SME forbearance and its implications for monetary and financial stability

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- This article presents the results of an investigation into the extent of loan forbearance in the SME sector and its implications for productivity and financial system resilience.
- Around 6% of SME borrowers were estimated to be in receipt of some form of loan forbearance in March 2013. This accounted for around 14% of the major five UK banks' exposure to this sector.
- SME forbearance appears to account for only a small proportion of the weakness in aggregate UK productivity and also seems unlikely to threaten financial system resilience.

Overview

This article sets out the results of a Bank of England investigation into forbearance provided by major UK banks to small and medium-sized enterprises (SMEs), and its implications for monetary and financial stability.

Forbearance by banks is said to occur when, outside of the normal terms of business, a bank seeks to provide support to a borrower struggling to meet its obligations. This may range from ignoring a breach of a loan covenant to providing some form of payment relief.

Forbearance can be helpful in providing assistance to borrowers suffering from temporary problems. This may have helped some viable businesses to survive the financial crisis. But it may also pose risks to monetary and financial stability. Support provided to firms who do not have a realistic chance of recovery may impede the allocation of resources to healthy firms and restrict productivity growth. Or banks may choose to employ forbearance rather than classify loans as non-performing, possibly increasing financial system fragility.

Previous surveys by the regulatory authorities revealed forbearance to be most widespread in the commercial real estate (CRE) sector (see **summary table**). This was a factor in the 2013 FPC recommendation which led the PRA Board to require some UK banks to improve their capital positions. Risks arising from forbearance in the CRE sector, as well as other sectors, continue to be monitored by the FPC and PRA.

Summary table Forbearance by UK lending sector

Sector	Major UK banks' exposure in forbearance
Household secured[(a)]	5%–8%
Commercial real estate[(b)]	35%
Leveraged loans[(c)]	28%
SME (excluding CRE lending)[(d)]	14%

(a) Survey results as at June 2012.
(b) Survey results as at June 2011.
(c) Survey results as at December 2011.
(d) Survey results as at March 2013.

This study focuses on the SME sector and excludes CRE. It estimates that around 6% of borrowers were in receipt of some form of loan forbearance. This represents around 14% of the five major UK banks' loan exposure to this sector. Forbearance among SMEs also appears to be most significant in the property-related industrial sectors, such as construction and accommodation and food.

Overall, bank forbearance to SMEs appears to account for only a small proportion of the weakness in aggregate UK productivity. Low interest rates are likely to have been more important in explaining higher firm survival rates over recent years, with results from this investigation highlighting vulnerabilities to a rise in interest rates if not accompanied by an improvement in economic conditions. Current provisioning and capital levels of the major UK banks against SME forbearance seem broadly adequate, and therefore the scale of this forbearance seems unlikely to threaten financial system resilience.

(1) The authors would like to thank Gareth Anderson for his help in producing this article.

This article sets out the results of a recent Bank of England investigation into the extent of forbearance provided by the major UK banks to small and medium-sized enterprises (SMEs), defined here as companies with turnover below £50 million, and draws out the implications for monetary stability, financial stability and bank regulation.

Since the financial crisis, the rate of company failure has remained surprisingly low and labour productivity unusually weak, especially among SMEs.(1) SMEs are an important part of the UK economy, contributing around 60% of total private sector employment and 50% of total nominal private sector turnover.(2)

Forbearance by banks has been suggested as one of the factors that might explain both the low rate of company failure and weak productivity growth since 2008. This makes forbearance relevant for both the Monetary Policy Committee and the Financial Policy Committee (FPC). Forbearance is also monitored by the Prudential Regulation Authority (PRA) in its regulatory role.(3) This study supplements previous surveys on forbearance by the regulatory authorities which have covered household secured lending, leveraged loans and commercial real estate (CRE) lending.(4)

The first section of this article outlines what forbearance is and why it can have important implications for the economy and financial system. The following sections set out the key findings on forbearance to the SME sector and discuss the implications of forbearance for productivity and financial system resilience. A short **video** explains some of the key topics covered in this article.(5)

What is forbearance?

