

**Evaluation of Start Up  
Loans: Year 3 Report**

**RESEARCH REPORT**

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A report from SQW Ltd, with support from  
BMG Research

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## Executive Summary

### About the programme

1. The Start Up Loans programme offers loans, alongside business support and mentoring, to individuals across the UK looking to start a business or to develop a recently-established business. From its launch in 2012 to May 2018, the programme had lent over £420m, through over 56,000 loans.
2. The programme is managed by the Start Up Loans Company (SULCo), and funded by the Department for Business, Energy and Industrial Strategy (BEIS). On 1<sup>st</sup> April 2017, SULCo became a subsidiary of the British Business Bank.
3. The underlying case for the programme is that banks and other mainstream finance providers do not meet the demand for loans for start-up companies owing to the lack of collateral, credit history and/or trading history amongst applicants, and the low margins associated with low value loans. In addition, there can be barriers to accessing appropriate external advice for people looking to start a new business. Further, there is an equity argument, because enterprise and self-employment can be a way to improve individuals' economic prospects.
4. The programme involves three main stages: initial 'pre-application support' to help individuals to develop a business plan; a personal loan to start-up/develop a business; and mentoring support to help develop and grow the business. SULCo uses a network of Delivery Partners to deliver the programme.

### The evaluation

5. SQW Ltd, working with BMG Research, was commissioned by the British Business Bank in 2014 to undertake an evaluation of the programme. The main aim of the evaluation was to assess the economic impact and value for money of the programme. In addition, the evaluation was to assess the extent to which different degrees of take-up of the pre-application and mentoring support affected business and individual outcomes, and the characteristics of those individuals that benefited the most from the programme.
6. The evaluation of impact included comparing the performance of a group of individuals that had drawn down a Start Up Loan from June to December 2014 (the beneficiary group) to a matched group of individuals also looking to or recently starting a business that had not been supported by the programme (the comparison group). This comparison was based on analysis of data from surveys of the two groups. This analysis was completed for the first two years of the evaluation that reported in 2016 and 2017, and was planned for this final year. However, the lower-than-expected number of survey respondents amongst the comparison group in Year 2 meant that a third wave of the survey of the comparison group was not considered viable. The final year of the evaluation therefore comprised a third wave of the survey with the existing beneficiary group (referred to in the report as the '2014 Year 3 sample') alongside evidence from a survey of a new group of beneficiaries from the population of individuals that had drawn down a loan from January to June 2016 (referred to in the report as the '2016 sample').

7. This Year 3 report sets out evidence on the impact and value for money for both the '2014 Year 3 sample' and the '2016 sample'. The assessments cannot be directly compared, given changes in the delivery of the programme leading to the characteristics of the two groups being very different, and the different period of time that has occurred following support. However, the evaluation has reviewed differences in the evidence for both cohorts, in order to provide comment on how the benefits of the programme (and their distribution) and the value for money have changed over the lifetime of the scheme.
8. Year 3 of the study also considered two further issues of interest to the British Business Bank that reflect changes in the policy and delivery landscape and the need for the evaluation to help inform the future of the programme. The issues were: the extent to which outcomes were different across different regions of the UK and how regional and local issues have influenced delivery; and the needs and experiences of beneficiaries in accessing finance after they have been supported by the programme.

### **Impact and value for money**

9. The evidence indicated that the programme has supported the start-up and/or early growth of new businesses, and demonstrated additionality. The evidence in Year 3 was based on 'self-reported' data from beneficiaries and this needs to be treated with some caution as it can be subject to bias. However, the findings are consistent with the overall messages from the evaluation in Years 1 and 2.
10. For both the 2014 Year 3 sample and 2016 sample, nine in ten of those individuals surveyed that had secured a loan for the programme to start-up a business subsequently went on to do so. The survey evidence suggested that more businesses have started up than would have been the case if the programme had not existed, resulting in an increase in the number of business starts across the UK. Around one in five of the individuals in the 2016 sample, and one in four in the 2014 Year 3 sample that started-up a business following support would not have started their business at all without Start Up Loans. Timing effects were more common. Over one-half of individuals that started a business following support in both cohorts indicated that their business was started more quickly as a result of the programme.
11. The economic impacts of the businesses that have been started-up by beneficiaries (and those that were already established, but which the programme helped to develop) are significant. The evaluation estimates that:
  - the approximately 11,000 loans drawn down over November 2013-December 2014 (the '2014 cohort') will generate an additional Gross Value Added (GVA) for the UK economy of £169m by 2019/20
  - the approximately 3,450 loans drawn down over January-June 2016 (the '2016 cohort') will generate an additional GVA for the UK economy of £85m by 2021/22.
12. For both the 2014 and 2016 cohorts, the benefits in terms of GVA are expected to be higher than the costs associated with delivering the programme (covering the lending and non-lending costs). The analysis is expressed in terms of Benefit Cost Ratios (BCRs), where the economic benefits are compared to the costs of delivery; a BCR of 1.0 means that the benefits and costs are the same, a BCR of more than 1.0 means that the benefits outweigh the costs.

13. The BCRs vary between the samples and cohorts from around 3.0 to 3.7:1 for 2014, to 5.7:1 for 2016. In estimating these BCRs, a number of assumptions are taken. These, and the potential variation, are discussed in the full report. Nevertheless, the results suggest positive value for money, which is consistent with the evidence from the previous years of the evaluation.
14. The BCRs for the 2014 and 2016 cohorts cannot be compared directly, owing to the changes in the characteristics of the individuals and loans in the two populations. However, the data suggest that the value for money of the programme may be higher for the 2016 cohort, relative to the 2014 cohort, based on the data from the survey samples. The costs of the programme have reduced due to a drive for operational efficiency that has reduced non-lending costs, and due to lower default rates. On the benefits side, there has been an increase in the size of companies started and developed, with the average turnover in the current year higher for the 2016 sample than the 2014 Year 3 sample.
15. Some of these changes between the 2014 and 2016 cohorts (and the survey samples in turn) are partly results of the changing characteristics of entrepreneurs supported (e.g. due to targeting or self-selection to take part). The 2016 cohort had older individuals securing loans, fewer that were unemployed when they approached the programme, and higher value loans. These changes in the socio-economic characteristics of the individuals supported has implications for the social and distributional contribution of the programme (which is not reflected in the value for money model), and the extent to which these individuals may have been able to access other sources of finance. The increases in efficiency in programme processes, partly due to pushing costs of non-lending support down, may also have reduced the ability for Delivery Partners to support groups requiring greater hand-holding and with lower credit ratings.
16. Despite the increase in the size of the businesses started-up by supported individuals in the 2016 sample relative to the 2014 Year 3 sample, it is important to recognise that – at this stage at least – the businesses are largely providing employment and an income for the founder, rather than supporting wider employment: around 60% of businesses reported having no employees (other than the owner) in both the 2014 Year 3 sample and 2016 sample at the time of the evaluation survey. The modest employment effects to date confirm that the principal route to economic impact of the programme has been via the turnover of the businesses started-up.
17. Exploratory analysis sought to take account of distributional issues on programme value for money, drawing on Treasury guidance on the use of income distributional weights. The value for money analysis was re-run using distributional weights based on the income of beneficiaries when they first considered starting up a business, before their engagement with the programme, for both the 2014 and 2016 cohorts. The analysis suggests the value for money of the programme is higher once the pre-programme income of the beneficiary is taken into account, across both cohorts, although the effect is more pronounced for the 2014 cohort (using data from Year 2 given sample sizes), with a higher share of individuals in this group in the lowest income bands.
18. The income adjustment does not fully close the difference in BCRs between the cohorts. However, the exploratory analysis highlights the economic and social value of the programme in supporting 'less advantaged' individuals, as part of the overall service offer, with improved value for money when the income distribution of beneficiaries is considered.

## Employment and personal development outcomes

19. The Year 3 evaluation indicates that the programme has had a substantive effect on perceptions of longer-term employability and employment prospects amongst its beneficiaries. Notably, over three-quarters of individuals surveyed in both the 2014 Year 3 sample and 2016 sample reported that the programme had had a positive effect on their long-term job prospects, with positive effects also reported by a majority in terms of skills, both within and outside of business.
20. There was also evidence of transitions between unemployment and self-employment and employment. In the 2016 sample, 17% of the total survey sample moved from unemployment into employment, self-employment or a role as a proprietor/business owner after their engagement in the programme. Of those that moved specifically into self-employment, approaching half reported that they would not now be in self-employment if they had not been involved with the programme. However, it is noted that as the characteristics of beneficiaries have shifted over time, the potential for the programme to support individuals out of unemployment may have reduced.
21. The pre-application support and mentoring was generally valued highly by those individuals taking it up from the 2016 sample. There were self-reported benefits on skills and confidence. However, overall participation in the mentoring support offered by the programme appears to have reduced over time. The evidence from Years 1 and 2 of the evaluation was that mentoring take-up was around 80% in the 2014 sample, though this had reduced to around 55-60% in the 2016 sample.
22. This apparent shift may reflect the different characteristics of the 2016 sample relative to the 2014 sample, as older and more experienced individuals tended to be less likely to take up mentoring. From the survey feedback and case study work, it was evident that the mentoring offer to individuals has remained varied across the Delivery Partner network, and there have been examples where Delivery Partners have drawn on the wider business support landscape to provide advice and mentoring to beneficiaries (which may not translate into take-up of SUL mentoring). Two consistent messages across the evaluation period have been that a significant minority of individuals did not understand the potential value of mentoring, and that approaching 20% of individuals supported by the programme reported they had not been offered mentoring support.

## Characteristics of those who benefit the most from the programme

23. Econometric analysis was undertaken on the 2016 sample to identify if there were any characteristics associated with individuals that had benefited the most from the programme, covering both business effects and those related to personal development. This analysis was not completed for the 2014 Year 3 sample owing to the sample size.
24. The analysis indicated that the characteristics of those that benefited most varied dependent on the nature of the outcome:
  - where the focus is on business outcomes (i.e. business survival, sales and employment), the key characteristics associated statistically with positive benefits were businesses with multiple owners, and individuals with businesses that had some employees (compared to beneficiaries operating businesses with no employees)

- where the focus is on individual personal development outcomes (notably job prospects, and business and personal confidence), those individuals with no previous business experience, and those that were unemployed at the time of applying to the programme were statistically positively associated with benefitting more from the programme.
25. The findings on personal development outcomes are not unexpected, and reflect the 'distance travelled' by these individuals as a result of programme support. However, the econometric analysis does highlight the importance of the programme in generating different effects for different groups, including personal development effects for those that were unemployed, which needs to be seen alongside the impact and value for money assessment which were based on business outcomes only.
26. Two other points are noted from the econometric analysis of the 2016 sample: higher levels of self-reported additionality were associated with individuals aged 18-30; and take-up of higher levels of mentoring support (over six hours) was associated with more positive outcomes in terms of business *and* personal confidence.

### **Access to finance**

27. The behaviours adopted by individuals supported by the programme were found to be similar to those of the wider population of micro enterprises. For example, most did not seek any advice when they first identified an access to finance need, and they have commonly relied on finance from friends and family to meet their financing needs.
28. However, the evaluation suggests a higher level of 'discouraged borrowers' amongst individuals supported by the programme than the wider business base. In both the 2014 Year 3 sample cohort and the 2016 sample, 16% of the individuals surveyed indicated that they had wanted to apply for external business finance in the last 12 months but did not do so, owing to a range of factors including an expectation of rejection and not wanting to take on additional risk; whilst care must be taken with comparisons given the different sample, this compares to 2% of SMEs in the SME Finance Monitor (Q2 2017) that were identified as 'discouraged borrowers'.
29. This apparent higher level of discouragement may reflect in part the maturity of the firms and the nature of the businesses – over half are sole traders, which may limit levels of willingness to take on risk. However, this may also limit the potential for the growth and sustainability of the businesses if they are not accessing the finance they would need to grow.
30. The surveys indicated that there will be demand for finance from the Start Up Loans population in the future. Between 40 and 50% of the individuals surveyed across the two samples anticipated that they will need and apply for external finance in the next twelve months.

### **Reflections on local and regional delivery**

31. Case studies of Delivery Partners suggested that their role in the local/regional/devolved business support landscapes has helped in delivering the Start Up Loans model, and in delivering it efficiently. Whilst Delivery Partners do not in the main 'tailor' their support offer in response to their contexts, the ability for local/regional delivery to align with other interventions, particularly to generate referrals and raise the profile of the programme amongst stakeholders was found to be particularly important. However, some of this wider

provision is supported by European funding, and so there is, at the time of writing, a degree of uncertainty about what may replace this in the future.

32. The case studies also highlighted the potential importance of local knowledge and insight in the successful delivery of the programme. The knowledge of local Delivery Partners has enabled them to provide beneficiaries with relevant signposting that they may not have got otherwise, and a sensitivity to local contexts, especially related to wider social challenges. Delivery Partners also noted that local knowledge had helped in making better informed decisions around loan assessments, leading potentially to lower rates of default.
33. More broadly, the profile and reach of the programme has benefited from the fact that Delivery Partners were active in local and regional business support. In a number of cases these mechanisms have enabled the programme to be communicated to a wide range of other organisations that can help to drive referrals and demand for support. So, whilst Delivery Partners are not engaged in local networks specifically because of Start Up Loans, this engagement does help to maximise the potential of the programme to reach a wide base, and raise its profile across advisers and other business and professional services.

### Summary findings and implications

34. Drawing on the evidence from across the three years of the evaluation the following summary findings and implications are identified at this final evaluation stage.
35. First, **value for money, as assessed via turnover/GVA from start-up businesses against the economic costs of running the programme, has improved over time.** This is positive, and has been partly due to increased efficiencies in programme delivery and partly reflective of the increase in average size of the businesses of individuals supported. However, there appears to be a risk that this is at the expense of the social and distributional rationale underpinning Start Up Loans, with the characteristics of individuals supported by the programme in the 2016 cohort different to that in 2014 (and earlier). Going forward, clarity on the objectives of the programme is required, and then operationally this needs to be communicated from SULCo to Delivery Partners. If these continue to include social and equity objectives, there is a need to address the current incentives for Delivery Partners. The focus on driving down default rates, and supporting individuals with lower risk business ideas, should not mean that the type of individuals that the programme was also established to support from the outset are no longer able to access support, i.e. those that are unemployed, seeking modest sized loans, younger and from more deprived communities.
36. Second, **despite its role as a core component of the programme, the offer, take-up and delivery of mentoring appears to remain very varied across the programme.** For example, around one-fifth of individuals drawing down loans were not offered mentoring support. The evidence from across the evaluation is clear that not all individuals supported by the programme want mentoring support. However, it is important that the 'offer' is made consistently, and this does not appear to be happening.
37. Third, **there is evidence of a need to make further finance advice available to beneficiaries after their award, for instance through 'aftercare' advice or signposting.** Many of those identifying a finance need have not sought finance advice, and a significant minority of individuals supported by the programme (around 15% according to the surveys) that required additional external finance following the Start Up Loan did not seek it, indicating a prevalence of 'discouraged borrowers'. Some of this may be due to risk



aversion (which may be high owing to the nature of many of the businesses), and for these businesses external finance may not be appropriate. This said, the proportion is higher than expected, even accounting for the maturity of businesses, and may be limiting their growth potential and/or sustainability. The data does not indicate a 'gap' on the supply-side, rather the need to help stimulate demand and awareness on the demand-side to ensure that beneficiaries are confident and able to access the finance they require following Start Up Loans.

38. Fourth, there are benefits from a regional/local approach to delivery. These are hard to quantify, but have included the ability to align and cross-refer between Start Up Loans and other local and regional provision, raising the profile of the programme in the business support landscape, and having an understanding of local and regional markets. Whilst there are also potential benefits from national providers (e.g. in terms of scale economies), the evaluation suggests the case remains for a provider mix that includes regional/local flexibility in the delivery of the programme. One issue identified, however, was that more could be done to avoid duplication, with limited joint-working identified at a local/regional level between Delivery Partners operating in the same geographies and competition for clients between national and local/regional players.

## Section 1: Introduction

SQW Ltd (SQW), working with BMG Research (BMG), was commissioned by the British Business Bank in November 2014 to undertake a longitudinal evaluation of the Start Up Loans programme (the programme). This report is the third and final output of the evaluation<sup>1</sup>.

### About Start Up Loans

Start Up Loans was announced in Lord Young's report on small business<sup>2</sup>, setting out plans for a pilot in 2012/13. The programme was originally intended to target young people aged 18-24 in England, offering individuals a loan to start a business (or to develop a business that had been trading for less than a year), alongside business support and advice. Lord Young drew on the model for, and evidence underpinning, the Enterprise Programme that was delivered by The Prince's Trust. Evidence from the Trust indicated that demand outstripped supply for enterprise support of this type.

The underlying case for Start Up Loans was that banks and other mainstream finance providers did not meet the demand for loans for start-up companies owing to the lack of collateral, credit history and/or trading history amongst applicants, and the low margins associated with low value loans. In addition, there were barriers to finding and accessing appropriate external advice for people looking to start a new business, and there was an equity argument, with enterprise and self-employment seen as a way to improve the economic prospects for young people. The programme was not intended to generate a commercial return for Government; rather it aimed to generate economic value through addressing a failure in the market for access to finance and by encouraging entrepreneurship.

Delivery of the pilot began in earnest in September 2012, and from January 2013 the age cap was raised to 30. In activity terms, the pilot was successful in meeting targets for loans with over 2,700 loans approved, at an average loan size of around £5,300. Subsequently, there have been additional funding commitments, and Start Up Loans has been extended to all parts of the UK. By May 2018, the programme had lent over £420m, through over 56,000 loans, with an average loan value of c. £7,500 over the period since launch<sup>3</sup>. The average loan value has increased over time. For example, in 2016 the average loan value for the year was over £10,000.

For an individual loan recipient, the programme involves three stages: initial 'pre-application support' to help individuals to develop a business plan; a personal loan to start/develop the business<sup>4</sup> with a fixed interest rate of 6% and a loan term of 1-5 years; and mentoring support to help the individual entrepreneur to develop and grow the business. The programme is funded by the Department for Business, Energy and Industrial Strategy (BEIS).

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<sup>1</sup> The Year 1 and 2 reports are available here: <http://british-business-bank.co.uk/research/6827-2/>, <https://british-business-bank.co.uk/wp-content/uploads/2017/10/SUL-Evaluation-Year-2-Report-Final-Report-October-2017.pdf>

<sup>2</sup> Lord Young (2012) *Make business your business: a report on small business start-ups*, London, p. 15.

<sup>3</sup> Data provided by the British Business Bank in July 2018.

<sup>4</sup> The loan is a personal loan to the individual, not to the proposed business. The individual remains responsible for repayment of the loan irrespective of the performance of the business.

Operational delivery of the programme is managed by the Start Up Loans Company (SULCo), a subsidiary (from April 2017) of the British Business Bank. Programme support is delivered by a network of Delivery Partners across the UK, ranging from local community finance institutions through to major social enterprises and charities, which are responsible for the provision of pre-application support, loan assessment, and mentoring support. There have been changes in the network of Delivery Partners since the programme's inception, with some leaving and others joining. At March 2018, there were 25 Delivery Partners involved in the programme.

## The evaluation

The evaluation was a long-term research programme, which commenced in late-2014. Over the course of the evaluation, the study has provided a 'real-time' evidence base on the delivery and impacts of the programme. The overarching purpose of the evaluation was to provide a robust assessment of the economic impact of Start Up Loans, whether the programme was targeted effectively to maximise economic impact, and whether the economic return can be enhanced. The evaluation had two core objectives:

- To assess the performance of the programme against its stated objectives and intended outputs, outcomes and impacts, including the Gross Value Added (GVA) contribution, businesses creation, growth and survival, the longer-term labour market prospects of individuals supported, and improvements in their skills and capacities.
- To provide a robust assessment of the value for money of the programme, including taking into account the additionality of the finance and outcomes generated, and where possible (and with appropriate caveats) assessing how value for money compares to similar programmes elsewhere in the UK and more widely.

The evaluation also had three supplementary objectives:

- To assess the value of pre-application support and mentoring, and the extent to which the pre-application support and mentoring affected the outcomes for individuals supported by the programme.
- To assess whether there were particular characteristics associated with those individuals that benefited the most from the programme, including individual characteristics (e.g. age, qualifications), business characteristics (e.g. business sector), and support characteristics (e.g. the size of the loan).
- To assess the links between the performance of businesses supported by the programme and loan repayment, and whether mentoring had any effect on levels of loan repayments.<sup>5</sup>

Drawing on the evidence, the evaluation was also required to provide practical suggestions for informing policy and delivery.

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<sup>5</sup> Note that the evaluation is not a formal assessment or audit of the programme's performance in terms of loan repayment, and/or the management of its loan portfolio.

To meet the objectives, the evaluation adopted a quasi-experimental approach. This involved comparing the performance of a group of individuals that had drawn down a Start Up Loan from June to December 2014<sup>6</sup> (the beneficiary group) to a matched group of individuals also looking to or recently starting a business that had not been supported by the programme (the comparison group). This comparison was based on a longitudinal survey of the two groups, and econometric analysis. This analysis was completed for the first two years of the evaluation, and planned for the final year. However, the achieved sample size in the survey for the comparison group in Year 2 (n=334), and the likely response rate in Year 3, meant that a third wave of the survey of the comparison group was not considered viable. The final year of the evaluation therefore include a third wave of surveys with the existing beneficiary group (referred to in the report as the '2014 Year 3 sample') alongside evidence from a further set of beneficiaries that had drawn down a loan from January to June 2016 (referred to in the report as the '2016 sample').

The evidence from the 2016 sample reflected the fact that the programme had evolved and matured significantly since 2014. Changes included: the rationalisation of the number of Delivery Partners with only those Delivery Partners that have demonstrated the ability to deliver loans at both volume and quality retained; improvements in the consistency, rigour and quality of delivery processes including at the application stage (e.g. credit checks), and the delivery of pre-application and mentoring support; and a change in the management of the loan book. The characteristics of the beneficiary cohort have also evolved over time. The 2016 sample provided an opportunity to assess the (early-stage) impacts and value for money of the programme that reflected more fully the current delivery model and approach.

Complementing the quasi-experimental approach in Years 1 and 2, and the ongoing tracking with beneficiaries in Year 3, the evaluation has also included feedback from Delivery Partners via an online survey, and two waves of case study research centred on delivery by individual Delivery Partners. Further detail on the methods is set out in Section 2.

## **Re-cap on the findings from the study so far**

The Year 1 report provided an initial perspective on the emerging impacts of the programme, with the Year 2 providing a more robust set of findings as the impacts became more evident over time, notably related to effects on business performance and survival. The key findings from the previous years of the evaluation included:

- the programme has had a significant and positive effect on the start-up rate of its beneficiaries, relative to the comparison group; more businesses have started up than would have been the case if the programme had not been delivered, resulting in an increase in the number of business starts across the UK

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<sup>6</sup> This period within the full November 2013-December 2014 period that forms the population for the 2014 sample was selected in Year 1 to provide the most appropriate 'baseline' data for the beneficiary cohort, taking into account that pre-application support will have been received in advance of the loan approval date. This period was subsequent to when the programme became available for all UK residents (rather than age limited), and so there were no issues with respect to eligibility impacting on the ability to compare results to the comparison group in the Year 1 and Year 2 report.

