

Evaluation of the  
Trade Credit  
Enterprise Finance  
Guarantee Pilot

## RESEARCH REPORT

A report from SQW Ltd, with support from BMG Research, Professor Salima Paul (Plymouth University) and Professor Rebecca Boden (University of Roehampton)

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# Executive Summary

## Context

1. Trade credit is where suppliers and commercial customers exchange goods/services for cash (trade) but a time lapse occurs between delivery of the goods/services and receipt of the payment (credit). Trade credit is extended by 'non-financial' firms whose primary business is selling goods/services, and for whom the provision of credit is a secondary activity. Trade credit is an important source of business finance, particularly for SMEs.
2. However, the availability of trade credit has declined in recent years, exacerbating the issues faced by SMEs in funding working capital owing to reductions in lending from the banking sector following the financial crisis. In response, the Government launched the Trade Credit Enterprise Finance Guarantee (TCEFG) pilot in 2013 intending to unlock credit for new SME customers that fall just outside trade credit providers' existing credit criteria, and to facilitate higher credit limits for existing customers where appropriate.
3. The British Business Bank discussed the potential for delivering the TCEFG pilot with providers from a range of sectors. Following these discussions, the TCEFG pilot involved a number of major providers of trade credit in the construction and related sectors, and smaller independent merchants participating under a collective arrangement operated by the Builders Merchants Federation (BMF). Providers from other sectors, such as auto parts and IT components, were consulted but decided not to take part in the pilot.
4. Participating trade credit providers were provided with a guarantee such that, in the event that a customer offered trade credit under the scheme failed to meet their repayment obligations, the trade credit provider would be entitled to claim for 75% of the qualifying loss from British Business Bank. A guarantee premium was paid by the trade credit provider for using the facility. The pilot scheme's design drew on the established Enterprise Finance Guarantee scheme.
5. SQW Limited, in conjunction with BMG Research and specialist academic researchers Professor Salima Paul and Professor Rebecca Boden, was commissioned by the British Business Bank in mid-2014 to undertake a study on the TCEFG pilot.
6. The study had three key parts:
  - a concise literature review on theories of trade credit underpinning the pilot
  - an evaluation of the operation and performance of the pilot scheme
  - a wider market assessment of trade credit.
7. As such, the overall aim of the study was both to assess the effectiveness of the TCEFG pilot, and to draw lessons from its operation to inform the British Business Bank's approach to supporting an effective trade credit market. Importantly, the TCEFG pilot was established explicitly as a pilot to test the effectiveness of the concept of using a government guarantee to facilitate provision of additional trade credit, and to test its impact on SMEs participating in the scheme. The findings of the evaluation need to be viewed in this context.

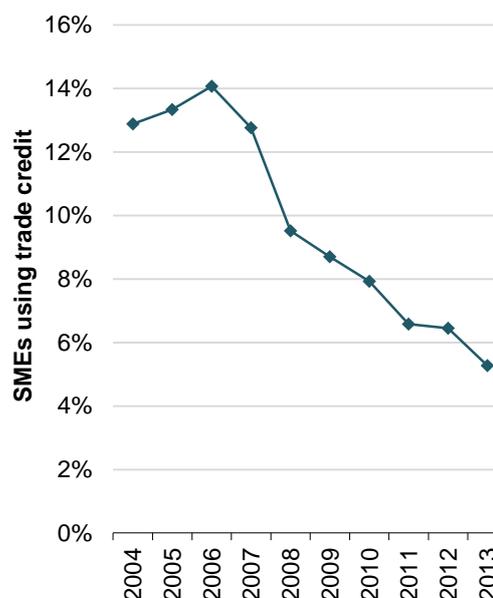
8. The study included: primary research with businesses that were provided with trade credit through the pilot; consultations with all of the participating trade credit providers, industry stakeholders, and a number of trade credit providers that considered but did not ultimately become involved in the scheme; and analysis of data purchased from Experian on trade credit. The study was overseen by a Steering Group comprising of representatives from the British Business Bank and the Department for Business, Innovation and Skills (BIS).

## The trade credit market

9. Trade credit can provide a means of financing working capital across supply-chains, especially where bank finance is restricted or more costly. It can also be a useful means of utilising otherwise idle working capital, and reduce the costs of financing for both suppliers and buyers. This is because businesses have increased knowledge of their customers through their regular contact and shared market experience, which can be more efficient and reduce the costs of agreeing lending compared to borrowing from banks.

10. Many of these factors can be particularly important to SMEs, which are likely to encounter greater problems with accessing external finance. The literature and empirical evidence indicates that trade credit is a particularly important source of finance for many SMEs relative to larger businesses. For suppliers, trade credit provides a means of gaining (or maintaining) custom and market share, and a way of building relationships with customers.

11. However, there is evidence that the use of trade credit across the UK has declined over the past decade. Notably, data from Experian indicate that around 5% of SMEs had access to trade credit in 2013 compared to over 10% a decade earlier. The downward trend in the availability of trade credit continued during, and persisted after, the financial crisis (see Figure opposite).



12. This reduction in the availability of trade credit has been felt particularly by smaller SMEs, for whom trade credit is often the only source of external business finance. For example, the Experian data indicate that over 24,000 fewer businesses across the UK with an annual turnover of up to £1m had access to trade credit in 2013 compared to the number in 2008 in advance of the financial crisis.
13. The decline in the availability of trade credit could in part be due to reduced demand for goods/services generally, resulting potentially in less demand for trade credit. Importantly, however, the net credit position of SMEs has also declined (that is, the balance between what they owe, and what they are owed, on trade credit) as larger companies have potentially become more cautious and tighter in managing their own cash flow. This supports the theory that power relationships in supply chains can result in a sub-optimal provision of trade credit.

14. The literature also identifies that there may be information asymmetries affecting the provision of trade credit, as suppliers do not have access to full information on creditworthiness particularly when economic conditions (and so those facing their customers) are uncertain. Market power and information asymmetries, alongside the positive externalities associated with supply chain cooperation, provide an underpinning case for government intervention to encourage the provision of trade credit.

## Impact assessment

15. Drawing on the literature and evidence, some of which is summarised above, and consultations with providers and stakeholders, the evaluation finds evidence to support the underlying rationale for the TCEFG pilot, based on addressing market failures in the provision of trade credit to SMEs. However, it was also an 'opportunistic' intervention, developed following a pro-active approach to Government by a major provider of trade credit in the construction trade sector.
16. In this respect, the pilot is evidence of the Government responding effectively to the needs of business. However, there were implications, notably, that the pilot became focused principally on construction and related trades, which led to other providers in this market choosing to participate in order to maintain their market position. In comparison, businesses providing trade credit to their customers in other sectors did not have this incentive. Moreover, because providers became involved in the pilot to maintain market position, they were not necessarily aiming to address issues of market failure surrounding the provision of trade credit to SMEs.
17. Around 2,900 SMEs secured 'new' or 'increased' trade credit that was facilitated by the pilot over the period covered by the evaluation.<sup>1</sup> The following characteristics in delivery and the nature of the recipient cohort were evident:
- the pilot was heavily dependent on one 'Majority Provider', accounting for nearly nine out of ten of the SMEs supported
  - the model was largely 'supply' rather than 'demand' led, with the majority of SMEs allocated their increased trade credit by the provider, rather than actively applying for it; and nearly two-thirds of recipients were existing customers of the relevant trade credit provider. Given both these factors, up to half of the businesses surveyed supported by the pilot were not aware of the trade credit that the TCEFG pilot had facilitated
  - where businesses did not previously have a trade credit limit with the participating provider, the average 'new' trade credit limit facilitated by the pilot was £4,350; where businesses did have a trade credit the average 'increase' in the trade credit limit was slightly higher at £5,100
  - the credit rating of recipients was consistent broadly with the wider business base from similar sectors, although in some cases businesses with 'high risk' credit ratings were supported through the pilot. It is arguably these

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<sup>1</sup> By the end of September 2014 (i.e. including SMEs outside of the evaluation period), 3,257 SMEs have been offered EFG guaranteed trade credit agreements with total account limits of £21.3m. The total sales facilitated to date under those limits is £10.3m.

businesses that could not access trade credit in the past where the core rationale for the scheme is most pronounced

- businesses that received trade credit facilitated by the pilot regularly used other trade credit facilities, purchased goods/materials from a range of other suppliers, and used other forms of external finance. As such, in most cases, the trade credit facilitated by the pilot was just one of a number of different funding sources used by businesses.

18. Benefits for recipient businesses identified by the evaluation included positive effects on cashflow, improved relationships with the trade credit provider, perceived improvements in the chances of securing trade credit in the future, and reduced business costs. However, in all cases these benefits were evident for under half of the businesses surveyed and in most cases those surveyed had not experienced substantive benefits from the TCEFG pilot.
19. The effects of the pilot on the need for recipients to use other forms of external finance, and increasing or accelerating orders (that is, where the trade credit facilitated by the pilot enabled the business to meet orders they otherwise would not have been able to) were again evident for some, but not for most, recipients surveyed.
20. Three further points regarding the effects of the pilot on individual businesses:
  - The business survey indicated that the TCEFG pilot led around one in five recipients increasing their purchases at the participating trade credit provider, and in turn reducing their purchases from elsewhere. At the scale of the pilot the effects of this on the wider market are small, but were the pilot to be scaled-up and rolled-out the effect would be more substantial, possibly even to the extent where market distortion and competition concerns may be raised.
  - As one might expect, the TCEFG pilot changed behaviours more, and had a greater effect, where businesses were actually aware of the new/increased trade credit that it facilitated. This highlights the importance of raising awareness of the scheme where it has been used and/or responding to genuine demand for trade credit.
  - Around half of the businesses surveyed reported that they would have been able to access the trade credit facilitated by the pilot from other sources. Indicatively, this suggests that the pilot facilitated on average c. £2,500 of new new/increased trade credit per businesses (whether or not this was utilised).
21. Set against these findings, the impact of the pilot in overall economic terms is modest. Including accounting for self-reported additionality, displacement and multiplier effects, the evaluation estimates that the overall net GVA contribution of the pilot (through enhanced sales at recipient businesses) to be in the range of £575,000-905,000. Given the breadth of the pilot, with some 2,900 businesses supported this impact does appear to be quite limited, driven in large part by most recipients in the business survey identifying no quantitative impacts from the pilot. The evaluation also identified modest savings for recipient businesses in terms of reducing the need to use other forms of finance.
22. The overall cost of the pilot is not known as the full set of possible claims which may arise from participating providers have not yet been received. The net cost to Government at the time of writing (including delivery and management costs,

minus the income from fee guarantee premium) was £223,000, although this is expected by the British Business Bank to increase substantially as claims come through from all providers. Given this context, any assessment of Value for Money is indicative only.

23. This said, the evaluation findings on Value for Money are as follows:

- The **Economy** of the pilot at this stage is judged as **reasonable**, given the breadth of the pilot (with over 2,900 businesses supported), operating across a range of providers, and including the umbrella agreement with the BMF.
- The **Efficiency** of the pilot is judged as **limited**, notably a large cohort of businesses were involved to deliver a relatively modest set of outcomes. Put simply, the trade credit facilitated by the pilot was of no or little value to most recipient businesses – a more efficient intervention was possible.
- The **Effectiveness** of the pilot is also judged as **limited**: whilst it facilitated new/increased trade credit, many recipients were not aware of, or did not need, this credit, and as reported above the overall impact of the pilot was modest. A more targeted intervention, which focused on where businesses genuinely needed to access new/increased trade credit in order to meet orders or improve business performance may have been more appropriate. However, this has potential implications for risk and the cost of defaults, which may affect the attractiveness and viability for government and providers.
- The **Benefit Cost Ratio** for Government (GVA impact compared to public expenditure) is, at the time of writing, 'positive' – only time will tell, but should the levels of default increase in recipients as expected, the balance between costs and benefits may become increasingly marginal.

24. The above has focused on the 'impact'. However, it is also worth noting that the pilot has provided useful learning for the British Business Bank on the potential and scope of a trade credit intervention, indicating that a revised approach is needed if the scheme is to be continued going forward. In this respect, the pilot has served its purpose and delivered effectively on its 'learning' intent.

## Market assessment

25. Across providers, key motivations for engagement in the TCEFG pilot included seeking to maintain/increase customer orders, improve customer relationships, and in some cases maintain market position where competitors were also involved in the pilot. The 'Majority Provider' also sought to use the TCEFG pilot to test and validate their approach to offering trade credit. This testing motivation is important as providers had comprehensive processes in place to check creditworthiness (e.g. credit ratings, payment history, bankruptcies etc.) prior to the pilot, although in some cases testing risk awareness through the pilot was evident.

26. Interestingly, consultations with providers suggested that suppliers do not exert market power in terms of credit; rather there is some evidence to suggest that it may be the other way round – that the competitive nature of the market results in some risk taking amongst suppliers. Alongside this, there is some evidence of the existence of information asymmetries and the fact that credit insurance will not cover fully the trade credit facilities that suppliers wish to offer.

27. Providers used the TCEFG pilot to offer trade credit to new customers that would not have been offered trade credit anyway or for borderline cases, to offer more credit to existing customers to test their payment behaviour and encourage more sales, and to give more credit than would otherwise have been the case for new clients with good assessments.
28. What worked across the three groups varied across providers, and there appears to be no consistent indicator of success in terms of the target group from a provider perspective, with default rates varying across these groups. Consistent with the messages from recipients, there is evidence of increases in sales amongst small numbers of customers that used the TCEFG pilot facility, although the effects have been limited to some extent by demand and need from the business base – given that many businesses were not aware of the credit offered this is not unexpected. On the whole, it was recognised by providers consulted that the TCEFG pilot has helped to maintain and build customer relationships and improve customer loyalty, rather than generate substantial quantitative effects on sales.
29. There was consensus across the providers consulted that the application and set up process for the TCEFG pilot was quite onerous, although larger providers were less vociferous on this point. A more streamlined process may be needed if a scheme is to be fully accessible to smaller providers.
30. Four other points are important from the market assessment:
- Late payment was raised as an important issue by both providers and stakeholders. This is not addressed directly by the pilot, and for some stakeholders it was noted that the scheme may potentially exacerbate this issue through loosening credit management.
  - Consultations with non-providers indicates that there have been limited effects of the scheme on the wider trade credit market, or on sales/performance of firms that are competing with the major providers – given the scale of impact identified this is not surprising, and it is important to recognise that there is the potential for more substantial effects on the wide market were the scheme to be expanded.
  - The overall strategic case for the TCEFG pilot was accepted by most stakeholders, although some questions were raised, such as how far it was genuinely adding to existing provision, such as that available through credit insurance, and the risk that the scheme may be supporting, and propping up, non-creditworthy businesses.
  - The level of understanding of the scheme amongst market stakeholders was limited, with the TCEFG pilot to date not well known across the industry. As a pilot this is reasonable, but greater awareness raising and recognition would be required going forward.

# 1: Introduction

SQW Limited, in conjunction with BMG Research and Professor Rebecca Boden and Professor Salima Paul, was commissioned by the British Business Bank to undertake a study on the Trade Credit Enterprise Finance Guarantee (TCEFG) pilot. The study had three key parts: a concise literature review on theories of trade credit underpinning the pilot; an evaluation of the operation and performance of the pilot scheme; and a wider market assessment of trade credit. This report sets out the findings from the study.

## Background to the study

### Trade credit

Trade credit is where suppliers exchange goods/services for cash (trade) but a time lapse occurs between delivery of the goods/services and receipt of payment (credit). Trade credit is credit extended by 'non-financial' firms – those which are in the primary business of selling goods and/or services, but for whom the provision of credit is a secondary activity. Sectors such as manufacturing and construction in particular often rely on trade credit to ease their cash flows when needing to purchase materials and equipment to enable them to undertake contracts, on which they in turn will be expected to offer similar payment terms to their customers.

Trade credit is an important source of external business finance, particularly for SMEs. However, the characteristics of both suppliers and their customers are heterogeneous, as are the arrangements and terms under which credit is extended, and the market is unregulated. Evidence indicates that the availability of trade credit has declined in recent years, exacerbating the issues faced by SMEs in funding working capital due to reductions in lending from the banking sector.

### The TCEFG pilot

In response to the decline in the availability of trade credit, and the wider tightening in the availability of external finance, the Government, initially through the Department for Business, Innovation and Skills (BIS) and subsequently through the British Business Bank, launched the Trade Credit Enterprise Finance Guarantee (TCEFG) pilot, drawing on the structure and approach of the long-standing Enterprise Finance Guarantee (EFG) intervention.

Involving a number of major providers of trade credit and a number of smaller independent merchants participating under a collective arrangement operated by the Builders Merchants Federation (BMF), the TCEFG pilot was intended to unlock credit for sole traders and small businesses that fall just outside trade credit providers' existing credit criteria, and to facilitate higher credit limits for existing customers where appropriate. Originally intended to run for a 12-month period from April 2013 to March 2014, the pilot was extended to September 2014 to allow all lenders a minimum of nine months to agree guaranteed facilities and subsequently to March 2015 to allow for a smooth transition from the end of the pilot to any successor arrangements which may be put in place.

The TCEFG pilot involved a guarantee from British Business Bank to the credit provider, so that in the event that a customer offered trade credit using the scheme failed to meet their repayment obligations, the trade credit provider would be entitled to claim for 75% of the qualifying loss from British Business Bank, while carrying the other 25% of the loss itself. A guarantee premium was paid by the trade credit provider to British Business Bank for using the facility.

It is important to note that the TCEFG pilot was established explicitly as a pilot to test the effectiveness of the concept of using a Government guarantee to facilitate provision of additional trade credit, and to test its impact on SMEs participating in the scheme. The findings of the evaluation need to be viewed in this context.

## Objectives of the evaluation

The overall aim of the study was to assess the effectiveness of the TCEFG pilot and to draw lessons from its operation in order to inform a decision by the British Business Bank on its future approach to guaranteeing the provision of trade credit, including the potential to expand and/or revise the TCEFG pilot model.

Within this context, there were three specific objectives for the work:

- Undertake a **literature review exploring the trade credit market**, including assessing SME behaviours and reliance on trade credit, the behaviours of providers of trade credit (motivations and assessment criteria), evidence of market failure in trade credit, and alignment with alternative solutions such as trade credit insurance.
- Complete an **evaluation assessing the effectiveness of the TCEFG pilot**, including testing the nature of businesses benefiting and the relationship between beneficiaries and providers, the extent to which the new and extended trade credit limits was 'finance additional', the nature and scale of business benefits (e.g. financial resilience, turnover, employment), and the overall net effects of the scheme
- Provide a **market assessment** based on evidence from trade credit providers to assess the wider market impact and position of the TCEFG pilot, including testing the motivations, experiences and benefits for providers and non-providers, how the pilot has addressed market failure, and the nature of competition and/or complementarity with other products.

## Structure

The remainder of this report is structured as follows:

- Section 2: Research methods
- Section 3: Trade credit as a source of finance
- Section 4: The TCEFG pilot design and delivery
- Section 5: Effects of the TCEFG pilot on recipients
- Section 6: Impact and Value for Money assessment
- Section 7: Market assessment
- Section 8: Conclusions and recommendations.

The literature review, led by Professors Boden/Paul, is provided in a separate paper.<sup>2</sup>

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<sup>2</sup> Trade Credit: A Literature Review

## 2: Research methods

This section sets out the research methods adopted for the study, which involved a mix of qualitative and quantitative approaches, including a survey of businesses supported by the pilot, consultations with providers, and analysis of monitoring and wider data on trade credit.

### Research approach

To meet the requirements of the study objectives, the evaluation involved a mixed method approach, with the work commencing in May 2014 as the pilot period reached its final months. Seven main elements formed the core of the method:

- **Review of the literature and supporting empirical evidence on trade credit theory and practice:** led by specialist trade credit researchers Professor Salima Paul and Professor Rebecca Boden, the literature review covered academic literature, policy research and other 'grey literature'. The review of empirical evidence included analysis of Experian data purchased specifically for the study to provide an overview on trade credit over the past decade across the UK. The detailed findings of the literature and evidence review were drawn together into a stand-alone literature review report, with the key messages summarised in this report.
- **Review and analysis of pilot monitoring data:** covering the information collected by the British Business Bank from providers on the businesses supported through the pilot and supporting financial information. Note that all monitoring data in this report is presented in aggregate form; no data is reported at the level of an individual business.
- **Analysis of financial and credit rating data of businesses that received trade credit through the pilot and a matched group of non-recipients.** Business-level data was purchased from Experian for around 1,500 businesses supported by the pilot scheme<sup>3</sup>, and a comparison group of 2,500 businesses with similar characteristics that had not been supported by the pilot. The purpose of the analysis was two-fold:
  - to provide additional information on the businesses that have been in receipt of the TCEFG pilot support, including their credit rating, business performance, and other financial characteristics
  - to enable analysis of characteristics of businesses using trade credit (including between recipients and non-recipients), and the importance of trade credit vis-à-vis other forms of credit; this analysis was undertaken to answer questions such as "do businesses benefiting from the TCEFG pilot have different credit scores to those not participating?" rather than to establish a comparison group to assess the impact of the scheme. In any case, the data available provided a snapshot of business characteristics for those taking part in the pilot and those

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<sup>3</sup> Of the total 2,900 TCEFG pilot recipients, a business name was only available for around 1,900 businesses due to omissions in the data supplied by the TCEFG pilot providers. Of this total, around 1,500 were found in Experian's database of registered businesses.

not, and it would have been too early to detect any changes in these following the pilot.

- **Survey of recipient businesses in receipt of trade credit supported by the pilot:** a telephone survey was undertaken with 210 businesses. The survey was designed to collect information on the use of trade credit and other forms of finance, motivations for involvement in the pilot, and the effects of the trade credit on behaviours and business performance. Whilst a Randomised Controlled Trial (RCT) offers the best approach for identifying a control group, an RCT was not viable for this evaluation, with the evaluation commencing after the launch of the intervention and focused explicitly on understanding the effects of TCEFG over the pilot period.<sup>4</sup>
- **Consultations with providers of the pilot:** consultations were completed with the main providers at both strategic and operational levels, the BMF, and a number of smaller firms providing the pilot under the BMF agreement. The consultations focused on understanding the motivation for participation, the delivery model adopted and links to existing trade credit provision, the effects of the pilot (in both quantitative and qualitative terms), and lessons/recommendations for the future.
- **Consultations with non-providers:** these consultations covered five trade credit providers that considered participating but did not ultimately do so. The consultations focused on motivations for considering the pilot and reasons for non-involvement, perceptions of the effects of the pilot, and potential engagement in the future, including any changes required to encourage participation.
- **Consultations with wider stakeholders:** consultations were completed with representatives of Institute of Credit Management (ICM), British Bankers Association (BBA), Association of Chartered Certified Accountants (ACCA), Institute of Chartered Accountants in England and Wales (ICAEW), and the Association of British Insurers (ABI), to provide wider perspectives on the strategic alignment and role of the pilot.

The study was overseen by a Steering Group comprising representatives from the British Business Bank (as the pilot's delivery agency) on both the delivery side and research side, as well as from BIS (as the pilot's sponsor department). The Steering Group was involved fully throughout the study including providing inputs on research design, and comments and feedback on draft study outputs.

## Analytical approaches

### Survey analysis

The key primary evidence available to the study, including for assessments of impact and additionality, was self-reported perspectives from recipients. Whilst self-reported data is subject to reporting bias, it is the best approach for understanding in detail businesses' experience of accessing the programme, and potential impact on business performance given the relatively short amount of time that has passed since credit

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<sup>4</sup> The British Business Bank indicated that an RCT was not put in place at the outset of the pilot in order to avoid rejecting potential applicants for the TCEFG scheme.

was extended by the trade credit provider. The survey comprised 210 recipients, with 191 respondents having secured trade credit from a single 'Majority Provider', and 19 respondents having secured trade credit from the other providers. Although the Majority Provider dominated the survey responses, as is shown in the Table below, the survey sample was matched quite closely to the overall population of the TCEFG pilot.

**Table 1: Survey sample and population**

	Survey sample	% survey sample	Population	% population
Majority Provider	191	91%	2494	86%
Other Providers	19	9%	421	14%
Total	210	-	2915	-

Weighting has been applied to the results to account for the modest over representation in the survey sample of the Majority Provider. All data presented in the report based on the survey have been weighted unless otherwise stated. Data is presented for the Majority Provider and All Providers where appropriate.

## Analysis of financial and business data

Data was purchased from Experian at a business level for recipients, and for a matched group of 'non-recipient' businesses not involved in the pilot. The 'non-recipients' were drawn from Experian's full database of businesses across the UK. The matching was undertaken on the basis of business size (employment and turnover) and SIC code (with the non-recipients matched to the sectoral distribution of the recipients businesses). A criterion was also set to ensure that the non-recipients for which data was collected included data on trade credit (even if this was 0 i.e. no trade credit in place), so that comparisons could be made to the recipient cohort.

From the total population<sup>5</sup> of 2,915 recipients at the time of the evaluation, information on business name/registration number was available from the monitoring data for around 1,900 businesses. These businesses were provided to Experian for matching; of which data was available for 1,496. The Experian recipient data therefore represents half the recipient population, and over three-quarters of the recipient population for whom basic business information was provided. The non-recipient data included 2,500 businesses.

The business-level data from the recipient and non-recipient groups have been compared on key metrics such as credit rating, the ratio of debt to assets and working capital. Given the nature of the recipient and non-recipient businesses (mainly small SMEs in construction and related sectors) it is important to recognise that the database contained a significant volume of missing variables (i.e. where data is not

<sup>5</sup> By the end of September 2014 (i.e. including SMEs outside of the evaluation period), 3,257 SMEs have been offered EFG guaranteed trade credit agreements with total account limits of £21.3m. The total sales facilitated to date under those limits is £10.3m.

available), particularly on the more detailed financial metrics sought. This has limited, to some extent, the variables that have been analysed and presented.

All data are presented anonymously and/or in aggregated form. Note that for the purposes of the comparisons between recipients and non-recipients, the recipient data is presented for the full pilot (i.e. it does not distinguish between the Majority Provider and other providers), and no weighting has been applied to the data.

## **Challenges and limitations to the methodology**

The challenges faced, and key limitations to the methodology are highlighted up-front and explicitly by the evaluation team. Eight points are made.

First, the evaluation and impact assessment draws heavily on the evidence provided by recipients in the survey. This 'self-reported' approach was necessary given both the timing of the evaluation (that commenced over a year after the pilot had been launched) and the nature of the client group of the providers that chose to take part in the pilot, which consists largely of 'trades' businesses. Given these issues the identification of a robust comparison group for primary research purposes (or other quasi-experimental approaches) was not possible. The data collected from Experian only provided a snapshot based on its latest available data, and was limited in terms of metrics on business behaviours and performance, and so would not have been an appropriate solution for this evaluation. As such, the quantitative additionality and impact assessment should be treated with some caution. There is an increasing recognition within Government of the important role of experimental and quasi-experimental approaches to evaluation in order to provide a robust counterfactual to assess impact. This evaluation does not involve such approaches. Should the TCEFG pilot approach be rolled out as a permanent programme, planning for the evaluation early, potentially including establishing a robust control/ comparison group, would be required.

Second, and related, the assessment of impact has relied on the information provided by survey respondents on business performance and expected future effects, which are both subject to optimism bias. The impact analysis therefore drew on judgements and informed assumptions, meaning that the specific values and metrics developed should be regarded as indicative and representing the broad range of likely impact. We have also sought to account for optimism bias, where evident, in the analysis of expected future effects (this is explained in section 6 of this report).

Third, as indicated above there were some gaps in the monitoring information available for the study, and some inconsistency in the comprehensiveness of monitoring across different providers. Notably, basic information on c.1,000 businesses was missing.

Fourth, securing survey completions with recipients was a challenge, in part owing to the nature of the cohort (with trades businesses often not contactable during working hours owing to work commitments). The significant number of businesses that could not be contacted owing to missing data (see above) also limited the scope of the survey population. In total, there were approximately 1,800 contactable businesses, and surveys were completed with 210, which represents around 12% of the contactable population.

Fifth, there was variation in the delivery model applied by providers, including via the agreement with the BMF. In particular, the delivery model was driven at a provider

level by existing systems and practices, with this model in order to maximise provider interest and limit administrative burden. However, this has meant that the pilot operated in various ways for different recipient groups. The research has sought to draw out and understand this diversity, whilst providing an assessment of the overall pilot.

Sixth, and with this diversity noted, the overall scale of the pilot was dependent heavily on one Majority Provider, which accounted for the vast majority (86%) of the businesses supported. Despite the weighting of the survey and engagement with other providers, there remains a risk that the experience for businesses, British Business Bank and stakeholders is dominated by this single provider.