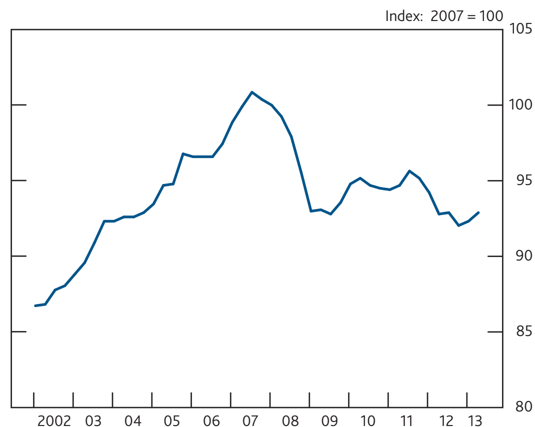
Forbearance by a bank occurs when it seeks to provide a measure of support to a customer struggling to meet its obligations. This may range from ignoring a breach of a loan covenant, to giving the borrower more time to meet its loan obligations, to providing some form of active payment relief. For the purposes of this investigation, bank forbearance is said to occur when, for reasons relating to the actual or apparent financial distress of a borrower, a bank grants a temporary or permanent concession(6) and that concession is made outside of normal market terms.

Forbearance can be a useful practice for banks in managing their loan portfolios. Providing assistance to a customer suffering from a temporary problem can avoid an unnecessary and costly process of default and might, from an individual bank's perspective, be the best way to maximise the recovery value of its assets. Such support may also have allowed some viable businesses to remain in operation through the prolonged period of weak demand following the recession and may allow them to recover fully in time. Indeed, lower insolvencies may also have helped to restrain increases in unemployment, reducing the risk of erosion of the economy's supply potential.

But there are also risks to monetary and financial stability arising from forbearance. Forbearance which is provided to businesses without a realistic chance of being viable in the future, and which supports their survival, may impede the allocation of resources to healthy firms in the economy. Furthermore, fragility could build up in the financial system should banks choose to employ forbearance rather than classifying loans as non-performing.(7)

Indeed, forbearance may be one factor that could help to explain why productivity growth in the United Kingdom has been so weak following the recession. In the second quarter of 2013, private sector output per worker was 8% below its pre-crisis peak and 18% below the level that would be implied by its pre-crisis trend (**Chart 1**).(8) Labour productivity appears to have been particularly weak among SMEs since the financial crisis.(9) Forbearance by banks, as well as other factors including the low level of Bank Rate and forbearance by HM Revenue and Customs (HMRC) (as part of the 'time-to-pay' scheme), may help explain why the number of firms entering insolvency has been lower in the latest recession compared to the 1990s — despite the substantial fall in output.(10) The various channels through which forbearance may affect productivity growth are discussed in the third section of this article.

Chart 1 UK private sector output per worker



Sources: ONS and Bank calculations.

(1) See the discussion on page 31 of the November 2012 *Inflation Report*.
(2) These data are published in *Business Population Estimates 2013*, available at www.gov.uk/government/publications/business-population-estimates-2013.
(3) For an overview of the changes to the UK regulatory landscape that came into force in April 2013, including the creation of the PRA and the FPC, see Murphy and Senior (2013).
(4) See the discussion on page 37 of the June 2013 *Financial Stability Report*.
(5) See www.youtube.com/watch?v=kir33mVT1eI.
(6) For example, a concession could include changing the terms of the loan, such as the interest rate paid or the loan amount.
(7) Note that loans can be non-performing and have forbearance applied. Potential risks would arise where forbearance is used to mask a situation where an asset is non-performing.
(8) The pre-crisis trend is estimated as the linear trend in log private sector productivity per worker between 1997 Q1 and 2006 Q4.
(9) See the discussion on page 31 of the November 2012 *Inflation Report*.
(10) See the discussion on page 27 of the August 2013 *Inflation Report*.

Forbearance is not a UK-specific phenomenon. International evidence points to the survival of unviable firms, or so-called 'zombie' companies, in explaining weak growth in Japan following the financial sector distress of the 1990s.[1] There are, however, some important differences. For example, the outstanding stock of lending to UK private non-financial corporations has fallen by 19% since 2008 Q3; this sits in contrast with the practice of 'evergreening' in Japan, where loans were extended to allow borrowers to make interest payments.[2]

Evidence of bank forbearance provided to SMEs

The Bank carried out an investigation in March 2013 with the five largest commercial banks to estimate the extent of forbearance among a sample of more than 5,000 companies with turnover of less than £50 million. This threshold is higher than some standard definitions of SMEs and includes what many term the 'mid-corporate sector'. For the remainder of this article, however, we refer to these companies simply as SMEs. The sample of companies was identified and constructed by the Bank of England in the first instance and then commercial banks were asked to report on the performance of loans to those companies. Companies in the CRE sector, as well as those in the agriculture, finance and energy sectors, were excluded from this investigation.