- the programme appears to have had some positive effects on business outcomes; whilst *not* leading to a higher business survival rate, a positive and significant effect was found in Year 2 in terms of whether beneficiaries had increased their sales and/or employment over the previous year compared to the comparison group (the effects were restricted to *whether* a business had grown its sales/employment, not the scale of growth)
- programme value for money was estimated to be positive; the Benefit Cost Ratio (comparing the Gross Value Added benefits of the programme to its costs) was estimated in both Year 1 and Year 2 to be around three to one (excluding multiplier effects), based on 'self-reported' data from the beneficiary group
- programme mentoring has had positive effects for some individuals and was generally well-regarded, but there was no statistical evidence that mentoring has led to changes in business or personal development outcomes; this reflects that mentoring delivery has varied across Delivery Partners, and there is a range of factors that drive whether an individual seeks mentoring assistance, with different implications for expected business and personal outcomes (e.g. those with less experience and/or those whose businesses were struggling may have been more likely to take up the mentoring assistance)
- there was a relationship between arrears and business survival, but the direction of causality was not clear from the evidence; those individuals with businesses in the beneficiary group that were still trading were less likely to be in arrears in Year 2, but in part, this was likely to reflect response bias (with individuals in arrears less likely to have responded to the survey).

### Focus of the Year 3 report

The principal focus of this Year 3 report is on the two core objectives of the evaluation: to assess the impact of the programme in terms of key business and individual outcomes, and to provide a final assessment of value for money. These assessments cover both the '2014 cohort' (that is, those beneficiaries that drew down a loan in 2014, based on the Year 3 sample), and the '2016 cohort' (that is, those beneficiaries that drew down a loan in 2016, based on the 2016 sample). These assessments for the two groups are presented separately and cannot be directly compared, given both changes in the delivery of the programme leading to the characteristics of the two groups being very different (as discussed in Section 2), and the different period of time that has occurred following support. With the absence of a counterfactual in Year 3, the evaluation has been reliant on assessing the intended benefits in the programme logic model by collecting data on relevant outcome measures from individual beneficiaries in both the 2014 Year 3 sample and 2016 sample. This has also included self-reported assessments of the role of the programme in contributing to these outcomes.

The analysis for the 2016 sample also includes assessment in relation to the supplementary objectives, and this also draws on the evidence from the qualitative case study research. The sample size for the 2014 Year 3 sample prevents an assessment for the first two supplementary objectives.

Year 3 of the study also included two further objectives for the evaluation identified by the British Business Bank. These reflected changes in the policy and delivery landscape and the need for the evaluation to help inform the future of the programme. The objectives were:

- to assess the extent to which outcomes were different across different regions of the UK, and any implications of this for programme delivery in the future
- to assess the access to finance needs and experience of beneficiaries after they have been supported by the programme, including the extent to which individuals have sought and secured follow-on funding, and any implications for the programme offer in the future.

Given sample sizes of the surveys, the regional analysis is covered by the 2016 cohort only alongside the evidence from the qualitative research. Access to finance is considered for both groups. Table 1-1 provides a summary of the focus of the Year 3 report across the two groups and the evaluation objectives.

Table 1-1: Coverage of the Year 3 evaluation

	2014 cohort	2016 cohort
<b>Core objectives</b>		
Impact assessment	✓	✓
Value for money assessment	✓	✓
<b>Supplementary objectives</b>		
Assessment of the value of pre-application support/mentoring; whether pre-application support/mentoring affect outcomes for individuals	✗	✓
Assessment of the characteristics that are associated with individuals that benefit the most from the programme	✗	✓
Assessment of links between the performance of businesses and re-payment; and whether mentoring has any effect on levels of loan repayments	✗	✓
<b>Year 3 research objectives</b>		
Assessment of regional variation in evidence	✗	✓
Assessment of access to finance issues post-programme	✓	✓

Note that, for clarity, throughout the report 'cohort' refers to the population of individuals drawing down loans in November 2013-December 2014 (2014 cohort) and January-June 2016 (2016 cohort) respectively, and 'sample' refers to the surveyed individuals from the 2014 and 2016 cohorts.

## Structure

The remainder of this report is structured as follows:

- Section 2 sets out the research methods in more detail

- Sections 3 and 4 set out the findings on the core evaluation objectives relating to impact and value for money for the 2014 cohort and 2016 cohort respectively
- Sections 5 and 6 set out the evidence and findings on the supplementary and Year 3 research objectives for the 2014 cohort and 2016 cohort respectively based principally on the survey evidence
- Section 7 presents findings, drawing on econometric analysis of the 2016 cohort survey data, on characteristics associated with those who have benefited the most
- Section 8 summarises the evidence on local/regional delivery from the case studies
- Section 9 provides the overall conclusions of the evaluation and implications for the programme in the future.

Three Annexes are attached: Annex A presents the detailed findings from the econometric analysis; Annex B presents the detailed findings from the income distribution analysis; and Annex C provides a summary of the range of BCR findings presented in the main report.

## Section 2: Research methods

### Coverage

This section includes an overview of the primary research for the 2014 and 2016 cohorts, including their characteristics; the approach to qualitative research; and the analytical approach, including limitations and implications for the interpretation of findings.

### Primary research

#### 2014 cohort

##### Background to the approach

As noted in Section 1, the evaluation sought to adopt a quasi-experimental approach that compared (via econometric analysis) the performance of a group of individuals that had been supported by the programme (beneficiaries) with a comparison group of similar individuals that had not (non-beneficiaries). In Year 1 of the evaluation, surveys were completed with approximately 1,000 individuals that had been supported, and 575 that had not. These groups were then re-contacted for the Year 2 evaluation (excluding those that did not wish to be re-contacted), with 330 beneficiaries and 222 non-beneficiaries, with a subsequent 'top-up' of the non-beneficiary group securing a further 112 interviews, providing a comparison group in Year 2 of 334 individuals.

In both Year 1 and Year 2, the survey data from the two groups was used as the basis for econometric analysis – using a two-step Heckman approach<sup>7</sup> – that sought to evidence the causality of the programme on relevant outcomes i.e. that Start Up Loans has - or has not - led to a particular outcome. This econometric analysis was complemented by analysis on the effects of the programme based on primary evidence provided by beneficiaries in the survey, known as 'self-reported analysis'.

As discussed in Section 1, given the sample size remaining for the comparison group following Year 2 and what could reasonably be expected in terms of response rates if they were re-contacted again, it was agreed with the British Business Bank that it would not be proportionate to seek to gather a third year of data for the comparison group. The key factor here was consideration of the potential sample sizes required to generate results with sufficient statistical power. With expected sample sizes of around or just over 100 expected for each group (dependent on response rates), the ability of the econometric analysis to find statistically robust evidence on any variation between the groups was regarded to be very limited. Therefore, it was agreed that the approach for Year 3 would be based on the self-reported analysis only, drawing on evidence from a third wave of surveys with beneficiaries, complemented by research with a 2016 cohort of beneficiaries (discussed below).

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<sup>7</sup> For details of the method see pp. 23-26 and Annex A of the Year 2 report here: <https://british-business-bank.co.uk/wp-content/uploads/2017/10/SUL-Evaluation-Year-2-Report-Final-Report-October-2017.pdf>



## Survey sample

Of the 330 completions in Year 2, 236 stated that they would be willing to participate in another survey in the future. The 236 therefore provided the sampling frame for the Year 3 survey that were contacted by BMG Research over a 10-week period from mid-November 2017 to mid-January 2018. Surveys were completed with 107 beneficiaries, a response rate of 45%, providing a survey sample for the Year 3 analysis of 107 (the 2014 Year 3 sample). The implications of the sample size for the analysis are discussed below.

As shown in Table 2-1, the characteristics of the 2014 Year 3 sample are different to both the original beneficiary survey sample from Year 1 (and Year 2) of the evaluation (from which the 2014 Year 3 sample is a sub-set of those that have been surveyed in each year), and the wider 2014 cohort, that is the 11,000 individuals that drew down loans over the November 2013 to December 2014 period. Those available and willing to be interviewed in Year 3 were biased (relative to the population and the earlier years of research) towards older recipients, those formerly in employment, and those that had drawn down larger loans.

Table 2-1: Characteristics of the 2014 cohort vs previous years and the evaluation population

	2014 cohort (n=11,001)	2014 Year 1 sample (n=957)	2014 Year 2 sample (n=323)	2014 Year 3 sample (n=104)
<b>Gender</b>				
Male	61%	61%	62%	64%
Female	39%	39%	38%	36%
<b>Age group (at application)</b>				
18-30	46%	44%	36%	30%
Over 30	54%	56%	64%	70%
<b>Loan value group</b>				
Up to 3k	21%	21%	19%	12%
3k to 8k	54%	54%	51%	58%
Over 8k	25%	25%	30%	31%
<b>Average loan value</b>				
Average loan value	£6,318	£6,868	£7,529	£8,170
<b>Employment status at application (SUL CRM)</b>				
Unemployed	36%	38%	34%	28%
Self-employed	27%	27%	32%	33%
Employed (FT+PT)	32%	31%	32%	38%
Other	5%	4%	2%	2%

Source: SULCo monitoring data, and evaluation surveys Years 1-3

The characteristics of the 2014 Year 3 sample has implications for the analysis, and the extent to which the findings can be regarded as representative of the wider population of individuals supported by the programme. For example, the self-reported evidence in Year 2 found that individuals with larger loans and that were older were associated with higher levels of net

turnover in the businesses they had started-up relative to those with lower value loans and that were younger. Therefore, a survey sample that is over-represented relative to the population in terms of larger loan values and older beneficiaries, may over-estimate programme effects.

Two other points are noted regarding the characteristics of the 2014 Year 3 sample. First, the proportion of individuals that had previous experience of owning/managing a business was significantly higher (at the 5% level) in the 2014 Year 3 sample than in the 2014 Year 1 sample: at 37% and 27% respectively.<sup>8</sup> This suggests that the 2014 Year 3 sample were more experienced in owning and running a business than the original survey sample in Year 1, which may have implications for the performance of the businesses.

The sector mix of the businesses that survey respondents have started-up, or plan to start-up, has shifted over the three years of the tracking survey, with an increased proportion in business/professional/scientific services, and a lower proportion in wholesale/retail/transport/accommodation in the 2014 Year 3 sample relative to Year 1 sample (see Table 2-2). The self-reported analysis in Year 2 found manufacturing firms and those in wholesale/retail/transport/accommodation appeared to have experienced at that point 'better' turnover effects than those in other sector groups, and there was some corroborating evidence from the econometric analysis where individuals with businesses in the wholesale, retail, transport and accommodation sectors were more likely to increase employment. These findings may have reflected timescales associated with business growth, with retail, accommodation and food businesses potentially able to reach the market and grow more quickly than those in professional services. The implications for the analysis are therefore not straightforward, and the sample sizes in Year 3 mean that it is not possible to present robust data on outcomes by sector to test further the findings from Year 2. However, the apparent shift in the sector profile of the survey sample needs to be recognised as a possible factor when comparing the Year 3 survey findings to data from previous years of the evaluation.<sup>9</sup>

Table 2-2: Sector mix of businesses started-up/planned by individuals in 2014 Years 1/3 samples

	2014 Year 1 sample (n=971)	2014 Year 3 sample (n=106)
Sector: SIC A-F: "primary/production/construction"	15%	19%
Sector: SIC G-I "wholesale/retail/transport/accommodation"	31%	24%
Sector: SIC J-N "business/professional/scientific services"	31%	37%
Sector: SIC O-U: "public administration/education/health"	22%	21%

Source: Evaluation surveys Year 1 and 3

The characteristics of the 2014 Year 3 sample suggest some 'response bias', which was also evident in the Year 2 evaluation. Quantifying the exact level of response bias is not possible: we do not know how those individuals surveyed in Years 1 and 2 who did not participate in the

<sup>8</sup> Note there was no significant variation in the proportion of individuals starting-up a business alone (rather than with others) with others between Year 1 and Year 3, in both cases around 70% were the sole owner of the business that had (or planned to be) started-up.

<sup>9</sup> Note that intended business sector was not collected in the monitoring data meaning that a population-level breakdown is not possible.

subsequent survey have performed in terms of the development of their business, or their own wider personal development. Further, the small number of individuals that refused to participate from the sample frame of contacts (n=21) means that it is not possible to identify any trends related to business performance that may suggest systematic response bias.

However, the proportion of individuals in the 2014 Year 3 sample that were in arrears in March 2017, at 20%, was significantly lower than the average for the 2014 cohort as a whole, at 47%.<sup>10</sup> Whilst this is not unexpected – we may expect that individuals in arrears would be less likely to respond to a survey related to the programme, and this difference was also evident in previous years of the survey – this has implications for the analysis. Notably, the evidence from the econometric analysis in Year 2 pointed to a relationship between the level of arrears and business survival, with those individuals with businesses still trading less likely to be in arrears.

Taken together, given the 2014 Year 3 sample has continued to diverge from the overall 2014 cohort in terms of individual, loan and business characteristics, and the variance in the arrears rate, the evaluation needs to be cautious in scaling-up the results from the sample to the wider cohort. We have sought to address this issue in part by weighting the scaling-up of the results by arrears status, and using sensitivity analysis by considering average business survival rates (see Section 3 for more details). However, these adjustments cannot account fully for the effects of the very different characteristics of the 2014 Year 3 sample to the full 2014 cohort, including the interrelated issues of age, loan value and background.

## 2016 cohort

The 2016 cohort is the c.3,450 individuals that drew down a Start Up Loan between January and June 2016, with 3,209 usable contacts available. The 3,209 contacts provided the sampling frame for the survey that was contacted by BMG Research over a 10-week period from mid-November 2017 to mid-January 2018. Surveys were completed with 602 beneficiaries, a response rate of 22%, providing a survey sample for the analysis of 602 (the '2016 sample'). The implications of the sample size for the analysis are discussed below. No formal targets were established, however, the survey sought to be representative of the regional split of loans. As set out in Table 2-3, the 2016 sample was generally well-matched to the population in terms of the spatial distribution of loans/respondents, although the North of England was slightly underrepresented in the survey (17% compared to 21% of the population).

Table 2-3: Regional split of 2016 cohort population and survey sample

	2016 cohort (n=3,543)	2016 sample (n=601)
South of England	14%	12%
North of England	21%	17%
London	15%	18%
Midlands	25%	25%
Devolved Admin	25%	27%

Source: SULCo monitoring data, and evaluation survey Year 3

<sup>10</sup> Comparisons to the previous waves of the survey are not appropriate as the arrears rate changes over time.

The characteristics of the 2016 sample to the population on a range of other factors are set out in Table 2-4. The survey sample is well matched across most characteristics, although the survey sample is weighted slightly to male rather than female beneficiaries – with women accounting for 40% of all loans drawn down over this period – and older individuals. The split by loan value and employment status prior to approaching the programme is consistent.

Table 2-4: Characteristics of the 2016 cohort compared to population (Jan-June 2016)

	2016 cohort (n=3,543)	2016 sample (n=601)
<b>Gender</b>		
Male	60%	64%
Female	40%	36%
<b>Age group (at application)</b>		
18-30	40%	35%
Over 30	60%	65%
<b>Loan value group</b>		
Up to 3k	14%	14%
3k to 8k	35%	35%
Over 8k	51%	51%
<b>Average loan value</b>		
Average loan value	10,390	10,625
<b>Employment status at application (SUL CRM)</b>		
Unemployed	25%	26%
Self-employed	37%	35%
Employed (FT+PT)	35%	36%
Other	2%	2%

Source: SULCo monitoring data, and evaluation survey Year 3

The data indicate that the 2016 sample is well-matched to the wider full 2016 cohort in terms of individual and loan characteristics. However, similar to the data related to the 2014 cohort and survey sample, the 2016 sample had a lower proportion of individuals in arrears in March 2017 with their loans, at 12%, compared to the 2016 cohort as a whole, at 20%. This may suggest those individuals that have had better experience with their loan and business are more likely to have responded to the survey. This will need to be taken into account in scaling-up the findings to the population.

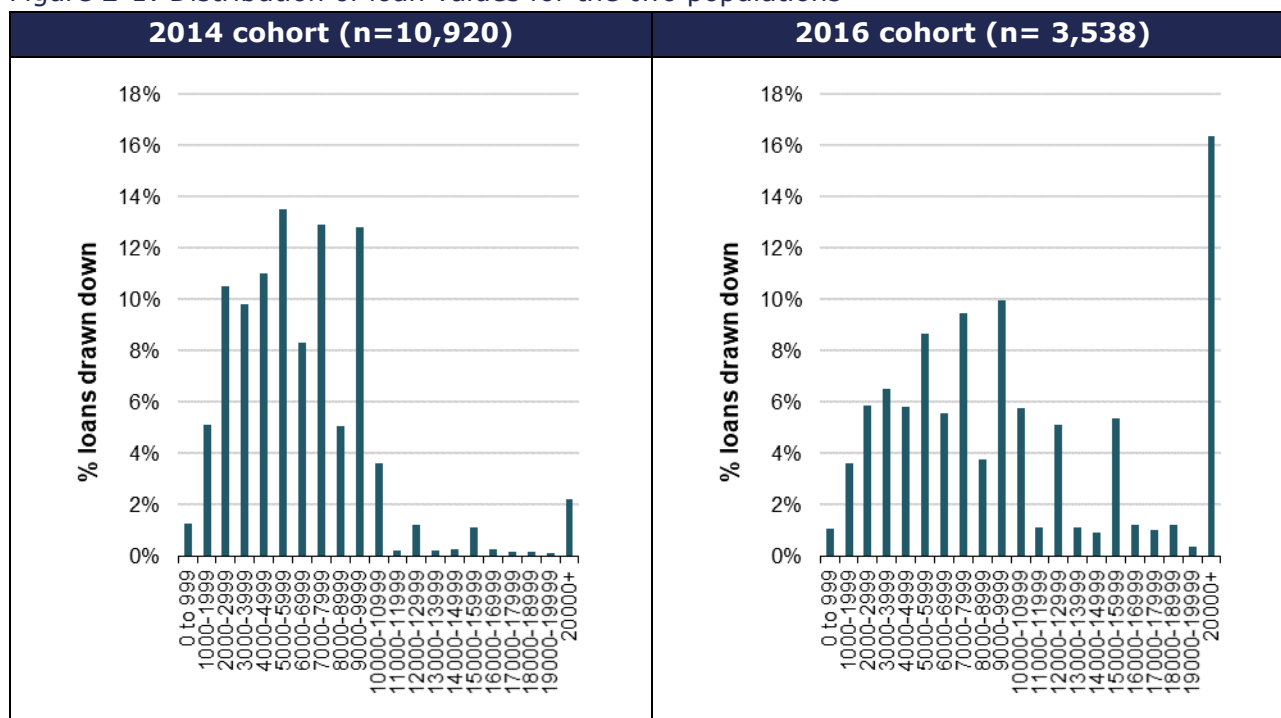
### The two populations

Whilst the two survey samples (i.e. the 2014 Year 3 sample, and the 2016 sample) are not compared directly in the analysis, it is also worth highlighting that the two populations (from which the surveys are drawn) are substantially different, with changes in the characteristics of individuals supported by the programme over time. For example, over a third (36%) of the individuals in the 2014 cohort (that drew down a loan over November 2013-December 2014) were unemployed when they first engaged with the programme, compared to a quarter (25%)

of the 2016 cohort (that drew down a loan in January-June 2016). The 2016 cohort is also on average older than the 2014 cohort, with 60% aged Over 30, compared to 54%.

This change is also reflected in the loans provided by the programme, which increased by around two-thirds between the two cohorts from around £6,300 to around £10,400. The distributions of the loans within the two cohorts are set out in Figure 2-1 below, highlighting a move to higher loan values as a more common element of the loan portfolio, notably the number and proportion of loans over £20,000 in the 2016 cohort (16%), compared to the 2014 cohort (2%).

Figure 2-1: Distribution of loan values for the two populations



Source: SULCo monitoring data

The spatial distribution of loans is also different between the two cohorts. The proportion of loans accounted for by individuals based in the South of England was five percentage points higher in the 2016 cohort than the 2014 cohort, accounting for a quarter of all loans in the later period. By contrast, the proportion of loans accounted for by individuals in the North of England and Midlands decreased.

Table 2-5: Spatial distribution of loans for the November 2013-December 2014 and January-June 2016 populations

	2014 cohort (n=10,929)	2016 cohort (N=3,543)
Devolved Admin	11%	14%
London	24%	21%
Midlands	17%	15%
North of England	28%	25%
South of England	20%	25%

Source: SULCo monitoring data

The key implication of these changes in the characteristics and locations of individuals, and the loans they draw down, over time is that it should not be unexpected if the findings on impact and value for money of the programme are different, emphasising that the two cannot be compared directly. Note that it is not within the remit of the evaluation to review or comment on the factors and drivers underpinning this apparent change in the characteristics of programme beneficiaries. However, in some cases the potential implications of this change have been identified in the qualitative research, and this is reported where relevant.

## Qualitative research

The Year 3 evaluation involved two strands of qualitative research: Delivery Partner case studies, and an online survey of all existing Delivery Partner surveys.

The Delivery Partner case studies focused on the delivery of the programme by eight Delivery Partners in different local areas, regions and the devolved administrations across the UK. The purpose of the case study research was to provide qualitative evidence on:

- how the programme was delivered in particular areas, including how this aligned with other economic development activity in these areas
- the outcomes and impacts from the programme for its beneficiaries, to complement the quantitative data from survey research with beneficiaries, i.e. how and why the programme has (or has not) had an effect on beneficiaries
- the outcomes and impacts from the programme on particular local areas/regions
- case examples of individuals that have been engaged with the Delivery Partner; these examples were not intended to be representative, rather to provide qualitative insight into the experiences of individuals that have been supported by the programme.

The Delivery Partners, and their spatial focus, are set out below. Each case study involved a site-visit to the Delivery Partner and interviews with managers responsible for Start Up Loans and individuals responsible for delivering pre-application support and mentoring support. Where possible, the case study also included qualitative interviews with a number of beneficiaries.

Table 2-6: Focus of the Delivery Partner case studies

Delivery Partner	Spatial area covered by Delivery Partner
Transmit Start-up	North East England
First Enterprise	East Midlands
DSL Business Finance	Scotland
Antur Teifi	Wales (Powys, Ceredigion, Carmarthenshire, Pembrokeshire and North Wales)
Let's Do Business Group	South East of England (particularly Sussex, Kent, Surrey and Essex)
SWIG Finance	South West of England
Business Finance Solutions	Greater Manchester
Acorn	Yorkshire and Lincolnshire

The case study evidence has been used in three ways. First, each case study has been written-up to a standard format as a formal output. Second, the findings from the eight case studies regarding local and regional delivery have been synthesised to inform Section 7 of the report. Third, the wider messages have been used to complement the findings from the quantitative evidence throughout the report; the case study evidence has been used alongside the evidence from the 2016 cohort, to reflect the greater consistency in the time period covered.

It is important to note that the case study evidence was not intended to be representative of the delivery of the programme as a whole across the 25 Delivery Partners. As noted throughout the evaluation, although there is consistency in the overall delivery model (pre-application support, loan, mentoring), there is considerable variation in how the programme is delivered practically by individual Delivery Partners within this framework. Further, the case study research for Year 3 was targeted explicitly on Delivery Partners with a local or regional focus, rather than those organisations that deliver the programme across the UK, reflecting the research questions around alignment with, and contribution to, local and regional economic development.

This focused approach to the case studies was complemented by an online survey of all Delivery Partners (24) that were delivering the programme at the time of the evaluation research in Year 3. This was the third wave of engagement with Delivery Partners via an online survey, with the survey distributed to all Delivery Partners in March 2018. The online survey in Year 3 focused on gathering qualitative and detailed feedback from Delivery Partners on their perspectives on the delivery and outcomes of Start Up Loans, spatial variation, and any ways that it could be improved. Responses were received from 14 Delivery Partners (a response rate of 58%). The evidence from the online survey has been used throughout the report where relevant to complement the quantitative data and evidence from the case studies.