Seventh, in part owing to the nature of the businesses engaged in the TCEFG pilot, the data purchased from Experian for recipients and non-recipients contained significant gaps, notably in terms of employment figures for recipients, and financial metrics for both recipient and non-recipients. Further, the data on non-recipients matched by Experian included businesses where information was available on employment (as well as matched by sector and trade credit) as this is a key indicator of other information (i.e. for businesses where employment data is available, other financial and business information is generally fuller). This did affect the matching in terms of the employment size, and we have sought to account for this in the analysis through weighting the non-recipient data to the recipient cohort where appropriate based on employment size. However, the gaps in the data did limit the range of analyses that were possible to complete, and in some cases meant that a sub-set of the data was used. These issues and caveats should be considered when reviewing the analysis of Experian business-level data.

Finally, it is also important to highlight that the pilot of TCEFG was just that, a pilot, which sought to test a new way of facilitating trade credit to SMEs working within the wider framework of the existing Enterprise Finance Guarantee model. The pilot developed and evolved as it was delivered, including widening the scope of delivery partners. This context needs to be remembered when reviewing the findings on impact, additionality and Value for Money, as well as the overall conclusions and recommendations.

### 3: Trade credit as a source of finance

#### Key findings

- Trade credit can be mutually beneficial for all participants across supply chains. It can provide a means of financing working capital across all collaborators, be a useful means of utilising otherwise idle working capital, and reduce the costs of financing. These factors can be important to SMEs, who are likely to encounter greater problems with accessing external finance. For suppliers, trade credit provides a means of gaining/maintaining custom, and a way of building customer relationships.
- The use of trade credit has declined during the financial crisis, with the smallest firms particularly affected; the net credit position of SMEs has also declined.
- Market power and information asymmetries, alongside the positive externalities associated with supply chain cooperation, provide a potential rationale for public intervention to encourage the greater provision of trade credit, for example, through the government acting as a guarantor on the credit offered (or at least part of it).

#### Introduction and coverage

This section sets out what 'trade credit' is, why businesses use and offer it, the market conditions relating to the use of trade credit, and theories and evidence on the existence of market failures. Therefore, the section provides the background and context for the TCEFG pilot. In doing so, the section identifies key issues to be tested as part of the evaluation and market assessment, which the authors seek to answer in subsequent sections of this report.

This section has drawn on the short literature review (for which a separate standalone paper has been produced), and other secondary data and research, including data provided by Experian on trends in the use of trade credit by SMEs, and the SME Finance Monitor (which now includes questions on the use of trade credit).

#### Theories of trade credit

Trade credit is where supplier businesses and commercial or other organisational buyers exchange goods and services for cash (trade) but a time lapse occurs between delivery of goods or services and receipt of payment (credit), i.e. it is the agreed deferral of payment until some (usually agreed) point in the future. Trade credit is therefore credit extended by 'non-financial' firms – those which are in business to supply goods and/or services and for whom the provision of credit is a secondary activity. The range of types and sizes of both suppliers and customers is heterogeneous, as are the arrangements and terms under which credit is extended. Trade credit is also unregulated.

Theories of trade credit often conceptualise it as occurring in and across supply chains – that is, one or more suppliers, each facilitating the supply of goods or services in a

sequence of actions until delivery to the ultimate consumer/user. As goods and services are generated through this supply chain – say from raw materials to the finished product – they embody the financial costs of production. The cash laid out in this way constitutes part of a business' working capital and can be characterised by volume (the amount of working capital tied up in goods or services not yet paid for) and time (the gap between the expenditure on production and the receipt of payment from customers). When considered as a means of financing working capital, we can see how trade credit may be attractive to businesses and we turn to this in the next sub-section. The supply chain relationships, introduced above, underpin some of the motivations for offering trade credit, and are covered in more detail in the subsequent sub-section below.

## Why businesses use trade credit as part of the finance mix

Working capital can be derived from a number of sources. Key sources include cash resources retained within the business, and credit cards, overdraft facilities and term loans offered by financial institutions. Information asymmetries can cause financial institutions to limit the amount of credit they offer to businesses; and such sources of external finance may be costly and lack flexibility and adaptability for the end SME user. If goods and services are bought on credit instead, then the costs of production embodied in them are borne, for the period of the credit, by the supplier. Trade credit, therefore, offers a significant further source for businesses to finance their working capital.

It is important to note that businesses may also offer credit to their customers, as well as taking it from suppliers. Like any source of finance, this involves costs and risks, e.g. borrowing may be required to extend credit, there may be opportunity costs of using the working capital, and there may be costs associated with dealing with late payment and defaults on payments. Businesses that are involved in taking or giving trade credit will have a 'net credit position' – the net balance between accounts receivable and accounts payable. This net credit position may be proactively managed within the firm. From the business own financial position, it is always better to have larger accounts payable than accounts receivable, but there may be good reasons, as we explain below, why firms may choose to be net credit providers.

## Why offer trade credit?

The reasons why some suppliers extend trade credit to their customers, given the costs, the potential difficulties of recovering those costs, and the risks are various and include a number of business operation and strategic advantages. The main reasons, as indicated in the literature, are as follows:

- **Trade credit as financing within supply chains:** as indicated above trade credit facilitates the supply of goods or services across supply chains with those extending credit essentially taking on the financing costs of working capital of those receiving credit. Based on this, trade credit can be conceptualised as the collective borrowing power of the firms involved in the supply chain relationship. Some firms' survival, small ones especially, depends on whether they get credit or not. Such firms may not have ready or sufficiently cheap access to borrowing through banks due to their size, reputation, the nature of their assets and of their product (Hutchinson and Ray, 1986; Choi and Kim, 2005; García-Teruel and Martínez-Solano, 2010). Trade credit is an important source of short-term finance for SMEs, in particular as they tend to be less liquid and have more volatile cash

flow (Hutchinson and Ray, 1986; Forbes 2010). In supply chains with both larger and smaller firms, the former are more likely to have easier and cheaper access to bank finance than the latter. Trade credit can work then as a facilitator of financing across the supply chain, i.e. as a positive spillover or externality, with the benefit of access to finance being passed from suppliers (larger business) to customers (smaller business) via the extension of credit.

- **Building better business relations:** Related to this, in terms of supply chain cooperation, suppliers who invest in their customers by financing their working capital through trade credit may benefit from their customers' survival and thus their continued requirement for goods, which may even increase if the customer grows. In turn this should increase the suppliers' market share, reducing the problem which market size imposes on their own growth. This is especially the case in highly competitive environments, where suppliers may invest in buyers to achieve a higher market share by granting favourable credit terms (as part of price discrimination – see below). In addition to this though, in doing so credit provides an opportunity to build goodwill, enhance suppliers' reputation and improve customer loyalty by cementing supply chains (Summers and Wilson, 1999; Paul and Wilson 2006; Paul and Boden, 2012).
- **Costs of financing:** Trade credit is seen as a means of enhancing cash management such that cash holding costs can be reduced. Ideally, businesses keep a cash buffer as a contingency reserve against unplanned cash fluctuations, unforeseen expenses and for short-term emergencies (i.e. the 'precautionary motive' for keeping cash). Cash-based businesses may be more exposed to such volatility, which can arise through fluctuations in daily sales. Unpredictable patterns of cash receipt can be mitigated by companies offering trade credit and/or accepting it from their own suppliers. This creates greater predictability as to when customers are likely to settle their bills and when suppliers need to be paid. Trade credit 'gives the buyers time to plan for the payment of unexpected purchases, enables them to forecast future cash outlays with greater certainty and simplifies their cash-flow management' (Schwartz, 1974: p643). Trade credit can reduce financing costs by reducing default loss. In the event of non-payment, the seller has the power to repossess the goods. The goods have more collateral value to the seller, who is already in that line of business, than to a bank for instance (Summers and Wilson, 2002; García-Teruel and Martínez-Solano, 2010). However, the collateral value of goods will depend on the nature of the product and the transformation process to which they are subjected (Petersen and Rajan, 1997) – for example this would be less relevant in say the building sector where goods are transformed and inventories are very low.
- **Transaction costs:** these may be lower in supply chains (in comparison to financial institutions). Transactions between businesses take place in markets with imperfect information about both the buyer and the seller. This uncertainty creates transaction costs for both parties in evaluating the potential risk and return ratios. These real-world information asymmetries can make trade credit more attractive than bank credit to both buyers and sellers (Wilson et al, 1996, Paul and Guermat, 2009). This is because the information asymmetries between suppliers and buyers may not be as great as they are between borrowers and banks. Financial institutions do not necessarily have the same sector knowledge or close relationship with buyers in the same way as sellers in supply chains may have. As a result, banks are more constrained in their ability to collect similar information about customers' creditworthiness (Petersen and Rajan, 1997; Paul and Boden, 2008; Summers and Wilson, 1999; Paul et al, 2012). Because this information is

collected repeatedly in the course of business between a supplier and customer, the cost of collection for both parties is mitigated, especially with regular customers.

- **Correcting information asymmetries:** there are two parts to this. The delay between receipt and payment has informational advantages as it allows customers to investigate and assess the quality of the product and its value for money – withholding payment until they are satisfied. There is evidence to back up this rationale with companies offering trade credit as part of an assurance of quality: findings suggest that firms with established reputations for offering quality products/services tend to extend less trade credit than newer and often smaller businesses (Long et al., 1993; Lee and Stowe, 1993; Summers and Wilson, 2002), which may be unable to honour product warranties; companies producing goods whose quality takes longer to assess are more likely to offer longer credit terms relative to sales, to allow customers to check the product quality (Long et al., 1993; Wilson, 2003; Paul and Boden, 2008); and research suggests that credit terms may also be linked to product durability – firms producing durables offer more credit than those producing perishables (Smith, 1987; Long et al., 1994). The second part of the informational argument is that trade credit can provide a means of acquiring information regarding their customers' creditworthiness (e.g. through buyers' financial and general business health) and buying habits to inform business decisions and supply chain logistics. Researchers have argued that trade credit acts as a screening device, identifying earlier than otherwise potential problems with customers and therefore signalling the desirability of more monitoring and control (Smith, 1987; Wilson, 2008).
- **Price discrimination:** trade credit, through an adjustment of credit terms, can be used to price discriminate. For example, if suppliers offer 30 days but allow certain customers to pay later than agreed without penalty, it is equivalent to reducing the price of the product/service. Similarly, suppliers may manipulate their discount for early payment by offering different discounts to selected customers or allow them to take a discount even when they pay late. Note that the supplier has to have enough market power to discriminate between customers. Trade credit can, therefore, be seen as much more than a system for providing finance: it can constitute part of an integrated package of measures which can be used to generate demand, providing more opportunities for the seller to differentiate its product-finance offering from the competition (Ingves, 1984), and thereby capturing/maintaining market share. Many businesses find that trade credit provision is an important criterion of supplier selection, especially when sellers offer an identical mix of other variables such as quality and delivery (Schwartz and Whitcomb, 1976; Petersen and Rajan, 1997; Shipley and Davis, 1991; Pike *et al.*, 2005; Paul and Wilson, 2007).

## Credit insurance

Credit insurance is one option for companies to protect themselves against risk of non-payment. Credit insurance companies that insure against this risk offer a range of covers. Insurance can include domestic and export invoices and can cover the whole turnover or specific accounts. Furthermore, credit insurers can offer other services such as: 'continuous monitoring of creditworthiness of the insured's customers, maintaining account receivables, suggesting payment and delivery conditions and supporting debtors collection' (Wilson, 2008:149).

To insure their invoices, companies have to comply with requirements imposed by the insurer. Such requirements often relate to internal credit procedures. Customer risk profile plays a big role in whether SMEs are able to get insurances or not and at what cost (Paul and Wilson, 2006). SMEs, especially, try to insure their receivables to protect their cash-flow and reduce bad debts. However, SMEs are often not in a position to comply with requirements and credit insurance can be costly and may even not offer an appropriate cover (Paul, 2010). When an insurer evaluates a firm's financial health, they would often look at their net trade credit position (Paul and Boden, 2011). For instance, in January 2011 suppliers to HMV were refused credit insurance because the company was struggling (Albert, 2011).

## Market conditions

### Trade credit as part of the finance mix

SMEs need access to finance for starting-up, ongoing working capital and to support expansion. The use of trade credit is an important part of this working capital. Taulia (2014) undertook research on the UK corporate sector as a whole (covering all limited companies) reviewing the most recent company account information across the economy. This indicated that the value of trade credit was 1.2 times that of bank credit, at approximately £327bn. Further, trade credit was found to have risen in importance across all sectors as the economy moved towards recovery. This contrasts with data from Experian data (see more detail below), which showed a decline in trade credit for SMEs, though it is important to note that the research by Taulia covered companies of all sizes, with larger companies having some influence on the overall results.

The SME Finance Monitor now asks about SMEs' use of trade credit, as well as other sources of finance. The figure below shows that in the first quarter of 2014 (when specific questions on trade credit were asked for the first time), just over one-quarter (27%) of SMEs reported using trade credit regularly as a source of finance. To put this into context, 33% of SMEs reported using any external finance (excluding trade credit) and 27% of SMEs reported using core products (i.e. loans, overdrafts and/or credit cards). Both of these indicators were at their lowest levels: since 2011, use of external finance (excluding trade credit) has been around 40-50% and use of core products at around 30-45% (BDRC-Continental, 2014)<sup>6</sup>.

Trade credit as a source of finance can be complementary to other external sources. The SME Finance Monitor<sup>7</sup> indicated that 15% of SMEs use external finance and trade credit regularly, 17% use external finance but do not use trade credit regularly, and 12% use trade credit regularly but not other sources of external finance.

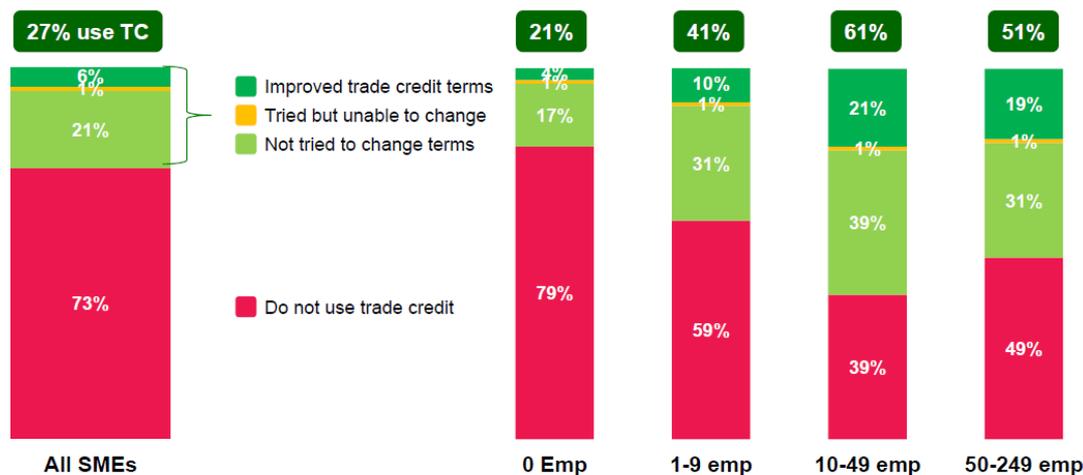
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<sup>6</sup> Given that the SME Finance Monitor only began to cover trade credit in 2014 we do not have comparable historic data on the use of trade credit by SMEs.

<sup>7</sup> Q1 2014

## A quarter of SMEs regularly use Trade Credit. 6% have successfully increased the amount/terms of their TC

NEW QUESTION: Use of trade credit and how this has changed in last 12 months Q1 2014



6% of all SMEs have successfully negotiated an improvement in credit terms (1 in 5 of those using trade credit, and 8 out of 10 of those who tried to negotiate a change). Larger SMEs are more likely to use Trade Credit regularly, and if they do, they are more likely than smaller SMEs to have successfully negotiated higher limits or longer credit terms.

Source: SME Finance Monitor (BDRC-Continental, 2014)

## Tightening conditions for accessing working capital finance

As noted above, obvious sources of finance for SMEs' working capital is bank finance, in particular loans or overdrafts, but also in the form of credit cards. Micro-businesses make regular use of credit cards – which may be in a business name or personally held; in (usually very small) unincorporated businesses there is no legal distinction between personal and business assets.

SMEs generally have much poorer access to bank finance compared to larger businesses because they will have fewer assets (hence a lack of collateral), be less well documented and be perceived as a higher credit risk (Fraser, 2004). It is widely reported that the financial crisis since 2008 has exacerbated these problems with financial institutions reducing their lending to SMEs, for example:

- A major NIESR<sup>8</sup> study (NIESR, 2013) concluded that the financial crisis and subsequent recession had created a more 'challenging environment' for SMEs seeking bank finance. The NIESR study found that, even when risk factors were controlled for, rejection of applications for overdrafts and term loans were significantly higher from 2008-9, indicating a contraction in the flow of finance to the SME sector. This study also highlighted that 39% of SMEs requested an overdraft between 2008-2009, and that it was likely that demand had been dampened by the 'discouragement' of applications in that period.
- Fraser (2012a; 2012b) found that loan rejections rates increased quite significantly in 2008, but that the average loan size increased too. The conclusion was that

<sup>8</sup> National Institute of Economic and Social Research

banks were meeting lending targets by extending larger loans to lower risk businesses.

## Use of trade credit as an alternative source?

The deterioration in the availability of bank lending may have encouraged firms to compensate by making increased use of trade credit as an alternative source of working capital. However, in April 2013 Experian (Experian, 2013) asserted that its investigations showed that SMEs had faced a significant reduction in net trade credit availability since 2009. Experian claimed that, prior to 2009, overdrafts and trade credit were the most 'flexible and popular' ways for SMEs to finance their working capital – especially for trades such as construction<sup>9</sup>. Its data showed that, whilst 10% of SMEs used trade credit in 2008, that had fallen to 9.2% in 2009 and to 6.1% by 2012. Experian calculated that this was equivalent to a £4.7bn fall in available credit. The smallest firms had been hardest hit.

*In 2007, 90,000 businesses with a turnover of under £50k had access to trade credit, but this fell by almost 50 per cent by the following year. Businesses in the £250k turnover bracket have also seen a marked decline, with figures falling by 17 per cent from 45,449 to 37,688. (Experian, 2013)*

Combined with a supply side restriction and the expense of term loans and overdrafts, the reduction in the availability of trade credit can have a significant effect on micro-businesses which need to buy materials prior to delivering a good or service.

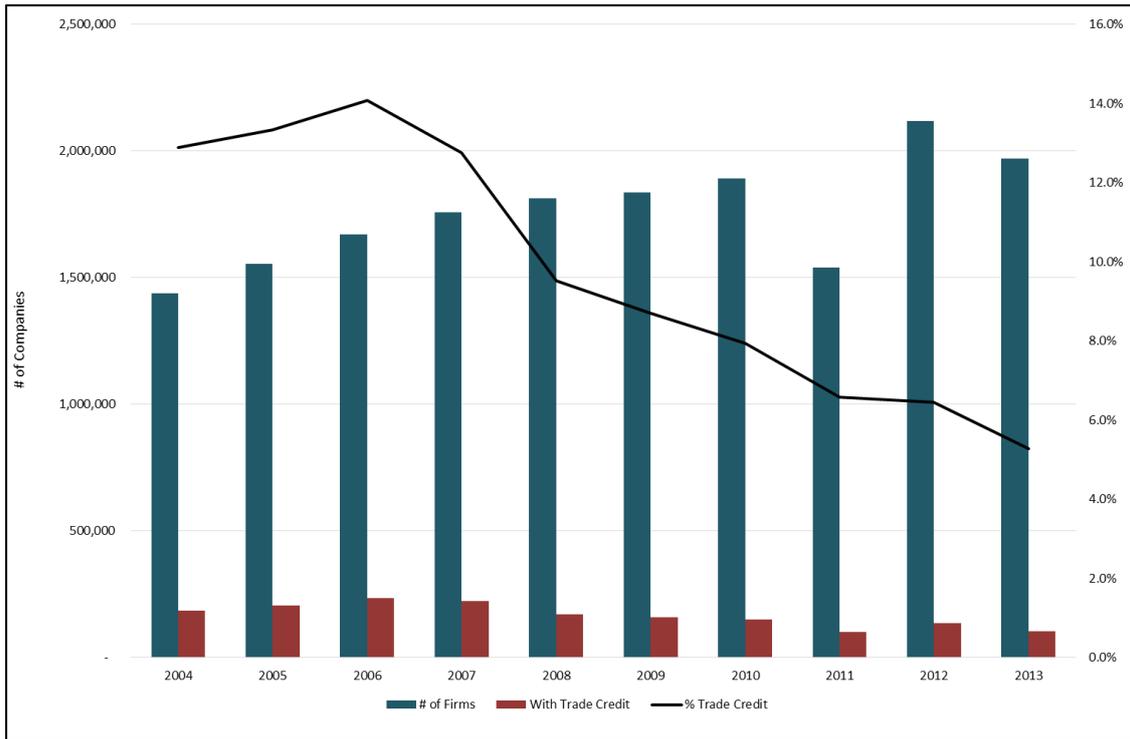
To provide a longer-term, more detailed and updated perspective on this issue, equivalent data has been purchased from Experian covering the period from 2004-2013. The summary findings provided by Experian are set out in the Figure below, identifying the total number of SMEs recorded by Experian across the UK, the number with trade credit on their balance sheets, and the resulting proportion of firms using trade credit. The data provided by Experian indicate that the proportion of SMEs with trade credit declined steadily over the past decade: in 2004, 12.9% of SMEs used trade credit, by 2013 this had reduced to 5.3%.<sup>10</sup>

### **Figure 1: Headline data on use of trade credit by SMEs 2004-13 (Experian data)**

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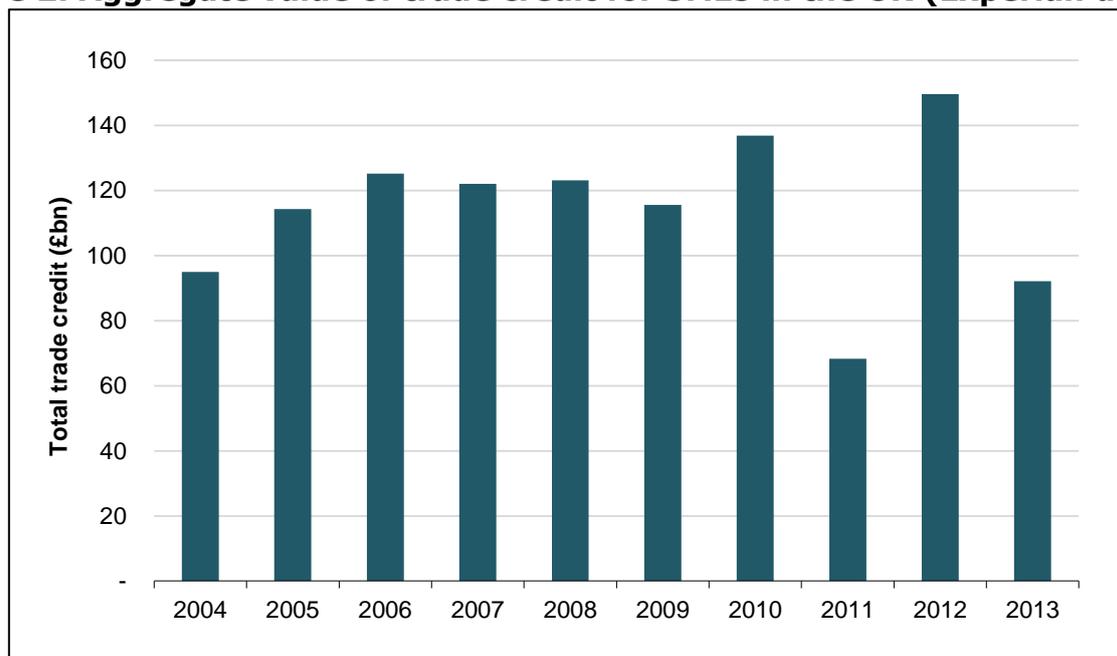
<sup>9</sup> Wider evidence indicates that construction firms take much more trade credit from their suppliers (two to three times as much, depending on the measure used) as a proportion of their balance sheet than do firms in the rest of the economy (see [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/210964/bis-13-956-trade\\_credit-in-uk-construction-industry-analysis.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/210964/bis-13-956-trade_credit-in-uk-construction-industry-analysis.pdf))

<sup>10</sup> The Experian data (5.3% of SMEs with access to trade credit in 2013) and the SME Finance Monitor data (27% SMEs reporting using trade credit in Q1 2014) vary significantly – reflecting potentially the different sample characteristics, and difference between self-reported information in the survey and data from Experian based on financial information submitted to Companies House.



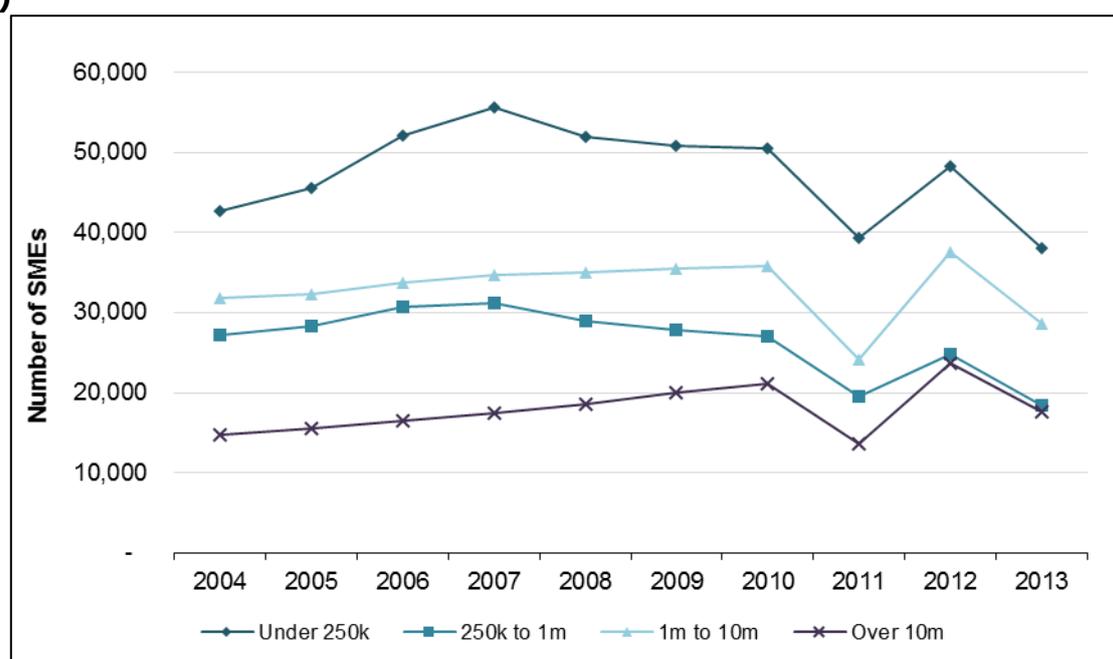
The annual aggregate value of trade credit used by SMEs in each year is set out in Figure 2. The annual level was broadly consistent in the pre-recession period, but more variable in recent years. However, the latest data indicate the total value of trade credit accessible to SMEs in 2013 was around one-third lower than the pre-recession peak in 2010. (Note this data excludes the financial services and insurance sector that increased very substantially in 2011 in light of the recession and financial crisis).

**Figure 2: Aggregate value of trade credit for SMEs in the UK (Experian data)**



Recent data also suggest that the reductions in the availability of trade credit to smaller firms has continued. As shown in Figure 3 below, the number of businesses with a turnover of under £250k using trade credit has declined over the past decade, and particularly since 2007, with a similar pattern for businesses with turnover of £250k-1m. By contrast, the number of larger businesses (with turnover of over £10m) using trade credit has increased slightly (from 14,500 to 17,500).

**Figure 3: Number of SMEs using trade credit by turnover bands (Experian data)**



The Experian data also indicate important sectoral trends in the extent to which SMEs access trade credit, and how this has changed over the past decade. The Table below sets out the proportion of SMEs using trade credit by sector in 2004 and 2013, and the percentage point (PP) change between these data points.