Any assessment of the extent of loan forbearance relies on commercial judgement, which makes it difficult to produce robust, comparable results by simply asking banks about the aggregate amount of forbearance on their loan books. Instead, the investigation gathered a range of loan-level information, including whether a loan was judged to be in receipt of forbearance, on a sample of participating banks' business customers. This was accompanied by an assessment from the banks' own relationship managers of the prospects for each company (see the box on page 299 for more detail on the survey methodology).

Around 6% of SME borrowers outside of the CRE sector were estimated to be in receipt of some form of loan forbearance.[3] When aggregated, loans to these borrowers accounted for around 14% of the major UK banks' exposure to the SME sector, suggesting that forbearance was concentrated in larger bank exposures. To provide some context, this headline result is lower than the forbearance in CRE and leveraged loan sectors identified in previous studies by the regulatory authorities (**Table A**).

The investigation revealed relatively few cases of banks providing direct payment relief to struggling companies. The main types of forbearance were waivers granted when loan conditions — such as debt to income covenants — had been breached and extensions to the period over which the loan needed to be repaid, as shown in **Chart 2**.[4]

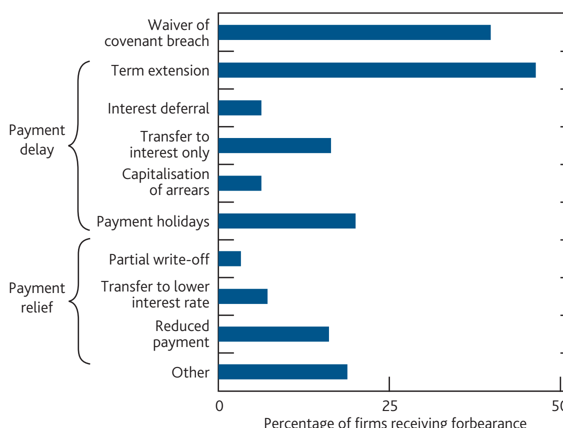
Table A Forbearance by UK lending sector

Sector	Bank exposure in forbearance (per cent)	Stock of bank lending covered by forbearance survey (£ billions)	Current stock of bank lending to sector in question (£ billions)[a]
Household secured[b]	5–8	903	1,043
Commercial real estate[c]	35	153	188
Leveraged loans[d]	28	35	n.a.
SME (excluding CRE lending)[e]	14	81	122

Sources: Bank of England, British Bankers' Association (BBA) and Bank calculations.

(a) As at end-2013 Q3. Household secured data is UK-resident monetary financial institution (MFI) net secured lending. CRE data is UK-resident MFI net lending to real estate and development companies. The Bank of England does not publish data on lending to non-CRE SMEs so the SME figure in the table is indicative only, and estimated by applying the share of non-CRE lending (in total SME lending) derived from BBA data on major UK bank lending to SMEs to Bank of England data on the total stock of outstanding UK-resident MFI lending to SMEs. Sufficient aggregate data on lending to leveraged companies in the United Kingdom is not available.
(b) Survey results as at June 2012.
(c) Survey results as at June 2011.
(d) Survey results as at December 2011.
(e) Survey results as at March 2013. Companies in the agriculture, finance, real estate and energy sectors were excluded.

Chart 2 Types of forbearance[a]



Source: Bank of England investigation into SME forbearance.

(a) Percentages add to more than 100 as a single company can experience more than one type of forbearance.

Banks reported that in many cases, the reasons they felt confident to forbear on loans were that the borrowing company's problems were perceived to be temporary or that the company had undertaken some form of operational restructuring (**Chart 3**).

SME relationship managers also reported that there had been no material changes to their forbearance practices in recent years, but cited the low interest rate environment as an important factor in reducing the opportunity cost of forbearance relative to the early 1990s.

(1) See, for example, Caballero, Hoshi and Kashyap (2008) and Peek and Rosengren (2005).
(2) The reduction in stock reflects net repayment of loans and write-offs.
(3) This figure was very similar when weighted by the turnover of SME borrowers.
(4) A debt to income covenant could require that the ratio of debt to annual earnings before interest, tax, depreciation and amortisation should not exceed a given threshold.