## **Approach to analysis in Year 3**

### **Impact and Value for Money**

The evidence from the surveys of the 2014 Year 3 sample and the 2016 sample was used as the basis of the assessment of programme impact and value for money. The focus for the impact and value for money was on the turnover contribution of the businesses started-up by individuals supported by the programme, converted to Gross Value added (GVA). This GVA was then compared to the costs of delivering the programme to assess value for money (in terms of Benefit Cost Ratios, or BCRs). The same approach was applied for both samples, with adjustments made to the time-period of impact and the assumptions in the analysis to account for the differences between the two samples (set out in Sections 3 and 4 respectively).

This approach involved converting the 'gross' effect provided on business turnover (both achieved and expected) to a 'net' effect, taking into account reflections from the supported individuals on what would have happened without support from the programme (deadweight), and other key factors such as the extent to which firms supported by the programme may have taken market share away from existing non-supported firms (displacement). To account for the inherent uncertainty in responses, especially with respect to future potential effects, the analysis has accounted for optimism bias.

Despite the incorporation of optimism bias into the analysis it is important to recognise the weaknesses in this approach that relied on 'self-reported data'. The approach relied on individuals being able to answer hypothetical questions in relation to a counterfactual situation (i.e. what they would have done and what their business would have achieved without the programme). However, a conservative approach has been taken to incorporate survey responses into the value for money assessment. Note that the evidence from the Year 1 report on 'finance additionality' (that is whether beneficiaries believed they would have been able to access this finance from other sources if a Start Up Loan had not been provided) has again been used in the value for money model that has informed this report for the 2014 Year 3 sample. These data, drawn from a survey completed in early 2015 (within a year of when beneficiaries in the 2014 cohort drew down their loan) were regarded as more robust than data from approaching three years on in late 2017/early 2018 (when there may have been challenges associated with memory recall).

The impact and value for money analysis on the 2014 Year 3 sample and the 2016 sample generated a range of BCRs. This included BCRs for both Economic Costs and Exchequer Costs for each sample, adjusted and unadjusted BCRs (reflecting different adjustments for the two samples), and BCRs for the wider cohorts (by scaling-up the findings from the survey to the populations). BCRs were also estimated based on distributional effects by taking into account the income distribution of beneficiaries. Across this range, we have focused our reporting particularly on the adjusted Economic Costs BCRs (which takes into account finance additionality, and the variation between the sample and the wider populations).

Given the wide range of BCRs generated from the analysis (see Annex C for a summary), which has included adjusted and unadjusted estimates, and the well-evidenced nature of the key data and assumptions that has underpinned the analysis, further sensitivity analysis has not been undertaken. The key driver of the estimates of impact, and subsequent BCRs, is the turnover data provided directly by beneficiaries in the survey. Other key assumptions used in the analysis include the default rate, which is based on BBB analysis of actual loan book data, optimism bias on expected effects (which has been tested against earlier evidence, see p33), and the turnover to GVA ratio which is based on ONS data.

### **Wider effects**

Consistent with the approach agreed for the evaluation, the value for money assessment does not include monetising benefits such as moving people into employment, or wider effects such as improved confidence or skills. However, the analysis includes an assessment of the contribution of the programme in terms of employment and wider effects, for the 2014 Year 3 sample and 2016 sample respectively, including:

- analysis of the 'employment transitions' experienced by individuals supported by the programme, including the employment status of individuals before and after their engagement with the programme, and their view on the extent to which they would be self-employed or employed without the programme
- analysis of the self-reported effects of the programme on wider employability factors and issues, including individuals' long-term job prospects and confidence.



The self-reported effects on the value of pre-application support and mentoring is also set out for the 2016 sample (this was covered for the 2014 sample in previous years).

### **Analysis of characteristics of who benefits the most**

The focus of the Year 3 econometric analysis was to undertake multivariate regression to provide insights into the characteristics of beneficiaries that benefit the most based on a range of outcomes. This included analysis of business outcomes (e.g. the characteristics associated with businesses that survive, grow their sales, and generate employment) and other outcomes (including satisfaction with the programme, personal development outcomes, and whether individuals were in arrears).

It is important to note that this analysis was based on the 2016 sample of beneficiaries only. The econometric analysis did not seek to analyse the causal mechanisms associated with benefitting most, as data were not collected on a representative comparison group of non-beneficiaries that would be needed for a counterfactual-based analysis. The approach taken, therefore, was exploratory cross-sectional regression analyses (logistic regression where the dependent variables were binary - i.e. the outcome was either achieved ( $y=1$ ) or not achieved ( $y=0$ ) - and OLS regression where the dependent variables were continuous - e.g. number of employees) to provide evidence on key characteristics associated with the outcomes, including net outcomes that focus on the specific contribution of the programme. Full technical details of the approach used are provided in Annex A.

### **Access to finance**

Evidence on access to finance issues for individuals after they have drawn down their Start Up Loan is set out for the 2014 Year 3 sample and 2016 sample respectively. The purpose of the analysis was to understand the overall experiences of individuals that have been supported by the programme, not individual financing decisions.

The questions used for the access to finance analysis were developed to align with wider evidence from the British Business Bank on access to finance, for example, related to what individuals first do when they identify a financing need, and whether they seek advice. The findings from the 2016 sample were compared to this wider evidence where relevant, although it is important to recognise that the individuals in the 2016 sample all have early-stage businesses, so comparison to wider evidence on the SME population as a whole needs to be treated with caution.

### **Regional analysis**

The analysis of the survey evidence for the 2016 sample included data reported at a regional level, where the sample sizes allowed. The regions refer to the residential location of the individual when they applied for a Start Up Loan (based on Start Up Loans monitoring data), not the location of a business they have started-up. The regions of the UK have been combined into five regions in order to generate sufficiently large sample sizes for analytical purposes, as follows:

- Devolved Administrations covering Scotland, Wales and Northern Ireland
- London

- South of England, covering South West, East, and South West England
- North of England, covering North West, North East and Yorkshire and Humber
- Midlands, covering East Midlands and West Midlands.

## Section 3: Impact and value for money - evidence from the 2014 cohort

### Key findings

- The impact and value for money analysis for the 2014 cohort is based on the 2014 Year 3 sample of 107 individuals that drew down a loan and responded to the third wave of the survey. The sample reflects attrition of survey respondents from the first to third survey wave.
- The survival rate of businesses started-up by individuals supported by Start Up Loans that responded to the third wave of the survey was 84%. The businesses remain generally modest in scale in terms of turnover – with an average turnover in the current year of trading of £100k – and employment, with over half not employing any staff other than the owner.
- The businesses started-up by individuals in the 2014 Year 3 sample, including those that have subsequently closed, are estimated to generate c.£30m in gross turnover over the 2014/15 to 2018/19 period. Taking into account deadweight, displacement, optimism bias, and expected business survival, the estimated net turnover over this period from the 2014 Year 3 sample is £4.7m.
- The average self-report additionality – that informs the deadweight adjustment – was 0.65, suggesting that nearly two-thirds of turnover effects generated by business started-up by the 2014 Year 3 sample are estimated to be additional, before accounting for displacement effects, based on the self-reported evidence. The average additionality ratio was higher for individuals with loans of £8k compared to those with loans of less than £8k; this is consistent with the evidence from previous years that self-reported additionality was higher for those individuals with higher loans.
- Converting net turnover to net GVA, and carrying-forward the effects for a further year to cover the six-year modelling period, the estimated net GVA impact for the 2014 Year 3 sample was £2.3m. Compared to the costs of the programme, this provides a Benefit Cost Ratio (using Economic Costs) of 4.5:1. Adjusting the data to account for the higher business survival rate in the survey sample owing to response bias provides an adjusted BCR (using Economic Costs) of 3.7:1.
- The 3.7:1 is higher than the BCR findings from the Year 2 evaluation. However, the analysis indicates that this is owing largely to the nature of the sample, notably the higher average loan values and age of respondent, even after adjusting the findings for business survival, rather than a change in the value for money of the programme for the 2014 Year 3 sample one year on. The value for money of the 2014 cohort, as expressed in terms of BCR (Economic Costs) is therefore likely to fall within the range of the survey sample BCRs of 3.0:1 from the Year 2 evaluation, and 3.7:1 from the Year 3 evaluation. Both remain positive for the programme.
- Scaling-up the effects of the 2014 Year 3 sample to the wider 2014 cohort of around 11,000 individuals that drew-down a Start Up Loan over the November 2013-December 2014 period, provided a net GVA impact of approximately £169m for the programme.

## Coverage

This section sets out the evidence, in relation to the 2014 cohort on impacts associated with the starting-up of businesses by programme beneficiaries, and extends this to provide an assessment of value for money. The analysis uses evidence provided by the 2014 Year 3 sample of 107 beneficiaries that have been surveyed in each year of the evaluation. Consistent with the methodology agreed for the evaluation, the impact assessment is based on the turnover effects of businesses started-up/developed by beneficiaries, converted to Gross Value Added (GVA), taking into account deadweight and displacement effects. Based on this evidence, an assessment of value for money is made, comparing the GVA effects identified to the costs of delivering the programme. The data are presented for the group of beneficiaries captured in the 2014 Year 3 sample, and are scaled-up to the 2014 cohort as a whole (i.e. beneficiaries that drew down loans over the November 2013 to December 2014 period), providing an assessment of the total impact and value for money of the programme for the 2014 cohort. The analysis includes a number of adjustments providing a range of estimates on value for money to reflect differences between the survey 2014 Year 3 sample and the wider 2014 cohort.

## Business status and profile

Of the 107 individuals in the 2014 Year 3 sample, 100 reported that they had started a business (seven had not yet started), of which 67 started-up after support from the programme, and 33 came to the programme with an existing business. For those individuals that had started-up a business either before or after they first approached the programme (n=100), the business survival rate was 84% (i.e. 84 of the 100 were still trading at the point of the survey).

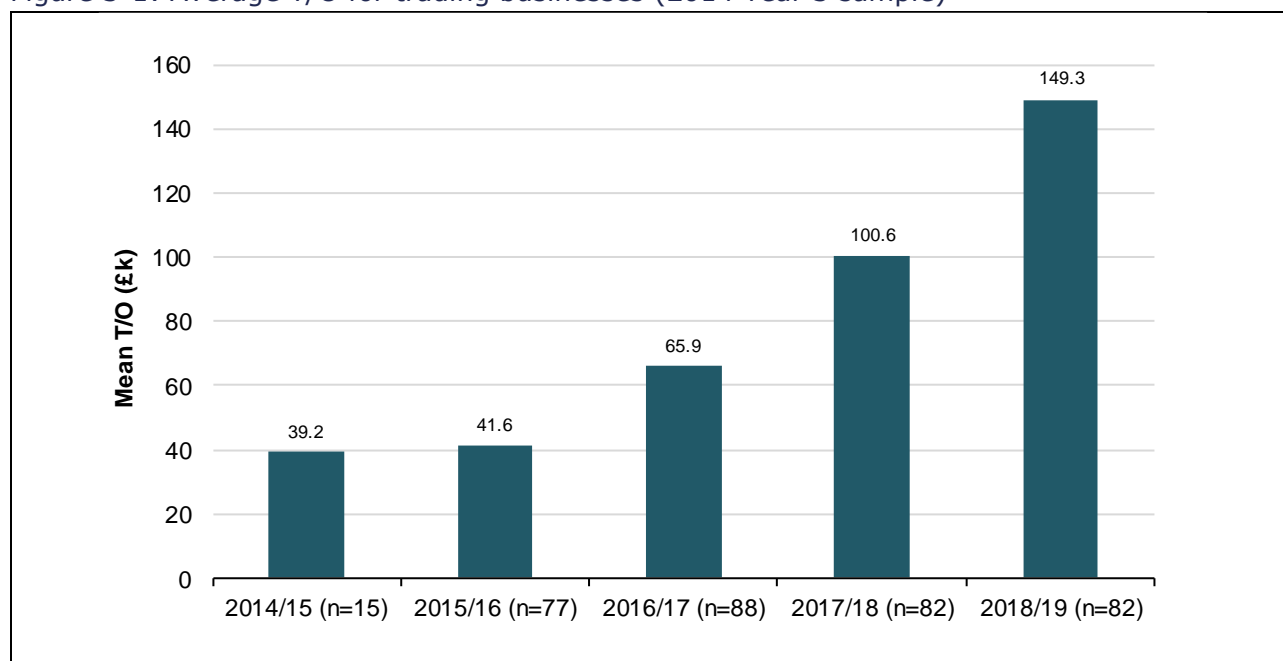
The businesses started-up by the 2014 Year 3 sample remain in most cases modest in scale in terms of turnover. The average (mean) turnover in the current year (2017/18) was £100k. The growth in average (mean) turnover since 2014/15 to the next financial year (relevant to those businesses that were trading in each year) is set out in Figure 3-1; the data highlight the modest and steady growth across the businesses started up by beneficiaries.

It is worth noting that the average turnover for the current year was slightly higher for those individuals that came to the programme with an existing business (£112k), compared to those who started-up a business after support from the programme (£94.5k). This is not unexpected, with the businesses in the former group slightly older than those that were started-up after engaging the programme (although in most cases still reporting turnover generation from 2015/16). Note that one significant outlier, with a turnover of £6m in 2017/18, is excluded from these data, and all subsequent data in this section.<sup>11</sup>

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<sup>11</sup> One respondent reported expected turnover of £6m in 2018/19, increasing from £750k in 2017/18, a change that is not regarded as credible (involving one-year growth of some 700%). If included this single respondent would account for 18% of the total aggregate turnover from across the 2014 Year 3 sample of 107 individuals, and skew significantly the findings of the impact analysis and value for money assessment.

Figure 3-1: Average T/O for trading businesses (2014 Year 3 sample)



Source: Year 3 2014 cohort survey Note: the data excludes one outlier with a very high expected T/O (of over £6m) in 2018/19, and one respondent did not provide turnover data

However, the average (mean) data masks significant variation across the businesses started-up and trading by beneficiaries in the 2014 Year 3 sample. The median turnover in the current year was £44k. This reflects that a third of businesses had turnover of under £25k, and three-quarters of all businesses had turnover of under 100k, as summarised in Table 3-1.

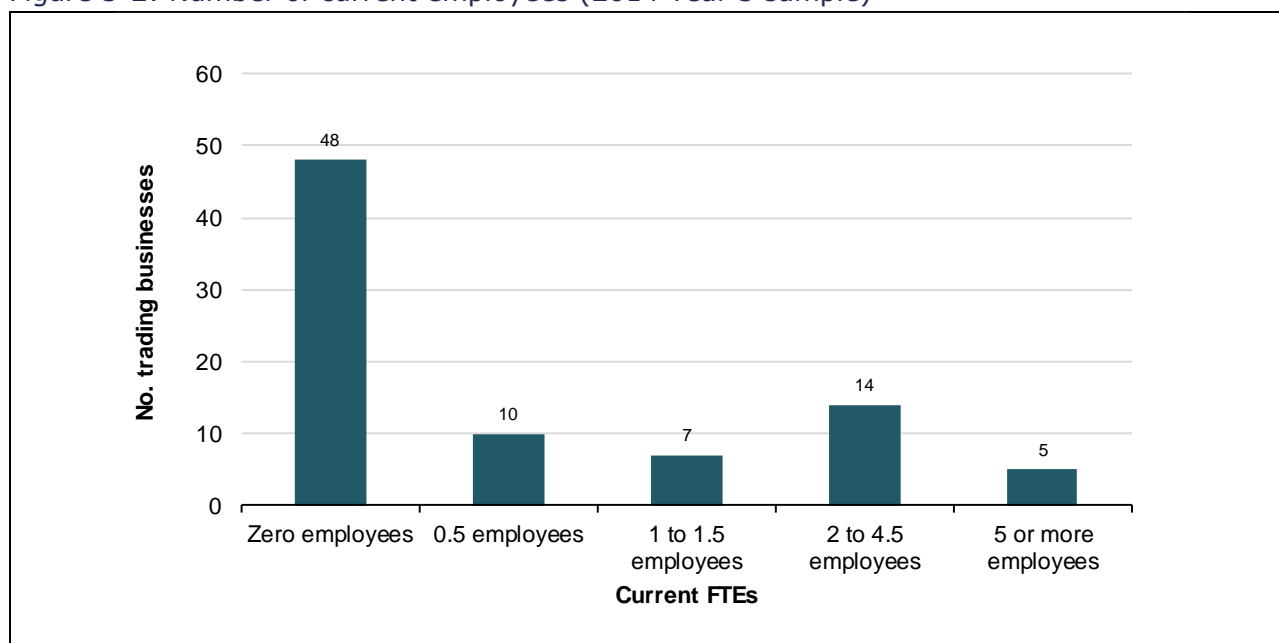
Table 3-1: Current turnover by range across the 2014 Year 3 sample

	Number	Proportion
Under 25k	27	33%
25k to 49k	19	23%
50k to 99k	17	20%
100k to 249k	10	12%
Over 250k	10	12%

Source: Year 3 2014 cohort survey Note: data includes the outlier with high T/O expected in 2018/19

The modest turnover of most of the businesses started-up by beneficiaries in the 2014 Year 3 sample is also reflected in employment. Over half of the businesses (48 of the 84) did not employ any employees excluding the owner at the point of the survey as shown in Figure 3-2. The average (mean) FTE current employment was 1.2 employees; this average was heavily dependent on just four firms in the sample (that collectively accounted for over 40% of the total employees across the 84 trading firms, 42 out of 99 FTEs).

Figure 3-2: Number of current employees (2014 Year 3 sample)



Source: Year 3 2014 cohort survey

It is notable that employment has generally not increased between the previous wave of the survey; just nine of the 84 individuals with trading businesses in the 2014 Year 3 sample indicated their current employment was higher than their employment in the previous year. This limited change in employment is contrasted to turnover, where 48 of the 84 individuals with trading businesses indicated their turnover had increased over the past year. Care must be taken with this comparison given the characteristics of the businesses – with incremental changes in turnover more likely to be evident than changes in employment for small businesses. This said, the difference may reflect in part the time lag between increasing sales and the need to employ more staff to meet this demand, with 40 of the 84 individuals with trading businesses expecting to increase their employment by the end of the next financial year, with the average employment by the end of 2018/19 expected to increase to 2.0 FTEs per business (excluding the owner).

This said, the data also suggest that in the majority of cases the businesses started-up by beneficiaries of the programme appear to be 'lifestyle businesses', designed principally to provide employment and an income for the founder, rather than 'scalable' businesses that are seeking to grow and generate further employment. This is not unexpected – and consistent fully with the underpinning rationale of the programme – but needs to be taken into account when considering the potential overall impacts of the programme.

### Gross turnover impacts

The first step in the impact assessment involved establishing the 'gross' turnover generated to date, and expected for the current and next financial years, by businesses started-up or developed by beneficiaries in the 2014 Year 3 sample. This analysis included all firms that had started-up by the time of the survey and provided turnover data, including those that subsequently closed. With a small number of exceptions, the data correspond to the 2014/15, 2015/16, 2016/17, 2017/18 (current) and 2018/19 (next) financial years. For the purpose of the modelling, all turnover data has been allocated to these five financial years.

As set out in Table 3-2, the aggregate 'gross' turnover identified by the 2014 Year 3 sample was around £30m (i.e. the businesses started/developed by the sample are collectively estimated to generate a total turnover over five years of £30m). The table sets out the number of businesses that the data in each year are based on – as expected, the number increased over time from 2014/15 when only around 15 businesses started-up by beneficiaries were trading and generating turnover, to a high-point of 88 in 2016/17 (before several ceased trading).

Table 3-2: Aggregate gross turnover from businesses started-up/developed by 2014 Year 3 sample (2014/15 to 2018/19)

	Aggregate T/O generated by businesses started-up (£k)
Aggregate T/O in 2014/15 (£k) (n=15)	803
Aggregate T/O in 2015/16 (£k) (n=77)	3,760
Aggregate T/O in 2016/17 (£k) (n=88)	5,446
Aggregate T/O in 2017/18 (k) (n=82)	8,253
Aggregate T/O in 2018/19 (k) (n=82)	12,240
Aggregate T/O turnover (£k)	30,501

Source: Year 3 2014 cohort survey

It is worth noting that 40% of the aggregate total turnover identified by the 2014 Year 3 sample (£12m) is expected for the next financial year (in 2018/19), rather than generated to date, a further £8m is also expected for the current financial year (in 2017/18), which had not been generated in full at the time of the survey. This data is adjusted for optimism bias in the subsequent calculations.

## Net turnover impacts

The 'gross' turnover impacts identified need to be adjusted by a number of factors to identify 'net' turnover impacts. This includes adjusting for deadweight, optimism bias, displacement, and anticipated business survival. These adjustments to the gross data are set out below.

### Deadweight

The evidence base ...

Beneficiaries that started a business either before or after drawing down a Start Up Loan were asked in the survey to provide a view on what would have happened if they had not been supported by the programme. This is evidence on so-called 'self-reported deadweight', one of the core components of additionality. The findings are set out in Table 3-3.

As set out in the table, around a quarter of the 2014 Year 3 sample that started-up a business following drawing down a loan (n=66) stated that their business would not have been started-up without the programme, reflecting full additionality. By contrast, just 6% of this group reported full deadweight, that is, in their view, the business would have started-up in any case and at the same time, scale and quality without the programme. However, partial additionality, most often in the form of timing effects was most common, with over 60% of this group

indicating that the businesses would have started but at a later date without the programme, generally up to a year more quickly. For those in the 2014 Year 3 sample that started-up a business before drawing down a loan (n=33) timing effects were also very common, alongside scale effects where the business would now be at a smaller scale without the programme.

Table 3-3: Self-reported deadweight for the 2014 Year 3 sample. Response to 'In your view, without your involvement with the Start Up Loans programme, which of the following would have happened?'

	Started-up after programme (n=66)	Started-up before programme (n=33)
The business would not have started/developed at all	24%	12%
The business would have started/developed, but at a later date	62%	61%
The business would have started/developed, but on a smaller scale	39%	58%
The business would have started/developed but would have been of lower quality	21%	21%
The business would have started-up/developed at the same time, scale & quality	6%	18%
Don't know	2%	3%

Source: Year 3 2014 cohort survey

The responses to the questions on the nature of self-reported additionality have been used to identify an additionality ratio for each respondent. For example, where a respondent stated that their business would not have started/developed at all the additionality ratio is 1, where the respondent stated that the business would have started-up/developed at the same time, scale and quality the additionality ratio is 0, with partial additionality effects somewhere between these two extremes. For example, where a respondent stated that the business would have started/developed but over 2 years later, the additionality ratio is 0.75.

Across the 2014 Year 3 sample, the average additionality ratio was 0.65, suggesting that nearly two-thirds of turnover effects generated by the sample are estimated to be additional, before accounting for displacement effects, based on the self-reported evidence.

Three points are highlighted with this data:

- Consistent with the variation set out in Table 3-3 on full additionality between those who started-up before or after drawing down the loan, the average additionality ratio for those individuals that started-up after drawing down the loan was slightly higher at 0.68, compared to 0.58 for those that came to the programme with an existing business.
- The average additionality ratio was higher for individuals with loans of £8k or over at 0.76 (n=30) compared to those with loans of less than £8k at 0.62 (n=67). Although care must be taken here given the modest sample size, this is consistent with the evidence from both Year 1 and Year 2 that self-reported additionality was higher for those individuals with loans over £8k relative to small loan values.



- The 0.65 average additionality ratio is consistent with the findings of the Year 3 sample in the Year 2 survey (i.e. what the 2014 Year 3 sample said in the previous survey) where the average additionality ratio was also 0.65, suggesting that overall perceptions of the additionality associated with the programme have not shifted over the past year between the two surveys. The data were also broadly consistent with the findings from the wider respondents in the Year 2 sample of 330 beneficiaries where the average additionality ratio was 0.62.

