determinants of term loan arrangement fees are: legal form (limited liability company); owner qualifications (other/unclassified qualifications); sector; region (London, the South-East and Wales); and loan characteristics (fixed interest rate and size of loan).
- Notably business located in London paid 134% more in term loan fees, those in the South-East 89% more, and those in Wales paid 120% more, than businesses in the East of England.

Table A2.6: Determinants of collateralisation

<table>
<thead>
<tr>
<th></th>
<th>Overdrafts (marginal effects)</th>
<th>$p$-value $^2$</th>
<th>Term loans (marginal effects)</th>
<th>$p$-value</th>
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<tbody>
<tr>
<td>Applied for loan in 2008</td>
<td>0.069634*</td>
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<td>-0.06983</td>
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<tr>
<td><strong>Availability of collateral</strong></td>
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<tr>
<td>Log business assets</td>
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<td>Log net worth</td>
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<td><strong>Business characteristics</strong></td>
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<tr>
<td>1-9 employees</td>
<td>0.235941**</td>
<td>0.013</td>
<td>-0.03798</td>
<td>0.780</td>
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<tr>
<td>10-49 employees</td>
<td>0.172375*</td>
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<tr>
<td>50-249 employees</td>
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<tr>
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<td><strong>Owner characteristics</strong></td>
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Small Firms in the Credit Crisis: Evidence from the UK Survey of SME Finances

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**Delinquency and risk ratings**

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<th>p-value</th>
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<tr>
<td>Average risk</td>
<td>0.159522**</td>
<td>0.026</td>
<td>0.075481</td>
<td>0.597</td>
</tr>
<tr>
<td>High risk</td>
<td>0.290014***</td>
<td>0.002</td>
<td>0.11445</td>
<td>0.483</td>
</tr>
</tbody>
</table>

**Financial relationships**

<table>
<thead>
<tr>
<th>Financial relationship</th>
<th>Coefficient</th>
<th>Standard Error</th>
<th>T-statistic</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log relationship length</td>
<td>0.00237</td>
<td>0.913</td>
<td>-0.00936</td>
<td>0.785</td>
</tr>
<tr>
<td>2 finance providers</td>
<td>-0.00372</td>
<td>0.929</td>
<td>-0.01499</td>
<td>0.831</td>
</tr>
<tr>
<td>3 finance providers</td>
<td>0.00875</td>
<td>0.885</td>
<td>0.085722</td>
<td>0.353</td>
</tr>
<tr>
<td>4 finance providers</td>
<td>0.120945</td>
<td>0.409</td>
<td>0.024475</td>
<td>0.889</td>
</tr>
<tr>
<td>5 finance providers</td>
<td>0.246319</td>
<td>0.368</td>
<td>-0.29015</td>
<td>0.289</td>
</tr>
</tbody>
</table>

**Sector**

<table>
<thead>
<tr>
<th>2 Digit SIC codes (p-value)</th>
<th>Coefficient</th>
<th>Standard Error</th>
<th>T-statistic</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Digit SIC codes (p-value)</td>
<td>0.070</td>
<td></td>
<td></td>
<td>0.091</td>
</tr>
</tbody>
</table>

**Region**

<table>
<thead>
<tr>
<th>Region</th>
<th>Coefficient</th>
<th>Standard Error</th>
<th>T-statistic</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Midlands</td>
<td>-0.09997</td>
<td>0.233</td>
<td>-0.00414</td>
<td>0.978</td>
</tr>
<tr>
<td>London</td>
<td>-0.02694</td>
<td>0.793</td>
<td>-0.07385</td>
<td>0.709</td>
</tr>
<tr>
<td>North East</td>
<td>-0.13147</td>
<td>0.156</td>
<td>0.161541</td>
<td>0.289</td>
</tr>
<tr>
<td>Northern Ireland</td>
<td>0.026468</td>
<td>0.783</td>
<td>0.36981**</td>
<td>0.011</td>
</tr>
<tr>
<td>North West</td>
<td>-0.18019**</td>
<td>0.029</td>
<td>0.170586</td>
<td>0.239</td>
</tr>
<tr>
<td>Scotland</td>
<td>-0.06115</td>
<td>0.508</td>
<td>0.177324</td>
<td>0.248</td>
</tr>
<tr>
<td>South East</td>
<td>-0.116</td>
<td>0.159</td>
<td>0.103762</td>
<td>0.468</td>
</tr>
<tr>
<td>South West</td>
<td>-0.13814</td>
<td>0.125</td>
<td>0.023263</td>
<td>0.875</td>
</tr>
<tr>
<td>Wales</td>
<td>-0.08783</td>
<td>0.284</td>
<td>0.277774**</td>
<td>0.044</td>
</tr>
<tr>
<td>West Midlands</td>
<td>-0.02628</td>
<td>0.768</td>
<td>0.045824</td>
<td>0.769</td>
</tr>
</tbody>
</table>
**Small Firms in the Credit Crisis: Evidence from the UK Survey of SME Finances**