Methodology

The investigation focused on the performance of individual companies with a borrowing relationship with one of the major UK lenders in order to assess the nature and extent of loan forbearance. The sample of companies was identified by the Bank of England in the first instance and then commercial banks were asked to report on the performance of loans to those companies, including whether they were in receipt of forbearance.

The sample of companies was drawn from the population of all UK companies that were registered at Companies House in 2012. At the start of 2012, there were estimated to be around 4.8 million businesses in the United Kingdom, of which 1.3 million were distinct companies.[1] The survey was targeted at the small and medium-sized enterprises (SME) market and therefore selected only companies with turnover of less than £50 million. This threshold is higher than some standard definitions of SMEs and includes what many term the 'mid-corporate sector'.

The investigation also used registered 'charges' at Companies House to identify bank relationships. Companies provide security to a lender by granting a charge over some or all of their assets — that is, they pledge collateral that the lender can seize in the event of default. A company must generally register a charge — as well as the holder of the charge — at Companies House when it is created. Therefore, where a specific bank is registered as the charge-holder, it is likely that the bank has made a loan to that company.

A stratified sample, based on total asset size and industry, was constructed from companies with a charge registered with at least one of the five of the largest lenders to the SME sector in the United Kingdom. In addition, an anonymised booster sample was incorporated which included companies with low profitability and liquidity ratios. This was done in order to increase the sample size of those firms that were more likely to be in receipt of forbearance such that reliable inferences could be made about the weaker firms in the economy.

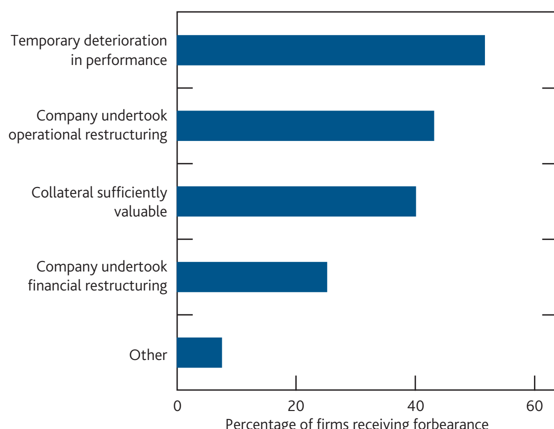
The sample of companies was constructed in two stages. First, the Bank provided an initial sample of companies to each participating bank. The banks then confirmed whether or not they continued to have an active lending relationship with each of these companies. The final stratified sample was then selected from this group of companies. An appropriate set of weights was constructed in order to aggregate the results, such that they were representative of the complete population of SME borrowers at these five banks.

For each company in their sample, banks were then asked to return a qualitative questionnaire, which was completed by individual relationship managers responsible for that company, and to provide quantitative, centrally managed risk and lending metrics.

The final sample covered around 5,300 companies in ten industries. Companies in the agriculture, finance, real estate and energy sectors were excluded from the investigation.

(1) These data are published in *Business Population Estimates 2012*, available at www.gov.uk/government/publications/bis-business-population-estimates.

Chart 3 Why banks feel confident in forbearing[a]



Source: Bank of England investigation into SME forbearance.

(a) Percentages add to more than 100 as respondents could indicate more than one reason for being confident to forbear.

The investigation sought to distinguish between loan forbearance that is likely to support the macroeconomy, by helping productive companies survive temporary problems, and forbearance which has helped to keep alive unproductive firms with more persistent problems. Around two thirds of banks' exposure in forbearance was judged by individual bank relationship managers to be provided to firms that were viewed as having a viable long-term future. And in nearly all cases of forbearance to a firm without a viable future, the bank reported that it was looking to reduce its exposure to the company in question.

Loan forbearance to SMEs varied by both industry and region. Forbearance appears to be most significant in the property-related industrial sectors such as construction and accommodation and food (**Table B**).[1] Forbearance also

(1) The 'accommodation and food' sector, which includes hotels, restaurants and public houses, can be considered to be property-related because a significant share of the sector's borrowing is secured on property.

Table B Forbearance by industry

Industry	Per cent of banks' exposure to each industry receiving forbearance
Manufacturing	12
Construction	27
Wholesale and retail	3
Transport	6
Accommodation and food	28
Information and communication	7
Professional and scientific	6
Administration	14
Other services	9

Source: Bank of England investigation into SME forbearance.

appears to be most prevalent outside of London and the South. And the higher incidence of forbearance in those regions is concentrated in the same property-related sectors.