... adjusting the gross data

Applying the respondent-level additionality ratio to each relevant respondent's gross turnover data, and aggregating this net data across all relevant respondents, **provides a turnover effect adjusted for self-reported deadweight from the 2014 Year 3 sample of £20.6m.**

This deadweight adjusted turnover value is equivalent to 0.68 of the gross data, slightly higher than the 0.65 average non-deadweight ratio would suggest. This is owing to high levels of additionality associated with some businesses with high levels of turnover.

### Optimism bias

The evidence base ...

As set out above, over half of the gross turnover impact reported by beneficiaries was expected rather than achieved. The analysis therefore seeks to account for the potential optimism bias in the estimates provided by survey respondents, i.e. that they are overly optimistic on the future performance of the business. A 20% optimism bias has been assumed for turnover for the current and next financial year, i.e. we have assumed that only 80% of the reported turnover will in fact be generated.

The 20% adjustment factor is consistent with the approach taken in previous years of the evaluation. Data from the Year 2 and Year 3 surveys also suggest that the adjustment factor is appropriate; the aggregate *expected* turnover for the 2016/17 financial year reported by the 2014 Year 3 sample in the Year 2 survey was £6.6m, and the *actual* turnover for the 2016/17 financial year reported by the 2014 Year 3 sample in the Year 3 survey was £5.5m, equivalent to 82% of the expected value. An optimism bias adjustment of 20% therefore appears to be appropriate.

... adjusting the gross data

Applying the optimism bias of 20% to expected (rather than realised) turnover (following the adjustment for self-reported deadweight) provides **a turnover impact accounting for self-reported deadweight and optimism bias of £18.0m for the 2014 Year 3 sample.**

### Displacement

The evidence base ...

Displacement occurs when businesses created by the individuals supported by the programme compete for resources/market share with those of non-assisted individuals. To understand the

scale of this potential effect, the 2014 Year 3 sample was asked to identify: the location of their sales, levels of competition in their markets, and if competitors would take their sales if they closed. This data is then used to inform an assessment of displacement using the BEIS/British Business Bank methodology.<sup>12</sup>

The evidence on the location of sales is set out below in Table 3-4: (A) is the average proportion of sales reported by respondents in each area (not taking account of differences in turnover between respondents); and (B) is the proportion of sales in each area taking into account the scale of total current sales (i.e. applying the proportion in each area, and aggregating the data across all respondents). In both cases, the data suggest that local markets account for over half of sales, with the rest of the UK accounting for around a third, and overseas sales around 5%. The findings are similar to Year 2, where local markets were 56% of current sales (n=245).

Table 3-4: Proportion of sales in local area, rest of the UK and outside the UK for the 2014 Year 3 sample (n=70<sup>13</sup>)

	(A) Average proportion	(B) Proportion of current sales
Local	66%	60%
Rest of the UK	29%	36%
Outside the UK	5%	4%

Source: Year 2 Beneficiary survey

The evidence on levels of competition in their main markets is set out below in Table 3-5. The Table includes the data from the Year 3 sample and previous samples, demonstrating the consistency in perspectives on the level of competition throughout the evaluation research. The 2014 Year 3 sample responses in Year 2 (i.e. what the group surveyed this year said last year) was also consistent (with 18% indicating very intense competition at that point).

Table 3-5: Level of competition experienced in markets data from Years 1-3 (full samples)

	Year 1 sample (n=729)	Year 2 sample (n=240)	Year 3 sample (n=73 <sup>14</sup> )
Very intense competition	17%	19%	18%
Intense competition	28%	33%	32%
Moderate competition	38%	35%	34%
Weak competition	11%	9%	12%
No competition at all	5%	3%	4%
Don't know	1%	2%	0%

Source: Years 1-3 beneficiary surveys

<sup>12</sup> The method uses assumptions to responses to questions on levels of competition experienced by businesses and the proportion of sales that would be taken if they were to close to identify a displacement ratio. This ratio is then applied to UK sales to identify the non-displacing UK sales, and the total sales to generate an overall displacement.

<sup>13</sup> 14 of the trading businesses did not provide data on the location of sales; this turnover has been excluded from the analysis. Displacement was applied to the turnover at an aggregate level using average data, not by individual firm.

<sup>14</sup> 11 of the trading businesses did not provide a response to the question.

The evidence on whether beneficiaries perceive that competitors would take up their sales if they ceased trading is set out in Table 3-6. The data from the full sample in each year of the 2014 cohort surveys are presented. The data appears to suggest that beneficiaries increasingly believe that their sales would be taken if they were to close, at 52% in Year 3 compared to 34% in Year 1 (the latter focused on the full sample in Year 1).

Table 3-6: Perception of what proportion of sales would be taken by competitors if the business was to close - data from Year 1 to Year 3 (full samples in each year)

	Year 1 sample (n=729)	Year 2 sample (n=240)	Year 3 sample (n=73)
Yes, all of our sales	34%	42%	52%
Yes, some of them	34%	39%	27%
No, no-one would take up our sales	24%	15%	16%
Don't know	8%	5%	4%

Source: Years 1-3 evaluation surveys

However, this change appears to reflect the characteristics of the 2014 Year 3 sample. As shown in Table 3-7, the response in Year 2 for the Year 3 sample (n=85<sup>15</sup>) – i.e. what the 2014 Year 3 sample said last year – is consistent with their feedback in Year 3.

Table 3-7: Perception of what proportion of sales would be taken by competitors if the business was to close – data from the 2014 cohort only in Year 2 and Year 3

	Year 3 sample – response in Year 2 – (n=85)	Year 3 sample – response in Year 3 (n=73)
Yes, all of our sales	53%	52%
Yes, some of them	28%	27%
No, no-one would take up our sales	13%	16%
Don't know	6%	4%

Source: Years 2 and 3 evaluation surveys

The responses to the questions above have been used to identify a displacement ratio for each respondent where possible (using the BEIS/British Business Bank methodology for calculating displacement), and then an average displacement value for three groups of beneficiaries: fully additional new firms; partially additional new firms; and existing firms.<sup>16</sup> The average level of displacement across these three groups was 63% i.e. approaching two-thirds of the turnover generated by businesses started-up by beneficiaries is estimated to be taking market share away from other UK-based firms with whom they are competing.

<sup>15</sup> This includes all those that were trading last year and provided data.

<sup>16</sup> The categories are based on the information provided in the Year 1 survey on whether the business was trading prior to approaching Start Up Loans, and in response to the questions on additionality. Individuals that indicated they did not have an existing business when approaching the programme and identified full non-deadweight are classified as 'new fully additional'; individuals that indicated they did not have an existing business when approaching the programme and indicated partial deadweight are classified as 'new partially additional'; individuals that indicated they came to the programme with an established business are classified as 'existing firms'.

This may appear high, but reflects both perceptions of a competitive market, and the high proportion of UK-based sales across the 2014 Year 3 sample. It is important to highlight that this evidence on displacement does not mean that these businesses are not beneficial. Increased competition amongst firms can be important for driving productivity; however, it is not possible to capture/model this additional benefit with any accuracy.

... adjusting the gross data

Applying the estimate of displacement provides **a turnover impact accounting for self-reported deadweight, optimism bias and displacement of £6.5m for the 2014 Year 3 sample.**

### **Business survival**

The evidence base ...

It is necessary to account for the fact that some of the businesses that were trading at the time of the survey will close in advance of realising their future expected sales. Data from ONS on business survival rates have been used as a proxy, to adjust the aggregate turnover for 2017/18 (58%, reflecting three-year survival in most cases) and 2018/19 (49%, reflecting four-year survival in most cases).<sup>17</sup> Data from previous years (2014/15 to 2016/17) have not been adjusted in the main case impact analysis as this turnover had been realised in practice.

... adjusting the gross data

Applying the business survival rate for expected turnover provides **a net turnover impact accounting for self-reported deadweight, optimism bias, displacement and business survival of £4.7m for the 2014 Year 3 sample.**

### **Summary of net turnover impacts**

The analysis set out above resulted in a net impact in terms of turnover generated by businesses started-up by the 2014 Year 3 sample of approaching £5m over the 2014/15 to 2018/19 period.

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<sup>17</sup> Business Demography available [here](#): Note that to ensure consistency in the analysis between years, the same business survival rates have been assumed in the Year 3 analysis as were used in the Year 1 and Year 2 analysis over the modelling period. The data for 2019/20 has also been adjusted at 41% when this has been carried forward in the value for money analysis below. The ONS business survival rates used as a proxy are based on the overall survival rate of a cohort of firms started up in a particular year; they do not account for the potential higher survival rate for those firms that continue to trade in each year. However, the standard ONS data has been used as the most robust proxy for the potential survival rate of firms started-up by individuals supported by the programme'.

## Value for money assessment for the 2014 cohort

The net turnover data has been used as the basis for the value for money assessment. This involves converting the net turnover impacts to GVA (with some additional adjustments made, as described below), and comparing the GVA to the costs of the programme.

### GVA estimates

The GVA estimates are based on the following assumptions and adjustments. First, the net turnover impacts identified over the five years set out above have been adjusted to include one further year (2019/20) to reflect the six-year modelling period agreed at the outset of the work.<sup>18</sup> The data for 2018/19 has been assumed to persist for one year, adjusted for a further year's business survival, providing a net turnover impact over 2014/15 to 2019/20 of £5.6m. One year of persistence is a conservative assumption (with surviving businesses continuing to generate turnover in the years after the modelling period), and has been used to ensure consistency to data from previous years of the evaluation, and to reflect the uncertainty on business performance of early-stage firms over the longer-term. Second, turnover data have been adjusted to GVA, with an assumption that GVA is 45% of turnover. This ratio is based on ONS analysis<sup>19</sup> and has been used in Year 3 to enable consistent comparisons to the value for money estimates in previous years. Third, the net GVA data has been adjusted to account for inflation<sup>20</sup>, and discounted using the Treasury's standard 3.5% discount rate.

This analysis provides a **net GVA impact for the of £2.3m over the 2014/15 to 2019/20 period for the 2014 Year 3 sample.**

### Cost estimates

Costs for the value for money assessment are expressed in terms of both Exchequer Costs (the costs to government of the programme) and Economic Costs (including opportunity costs and accounting for finance additionality); in both cases, the costs cover the period 2014/15 to 2019/20 and have been adjusted for inflation<sup>21</sup> and discounted.<sup>22</sup>

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<sup>18</sup> This modelling period reflects that the maximum period to re-pay a loan was 60 months (i.e. five years), with a maximum 12-month capital repayment holiday period, meaning a maximum of six years during which loans could be re-paid. This is consistent with standard British Business Bank practice for loan products, that the modelling period is consistent with the period over which re-payments are expected to be realised.

<sup>19</sup> See [here](#). The majority of firms started-up/developed by beneficiaries remain micro-businesses (with 0-9 employees). The ratio for micro-businesses of 45% in the data has therefore been used. As with previous years, it was considered whether a specific ratio for GVA/turnover could be derived through the survey, e.g. by collecting data on indicators such as the costs of bought in goods and services. However, it was agreed with the British Business Bank not to take this route, because it would increase substantially the time required to complete the survey, adding additional burden to beneficiaries and risk adversely affecting response rates. There is also the risk that respondents provide inconsistent data on such metrics, owing to differences in accounting practices.

<sup>20</sup> Using the ONS deflator for 2013-14 as the base year, to ensure consistency with previous years of the evaluation.

<sup>21</sup> Using 2013/14 prices and deflator factors.

<sup>22</sup> Please note that the costs cover the Start Up Loans programme only; evidence from previous years of the evaluation, and the qualitative research in Year 3 indicates that supported individuals may also receive other forms of advice and support alongside Start Up Loans. However, it was not possible to capture information in the costs of this

## Exchequer Costs

The Exchequer Costs include lending costs, covering the value of the loans provided to individuals. The model assumes a re-payment rate on the initial loan value of 50% (i.e. of the £850k lent to the 2014 Year 3 sample, half is estimated to be re-paid) by 2019/20. The 50% assumption is based on analysis conducted for the British Business Bank to understand the 'Lifetime Expected Loss' (LEL) on the portfolio of loans across the Start Up Loans programme. It should be noted that the 50% assumption relates to the potential loss over the entire life of the loan, and is different to arrears which focuses on re-payment status at a specific point in time. It should also be noted that the LEL of 50% covers the entire programme portfolio; the LEL is higher for loans delivered earlier in the programme period, and lower for more recent and future cohorts, given improvements in financial management, including loan assessment processes. However, a 50% assumption has been retained for the purpose of the evaluation based on guidance from British Business Bank as the 'best estimate' to use when assessing the overall performance for the 2014 Year 3 sample. This cost is offset by the inclusion in the model of interest repayments, assumed at 6% of the annual outstanding balance (non-defaulted debt, with 6% the interest rate charged under the programme) at the start of each year for Exchequer Costs.<sup>23</sup>

Non-lending costs, covering the costs associated with the delivery of the programme by Delivery partners, including the pre-application support, mentoring support and administration, are also included. A non-lending cost per loan of £1,612 has been assumed for each loan based on data provided by SULCo in Year 1 of the evaluation. The model assumes that all of the costs for the delivery of the programme were included in this average, and the non-lending costs occurred in the first year of the modelling period (2014/15).

## Economic Costs

The Economic Costs also include the non-lending costs and the lending costs (again assuming a 50% default rate, offset by interest re-payments). The lending costs have been adjusted to take into account finance additionality, estimated at 74%, based on the Year 1 survey evidence to enable consistency in the approach. Finance additionality is an estimate of the proportion of the finance secured by beneficiaries from the programme (i.e. the loan value) that would not have been provided without the programme. The 74% level was the estimate used in the Year 1 evaluation taking into account evidence from the 2014 Year 1 sample, including whether they applied for bank/mainstream finance, and for those that did not why this was the case.<sup>24</sup> Economic Costs also include the public sector opportunity cost, assumed at 3.5% of the balance outstanding at the end of each year.

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support (which is drawn potentially from a wide range of sources, both public and private) in the survey, so these costs are not included in the value for money analysis for the 2014 and 2016 cohorts.

<sup>23</sup> Note that the Exchequer Costs are marginally higher than the Economic Costs because the full loan value is included in the Exchequer Costs as a cost in the first year of the evaluation (as this loan value has been 'spent' by the public sector – even though it is expected to be re-paid). This cost is covered in the Economic Costs on an annual basis, with the annual lending cost (taking into account re-payment and interest payments), adjusted for finance additionality.

<sup>24</sup> For further details regarding finance additionality see pp. 53-54 in the Year 1 evaluation report here: <http://british-business-bank.co.uk/research/6827-2/>

## Estimated costs

The discounted Exchequer Costs and Economic Costs over the modelling period for the 2014 Year 3 sample are set out in Table 3-8 below. As noted above, for the Exchequer Costs, the full value of the loan expenditure is counted in 2014/15, when the loans were drawn down by beneficiaries covered in the 2014 Year 3 sample, with the loan value then re-covered over time via re-payments, plus interest payments. For Economic Costs, the costs are spread across the modelling period, with the public sector opportunity cost from the outstanding balance and costs of default captured across the period. As noted above, non-lending costs are assumed to fall in the first year of the modelling period (2014/15) for both Exchequer and Economic Costs.

Table 3-8: Estimated Exchequer and Economic Costs – annual/cumulative for the 2014 Year 3 sample

	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
Exchequer Costs – annual (£k)	939	-119	-103	-92	-61	-46
Economic Costs – annual (£k)	218	78	74	61	41	32
Exchequer Costs – cumulative (£k)	939	820	717	624	563	518
Economic Costs – cumulative (£k)	218	296	370	432	473	505

Source: SQW analysis

## Value for money estimate for the 2014 Year 3 sample

Comparing the GVA impacts to Exchequer Costs and Economic Costs set out above provide a Benefit Cost Ratio (BCR) of around 4.5:1 (i.e. £2.3m in GVA for around £500k in costs). This is significantly more positive than the equivalent data from the Year 2 evaluation, which found a BCR of around 3.1. This likely reflects the response bias in the 2014 Year 3 sample, as discussed in Section 2, which means that the individuals that responded to the survey in Year 3 are likely to have businesses that are performing better than those that did not, and/or that they are more likely still to be trading. As such, this unadjusted BCR is likely to over-estimate the impacts of the programme as it does not account fully for those individuals that have been less successful. To seek to account for this response bias in the value for money assessment two separate (and mutually exclusive) approaches have been adopted.<sup>25</sup>

First, we have used data on arrears to weight the findings from the 2014 Year 3 sample to make the results more representative of the wider population in terms of re-payment. The justification of this approach stems from the evidence from the Year 2 evaluation in which the econometric analysis found a relationship between the level of arrears and business survival, with those

<sup>25</sup> The two approaches were agreed with the British Business Bank as the preferred means of addressing issues of variation between the survey sample and the population. This drew on evidence from the previous years of the evaluation on the relationship between arrears and business performance (with business performance outcomes also associated with characteristics including employment status and previous business experience), and the uncertainty on survival rates of the wider population, which is a key assumption in the impact assessment.

individuals with businesses still trading less likely to be in arrears (although this does not mean that individuals in arrears do not have businesses trading and generating turnover). Key data and elements of the approach are as follows:

- In the 2014 Year 3 sample data, the average net GVA per loan generated by businesses by individuals not in arrears was £23.6k, compared to £13.6k for those that were in arrears.
- Of the 2014 Year 3 sample, 20% of the individuals were in arrears, compared to 47% in the population as a whole. If the 2014 Year 3 sample was representative of the 2014 cohort as a whole, approaching half of the total would be in arrears, where the lower GVA per loan value would apply.
- Applying the average GVA per loan value to the weighted proportion of the 2014 Year 3 sample in arrears (i.e. assuming that 47% of the sample were in arrears), provides a GVA estimate of £2.0m, a reduction from the main case of around 13%.

The second approach was to assume that the business survival rate amongst the 2014 Year 3 sample was consistent with the wider business survival rates of the economy as a whole over the modelling period. This has drawn data from ONS business survival rates. Key data and elements of the approach are as follows:

- The business survival rate of the 2014 Year 3 sample at the time of the survey was 84%; this is significantly higher than the three-year business survival rate of 58% from the ONS business survival data.<sup>26</sup>
- Moreover, if we assumed that the business survival rate in previous years matched the ONS data, in 2015/16 92% of turnover would have been generated, and in 2016/17 74% of turnover would have been generated.<sup>27</sup>
- Applying the business survival rates to the turnover generated across the modelling period provides a GVA estimate of £1.9m, a reduction from the main case of 19%.

The BCRs based on these approaches provide a range of estimates for value for money of the programme for the 2014 Year 3 sample – see Table 3-9. As set out in the table, the BCRs provide a range of between 3.7:1 and 4.5:1 for Economic Costs.

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<sup>26</sup> Using the data in the model from 2013/14 to ensure consistency.

<sup>27</sup> Note that consistent with the wider approach of the impact assessment, we have assumed that the business survival rate is equivalent to the value of turnover generated i.e. a 10% reduction in the business survival rate leads to a 10% reduction in turnover; the analysis does not seek to model the closure of individual businesses.



Table 3-9: BCRs for the 2014 Year 3 sample

	<b>GVA impacts (£k)</b>	<b>BCR: Exchequer costs</b>	<b>BCR: Economic costs</b>
Unadjusted impacts	2,281	4.4	4.5
Impacts adjusted for arrears	1,988	3.8	3.9
Impacts adjusted for business survival	1,857	3.6	3.7

Source: SQW analysis

The adjusted BCRs remain above the findings from the previous two waves of the evaluation, where the BCR for the survey cohort was estimated to be around 3:1. The higher BCRs reflect the fact that the adjustment for arrears and business survival are not able to account fully for the significant differences between the 2014 samples in Year 2 and Year 3, both in terms of the businesses covered in the analysis, and the (related) characteristics of the individuals included in the sample.

To test this further, the value for money model used in Year 2 of the evaluation has been re-run, using the data provided in the Year 2 survey, but containing only the data from the individuals included in the 2014 Year 3 sample. The overall BCR (Economic Costs) for Year 2 was 3.0:1 (based on 315 individuals), however, focused only on the data provided by the 2014 Year 3 sample (i.e. the 107), the BCR (Economic Costs) is 4.0:1.<sup>28</sup>

This 4.0:1 BCR in Year 2 remains lower than the (equivalent) unadjusted Year 3 BCR of 4.5:1. However, it is also noticeably higher than the 3.0 BCR from the full Year 2 sample. This does suggest that the BCR estimate for the 2014 Year 3 sample (i.e. 4.5:1) is the result of the characteristics of the sample in Year 3, rather than a substantive shift in the outcomes for individuals supported over the November 2013-December 2014 period in the past year between the Year 2 and Year 3 surveys. The variation between the 4.0:1 and 4.5:1 ratios is driven principally by the lower business survival rate assumed in the Year 2 model for future turnover than the actual business survival rate amongst the 2014 Year 3 sample.

### Scaling-up the findings to the population

The analysis set out above is based on the findings of the 2014 Year 3 sample, and the 105<sup>29</sup> loans drawn down by respondents. Not all the loans drawn down contributed GVA. For example, some individuals have yet to start a business, and some individuals reported that the business had not had a full financial year of trading; however, we would also expect this to be the case in the evaluation population as a whole.

To provide an estimate of the aggregate effects of the programme from the 2014 cohort as a whole of around 11,000 loans, the findings from the 2014 Year 3 sample have been scaled up to the total population. The analysis applies the average net effect per loan from the survey

<sup>28</sup> Note that all 107 individuals for the 2014 cohort are included in the data, including the outlier excluded for very high/unrealistic future expected turnover in Year 3.

<sup>29</sup> Excluding the outlier and one respondent that did not provide any data on business performance.

cohort to each loan in the population to arrive at a scaled-up value. The scaling-up approach is based on the business survival adjusted data from the 2014 Year 3 sample (see Table 3-9). The analysis also seeks to account for the difference in the proportion of beneficiaries in the 2014 cohort that were in arrears compared to the 2014 Year 3 sample, important because the average net effect per loan is lower for those in arrears compared to those not in arrears. This is done by applying the average effects for loans in arrears and loans not in arrears from the survey data to the populations of loans in arrears and not in arrears when scaling-up. The specific values used, and the findings of the analysis are set out in Table 3-10 below.

This analysis identifies **a net GVA impact of the population from the 2014 cohort (that is, the 11,000 loans drawn down between November 2013 and December 2014) of £169m.**

Table 3-10: Scaling-up of GVA findings for the 2014 cohort

Stage of analysis	Metric
Net effects (adjusted for survival)	1,856,548
A: ... of which from loans not in arrears	1,637,348
B: ... of which from loans in arrears	219,200
C: Number of loans not in arrears in survey cohort	85
D: Number of loans in arrears in survey cohort	20
E: Average GVA effect from loans not in arrears (=A/C)	19,263
F: Average GVA effect from loans in arrears (=B/D)	10,960
G: Number of loans in population not in arrears	5,857
H: Number of loans in population in arrears	5,144
I: GVA generated by loans not in arrears (=E*G)	112,825,328
J: GVA generated by loans in arrears (=F*H)	56,376,854
Total GVA (I+J)	169,202,182

Source: SQW analysis

The estimated costs of the 11,001 loans (applying adjustment factors and assumptions including a 50% default rate) are around £45m in terms of Economic Costs. This provides a BCR for the 2014 cohort of loans drawn down between November 2013 and December 2014 of 3.8:1.