**Table 2: SMEs with trade credit in 2004 and 2013 by sector (Experian data)**

Sector	% SMEs with trade credit in 2004	% SMEs with trade credit in 2013	PP Change 2004-2013
Agriculture	15.1%	4.6%	-10.5
Mining/Energy	15.3%	8.5%	-6.9
Manufacturing durable	19.6%	9.5%	-10.1
Manufacturing non-durable	18.2%	6.9%	-11.4
Construction	14.8%	4.8%	-10.0

Sector	% SMEs with trade credit in 2004	% SMEs with trade credit in 2013	PP Change 2004-2013
Wholesale	19.2%	8.9%	-10.3
Retail	17.0%	5.0%	-12.0
Transport	16.5%	6.5%	-9.9
Business Services	10.0%	4.0%	-6.0
Finance, Insurance	16.7%	9.4%	-7.3
Property	10.1%	6.1%	-4.0
Personal Services	12.8%	4.9%	-7.9
Public	12.6%	8.4%	-4.2

## Links to trade credit insurance

Another part of the contextual picture regarding the trade credit market is the capacity provided to SMEs through credit insurance. Following the financial crisis, data provided to the study team by the Association of British Insurers indicate that levels of insured turnover fell from 2008 to 2009 and again to 2010. However, since then credit insurance has increased again. The levels of insured turnover in 2011 to 2013 were at levels commensurate to 2008.

This said, based on the proportion of credit premiums made up by businesses with insured turnover of £0m-£3m and £3.1m-£5m (i.e. those that are likely to be made up by micro enterprises and small businesses<sup>11</sup>), it appears that insurance cover for these businesses has fallen since 2008 and not recovered.

## SMEs' net credit position

Credit taken is only one side of the picture – there is also the matter of SMEs extending credit to their own customers, affecting their net credit position (and therefore available working capital). Moreover, during a period of capital shortage and more difficult trading conditions, which we have seen during the recession, many other businesses will be seeking to extend the trade credit they take whilst getting their own invoices paid more quickly. The evidence indicates that SMEs have seen

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<sup>11</sup> Whilst these would typically comprise policies for SMEs and micro businesses, they may also include individual policies purchased by larger firms for a particular section of the business.

their net credit position deteriorate, and are sometimes affected by issues of 'late payment'.

BACS (BBC News, 2011) reported that UK SMEs were owed £33.6 bn in November 2011. By February 2014 that estimate had risen to £55 bn, with the average business owed £11,358 (Telegraph 2014). Abrahams, writing from the perspective of 2012, puts the significance of the problem into perspective; 'more than £36.4 billion is owed to SMEs nationally... high street banks lent just £56 billion to small firms in 2011' (Abrahams, 2012:23). The problem here is plainly one of SMEs being in danger of becoming net credit providers – being owed more than they have received in credit, thereby pressurising their working capital positions.

Further, the latest survey from ICAEW<sup>12</sup> found that late payment was a more significant challenge than access to capital for businesses trying to manage their cash flow. From a survey of 1,000 firms across the UK, 9% of businesses cited access to finance as a challenge in the next 12 months, but nearly twice as many (17%) cited late payment. The survey also found that the construction sector is particularly concerned about late payment by customers, more so than any other industry, with a quarter (25%) saying that this will be a greater challenge in the next 12 months.

Temporal considerations are critical in this – if payment receipt periods are longer than payment demand periods, then this can quickly create funding gaps. There is evidence that this issue is affecting SMEs. A survey by Hilton-Baird Collection Services in 2014 found that 49% of firms paid their suppliers late because they had received less than they owe (Creditman.co.uk, 2014). Late payment thus slows down cashflow throughout the whole economy and causes financial distress that can lead to SME failure. There is some evidence that larger firms pay more slowly, and are more likely to pay late than SMEs (Paul and Boden, 2011; 2012; Collies, et al., 2013). It is also argued that 'sloppy payers owe £55bn to small and mid-sized businesses in unpaid or outstanding invoices, which is stifling growth and restricting cash flow... [and] despite political pressure on large corporations to pay their smaller suppliers on time, this sum has jumped 52pc since last summer' (The Telegraph, 10th February, 2014).

## Market failures and policy options

In summary, the discussion above on the theory of trade credit and on market conditions identifies the important role that trade credit can play for SMEs in managing working capital. It also shows that there are motivations for suppliers in offering trade credit, for example in terms of managing and building supply chain relationships, maintaining/ capturing market share and gathering information on customers. However, since the onset of the financial crisis, there is evidence that SME access to short-term finance has become more difficult, including access to trade credit. This presents challenges for SMEs that need to buy materials prior to delivering a good or service. This is exacerbated by issues of late payment, which, combined with reduced access to credit, make managing cash flow more challenging for SMEs.

This raises questions about how markets may fail and what appropriate policy responses are. We turn to these two areas now, before the final sub-section

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<sup>12</sup> UK Enterprise Survey Report 2013, ICAEW

comments on the implications for testing these and other issues identified as part of the evaluation.

## Market failures

The theoretical work on trade credit, as indicated above, suggests that cooperative supply chains are critical to the maximisation of the advantages of trade credit financing. A crucial aspect of this is the flow of trade credit through and across supply chains, with cooperation between all members. As identified earlier, this may lead to positive externalities to other businesses in the supply chain, and the wider economy. There are four key factors that may restrict either the provision of trade credit or limit the benefits to a wide range of businesses:

- **Market power:** in the context of trade credit, market power is derived from the structural positioning of businesses in the supply chain, which is partly dependent on the degree of dominance that participant firms have by virtue of market share. Where there is customer concentration, i.e. suppliers have very few customers or with a significant proportion of sales concentrated in very few customers, sellers can be at a serious disadvantage with regard to trade credit (Blome and Schoenherr, 2011). Conversely, where suppliers have market dominance, i.e. where there might be weak competition for the supply of goods and services, sellers are empowered to load working capital costs within the supply chain onto customers by restricting trade credit.
- **Risk management:** one significant reason why trade credit may not work optimally across supply chains is poor risk management. Within individual firms there may be conflict between sales managers, who wish to maximise sales (and so utilise trade credit as a means of doing this), and those who want to ensure the company has cash available (and so apply more caution to the use of trade credit). Trade credit operations can assist in collecting creditworthiness information in order to discriminate between customers, without missing out on opportunities. Customers' classification according to their level of risk (initially) and their pattern of payment (over a certain period) allows companies to manage their risk properly. Inappropriate management of risk, however, can lead to financial difficulties or limit the supply of trade credit.
- **Supply chain management:** credit terms are heterogeneous between sectors/ supply chains as they can be contingent upon particular structural characteristics and habits (Paul, 2010). In some sectors firms may have a policy of paying within the agreed terms to support the supply chain. However, in others the structure may heighten the risk of the supply chain collapsing. For instance, Paul and Boden (2012:18) find that in the construction sector 'the complex supply chain relationships meant that respondents in this sector were a very generative source of further contacts under the snowball sampling approach'. Given the nature of the sector, suppliers tend to agree on a 'pay-when-paid' system which increases the risk associated with the supply chain collapsing in a domino-effect and 'even when a "pay-when-paid" clause is not in the contractual details, some customers literally cannot pay their suppliers unless they collect the cash from their own customers themselves, with the same result' (Paul and Boden, 2012:33). Extending trade credit (including when supported by government guarantee) may, to some extent, formalise payments systems and routines – but this is contingent upon buyers' compliant behaviours and the effectiveness of the suppliers' control systems.
- **Information asymmetries:** as we have seen in this section, in deciding whether to extend trade credit to a customer a business will need to take account of issues

such as creditworthiness, which will be informed by credit scores, previous purchasing and payment behaviour, and knowledge of the business (and its customers). Whilst we have seen that suppliers may be in a relatively better position compared to financial institutions, there may still be imperfect information, which may limit the extent to which trade credit is offered. In the context of an uncertain economic recovery, as we have seen in recent years, these may be exacerbated as suppliers have less confidence in the outlook of their business customers.

## Policy options

Given the propensity of trade credit to suffer from market failure, three types of possible options are available to address these failures: regulation, third-party services, and better awareness and training. Each is briefly discussed in turn.

**Regulating trade credit** to help SMEs' financial situation is suggested as one solution to the late payment problems, because prompt payment might help SMEs maintain a more favourable net credit position. There have been various policies and legislation to help encourage prompt payment. Self-regulation and other measures such as the Prompt Payment Code, the amendment of Companies Acts (requiring UK companies to disclose their payment policies in their annual report), Best Practice Group on late payment, a British Standard for Payment, and a Voluntary Code of Practice were introduced to help mainly SMEs. But these measures resulted in only marginal improvements (Paul and Boden, 2012; Paul *et al.*, 2012). The 1997 Labour Government introduced the Commercial Debts (Interest) Acts to give the statutory right to companies to charge 8% plus the standard bank rate interest on the late payments. SMEs were the first to be given the right to charge large companies and public sector organisations interest on any outstanding debts. The right to charge interest was then extended two years later to SMEs to charge whoever they are dealing with, and then these rights were given to all firms in 2002. The European Commission introduced the 2000 Directive (2000/35/EC) where firms could charge interest on any outstanding debts not paid within the contractual/legal deadline with a new updated 2011 Directive implemented in the UK in 2013.

However, despite this legislation, the number of SMEs who use these measures is consistently low. For instance, two years after the introduction of the UK legislation, only 2% of SMEs charged interest on late payment, with 30% reporting that they would be worried about jeopardising customer relationships (CMRC, 2005; Wilson, 2008). Figures from BIS showed 85% of SMEs suffer from late payment and are paid 41 days late on average longer than their larger counterpart. As a result 14% of them were unable to pay their own suppliers, most of them talked about growth constraint and 25% of them failed all together. Power imbalances arising from the position of the SME in the supply chain seem to be an important factor here. This suggests that less powerful SMEs have, despite legislative regimes, little effective power to exercise on larger market dominant firms.

**Third-party services** can be divided into services designed to accelerate payment of debts to SMEs and insurance and guarantee schemes (e.g. TCEFG) designed to assist SMEs giving credit and assure those extending trade credit to them. These are not cost-free solutions in either case and these costs have to be borne by someone, e.g. within the supply chain or by an external party such as government as a guarantor.

Invoice factoring (whereby a business sells its invoices on to an invoice financing company at less than 100% of their value) and invoice discounting (whereby a

business borrows on the strength of its sales ledger) are two alternative sources of finance that SMEs can use to help address cash flow. The growing interest in these financial products highlights how financial providers are seeking to respond to market failures in credit provision for SMEs and can be extremely useful. However, one view is that dealing with trade credit issues more directly offers a more appropriate solution because it addresses the problem at its base rather than developing further financial products<sup>13</sup> that attempt to mitigate the prevailing situation.

Finally, **awareness raising and training measures** can be used to complement other measures such as those around regulation to create a 'responsible payment' culture. For example, in 2011 the 'Be Fair – Pay on Time' campaign was launched to raise awareness about late payments to SMEs. Awareness raising and training can also work with SMEs directly, for example raising awareness of credit issues and providing help to small businesses on how they can best manage their financial risk.

## Summary and implications for the evaluation

The literature suggests that there is an optimal trade credit position across supply chains which can be mutually beneficial across all participants. Trade credit can provide a means of financing working capital across all collaborators, especially where bank finance is restricted or more costly. Trade credit can also be a useful means of utilising otherwise idle working capital, and reduce the costs of financing for both suppliers and buyers, because knowledge of customers can reduce the costs of agreeing lending compared with banks. Many of these factors can be important to SMEs, who are likely to encounter greater problems with accessing or accumulating working capital, and the evidence suggests that trade credit is indeed an important source of finance for many SMEs. For suppliers, trade credit also provides a means of potentially gaining (or at least maintaining) custom and market share, and a way of building relationships with customers.

In the context of the recent difficulties in accessing bank finance, therefore, trade credit may have been an attractive option for SMEs to fund working capital. Evidence indicates that credit insurance provision has changed significantly in recent years with falls after 2008, but with recent increases. As we have also seen, there is evidence to suggest that the use of trade credit has declined during the financial crisis, with the smallest firms particularly affected. This could in part be due to less demand for goods/services generally, which would, *ceteris paribus*<sup>14</sup>, result in less demand for trade credit. It is important to note though, that the net credit position of SMEs has also declined, as large companies have potentially become more cautious and tighter in managing their own cash flow. This supports the theory that power relationships in supply chains can result in a sub-optimal provision of trade credit. There may also be information asymmetries that are affecting the provision of trade credit, as suppliers do not have access to full information on creditworthiness particularly when the economic conditions (and so those facing their customers) may be uncertain. These two arguments, market power and information asymmetries, alongside the positive externalities associated with supply chain cooperation could provide a rationale for

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<sup>13</sup> A potentially second best solution

<sup>14</sup> All else being equal

government intervention to encourage the provision of trade credit. A potential policy option to facilitate greater use of trade credit, and as used for the TCEFG pilot, is for government to act as a guarantor on the credit offered (or at least part of it).

There are other options for government intervention, including through regulation (to tackle issues around late payment, which result from market power in supply chains), and awareness raising and training.

Several key implications and questions arise for the evaluation, notably the following:

- How far does the evidence on the motivations of providers of the TCEFG pilot and their beneficiaries align with the theories of trade credit?
- Is there evidence from providers and beneficiaries of not being able to provide/access trade credit in the past, which would support the existence of market failures?
- What benefits have providers derived from the TCEFG pilot, and do these support the motivations of supplying trade credit, e.g. through gaining custom/market share?
- To what extent have beneficiaries of the TCEFG pilot been able to use trade credit to better manage their own cash flow? And related to this, what are beneficiary behaviours in terms of the timing of payment, and how far do these suggest the existence of issues around “pay when paid”?

## 4: TCEFG pilot design and delivery

### Key findings

- The TCEFG pilot had a sound rationale for intervention, based on addressing market failures in the provision of trade credit to SMEs, and the decline in trade credit available to SMEs. The TCEFG pilot was an 'opportunistic' intervention, developed following an approach to the government by a major provider. This was reasonable, but had implications: it meant that the standard policy development cycle was not undertaken, and that the eventual focus was on construction, as other providers sought to maintain market position.
- Around 2,900 SMEs secured new/increased trade credit through the TCEFG pilot. The pilot was heavily dependent on one Majority Provider accounting for approaching 90% of all SMEs. The model was largely 'supply' led, with the majority of SMEs allocated trade credit, rather than actively applying for it, and survey evidence indicating that up to half of SMEs supported were not aware of the new/increased trade credit.
- The average 'new' trade credit limit facilitated by the TCEFG pilot was £4,350, and the average 'increased' trade credit facilitated slightly higher at £5,100.
- The credit rating of recipients was consistent with the wider business base, although in some cases SMEs with a 'high risk' credit rating were supported by the TCEFG pilot: it is for these businesses where the core rationale was most pronounced. SMEs supported by the TCEFG pilot were not fundamentally 'different' from non-recipients in terms of financial performance, although recipients may have been younger, with potentially less well developed credit histories.
- Businesses that received trade credit through the TCEFG pilot regularly used a range of other trade credit facilities, purchased goods/materials from a range of other suppliers, and used a range of other forms of external finance. So the trade credit facilitated by the TCEFG pilot was generally one of a range of different funding sources used by SMEs.

This section sets out the underlying rationale for the TCEFG pilot, its delivery model and an overview of the activity supported by the pilot. It also provides an overview of the characteristics of recipients, and compares the recipient cohort with a group of similar but non-recipient businesses.

### Programme rationale and objectives

The evidence and conditions underpinning the core conceptual rationale for the TCEFG pilot have been discussed in the previous section: evidence on the decreasing use of trade credit for SMEs and challenges in accessing finance owing to perceived market failures, leading to the piloting of a new model for the government (through the British Business Bank) to help facilitate the provision of credit to SMEs. Specifically, the pilot was designed to address the situation of SME customers being unable to demonstrate an adequate track record to support provision of a credit limit at the

level required, be this 'new' trade credit or 'more' trade credit due to information asymmetries.

However, in practical terms, the chronology of the pilot is important. It was developed following an approach in mid-2012 to BIS from one of the main providers wishing to pilot a trade credit guarantee programme on similar lines to the main EFG programme. BIS, and subsequently the British Business Bank (initially as the predecessor organisation Capital for Enterprise Limited), then undertook work to design and develop the pilot prior to its launch in April 2013, initially with the provider first approaching BIS and subsequently with a number of other providers which joined later in the year. As such, the pilot was from the outset a response by Government to a call from the 'supply-side' (i.e. a major provider) for intervention in trade credit markets, rather than an evidence-based and policy-led intervention that was developed within Government.

This demonstrates the Government responding flexibly to the market, but it does have implications. Notably, the stages and processes that policy interventions generally progress through were not evident, for example, there was no formal options appraisal undertaken, meaning that the specific failures and issues that the pilot was seeking to address were not identified and tested explicitly at the outset. Further, whilst there appears to be evidence to justify a rationale for a pilot intervention, which was also validated by the consultations undertaken for this study, maintaining market position was one of the main drivers for participation by some providers (see section 7 of this report for more details). This means that providers became involved not because there were necessarily issues to address in their provision of trade credit, but to ensure that they were not at a disadvantage to a major competitor using the pilot. This background also contributed to the fact that the pilot became particularly focussed on construction and related trades, as firms in this area were keen to maintain market position (relative to the firm first approaching BIS, which operates in this field), whereas firms in other market areas did not have this incentive. In fact, potential providers from other market areas chose not to participate in the pilot, the reasons for which are discussed in more detail in section 7.

With no formal appraisal or underpinning logic model developed, there are currently no SMART objectives for the pilot. However, the broad objectives of the pilot, as summarised by the British Business Bank in programme documents<sup>15</sup>, were as follows:

- To assess to what extent a government guarantee can facilitate provision of additional trade credit, thereby boosting liquidity in SMEs
- To provide sufficient information to BIS to decide whether trade credit provides sufficient benefit to business to be made a further variant to the core EFG scheme
- To increase the flow of credit from non-bank lending channels to SMEs.

It is important to note the emphasis on learning in these objectives. However, the objectives also focus on delivering tangible (albeit broadly cast) benefits to participating recipients. These objectives do align to the underpinning rationale for intervention, although they are quite broad (for example, what 'business benefits' is

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<sup>15</sup> TCEFG Progress and Forward Look November 2013, British Business Bank

evidence sought on) – for any subsequent stages of TCEFG a set of ‘SMARTer’ objectives would be required against which progress and performance could be assessed fully.

## Delivery model

The pilot has been coordinated and managed by the British Business Bank, having responsibility for the selection and accreditation of partners, on-going financial management and liaison with providers, and oversight. The actual delivery of the pilot, involving the selection of businesses for trade credit and provision of credit limits is undertaken by a network of suppliers of goods and services, each with their own existing trade credit and financial management systems. The main providers during the pilot were B&Q Tradepoint, Covers, Screwfix, Selco and Unipart. A number of smaller merchants were involved through the Builders Merchants Federation (BMF), the sectoral trade association. This overall management model is consistent with the precursor EFG programme, and sought to ensure as far possible that the pilot worked alongside the existing systems at providers.

Although the specific pilot design varies at each provider, including with the BMF who provide an oversight function for smaller member firms, the overall TCEFG pilot delivery model involved the identification of recipient businesses by the provider for the provision of trade credit guaranteed by the Government. These businesses were then allocated an increased trade credit limit. Importantly, the provider paid British Business Bank a premium each time that the guarantee was applied, even if there was ultimately no claim. This approach, which is consistent with that followed within the core EFG scheme, is important in identifying the trade credit limit covered by the guarantee and which would not have been provided in the absence of the scheme. If the trade credit limit was not used, or payments were made in full at the agreed time, the guarantee was not required and there is no cost to the British Business Bank. However, in those cases where the trade credit limit was used and the recipient did not fulfil their agreed payment obligations, the provider could claim up to 75% of the loss from the British Business Bank, whilst remaining responsible for the remaining 25%. The capacity to claim was restricted to 15% of the provider’s guaranteed portfolio, in line with the core EFG scheme.

Formally, all businesses were informed that the trade credit they had received was part of the TCEFG pilot although, as discussed later in this report, this ‘awareness’ does not appear to be evident in many cases. The British Business Bank played no role in the identification or selection of recipient businesses for inclusion in the pilot i.e. the businesses to which trade credit was guaranteed by the pilot was determined by the providers, not the British Business Bank.

Within this model a number of points are important in terms of the delivery and how this has operated practically:

- The route to participation has varied. In particular, whilst some SMEs have applied for new/increased trade credit and have been assessed by the provider as requiring a guarantee for increased limits, in other cases providers have themselves offered additional trade credit to SMEs (without SMEs applying for it) under the guarantee. As noted later in the report, the latter approach was the most common over the pilot period.

- Linked to the above point, the relationship prior to the pilot between the recipient business and provider has varied; the recipient group comprised both existing customers of the provider (i.e. there was an existing commercial relationship that may or may not have included a trade credit element), and those that were not previously customers of the provider (i.e. there was no pre-existing commercial relationship).
- The scale of the pilot varied very substantially across the provider network, from the Majority Provider, with approaching 2,500 businesses offered trade credit under the TCEFG pilot, to other main providers with 100-200 businesses involved, and through to individual providers under the BMF with a smaller number each, ranging from under 10 to 80.
- The specific legal and financial arrangement varied between providers including different credit limits, guarantee terms, and payment processes; individual agreements were made by British Business Bank with each of the providers, and separately the BMF. Testing different operating models was one of the aims of the pilot in order to understand better 'what works' and in what contexts.

The perspectives of providers on the delivery model and 'what works' are discussed in the market assessment section (Section 7).

## Overview of pilot activity

This sub-section provides an overview of the pilot based on monitoring information provided to the SQW research team by the British Business Bank in June 2014. The data therefore cover the period from the launch of the pilot in April 2013 to the end of May 2014.<sup>16</sup>

### SMEs supported and relationship with provider

The monitoring data indicate that approximately 2,900 SMEs were provided with trade credit through the TCEFG pilot. One provider operating through two distinct customer-facing brands (referred to as the 'Majority Provider') accounted for 86% of all SMEs supported (c.2,500). Consistent with the intention that the pilot could be used both to facilitate trade credit to new customers and increasing the limits of existing customers, around 60% of SMEs supported by the pilot were existing customers of the trade credit provider; the proportion of SMEs that were existing customers was slightly higher for the Majority Provider. In aggregate terms this means that around 1,050 SMEs accessed 'new' trade credit through the pilot, and around 1,800 accessed 'increased' trade credit (note that data were not available on the status of 80 businesses).

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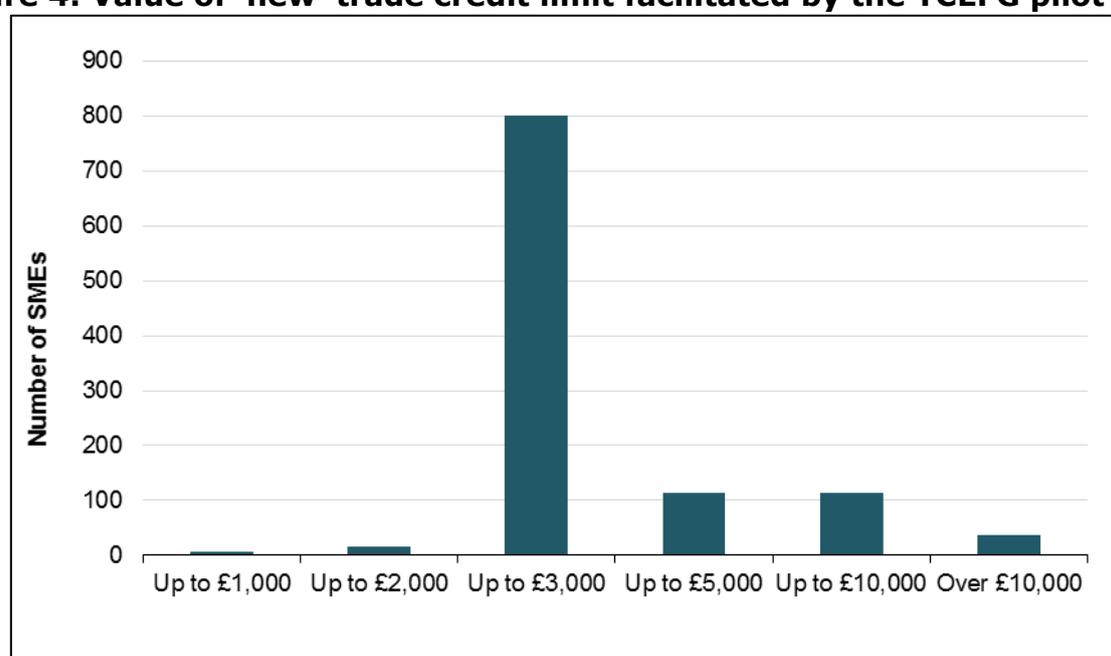
<sup>16</sup> The latest available data until the end of September 2014 shows 3,257 SMEs have been offered EFG guaranteed trade credit agreements with total account limits of £21.3m. The total sales facilitated to date under those limits is £10.3m.

**Table 3: Relationship with Provider – existing or new customer**

Relationship with Provider	Major Provider	All Providers
Existing customer	65%	61%
New customer	35%	36%
Not known	0%	3%

## Value of trade credit

Where SMEs did not have an existing trade credit facility with the provider, the average trade credit limit offered was around £4,350, although this varied considerably, from as little as £500 up to a maximum of £50,000. The average level of a new trade credit limit was largely consistent between the Majority Provider (£4,300) and Other Providers (£4,900). Further, as shown, most businesses were offered a limit of around £3,000, indeed around 780 businesses were offered *exactly* £3,000 through the pilot (and around 100 £5,000 exactly), consistent with the standard levels of trade credit offered by providers to customers (as discussed in Section 5, the survey evidence suggests that most businesses were allocated rather than applied for trade credit). In aggregate, the new limits totalled c. £4.8m.

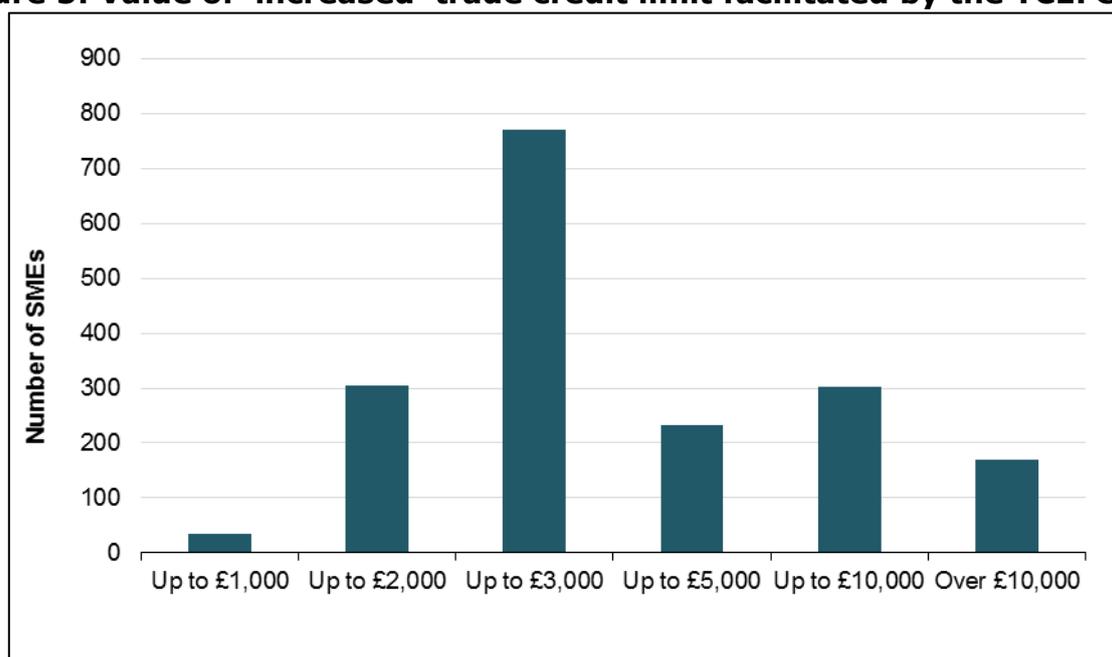
**Figure 4: Value of 'new' trade credit limit facilitated by the TCEFG pilot**

For those SMEs that already had a trade credit facility with the relevant provider prior to the TCEFG pilot, the average increase in the trade credit limit (i.e. the total trade credit limit after TCEFG, minus the existing trade credit limit before TCEFG) was around £5,100, again ranging substantially from £500 to £100,000. Again, the most common limit covered by the TCEFG pilot was around £3,000, although smaller

increases of up to £2,000 were also common (for around 300 businesses), and an increased credit limit was also more commonly at a larger scale, with 170 businesses securing an increased trade credit limit of over £10,000.<sup>17</sup>

It is also worth noting that the average increased trade credit limit from the Majority Provider at £4,250, was below the average for Other Providers at £8,800, with Other Providers accounting for over a third (35%) of the businesses that secured additional trade credit of over £10,000 through the pilot. In aggregate, the increased limits totalled £9.3m.