During the course of the investigation, the banks reported that they thought it likely that the low interest rate environment had been a more significant factor in accounting for the low rate of company failure than loan forbearance.

Bank relationship managers were also asked to estimate how likely each company was to default in the next twelve months in the event of an increase in the interest rate on their debt (**Table C**). They reported that 0.6% of companies had a 50% or more chance of defaulting even without a change in interest rates. But they estimated that 4.7% of companies had a 50% or more chance of defaulting if rates were to rise by 400 basis points. So the low level of interest rates is likely to be an important factor in explaining why company defaults and liquidations in recent years have been low relative to the early 1990s, even though the fall in GDP was much larger in the recent recession (**Chart 4**). **Table C** shows that relationship managers also thought that higher interest rates would have a larger impact on companies currently in receipt of forbearance — although as indicated in our headline results, only 6% of SME borrowers fall into this category. It is important to note, too, that these estimates are likely to be an upper bound since they take current economic conditions as given. Higher interest rates might reasonably be expected to have less effect on company defaults if the rise in rates was due to an improvement in economic conditions.

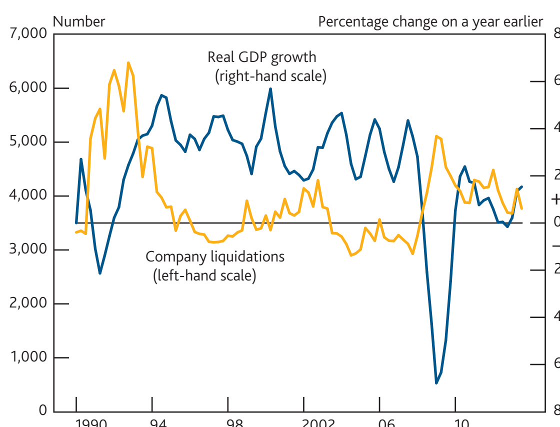
Table C Reported impact of higher interest rates on potential SME bank loan defaults

	Percentage of customers likely to default[a] in the next twelve months		
Interest rate	Currently receiving forbearance	Not receiving forbearance	All
No change	2.7	0.5	0.6
50 basis points	2.9	0.5	0.6
100 basis points	5.9	0.8	1.1
200 basis points	13.7	1.6	2.3
400 basis points	25.5	3.3	4.7

Source: Bank of England investigation into SME forbearance.

(a) Where individual bank relationship managers reported that the probability of a company defaulting was 50% or more.

Chart 4 UK corporate liquidations and real GDP growth[a]



Sources: Bank for International Settlements, ONS, The Insolvency Service and Bank calculations.

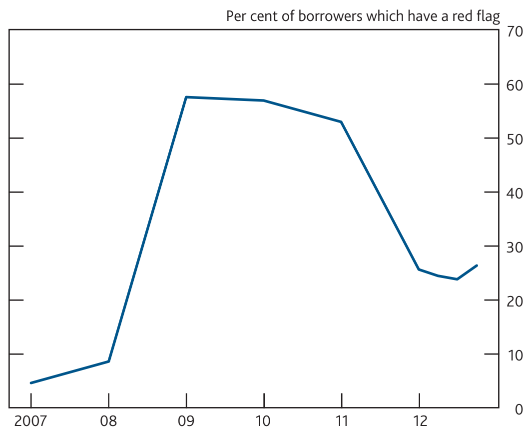
(a) Quarterly sum of compulsory and voluntary liquidations in England and Wales. Changes to legislation, data sources and methods of compilation mean the statistics should not be treated as a continuous and consistent time series. Since the Enterprise Act 2002, a number of administrations have subsequently converted to creditors' voluntary liquidations. These liquidations are excluded from both the headline figures published by The Insolvency Service and the chart.

In order to test the robustness of the results, cross-checks were made by comparing the results across banks, using answers to other survey questions, as well as data from the borrowing companies' financial statements.[1] These checks implied that the proportion of companies in receipt of forbearance was not likely to be sufficiently higher than our headline estimates to make a material difference to our assessment of its implications for monetary and financial stability.