<table>
<thead>
<tr>
<th>Loan characteristics</th>
<th>Coefficient</th>
<th>Standard Error</th>
<th>Z Value</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yorks and Humbs</td>
<td>-0.08931</td>
<td>0.346</td>
<td>0.162064</td>
<td>0.266</td>
</tr>
</tbody>
</table>

**Variable interest rate**

<table>
<thead>
<tr>
<th>Coefficient</th>
<th>Standard Error</th>
<th>Z Value</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.024048</td>
<td>0.581</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Fixed interest rate**

<table>
<thead>
<tr>
<th>Coefficient</th>
<th>Standard Error</th>
<th>Z Value</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>-0.1178*</td>
<td>0.095</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Log size of loan**

<table>
<thead>
<tr>
<th>Coefficient</th>
<th>Standard Error</th>
<th>Z Value</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.099416***</td>
<td>0.000</td>
<td>0.135736***</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Notes:

1. Estimated by probit with Huber-White robust standard errors.
2. *p*-values from robust standard errors. *, ** and *** denote significance at the 10%, 5% and 1% levels respectively.
3. Qualifications relate to the owner's highest formal qualification.

- Firms which applied for overdrafts in 2008 are about 7% points (ρ=0.079) more likely to have posted collateral on the loan compared to firms with the same level of risk but which did not apply in 2008.
- However, the corresponding effect for term loans is statistically insignificant (ρ>0.10).
- The other main factors associated with overdraft arrangement fees are: owner qualifications (A-levels); risk ratings (average and high risk); sector; region (North-West); and loan characteristics (size of loan).
- The main factors associated with term loan arrangement fees are: financial delinquency; sector; region (Northern Ireland and Wales); and loan characteristics (fixed interest rate and size of loan).

**Conclusions**

The econometric analysis presented in this appendix has found evidence that the credit crisis has directly affected:
• Loan rejections.
• Size of overdraft facilities.
• Loan arrangement fees.
• Incidences of collateral on overdrafts.

The results for loan rejections, arrangement fees and collateral indicate that tighter credit supply in 2008 made it harder for firms to access loans regardless of any changes in firm risk. In other words, even had firm risk remained constant in 2008, firms would still have found it harder/more costly to access loans. In contrast the finding of increased overdraft facilities, among applicants in 2008, is consistent with the increases in overdraft lending in 2008 reported by the BBA. However, the interaction model for loan amounts highlighted that lower risk firms were the main beneficiaries of these increases; facilities for high risk firms were unchanged.

In contrast there is no evidence that the credit crisis has directly affected margins on either overdrafts or term loans. That is not to say that the credit crisis has had no impact here. However, it suggests that increased levels of risk in 2008 underlie the observed increases in loan margins. This highlights the importance of further analysis on the issue of how the credit crisis has affected firm risk and thence access to finance (indirect effects).
Appendix 3: Technical Report on Survey Methodology (by IFF Research Ltd)

IFF Research was commissioned by the University of Warwick and Barclays Bank to conduct a survey of small and medium sized enterprises about their usage and experiences of accessing finance.

There were two elements to the study:

- A ‘recall’ stage, where as many interviews as possible were conducted with businesses which took part in the study in 2004 (the ‘main sample’ of 2,500 businesses) and in 2005 (the 860 booster interviews with ethnic minority led businesses). The purpose of this was to be able to compare findings with the 2004/5 survey.
- A ‘top up’ stage, in order to provide an overall sample size of 2,500.

The survey was conducted among 2500 small and medium sized enterprises (defined as firms with less than 250 employees) in the private sector in the UK. Public sector and not for profit organisations were excluded, together with the Financial Services, Mining and Quarrying, Electricity, Gas and Water Supply sectors (the latter due to the very small numbers in the population).