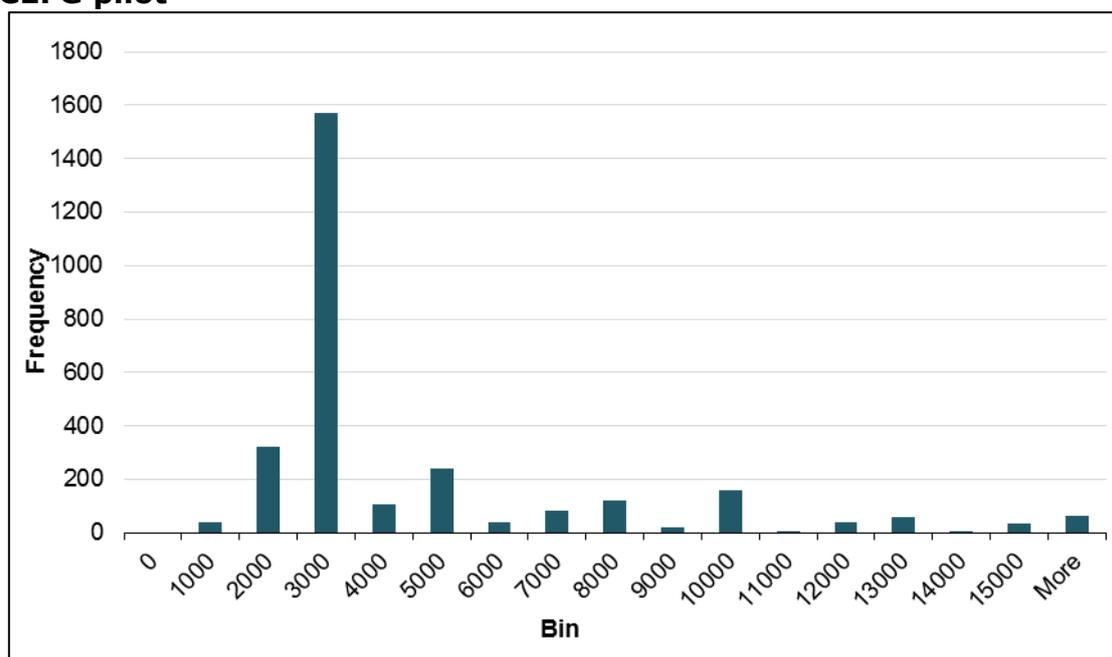
**Figure 5: Value of 'increased' trade credit limit facilitated by the TCEFG pilot**



Taken together, these data indicate that around £14m of new or increased trade credit limits to SMEs were facilitated by the pilot across 2,900 recipient businesses. The distribution covering both new and increased limits, is set out in Figure 3, again highlighting the high number of businesses that secured new/increased trade credit limits of around £3,000.

<sup>17</sup> Note that this data excludes information from a small number of businesses (under 10) where the trade credit limit facilitated from TCEFG was recorded in the data as lower than the previous limit. It is assumed that this is a data entry error at the provider level.

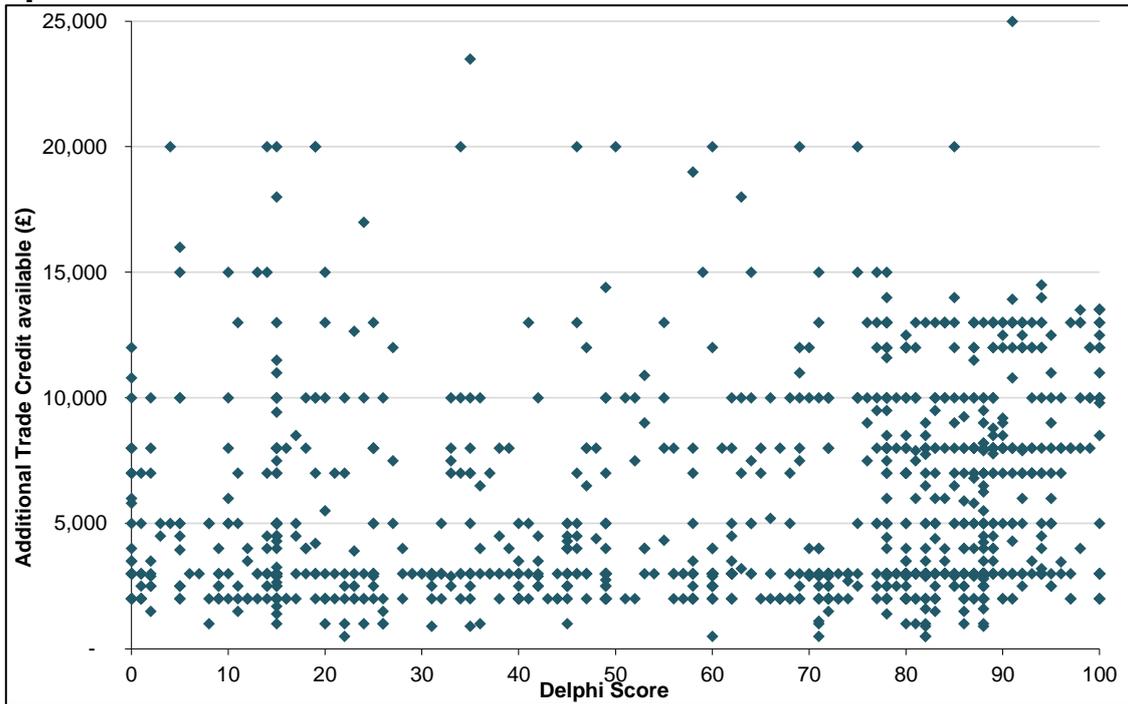
**Figure 6: Distribution of new/increased trade credit (£) facilitated by the TCEFG pilot**



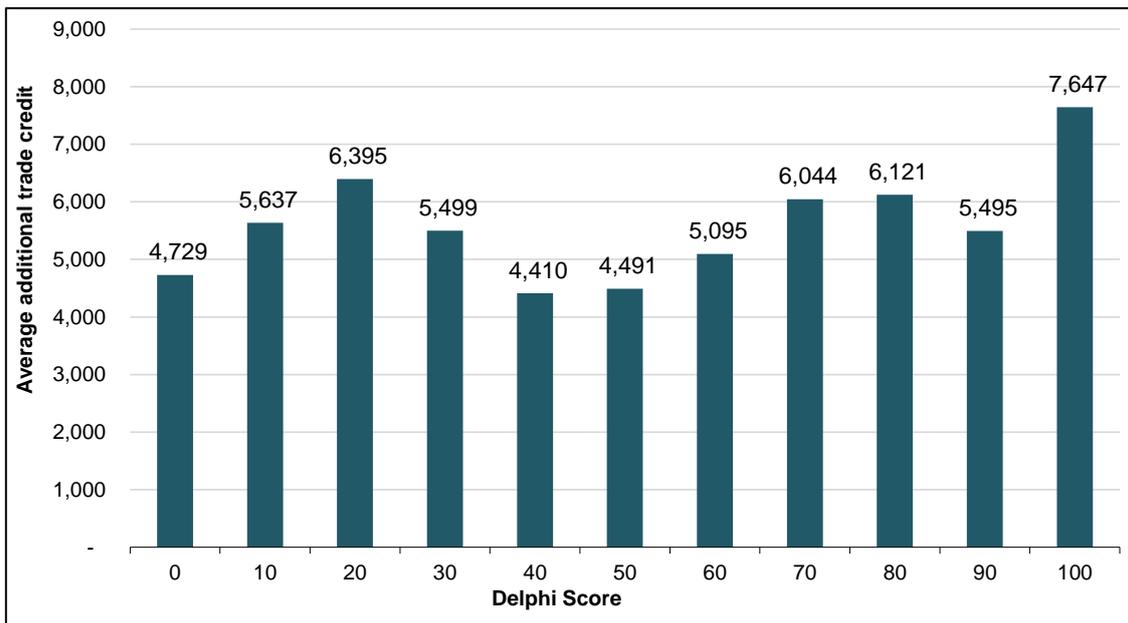
Using the Experian Delphi Score data (see below for further details), and cross-tabulating this with the value of trade credit that recipients secured from the pilot, it is possible to assess whether there is a relationship, i.e. whether businesses with a better credit score received more additional trade credit<sup>18</sup>. As demonstrated in the Figures below the data indicate that there is no clear relationship between credit score and value of trade credit facilitated by the pilot. This may reflect in part the use of standard ranges of credit by providers (e.g. £3,000 or £5,000) not linked to credit rating. Whilst this has not been tested with providers, it may also reflect some of the points from the literature review, which highlight the ability of trade credit providers to draw on their own relationships and knowledge of their customers. This could mean that they are able to draw on past payment behaviour and knowledge of the customers' projects/clients, and so are less dependent on standardised credit scores like Experian Delphi Scores in the allocation of trade credit.

<sup>18</sup> Note that this does not include all TCEFG recipients, as the Experian data includes less than 1,500 of them, and over 200 of these specifically lack Delphi Score data.

**Figure 7: Distribution of additional trade credit secured against recipient Delphi Score<sup>19</sup>**



**Figure 8: Average additional trade credit secured against recipient Delphi Score**



<sup>19</sup> Some businesses received more than £25,000 additional trade credit through the TCEFG. However, as there are few of these, they are treated as outliers, and so are not presented on this graph.

## Recipient characteristics

This sub-section provides an overview of the characteristics of recipient businesses covering location, size, sector, business age and credit rating. The data are from the business-level Experian information. Of the approximate 2,900 recipients, data were available from Experian on roughly 1,500 businesses, so just over half of the population. Two factors were in play here: in the monitoring data provided to the SQW research team a business name or company registration number was missing for around 1,000 businesses, and c. 400 recipients were not found in the Experian database.

### Business characteristics

Looking first at the **location** of the TCEFG pilot recipient businesses, the data suggest that the majority were registered in England, accounting for 88% of the 1,500 for whom data were available, with 7% in Scotland, 4% in Wales and 1% in Northern Ireland. A more detailed regional breakdown is provided below, in descending order, with the South East of England accounting for the highest proportion of recipient businesses.

For context, data for the wider SME business population in the Construction sector is presented in the Table. The data indicate that the regional spread of pilot recipients was consistent generally with what would be expected from the relevant SME business base, although the South East and West Midlands regions were somewhat over-represented (with 21% and 12% of recipients compared to 17% and 8% of the UK's Construction SMEs respectively), and London somewhat under-represented (with 8% of recipients compared to 13% of the UK's Construction SMEs).

**Table 4: Regional location of recipients**

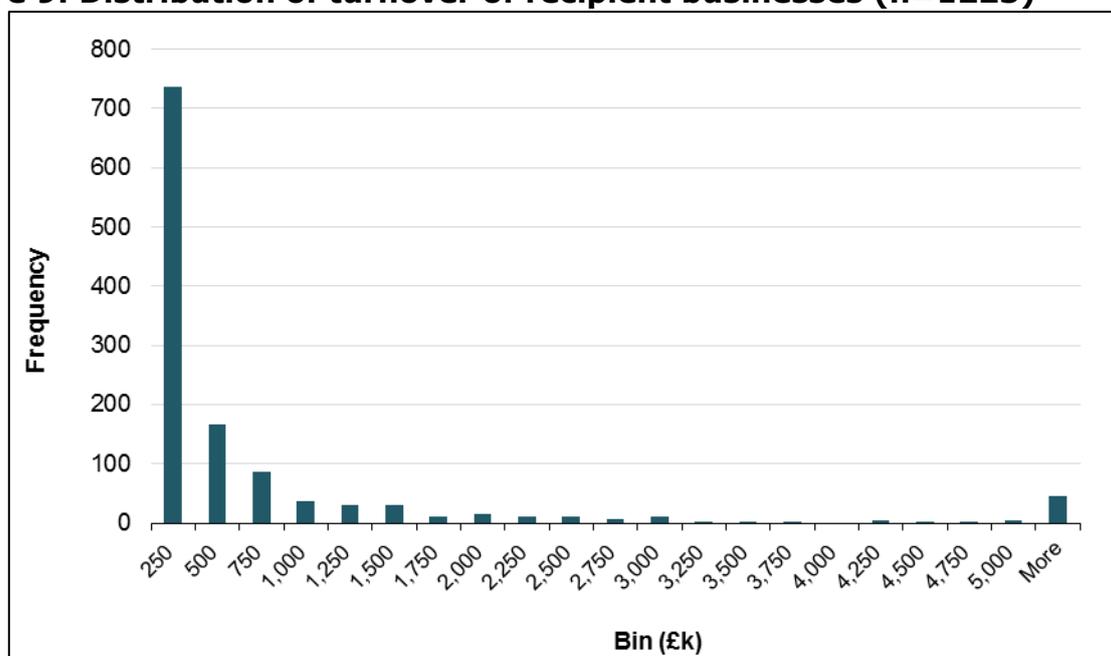
Region	Proportion of recipients (n=1,495)	Proportion of all Construction SMEs <sup>20</sup>
South East	21%	17%
West Midlands	12%	8%
East Anglia	11%	12%
South West	9%	10%
North West	9%	9%

<sup>20</sup> UK Business Counts – Enterprises, Construction Sector, 2014; ONS Crown Copyright Reserved

Region	Proportion of recipients (n=1,495)	Proportion of all Construction SMEs <sup>20</sup>
London	8%	13%
East Midlands	8%	7%
Scotland	7%	7%
Yorkshire and Humberside	6%	7%
North East	4%	3%
Wales	4%	4%
Northern Ireland	1%	3%

Turning to the **size** of recipients, data were purchased from Experian on both the latest turnover and employment levels. The average turnover of businesses where the data were available (n=1,223) was just under £1m (£944k). As shown in Figure 9, the majority of recipients had a turnover of less than £1m, with around 60% of those businesses where data were available having a turnover of up to £250k.

**Figure 9: Distribution of turnover of recipient businesses (n=1223)**



No employment information was recorded in the Experian data in 550 cases: so the findings on employment size are based on c. 940 businesses. The average number of employees for recipients captured in the Experian data was around 10, but the

majority (79%) were micro-businesses with no more than 10 employees. Given that many of the c.400 businesses not found in the Experian data are likely to be sole traders, and those recipients where employment is missing (550 cases) may include businesses with low levels of employment, the evidence suggests that businesses supported by the TCEFG pilot are likely to have been small in employment terms, although data gaps (both in the monitoring data and Experian matching) preclude a definitive assessment. The proportion of recipients in broad employment bands are set out in the Table below; note this covers only those c.940 recipients where employment data was available, and excludes businesses not found in the Experian data, or where employment data was not available, with both groups likely to include sole traders.

**Table 5: Employees size band of recipient businesses**

Employees band	Proportion of recipients (n=941)
1 to 9	76%
10 to 49	20%
50 to 250	4%

Taken together, the data on size indicate that the pilot was used to support generally micro or small SMEs (and in many cases these are likely to be sole traders). That said, in some cases the TCEFG pilot did support larger businesses, including some with over 50 employees, and turnover in excess of £2.5m.

As noted above, the background, establishment and subsequent development of the pilot meant that it focused principally on providers in construction and associated trades. The split of recipients by **sector** is set out below: just over one-third of businesses captured in the Experian data were plumbing businesses, with significant proportions in other trades such as electricians, joinery and other building or construction activities.

**Table 6: Sector of recipient businesses**

Sector	Proportion of recipients (n=1496)
Plumbing	34%
Installation Of Electrical Wiring And Fittings	16%
General Construction Of Buildings And Civil Engineering Works	11%
Other Business Activities Not Elsewhere Classified	6%
Joinery Installation	5%

Sector	Proportion of recipients (n=1496)
Other Building Installation	3%
Other Building Completion	3%
Retail Sale Of Hardware, Paints And Glass	2%
Other Construction Work Involving Special Trades	2%
Architectural And Engineering Activities And Related Technical Consultancy	1%
Retail Sale Of Furniture, Lighting Equipment And Household Articles Not Elsewhere Classified	1%
Other Service Activities Not Elsewhere Classified	1%
Manufacture Of Ceramic Sanitary Fixtures	1%
Other	13%
Not known	2%

Finally for this initial characterisation of the recipients, the **age** of the businesses is summarised in the Table below. The data indicate that the majority of recipient businesses were well established, with over two-thirds established prior to 2010.

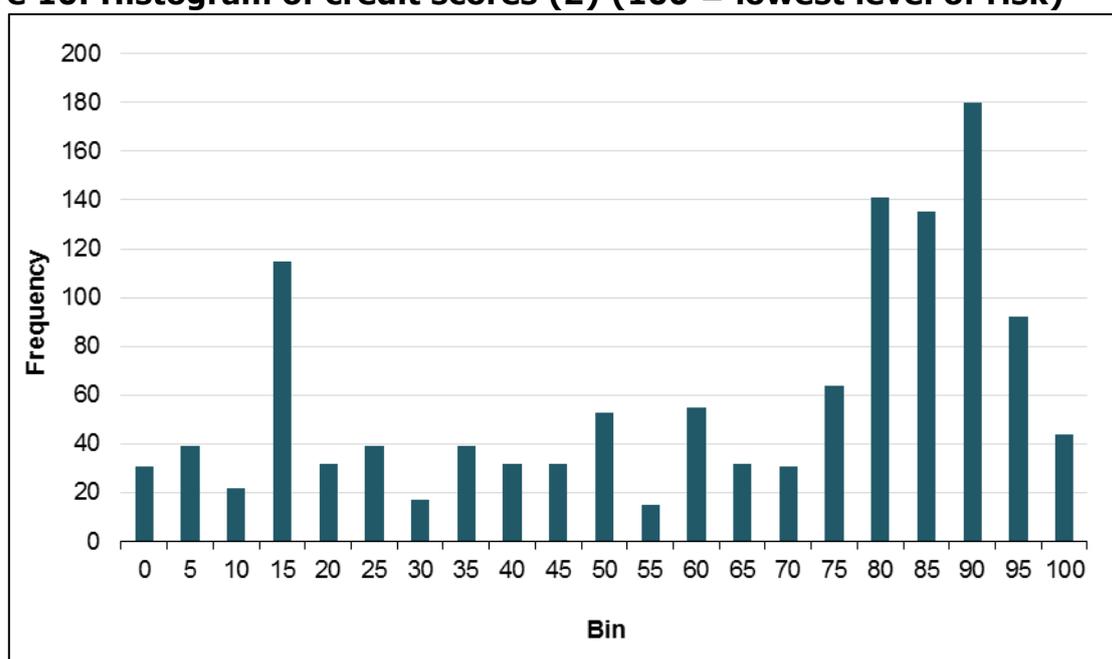
**Table 7: Year of establishment of recipient businesses**

Employees band	Proportion of recipients (n=1496)
Pre-2000	33%
2000-2009	37%
2010-2014	17%
Not known	13%

## Credit rating

As discussed above, a core element of the TCEFG pilot was to enable businesses to access trade credit that previously could not owing to their credit history. Data was purchased from Experian on the credit rating of recipients in order to test this issue. The distribution of credit scores for recipients (n=1,240) is set out in the Figure below. The data indicate a broad range of credit ratings across the recipient cohort, with the majority below average risk level (a score over 51), but a significant number with above average risk levels (a score under 50).

**Figure 10: Histogram of credit scores (£) (100 = lowest level of risk)**



These data are grouped by Experian Delphi Band and provider group in the Table below, indicating that approaching one-fifth of recipients are classified as Maximum Risk (13%) or High Risk (6%). Recipients from the Majority Provider tend to be in lower risk Delphi Bands compared to other providers: 68% classified as 'below average risk' or better, compared to 49% for other providers.

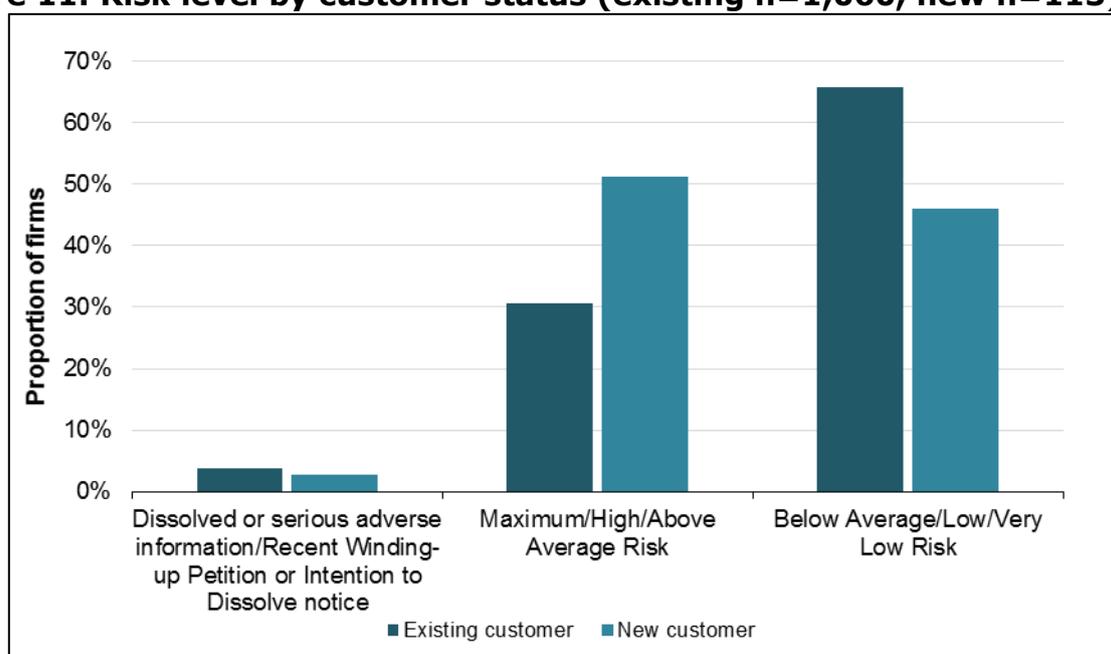
**Table 8: Delphi bands of recipients**

Delphi Band	Proportion of recipients from the Majority Provider (n=935)	Proportion of recipients from other providers (n=305)	Proportion of recipients from All Providers (n=1,240)
Dissolved or Serious Adverse Information	3%	2%	3%
Recent Winding-up Petition or Intention to Dissolve notice	1%	1%	1%

Delphi Band	Proportion of recipients from the Majority Provider (n=935)	Proportion of recipients from other providers (n=305)	Proportion of recipients from All Providers (n=1,240)
Maximum Risk	10%	24%	13%
High Risk	4%	10%	6%
Above Average Risk	13%	15%	14%
Below Average Risk	28%	26%	27%
Low Risk	28%	18%	25%
Very Low Risk	13%	5%	11%

As discussed above, over half of recipients were existing customers of Providers, many with existing trade credit relationships; as such we would not expect that all recipients would have high risk credit ratings. Indeed, as set out in Figure 11 below, the risk level for existing customers was generally lower than for new customers, and the proportion of new customers with higher risk levels was significantly greater than for existing customers. Note that given the relatively small sample size of businesses securing new trade credit in the Experian data (around 100), the Delphi bands have been grouped into broader risk ranges.

**Figure 11: Risk level by customer status (existing n=1,060, new n=113)**



The data suggest that the pilot enabled the provision of trade credit to new customers that may previously have been unable to access credit owing to a poor credit rating, particularly from the other providers compared to the Majority Provider. However, with two-thirds of existing customers with below average risk levels (or better), and given this group accounted for the majority of businesses supported, the data has implications for the potential additionality and net effects of the pilot.

Notably, businesses with both an existing relationship with a provider, and a 'positive' credit rating (that is below average risk, or better) may have been able to access increased levels of trade credit in any case, including from other providers not involved in the pilot. Further, whilst over half (51%) of the businesses in the Experian data that were new customers had an above average risk level (or worse credit score), nearly as many (46%) had a 'positive' credit rating (below average risk, or better credit score). The data also suggest that the model, with one Majority Provider, is important in understanding the overall impact of the pilot as the evidence suggests that other providers were more willing to provide trade credit facilitated by the pilot to businesses with higher risk profiles.

## Other characteristics

Three more points are noted in characterising the recipient cohort, based on the findings of the survey of 210 recipients:

- Recipient firms were generally profitable, with over three-quarters of those recipients surveyed reporting that they made a profit in the last finance year; just 6% of recipients surveyed reported that they made a loss.
- Most had modest growth ambitions, with half (50%) of the recipients surveyed stating that they would remain the same size (in terms of employment, turnover) over the next two to three years, and 38% that they expect to grow moderately; just 5% of recipients surveyed stated that they expect to grow substantially in the next two to three years.
- Late payment of invoices by recipient firms (i.e. to their suppliers) was quite common, with one-third (34%) of those recipients surveyed reporting that they had paid invoices beyond the standard agreed terms in the past year.

## Comparisons of recipients to non-recipients

### Overview of the data

Alongside data on recipients, level data was purchased on a comparison group of 2,500 businesses with similar size and sectoral characteristics (and for whom information was available on trade credit usage) that had not been engaged in the TCEFG pilot. The characteristics of these groups have been compared in order to test the extent to which recipients of TCEFG may have been different to the wider business population.

The primary metrics used to ensure a match between the cohorts were sector and size. As the Table below shows, the two populations are well matched in terms of

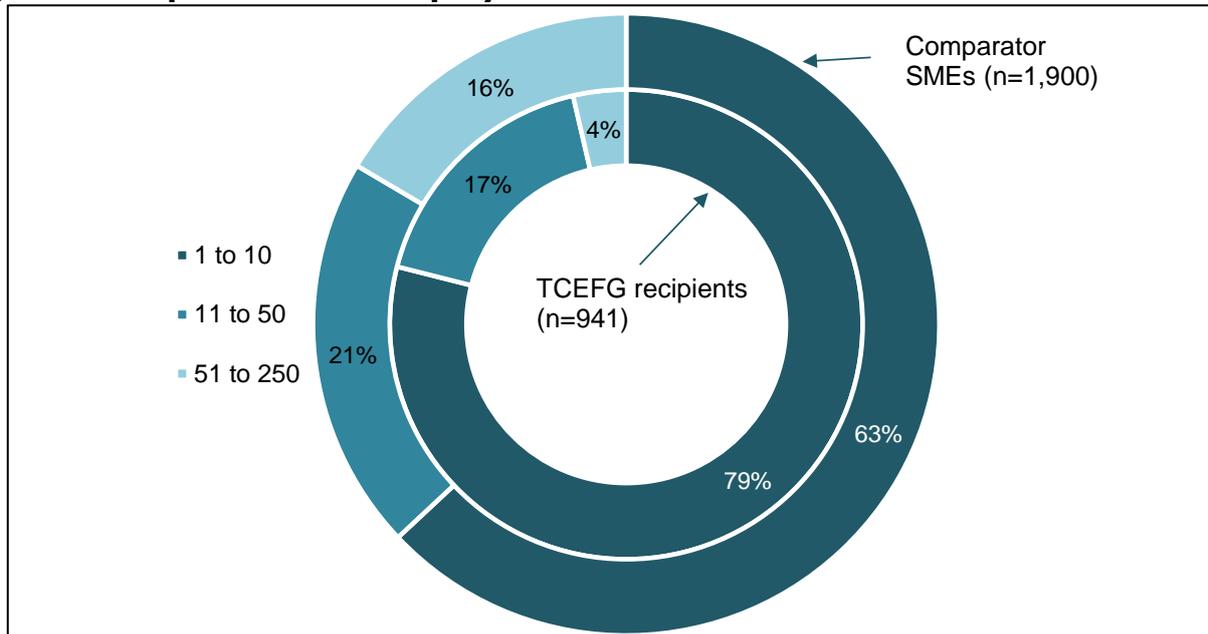
sector, with a slight over-representation in the comparator group of plumbing and electrical businesses, the two most common sectors in the recipient cohort.