It is likely that forbearance was less extensive at the time of the investigation than it had been in the period immediately following the financial crisis. Various aggregate measures of the financial health of borrowing companies have improved since 2009. The proportion of banks' exposure on 'watch lists'[2] or whose loans were classified as impaired has fallen. And the proportion of companies with a 'red flag', an independent warning indicator, against them halved from around 60% in 2009 to 30% in 2012 (**Chart 5**).[3] In addition, forbearance by HMRC in the form of time-to-pay VAT approvals, which represent cases where companies are granted some form of extension to pay their VAT obligations, has fallen substantially from its peak in 2009.[4]

(1) One example of such a cross-check was to compare the level of forbearance towards companies with those that appeared to be in financial difficulty and had been drawing on an overdraft facility beyond an agreed limit (and beyond the level that might be expected from a company of a particular size and in a particular sector).
(2) All commercial banks maintain a watch list of loans that have exhibited potential signs of distress. These loans are more intensively managed and monitored.
(3) Red Flag Alert put together company warning indicators (red flags) that are triggered through various events, such as when a firm reports a loss, receives a county court judgement or when a director resigns.
(4) HMRC time-to-pay approvals peaked at 118,000 in 2009, representing around 5% of the tax-registered business population. This fell to 20,700 in the first half of 2011.

Chart 5 Company distress indicator[a]



Source: Red Flag Alert.

(a) Proportion of Barclays, HSBC, Lloyds Banking Group, Royal Bank of Scotland and Santander business customers with at least one red flag.

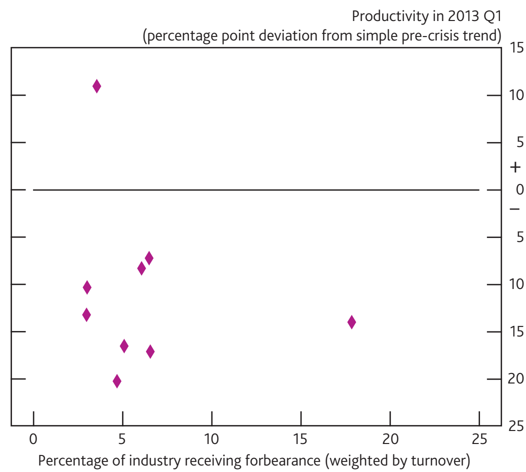
How might SME forbearance have impacted on measured productivity?

Since mid-2010, the strength in private sector employment has contrasted with the weakness in private sector output growth, reflecting unusually weak growth in measured labour productivity. Understanding the reasons behind this weak growth, and the likely response of labour productivity as demand recovers, is important in the setting of monetary policy.

Forbearance can affect productivity growth through three key channels. First, there is the direct 'batting average' effect: if companies in receipt of forbearance have lower productivity than other companies, then their survival will push down on the aggregate level of measured productivity. In support of this, productivity among SMEs is estimated to be 40% lower in companies in receipt of forbearance (controlling for size and sector).[1] But, since forbearance in this sector is estimated to cover only 6% of borrowing companies, the implied effect from this direct channel is to depress aggregate private sector productivity only by around 1 percentage point.[2] This compares to an estimated productivity shortfall in the private sector relative to its pre-crisis trend of around 18%.

Second, loan forbearance could have an indirect effect on the productivity of healthy companies. Forbearance aids the survival of weak companies by lowering their effective borrowing costs. It may therefore have adverse consequences for productivity within particular industries and regions by limiting the competitive pressures through which more efficient businesses would gain market share from their less efficient rivals. While it would be difficult to identify such an effect within industries, it might be expected that productivity would be more depressed in industries with a higher incidence of forbearance, since companies are more likely to compete with other companies in the same industry. However, the negative correlation between productivity and the incidence of SME forbearance across industries is weak (**Chart 6**). This suggests that this channel is unlikely to be material.

Chart 6 Productivity and forbearance by industry[a]



Sources: Bank of England investigation into SME forbearance and ONS.

(a) Productivity is calculated as the percentage point deviation of industry output per head from a log linear trend between 1999 and 2006. The measure of forbearance is weighted by turnover in order to make the comparison with productivity.

It could also be the case, however, that forbearance within one industry has an adverse impact on companies in another industry. For example, if forbearance sustains the demand for commercial space and rents, then this could push up costs in other industries and prevent productive firms from expanding or entering new markets. This would reduce the strength of any correlation between forbearance and productivity observed across industries.