Roughly equal proportions of recall and top up interviews were achieved (1,253 and 1,247 interviews respectively). Note that any business interviewed in 2004/5 could be included in the research, even if they now had more than 249 employees. This was the case for 12 businesses. Outcomes for businesses which could not be surveyed were also provided, for example if the business had closed or moved.

The survey fieldwork was conducted by telephone by IFF Research, an independent market research company, at IFF’s CATI centre between 10th September and 20th November 2008. It had originally been intended to complete the recall stage first, before starting on the top up stage, but it was decided to continue with the recall element after the top up stage had started, in order to maximise response.

Sample profile

The sample structure was set in order to allow for analysis by size, sector and government standard region. Thus, larger firms and those in sectors and regions with a lower proportion of firms were over sampled. A quota was also set by whether the business was a start up (defined as trading for less than 24 months). Because by definition those interviewed in 2004/5 could not be start-ups, a higher proportion of the top up sample were start ups.

The sectors and size bands (by number of employees) included in the survey, across the whole of the UK, are shown in the table overleaf. The table also shows the achieved

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32 Only those who had agreed to take part in further research were recontacted. Thus 2,228 out of 2,500 interviewed in 2004 and 728 out of 860 interviewed in 2005 were recontacted.
sample by size, sector, region (2003 SIC definitions for sectors are shown in brackets) and age of business.

The sample profile was similar to that achieved in 2004. However, it was found that the booster interviews with ethnic minority led businesses, which formed part of the ‘recall sample’ for 2008, were particularly likely to have been achieved in small (1-9 employee) wholesale/retail businesses, and in London and the West Midlands. The quota targets for these cells were therefore increased slightly relative to 2004, in order that a broader range of businesses could be included in these particular cells.

<table>
<thead>
<tr>
<th>NO. OF EMPLOYEES BY SECTOR</th>
<th>TOTAL</th>
<th>0</th>
<th>1-9</th>
<th>10-49</th>
<th>50-249</th>
</tr>
</thead>
<tbody>
<tr>
<td>AB Agriculture, Hunting and Forestry; Fishing (01-05)</td>
<td>168</td>
<td>41</td>
<td>78</td>
<td>35</td>
<td>14</td>
</tr>
<tr>
<td>D Manufacturing (15-36)</td>
<td>225</td>
<td>38</td>
<td>67</td>
<td>68</td>
<td>52</td>
</tr>
<tr>
<td>F Construction (45)</td>
<td>377</td>
<td>60</td>
<td>159</td>
<td>110</td>
<td>48</td>
</tr>
<tr>
<td>G Wholesale / Retail (50-52)</td>
<td>428</td>
<td>51</td>
<td>180</td>
<td>102</td>
<td>95</td>
</tr>
<tr>
<td>H Hotels and Restaurants (55)</td>
<td>172</td>
<td>15</td>
<td>58</td>
<td>66</td>
<td>33</td>
</tr>
<tr>
<td>I Transport, Storage and Communication (60-64)</td>
<td>191</td>
<td>25</td>
<td>66</td>
<td>60</td>
<td>40</td>
</tr>
<tr>
<td>K Real Estate, Renting and Business Activities (70-74)</td>
<td>510</td>
<td>101</td>
<td>166</td>
<td>120</td>
<td>123</td>
</tr>
<tr>
<td>N Health and Social Work (85)</td>
<td>187</td>
<td>29</td>
<td>47</td>
<td>81</td>
<td>30</td>
</tr>
<tr>
<td>O Other Community, Social and Personal Service Activities (90-93)</td>
<td>242</td>
<td>33</td>
<td>110</td>
<td>65</td>
<td>34</td>
</tr>
<tr>
<td>TOTAL</td>
<td>2500</td>
<td>393</td>
<td>931</td>
<td>707</td>
<td>469</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>REGION</th>
<th>START UP</th>
</tr>
</thead>
<tbody>
<tr>
<td>East</td>
<td>Trading for less than 24 months 160</td>
</tr>
<tr>
<td>East Midlands</td>
<td>Trading for 24 months or more 2340</td>
</tr>
<tr>
<td>London</td>
<td></td>
</tr>
<tr>
<td>North East</td>
<td></td>
</tr>
<tr>
<td>Northern Ireland</td>
<td></td>
</tr>
<tr>
<td>North West</td>
<td></td>
</tr>
<tr>
<td>Scotland</td>
<td></td>
</tr>
<tr>
<td>South East</td>
<td></td>
</tr>
<tr>
<td>South West</td>
<td></td>
</tr>
<tr>
<td>Wales</td>
<td></td>
</tr>
<tr>
<td>West Midlands</td>
<td></td>
</tr>
<tr>
<td>Yorkshire &amp; Humberside</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>2500</td>
</tr>
</tbody>
</table>
**Approach**

The majority of the interviews were conducted using a one stage approach. However, some of the largest businesses (50-249 employees) were interviewed using a two stage approach, as follows:

1) Screening of respondents to check if the firm qualified for the study, identify the most appropriate person to interview (owner / manager for smaller businesses and Finance Director or equivalent for larger ones) and obtain agreement in principle to participate in the study.