**Table 9: Sector profile of recipients and comparator businesses**

Sector	Proportion of TCEFG recipients (n=1,496)	Proportion of Comparator SMEs (n=2,440)
Plumbing	34%	38%
Installation Of Electrical Wiring And Fittings	16%	18%
General Construction Of Buildings And Civil Engineering Works	11%	12%
Other Business Activities Not Elsewhere Classified	6%	6%
Joinery Installation	5%	5%
Other Building Installation	3%	3%
Other Building Completion	3%	3%
Retail Sale Of Hardware, Paints And Glass	2%	3%
Other Construction Work Involving Special Trades	2%	2%
Architectural And Engineering Activities And Related Technical Consultancy	1%	0%
Retail Sale Of Furniture, Lighting Equipment And Household Articles Not Elsewhere Classified	1%	1%
Other Service Activities Not Elsewhere Classified	1%	1%
Manufacture Of Ceramic Sanitary Fixtures	1%	1%
Other	13%	8%
Unknown	2%	0%

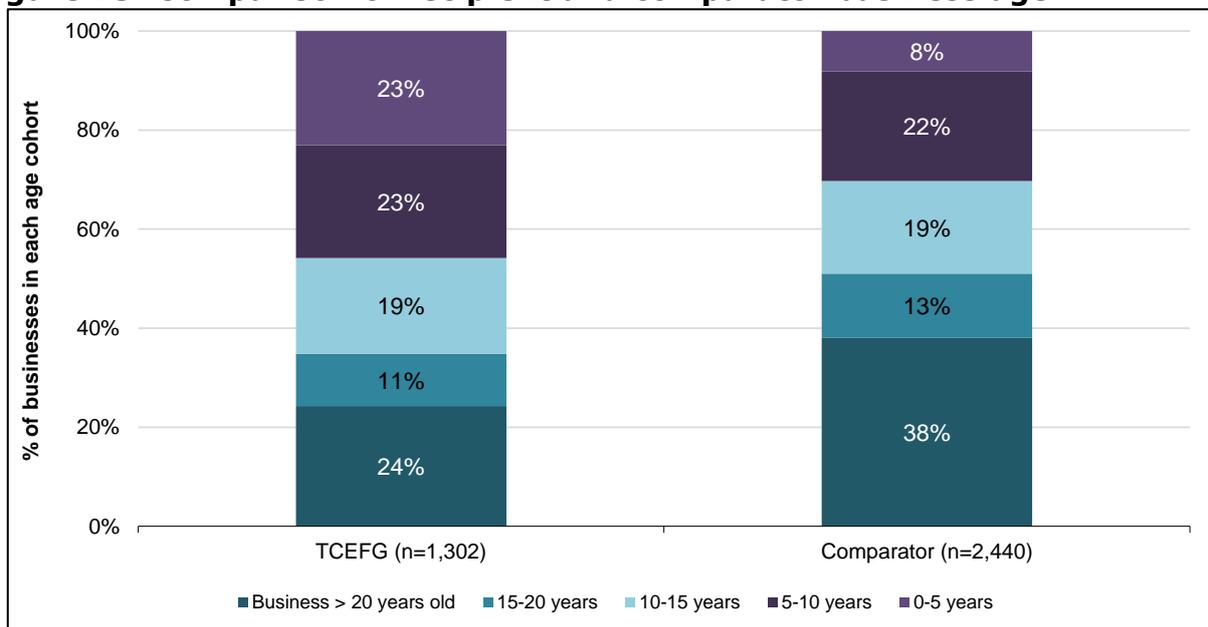
The non-recipient companies were restricted to SMEs. However, as set out in the Figure below, the non-recipients were on average slightly larger in employment terms than the recipients: 79% of the TCEFG pilot recipients for whom data were available were micro businesses enterprises, compared to 63% in the non-recipient cohort. This may suggest that recipients that secured trade credit facilitated through the TCEFG pilot are generally smaller than the wider business base. However, there may also be some bias in the data matching which sought to ensure that data was available on both employment and trade credit, with higher levels generally of missing values in smaller businesses. Given this issue, and the gaps in the recipient data (as discussed above), it is not possible to be definitive on this issue.

**Figure 12: Comparison of the TCEFG pilot recipient business employment size against comparator SME employment size**



The groups were also compared in terms of business age. As set out below, the TCEFG pilot recipients were generally younger businesses than non-recipients.

**Figure 13: Comparison of recipient and comparator business age**



Although there may again be some bias here, it is perhaps not unexpected that TCEFG recipients would be younger than the comparator group: with shorter credit histories, there may be an insufficient track-record for providers to assess trade credit applicants against, either in terms of credit rating or in terms of track-record with the provider itself, reducing the likelihood of these younger businesses being able to access trade credit, or enhancing the potential benefits to providers of extending trade credit in order to develop a relationship and build-up further information on the business. As such, whilst there needs to be some caution in drawing too much from

the data given the gaps in the monitoring information and matching, the data does suggest that businesses supported by the pilot may generally be younger than non-recipients.

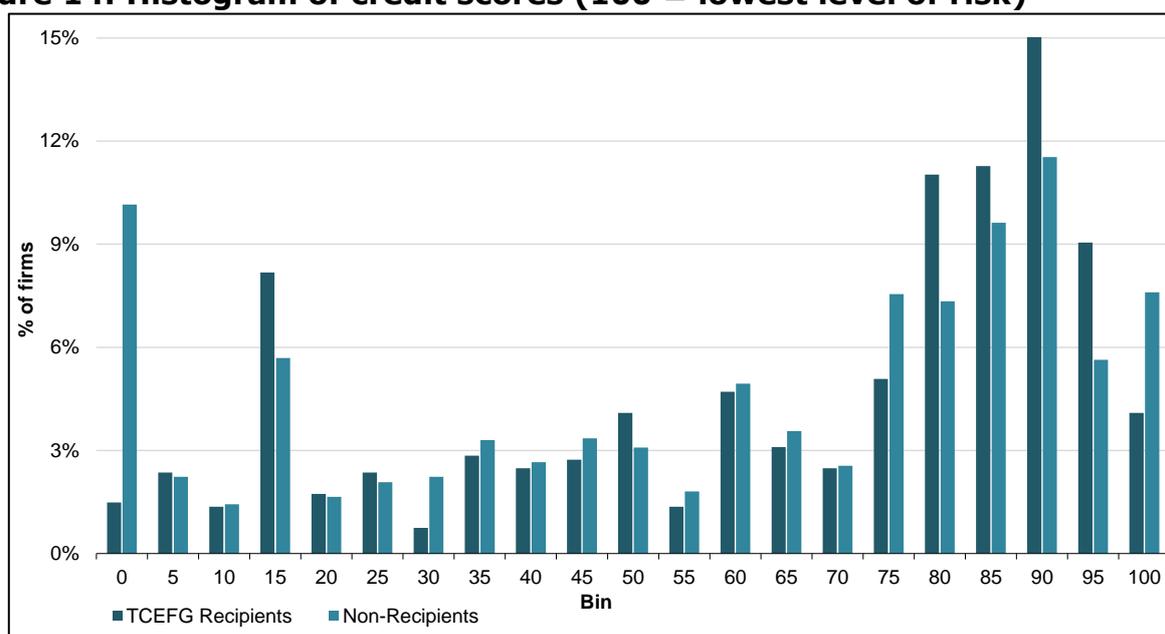
## Credit rating

As noted, a key element of the TCEFG pilot was to enable businesses to access trade credit that previously could not do so, due to their credit track record. To provide evidence on this, alongside the wider information from the survey and consultations, the data below compares the credit rating of the recipient cohort with the non-recipients.

To ensure that the analysis is robust – comparing as far as practical ‘like with like’ – we have compared the credit scores of those businesses from the recipient data where information was available on employment (around 940 cases) to an equivalent sample from the non-beneficiary data matched by employment size. Specifically, 79% of the recipient businesses had 1-10 employees, 17% had 11-50 employees, and 4% had 51-250 employees, so an equivalent sample from the non-recipient base of 2,500 has been identified to match this distribution, with businesses allocated by random within each group to provide an equivalent weighting of businesses by employment size. The comparator base for this analysis is therefore around 1,900 of the 2,500 businesses (given that there was a need to over sample businesses in the smallest group).

The distribution of credit scores are set out in the Figure below for the two groups, indicating that whilst the credit scores for the TCEFG recipients and comparator SME sample vary, both populations are skewed towards higher credit scores (and therefore lower risk profiles). Further, there is no significant difference in the distribution of credit scores of the businesses between the two groups. Indeed, the average credit scores for the two groups are closely aligned: the TCEFG pilot recipients have an average score of 64, and comparators have a score of 58.

**Figure 14: Histogram of credit scores (100 = lowest level of risk)**



Grouping the populations by Experian Delphi Band (see the Table below) reinforces the finding of no significant difference between the groups. Indeed, the proportion of the TCEFG pilot recipients with better than average credit ratings is slightly *higher* than for the comparator population (70% of the TCEFG pilot recipients, compared to 63% of Comparator SMEs).

**Table 10: Credit band profile of recipients and comparator businesses** <sup>21</sup>

Delphi Band	Proportion of Recipients from All Providers of the TCEFG pilot (n=807)	Proportion of Comparator SMEs (n=1,881)
Dissolved or Serious Adverse Information	2%	10%
Recent Winding-up Petition or Intention to Dissolve notice	0%	1%
Maximum Risk	12%	8%
High Risk	4%	4%
Above Average Risk	13%	15%
Below Average Risk	28%	28%
Low Risk	29%	21%
Very Low Risk	13%	13%

## Financial metrics

Further to the 'headline' credit rating analysis, using the business-level Experian data it is also possible to consider the difference between the TCEFG pilot recipients and comparator SMEs in terms of key financial metrics: namely, the asset to debt ratio and working capital position. This data used the same samples as above taking into account the size of businesses matched by employment.

In terms of the asset to debt ratio, the Table below suggests that the recipient and non-recipient businesses are well matched – there is no evidence that businesses that have made use of the TCEFG pilot are more indebted (relative to their asset base) than the wider business base (as indicated by the non-recipients).

<sup>21</sup> Note that credit scores were missing for a proportion of both groups

**Table 11: Asset to debt ratio of recipients and comparator businesses**

<b>Asset: Debt ratio</b>	<b>Proportion of Recipients from All Providers of the TCEFG pilot (n=515)</b>	<b>Proportion of Comparator SMEs (n=1,114)</b>
<1	1%	1%
1-2	35%	41%
2-5	33%	33%
5-10	14%	12%
10-100	14%	12%
>100	3%	2%

Similarly, the working capital position of businesses in the two groups is broadly consistent: around one-fifth (18% and 20% in the recipient and comparator groups respectively) had negative working capital in the latest Experian data. Whilst the optimum absolute working capital position will vary, the data suggest that the working capital profiles of the two groups relative to each other is broadly consistent i.e. there is no significant difference between businesses using and not using the TCEFG pilot.

It is worth noting that data on other financial metrics was purchased and reviewed. However, owing to the 'fill rate' of the Experian data (that is where not all financial information is available for all indicators) it was not possible to construct robust estimates on the two cohorts. Given the nature of the recipient cohort this is unavoidable, but it does limit the detail and scope of the analysis possible. Going forward, if the TCEFG is continued, the British Business Bank may wish to consider how data gaps on financial metrics could be filled through monitoring systems, both for the recipient base and potentially a comparison group as part of an on-going programme of evaluation including experimental or quasi-experimental approaches.

## Summary and implications for TCEFG

A number of implications for the TCEFG pilot and the evaluation are evident from the data and evidence set out in this Section:

- The TCEFG pilot recipients were not, in absolute terms, consistently 'high risk' in terms of their credit score, and many (indeed, from the data available) most had a below average risk score. This is not unreasonable, and the evidence indicates that other forms of information are used by providers in making decisions on trade credit applications and levels, but it does have implications for the finance additionality of the pilot in facilitating greater credit to businesses given they may have been able to secure this trade credit in any case from the provider, or from elsewhere.
- Related to this, in relative terms the recipients of the TCEFG pilot were not significantly different in terms of credit score than the non-recipient comparator

group. Given that many of the businesses supported through the pilot were existing customers of the providers this is not surprising, but again it has implications for the additionality of the pilot. Further, it does to some extent call into question the extent to which the rationale for intervention – to support trade credit in businesses that would otherwise not have been able to secure it – has been addressed consistently by the TCEFG pilot.

- Whilst some care must be taken in the comparisons given the gaps in the data and potential bias in the matching process in order to ensure that data was available on core metrics, the data suggest that recipients of TCEFG are generally younger than comparator businesses. This is consistent with the evidence from the literature that it is often the scale and availability of information on businesses (as much as credit rating) that determines whether or not trade credit is offered, and suggests that the pilot has been used (at least in part) to enable provider firms to gather more information on, and develop relationships with, younger businesses. The extent to which businesses have benefited from this approach is tested later in the report.
- However, the data also suggest that the overall financial profile of businesses supported by the pilot is not substantially different from the wider business base, or from comparator non-recipients. As such, whilst the TCEFG pilot may have supported businesses that are generally slightly younger than the wider business base, but in key respects related to credit ratings and financial performance they are not fundamentally 'different'. This is consistent with the evidence that in many cases the TCEFG pilot was used (particularly by the Majority Provider) to provide trade credit to existing customers.

## 5: Effects of the TCEFG pilot on recipients

### Key findings

- The overall scale of the effects of the TCEFG pilot for SMEs, both quantitative and qualitative, were modest, and in most cases recipients have not experienced substantive benefits.
- Survey respondents identified benefits in terms of positive effects on cashflow, improved relationships with providers, improved chances of securing trade credit in the future, and reduced business costs. But in all cases, these effects were evident for under half of the survey cohort.
- Effects on behaviours in terms of use of other forms of external finance, and increased/accelerated orders were again evident for some, but not for most, recipients surveyed.
- The survey evidence indicated that the TCEFG pilot led around one in five recipients to increase their purchase at the relevant provider, and in turn reduce their purchases elsewhere. At the scale of the pilot, effects on the wider market are small, but were the TCEFG pilot to be scaled-up and rolled-out the effect may be more substantial.
- The TCEFG pilot changed behaviours more where businesses were aware of the new/increased trade credit. This highlights the importance of raising awareness, and responding to genuine demand for new/increased trade credit from SMEs.

Set against the context above, this section sets out the findings of the survey of recipients completed by BMG Research. Surveys were completed with 210 businesses, of which 191 were from the Majority Provider; the data have been weighted to account for the proportion of businesses securing trade credit through the Majority Provider, with findings presented for the Majority Provider and All Providers respectively where appropriate.

The survey covered the full 'customer journey' from businesses' engagement with and awareness of the trade credit facilitated by the pilot, their use of trade credit and other forms of finance, the effects of the trade credit on their behaviours including purchasing of goods/materials and use of other forms of finance, and the potential effects of the trade credit on business performance.

### Engagement and understanding

As noted in the previous section, a majority of businesses that secured trade credit facilitated by the pilot were existing customers of the relevant provider. Consistent with this, the majority of recipients surveyed (65%, or 136 of the 210) reported that they had the new/increased trade credit 'allocated' to them by the provider. A far lower proportion 26% (55 of the 210) actively applied for trade credit. Given the delivery models and approaches to the pilot adopted by the providers this is not unexpected, although it does mean that levels of awareness of the trade credit

facilitated by the pilot (and therefore the use of it) may be low, and draws into question whether it was actually required. Evidence on these issues was assessed in the survey.

On levels of awareness, the survey indicated that the majority of recipients were *not* aware of the trade credit facilitated by the pilot prior to the survey: just 44% of all respondents were aware of their new or increased credit limit. Although the TCEFG pilot was communicated to all businesses in the relevant formal agreements, perhaps not unsurprisingly, knowledge that the trade credit was facilitated by the TCEFG pilot was even lower, at around one in ten of all those surveyed.

**Table 12: Awareness of trade credit and the TCEFG pilot**

Provider	% respondents aware received a new or increased credit limit	% respondents aware received a new or increased credit limit guaranteed by the TCEFG pilot
Majority Provider (n=180)	41%	11%
All Providers (n=210)	44%	12%

Following on from this, significant numbers of those surveyed felt that they did not need the trade credit. Of the businesses that stated that the trade credit was offered to them, or they did not know whether they applied or were offered (n=155), 69% stated that they felt that they did *not* need this extra trade credit (rising to 74% for the Majority Provider). Put another way, essentially half (107 of 210) of the businesses surveyed that received trade credit facilitated by the pilot felt that they did not need it.

For those businesses that did apply for the trade credit, the survey indicated that improving short-term cashflow/financial management was the most common factor, as shown in the Table below. Securing goods at reduced costs (through discounts or bulk purchases) and reducing reliance on other sources of finance were also common reasons for seeking new/increased trade credit. These motivations do align closely to the overall rationale and objectives of the pilot, and the literature on theories of trade credit. The extent to which these benefits were realised is discussed in greater detail below.

**Table 13: Reasons businesses applied for trade credit facility from Provider**

Motivation for application	Majority Provider (n=44)	All Providers (n=55)
To enable the servicing of specific contract(s)	21%	31%

Motivation for application	Majority Provider (n=44)	All Providers (n=55)
To enable the servicing of future potential contracts	32%	34%
To improve short-term cashflow or financial management	72%	69%
To develop a better relationship with the provider	28%	31%
To secure goods at reduced costs (e.g. through discounts/bulk purchases)	49%	53%
To secure better quality goods (e.g. enabling testing of product quality prior to payment)	30%	32%
Reduce reliance on other sources of finance (e.g. bank loans)	49%	45%
Convenient location	4%	6%
Other reason	30%	30%

Two final points from the survey are important in understanding the initial engagement with the pilot. First, consistent with the monitoring data set out in the previous section where the limits were regularly focussed at specific levels (notably £3,000 and £5,000), the survey indicated that where businesses did apply for trade credit they generally did not apply for a specific amount, rather they applied for trade credit facility, with the level then set by the provider: of those that applied (n=55), 64% did not apply for a specific amount (this was higher for the Majority Provider at 77%, of 44 businesses).

Second, the vast majority of recipients surveyed purchased goods/materials from a range of suppliers, including but not limited to the provider from whom trade credit was facilitated through the pilot. Specifically:

- of the 210 survey respondents 67% stated that they regularly purchased from four or more other suppliers, and a further 19% from three other suppliers.
- a similar proportion (64%) stated that under 20% of their purchases were from the provider in question in relation to the TCEFG pilot.
- in the majority of cases the business had trade credit agreements with these other suppliers, 88% of survey respondents had used trade credit from other suppliers in the previous year.

These data highlight the fact that the relative importance of the trade credit facilitated by the pilot is likely to be limited or modest in many/most cases, given that recipient

businesses already had relationships with a number of other suppliers from where they regularly bought the majority of their goods/materials.

Taken together, the survey data on the engagement of businesses with the pilot does somewhat call into question the appropriateness of the overall delivery model and approach adopted for the pilot (across the delivery network). Notably, most recipients supported by the pilot were not aware of, and as many as half did not feel they required, the trade credit that it facilitated, and most already had trade credit agreements with other suppliers. A more targeted and needs-based approach was possible, and these findings have implications for the levels of finance additionality and likely impact that can be expected of the pilot, including related to displacement. We return to these issues below.

## Trade credit and other finance

Providing evidence on the importance of trade credit as a source of finance to SMEs was an important element of the pilot, and an issue for testing in this evaluation.

Nearly all of the recipients surveyed (94%, 198 of the 210) had used trade credit prior to the pilot, and as indicated in the Table below, trade credit had commonly been used as part of a wider package of external finance, particularly alongside credit cards (business and personal) and overdrafts. However, it is notable that over one-fifth of recipients (21%, and 23% with trade credit from the Majority Provider) indicated that they had not used any other form of external finance over the past year, highlighting the importance of trade credit (along with cash in the business) as the main source of funding working capital for recipients.

**Table 14: Recipients using other forms of external finance in the past year**

	Majority Provider (n=180)	All Providers (n=210)
Loan - from a bank or other financial organisation	12%	15%
Overdraft facility	32%	30%
Business credit card	35%	36%
Personal Credit card (used for business purposes)	32%	30%
Invoice financing (e.g. factoring/invoice discounting)	5%	4%
Leasing and hire purchase	23%	23%
Loans from family/friends/ Directors	4%	7%

	Majority Provider (n=180)	All Providers (n=210)
Other	1%	0%
Have not used external finance in last year	23%	21%

Recipients were also asked to comment on the extent to which using trade credit in general (i.e. not tied specifically to the TCEFG pilot) reduces the need to use other forms of external finance. As set out in the Table below, around one-third of recipients stated that using trade credit reduced 'significantly' their need to use other forms of external finance, and a further 22% that it reduced it 'slightly'. Whilst for 43% of recipients trade credit had no perceived effect on the need to use other sources of finance, this suggests that trade credit can (and does) reduce the reliance on other forms of credit for SMEs in the construction/related sectors.

**Table 15: Recipients using other forms of external finance in the past year**

Effect of trade credit on use of other forms of external finance	Majority Provider (n=180)	All Providers (n=210)
No effect	44%	43%
It reduces it slightly	20%	22%
It reduces it significantly	35%	35%
Don't know	1%	1%

## Effects of the TCEFG pilot on recipient behaviour

The evidence on the scale and nature of effects of the pilot on recipient behaviour needs to be viewed in the context of the findings above; where, to re-cap, most recipients were not aware of the new/increased trade credit, and as many as half felt that they did not need it. Notwithstanding this, recipients were asked to comment on the extent to which the trade credit facilitated by the pilot had led to any changes in: purchasing behaviours at the provider and other supplier, and use of trade credit, and other forms of finance.

## Effects on purchasing behaviour

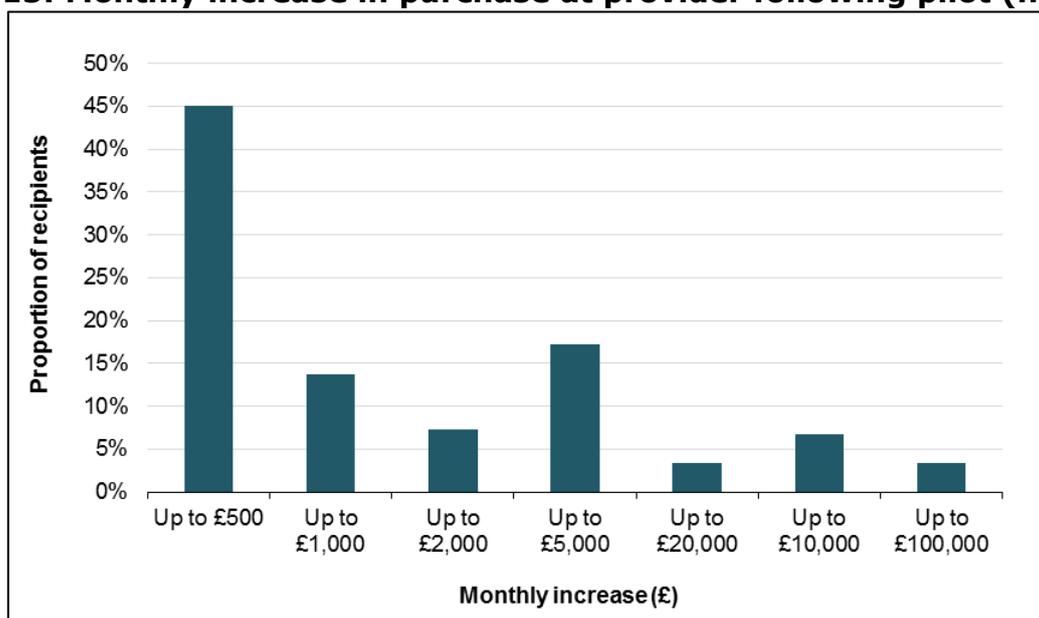
Around one-quarter (23%) of the recipients surveyed stated that the trade credit facilitated by the pilot had led to an increase in the value of purchases made from the provider, the corollary is that around three-quarters (76%) stated that it had not.

It is worth noting that the proportion of recipients that reported increased purchases from the provider from those that 'applied' for the trade credit was higher (28%) than those for whom it was 'allocated' (20%), although this difference is not statistically significant. However, as would be expected, increase in purchasing was significantly higher amongst those that were aware of the trade credit facilitated by the pilot: 32% of the recipients that were aware of the trade credit increased their purchases with the relevant provider, compared to 16% of those that were not aware<sup>22</sup>. This does suggest that raising levels of awareness of the trade credit facilitated granted amongst recipients should be a priority for any roll-out or successor to the pilot, although raising awareness could also result in greater use of the trade credit from the specific provider, leading to higher levels of displacement from other providers: as such, addressing both the awareness on the recipient side, and the breadth of the provider base on the delivery side is important.

Where increases in purchases from the provider were evident, the scale was generally modest, with the highest proportion of recipients indicating their purchases had increased by up to £500 per month, as shown in the Figure below. This may seem a small increase, although it is important to note that this is a monthly figure, on a per-business basis.

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<sup>22</sup> Recipients were asked whether they were aware of the new/increased trade credit facilitated by TCEFG at the relevant date prior to the survey. For those that said they were not, the subsequent questions on the effects and impacts of this trade credit were still asked. It is expected that being informed of this trade credit 'jogged the memory' of these respondents, meaning they were able to comment, for example, if they had increased their purchases from the provider after this date.

**Figure 15: Monthly increase in purchase at provider following pilot (n=48)**

Where recipients had *not* increased their purchases, the key reasons were principally owing to market demand factors (purchases had not increased because orders had not increased), business behaviour where they buy on demand and there was no need, and/or because despite the trade credit offered there remained lower cost or better quality goods elsewhere – these issues were not impacted directly the pilot.

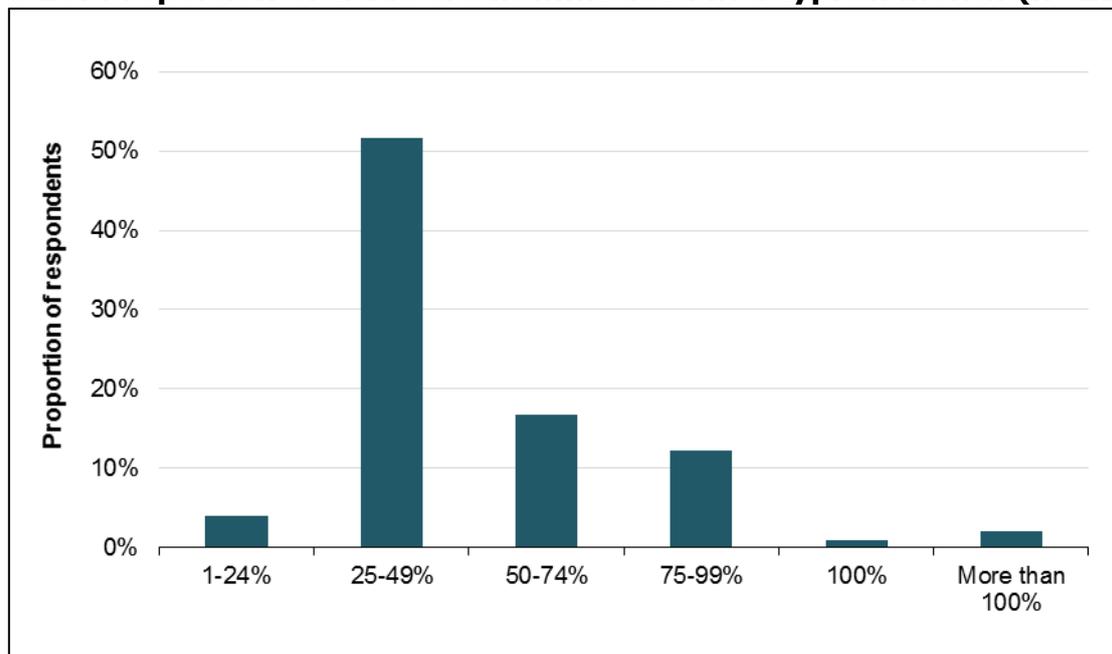
The survey also sought evidence on whether the trade credit facilitated through the pilot had led to reductions in purchases from other suppliers (in part to provide evidence on the displacement effects of the pilot, discussed in more detail in the next section). The findings here are interesting. On the one hand, a low proportion of respondents (7%) stated that they had stopped *completely* using any of their regular suppliers of goods/materials other than the relevant provider as a result of the trade credit facilitated by the TCEFG pilot – this is perhaps not unexpected given the trade credit and customers relationships established with suppliers not involved in the pilot. However, a more substantial proportion of respondents (18%, approaching 40 of the 210 businesses surveyed) stated that their purchases from other suppliers had *decreased* following the trade credit facilitated by the pilot. This data is consistent broadly with the 23% of respondents that noted their purchases had increased from the relevant provider, and does provide some evidence of market displacement impacting potentially on competitor firms to providers.

For those recipients that stated their purchases from other suppliers had decreased, this was most commonly around 20-30% of the value of these purchases. The aggregate scale of this is limited (with around 40 recipients reducing their purchases from elsewhere by around 20-30%), and is unlikely to be felt by large competitors (as found in the non-provider consultations reported on later). However, the findings do indicate that the TCEFG pilot, and increasing levels of trade credit, does have the potential to impact quite substantially on the purchasing behaviours of some businesses.

That said, consistent with the wider evidence on the number of other suppliers used by recipients and the relatively modest scale of goods/materials purchased from

providers engaged in the pilot, it is also worth noting that in most cases recipients of trade credit facilitated through the TCEFG pilot did not make use of the full credit limits offered. As set out below, over one-half of the survey respondents stated that they have generally used between 25-49% of their trade credit from the relevant provider in a typical month, with the availability of better quality/lower cost goods elsewhere again the most common explanation for not utilising the full amount.