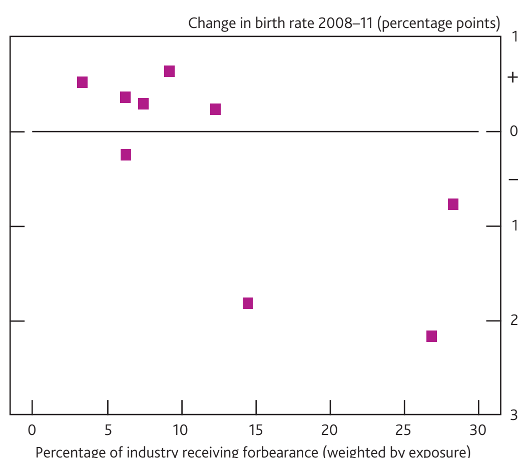
Third, loan forbearance could also have an adverse impact on firm entry. This could occur if forbearance in a particular industry stifles profitability by keeping firms with unprofitable operations afloat, and therefore reduces the incentive for new firms to enter the market. Here the evidence is a bit more supportive of a link from bank forbearance to firm entry, but far from conclusive. Firm entry rates — which are lower on an economy-wide basis compared to 2008 — have fallen most in industries with high levels of forbearance (**Chart 7**).

Forbearance may also indirectly restrict the supply of loans from banks themselves. This may have slowed growth among new companies and companies that might otherwise have

(1) Labour productivity is estimated using financial information from the Bureau van Dijk FAME database which are matched to the SME borrowers in the survey. Productivity is defined as profit before tax plus total remuneration divided by the number of employees, using data from 2012 annual accounts (and where not available, from 2011 accounts). The log of labour productivity is regressed on a dummy variable indicating whether the firm is in receipt of forbearance, controlling for different industries.

(2) Multiplying the estimated reduction in SME company-level productivity (40%) by the proportion of SMEs in forbearance (6%) gives an impact of 2.4% on the productivity of borrowing SMEs. The estimated impact on overall productivity reflects the fact that SMEs account for around half of nominal turnover in the private sector, and only a subset of these SMEs will be borrowers.

Chart 7 Firm entry rates and forbearance by industry[a]



Sources: Bank of England investigation into SME forbearance and ONS Business Demography 2011.

(a) Firm entry rates are calculated as the number of firm births in a given year divided by the total number of businesses in each industry. The measure of forbearance is weighted by bank exposure in order to make the comparison with firm entry.

grown more quickly had they been able to obtain loan finance. This mechanism may have operated in Japan in the 1990s, where forbearance was associated with banks' weak capital positions. Troubled Japanese banks may have allocated credit to weak firms in order to avoid realising losses on their own balance sheets, thereby reducing the amount of credit available to new entrants. The extent of forbearance in the UK economy more broadly may have been a factor in reducing the availability of credit to SMEs across all industries. Ensuring that banks have sufficient capital to lend to the real economy was an important factor in influencing the recommendations by the FPC on UK bank capital adequacy in 2013 (described in the section below).

In summary, while firms in receipt of forbearance appear to be significantly less productive, the measured direct impact on the level of aggregate private sector productivity is estimated to be small compared to the 18% gap relative to its pre-crisis trend. Nonetheless, it could still explain around 1 percentage point of this shortfall. There is also only limited evidence, based on industry-level correlations, to support any secondary effects from industry congestion discouraging firm entry. Therefore, bank forbearance to SMEs does not appear to be on a sufficient scale to account for more than a small proportion of the weakness of UK productivity relative to its pre-crisis trend.

How might SME forbearance impact on financial system resilience?

A key determinant of financial system resilience is capital adequacy — in other words, whether or not banks have enough capital resources to absorb losses.[1] At its meeting in November 2012, the FPC identified a number of factors which suggested that the capital adequacy of the UK banking system could be overstated.[2] This led to an FPC recommendation on capital adequacy which ultimately resulted in a judgement by the PRA Board that the eight major UK banks and building societies had a capital shortfall amounting to around £25 billion at the end of 2012.[3]

An important factor in concerns over capital adequacy was that credit losses could exceed existing provisions in some loan portfolios. CRE lending was identified as one of several portfolios which were particularly vulnerable in this respect, partly as a result of the level of forbearance in that sector.[4]