The BCR (Economic Costs) is slightly higher than the adjusted BCR for the 2014 Year 3 sample (of 3.7:1) owing to the lower average loan value for the population as a whole relative to the 2014 Year 3 sample. These findings provide the best estimate for value for money given the evidence available, but they should be seen in the context of the assumptions that have been used. Although the scaling-up has sought to account for the response bias in terms of business survival and the relationship between arrears and business performance, this does not account fully for other potential forms of response bias. For example, the start-up rate amongst the population as a whole may be lower than identified in our sample. For instance, research by the

Start Up Loans Company for their 2014/15 impact report<sup>30</sup> found a start-up rate of 76% within one year of loan draw down (for those individuals that did not come to the programme with an established business).<sup>31</sup> This compares to the start-up rate from our 2014 Year 3 sample of over 90%, suggesting that our sample may be weighted towards those that started-up a business, relative to the population as a whole, even allowing for the potential for later start-up for the group included in the Start Up Loans Company survey. Clearly another caveat to the findings is that the evidence base for this Year 3 evaluation is based on a small sample of just over 100 loans. However, whilst moderately higher than in previous years of the study, the evaluation has consistently reported a positive value for money with BCRs year on year at 3:1 or above.

### **Commentary on impact and value for money for the 2014 cohort**

Consistent with the findings set out in the previous evaluation reports, the findings on value for money for the 2014 cohort are positive. The analysis suggests that, based on the self-reported evidence from individuals that drew down a loan between June to December 2014, the programme will generate a benefit in terms of GVA effects that outweighs the costs of programme delivery, taking into account both the loan and non-lending costs for Delivery Partners.

The findings in Year 3 are broadly in line with the results from Years 1 and 2 of the evaluation. However, the BCR of the 2014 cohort has increased from around 3:0 in previous years (based on the samples achieved for the earlier evaluations), to between 3.7:1 to 3.8:1 in this report, dependent on whether the focus is on the 2014 Year 3 sample, or scaled-up to the cohort as a whole. However, this uplift in the suggested value for money of the programme for the 2014 cohort is based principally on the characteristics of the survey sample in Year 3, which is likely to contain a higher rate of businesses that are trading and performing well than the samples surveyed in previous years. This is owing to response bias, where individuals that are performing 'better' (where their business continues to trade and/or where they are not in arrears) are more likely to have responded to the survey; the BCR (Economic Costs) for the 2014 Year 3 sample in Year 2 was 4.0:1.

The analysis has sought to adjust for this effect as far as possible, for example, by assuming a lower business survey rate in sensitivity analysis. However, other factors are still evident, including for example a higher average loan value and age of individual in Year 3 relative to previous years. The equivalent analysis in Year 2 suggested that those individuals with larger loans, and those that were older, were associated with higher levels of net turnover in the businesses they had started-up relative to those with lower value loans and from younger individuals, leading to improved value for money; this adjusts the BCR (Economic Cost) to 3:7:1.

Taken together the analysis indicates that the apparent improvement in the BCR suggested in the Year 3 evaluation for the 2014 cohort does not reflect a genuine shift in the underlying value for money of the programme, rather that the 2014 Year 3 sample, that includes individuals that have responded to the survey in all three years have previously, and continue to, perform better

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<sup>30</sup> This covered loans drawn down in 2014/15 and so a similar cohort of individuals to our 2014 cohort. It also included recipients of New Enterprise Allowance loans, which are not covered in this evaluation.

<sup>31</sup> <https://prod.cdn.sulserver.net/app/uploads/2016/06/08145304/Annual-Impact-Report-2014-15-final-V5-.pdf>

(in terms of generating new turnover, relative to the costs of the programme), than the full sample from Year 1 only, owing to response bias. Given the uncertainties here – related to response bias and business survival – it appears appropriate to consider that the value for money of the 2014 cohort, as expressed in terms of BCR (Economic Costs) is likely to fall within the range of the 3.0:1 from the Year 2 evaluation and the 3.7:1 from the Year 3 evaluation (for the sample adjusted for business survival). This remains positive for the programme.

In this context, it is noted that the level of (self-reported) additionality of the programme is consistent with the evidence from Year 2. The average additionality ratio from the 2014 Year 3 sample of 0.65 (i.e. that 65% of turnover effects are additional, before accounting for displacement) is consistent with the findings from this sample in the Year 2 survey, where the average additionality ratio of this sample was also 0.65. This suggests that the perceptions of the additionality associated with the programme by those that have benefited from support have not shifted over the past year, providing a level of confidence in the findings in Year 3, and further pointing to an assessment of value for money that reflects the evidence in both Years 2 and 3.

The analysis also highlights two important points regarding the nature of businesses started-up by individuals supported by the programme: first, they are predominantly providing employment for the owner only, with modest external employment, and second (and linked to this), they remain predominantly local or national in their markets, with under 5% of estimated sales across the survey cohort in the current year accounted for by exports. This is not unexpected. though the employment data in particular highlight that the businesses started-up by beneficiaries of the programme are most commonly 'lifestyle businesses', designed principally to provide employment and an income for the founder, rather than 'scalable' businesses that are seeking to grow and generate further employment. This is consistent fully with the underpinning rationale of the programme – but needs to be taken into account when considering the potential overall impacts of the programme; it is principally via the turnover generated by the businesses that the programme is likely to be delivering substantive economic impact.

## Section 4: Impact and value for money - evidence from the 2016 cohort

### Key findings

- Of the 602 individuals in the 2016 sample, 95% had started-up a business; this includes individuals that came to the programme with an existing business, if these are excluded, the start-up rate by the point of the survey was 94%.
- The survival rate of businesses started-up by individuals supported by Start Up Loans was 88%, although this was higher for businesses that had been started-up before the loan was drawn down (93%), than those that had been started-up after the loan had been drawn down (86%). The average turnover of the businesses in the current year was £113k, expected to increase to £180k next year. On employment, 60% of the businesses had no employees other than the owner at the time of the survey, however, most expect to increase their employment in the future; if expected growth is realised, only 35% of businesses will have no employees by the end of the next financial year.
- The businesses started-up by individuals in the 2016 sample, including those that have subsequently closed, are estimated to generate c.£164m in gross turnover over the 2016/17 to 2018/19 period. Taking into account deadweight, displacement, optimism bias, and expected business survival, the estimated net turnover over this period from the 2016 cohort is c.£20m.
- The average self-reported additionality was 0.52, suggesting that just over half of turnover effects are estimated to be additional, before accounting for displacement effects, based on the self-reported evidence. For the 2016 sample, the average additionality ratio was slightly higher for individuals with loans of less than £8k, than those with loans over £8k. This is different to the evidence on the 2014 samples, and may reflect that individuals in the 2016 sample with higher loan values could have accessed other forms of finance, had they not been supported by the programme. This is consistent with a reduction in the finance additionality of the programme for the 2016 sample relative to the data from the data from the 2014 Year 1 sample.
- Converting net turnover to net GVA, and carrying-forward the effects for a further three-years for the six-year modelling period, the estimated net GVA impact for the 2016 sample was c.£15m. Compared to the costs of the programme, and adjusting the data for arrears, provides a Benefit Cost Ratio (using Economic Costs) of 5.7:1.
- The BCR of 5.7:1 is high relative to the evidence from the 2014 cohort and previous years of the evaluation. A range of inter-related factors drive this: the characteristics of the individuals that drew down loans over this period, who were on average older and more likely to be in employment prior to the programme; an increase in the average loan value and the scale of businesses started-up; an assumed re-payment rate of 60% for the 2016 sample, compared to 50% for the 2014 Year 3 sample; and a reduction in the non-lending costs as a result of efficiencies in the delivery of the programme.
- The BCR is positive, but there may be implications for the social and distributional potential of the programme given the changing characteristics of the beneficiary sample in the January-June 2016 period – and such distributional effects are not fully captured in the value for money model. However, exploratory analysis does suggest that the value for money of the programme improves once distributional weightings are applied to pre-programme incomes of beneficiaries, for both the 2014 and 2016 cohorts.

## Coverage

This section sets out the equivalent data to Section 3 for the 2016 cohort of individual survey respondents that drew down their loan over January to June 2016. This includes findings related to the core evaluation objectives on impacts related to business start-up and development, and value for money.

The analysis draws on the evidence provided by the 602 individuals in the 2016 sample, with consistent approaches to identifying the turnover effects of businesses started-up and developed by beneficiaries, converted to Gross Value Added (GVA), taking into account deadweight and displacement effects. Similar to Section 3, GVA is compared to costs to estimate the value for money of this sample. A number of key assumptions in the analysis have changed to reflect the later delivery period, including the level of finance additionality and the expected life-time default rate, with the evidence and background to these changes detailed in the section. Where sample sizes allow, data for the 2016 sample is also presented at a regional level. BCRs cannot be developed at regional level due to small sample sizes.

It is important to highlight that the data for the 2016 cohort is not compared directly to the findings from the 2014 cohort, either in Year 3 or from previous years of the evaluation. Whilst consistent approaches have been taken to the analysis, the variation in the characteristics of the 2016 sample compared to the 2014 Year 3 sample means that any direct comparisons are not appropriate and may be misleading. An overall comparison of the key implications is clearly relevant to informing policy, and is discussed.

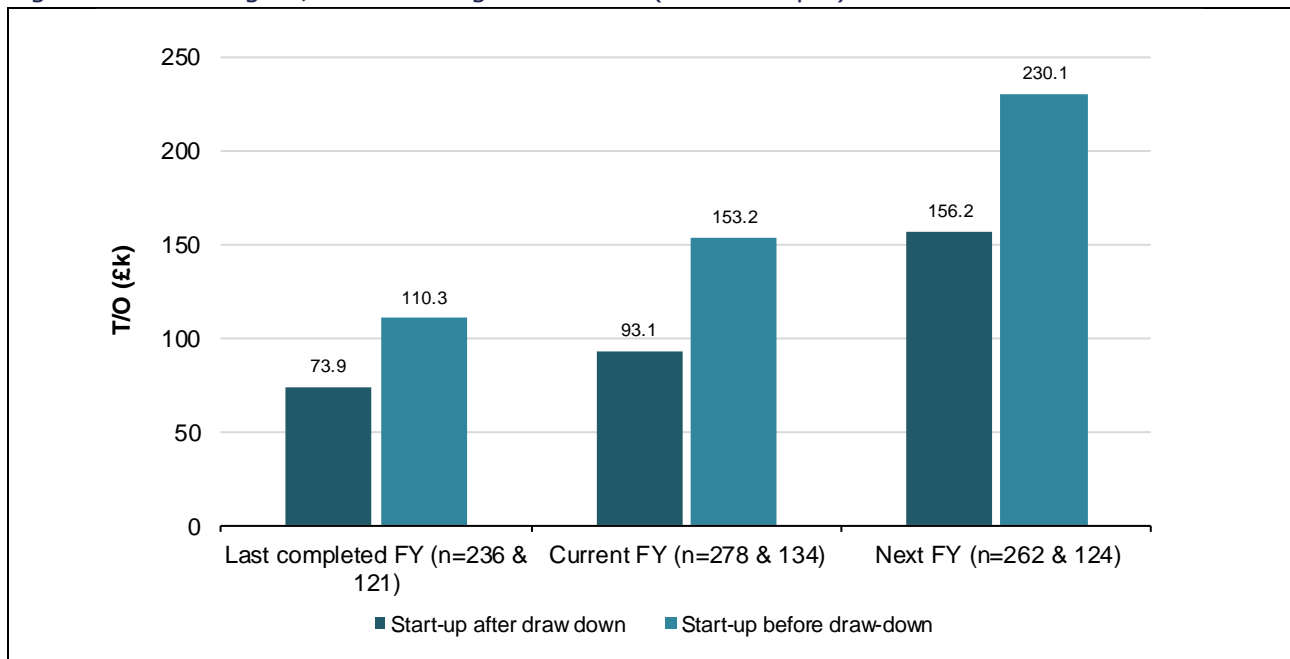
## Business status

Of the 602 individuals in the 2016 sample, 95% (574) reported that they had started-up a business, of which 407 started-up after support from the programme, and 167 came to the programme with an existing business. For those individuals that came to the programme without a business that was trading (n=432), the start-up rate was 94%. The start-up rate was consistently over 90% in all five regional areas.

For those individuals that had started-up a business either before or after they first approached the programme, the business survival rate was 88% i.e. 88% of businesses were still trading at the point of the survey in late-2017/early-2018. There were no significant differences in the survival rate across the five regional areas. However, the survival rate was higher for businesses that were started-up by individuals before they drew down their loan i.e. those individuals that came to the programme with an existing business (93%, n=167), than for those that started up a business after drawing down the loan (86%, n=379), with all loans drawn down between January and June 2016.

The average turnover of businesses started-up by beneficiaries in the 2016 sample in the current financial year was £113k, expected to increase to £180k in the next financial year. However, reflecting the relatively early-stage of the businesses in the 2016 sample, the average turnover for those businesses that were started-up by individuals before they drew down their loan was considerably higher than those that started-up following the loan draw down. The variation is most pronounced in the estimated turnover in the next financial year (2018/19), as set out in Figure 4-1.

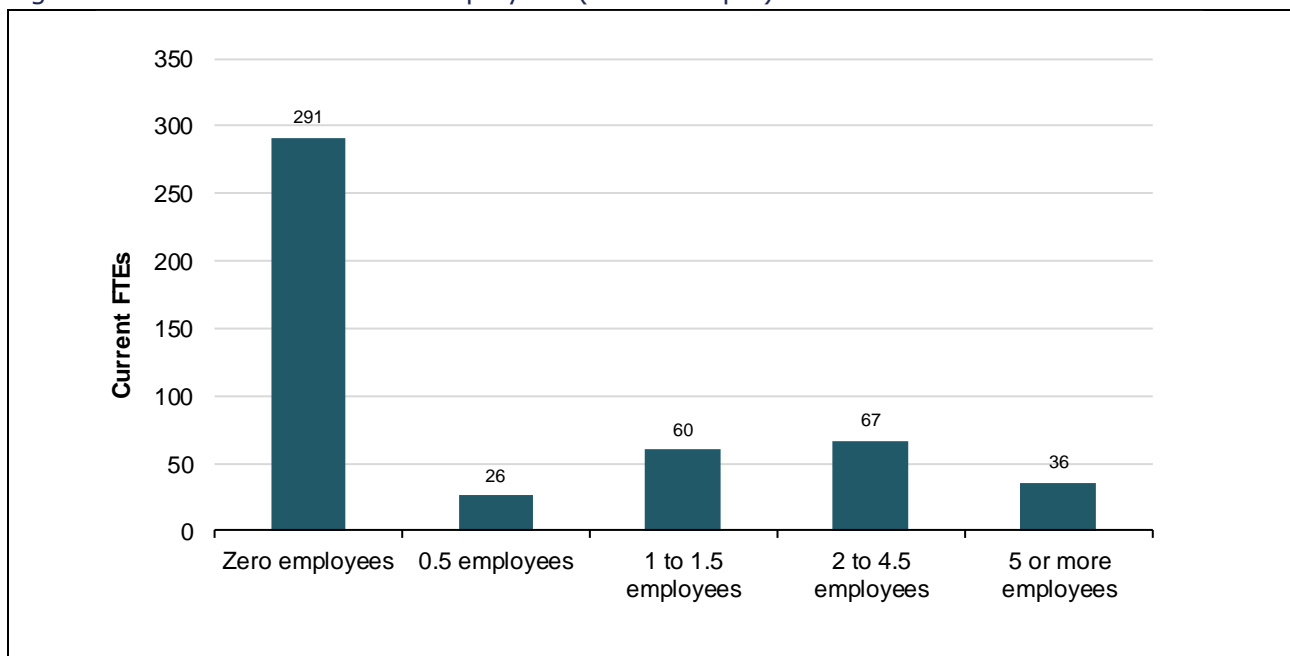
Figure 4-1: Average T/O for trading businesses (2016 sample)



Source: Year 3 2016 cohort survey Note: the data excludes three outliers with very high T/O

The average (mean) number of FTEs employed at the time of the survey by businesses trading, excluding the owner, was 1.4. However, over half (60%) of the businesses reported having no employees (other than the owner) at the point of the survey.

Figure 4-2: Number of current employees (2016 sample)



Source: Year 3 2016 cohort survey

This said, over half (53%) of trading businesses expect to increase their employment in the future, with an average of 2.5 FTEs expected by the end of the next financial year. Linked to this growth, if expected employment is realised (and all businesses remain trading), the proportion

of businesses with no employees will be 35% by the end of the next financial year, compared to 60% for the current year.

## Gross turnover impacts

The first step in the impact assessment involves establishing the 'gross' turnover generated to date, and expected for the current and next financial years, by businesses started-up or developed by beneficiaries in the 2016 sample. This analysis included all firms that had started-up by the time of the survey and provided turnover data, including those that subsequently closed. With a small number of exceptions, the data correspond to the 2016/17 (last), 2017/18 (current), and 2018/19 (next) financial years. For the purpose of the modelling, all turnover data has been allocated to these financial years.

As set out in Table 4-1, the aggregate 'gross' turnover identified by businesses started-up by individuals in the 2016 sample was around £164m (i.e. the businesses started/developed by the 2016 sample are collectively estimated to generate a total turnover over three years of £164m).<sup>32</sup>

Table 4-1: Aggregate gross turnover from businesses started-up/developed by 2016 sample (2016/17 to 2018/19)

	Aggregate T/O generated by businesses started-up (£k)
Aggregate T/O in 2016/17 (£k) (n=447)	35,024
Aggregate T/O in 2017/18 (£k) (n=476)	49,858
Aggregate T/O in 2018/19 (£k) (n=469)	79,242
Aggregate T/O turnover (£k)	164,124

Source: Year 3 2016 cohort survey

It is worth noting that approaching half (48%) of the aggregate total turnover identified by the 2016 sample is expected for the next financial year (in 2018/19), rather than generated to date, with 30% expected for the current financial year, which had not been generated in full at the time of the survey. This data is adjusted for optimism bias in the subsequent calculations, however it is important to recognise the uncertainty associated with estimates of impact at this early stage in the development of their businesses.

## Net turnover impacts

The 'gross' turnover impacts have been adjusted to 'net' turnover impacts applying the same approach as set out for the 2014 cohort in terms of deadweight, optimism bias, displacement, and anticipated business survival.

<sup>32</sup> This data and all subsequent data on turnover excludes data from four respondents that reported very high turnover data that would skew the findings substantially, and involved very large year-on-year changes in reported turnover that are not considered credible e.g. one reported a change in turnover from £750k to £50m in one year.



## Deadweight

The evidence base ...

The evidence on 'self-reported deadweight', for the 2016 sample is set out in Table 4-2. Consistent with the evidence throughout the evaluation on the effects of the programme, timing additionality was common, with half of those individuals that started-up a business after drawing down their loan identifying that the business would have started later without the programme. However, full deadweight is also quite high, with a fifth (20%) of those that started-up a business after drawing down their loan, and over a quarter (26%) of those that started-up a business before drawing down their loan indicating that the business would have started-up/developed at the same time, scale and quality if they had not been supported by Start Up Loans.

Table 4-2: Self-reported deadweight for the 2016 sample. Response to 'In your view, without your involvement with the Start Up Loans programme, which of the following would have happened?'

	Started-up after programme (n=393)	Started-up before programme (n=168)
The business would not have started/developed at all	19%	9%
The business would have started/developed, but at a later date	50%	31%
The business would have started/developed, but on a smaller scale	35%	51%
The business would have started/developed but would have been of lower quality	26%	32%
The business would have started-up/developed at the same time, scale & quality	20%	26%
Don't know	5%	1%

Source: Year 3 2016 cohort survey

Applying the approach discussed in the previous section, the average additionality ratio was 0.52, suggesting that approaching a half of the gross turnover effects would have occurred anyway. Put another way, just over half of turnover effects generated by businesses started-up by individuals in the 2016 sample are estimated to be additional, before accounting for displacement effects, based on the self-reported evidence.

Three further points are highlighted:

- the average additionality ratio was consistent across the five regional areas, in the range of 0.49 to 0.54 suggesting a broad level of consistency in self-reported additionality by individuals across the UK
- consistent with the higher level of full deadweight and lower full additionality set out in Table 3-2, the average additionality ratio for individuals that started-up a business before they drew down their loan was lower at 0.48 (n=165) than for those that started-up after drawing down their loan at 0.54 (n=385)

- the average additionality ratio was higher for individuals with loans of less than £8k at 0.56 (n=237), than those with loans over £8k at 0.51 (n=258).

... adjusting the gross data

Applying the respondent-level additionality ratio to each relevant respondent's gross turnover data, and aggregating this net data across all relevant respondents, **provides a turnover effect adjusted for self-reported deadweight from the 2016 sample of £64.2m.**

This deadweight adjusted turnover value is equivalent to 39% of the gross data, lower than the 0.52 average non-deadweight ratio would suggest. This is owing to individuals that reported businesses with high levels of turnover reporting relatively low levels of additionality. For example, of the ten individuals that reported the highest gross turnover over the three-year period (that collectively accounted for 20% of the total gross value of £164m), seven reported full deadweight.

### Optimism bias

The evidence base ...

As set out above, approaching 80% of the gross turnover impact reported was expected (i.e. forecast to be generated in the current or next financial year) rather than achieved. Consistent with the approach for the analysis of the 2014 cohort, a 20% optimism bias has been applied to the data for the current and next financial year to account for the potential optimism bias in the estimates provided by survey respondents.

... adjusting the gross data

Applying the optimism bias of 20% to expected turnover effects (following the adjustment for self-reported deadweight) provides **a turnover impact accounting for self-reported deadweight and optimism bias from the 2016 sample of £53.8m.**

### Displacement

The evidence base ...

The survey captured data on the location of sales, levels of competition in their main markets, and whether competitors would take up their sales if they ceased trading for the businesses started-up by individuals in the 2016 sample. The data are set out below in Table 4-3, Table 4-4 and Table 4-5. Key findings include:

- The businesses are generally securing sales locally or elsewhere in the UK, although around 11% of turnover generated is from sales outside of the UK; this helps to reduce the level of potential displacement in the UK. The level of overseas sales was particularly high for individuals based in London where 20% of sales (taking into account the scale of turnover) were from outside of the UK, with 12% for businesses started by individuals in the South of England.

- Approaching a quarter of respondents believe that the level of competition they face is 'very intense'. This is higher in London than in other regions, although the difference is only significant (at the 10% level) between London (32%) and the devolved administrations (15%) in terms of intense competition.
- Around 40% of individuals believe that all of their sales would be taken by competitors if they were to close. London again appears to be the outlier, at 34%, which likely reflects the higher level of exports meaning that these sales would not be taken by their direct competitors in the UK.

Table 4-3: Proportion of sales in local area, rest of the UK and outside the UK for the 2016 sample (n=484)

	(A) Average proportion	(B) Proportion of current sales
Local	66%	58%
Rest of the UK	25%	31%
Outside the UK	9%	11%

Source: Year 3 2016 cohort survey

Table 4-4: Level of competition experienced in markets data for the 2016 sample

	Total (n=442)	Devolved Admin (n=53)	London (n=79)	Midlands (n=79)	North of England (n=108)	South of England (n=123)
Very intense competition	23%	15%	32%	23%	24%	21%
Intense competition	25%	34%	23%	24%	24%	25%
Moderate competition	36%	28%	30%	39%	36%	40%
Weak competition	11%	11%	13%	8%	14%	10%
No competition at all	4%	8%	1%	6%	2%	4%
Don't know	1%	4%	1%	-	-	-

Source: Year 3 2016 cohort survey

Table 4-5: Perception of what proportion of sales would be taken by competitors if the business was to close for the 2016 sample

	Total (n=442)	Devolved Admin (n=53)	London (n=79)	Midlands (n=79)	North of England (n=108)	South of England (n=123)
Yes, all of our sales	41%	42%	34%	46%	42%	41%
Yes, some of them	32%	30%	41%	25%	33%	32%
No, no-one would take up our sales	20%	19%	16%	24%	19%	21%
Don't know	7%	9%	9%	5%	6%	6%

Source: Year 3 2016 cohort survey

The responses to the questions above have been used to identify a displacement ratio for each respondent where possible (using the BEIS/British Business Bank methodology for calculating displacement), and then an average displacement value for three groups of beneficiaries: fully additional new firms; partially additional new firms; and existing firms.<sup>33</sup> The average level of displacement across these three groups was 57%, i.e. 57% of the turnover generated by businesses started-up by individuals in the 2016 sample was estimated to be taking market share away from other UK-based firms with whom they are competing.