2) Mail out by email, fax or post of letter providing more information about the survey and datasheet to assist respondents in collating the necessary financial information for the main part of the survey

3) Main survey

The intention behind the two stage approach was to allow respondents the opportunity to refer to their records, in order to maximise the accuracy of the financial information (e.g. value of loans). However, the drawback of this approach was that there was a significant degree of drop out between the screener and main survey, which had a negative effect on response rates.

It was decided from the outset to use the one stage approach for all the recall interviews, since it was important to obtain feedback from as many of the businesses surveyed in 2004 or 2005 as possible.

For the ‘top up’ stage, the largest size band (50-249) was initially surveyed using the two stage approach, as it was felt that companies of this size might have more complex financial arrangements and thus be in more need of referring to additional information. It had been found in 2004 that using the one stage approach among smaller businesses did not lead to a significant increase in non response to key questions – a higher proportion opted to use the ranges rather than provide an exact figure, but this was felt to be acceptable. This also proved to be the case for the largest size band.

During fieldwork, a high level of drop out between the stages was experienced. Refusals to participate, as opposed to not being able to get hold of the target respondent, were also a particular factor: the economic climate and difficulties businesses were experiencing in obtaining finance from banks at the time of fieldwork meant that there was a certain amount of hostility to banks and finance generally, meaning that businesses were less inclined to participate in the survey. It was therefore decided to conduct the remaining interviews in the 50-249 size band using the one stage approach. This also meant that the interviews could be completed within a reasonable time-frame.

Overall, 248 interviews were conducted using the two stage approach. The majority of these (178) were in the 50-249 size band (the size information used to determine which approach to use to the survey was defined from the sample provided by Dun and Bradstreet, and thus once this information was checked with respondents, 28% of these businesses were subsequently reassigned to a smaller size band).
A questionnaire was only considered complete once both the screener and main survey had been completed. The ‘top up’ interviews took 25 minutes on average (when conducted in one stage), while the recall interviews were slightly shorter, taking 22 minutes on average.

**Response rate**

Response rates and outcomes are shown over the next few pages for the three types of survey:

1. The Recall interviews
2. The Top Up interviews – less than 50 employees sample (one stage)
3. The Top Up interviews – 50-249 sample (mostly two stage interviewing)

As a percentage of all records in the scope of the study, a response rate of 43% was achieved for the recall study; 7% for the top up interviews with the less than 50 employee sample; and 3% for the top up interviews with 50-249 employees sample.
### Response rate for recall (one stage)

<table>
<thead>
<tr>
<th>Category</th>
<th>Total</th>
<th>Population in scope of study %</th>
<th>Population in scope of fieldwork %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total amount of used sample</td>
<td>2956</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Ineligible</strong></td>
<td>50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Another company owns 50% or more of firm</td>
<td>29</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business owned by agency of local or national government</td>
<td>16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business not run for profit or as social enterprise</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business has 250+ employees</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total in scope of study</strong></td>
<td>2906</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Appointment made for interview with target respondent, but not achieved during fieldwork period</td>
<td>15</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Business called several times, but unable to reach target respondent</td>
<td>221</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Not available in fieldwork period</td>
<td>75</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Invalid cases</strong></td>
<td>727</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>Unobtainable number/closed business</td>
<td>727</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>Out of quota</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td><strong>Total in scope of fieldwork</strong></td>
<td>1868</td>
<td>64</td>
<td>100</td>
</tr>
<tr>
<td>Interviews achieved</td>
<td>1254</td>
<td>43</td>
<td>67</td>
</tr>
<tr>
<td>Refusals</td>
<td>596</td>
<td>21</td>
<td>32</td>
</tr>
<tr>
<td>Breakdown during interview</td>
<td>18</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Response rate</strong></td>
<td></td>
<td>43%</td>
<td>67%</td>
</tr>
</tbody>
</table>
**Response rate for top-up (one stage – less than 50 employees sample)**