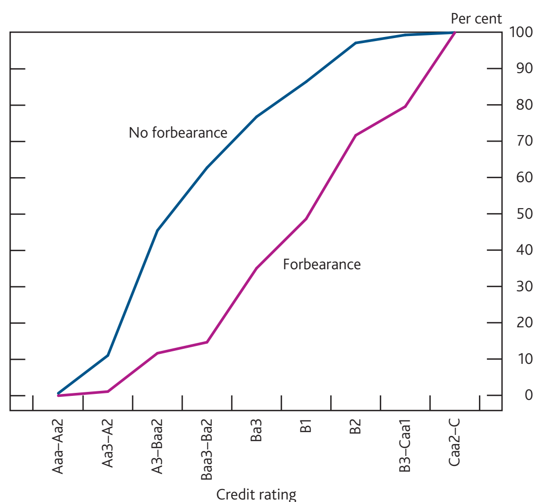
Forbearance against CRE lending has been particularly widespread in the United Kingdom since the crisis. **Table A** shows that in 2011, over one third of UK banks' loans to CRE companies were receiving some form of forbearance. The FPC and PRA continue to monitor risks arising from forbearance in the CRE sector, as well as other sectors.

The results of the investigation into SME forbearance revealed that the current levels of provisions and capital held against SME lending appeared broadly adequate given the prevailing conditions at the time. The significance of SME forbearance in affecting the resilience of the UK financial system is limited by the relative size of that portfolio, which is smaller than for CRE (**Table A**). Internal bank stress-test estimates of potential losses from forborne loans were judged not to be a threat to bank resilience at this time.

Encouragingly, there is evidence that the banking system in aggregate is differentiating between performing loans that are forborne versus those that are non-forborne and setting aside more capital against the former. The investigation showed a link between a bank's internal rating scales — used to determine their regulatory capital requirements — and forbearance. While none of the banks covered by this analysis typically include forbearance as an input to their ratings models for SME exposures, there is, in practice, a relationship given the other factors used by those models. These factors, which might be correlated with forbearance, include financial performance metrics and a bank's own assessment of a company's business model and management. **Chart 8** shows the cumulative distribution of credit grades for all banks, split by whether a loan is forborne or not. It indicates that forborne loans are allocated lower credit grades than loans without forbearance.

(1) For a primer on bank capital, see Farag, Harland and Nixon (2013).
(2) The FPC's primary role is to identify, monitor, and take action to remove or reduce risks that threaten the resilience of the UK financial system as a whole. See Tucker, Hall and Pattani (2013).
(3) This shortfall was assessed relative to a benchmark of capital resources — using an internationally agreed 'Basel III' definition of equity capital — being equivalent to at least 7% of risk-weighted assets. For more details on the recommendation, see www.bankofengland.co.uk/publications/pages/news/2013/013.aspx.
(4) The FPC exercise considered the level of capital and provisions against an estimate of expected losses likely to emerge over a three-year period. For more details on the approach taken, see www.bankofengland.co.uk/financialstability/Documents/fpc/cpmethodology.pdf.

Chart 8 Cumulative distribution of probabilities of default for SME loans in the sample, split by forbearance status[(a)]



Source: Bank of England investigation into SME forbearance.

(a) This chart is derived from the set of loans on which banks model the probability of default for credit risk capital requirements purposes. These probabilities of default have been mapped to Moody's ratings grades to enable ease of comparability.

Conclusion

This article reports the results of a recent Bank of England investigation into SME forbearance by the major UK banks. Around 6% of SME borrowers, outside of the CRE sector, were estimated to be in receipt of some form of loan forbearance in March 2013. When aggregated, these borrowers accounted for around 14% of the major UK banks' exposure to the SME sector.

Productivity is estimated to be around 40% lower in SMEs receiving bank forbearance. But, given that only a relatively small proportion of SMEs are in receipt of forbearance, this translates into a small direct impact on aggregate productivity. Nonetheless, this could still explain around 1 percentage point of the shortfall in productivity. There is also only limited evidence, based on industry-level correlations, to suggest that loan forbearance to SMEs is having an indirect impact on industry-wide productivity growth or by discouraging firm entry.

Low interest rates, meanwhile, are likely to have been a more important factor in explaining higher firm survival rates over recent years. Results from this investigation suggest that firm default rates could increase in response to a rise in interest rates, especially if not accompanied by an improvement in economic conditions. HMRC time-to-pay, a form of non-bank forbearance, is also likely to have been a significant factor.

The extent of forbearance on CRE lending was one factor leading up to the 2013 FPC recommendation on capital adequacy. But the evidence from the latest investigation into SMEs, excluding CRE, revealed that the current levels of capital and provisioning against SME lending appeared broadly adequate given the prevailing conditions at the time.

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