... adjusting the gross data

Applying the estimate of displacement provides **a turnover impact accounting for self-reported deadweight, optimism bias and displacement from the 2016 sample of £23.6m.**

### **Business survival**

The evidence base ...

The latest data from ONS on business survival rates have been used to adjust the aggregate turnover for 2017/18 (93%, reflecting one-year survival after the current year) and 2018/19 (76%, reflecting two-year survival after the current year).<sup>34</sup> Data from 2016/17 have not been adjusted in the main case impact analysis as this turnover had been realised in practice, and so inherent survival rates of the group of respondents was taken into account as part of the data reported.

... adjusting the gross data

Applying the business survival rate for expected turnover, provides **a net turnover impact accounting for self-reported deadweight, optimism bias, displacement and business survival from the 2016 sample of £20.4m.**

### **Summary of net turnover impacts**

The analysis set out above indicates a net impact in terms of turnover generated by businesses started-up by the 2016 sample of approximately £20m over the 2016/17 to 2018/19 period.

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<sup>33</sup> The three categories are based on the information provided in the survey on whether the business was trading prior to approaching Start Up Loans, and in response to the questions on additionality in the Year 1 survey. Those individuals that indicated they did not have an existing business when approaching the programme and that identified full non-deadweight are classified as 'new fully additional'; those individuals that indicated they did not have an existing business when approaching the programme and indicated partial deadweight are classified as 'new partially additional'; those individuals that indicated they came to the programme with an established business are classified as 'existing firms'.

<sup>34</sup> ONS, Business Demography 2016.

## Value for money assessment for the 2016 cohort

### GVA estimates

The turnover data has been converted into GVA estimates applying the same approach as set out for the 2014 cohort, with a 45% turnover to GVA ratio and adjusting for inflation and discounting. The estimated net turnover data for the next financial year provided in the survey has also been assumed to persist for a further three years to provide the six-year modelling period (consistent with the 2014 cohort), which was adjusted for anticipated business survival.

This analysis provides a **net GVA impact for the 2014 sample of £14.9m over the 2016/17 to 2021/22 period**. The build-up over time (with 2019/20 to 2021/22 based on persistence of the data from 2018/19, adjusted for business survival) is set out in Table 4-6.

Table 4-6: Net GVA impacts from the 2016 sample

	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
Annual GVA (£k)	2,399	2,676	3,424	2,604	2,082	1,707
Cumulative GVA (£)	2,399	5,075	8,499	11,103	13,185	14,892

Source: Year 3 2016 cohort survey

### Cost estimates

#### Approaches to estimates

Exchequer Costs and Economic Costs have been derived for the 2016 sample consistent with the approach set out for the 2014 Year 3 sample, with three revisions. First, based on evidence from the British Business Bank, the re-payment rate for the 2016 sample is estimated to be 60% (i.e. a 40% default rate by 2021/22).

Second, finance additionality for Economic Costs is estimated at 67%. The starting point for the assessment of finance additionality was individuals in the 2016 sample that indicated they actively considered or applied for finance from a bank or mainstream finance provider to start-up or develop their business before or at the same time as applying to the Start Up Loans programme where the outcome of this application was known at the time of the survey. Of this group (n=111), 61% had applied unsuccessfully suggesting finance additionality of the Start Up Loans support. This 61% has then been adjusted to take into account evidence from individuals that did not consider or apply for bank/mainstream finance but provided a reasonable explanation why this was the case, that suggests finance additionality for the programme. The reasons were: assumed a bank would refuse an application; were unable to afford the interest/re-payment levels; lacked confidence in the business idea; did not know how to approach a bank; did not know which bank to approach; had a poor credit history; low cost of starting this type of business; not aware of what finance options are available; and business in early stages of development. In all, around 4% of the sample identified at least one of these reasons. A range of other reasons were also provided that are harder to judge in terms of finance additionality, but have been included to take into account potential factors that may prevent take-up of bank finance, including individuals not wanting to take on additional debt/risk. This adjustment provides an overall estimate of finance additionality of 67%.

In this context, it is worth noting that approximately two-thirds of individuals in the 2016 sample (65%, n=602) reported that they did not actively consider or apply for *any* other source of external finance to start-up or develop before or at the same time as applying to the Start Up Loans programme. Put another way, only around a third of individuals surveyed had considered other sources of funding prior to approaching the programme. This is notable given the reported improvements in the assessment processes, whereby individuals were expected to prove they were not able to access other forms of funding in order to secure support from the programme.

Although care must be taken with direct comparisons given the changing characteristics of supported individuals and external economic and access to finance conditions, the equivalent proportion of individuals that actively considered and/or applied for external finance sources other than Start Up Loans to start-up or develop their business in the first year of the evaluation – covering the 2014 Year 1 sample (n=959) – was 24%. This does suggest there has been a shift towards individuals seeking other forms of finance as the programme has evolved, but in most cases, Start Up Loans appears to remain the only source of external finance considered.

Third, the non-lending costs, covering the costs associated with the delivery of the programme by Delivery Partners (including the pre-application support, mentoring support and administration) were estimated at £1,287 based on data provided by the Start Up Loans Company for delivery over the 2015/16 and 2016/17 periods from which the 2016 sample is drawn. This was lower than the average used for the 2014 sample (£1,617) reflecting the efficiencies in programme management and the reduction in fees provided to Delivery Partners per loan (to cover non-lending support).

#### Estimated costs

The discounted Exchequer Costs and Economic Costs over the modelling period for the 2016 sample are set out in Table 4-7. The costs are c.£2.5m for Exchequer Costs and Economic Costs.

Table 4-7: Estimated Exchequer and Economic Costs – annual/cumulative for the 2016 sample

	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
Exchequer Costs – annual (£k)	6,191	-1,069	-935	-737	-568	-276
Economic Costs – annual (£k)	1,055	444	390	308	239	116
Exchequer Costs – cumulative (£k)	6,191	5,122	4,187	3,450	2,882	2,606
Economic Costs – cumulative (£k)	1,055	1,498	1,888	2,197	2,436	2,552

Source: SQW analysis

## Value for money estimate for the 2016 sample

Comparing the GVA impacts to Economic Costs set out above provide a Benefit Cost Ratio (BCR), of around 5.8:1 (i.e. £14.9m in GVA for around £2.5m in costs). Weighting the survey data to account for the lower level of individuals in the survey cohort in arrears relative to the population (12% in the 2016 sample compared to 20% in the 2016 cohort overall) revises down the GVA estimate to £14.5m, with an arrears adjusted BCR (on Economic Costs) of 5.7:1. The data are set out in Table 4-8.

Table 4-8: BCRs for the 2016 sample

	GVA impacts (£k)	BCR: Exchequer costs	BCR: Economic costs
Unadjusted impacts	14,892	5.7	5.8
Impacts adjusted for arrears	14,453	5.5	5.7

Source: SQW analysis

## Scaling-up the findings to the population

The analysis set out above is based on the findings of the 2016 sample, and the 598<sup>35</sup> loans drawn down by the sample. Not all the loans drawn down contributed to the GVA impact. For example, some individuals have yet to start a business, and some individuals reported that the business did not have a full financial year of trading; however, we would also expect this to be the case on the evaluation population as a whole.

The findings from the sample have been scaled-up to the cohort as a whole of around 3,450 loans drawn down over the January to June 2016 period. Consistent with the approach to the 2014 cohort, the scaling-up approach adjusts for the difference in the rate of arrears between the survey sample and the cohort as a whole, given the differences in performance between respondents with loans in arrears and those not in arrears. The analysis is set out in Table 4-9 below.

This analysis identifies **a net GVA impact of the population from the 2016 cohort (that is, the loans drawn down between January and June 2016) of £85m.**

The estimated costs of the loans (applying the same adjustment factors and assumptions as used for the 2014 cohort, but a 40% default rate) is £15.0m in terms of Economic Costs. This provides a BCR for the 2016 cohort of 5.7:1, consistent with the sample data.<sup>36</sup>

<sup>35</sup> Excluding outliers.

<sup>36</sup> The average loan value for the 2016 cohort at £10,390 is consistent with the sample of £10,550, meaning this does not impact on the scaled-up BCR estimate.

Table 4-9: Scaling-up of GVA findings for the 2016 cohort

Stage of analysis	Metric
Net effects	14,891,770
A: ... of which from loans not in arrears	13,703,688
B: ... of which from loans in arrears	1,188,083
C: Number of loans not in arrears in survey cohort	529
D: Number of loans in arrears in survey cohort	69
E: Average GVA effect from loans not in arrears (=A/C)	25,905
F: Average GVA effect from loans in arrears (=B/D)	17,219
G: Number of loans in population not in arrears	2,821
H: Number of loans in population in arrears	717
I: GVA generated by loans not in arrears (=E*G)	73,077,699
J: GVA generated by loans in arrears (=F*H)	12,345,731
Total GVA (I+J)	85,423,430

Source: SQW analysis

### Commentary on impact and value for money for the 2016 cohort

The findings from the self-reported evidence for the 2016 cohort are positive. The analysis suggests that, based on the self-reported evidence from the survey sample, the programme will generate a benefit in terms of GVA effects from businesses started-up that outweighs substantially the costs of programme delivery, taking into account both the loan and non-lending costs for Delivery Partners. The scale of the impact is also substantial, with an estimate of the net GVA impact of the population from loans drawn down over this period of £85m.

The BCR estimates from the 2016 cohort are high relative to the evidence from the 2014 cohort and previous years of the evaluation, at around 5.5:1 to 5.7:1 for Exchequer Costs and Economic Costs respectively. A range of inter-related factors appear to be driving this performance including: the characteristics of the individuals that drew down loans over this period, that were on average older and more likely to be in employment prior to the programme than for previous cohorts; the nature of the loans drawn-down, with an average of over £10k and many over £20k; and in turn the scale of the businesses that have been started-up, with an average turnover in the current financial year of £113k, expected to increase to £180k in the next financial year. Alongside broadly consistent evidence on start-up rates and additionality, these factors all have pushed up the scale of the benefit from the programme. These factors have been accompanied by some reductions (relative to the 2014 cohort) in the estimates of costs of the programme, most notably an assumed re-payment rate of 60% for the 2016 cohort (compared to 50% for the 2014 cohort) based on evidence from BBB/SULCo, lower finance additionality (at 67%), and a reduction in the non-lending costs as a result of efficiencies in the delivery of the programme across the Delivery Partner network.

Taken together, these factors have led to an improvement in the observed value for money of Start Up Loans, as covered in the value for money model based on turnover generated by businesses started-up by supported individuals. This assessment does not cover wider



perspectives on the value for money and impact of the programme related to supporting individuals that are not able to access finance and its wider social effects, and the lower finance additionality (at under 70%) may reflect that individuals supported by the programme that drew down their loans in the January-June 2016 period were more likely to be able to access other forms of finance compared to previous cohorts.

This is consistent with the changing characteristics of the individuals supported by the programme, for example, with more older individuals, with fuller employment histories, which may help to reduce the assumed risk in lending from commercial providers. This said, it is notable that only a third of individuals in the 2016 sample had considered or applied for other sources of funding prior to approaching the programme; this is lower than may be expected given that individuals are expected to prove they were not able to access other forms of funding in order to secure support from the programme.

Further, drawing on the findings of the main value for money analysis, exploratory analysis was completed that sought to take account of distributional effects, reflecting that part of the rationale for the programme was to address equity issues, with self-employment and enterprise seen as a way to improve individuals' economic prospects. To do this, the value for money analysis – as reflected in the Benefit Cost Ratios (BCRs) – was re-run using distributional weights based on the income of beneficiaries when they first considered starting up a business, before their engagement with the programme. The headline findings of the analysis are set out in Table 4-10 (see Annex B for details on the methods and approach). These findings are regarded as exploratory, particularly as the approach is based on combining data on individual (personal income) and businesses (net turnover effects).

Table 4-10: Income adjusted benefits and BCR

Cohort	Economic costs (£)	GVA benefits <u>without</u> income weighting adjustment (£)	BCR <u>without</u> income weighting	GVA benefits <u>with</u> income weighting adjustment (£)	BCR <u>with</u> income weighting adjustment
2014 sample – Year 2 survey group <sup>37</sup>	1,400,446	4,226,924	3.0	5,615,320 (+33%)	4.0
2016 sample	2,552,089	14,891,770	5.8	18,975,426 (+27%)	7.4

Source: SQW analysis

The analysis suggests the value for money of the programme is higher once the pre-programme income of the beneficiary is taken into account, for both 2014 and 2016. The effect is more pronounced for the 2014 sample (using data from Year 2 given sample sizes), with a 33% uplift in the net GVA effects, given a higher share of individuals in this group in the lowest income

<sup>37</sup> The Year 3 survey group for the 2014 Cohort has a relatively small sample size (n=107) and the characteristics of the survey group are very different to the population. The analysis was therefore undertaken using Year 2 evidence where the sample size was larger (n=331) and the characteristics were less divergent from the population. Also note that the BCRs 'without income weighting' exclude consideration of arrears as the income distribution of the entire population is not known, meaning that it is not possible to adjust for arrears rates.

bands. The income adjustment does not fully close the difference in BCRs between the 2014 and 2016 samples as other factors such as more efficient programme delivery and lower rates of expected default influence the BCR for the 2016 sample. However, the exploratory analysis does highlight the economic and social value of the programme in supporting 'less advantaged' individuals, as part of the overall service offer, with improved value for money when the income distribution of beneficiaries is considered.

### **The relationship between business performance and arrears**

The survey suggests a relationship between the level of arrears and business performance. The arrears rate in March 2017 for the 2016 sample was 12% (i.e. 12% of individuals were in arrears at this point). This increased to 30% for those individuals that had started-up a business that had subsequently closed (n=66). The average turnover for businesses started-up by individuals that were not in arrears was also higher than those that were (£116k compared to £71k). It should be noted that the direction of causality is not clear from the data.

## Section 5: Evidence on employment and personal development outcomes

### Key findings

- The self-reported effects of the programme on the long-term job prospects and confidence both in business and more widely are positive for both the 2014 Year 3 sample and the 2016 sample. Notably, over three-quarters of individuals in both groups reported positive effects from Start Up Loans on their view of their long-term job prospects.
- The programme has supported individuals to transition from unemployment into self-employment and employment. For the 2014 Year 3 sample, a quarter of the survey group were unemployed prior to the programme, this had reduced to 6% by the Year 3 survey. Of the individuals that identified as self-employed in the Year 3 survey that were not self-employed when they first considered starting-up a business, around a third thought they would not be in self-employment without their involvement in Start Up Loans.
- The data on transitions for the 2016 sample reflect the changing characteristics of individuals supported, with 20% unemployed before they drew down their Start Up Loan; this had reduced to under 5% by the point of the survey. Looking specifically at the transitions of those that were unemployed pre-programme, of the 83 individuals that moved from unemployment to self-employment/full-time employment, over a third attributed this to the programme. This is equivalent to 27% of all those that were unemployed pre-programme, and 5% of the 2016 sample as a whole.
- Scaling-up the sample data to the 2016 cohort as a whole suggests the loans drawn down over the January-June 2016 period may have led to 240 individuals moving from unemployment into self-employment/full-time employment. This has the potential to generate Exchequer Savings through reduced benefits claims of up to around £900k p.a.
- The evidence on the value of pre-application and mentoring for the 2016 sample was broadly consistent with the evidence from the 2014 sample in previous years. The support was generally valued highly by individuals, and there were self-reported benefits from both pre-application support and mentoring on skills and confidence. However, the survey suggests participation in mentoring may have reduced over time; this may reflect the characteristics of the more recent cohort surveyed, as older and more experienced business owners have tended to be less likely to take up mentoring.
- From the survey feedback and case study work, it was evident that the mentoring offer to individuals has remained varied across Delivery Partners, and there have been examples whereby Delivery Partners have drawn on the wider business support landscape to provide advice and mentoring to beneficiaries. Two consistent messages across the evaluation period have been that a significant minority of individuals did not understand the potential value of mentoring, and that approaching 20% of individuals supported by the programme have not been offered mentoring support.
- Overall satisfaction with Start Up Loans is high, with a Net Promoter Score of 50-60% across the two survey samples; this appears to perform well against benchmarks of other finance providers. Higher satisfaction with the programme was associated with certain aspects of individuals' experience including those that had taken up pre-application support, and for those using more hours of mentoring. Satisfaction was also higher for those that had a business that was still trading, relative to those where the business had closed; this is not unexpected but indicates satisfaction with the programme is reliant on external factors that it cannot control fully.

## Coverage

This section sets out the findings from the evaluation related to the employment and personal development outcomes, for both the 2014 Year 3 sample and the 2016 sample. It also provides evidence on overall satisfaction with the programme from these groups. For the 2016 sample only, the section summarises the evidence on programme improvement, thereby addressing the supplementary research objective on pre-application support and mentoring.

## Employment outcomes

### Approach

Alongside supporting the creation of new businesses, one of the original objectives of the programme was to improve the employment prospects of individuals, regardless of whether the specific businesses started-up were successful. Evidence on the employment outcomes of the programme has been considered in the evaluation via:

- analysis of the 'employment transitions' experienced by individuals supported by the programme, including the employment status of individuals before and after their engagement
- analysis of the self-reported effects of the programme on wider employability factors and issues, including individuals' long-term job prospects and confidence.

The evidence on these two perspectives on the employment effects of the programme is set out below, for the 2014 cohort and 2016 cohort respectively.

### 2014 cohort

#### Employment transitions

The 2014 Year 3 sample were asked in Year 1 of the tracking survey (in 2015) what their employment status was at the time they first gave serious thought to starting-up the business for which they secured the Start Up Loan.<sup>38</sup> As set out in Table 5-1, at this point half (50%) of the sample were in employment (mainly full-time employment), and approaching a quarter (24%) were unemployed. By the point of the Year 3 survey, the proportion of the sample that was unemployed had reduced to 6%, with those identifying as self-employed (including those that were proprietors/business owners) representing over 60% of the sample.

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<sup>38</sup> Note this is different from the data drawn from SULCo monitoring data on their employment status when they approached the programme; this explains the variation to the data set out in Table 2-1 and in the sub-section on "The two populations" in Section 2.

Table 5-1: Employment status before and after engagement with the programme for the 2014 Year 3 sample (n=107)

	Status when first gave serious thought to starting-up business (pre-support)	Status at point of survey (post-support)
Employed	50%	31%
Self-employed or proprietor/business owner	19%	61%
Unemployed	24%	6%
Other	7%	3%

Source: Year 3 2014 cohort survey

Of those individuals in the 2014 Year 3 sample that identified as self-employed specifically<sup>39</sup> in the Year 3 survey that were not self-employed when they first gave serious thought to starting-up a business (n=37), just over a third (14) thought they would not be in self-employment if they had not been involved in the Start Up Loans programme, with most thinking they would be in employment instead. It is worth noting that the survey suggested that some individuals supported by Start Up Loans that were running a business that continued to trade were also engaged in other employment activity. The 30 individuals in the 2014 Year 3 sample that identified their current employment status as 'employed' (either full time or part time) included 23 that reported that the businesses supported by Start Up Loans were trading and that they remain involved with them. Of this group (n=30), a third indicated that under a half of their annual gross income was derived from this business, suggesting that other employment was responsible for the majority of their income. This is consistent with the evidence from the Year 2 evaluation, where around a third of the beneficiary sample (at the time of the Year 2 survey) that were still involved in their business supported by the programme were engaged in other employment/education/training activities, most commonly a full-time or part-time position with a separate employer.

This said, the data also highlighted the challenges in definitions around employment status; a similar number of individuals in this group that had identified as employed (rather than self-employed or a proprietor/business owner) derived all of their annual gross income from the business started-up.

The Delivery Partner survey reiterated that Start Up Loans supports individuals to transition from employment into self-employment, and unemployment into employment/self-employment. Respondents suggested that these transitions support both the reduction of people who would have otherwise remained in low-paid unemployment, and those claiming unemployment benefits, with one respondent expressing how Start Up Loans has had;

*"a significant impact on getting unemployed, returning parents and the disadvantaged to start a new life"*

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<sup>39</sup> Excluding those that identified as a proprietor/business owner as this category was not included in the Year 1 survey.

## Wider employability

All individuals in the 2014 Year 3 sample were asked whether the programme has had a positive, neutral or negative effect on three employability issues: their long-term job prospects (as they perceive it), their confidence in running and managing a business, and their personal confidence outside of business. The findings are set out in Table 5-2.

Positively, 80% reported that the programme has had a positive effect on their long-term job prospects, with a 'net positive effect' of 78% (i.e. the proportion of positive effect responses minus the negative effect responses). The effects on business and personal confidence were also highly net positive, particularly in terms of confidence in running and managing a business. A lower net positive effect on personal confidence is not unexpected given the focus of the programme. This said, the results on the perceived effects of the programme on personal confidence outside of business are still encouraging, with increased personal confidence potentially leading to effects on employment outcomes over the long-term, and more widely to individual well-being and quality of life.

Table 5-2: Self-reported effects of the programme on employability issues for the 2014 Year 3 sample (n=107)

	Long-term job prospects	Confidence in running and managing a business	Personal confidence outside of business
Positive effect	80%	74%	62%
Neutral/no effect	17%	22%	37%
Negative effect	3%	4%	1%
Net positive effect	78%	70%	61%

Source: Year 3 2014 cohort survey

## 2016 cohort

### Employment transitions

The employment status of individuals in the 2016 sample when they first gave serious thought to starting-up a business (prior to approaching Start Up Loans), and at the point of the survey following support is set out below. The data indicate a reduction in the proportion of individuals that are unemployed (from 20% down to 4%), and an increase in self-employment and those who are proprietor/business owners. As may be expected – with individuals moving from employment to start-up their own business – there has also been a decline in the proportion of individuals that were employed, although again care must be taken with this analysis given the potential overlaps between self-reported employment and self-employment status.

Table 5-3: Employment status before and after engagement with the programme for the 2016 sample (n=602)

	Status when first gave serious thought to starting-up business (pre-support)	Status at point of survey (post-support)
Employed	52%	32%
Self-employed	20%	47%
Unemployed	20%	4%
Proprietor/business owner	1%	15%
Other	7%	1%

Source: Year 3 2016 cohort survey

With the larger sample size for the 2016 sample, it is possible to track the volume of movements from one employment status to another employment status, with the findings set out in Table 5-4. The most common transition, for 136 of the individuals, was moving from employment to self-employment following support from the programme. A total of 104 individuals, equivalent to 17% of the 2016 sample, moved from unemployment into either employment (32), self-employment (58) or a role as a proprietor/business owner (14) after their engagement in the programme. Note the table does not include those individuals where the employment status remained the same (i.e. employed both before and after the programme, these are marked with a " - " in the table).

Table 5-4: Transition from types of employment for the Year 3 sample (n=602)

To → From ↓	Employed	Self-employed	Proprietor / business owner	Unemployed	Other
Employed	-	136	39	10	3
Self-employed	21	-	23	3	0
Proprietor / business owner	1	0	-	0	0
Unemployed	32	58	14	-	4
Other	13	17	6	3	-

Source: Year 3 2016 cohort survey

This shift of approaching a fifth (17%) of the 2016 sample from unemployment into employment, self-employment or role as a proprietor/business owner highlights the potential contribution of the programme in supporting improved employment outcomes for supported individuals. The significant movements from employment to self-employment or a role as a proprietor/business owner also highlights how engagement in the programme has supported individuals to make decisions around their employment status and aspirations.