**Figure 16: Proportion of trade credit limit used in a typical month (n=210)**



## Effects on use of external finance

It was reported above that trade credit in the round (that is from all providers, not just the trade credit facilitated through the pilot) was regarded in many cases (just over one-half of survey respondents) to reduce reliance on other forms of finance. The survey of recipients therefore tested the extent to which the trade credit facilitated through the pilot had in practice reduced the need for recipients to use other sources of external finance or credit.

A similar pattern to changes in purchasing behaviours noted above was evidenced here, with reduced reliance on other forms of finance/credit reported for a quarter (25%) of respondents, compared to no effect for over one-half, specifically 64% of cases (note that 10% stated that they had no need to call on other forms of finance). Again, as would be expected, the proportion of recipients that reported reduced reliance on other forms of finance/credit was significantly higher for those that were aware of the trade credit facilitated by the pilot (33%), than for those that were not aware of it (17%).<sup>23</sup>

<sup>23</sup> Again, these findings are based on the survey helping to 'jog the memory' of recipients, and reflect on their behaviours and circumstances at the time the trade credit was facilitated by TCEFG

For those recipients that reported a reduction in the need to use other forms of external finance, this was principally reducing the need for the use of credit cards (business or personal), loans and overdrafts, consistent with the overall use of external finance discussed above. Such a change is likely to have a financial benefit for the businesses in question, for example, reducing/preventing the incurring of interest charges – the scale of this is estimated as part of the impact assessment in the next section.

## **Effects on business performance**

The survey was also used to provide evidence on the wider effects of the trade credit facilitated through the pilot in terms of business performance and prospects, including cash-flow.

As noted above, where businesses applied for the trade credit facilitated by the pilot, the most common motivation was to improve cash-flow and short-term financial management. The extent to which the trade credit had led to effects on cash-flow was assessed in the survey. Consistent with the wider findings on the relatively modest effects of the pilot, effects on cashflow were not evident in the majority of cases. Specifically, 82% of respondents stated that the trade credit had no effect on their cashflow (85% for the Majority Provider), and just 15% of respondents stated that the trade credit had a positive effect on their cashflow, and in nearly all cases this was a 'slight' improvement (although this was more common for businesses that identified this as a motivation for applying for the trade credit).

However, the findings were more positive regarding the effects of the pilot on wider business performance measures, including improving the relationship with the provider, reducing business costs, and perceptions of improving the chances of businesses to secure trade credit from other sources in the future, as set out in the Table below.

Whilst in most cases the trade credit facilitated through the pilot has had 'no effect' on recipients, the data suggests that for a good proportion of recipients there have been positive effects to emerge from the TCEFG pilot, that have the potential to deliver benefits over the longer term through building relationships and a credit history. This is important given the evidence from the literature that information asymmetries between providers and customers seeking trade credit is a key cause of market failure.

**Table 16: Effects of trade credit facilitated through the pilot (n=210)**

	Negative effect	No effect	Slight benefit	Significant benefit
Growth prospects	2%	74%	16%	5%
Survival prospects	1%	70%	22%	5%
Improved relationship/ track record with provider	1%	60%	29%	9%
Reduced business costs	1%	65%	25%	7%
Access to better quality goods	1%	71%	21%	4%
Improved capacity to secure finance from other sources	1%	78%	15%	2%
Reduced business reliance on other external sources of finance	1%	72%	20%	5%
Improved chances of securing trade credit elsewhere in the future	0%	60%	24%	8%

*Note: table excludes don't know/not applicable responses*

Although not quantified here, there is also evidence that the TCEFG pilot helped to reduce business costs (for example, through discounts or bulk purchases, and potentially through reduced transactions costs), for around a third of survey respondents. Across the full population of 2,900 businesses, this would (indicatively) indicate around 900 businesses supported through the pilot seeing business costs reduced, with potential benefits for their productivity and competitiveness. Further evidence on the quantitative effects of the pilot, including estimates of the reduced costs through reduced reliance on other forms of credit, are discussed in the next section.

## 6: Impact and Value for Money assessment

### Key findings

- The TCEFG pilot was associated with modest finance and outcome additionality, estimated at around one half for the former, and one third for the latter, based on the recipient survey evidence.
- The overall net GVA contribution of the TCEFG pilot, through the enhanced sales that the trade credit facilitated, is estimated at £575k-£905k. Given c.2,900 businesses were supported, this impact is limited, driven in large part by most recipients identifying no quantitative effects.
- The **Economy** of the TCEFG pilot is judged as reasonable, given the volume of SMEs supported and range of providers engaged/managed. **Efficiency** is judged as limited, with a large cohort of SMEs involved to deliver a modest impact. **Effectiveness** is also judged as limited: whilst it facilitated new/increased trade credit, many recipients were not aware of, or did not need, this credit. A more targeted intervention focused on need may have been more appropriate, although this has implications for risk/cost of defaults, which may have affected the attractiveness for government and providers.
- The Benefit Cost Ratio for GVA impact against public expenditure is, at the time of writing, 'positive'. But over the longer term, should default levels increase as expected, the balance between costs and benefits may become increasingly marginal.
- The TCEFG pilot has provided useful learning for the British Business Bank on the potential for, and scope of, a trade credit intervention. In this respect, the pilot delivered against its 'learning' purpose.

This section sets out a quantitative impact assessment of the pilot based on the survey evidence and includes an assessment of additionality. It also provides an assessment of the Value for Money of the pilot in terms of Economy, Efficiency and Effectiveness and an indicative assessment of the benefit cost ratio of public expenditure.

### Potential routes to impact

This study has focused on estimating the impact of the TCEFG pilot through two routes:

- **Increased sales for recipient businesses:** suppliers who invest in their customers by financing their working capital through trade credit may benefit from their customers' survival and thus their continued requirement for goods, which may increase if the customer grows. Further, supply chain co-operation unlocks the borrowing power of supply chains, and the potential for businesses to service orders and contracts may be enhanced with a more secure (and in some cases increased) level of trade credit. We might therefore expect to see some changes in the volume of sales across the supply-chain. These effects have been estimated

through evidence on the volume of orders/contracts secured by recipients, and self-reported evidence on whether these contracts would have been secured in any case. In theory it would be possible to identify these effects on sales at the providers, but this is likely to be subject to high levels of displacement which would be more difficult to assess.

- **Cash flow management and financing costs:** as noted above, the pilot has in some cases helped customers to manage their cash flow more effectively by instilling greater predictability, and it has also led to reduced costs and a reduced reliance on other forms of finance such as loans, overdrafts and credit cards that involve financing costs. Quantifying these effects is complex and will vary on a business-to-business basis depending on their own financial circumstances. To provide an indicative quantitative assessment we have estimated the potential costs saved through lower credit financing costs based on evidence from the survey and market data on the costs of borrowing. The authors note that these financing cost savings (to beneficiaries) represent a loss to other finance providers, and so they are a transfer payment (and excluded) when considering overall net benefits. Nevertheless, as benefits to the direct and intended beneficiaries, they are important to evidence.

In both cases the impact assessment takes into account the net effects of the pilot through evidence on additionality, which has been drawn from the survey evidence.

## Evidence on gross outcomes ...

### Sales of recipient businesses

The survey of recipients asked businesses to identify: the extent to which the trade credit facilitated by the pilot had enabled their business to secure or service new orders or contracts that would otherwise have been lost to the business; whether they expected to secure or service orders in the next 12 months that would have been lost to the business; and separately whether the trade credit facilitated by the pilot enabled their business to secure or service orders or contracts more quickly than would otherwise have been the case.

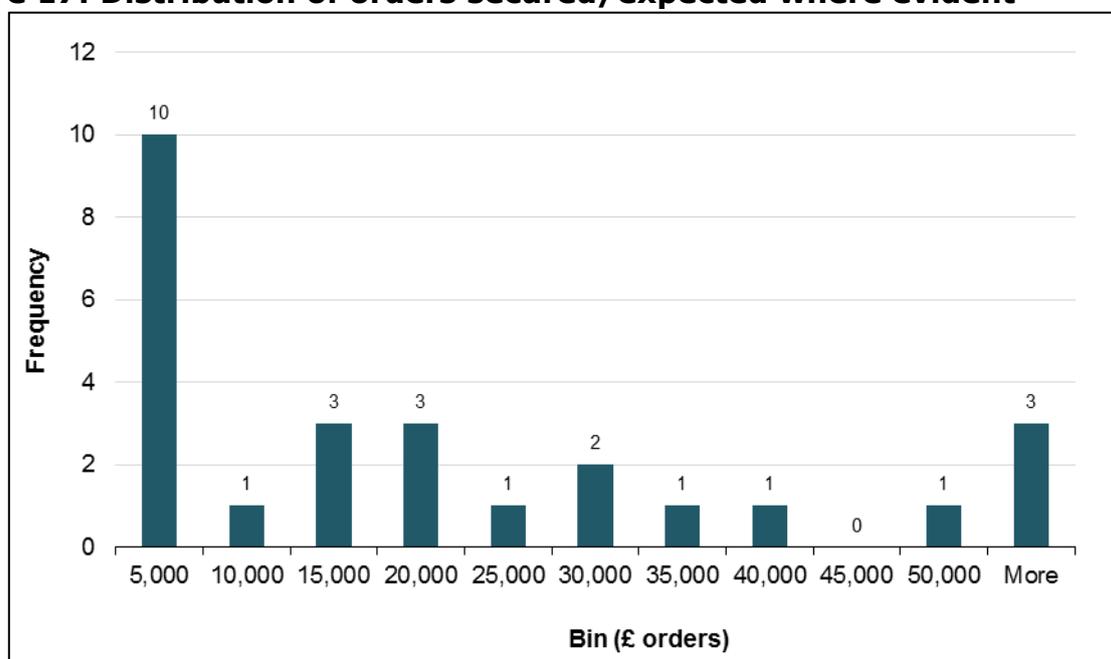
The headline findings are set out in the Table below. Under one in ten (8%) of the 210 businesses surveyed reported that the trade credit facilitated through the pilot led to new orders or contracts that would otherwise have been lost to the business. A higher proportion, reported that they expected to secure new orders in the future, and 17% that they had been able to secure orders more quickly.

**Table 17: Proportion of survey respondents identifying effects on orders**

	Majority Provider (n=180)	All Providers (n=210)
New orders secured	7%	8%
New orders expected	14%	15%
Orders more quickly	16%	17%

Although the majority of the businesses surveyed saw no effects on orders as a result of the trade credit facilitated through the pilot, for those that did, around a half (n=26) were able to provide quantitative estimates of these effects. The distribution of the aggregate value of the orders reported by these businesses is set out in the Figure below: in approaching half of cases the aggregate value of the orders was up to £5,000, but in a number of cases it was higher, up to and in a number of cases over £50,000, which is significant given that the majority of businesses had annual turnover of less than £500k. One business reported aggregate new/expected/accelerated orders of £190,000.

**Figure 17: Distribution of orders secured/expected where evident**



A further group of businesses that stated there were effects on orders but could not quantify these effects. As such to identify an aggregate figure from the survey in order to gross up the findings – but not to discount these businesses where data was not provided – the average effect on orders (for new, expected and accelerated respectively) has been applied. This provides an estimate of the aggregate effect of the TCEFG pilot from the survey cohort of:

- £207k of orders secured/serviced achieved (based on effects for 16 of the 210 surveyed businesses)
- £688k of orders secured/serviced expected in the next 12 months (based on effects for 32 of the 210 surveyed businesses)
- £428k of orders secured/serviced more quickly (based on effects for 36 of the 210 surveyed businesses).

These data have then been grossed up to the beneficiary population as a whole (the 2,915 recipients) to provide an estimate of the total scale of the gross impact of the TCEFG pilot on the orders secured/serviced by recipient businesses. Note that for the purpose of the grossing-up we have removed the major outlier that reported £190,000 as this skews quite substantially the average effect per businesses. The findings are set out in the Table below providing an estimate of around £1.25m of new orders secured, £7.9m of new orders expected to be secured, and £5.3m of orders accelerated.

**Table 18: Estimated gross orders secured/expected/accelerated across the recipient population**

	% survey reporting effects	Av effect where experienced (£)	Number of all recipients experiencing (n=2,915)	Value of orders from total population (£)
New orders secured	8%	5,500	227	1,250,600
New orders expected	15%	17,900	441	7,878,100
Accelerated orders	17%	10,500	502	5,280,600

*Note: Effects data rounded to nearest 100*

Three points are important here:

- First, the scale of expected orders is substantially higher than orders secured; this may reflect in part the time paths to impact (with businesses continuing to benefit from the new/increased trade credit at the time of the survey), but also optimism bias on the part of respondents. Assuming optimism bias of 20% on the value of expected orders results in a revised estimate for new orders expected of £6.3m.
- Second, the orders accelerated are just that, orders that would have occurred in the future but were brought forward as a result of access to trade credit facilitated by the pilot.
- Third, we have grossed up to the total number of beneficiaries, though there may be a degree of non-response bias which we cannot quantify.

The data are also gross – an assessment of the net impacts taking into account self-reported additionality is provided below.

## Cash flow and credit financing costs

As discussed in the previous section, a quarter of the respondents to the survey stated that the trade credit facilitated through the pilot had led to a reduced reliance

on other forms of external finance, principally in reducing the need to use credit cards (business or personal), loans and overdrafts.

Quantifying this effect is challenging given the variation in the costs of different financial products. However, to provide an indicative assessment (gross) of the impact of this, we have estimated the scale of new/increased trade credit facilitated by the pilot that was used by respondent businesses (this is based on the proportion of the credit limit used on a monthly basis), and used this evidence to estimate what the cost of financing this level of credit would have been through other forms of finance.

For example, where the increased trade credit facilitated by the pilot for a business was £3,000, and they reported they use 1-24% of this limit each month, assuming a mid-point of 12.5%, this equates to £375 of trade credit. Assuming this finance would have been required in any case, the cost of financing is estimated by applying a 7% interest rate. FSB (2012) indicates an average cost of bank finance of 7%, which provides a realistic assumption for the cost of finance had businesses been using credit cards/overdrafts or other external financial products.

The total estimated financing costs from the survey cohort applying this method is around £6,200, based on the 50 businesses that reported reduced need to use other forms of finance. This equates to an estimated per business effect (where there was a reduction in the use of other forms of finance) of around £118 per annum. Grossing this up to the recipient population as a whole provides an estimated total reduced cost of financing of £86,500 (for one year).

## Other potential impacts of the pilot

Two other potential routes to impact were assessed through the survey: whether the trade credit facilitated by the pilot (and the orders that this helped to secure) impacted on employment in recipients; and whether it led to changes in the trade credit terms offered by recipients to their own business customers, and therefore may have had effects down the supply chain.

In terms of employment, the effects were modest – of the respondents that identified effects on orders (n=37), three-quarters stated that they would have the same number of employees now if these orders had not been secured. One-quarter (in aggregate terms, under 10 businesses from across the sample of 210) stated that they would now have fewer employees if it was not for the orders secured/expected/accelerated as a result of the trade credit facilitated by the pilot, and where evident this was a small number (generally one or two employees). As such, the survey evidence suggests that the employment effects of the pilot were limited; this is not unexpected, and employment creation (or safeguarding) was *not* a stated objective of the intervention.

In terms of effects on supply chains through changes to the trade credit offered by suppliers, the effects were equally modest. Of the 210 businesses surveyed, 51% (107) stated that they sell to business customers, and around one-half of this group (58) stated that they offered trade credit to their business customers. It is worth noting that over two-thirds of businesses when probed stated that they offered trade credit as it is an 'expected part of doing business'. Of those that offered trade credit to business customers, most (45) offered trade credit *before* securing the trade credit

facilitated by the pilot. For this group the survey assessed whether or not the trade credit facilitated by the pilot had led to any changes in their offer to their own customers. However, the vast majority (87%, 39 of the 45) stated that the trade credit facilitated by the pilot had no effects on the scale, scope or nature of the trade credit offered to their own customers.

Two other points are noted:

- As indicated above, the survey indicated a small group of recipients that did not offer trade credit to their business customers prior to the TCEFG pilot but did do so after it. Given timing, the survey did not explicitly assess whether these businesses started to offer trade credit because of the TCEFG pilot, although it is possible that this may have been evident in some cases as a result of demonstrator effects and/or because the trade credit helped to improve their cash flow position.
- Although a relatively modest sample, it is worth noting that the survey suggests that most of the recipient businesses surveyed that offered trade credit to their own customers were net providers of trade credit i.e. they were owed more in trade credit at the time of the survey than they owed themselves. This is consistent with the evidence from the literature review and the Experian data on non-recipients, where the average level of credit owed to the business was higher than the level of credit they owed to their own creditors.

### **... and additionality**

The data above have set out the findings on the gross impacts of the pilot. It is necessary to account for additionality i.e. what would have happened 'anyway' if the trade credit facilitated by the pilot had not occurred. As discussed in Section 2, given the timing and nature of the evaluation, the assessment of additionality is based principally on self-reported evidence from the survey of recipients. Two types of additionality were probed for:

- finance additionality, based on recipient perspectives on whether they would have received the trade credit without the pilot, referring back to the evidence discussed above on whether the new/increased trade credit was needed; this element of additionality also draws on the qualitative evidence from consultations with providers
- outcome additionality, based on the orders secured/accelerated as a result of the trade credit, and recipient views on whether these would have been secured in any case.

### **Finance additionality**

Recipient businesses were asked whether, in their view, they would have secured the trade credit from the relevant provider in the absence of the pilot, and the guarantee from the public sector. The findings are set out in the Table below, evidencing a wide range of views, although approaching one-half felt that they probably or definitely would have secured the trade credit in any case.

**Table 19: Recipient views on whether trade credit facilitated by the pilot would have been secured in any case**

	<b>Majority Provider (n=180)</b>	<b>All Providers (n=210)</b>
Yes, definitely	15%	14%
Yes, probably	34%	34%
Possibly	19%	18%
Probably not	14%	15%
Definitely not	6%	6%
Don't know	13%	14%

It is worth noting that the level of self-reported finance additionality was consistent generally between beneficiaries in terms of the scale of trade credit facilitated by the pilot, and awareness of the trade credit prior to the survey.

**Table 20: Recipient views on whether trade credit facilitated by the pilot would have been secured in any case – by scale of trade credit and awareness**

	Level of trade credit facilitated by the TCEFG pilot		Awareness of new/more trade credit pre-survey	
	Up to £3k (n=125)	Over £3k (n=73)	Yes – aware (n=92)	No – not aware (n=110)
Yes, definitely	14%	15%	14%	15%
Yes, probably	33%	35%	34%	32%
Possibly	20%	15%	16%	18%
Probably not	17%	13%	15%	15%
Definitely not	5%	9%	8%	4%
Don't know	11%	13%	13%	16%

Alongside the views of a number of recipients that believed that they would have received trade credit anyway, it is worth noting that 95% of recipients surveyed stated that they had not been denied a request for trade credit in the past three years, from the relevant provider under the pilot or other suppliers of trade credit. The findings in the table above are self-reported, however, and based on recipient perspectives on the likelihood that they would have secured equivalent trade credit in any case; they should be regarded as illustrative only. In particular it is important to note in the case of the TCEFG pilot that beneficiaries have less visibility and awareness of the role of the government guarantee. Notably providers themselves reported higher levels of finance additionality, with key findings as follows:

- For the smaller providers operating under the BMF scheme, the reported finance additionality of the pilot was high, with a consistent message from the (albeit limited number of) consultations that without the pilot trade credit would not have been offered. For example, one consultee at a provider working through the BMF stated that a 'massive percentage is additional, and Trade Credit would not have been given without the scheme or to a lower amount'; a separate consultee stated that they 'could not have offered additional credit through any other means.'
- For the larger providers (including the Majority Provider) the picture is more mixed, with a greater recognition that some of the trade credit may have been offered in any case, although the overall level of finance additionality – from the provider – was still reported to be high. For example, one consultee estimated that three-quarters of the new/increased limit facilitated would not have been provided

without the pilot, and another that 'on the whole, businesses that benefited from the pilot would not have been offered credit' without it.

Overall, the evidence suggests that the pilot has been associated with a degree of finance additionality. However, two other points are important. First, as we saw above, around one-half of the businesses surveyed reported that they did not in fact need the trade credit facilitated by the pilot (and many did not know that it was available to them). So whilst the trade credit may have been additional in financial terms (that is, it would not have been offered without the pilot), in many cases it was of no practical value to the recipient. Second, even if they had needed the trade credit, given the credit ratings of many of the businesses supported and their existing relationships with other providers/suppliers of trade credit, it is likely that at least some of the trade credit would have been secured from other sources.

Quantifying this finance additionality is challenging, and should be regarded as indicative only. For the purposes of the assessment of net benefits below, an additionality ratio of 0.52 has been used for converting the reduced credit costs impact from gross to net, based on the 48% of survey respondents that stated they probably or definitely would have secured the trade credit facilitated by the pilot in any case, i.e. the finance was non-additional for 48% of respondents. As we have seen above, this ratio is consistent across the survey cohort when assessed by provider, by scale of trade credit secured, and by awareness of the trade credit prior to the survey.

This additionality ratio can also be used to estimate the net value of trade credit facilitated by the TCEFG pilot. As noted in Section 4, the aggregate value of trade credit limits guaranteed by the pilot was c £14m: applying the finance additionality ratio indicates an estimated £7.3m of additional trade credit limits facilitated by the pilot (note this does not account for market displacement). This equates to an average of £2,500 of additional trade credit limit per business (whether or not this was in fact utilised).

## Outcome additionality

Recipient businesses that reported that they had secured new (both achieved and expected) or accelerated orders as a result of the trade credit facilitated by the pilot were asked to identify the extent to which they would have secured these orders in any case without this support.

As set out below, over one-half of respondents (27 of the 47), stated that they would have achieved the orders anyway. By contrast, just 6% of the businesses (in aggregate terms under five) stated that they definitely would not have secured the orders.

**Table 21: Self-reported outcome additionality**

	<b>Majority Provider (n=36)</b>	<b>All Providers (n=47)</b>
Would have achieved the same sales/orders anyway	47%	57%
Would have achieved some but not all of the sales/orders	29%	22%
Probably would not have achieved the same level of sales/orders	16%	15%
Definitely would not have achieved the same level of sales/orders	8%	6%

Recipient businesses were also asked to identify whether for new orders (achieved or expected), the trade credit facilitated by the pilot has helped (or is expected) to bring these forward i.e. that the pilot delivered speed additionality. For the businesses where this was evident (n=37), just over one-half (54%) indicated that speed additionality was evident (it was not evident for the other 46%). Whilst this is a positive finding, the orders were generally brought forward by no more than a month. This could be helpful for the businesses in terms of cashflow and utilisation/planning, but means that the overall economic impact was limited.

The survey evidence suggested that the scale of outcome additionality from the pilot was relatively low. Given the wider evidence from the survey and consultations this is not surprising – as we have seen, recipients generally utilised a range of suppliers to purchase goods/materials, limiting the potential for the providers involved in the pilot to impact substantially on the behaviours of recipients. Further, orders – both in terms of timing and scale – are dependent on market demand, which we have seen has limited the potential effects of the pilot and cannot be addressed by the TCEFG intervention.

Again, quantifying this additionality is challenging, and should be regarded as indicative only. For the purposes of the assessment of net benefits below, an additionality ratio of 0.3 has been used for converting the orders secured/accelerated from gross to net. This is based principally on the 21% of survey respondents stating that they would probably or definitely not have secured the orders (i.e. 0.21 was additional), but also accounting for businesses that identified speed (n=20) and/or scale (n=10) additionality.

## Impact and Value for Money

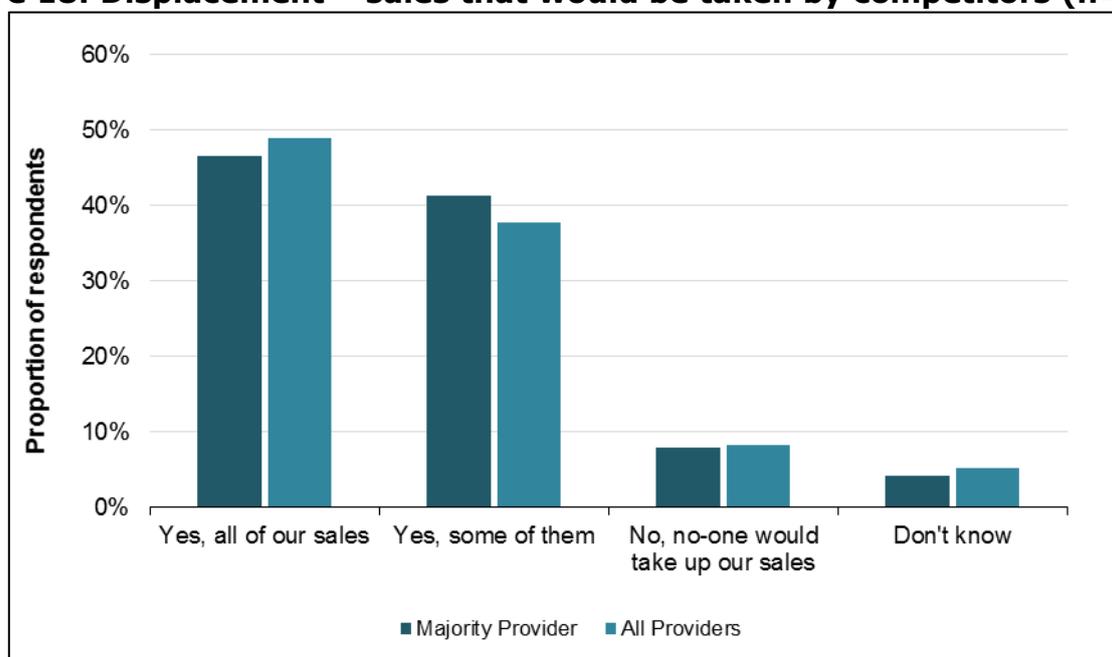
With the quantitative and wider qualitative effects identified, it is possible to provide an overall quantitative assessment of the net effect of the pilot, and reflect on the wider Value for Money.

### Net outcomes

The quantified net outcomes of the pilot have been derived by converting the gross effects identified above to net using the additionality factors identified above. However, two further factors have also been accounted for: displacement and multiplier effects.

Given the nature of the recipient cohort (focused on construction and related trades), the likely level of displacement on the orders was found to be high. The survey found that around 80% of recipients' sales were accounted for by customers in their local area (within 20 miles), with the remainder principally in their wider region. Further, as set out in the Figure below, the vast majority of respondents expected that were they to cease trading, competitors would take all (49%) or some (38%) of their sales within a year, with sales taken by equivalent small/medium sized businesses that were also operating in local markets. Given the location and nature of competitors, a displacement effect of 68% has been applied, based on the proportion of businesses that stated that all of the sales would be taken by competitors (49%), plus the proportion of businesses that stated some of their sales would be taken (38%) multiplied by 0.5.

**Figure 18: Displacement – sales that would be taken by competitors (n=210)**



Multiplier effects will act as a countervailing force to displacement for the economy as a whole, with the sales and benefits generated for recipients working through the supply-chain to other businesses (indirect multiplier), and through income effects (induced multiplier). Previous evidence shows that construction has a high multiplier effect – for example, Scottish Government analysis indicated a composite multiplier

for construction of 2.19<sup>24</sup>, and Oxford Economics at 2.7 at a UK level.<sup>25</sup> To account for the non-construction businesses (and given the sector multipliers will take into account the effects of large-scale construction activities not relevant to the pilot), we have applied the 'high' regional ready reckoner from the latest HCA Additionality Guide of 1.7.<sup>26</sup>

The findings of this analysis are set out in the Table below, derived by applying the outcome (for orders) and financial (for credit savings) additionality ratios to the gross impact data, followed by the displacement factor of 68% (i.e. 0.32 non-displacing) and the multiplier ratio of 1.7.

This provides an overall estimate of £2.4m in net orders/sales and credit finance savings generated by the TCEFG pilot. This includes the accelerated orders that may have occurred at some point in the future without the trade credit facilitated by the pilot, but the timing and certainty of this is not known, as such for the purposes of the assessment they have been included in the aggregate impact assessment. Excluding the accelerated orders the net impact is around £1.5m. The net impact on credit finance savings is £25,000.