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Population in scope of study</th>
<th>Population in scope of fieldwork</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total amount of used sample</td>
<td>12828</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Ineligible**

- Another company owns 50% or more of firm: 70
- Business owned by agency of local or national government: 30
- Business not run for profit or as social enterprise: 82
- Business has 250+ employees: 7

**Total in scope of study**

| Appointment made for interview with target respondent, but not achieved during fieldwork period | 56   | *    |
| Business called several times, but unable to reach target respondent | 6428 | 51   |
| Not available in fieldwork period | 11   | *    |

**Invalid cases**

- Unobtainable number/closed business: 2643
- Out of quota: 48

**Total in scope of fieldwork**

| Interviews achieved | 921   | 7    | 27    |
| Refusals           | 2424  | 19   | 70    |
| Breakdown during interview | 108   | 1    | 3     |

**Response rate**

- 7% 27%
## Response rate for top-up (50-249 employees sample; mostly two-stage, with some one stage)

<table>
<thead>
<tr>
<th>Ineligible</th>
<th>Total</th>
<th>Population in scope of study</th>
<th>Population in scope of fieldwork</th>
</tr>
</thead>
<tbody>
<tr>
<td>Another company owns 50% or more of firm</td>
<td>558</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business owned by agency of local or national government</td>
<td>286</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business not run for profit or as social enterprise</td>
<td>31</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business has 250+ employees</td>
<td>160</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Total in scope of study                                                   | 11081 | 100                          |                                   |
| Appointment made for interview with target respondent, but not achieved during fieldwork period | 63    | 1                            | 1                                 |
| Business called several times, but unable to reach target respondent       | 5547  | 50                           | *                                 |
| Not available in fieldwork period                                          | 26    | *                            |                                   |

## Invalid cases

| Unobtainable number/closed business                                       | 1933  | 17                           |                                   |
| Out of quota                                                              | 1880  | 17                           |                                   |
|                                                                           | 53    | *                            |                                   |

| Total in scope of fieldwork                                               | 3512  | 32                           | 100                              |
| Interviews achieved                                                        | 326   | 3                            | 9                                |
| Refusals                                                                   | 3100  | 28                           | 88                               |
| Breakdown during interview                                                 | 86    | 1                            | 2                                |

**Response rate**

|                                           |       |                              |                                   |
|-------------------------------------------|-------|------------------------------|                                   |
|                                           | 3%    | 9                            |                                   |
Weighting

The data were projected to the total number of SMEs in the UK in scope of the study: 4,430,825 enterprises in total. Two RIM weights were applied – one for size (number of employees) by industry sector, and a second which contained ethnicity and region. The RIM weighting allowed the two sets of weighting targets to be reconciled, to achieve the best fit.

The source of the population figures for size, sector and region was the Small and Medium Enterprise (SME) Statistics for the UK from 2007 provided by the Department for Business, Innovation and Skills. The data on ethnicity came from ASBS (Annual Small Business Survey).

In 2004, the data were only weighted by size, sector and region. However, the inclusion in 2008 of the booster interviews with ethnic minority led businesses in the recall sample, resulted in a greater proportion of these businesses in the sample than would normally be the case. There was a particular skew in London and West Midlands. The data were therefore weighted by white vs. non white for certain regions (East, East Midlands, London, North West, South East, West Midlands and Yorkshire & Humber) where there was a higher proportion of ethnic minority led businesses, while for the remaining regions, only regional targets were given as there were insufficient non-white businesses to be able to weight within region. Note that the booster sample contained roughly equal numbers of Indian, Bangladeshi, Pakistani, Black Caribbean and Black African businesses. It was not possible to correct for this given low numbers (the weighting only distinguished between white vs. non-white led businesses).

The tables below show the profile of the achieved sample and the weighted profile.
<table>
<thead>
<tr>
<th>SECTOR</th>
<th>SIZE</th>
<th>Sample profile</th>
<th>Weighted profile</th>
</tr>
</thead>
<tbody>
<tr>
<td>A, B Agriculture, Hunting and Forestry; Fishing</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>1 to 9</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>10 to 49</td>
<td>1</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>50 to 249</td>
<td>1</td>
<td>*</td>
</tr>
<tr>
<td>D Manufacturing</td>
<td>0</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>1 to 9</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>10 to 49</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>50 to 249</td>
<td>2</td>
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