Other factors may also have influenced these decisions. Indeed, the broader surge in self-employment in the UK since the economic downturn indicates that these employment transitions

have been taking place within a context of wider similar trends.<sup>40</sup> The survey therefore also sought to identify the role of the programme in this transition for those individuals that had moved into self-employment after their engagement with the programme (n=211). The evidence suggests that the programme made a notable contribution: 45% of this group reported that they would not now be in self-employment if they had not been involved with the Start Up Loans programme, and a further 6% did not know if they would be in self-employment. Of those that did not think they would be in self-employment or did not know (n=106), most (72%) felt they would be in full or part-time employment, and 13% felt they would be unemployed.

Looking more specifically at the transitions of those unemployed when they first gave serious thought to starting-up a business (prior to approaching the programme), of the 83 individuals that moved from unemployment to self-employment or full-time employment, the survey suggests that 39% attributed their current status to the programme. In aggregate this was 32 individuals in the 2016 sample that were unemployed pre-SUL and are now not unemployed as a result of the programme. This is equivalent to 27% of all those that were unemployed when they first gave serious thought to starting-up a business, and 5% of the sample as a whole.

The scale of this effect may appear modest, however, scaling-up the data to the 2016 cohort as a whole (where there were approaching 900 people unemployed before they approached the programme), suggests that the loans drawn down over the January-June 2016 period have led to 240 individuals moving from unemployment into self-employment or full-time employment.<sup>41</sup>

Further to the benefits for the individuals, this may also have wider effects on reducing take-up of unemployment benefits (where these are taken-up in full), leading to Exchequer Savings. Assuming that the 240 individuals that are estimated to have moved from unemployment were previously in receipt of Job Seekers Allowance, with a weekly allowance of up £73.10<sup>42</sup>, this would equate to an annual saving in terms of claimant benefits of approximately £914,000. Projecting this forward to the end of the modelling period to 2021/22, and including effects from 2017/18 (i.e. the current financial year), would provide an aggregate saving of £4.6m in benefits claimants, from the 2016 cohort.

It is important to bear in mind that some of these individuals may have moved into some form of employment without the programme, although the estimates are based on the survey cohort where the individuals attributed their move from unemployment into self-employment/full time

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<sup>40</sup> From March to May 2008 to March to May 2018, self-employment increased from 3.86 million workers to 4.79 million workers, an increase of 24.2% compared to an equivalent increase of 6.9% in employees. See Labour market economic commentary: July 2018 (<https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/articles/labourmarketeconomiccommentary/july2018>). The ONS also published data on labour market transitions, setting out flows between different labour market statuses from the Labour Force Survey (LFS). We have not sought to compare this LFS data to the findings from the survey of programme beneficiaries as the 2016 sample is not considered to be representative of the labour market as a whole. Individuals in the 2016 sample were explicitly seeking to transition from one status to another through starting-up a business, making comparisons in terms of the flows between labour market status for the labour market as a whole inappropriate.

<sup>41</sup> Note, the data on the wider population is based on CRM information regarding employment status at the time the individual first approached the programme, not when they first gave serious thought to starting up a business. However, this has been used as the most appropriate proxy for pre-SUL employment for the wider population, where survey evidence is not available.

<sup>42</sup> <https://www.gov.uk/jobseekers-allowance>



employment to the programme. As such, the data may over-estimate the scale of potential Exchequer Savings and should be regarded as indicative only.

### Wider employability issues

The findings from the 2016 sample on the effects of the programme on employability issues are set out in Table 5-5. The reported effects for the 2016 sample were very similar to those for the 2014 sample. Over three-quarters of individuals in the 2016 sample reported that the programme has had a positive effect on their long-term job prospects, with a 'net positive effect' of 73%. The results were also strongly net positive on confidence, particularly in terms of running and managing a business.

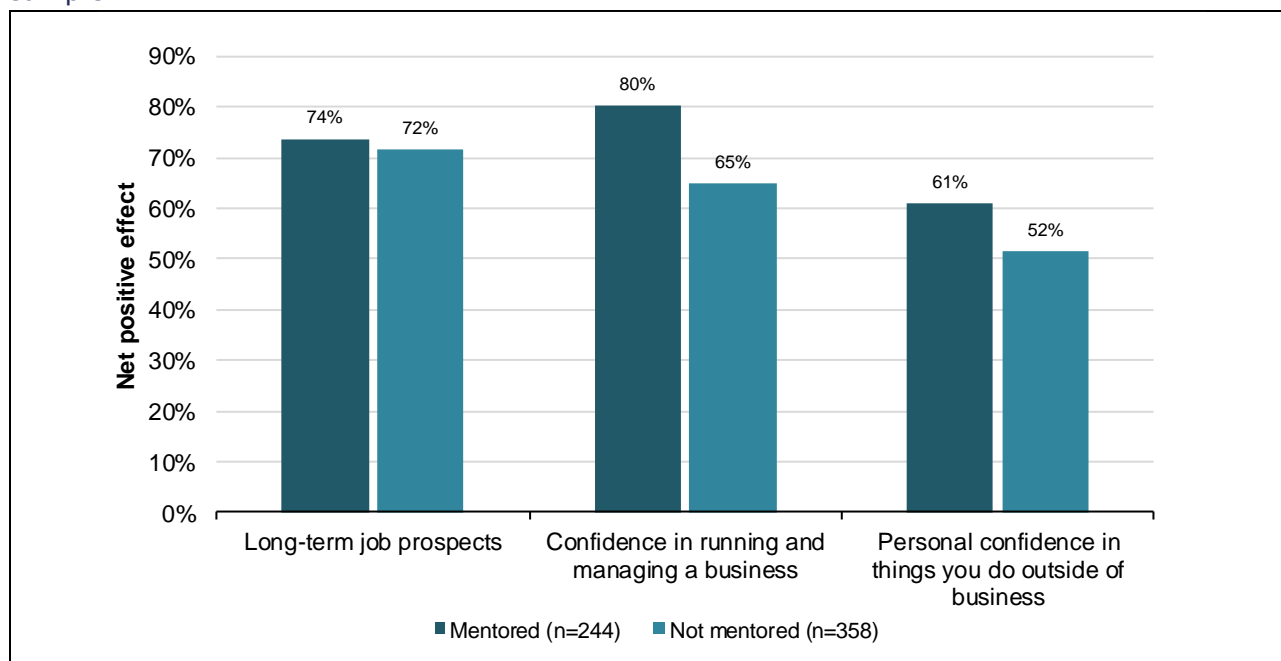
Table 5-5: Self-reported effects of the programme on employability issues for the 2016 sample (n=602)

	<b>Long-term job prospects</b>	<b>Confidence in running and managing a business</b>	<b>Personal confidence outside of business</b>
Positive	76%	74%	60%
Neutral	20%	22%	34%
Negative	3%	3%	4%
Don't know	1%	1%	2%
Net positive	73%	71%	55%

Source: Year 3 2016 cohort survey

There were no significant variations by region on the net positive data for any of the three employability issues. However, for individuals in the 2016 sample, there is some evidence that mentoring was associated with the self-reported effects of the programme on confidence, both in running and managing a business and in terms of personal confidence. As set out in Figure 5-1, the 'net positive effects' on confidence were significantly higher for those individuals that had been provided with mentoring support. This does not necessarily imply causality. There was no significant variation in terms of the effects on long-term job prospects between those that had and had not received mentoring support.

Figure 5-1: Net positive effects on employability issues by mentoring take-up for the 2016 sample



Source: Year 3 2016 cohort survey

The evidence also indicated that the 'net positive' effects on the two forms of confidence were significantly higher for individuals aged 18-30 than for those aged Over 30. The difference for long-term job prospects between the two age groups was not significant. This is perhaps not unexpected, with the programme helping to develop the confidence of younger individuals, and the findings remained strongly net positive even for those individuals aged over 30 that are engaged with the programme.

Table 5-6: Net positive effect of the programme on employability issues by age group for the 2016 sample

	Long-term job prospects	Confidence in running and managing a business	Personal confidence outside of business
Aged 18-30 (n=211)	76%	76%	63%
Aged over 30 (n=390)	71%	68%	52%

Source: Year 3 2016 cohort survey

### Programme improvement findings for the 2016 cohort

The survey for the 2016 sample gathered evidence to provide an assessment of the value of pre-application support and mentoring support.

The key messages regarding pre-application support included the following:

- **86% of the sample received some form of pre-application support, and 14% did not.** Face-to-face support (e.g. meetings, one to one sessions, workshops) were

the most common form of support received, but telephone and online support were also common, and around a fifth of individuals across the sample were involved in events/seminars that involved one-to-many application support. Pre-application support commonly involved more than one method: 64% of those that received pre-application support (n=517) reported at least two forms of support.

- **The volume of pre-application support varied substantially.** Approaching half (47%) of the individuals that received support reported that this involved under five hours of support, but 14% received over 21 hours of pre-application support (n=517). This reflects the varied needs and expectations of individuals, which were reported in the case study research and different Delivery Partner delivery models.
- **The effects of pre-application support were most evident in terms of improving understanding of business planning amongst individuals.** Over 75% of individuals that received pre-application support reported that it improved their understanding of business planning, with a 'net positive effect' (those agreeing minus those disagreeing) of 60%. This was a core focus of the pre-application support approach so is not unexpected. Effects on understanding of financial management and market opportunities were also positive (see Table 5-7).

Table 5-7: Response to: 'To what extent did you agree or disagree that the pre-application support led to improvements in the following areas' for the 2016 sample (n=517)

	Improved my understanding of market opportunities	Improved my understanding of financial management	Improved my understanding of business planning
Agree strongly	14%	17%	20%
Agree	43%	51%	56%
Neither agree nor disagree	16%	9%	7%
Disagree	23%	20%	15%
Disagree strongly	3%	2%	1%
Net positive	32%	45%	60%

Source: Year 3 2016 cohort survey

The key messages regarding mentoring support included the following:

- **Mentoring support was offered to most, but not all individuals.** 80% of the 2016 sample reported that they had been offered mentoring support, with 17% (in aggregate terms, 100 of the 602) reporting they had not been offered mentoring support (3% did not know).
- **Half of individuals offered mentoring had taken-up the support by the point of the survey (51%).** The take-up rate for mentoring was higher for individuals aged 18-30 (at 62%) than those aged over 30 (46%), for female beneficiaries (64%) compared to male beneficiaries (44%), for individuals with lower loan values (e.g. 76% for those with loans under £3k, compared to 39% for those with loans over £8k), and for individuals that were unemployed when they approached the programme

(68%). A significant minority (40%) of those offered mentoring chose not to take it up, with 8% indicating that they intended to use mentoring in the future.

- **Overall participation rates in mentoring for the 2016 sample in full were 40%, and are likely to remain at under 50%.** Taking into account the full survey sample, including those that were not offered mentoring, individuals that have received mentoring support accounted for 40% of the sample (244 out of 602). If the 39 individuals that intended to take-up mentoring in the future do so, this would bring the proportion of the survey sample that have received mentoring to 47%.
- **The most common reason individuals did not take up mentoring support was that they felt they did not need further support.** This was identified as a reason by 40% of those that were offered but did not take-up mentoring (n=193). However, a wide range of other reasons were also cited, with four themes emerging: that individuals did not have time for mentoring; that they were not contacted by mentors despite identifying an interest; that the specific nature of the business meant that they did not think that the mentoring would be of value (which is linked to those that felt they did not need support); and issues related to proximity and access to support preventing take-up.
- **Mentoring was most commonly delivered via face-to-face/one-to-one support, but the volume of support varied substantially.** Two-thirds (66%) of individuals that had taken up mentoring (n=244) identified individual face-to-face support as the main method. In terms of volume of support, 47% of the individuals that received support reported that this involved under five hours of support; however, 14% received over 21 hours of mentoring support (n=244).
- **Most individuals that have taken-up mentoring believed that it has had a positive effect on their business, with positive effects also identified in terms of developing new business skills.** The summary data are set out in Table 5-8. The 'net positive' effect on the business was significantly higher for individuals that had received face-to-face/one-to-one support (at 66%) than for other main methods of mentoring (at 46%). The volume of support was also potentially a factor, with a 'net positive' effect for those individuals that had received 11 or more hours of mentoring support (n=74) of 89%<sup>43</sup> compared to a 29% 'net positive' effect for those individuals that had received up to five hours of mentoring support (n=104). These findings may suggest that face-to-face/one-to-one and more intensive support deliver positive effects. However, it may also reflect that individuals that sought this form/volume of support were more likely to require in-depth support, and therefore benefit from the mentoring. This is consistent with the 'demand-led' approach i.e. Delivery Partners provide the method of support that individuals ask for, rather than defining a set offer or method. A caveat to note is that those individuals receiving face-to-face support and/or more support may exhibit greater attribution bias to the effects of mentoring.

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<sup>43</sup> Notably, of the 74 individuals that had received 11 or more hours of support, only one reported that they 'disagreed' that the mentoring had had a positive effect on their business, and none 'disagreed strongly'.

Table 5-8: Response to: 'To what extent did you agree or disagree with the following statements about business mentoring' for the Year 3 sample (n=244)

	<b>It has had a positive effect on my business</b>	<b>It has helped me personally to develop new or improved business skills</b>
Agree strongly	30%	23%
Agree	41%	43%
Neither agree nor disagree	15%	10%
Disagree	9%	19%
Disagree strongly	4%	5%
Net positive	59%	43%

Source: Year 3 2016 cohort survey

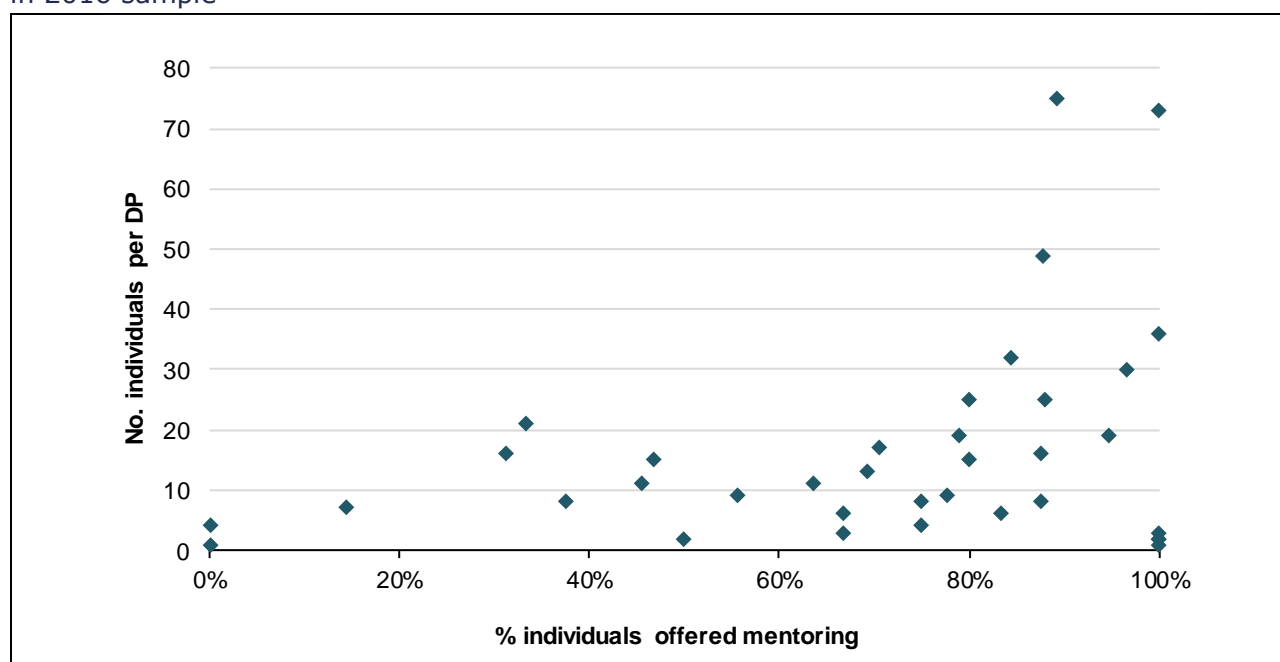
The evidence from the survey with the 2016 sample suggested that issues remained for the programme around the extent to which mentoring was offered consistently by Delivery Partners. Mentoring was intended to be a core component of the Start Up Loans customer journey, however, over half of the sample will not have received mentoring support, suggesting both that there remains a case for a greater focus on promoting the benefits of mentoring to raise awareness amongst the beneficiaries (reducing the 40% that do not take it up), and to ensure that the offer is made consistently across the Delivery Partner network.

All individuals should be offered mentoring support, although the survey evidence suggested that this has not happened in practice. The individuals in the 2016 sample were supported by 36 different Delivery Partners, and there was variation in the offer of mentioning support, for example: for eight of the Delivery Partners, under half of the surveyed individuals reported that they were offered mentoring support (and the proportion was under a third for four of these eight); and for seven of the Delivery Partners, between a half and three quarters of individuals reported that they were offered mentoring support. The number of individuals in the survey sample, and the proportion that indicated they had been offered mentoring by each Delivery Partner is set out in Figure 5-2.<sup>44</sup> There is no strong relationship between the volume of loans supported in the survey sample and the proportion that reported that they were offered mentoring support; Delivery Partners where all/a high proportion of individuals reported they had been offered mentoring support included both small/local, and large/national Delivery Partners.

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<sup>44</sup> The Delivery Partners are not identified, as the data is based on what individuals in the survey cohort reported which may not be fully accurate, and individual Delivery Partners have not been asked to corroborate the data, as this would involve identifying the individuals surveyed.

Figure 5-2: Proportion of individuals offered mentoring by Delivery Partner and number of loans in 2016 sample



Source: 2016 cohort survey

It is possible that some of the 17% of individuals in the 2016 sample that indicated they were not offered mentoring had in fact been offered support by the Delivery Partner, with the survey completed in some cases approaching two years since they drew down their loan. Further, the evidence from the Delivery Partner case studies indicates that in some cases, Delivery Partners signpost individuals to mentoring available elsewhere or use sub-contractors to deliver the mentoring, which may not be recognised by the individuals. However, the data from the 2014 cohort in Year 1 of the evaluation offered some corroborating evidence: 10% of the 2014 Year 1 sample (n=959) reported they were not offered mentoring support. The evidence does suggest that perhaps 10-20% of individuals supported by the programme have not been offered mentoring support.

The 2016 sample data also potentially suggests a reduction in the overall take-up rate of mentoring which may be linked to the changing characteristics of the beneficiary cohort. The evidence from across the three years of the evaluation was that mentoring take-up was higher for younger individuals supported by the programme, for those with smaller loan values, and for those that were unemployed when they approached the programme. As the characteristics of beneficiaries have shifted to older beneficiaries, to larger loan values, and to a lower proportion unemployed when they approach the programme, the overall level of mentoring take-up has reduced; the fact that individuals feel they do not need mentoring was also picked up in the qualitative research with beneficiaries as part of the Delivery Partner case studies. Whilst care must be taken given the different samples and time-periods of support, the evidence from Years 1 and 2 of the evaluation was that mentoring take-up was around 80% for the 2014 cohort, compared to around 55-60% for the 2016 cohort (with the specific value dependent on the proportion of those that expect to take-up mentoring that in practice do so).

The Delivery Partner survey also raised concerns over the current mentoring offering, with issues identified related to a lack of suitable mentors, and low engagement amongst individuals, which

is reflected in the beneficiary survey data on take-up. For example, feedback from Delivery Partners related to mentoring included:

*"It is difficult to find enough mentors who will give their time voluntarily. Maybe if there was funding available for training and at least to pay expenses. This may encourage people with the right skills to become a mentor."*

*"Mentoring is something clients don't always want or see the benefit of. I would like encouragement for mentoring... We know where clients stay in touch and receive mentoring support [this] helps businesses grow."*

The challenge of mentor take-up, quality and availability has been identified as an issue throughout the evaluation; for example, in the Delivery Partner survey in Year 2, approaching half of the respondents indicated they had faced some capacity issues in delivering mentoring support, with the quantity of mentors (i.e. availability and numbers) particularly problematic.

### **Mentoring and arrears**

One of the specific supplementary research questions for the evaluation was whether mentoring had any effect on levels of loan repayments. Overall take-up of mentoring has not appeared to have any association with re-payment: within the 2016 sample, 13% of those that had received mentoring support were in arrears in March 2017 (n=244), and 11% of those that had not received mentoring were in arrears (n=358).

However, the data do suggest that take-up of *more* mentoring was associated with a higher rate of arrears amongst the 2016 sample: 7% of those individuals that had received 'Up to 5 hours' of mentoring were in arrears (n=104), compared to 17% of those individuals that had received '6 or more hours' of mentoring support (n=131), a significant difference (at 5% confidence).

This finding is consistent with the econometric analysis conducted for the Year 2 evaluation report, which found evidence that individuals in arrears in the 2014 Year 2 sample spent more time with their mentors, potentially seeking ways to improve their businesses in order to recommence loan repayments. I.e. it is not mentoring take-up that leads to higher (or lower) levels of arrears, rather those individual in arrears are more likely to engage with a mentor in order to seek to address underlying issues or challenges in the business that prevent repayments.

### **Overall satisfaction**

The evaluation found that the programme had a high level of satisfaction amongst its beneficiary groups. The surveys for the Year 3 evaluation asked respondents on a scale of 0-10 whether they would recommend the programme to others (where 0 is they would not recommend the programme at all, and 10 is that they would recommend unreservedly). This data has been used to calculate a 'Net Promoter Score' (NPS) for the programme.<sup>45</sup> The findings for the two survey

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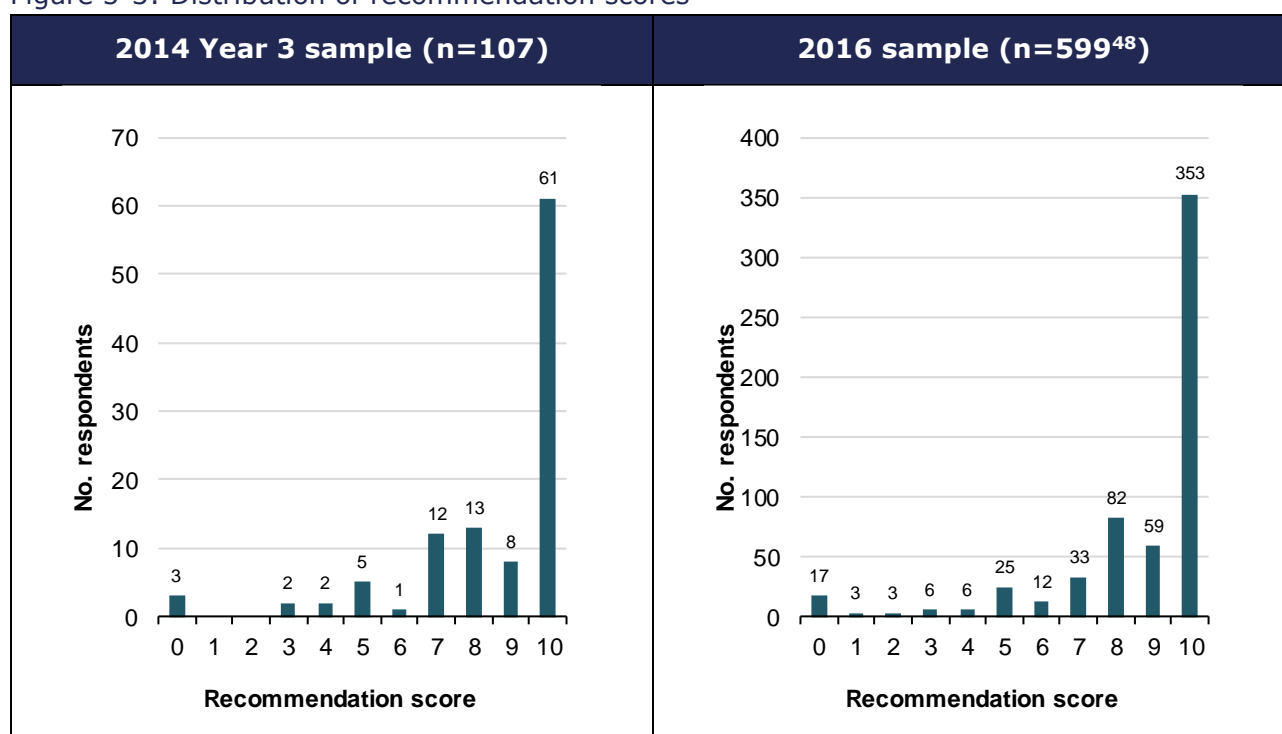
<sup>45</sup> This is an accepted overall measure of satisfaction, SULCo has previously adopted the commonly-used net promoter score in its own survey work. Those responding with a 9 or 10 out of a possible 10 are 'promoters'; those responding with scores of between 0 and 6 are 'detractors'. The net promoter score is the promoters minus detractors.

samples were similar, with an NPS for the 2014 Year 3 sample of 52%, and of 57% for the 2016 sample. The range of scores within each sample is set out in Figure 5-3.