**Table 22: Net outcomes of the pilot in terms of orders and credit costs**

	Gross impact (£k)	Net impact (£k)
New orders – achieved	1,326	218
New orders - expected (inc optimism bias)	7,953	1,305
Accelerated orders	5,321	873
<i>Total orders</i>	<i>14,599</i>	<i>2,396</i>
Credit finance savings	86	25
<i>Total</i>	<i>14,686</i>	<i>2,420</i>

*Note: the gross data include the information from the outlier excluded from the grossing-up analysis*

<sup>24</sup> [www.scotland.gov.uk/Topics/Statistics/Browse/Economy/Input-Output](http://www.scotland.gov.uk/Topics/Statistics/Browse/Economy/Input-Output)

<sup>25</sup> [www.homesandcommunities.co.uk/sites/default/files/aboutus/additionality\\_guide\\_2014\\_full.pdf](http://www.homesandcommunities.co.uk/sites/default/files/aboutus/additionality_guide_2014_full.pdf)

<sup>26</sup> *ibid*

Based on National Statistics data, Gross Value Added (GVA) in the Construction sector (as the best sector fit) on the latest data was 38% of turnover. Applying this average to the net impact on orders (the impact resulting from savings associated with the cost of credit are excluded when considering the overall GVA benefit to the economy<sup>27</sup>), provides an estimated net GVA impact of the pilot of:

- £906,000 net GVA for all orders/sales
- £576,000 in GVA for new/expected orders/sales (excluding accelerated orders).

Given the focus of the pilot, its delivery model (including levels of awareness and providing credit to existing customers), and the evidence from the survey on its importance and contribution relative to other forms of finance used by recipients – the overall scale of impact is modest. Further, given the reliance on self-reported information, the findings should be regarded as indicative.

## Value for Money

Value for Money (VfM) is a key consideration for evaluation studies: it establishes the relationship between the inputs (made typically, but not exclusively, by the public sector), and the economic returns secured as a consequence. The assessment of Value for Money is based on the 'Three Es' – Economy, Efficiency and Effectiveness. Respectively, these are:

- **Economy** – the extent to which project outcomes have been achieved for the minimum cost input, including with the minimum deadweight in funding.
- **Efficiency** – the costs with which outputs/outcomes (gross and/or net) have been delivered
- **Effectiveness** – the extent to which the objectives defined at the outset have been realised in practice.

It is important to note that at this stage any assessments of Value for Money can be indicative only as the full cost of the pilot is not yet known. Robust forecasts from future premium income and claims were not available at the time of writing. As such, the costs may increase over the next few months as providers make further claims on any defaults, with an end date for all pilot activity in March 2015.

At the time of writing the income secured from the premiums agreed was around £74,000, higher than the payments made to cover defaults, at £33,000, although this is subject to change and the British Business Bank expects that ultimately the payments to cover defaults may be substantially higher.

## Economy

Economy assesses the extent to which the activity supported by the pilot has been delivered at the minimum amount of cost input. Given the nature of the intervention, with the public sector providing a guarantee on any trade credit defaults rather than directly providing grants/loans or other forms of finance, and with the scale of

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<sup>27</sup> Credit finance savings are a transfer cost, so finance providers will lose the value – as such these impacts cannot be included as an economic benefit in the GVA assessment

payments made not yet known, the principal costs expended to date are on the management and administration of the pilot.

Data provided by the British Business Bank indicates that the cost of establishing and managing the pilot over the period from its initial development through to September 2014 was £264,000. This covered legal and audit costs, and staff costs at the British Business Bank. Given the breadth of the pilot – with over 2,900 businesses supported, operating across a range of providers, and including the umbrella agreement with the BMF – the Economy aspect of the pilot at this stage appears to be reasonable.

## Efficiency

Efficiency represents the cost associated with the achievement of net outputs and outcomes. The pilot did not have any formal stated outputs or outcomes, it was focused on facilitating the provision of additional trade credit to businesses, with the scale and scope of this determined largely by the providers. As such, there are no specific 'cost per' metrics; this issue is exacerbated by the fact that the true overall cost of the pilot is not yet known.

That said, two related points are made on the Efficiency of the pilot:

- the survey indicated that for a high proportion of recipients the pilot did not lead to any outcomes, be these quantitative or qualitative; the factors and drivers underpinning this have been discussed in detail above, but this does mean that much of the trade credit facilitated by the pilot was essentially of no value to recipient businesses – whilst the costs expended to date are not high, with no 'return' this does not offer positive value for money to the Exchequer.
- second, and related to this, where benefits were evident the most substantive effects appear to be in terms of promoting better relationships between providers and recipients, and in enhancing the long-term potential for businesses to access trade credit – these are important and positive effects, but the scale and complexity of intervention developed to generate them (with around a third of recipients reporting these effects) again does not indicate an efficient intervention.

Overall, the Efficiency of the pilot is limited, with a relatively large number of businesses involved in the pilot to deliver a relatively modest set of outcomes. For individual recipients – and providers as discussed in the next Section – in some cases the effects may have been important, but from an overall economy and policy perspective they are modest, and evident in only small numbers of the recipient cohort. A more efficient intervention – focused more specifically on the needs of businesses – may be possible.

## Effectiveness

Effectiveness represents the extent to which the stated objectives of an intervention are being achieved through the outputs and outcomes that it is generating. Focusing on the 'external' facing objectives of the pilot, three points are made:

- In terms of delivering additional finance and credit to SMEs, the evaluation suggests that the pilot has been effective in some cases, with evidence that it has facilitated new or more trade credit for recipients. However, this needs to be set against the high proportion of recipients that were not aware of, or reported that

they did not need, this trade credit and also the limited effects of the pilot on improving cashflow.

- In terms of delivering benefits to businesses, again the survey suggests that the evidence is modest – this does not mean that trade credit is not an important source of finance for SMEs (it is). However, the intervention to facilitate its use could be based more on demand and need. As noted above, where recipients were aware of the trade credit facilitated by the pilot (i.e. evidence that the pilot was meeting genuine demand), its effects on behaviours were more pronounced.
- Whilst the pilot facilitated credit in some cases, recipient SMEs utilised a wide range of suppliers for purchasing goods and made use of a range of sources of external finance. Interventions that free-up credit from one element of this mix are likely to be somewhat limited in their impact, and given this context the limited scale of the effects of the pilot are not unexpected. Again, a more targeted intervention, that focused on where businesses genuinely need to access additional trade credit (and would not get it from a provider without government guarantee) in order to meet orders or improve business performance could have potentially led to a more substantive impact. This is not without challenges. In addition to designing in this targeting, it has potential implications for risk and the cost of defaults, which may affect the attractiveness and viability for government and providers.

This said, the pilot has provided useful learning for the British Business Bank on the potential and scope of a trade credit intervention, indicating that a revised approach is needed if the scheme is to be continued going forward. In this respect, the pilot has served its purpose and delivered effectively on its learning intent.

## Benefit Cost Ratio

Finally for this section, we comment on the overall value for money of the pilot in terms of a Benefit Cost Ratio (BCR). The BCR presented for the pilot compares the net economic benefit (that is, the net GVA) to the level of public investment i.e. a 'Net economic benefit per exchequer pound' BCR.<sup>28</sup>

With the full costs of the pilot not yet available this BCR assessment is indicative only, and includes a range of estimates covering comparisons of the impact estimated by the evaluation against expenditure to date and two future scenarios on costs. These two scenarios draw on indicative estimates by the British Business Bank that the potential payments could ultimately be either 7.5 or 15 times as high as premium income received, if defaults start to increase and claims are made in full by providers. The latter would represent a 'worst case' scenario.

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<sup>28</sup> Two other standard BCR measures are used by Government: a 'societal' BCR that indicates the social return on investment made by society, including costs incurred by both the Government and the private sector, and a 'Public Money' BCR that indicates the benefit per pound of government spending. Both include the costs of the intervention to the private sector. Estimating the full costs to the private sector of delivering the TCEFG pilot was not feasible for this evaluation, with the costs including both the direct costs associated with trade credit (including defaults, payments, and associated financing costs) and indirect costs (including staff time for management and administration of delivery, and initial set-up costs)

The data are summarised in the Table below, indicating a positive BCR (that is impacts greater than expenditure) against current expenditure; and the BCR remains positive under a scenario where claims increase to around £0.5m. However, if defaults were to increase to the 'worst case' the BCR would turn negative i.e. the costs would exceed the impacts generated. The 'break even' point would be where the total cost was approximately £900k.

**Table 23: Benefit Cost Ratio (BCR) for the TCEFG pilot**

	<b>Expenditure to date</b>	<b>Scenario 1: Claims at 7.5x premium (£k)</b>	<b>Scenario 2: Claims at 15x premium</b>
Cost (£k)	223	558	1,116
GVA Impact (£k)	906	906	906
BCR	4.1	1.6	0.8

At this point, it is not possible to be definitive on the overall BCR of the pilot, although given the relatively modest scale of impact, a positive return is subject to the level of defaults remaining relatively low. Further, if the GVA from the accelerated orders is excluded from the analysis (providing a GVA impact of £600k), the BCR will be essentially neutral if claims increase to 7.5 times the value of premiums secured.

Taken together, the assessment finds that the Value for Money of the pilot is broadly acceptable at this stage. However, should the levels of default increase in recipient businesses, given the relatively modest scale of impacts generated, the Value for Money of the pilot may become increasingly marginal. Further, whilst the costs of delivering the pilot to date have been relatively modest, the scale, scope and complexity of the activity that this enabled is not reflected in the scale of impacts generated; as discussed above, this has been driven principally by the approach and delivery model adopted by providers and the limited engagement with, and awareness of, the recipient cohort.

## 7: Market assessment

### Key Findings

- Key provider motivations for engagement in the TCEFG pilot included maintaining/increasing customer orders, improving customer relationships, and in some cases maintaining market position. The Majority Provider used the TCEFG pilot to test their approach to offering trade credit.
- Consultations suggested that suppliers do *not* exert market power in trade credit; rather there is evidence to suggest it may be the other way round – that the competitive nature of the market results in risk taking amongst suppliers in order to gain market share. Alongside this, there is evidence of information asymmetries, and that credit insurance will not cover fully the trade credit facilities suppliers wish to offer.
- Providers used the TCEFG pilot to offer trade credit to: new customers that would not have been offered trade credit; for borderline cases, to offer more credit to existing customers to test their payment behaviour and encourage sales; and to give more credit than would otherwise have been the case for new clients with good credit. ‘What worked’ across the three groups varied, and there appears to be no consistent indicator of success in terms of the target group from a provider perspective.
- There is evidence of modest increases in sales amongst small numbers of the TCEFG pilot recipients, but on the whole, it was recognised by providers that TCEFG helped to maintain and build customer relationships and improve customer loyalty, rather than generate substantial quantitative effects on sales.
- Non-providers indicated that there have been limited effects of the TCEFG pilot on the wider trade credit market. Given the scale of impact this is not surprising, but there is the potential for more substantial market effects were the scheme to be expanded.
- The strategic case for the TCEFG pilot was accepted by most stakeholders, although some questions were raised regarding how far it was overlapping with existing provision through credit insurance, and the risk that the scheme may be supporting, and propping up, non-creditworthy businesses. Knowledge of TCEFG was limited amongst stakeholders.

This section sets out the findings from providers of the TCEFG pilot, non-providers (i.e. those that explored taking part, but ultimately decided not to do so) and wider stakeholders. In doing so, the section sets out contextual evidence on why trade credit is important and its recent trends (providing evidence on the rationale and theories of trade credit), why suppliers chose/chose not to be involved, and the effects of TCEFG.

## Provider perspectives

### Background (pre-TCEFG pilot) and motivations

Across all providers, whether large or small, there was recognition of the critical role of trade credit to micro and small businesses and in particular in the context of the 'building trades' to which they were supplying. Providers recognised that whilst "builders have access to credit cards [...] other sources of finance are difficult for builders to obtain e.g. bank loans". Trade credit, therefore, is integral to the business of these small companies as they need working capital to fund materials to do the job, but don't get paid until later. Two providers suggested that around 70% of building trades SMEs that form their target customer base use trade credit. Whilst the evaluators cannot substantiate these figures, they are high compared to the 27% indicated by the SME Finance Monitor across all SMEs (although the wider evidence supports the finding that trade credit is more common amongst SMEs in the construction/related sectors). Because of this, providers noted that they offer trade credit in order to be able to compete for the sales of this customer base, and indicated that demand for trade credit had been fairly stable in recent years.

Providers have comprehensive processes in place to check the creditworthiness of the SMEs they grant trade credit to (e.g. credit ratings, payment history, bankruptcies etc.), though some noted that they do not consider themselves as risk averse in the provision of trade credit – with applications approved for between c. 70% and over 90% and one indicating that their appetite for risk had slightly increased recently in order to keep pace with the competition. Despite this, providers reported they considered bad debts to be low, late payment was considered to be more of a problem across their customer base. The implication is that even though providers consider themselves not to be risk averse, providers undertake robust approval, monitoring and controls of the trade credit they offer. One provider noted that they will not offer a credit facility to a company that cannot be covered by their credit insurance, which has been a challenge – including when an insurer removes cover from a business that has a trade credit facility. Though the authors note that normal practice in the provision of credit insurance is for credit limits for individual businesses to be non-cancellable if those businesses have met their payment dates, and to give a period of 30-90 days for businesses to address concerns if they have not met payment schedules (i.e. cover is not simply cancelled overnight). A final noteworthy point in terms of context is that one provider indicated that customers often pay off their credit with credit.

Across providers, one of the motivations behind involvement in the TCEFG pilot was to seek to maintain/increase customer orders and improve customer relationships. However, as noted in Section 3, to some extent, motivation was partly about competitive positioning, following the Majority Provider of the TCEFG pilot, which had led others to become involved. The Majority Provider of the TCEFG pilot, for example, intended to use it to increase credit available in order to stimulate further demand for its goods. Alongside this, the Majority Provider specifically stated that they had wanted to use the TCEFG pilot to test and validate their approach to offering trade credit. As part of this, they wanted to increase the proportion of applications approved, i.e. offer credit to those that they would not have normally done so due to a lack of information on the customer. In essence, they were addressing a specific

information asymmetry in an experimental way, answering the question “are we correct to refuse credit to these customers?”

Other specific motivations were: to help manage increasing risk of their trade credit facilities as a whole; and to cover specifically those applicants not covered by insurance because i) credit requirements were now higher than insurers would cover, ii) insurers had reduced the amount of credit that they would cover, and iii) applicants would not be covered by insurers at all.

These findings are interesting in the context of the backdrop provided in section 3:

- Trade credit in the building trade sector is clearly important, particularly because there are constraints in accessing other sources of finance (e.g. from banks). Suppliers are able to draw on their own information on customers, as well as credit ratings, to inform their decisions as indicated in the theories of trade credit in section 3.
- The findings suggest that suppliers do not exert market power in terms of credit; rather there is some evidence to suggest that it may be the other way round – that the competitive nature of the market results in some risk taking amongst suppliers.
- Despite this, bad debt is not seen as an issue, indicating that suppliers are managing their risk effectively.
- However, late payment is seen as an issue for suppliers and this, together with the observation that customers pay for their credit with credit, highlights the problems raised in section 3 with respect to late payment affecting SMEs’ net credit positions.
- Providers recognise that trade credit can help to increase market share as part of their overall product and marketing strategy, as noted in the theories of trade credit in section 3, and this was primarily behind involvement in the TCEFG pilot. Alongside this, there is some evidence of the existence of information asymmetries and the fact that credit insurance will not cover fully the trade credit facilities that suppliers wish to offer.

This final point may contrast with data from the ABI set out in in section 3 that indicate that the provision of credit insurance has increased in recent years following the decline in the immediate aftermath of the financial crisis. The authors cannot be conclusive, but this could be reconciled if providers under the TCEFG pilot have provided credit to firms for which there is limited information (which was identified as being the case in section 3 by the Experian data), including for instance micro businesses.

## Effects of the TCEFG pilot

Most providers sought to use the TCEFG pilot to offer trade credit to new customers that would not have been offered trade credit anyway or for borderline cases. This included in one instance a provider that used the TCEFG pilot to offer credit to those applicants that would not be covered by credit insurance. In addition, providers also used the TCEFG pilot for two further groups of businesses: to offer more credit to existing customers to test their payment behaviour and encourage more sales (with this group accounting for a majority of the recipients, as discussed above); and to

give more credit than would otherwise have been the case for new clients with good assessments (so these would have been offered trade credit anyway, but the TCEFG pilot allows the offer of credit at higher levels).

The effect of the TCEFG pilot on provider behaviour has been affected by appetite to risk pre-TCEFG pilot. For example, one consultee commented that the TCEFG pilot has not resulted in them offering trade credit to more customers, because as a provider they are already accepting most applications anyway; some of the small providers were also not keen to change their processes and offer trade credit to those that they would deem to be too risky, i.e. they considered it inappropriate to take on the risk, even alongside Government.

What has worked across the three groups of customers targeted has varied across individual providers, as indicated by the following:

- **New customers that would have been declined otherwise/borderline cases:** for one provider this has led to high levels of default, which has been a useful finding for the provider as it has helped them to justify their existing processes; other providers have not seen higher levels of default, though effects in terms of outcomes have been limited (see more details below).
- **Higher credit for new clients who would have been offered lower trade credit anyway:** for one provider this has been the most effective approach, with default rates the same as would have been expected.
- **Offering more trade credit for the existing client group:** one provider comments that this has been the most effective approach, with low default rates and evidence of extra sales; for another provider that has used this approach there has been no or limited take-up of the extra credit on offer, and so there has been no effect for this group.

Therefore, providers have reported some modest effects, for example indicating that there have been increases in sales amongst small numbers of their customers. As one smaller provider put it, “we have seen a significant increase in sales in two or three customers, for some no change has been seen yet”. The evidence from the consultations has indicated that the effects have been limited to some extent by demand/need. For example, a range of providers, including the major provider involved in the scheme and smaller providers under the BMF, have all reported constraints in the take-up of extra credit offered.

In addition, the provider that used the scheme for those that were not covered by credit insurance have used the TCEFG pilot in a very limited number of cases. It is worth noting that some of those consulted, in particular smaller providers, indicated that they had only been involved for a short time and that it was relatively early days. On the whole, it was recognised by providers consulted that the TCEFG pilot has helped to maintain and build customer relationships, with one for instance commenting that they thought that the offer of trade credit/increased trade credit, facilitated by the TCEFG pilot, had helped to improve customer loyalty.

Two other wider effects have been identified by providers consulted:

- For one major provider, the TCEFG pilot provided the opportunity to test and experiment with the criteria they use for assessing creditworthiness. Whilst the

pilot will not result in them changing their criteria, it has been useful to confirm existing processes.

- One provider, which was using the scheme for those that would not be covered by credit insurance, considered that the TCEFG pilot may have contributed indirectly to changing the behaviour of the credit insurance company. They are now insuring customers more easily, with less onerous processes, and are not reducing as many customers' credit facility amounts. It was not clear how far this was attributed to the TCEFG pilot and the threat of TCEFG as potential competition, or to the overall reduction in the market served by the supplier, which in turn the insurance company was responding to in order to maintain its own revenues.

It is also worth noting that the consultations with providers validated the findings of the Experian analysis reported above that the businesses supported through the TCEFG pilot were not fundamentally 'different' to 'non-TCEFG' businesses i.e. those that they provide trade credit to through their standard practice. The one area where there was a difference is some cases – and explaining in part the usage of the TCEFG pilot– was in the level of information available on businesses and/or their credit rating (although, as we have seen at an aggregate level this latter characteristic does not appear to hold true): as one provider noted “apart from those that have thin data there is no difference between standard customers and pilot customers”.

## Process and management

There was consensus across the providers consulted that the application and set up process for the TCEFG pilot was quite onerous. Larger providers were less vociferous on this point though, noting that this not unexpected with one of those consulted indicating that it was on a par to an insurance application, and so not unreasonable. However, it was noted that this may put off smaller merchants, and those smaller ones consulted highlighted the length of, and jargon, in contracts (which was different to their usual business contracts), and the need for simpler documentation on how the scheme works. The BMF had provided additional documentation on Q&As for smaller merchants to help overcome this. Going forward, a streamlined process would help to ensure that it is accessible to smaller providers.

It was noted that the British Business Bank and BIS have been helpful in addressing comments and queries, and once set up the scheme seems to have been smoothly run – recognising that there is the expected paperwork and administration required. One provider in particular was keen to point out that it was too early to provide their view on this as the proof would be in how claims were dealt with, and it was expected that these would increase going forward (due to the expected time lag on claims).

For the federated model through the BMF, one suggested improvement was that merchants would benefit from being able to see the status of an enquiry e.g. through a portal that showed the status of the application and the level of cover, and that issued confirmation as soon as an application had been approved.

Smaller providers also commented that it took a long time to set up the scheme. As a result, there was a commonly-held view that it needs longer, partly to allow for more take up by merchants and partly to be able to see benefits with/through customers. Smaller providers in particular commented that the TCEFG pilot can have a role in

kick-starting the industry, and BMF commented that more time is needed as the industry can be slow in taking up new schemes. All of those consulted would like to see the scheme continue, so the providers are observing benefits to them, or expect to see them going forward; though one large provider commented that they would not lobby for it to continue if the intention was to cut the scheme. As part of the forward look, certainty on the future was requested, in particular to allow providers to plan for if/when the guarantee is cut.

## Non-provider perspectives

Following the initial development of the pilot (with the first provider), the British Business Bank sought to extend the provider network and approached over 30 corporates operating across a variety of business sectors. Discussions were also held with a number of trade credit providers that contacted the British Business Bank having become aware of the intervention. As part of this study, consultations were completed with a selection of firms involved in this process that did not ultimately become involved in the pilot. The discussions focused on why they chose not to take part, and any perspectives on the operation of the TCEFG pilot.

### Decisions not to take part in the pilot

The motivation that underpinned the initial interest in the TCEFG pilot by non-providers was consistent with the providers: that is, both market positioning (particularly for those in competition with the first major provider to become involved in the scheme), and seeking to maintain/increase customer orders and improve customer relationships, including potentially through opening up credit to new customers. A number of non-providers also identified the potential for publicity/PR benefits of involvement, based on the awareness generated by the initial launch of the TCEFG pilot.

A range of reasons were identified as to why they did not become involved in the pilot, including those specific to the organisation. However, three main themes emerged: uncertainty over the value and benefit of the TCEFG pilot given that trade credit assessment and management mechanisms were already in place; concern over the level of bureaucracy involved in participation (which when aligned with uncertainty of benefits was not regarded as attractive); and owing to an assessment of risk, where the provider was still taking a risk on marginal cases, albeit at a lower level as a result of the guarantee – as one consultee noted “why sanction more to customers that we are not comfortable to increase/take extra risk with”. Two other points are worth noting:

- One of the non-providers noted that they had trade credit insurance that covered 95% of a default, higher than the level offered through the TCEFG pilot (at 75%) meaning that there was limited value in participation.
- Specific criteria and parameters were mentioned in a number of cases, including those related to the time-scale of the guarantee and the maximum credit limit (£250k was regarded as too low in one case).

## Effects of the TCEFG pilot

To what extent has the TCEFG pilot impacted on the wider trade credit market, and potentially led to negative displacement effects for providers of trade credit not involved? Given the scale of the pilot, it is perhaps not unexpected, but the consultations with non-providers identified no evidence that the pilot of TCEFG was viewed as having a detrimental impact on the specific non-providers, or the wider market for trade credit. With five consultations completed with non-providers the findings should be treated with some caution and they reflect the views of these organisations only. They also reflect the scale of the pilot vis a vis major providers of trade credit: for example, one non-provider noted they have trade credit arrangement with over 100,000 businesses, the expenditure of a few hundred suggested through the evaluation evidence is therefore unlikely to be substantial or to be evident in the sales data of the non-provider.

Indeed, the common theme from the consultations with non-providers was that they had not heard anything more on TCEFG once they made the decision not to progress with the scheme: one consultee noted, they had “not heard much about the scheme in the sector – if there is take up then good news stories should be broadcast”, and another that they had “not heard much about it since we decided not to go ahead, not a topic in the industry”. This is owing to the scale, rather than the performance, of the pilot, with the consultation indicating no substantial awareness of the pilot’s performance amongst the non-provider group.

It is worth noting that there was limited interest from across the non-providers consulted for participation in any rollout of the TCEFG pilot, two of the five organisations consulted indicated that they may be interested in the future, but this would require substantive changes to the model including related to the fees/cost of the interventions and reporting/monitoring requirements.

## Wider perspectives on the TCEFG pilot

Consultations have also been completed with a number of wider stakeholders on the design, delivery and strategic role of the TCEFG pilot. It is worth noting that the level of knowledge and understanding of the TCEFG pilot from stakeholders was varied. Notably, perspectives on how well the pilot had ‘worked’ and its potential ‘impact’ were very limited. This is not unreasonable given the limited nature of the intervention, but it did mean that the consultations focused particularly on the underpinning rationale for and design of the TCEFG pilot rather than its effect on the trade credit market.

In this context, the following key themes and messages emerged from the stakeholder consultations:

- First, **the overall case for the TCEFG pilot was confirmed and validated by most of the stakeholders consulted**, affirming both the importance of trade credit to SMEs as a source of external finance, and the case for intervention to help facilitate the flow of trade credit in the context of broader challenges in accessing finance. The unregulated nature of the trade credit market was also identified here, with limited levers in place at a policy level to monitor and facilitate the flow

of trade credit to SMEs. However, one consultee suggested that the pilot had come too late, as credit provision, including through insurance cover, had recovered somewhat since the aftermath of the financial crisis.

- Second, within this supportive strategic context, there were some **questions raised over the specific implementation model and approach of the TCEFG pilot**, key issues raised by stakeholders covered:
  - Whether the pilot was set up effectively to change provider behaviours, given that trade credit is often not provided to applicants due to a lack of information on applicant businesses, something which a credit guarantee does not address (i.e. Providers do not have enough information to make an informed credit decision, which the intervention does not fundamentally address).
  - The risk that the scheme is enabling the provision of trade credit to non-creditworthy businesses (i.e. where providers are right not to provide credit), potentially propping up unsustainable or inefficient businesses. It was suggested that the market, notably through credit insurance, ought to be providing appropriate cover for most of the SME market, and so the provision of guarantees may duplicate cover or providing cover for non-creditworthy businesses. It was acknowledged that there may be segments that the market may not be reaching, especially amongst micro-businesses (in particular due to the paucity of information to inform credit decisions).
  - That TCEFG does not address the issue of late payment, which is a key issue for SMEs, and may in fact exacerbate late payment issues through loosening credit terms across the supply chain – whilst it was acknowledged that wider policy efforts are in place seeking to address late payment issues, the role of the TCEFG pilot in this was identified as an area for further development going forward. For example, one consultee suggested that businesses in receipt of trade credit facilitated by the pilot could be asked to provide information on payment issues as part of the agreement process to provide evidence as part of the wider policy push by Government to promote prompt payment.
- Third, **the sectoral focus of the pilot was questioned**, with other sectors (for example the automotive supply chain) regarded as missed opportunities; as discussed above the focus on construction and associated trades was not the initial aim of the pilot, rather this focus emerged as a result of the development of the scheme. Making the scheme (if continued) more attractive to a wider range of sectors was regarded as important if it is to have a substantive effect on addressing trade credit issues across the wider economy.
- Fourth, the **level of awareness of the TCEFG pilot in the wider industry and finance community is low, suggesting that more would be needed to be done to promote and communicate the TCEFG pilot were it to be extended**. The limited awareness of the pilot amongst stakeholders is consistent with the delivery model where it was often allocated rather than applied for. Consultees identified the need to ensure that the TCEFG pilot was understood across the industry and in professional networks and business representative groups. Put simply, if businesses and those involved in supporting businesses are not aware of the intervention it will not achieve its potential.

## 8: Conclusions and recommendations

This final section of the report summarises the conclusions that have emerged from the study, and provides a set of recommendations for the British Business Bank to consider.

### Conclusions

#### The trade credit market

Trade credit can provide a means of financing working capital across supply-chains, especially where bank finance is restricted or more costly. It can also be a useful means of utilising otherwise idle working capital, and reducing the costs of financing for both suppliers and buyers. This is because businesses' increased knowledge of their customers through their regular contact and shared market experience can be more efficient and reduce the costs of agreeing lending compared to borrowing from banks.

Many of these factors can be important to SMEs, which are likely to encounter greater problems with accessing or accumulating working capital. The literature and empirical evidence suggests that trade credit is an important source of finance for many SMEs. For suppliers, trade credit provides a means of gaining (or maintaining) custom and market share, and a way of building relationships with customers.

However, there is evidence that the use of trade credit declined during the financial crisis particularly for smaller SMEs, although the aggregate level may now be stabilising. The decline could in part be due to less demand for goods/services generally, resulting potentially in less demand for trade credit. Importantly, however, the net credit position of SMEs has also declined. This supports the theory that power relationships in supply chains can result in a sub-optimal provision of trade credit. The literature also identifies that there may be information asymmetries affecting the provision of trade credit, as suppliers do not have access to full information on creditworthiness particularly when the economic conditions (and so those facing their customers) are uncertain.

Market power and information asymmetries, alongside the positive externalities associated with supply chain cooperation, provide an underpinning case for government intervention to encourage the provision of trade credit.

#### Impact assessment

The evaluation finds that there was evidence to support the underlying rationale for the TCEFG pilot, based on addressing market failures in the provision of trade credit to SMEs, and justified by the persistent decline in trade credit for SMEs (especially smaller ones). However, the TCEFG pilot is also an 'opportunistic' intervention, developed in response to an approach to the government by a major provider in the construction trade sector. Whilst this is reasonable, and demonstrates the public sector responding to industry, it is highlighted that the standard policy development cycle (comprising of development of detailed business case, appraisal, and logic model) has not been undertaken. This has also meant that the pilot focused

principally on construction and related trades, as other providers sought to maintain their market position.

Around 2,900 SMEs have secured new or increased trade credit facilitated by the pilot. The following characteristics were evident:

- The pilot of TCEFG was heavily dependent on one Majority Provider, accounting for nearly nine out of ten of the SMEs supported by the pilot.
- The model was largely 'supply' rather than 'demand' led, with the majority of SMEs supported allocated their increased trade credit by the provider, rather than actively applying for it. Nearly, two-thirds of recipients were existing customers of their provider. As a result of this, the survey of recipients identified that up to half of the businesses involved were not aware of the trade credit facilitated by the pilot.
- Where businesses did not previously have a credit limit with the provider, the average trade credit limit facilitated by the TCEFG pilot was £4,350. Where they did previously have trade credit the average increase in trade credit was slightly higher at £5,100. However, consistent with the 'supply-led' approach to the pilot, businesses were generally allocated a specific value (often £3,000) by the provider.
- The credit rating of recipients was consistent broadly with the wider business base from similar sectors, although in some cases businesses with 'high risk' credit ratings were supported through the pilot. It is for these businesses where the core rationale to support those that could not access trade credit was most pronounced. The data suggest that businesses supported by the pilot were fundamentally no 'different' to those in the wider sector in terms of financial performance, although the TCEFG pilot recipients may have been somewhat younger, with potentially less well developed credit histories.
- Businesses that received trade credit facilitated by the pilot regularly used a range of other trade credit facilities and purchased goods/materials from a range of other suppliers, and also used a range of other forms of external finance. In most cases, the trade credit facilitated by the pilot was just one of a wide range of different funding sources used by businesses.

These findings have implications for the effects and subsequent impacts of the pilot. Overall, the scale of the effects – quantitative and qualitative – were modest and in most cases businesses have not experienced substantive benefits from the TCEFG pilot. Survey respondents identified benefits in terms of positive effects on cashflow, improved relationships with providers, improved chances of securing trade credit in the future, and reduced business costs, but in all cases these effects were evident for under half of the survey cohort.

Similarly, the effects on behaviours in terms of purchasing, the need to use other forms of external finance, and increased/accelerated orders were again evident for some, but not for most recipients surveyed. That said, the survey indicated that the TCEFG pilot led to around one in five recipients to increasing their purchases at the relevant provider, and in turn reducing their purchases from elsewhere. At the scale of the pilot the effects of this on the wider market are small, but were the pilot to be scaled-up and rolled-out the effect would be more substantial. The pilot changed behaviours more where businesses were aware of the new/increased trade credit, highlighting the importance of raising awareness of the scheme where it has been used and/or responding to genuine demand for trade credit.

Set against these findings, the impact of the pilot in overall economic terms is modest. Taking into account additionality, displacement and multipliers, the evaluation estimates that the overall net GVA contribution of the pilot – through enhanced sales – to be in the range of approximately £575,000 to £905,000. Given the breadth of the pilot, with some 2,900 businesses supported, these effects do appear to be quite limited, and are driven in large part by most recipients identifying no quantitative impacts from the pilot.

The total cost of the pilot is not known as the full set of claims by participating providers have not yet been received. The net cost to government at the time of writing (including delivery and management costs, minus the income from fee guarantee premium) was £223,000, although the British Business Bank expect this to increase substantially as claims come through from all providers. Given this context, any assessment of Value for Money is indicative only.

This said, the evaluation findings on Value for Money are as follows:

- The **Economy** of the pilot at this stage is judged as **reasonable**, given the breadth of the pilot (with over 2,900 businesses supported), operating across a range of providers, and including the umbrella agreement with the BMF.
- The **Efficiency** of the pilot is judged as **limited**, notably a large cohort of businesses were involved to deliver a relatively modest set of outcomes: put simply, the trade credit facilitated by the pilot was of no or little value to most recipient businesses – a more efficient intervention was possible.
- The **Effectiveness** of the pilot is also judged as **limited**: whilst it facilitated new/increased trade credit, many recipients were not aware of, or did not need, this credit, and as reported above the overall impact of the pilot was modest. A more targeted intervention, which focused on where businesses genuinely needed to access new/increased trade credit in order to meet orders or improve business performance may have been more appropriate. However, this has potential implications for risk and the cost of defaults, which may affect the attractiveness and viability for government and providers.
- The Benefit Cost Ratio for government investment (GVA impact compared to public expenditure) is, at the time of writing, 'positive' – only time will tell, but should the levels of default increase in recipients as expected, the balance between costs and benefits may become increasingly marginal.

However, it is also worth noting that the pilot has provided useful learning for the British Business Bank on the potential and scope of a trade credit intervention, indicating that a revised approach is needed if the scheme is to be continued going forward. In this respect, the pilot has served its purpose and delivered effectively on its 'learning' intent.

## Market assessment

Across providers, key motivations for engagement in the TCEFG pilot included seeking to maintain/increase customer orders, improve customer relationships, and in some cases maintain market position where competitors were involved. The Majority Provider also sought to use the TCEFG pilot to test and validate their approach to offering trade credit. This testing motivation is important as providers had comprehensive processes in place to check creditworthiness (e.g. credit ratings, payment history, bankruptcies etc.) prior to the pilot, although in some cases testing risk awareness through the pilot was evident.

Interestingly, consultations with providers suggested that suppliers do not exert market power in terms of credit; rather there is some evidence to suggest that it may be the other way round – that the competitive nature of the market results in some risk taking amongst suppliers; this may be specific to the construction sector. Alongside this, there is some evidence of the existence of information asymmetries and the fact that credit insurance will not cover fully the trade credit facilities that suppliers wish to offer.

Providers used the TCEFG pilot to offer trade credit to new customers that would not have been offered trade credit anyway or for borderline cases, to offer more credit to existing customers to test their payment behaviour and encourage more sales, and to give more credit than would otherwise have been the case for new clients with good assessments.

What worked across the three groups varied across providers, and there appears to be no consistent indicator of success in terms of the target group from a provider perspective, with default rates varying across these groups. Consistent with the messages from recipients, there is evidence of increases in sales amongst small numbers of customers that used the TCEFG facility, although the effects have been limited to some extent by demand and need from the business base – given that many businesses were not aware of the credit offered this is not unexpected. On the whole, it was recognised by providers consulted that the TCEFG pilot has helped to maintain and build customer relationships and improve customer loyalty, rather than generate substantial quantitative effects on sales.

There was consensus across the providers consulted that the application and set up process for the TCEFG pilot was quite onerous, although larger providers were less vociferous on this point. A more streamlined process may be needed to ensure that the scheme is accessible to smaller providers.

Four other points are important from the market assessment:

- Late payment was raised as an important issue by both providers and stakeholders and this is not addressed by the pilot, with some stakeholders suggesting that it may in fact exacerbate the problem through loosening credit management.
- Consultations with non-providers indicated that there have been limited effects of the scheme on the wider trade credit market, or on sales/performance of firms that are competing with the major providers. Given the scale of impact identified this is not surprising, and it is important to recognise that there is the potential for more substantial effects on the wider market were the scheme to be expanded.
- The overall strategic case for the TCEFG pilot was accepted by most stakeholders, although some questions were raised, such as how far it was genuinely adding to existing provision through credit insurance, and the risk that the scheme may be supporting, and propping up, non-creditworthy businesses.
- The level of understanding of the scheme was limited, with the TCEFG pilot to date not well known across the industry. As a pilot this is reasonable, but greater awareness raising and recognition would be required going forward.

## Recommendations

Based on the findings of this study the following recommendations are made to the British Business Bank:

- **Recommendation 1:** At the close of the pilot scheme in March 2015 (the date to which the scheme has been extended), the TCEFG pilot in its current form should be paused, it should not be rolled-out more widely. The findings of the study indicate that continuing the scheme as it is currently designed is not a viable option.
- **Recommendation 2:** Consistent with Recommendation 1, at the close of the pilot scheme in March 2015 if not before, the British Business Bank should undertake a formal options appraisal and market assessment to determine if and how a re-cast TCEFG scheme should be progressed. The British Business Bank should ensure that this includes a 'close' option where the TCEFG pilot is not taken forward, and a number of options focused on substantive re-designs of the delivery and operational model. It should also include consideration of:
  - a more targeted and needs-based intervention, that focuses on those businesses that actively apply for new/increased trade credit, and/or where providers can demonstrate a sound case to extending trade credit for existing customers – with both elements considered in the context of what the market already provides (i.e. through credit insurance)
  - any potential implications that targeting may have on risk and cost of defaults, in particular if such targeting results in more micro businesses and borderline cases being covered – where less information is available on credit histories
  - an extension of the provider network to encompass a wider range of sectors, ensuring that any successor intervention is not reliant on a single majority provider, and subsequently its competitors
  - how TCEFG can help to address issues of late payment across supply-chains impacting on the cash flow position of both suppliers and customers of trade credit.

If the TCEFG is continued subject to the options appraisal, the following recommendations should apply:

- **Recommendation 3:** The British Business Bank should ensure that systems and processes are in place at providers to ensure that recipients are aware of the increased trade credit provided. This should be developed as a priority to maximise the potential effects of the TCEFG pilot – increased trade credit will only be used, and deliver benefit to businesses, where businesses are aware of this facility.
- **Recommendation 4:** A full logic model and set of SMART objectives should be developed to ensure that the rationale for, and objectives of, the intervention are understood fully at the British Business Bank and providers, and to inform programme monitoring and evaluation plans.
- **Recommendation 5:** A consistent monitoring protocol should be put in place to ensure that consistent data is collected on recipient SMEs by providers, and that there are no significant gaps in the information provided to the British Business Bank.
- **Recommendation 6:** A scoping exercise should be undertaken to identify the evaluation requirements of the intervention, including the potential for an experimental or quasi-experimental approach. Given the nature of the intervention an experimental approach is likely not to be viable, however, a quasi-experimental approach involving the identification of a comparison group for primary research

and econometric analysis may be viable. The scoping study and options considered should be proportionate to the scale of the intervention.

- **Recommendation 7:** The TCEFG pilot and its purpose/role/scope should be communicated more fully to stakeholders in the finance, credit and business development community, to raise levels of awareness and understanding of the intervention, in turn leading potentially to higher levels of demand and engagement by businesses that require genuinely additional trade credit.
- **Recommendation 8:** The British Business Bank should review the current administrative and management systems in place and seek where possible to streamline the process in order to maximise the potential for smaller providers to participate in the scheme.

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## Annex B: Additional Experian data

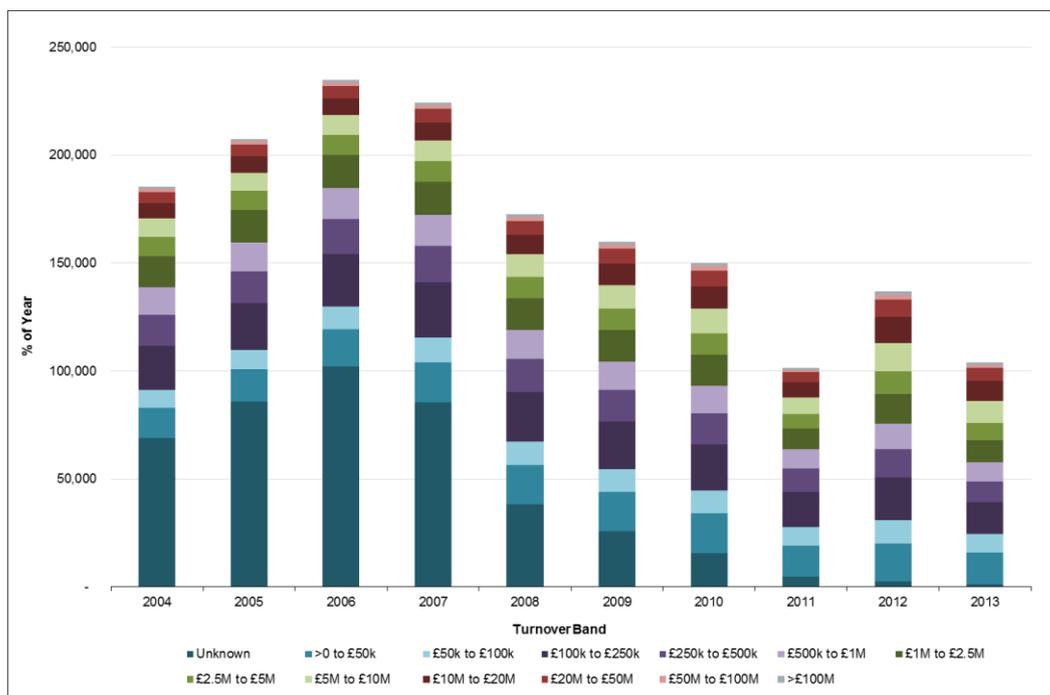
Proportion of SMEs with trade credit in 2013 by region

Region	Proportion of SMEs with trade credit in 2013
Scotland	5.0%
North East	5.5%
North West	4.3%
Yorkshire and the Humber	4.8%
East Midlands	4.5%
West Midlands	4.6%
Wales	5.0%
East Anglia	5.0%
South East	5.1%
London	6.1%
South West	5.0%
Northern Ireland	4.5%

## Change in proportion of SMES with trade credit between 2004 and 2013 by region

Region	PP change in % SMEs with trade credit between 2004 and 2013
Scotland	-5.9
North East	-8.2
North West	-5.6
Yorkshire and the Humber	-5.8
East Midlands	-7.0
West Midlands	-6.3
Wales	-8.4
East Anglia	-9.1
South East	-8.1
London	-8.2
South West	-9.8
Northern Ireland	-4.0

## Number of firms with trade credit by turnover band



## Average value of trade credit per firm 2004-13 (£k)

Year	Average value of trade credit per firm (excluding Finance/Insurance sector)
2004	537.7
2005	575.3
2006	553.3
2007	564.2
2008	746.0
2009	757.2
2010	958.0
2011	705.6
2012	1148.4
2013	930.3

## Average value of trade credit per firm 2004-13 by sector (£k)

Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Agriculture	210	203	220	216	272	311	2,671	398	470	517
Mining / Energy	2,160	1,746	1,904	1,733	2,787	2,948	3,051	1,462	4,470	4,229
Manuf durable	1,138	1,434	1,532	1,620	1,974	2,530	2,412	1,356	3,525	2,486
Manuf non-durable	659	653	730	712	958	901	1,001	1,084	1,163	1,318
Construction	486	656	503	482	563	501	536	533	818	742
Wholesale	925	1,076	1,038	1,285	1,283	1,131	1,589	1,298	1,597	1,680
Retail	454	451	489	430	484	542	511	683	744	617
Transport	1,070	1,240	1,408	1,350	1,312	1,620	1,566	985	2,358	2,908
Business Services	458	431	408	447	775	590	927	717	955	903
Property	181	348	375	236	248	200	223	195	231	202
Personal Services	286	308	350	404	355	348	310	279	729	299
Public	105	108	109	125	109	103	173	161	113	161
Unknown	1,484	1,820	814	156	2,349	4,777	8,608	4,745	4,865	1,617

## **Annex C: Research Tools**

This Annex contains the following research tools:

- Research guide for consultations with the TCEFG pilot providers – strategic and operational
- Research guide for consultations with the TCEFG pilot non-providers
- Research guide for consultations with strategic stakeholders

# Evaluation of the Trade Credit Enterprise Finance Guarantee (TCEFG) Pilot

## *Research Guide – TCEFG Providers*

June 2014

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### Strategic consultations

#### ***Background (c.5 mins)***

**Q1. Please set out briefly your role at <<provider organisation>>?**

**Q2. What is your involvement with, and knowledge of, the TCEFG pilot?**

#### ***Trade credit pre-TCEFG (c.10 mins)***

**Q3. Please summarise your firm's use of trade credit, pre-TCEFG**

- a. Importance of trade credit to business model e.g. as a way of attracting new customers/ increasing sales to existing customers
- b. Your strategic approach in offering trade credit in terms of risk, scope, scale.
- c. How does your approach to trade credit compare to your competitors?
- d. What benefits do you think businesses get through the trade credit you offer?
- e. To what extent do you think trade credit is a substitute for other external types of finance?

**Q4. What challenges or issues have you experienced with your 'standard' trade credit offer?**

- a. Levels of demand
- b. Level of late and/or non-payment
- c. Quality/validity of applications for trade credit from customers

#### ***Perspectives on TCEFG delivery and effects (c.15 mins)***

**Q5. What was your motivation for involvement with TCEFG? Specifically:**

- a. Why did your firm decide to take part in the TCEFG pilot?
- b. How does the pilot specifically address barriers to offering trade credit for particular types of firms. What evidence do you have for this?

- c. What were the expected nature and scale of benefits that you expected from participation in the TCEFG pilot – quantitative (e.g. increased orders, retain custom), and non-quantitative (e.g. enhanced relationship with customers)
- d. What are your thoughts on the strength of the rationale for introducing the TCEFG scheme, when it was first introduced (in April 2013), and now?

**Q6. Please summarise your implementation model for the TCEFG pilot**

- a. Overview of implementation model, and links to 'standard' trade credit offer
- b. Fit with your wider business model

*[Interviewer to note that more detailed discussion of implementation model to be completed with operational consultee]*

**Q7. To what extent is the trade credit offered/the increased facility enabled through TCEFG additional?**

- a. Would you have still offered a facility/ size of facility in absence of scheme – at all, at a lower level, in a different way?
- b. What steps do you have in place to ensure finance through TCEFG is additional?

**Q8. Has the TCEFG pilot had any direct/ indirect effects on your business? If yes, in specifically in terms of ...**

- a. Quantitative benefits e.g. increased orders, new customers, retained customers
- b. Non-quantitative benefits e.g. improved relationships with customers, better financial management, information on customers etc.

**Q9. Please characterise the range and scale of indirect benefits from the TCEFG pilot for your business**

- a. Impacts on attitude/approach to wider offer of trade credit to date/in the future (e.g. does it provide 'credit record' such that TCEFG beneficiaries might now be eligible for credit without guarantee?)
- b. Any other positive effects

**Q10. Have there been any adverse effects from the TCEFG pilot**

- a. Quantitative e.g. increased defaults, cost of implementation
- b. Non-quantitative e.g. relationships with existing customers

**Q11. What will be your approach to credit limits offered through TCEFG in the future i.e. at the close of the pilot will you maintain the credit levels applied to firms?**

- a. If they will change, how and why?

### ***Perspectives on TCEFG process (c.10 mins)***

#### **Q12. Please provide you feedback on the TCEFG 'process'**

- a. Application and accreditation process
- b. Model agreed with BBB (fees, arrangements etc.), and any issues in agreeing this
- c. Barriers for providers in agreeing a product like TCEFG
- d. Would you continue to use TCEFG if pilot was extended?
- e. Overall level of satisfaction with using the scheme

#### **Q13. What improvements or changes to the TCEFG model are required if it is to be continued?**

## Operational consultations

### ***Background (c.5 mins)***

#### **Q1. Please set out briefly your role at <<provider organisation>>?**

#### **Q2. What is your involvement with, and knowledge of, the TCEFG pilot?**

### ***Trade credit pre-TCEFG (c. 10mins)***

#### **Q3. What are your assessment criteria for granting trade credit facilities**

- a. Financial criteria
- b. Non-financial criteria
- c. To what extent are personal/company credit scores from third party providers used in the credit assessment?
- d. Does the assessment criteria differ for new and existing customers?
- e. What types of businesses do you generally decline a trade credit facility?

#### **Q4. What are the terms applied to the trade credit offered?**

- a. Timescales of re-payment, and any discounts for early payment
- b. Do the terms change for the level of risk/type of business?

#### **Q5. How would you characterise the level of historic demand for trade credit from your customers?**

- a. Over time – specifically in the last three years, and the past 12 months

- b. By firm types e.g. sector/size/risk level/ age of business
- c. What is the scale of 'marginal' applicants, and the balance between offer/rejection

**Q6. How do firms generally use the trade credit facilities offered**

- a. How soon do they repay/amount of head room etc.)
- b. Level of default (and any changes in this over time)

***Perspectives on TCEFG delivery and effects (c.15 mins)***

**Q7. Please explain practically how you deliver the TCEFG pilot.**

- a. What assessment criteria is used to identify 'TCEFG recipients' (including business characteristics, and size of request)
- b. What financial assessments are made e.g. how is scale and nature of trade credit offered through TCEFG considered
- c. What are the decision points, who has responsibility for making decisions
- d. Any variation to the client between TCEFG and non-TCEFG credit
- e. How are the costs of the pilot managed – have the costs of implementation (i.e. the cost of using the facility owing to BBB) been 'passed on' to firms in receipt of TCEFG-supported credit

**Q8. What have been the range and scale of effects on trade credit delivery through TCEFG?**

- a. Changes in offer and take-up of trade credit (including if/how orders are tracked/monitored and whether TCEFG beneficiaries have had higher increase in orders than non-TCEFG beneficiaries)
- b. Performance of TCEFG against expectations, including defaults

**Q9. Are there any observed difference between TCEFG and non-TCEFG firms? In terms of**

- a. Credit rating/risk
- b. Business Size/sector/ age of business/ Facility size
- c. Nature of intended purchase

**Q10. Have there been any changes in your TCEFG delivery model over the pilot period?**

- a. Drivers for any changes made
- b. Benefits/adverse effects of any changes made

**Q11. What is the most realistic 'counterfactual' scenario i.e. what would have happened if there was no TCEFG?**

- a. Offer of trade credit by your firm i.e. to what extent is the finance additional, would it have been offered in the absence of the TCEFG pilot?
- b. Take-up of trade credit i.e. to what extent would the firms have sourced the trade credit from elsewhere?

***Perspectives on TCEFG process (c.10 mins)***

**Q12. Please provide you feedback on the TCEFG 'process'**

- What worked well, and why
- Effects on timing of decisions e.g. did TCEFG 'take longer' to assess
- How useful and clear was the guidance and information from BBB

**Q13. What improvements or changes to the TCEFG model are required if it is to be continued?**

# Evaluation of the Trade Credit Enterprise Finance Guarantee (TCEFG) Pilot

## *Research Guide – Non-Providers*

June 2014

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### ***Background (c.5 mins)***

**Q14. Please set out briefly your role at <<non-provider organisation>>?**

**Q15. What is your involvement with, and knowledge of, the TCEFG pilot?**

### ***Trade credit (c. 10mins)***

**Q16. Please summarise your firm's use of trade credit**

- a. Importance of trade credit to business model e.g. as a way of attracting new customers/ increasing sales to existing customers
- b. Your strategic approach in offering trade credit in terms of risk, scope, scale.
- c. How does your approach to trade credit compare to your competitors?
- d. What benefits do you think businesses get through the trade credit you offer?
- e. To what extent do you think trade credit is a substitute for other external types of finance?

**Q17. What assessment criteria do you use in offering trade credit?**

- a. Financial
- b. Non-financial
- c. To what extent are personal/company credit scores from third party providers used in the credit assessment?
- d. Does the assessment criteria differ for new and existing customers?
- e. What types of businesses do you generally decline a trade credit facility?

**Q18. How would you characterise the level of historic demand for trade credit from your customers?**

- a. Over time – specifically in the last three years, and the past 12 months
- b. By firm types e.g. sector/size/risk level

- c. What is the scale of 'marginal' applicants, and the balance between offer/rejection

**Q19. Have you experienced any challenges or issues with your 'standard' trade credit offer?**

- a. Levels of demand
- b. Level of late and/or non-payment
- c. Quality/validity of applications for trade credit from customers

***Perspectives on TCEFG (15 mins)***

**Q20. Thinking about the TCEFG pilot, and your involvement in the scheme.**

- a. What was your original motivation for considering becoming involved in the scheme?
- b. What was your level of interest (i.e. how serious), and what stage did you reach in your involvement
- c. How would the TCEFG pilot have complemented your standard trade credit offer

**Q21. What were your reasons for not choosing to participate in the TCEFG pilot? Were they**

- a. Related to objectives of scheme
- b. Related to firm strategy/approach
- c. Related to expected level of demand/value in progressing
- d. Related to the design of TCEFG model
- e. Related to the TCEFG application process
- f. Other

**Q22. Has the TCEFG pilot had any effects on your business? If yes, specifically in terms of ...**

- a. Negative effects e.g. displacement effects reducing sales from competitors using the scheme
- b. Positive effects e.g. demonstrator effects on own approach to trade credit

**Q23. What are your views on the effects of the TCEFG pilot on wider market conditions?**

- a. Trade credit market, including relationship with trade credit insurance
- b. Other types of external finance e.g. bank loan/overdrafts

- c. Broader construction/related sectors and economic performance
- d. Perspective on 'scale' of effects given wider market context

**Q24. Would you be willing to participate in future TCEFG rounds if the scheme was continued?** *[Interviewer to highlight confidential nature of discussion]*

- a. If yes, are there any changes in the TCEFG process/model required to secure your participation?

# Evaluation of the Trade Credit Enterprise Finance Guarantee (TCEFG) Pilot

## *Research Guide – Stakeholders*

June 2014

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SQW has been commissioned by the British Business Bank to undertake an evaluation of the Trade Credit Enterprise Finance Guarantee pilot. As part of this work, we are undertaking consultations with a number of stakeholders, to provide a wider perspective on the operation and impact of the pilot, including the extent to which the TCEFG pilot has had any adverse (or positive) effects on the wider provision of trade credit.

The consultation should last around 30-40 minutes. All responses will be treated on a confidential basis.

### ***Background (c.5 mins)***

**Q1. Please summarise your role at your organisation**

**Q2. What is your involvement with, and knowledge of, the TCEFG pilot?**

### ***Perspectives on TCEFG rationale and role***

**Q3. In your view, how robust is the underpinning economic rationale for the TCEFG pilot?**

- a. Are there specific Market failures affecting the provision of trade credit to viable businesses? If so, what is the evidence of their existence, and likely level of scale?
- b. What is the rationale for public sector intervention in the trade credit market, at the time the pilot was launched (April 2013), now, and in the future?
- c. Is a government guarantee of providers the best way for increasing the flow of trade credit to viable businesses or are other approaches that could be used (Assessing the principle)

**Q4. How does the TCEFG pilot operate with and align to other interventions and sources of finance to businesses?**

- a. Links to wider trade credit market, and how TCEFG fits into this, including variation by: sectors/sub-sectors, types of business/providers
- b. Links to other public-sector access to finance interventions
- c. Links to wider business and enterprise development agenda
- d. Links/displacement to trade credit insurance market

- e. Links to mainstream business finance market e.g. banking market – loans and overdrafts

### **Perspectives on TCEFG performance**

#### **Q5. How effective do you think the TCEFG pilot has been? Specifically, its effects on**

- a. The provision of trade credit (positive and negative)
- b. Broader construction/related sectors and economic performance, including effects on supply-chains (what evidence is this based on)
- c. Perception on 'scale' of effects given wider market context

#### **Q6. How 'additional' do you think the TCEFG is?**

- a. Deadweight in outcomes – what would have happened if the TCEFG pilot had not been taken forward?
- b. Displacement effects – on other trade credit providers, credit insurance, other forms of finance?
- c. Positive spill-overs e.g. improving credit ratings so that beneficiaries can access purely market-delivered schemes (trade credit and other sources of finance)

#### **Q7. Overall, how has the TCEFG pilot performed against your initial expectations?**

### **Future**

#### **Q8. What improvements or changes to the TCEFG model are required if it is to be continued?**

#### **Q9. What are the key learning points from TCEFG pilot in the use of trade credit?**

- a. In terms of the *design* of the intervention (process, rationale, objectives etc.)
- b. In terms of the *delivery* of the intervention

#### **Q10. To what extent should the TCEFG approach be widened to focus on other business sectors?**

- a. Which ones and why?

Likely demand from 'providers' and 'recipients'?

## Legal notice

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