Equivalent NPS data was reported by SULCo in their annual reports in 2014/15 and 2015/16, at 65% and 72% respectively.<sup>46</sup> These data cannot be directly compared – they are based on different samples, and have been asked at different points in the Start Up Loans customer journey and subsequent post-programme activity. Further, the NPS from the evaluation for the 2014 Year 3 sample of 52% may reflect in part a decay over time in the extent to which individuals would recommend the programme, with these individuals surveyed some three to three and a half years after they drew down their loan.

This said, the SULCo impact reports benchmarked the NPS for Start Up Loans to a number of other UK finance providers, and the NPS from both the 2014 Year 3 sample and 2016 sample perform well against these benchmarks. The data from the 2015/16 impact report is summarised below, with the evaluation findings also included and highlighted in red.<sup>47</sup>

Figure 5-3: Distribution of recommendation scores



Source: Year 3 surveys (2014 and 2016 cohorts)

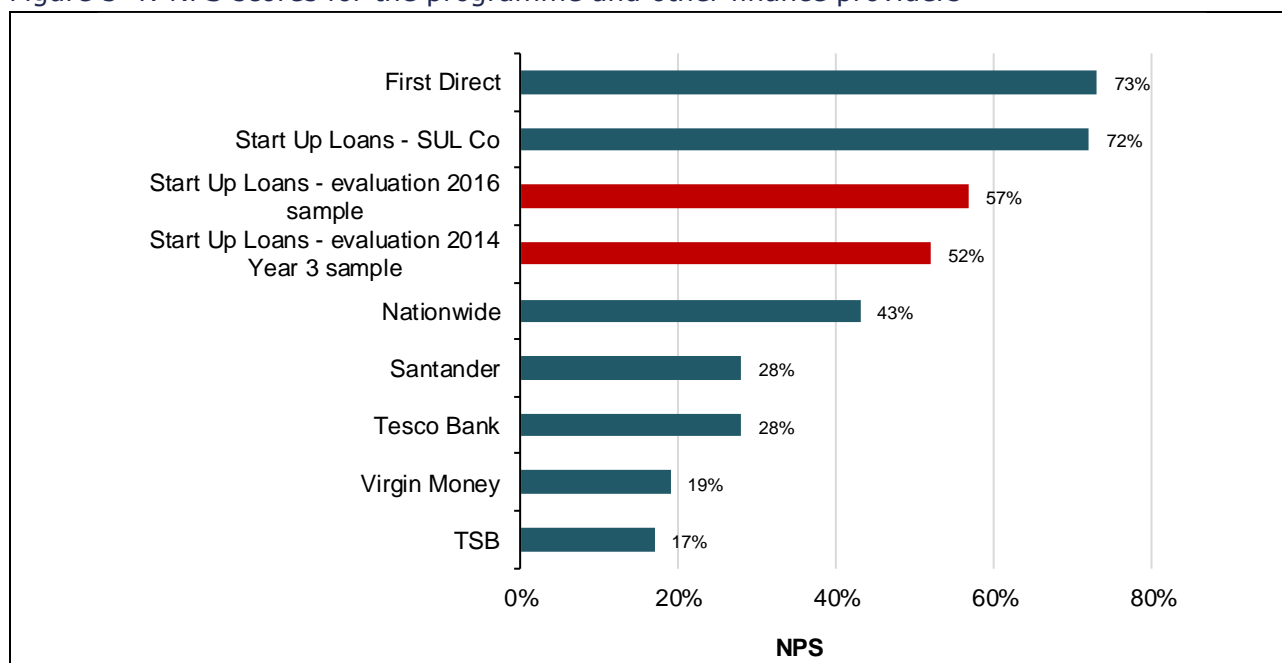
<sup>46</sup> See <https://prod.cdn.sulserver.net/app/uplotads/2016/06/08145304/Annual-Impact-Report-2014-15-final-V5-.pdf> and <https://prod.cdn.sulserver.net/app/uploads/2016/10/08144405/Annual-Impact-Report-2015-16.pdf>

<sup>47</sup> Note that the data on NPS for other finance providers is taken directly from the SULCo 2015/16 impact report; the impact report does not identify the source of the data or the sample sizes on which they are based. The data are reproduced here on the basis that this information is accurate and has been provided to/accessed by SULCo.

<sup>48</sup> Excludes don't know and refused.



Figure 5-4: NPS scores for the programme and other finance providers



Source: Adapted from Start Up Loans Annual Impact Report 2015-2016, including evaluation survey data

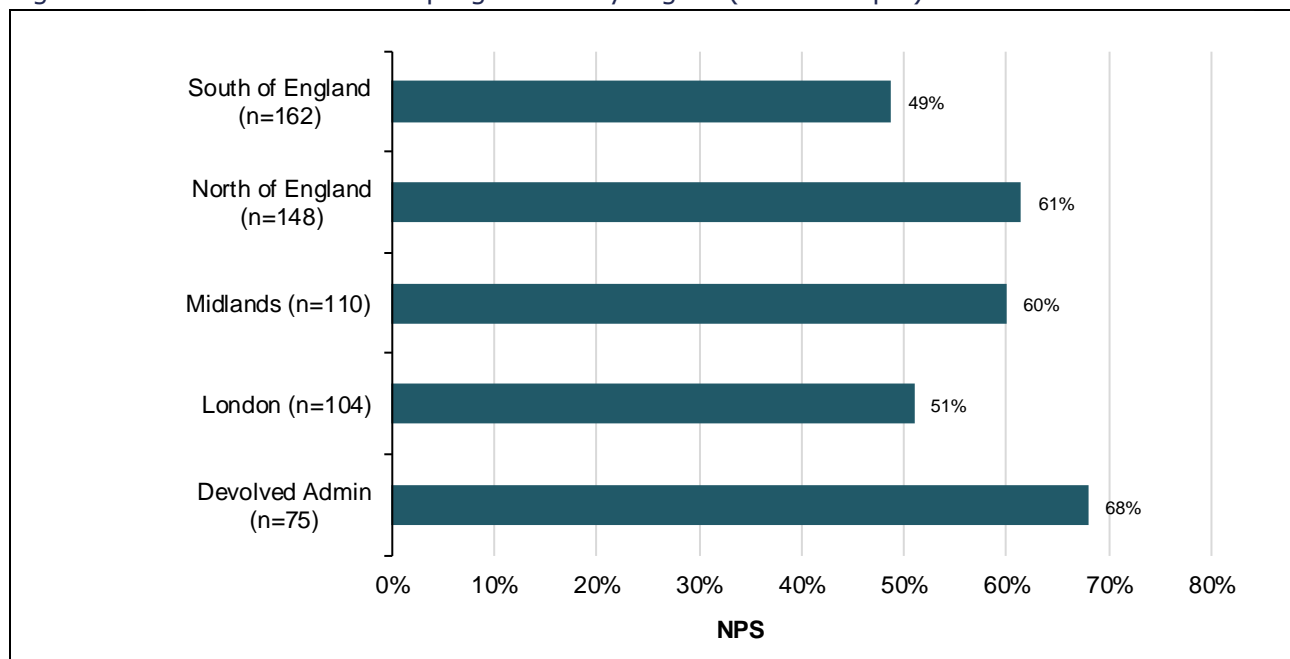
The sample size for the 2016 sample enables the NPS to be considered for different characteristics and groups. The following points are noted:

- First, the survey suggested that both take-up and volume of pre-application support influenced satisfaction with the programme. The NPS was significantly higher for those individuals that had received pre-application support, at 62% (n=516), compared to those that had not, at 26% (n=84). The NPS was also higher for those individuals that had received *more* pre-application support, at 87% for those that had received 'Six or more hours' of pre-application support (n=241), compared to 63% for those that had received 'Up to five hours' of pre-application support (n=243).
- Second, take-up of mentoring support in itself does not influence satisfaction, but the volume of mentoring received does. The NPS was consistent between those that had and had not taken-up mentoring support at the time of the survey, at 56% and 57% respectively (n=244 and n=356). However, the NPS for those individuals that had received 'Up to five hours' of mentoring (n=104) was 54%, compared to an NPS of 85% for individuals that had received 'Six or more hours' of mentoring support (n=131).
- Third, there was no variation in the NPS by loan value, gender, or employment status when applying to the programme. The satisfaction level was also consistent between individuals that were or were not in arrears in March 2017, and between those individuals that had previously started a business and those that had not.
- Fourth, satisfaction with the programme varied by region. The NPS for each of the five regions is set out below in Figure 5-5, ranging from a high of 68% in the devolved administrations, to 49% in the South of England. These data should not be taken too far, and it is possible that external conditions and factors may influence this evidence

e.g. individuals in London and the South East may be less likely to recommend the programme because of greater access to sources of finance in these areas, not as a result of their experience with the programme.

- Fifth, satisfaction with the programme was higher for those individuals that had a trading business at the time of the survey, compared to those where their business had ceased trading, with NPSs of 61% and 37% respectively (n=479, and n=65). This may be expected, but the data highlight that perceptions of the programme can be influenced by factors outside of its direct control.

Figure 5-5: NPS scores for the programme by region (2016 sample)



Source: Year 3 2016 cohort survey

## Section 6: Evidence on characteristics of those who benefited the most

### Key findings

- Econometric (regression) analysis completed on the 2016 sample (separate to the impact and value for money analysis set out in Section 4) indicates that the characteristics of those individuals that benefited most from the programme depend on the nature of the benefit in question; there are no consistent characteristics of those who benefit the most across different outcome types.
- Where the focus is on business outcomes (i.e. business survival, sales and employment), the key characteristics associated statistically with positive benefits are businesses with multiple owners, and having achieved some degree of employment in the last financial year.
- Where the focus is on individual personal development outcomes (notably job prospects, and business and personal confidence), those with no previous business experience, and those unemployed at the time of applying to the programme are statistically positively associated with benefitting more from the programme. This is not unexpected, and reflects the 'distance travelled' by these individuals as a result of programme support.
- Higher levels of self-reported additionality are associated with individuals aged 18-30.
- Take-up of higher levels of mentoring support (over six hours) is associated with more positive outcomes in terms of business and personal confidence, once other factors such as age, business experience, and qualification levels are taken into account.

### Coverage

The purpose of this section is to present a series of findings based on econometric (regression) analysis of the 2016 sample of beneficiaries that drew down a loan in 2016. The objective is to gain some insights into the characteristics that are most associated with a range of outcomes, including:

- **business outcomes** – survival, sales (gross and net additional), employment, and self-reported additionality
- **other outcomes** - personal development outcomes, arrears, and levels of satisfaction with the programme as a proxy indicator for the level of self-reported benefits experienced (e.g. if the beneficiary is a promoter/detractor of the programme).

As noted, the business outcomes include a variable for the net effects of the programme on sales. This variable covers sales outcomes attributed to the programme specifically by survey respondents, and so a direct measure of the extent to which a respondent has benefited from the programme through the performance of their business. The self-reported additionality variable also focused explicitly on the extent to which the effects of the programme on overall business performance would not have happened without the programme. Data on gross sales and employment are also presented for context. The other outcomes are used to consider the characteristics of those that have benefited through other means, such as in terms of their personal development.

The remainder of this section provides an outline of the results and a commentary of key messages and implications. It is important to note that as this analysis is based on evidence from beneficiaries of the programme only – i.e. it does not include a counterfactual group of non-beneficiaries – the interpretation of the results is limited to statements of association (i.e. this characteristic is significantly associated with this particular outcome), rather than statements of causality (i.e. this characteristic caused this particular outcome). The technical annex (Annex A) provides further details on the methodological approach to the model specifications, robustness tests, and full results tables.

## **Evidence on business outcomes**

The analysis of business outcomes focused on three aspects of business performance: survival, sales and employment. Table 6-3 provides an overview of the results.

Evidence on survival rates was based on the 529 (of 586) beneficiaries that started-up a business. The majority of businesses that had started-up were still trading at the time of surveying (a survival rate of 88%). The regression analysis suggests that for beneficiaries involved in other activities (for example, alternative employment, a different start-up, or an education programme), they were less likely to have started businesses that had survived (although the statistical relationship here was weak). It is important to note that this association may reflect that some beneficiaries have engaged in other activities because their business was failing, as opposed to the alternative activity (or activities) in itself causing the business to fail. Other findings include a weak and positive association between being female and business survival, and a weak and negative association with small loan values (under £3k, compared to mid-range loan values of £3k-8k) – i.e. the businesses of individuals receiving higher loan values were more likely to survive. Classification tests indicate that the predictive power of the model is high for the business survival outcome, providing confidence in the results (see Table A-4 in Annex A).

Turning to the analysis of sales and employment two forms of analysis were carried out. First, we analysed whether a beneficiary's business increased its sales or employment from one year to the next (i.e. "yes" or "no"). The rationale for using a binary variable was to address the high degree of variability present in the sales and employment data, by simplifying the analysis to draw conclusions on whether or not a business had grown. The second form of analysis considered the scale of sales and employment change, analysing the levels of sales and employment achieved (i.e. as continuous variables). Although this approach does allow for consideration of the scale of change in sales and employment, due to the high degree of variability in the data the results need to be treated with caution. For the sales outcomes, the analysis was extended to assess the characteristics associated with both gross sales (i.e. changes in the overall sales performance of the business) and net additional sales (i.e. changes in sales that were attributed to the programme through the self-reported responses of beneficiaries). Table 6-1 below provides a description of each sales outcome variables.

Table 6-1: Description of sales outcome variables

Outcome variable	Description
<b>Sales change (last-current FY)<sup>49</sup></b>	The outcome variable is binary, indicating whether a business grew its sales from the previous to the current financial year (y=1), or otherwise (y=0)
<b>Expected sales change (current-future FY)</b>	The outcome variable is binary, indicating whether a beneficiary expects their business to grow in sales terms from the current to the next financial year (y=1), or otherwise (y=0)
<b>Gross sales (current FY, logged*)</b>	The outcome variable is continuous, indicating the scale of gross sales generated in the current financial year, controlling for gross sales in the previous financial year. The data are log-transformed to normalise the data due to the high degree of variability in sales performance across the 2016 sample.
<b>Net additional sales (last and current FY, logged*)</b>	The outcome variable is continuous, indicating the aggregation of net additional sales generated in the previous and current financial years (i.e. the amount of sales attributed to the programme), controlling for gross sales in the previous financial year
<b>Net additional sales (last, current and next FY, logged*)</b>	The outcome variable is continuous, indicating the aggregation of net additional sales generated in the previous, current and next financial years (i.e. the amount of sales attributed to the programme), controlling for gross sales in the previous financial year

Note: \* indicates that the data underwent a log-transformation in order to normalise the data due to the high degree of variability in sales performance across the 2016 sample.

One common characteristic of individuals with businesses that increased their sales was the presence of multiple owners, which was positive and highly significant in three of the five sales models, and positive (albeit weakly significant) in one other.<sup>50</sup> Another characteristic was having one or more employees in the previous financial year (compared to beneficiaries operating businesses with no employees). The exception to this finding was for the expected sales change outcome variable, where the relationship was in the opposite direction (i.e. there was a negative association between employees in the previous financial year and expected sales change). This finding may potentially be explained by a higher rate of optimism among sole-traders. However, this finding would require further (qualitative) analysis to examine more fully.

There were other findings from the analysis of sales outcomes that were more tentative:

- **Mentoring:** beneficiaries that received a more substantial amount of mentoring (over 6 hours), compared to beneficiaries that receive no mentoring, were associated with a higher likelihood of growing their business sales. Conversely, beneficiaries receiving modest levels of mentoring (under 6 hours) were less likely to expect to increase their

<sup>49</sup> The classification test results for this outcome variable was in relative terms to the other outcomes low, at around 65% to 70% across the model specifications. This suggests that the predictive power of the model is lower, leading to some uncertainty in the results, which should be taken into account in reviewing the findings. See Table A-5 for the full classification tests for each model specification.

<sup>50</sup> The one model where this variable was not statistically significant was the model based on expected sales change.

sales than those receiving no mentoring (albeit the relationship was weak). This could mean that individuals that seek mentoring and find real value in it, engage in more substantial amounts and are able to derive performance benefits – either because of the mentoring or perhaps because they are simply more ambitious. Those receiving no mentoring may believe that they have the necessary skills and experience in any case – and this aligns with the qualitative evidence.

- **Degree education:** those with a degree were more likely to increase the sales of their business from the last to the current financial year, and were more likely to have higher sales in the current financial year – although the statistical relationships were weak.

The findings in terms of employment outcomes were similar to those for sales outcomes. Both multiple ownership and having some degree of employment in the previous financial year (compared to beneficiaries operating businesses with no employees) were characteristics of individuals with businesses that seemed to benefit more from the programme. Table 6-2 below provides a description of each employment outcome variable.

Table 6-2: Description of employment outcome variables

Outcome variable	Description
<b>Employment change (last-current FY)</b>	The outcome variable is binary, indicating whether a business grew its employment from the previous to the current financial year ( $y=1$ ), or otherwise ( $y=0$ )
<b>Expected employment change (current-future FY)<sup>51</sup></b>	The outcome variable is binary, indicating whether a beneficiary expects their business to grow in employment terms from the current to the next financial year ( $y=1$ ), or otherwise ( $y=0$ )
<b>Total employment (current FY)<sup>52</sup></b>	The outcome variable is continuous, indicating the scale of total employment in the current financial year, controlling for total employment in the previous financial year

The analysis found that higher loan values were associated with an increased likelihood of growing a business's employment from the last to the current financial year, but also in terms of expected future employment growth (i.e. from the current to the next financial year), although the latter finding was weakly statistically significant.

As with the analysis of sales outcomes, we again found that beneficiaries that were educated to degree level or higher were associated with a higher likelihood of increasing their level of employment.

<sup>51</sup> The classification test results for this outcome variable was in relative terms to the other outcomes low, at around 65% across the model specifications. This suggests that the predictive power of the model is lower, leading to some uncertainty in the results, which should be taken into account in reviewing the findings. See Table A-12 for the full classification tests for each model specification.

<sup>52</sup> Classification tests indicate that the predictive power of the model is high for the total employment outcome, providing confidence in the results (see Table A-13 in Annex A).

To complement the analysis of sales performance, we also examined whether there were any characteristics associated with **higher levels of self-reported additionality**. The main finding from this analysis was that there was a highly significant positive association for beneficiaries aged between 18 and 30 years old in reporting higher additionality, compared to beneficiaries over 30 years old. The results also suggested that businesses that had reached 10 or more employees in the previous financial year were associated with attributing a lower proportion of benefits to the programme.

Table 6-3: Summary table for business outcomes

	Survival	Sales change (last-current FY)	Expected sales change (current-future FY)	Gross sales (current FY, logged)	Net additional sales (last and current FY, logged)	Net additional sales (last, current and next FY, logged)	Additionality	Employment change (last-current FY)	Employment change (current-future FY)	Employment (current FY)
Age group (1=Age 18-30)		●	○				●			
Has business experience										
Has a degree		○		○				○		
Gender (1=Female)	○			●		○				
Unemployed pre-start							○			○
<b>Region (base case = London)</b>										
Devolved Admin						○				
Midlands										●
North of England								○		
South of England									○	
<b>Loan value (base case = 3k to 8k)</b>										
Up to 3k	○						○			
Over 8k								●	○	
Involved in other activities	●	●								
<b>Sector (base case = SIC A-F, primary, production, construction)</b>										
SIC G-I (wholesale, retail, transport, accommodation)								○		●
SIC J-N (business, professional, scientific services)								○		
SIC O-U (administration, education, health, arts, other)										
<b>Business size (last FY, base case = No employees)</b>										
Micro		●	●	●				●	●	●
Small				●			●	●		
Not trading		x	x	x	x	x		x	x	x
Business age								○		
Business age (squared)								●		
Has multiple owners		●		●	○	●		●	●	●
Business plan prepared			●							
SUL mentoring										
<b>SUL mentoring hours (base case = No mentoring)</b>										
Less than 6 hours			○			○				
6 hours or more		○							○	
Sales (logged, last FY)	x	x	x	●	●	●	x	x	x	x
Employment (last FY)	x	x	x	x	x	x	x			●

Source: SQW analysis; Note: ● = positively associated, highly significant (at 5% level or higher); ○ = positively associated, weakly significant (at 10% level) and/or sensitive to specification; ● = negatively associated, highly significant; ○ = negatively associated, weakly significant and/or sensitive to specification; x = indicates variable not included in any model specifications for the dependent variable



## Evidence on other outcomes

The analysis of other outcomes focused on three areas, level of satisfaction with the programme, personal development outcomes, and analysis of arrears. Table 6-4 provides an overview of the results.

Evidence on the **level of satisfaction** considered the characteristics associated with being a 'promoter' of the programme (i.e. providing a score of 9 or 10 out of 10 in terms of satisfaction with the programme) or with being a 'detractor' of the programme (i.e. providing a score of 6 or less in terms of satisfaction with the programme).

In terms of programme 'promoters', the regression analysis did not yield any strongly significant results.<sup>53</sup> In terms of weakly significant results, the analysis found that beneficiaries with previous business experience were less likely to be promoters. The analysis of programme 'detractors' found that beneficiaries aged between 18-30 were less likely to score the programme 6 or below in satisfaction terms compared with beneficiaries aged over 30.

Interestingly, in terms of mentoring, the results suggest that beneficiaries that received only a modest amount of mentoring (under 6 hours) were less likely to be promoters, potentially because they had not valued the mentoring aspect of the support. Beneficiaries receiving more mentoring (over 6 hours) hours were less likely to be dissatisfied with the programme (although the statistical association is weak).

In terms of **personal development outcomes**, the analysis drew on three questions from the beneficiary survey. These asked if the programme had increased individuals' job prospects, business confidence and personal confidence<sup>54</sup>. The regression analysis found that beneficiaries that had previous business experience were less likely to report these three personal development outcomes. In terms of business and personal confidence, we also found complementary evidence to suggest that beneficiaries that were unemployed at the time of entering the programme were more likely to increase their business and personal confidence compared to those that were in employment. Finally, the results found a strongly significant and positive association between engaging in substantial levels of mentoring (over 6 hours) and increasing individuals' business and personal confidence.

Finally, the analysis of **arrears** focused on two areas – the characteristics of beneficiaries that enter into arrears of one month or more, as well as an analysis of the characteristics of

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<sup>53</sup> The classification test results for this outcome variable was in relative terms to the other outcomes low, at around 70% across the model specifications. This suggests that the predictive power of the model is lower, leading to some uncertainty in the results, which should be taken into account in reviewing the findings. See Table A-14 for the full classification tests for each model specification.

<sup>54</sup> The classification test results for this outcome variable (personal confidence) was in relative terms to the other outcomes low, at around 63-65% across the model specifications. This suggests that the predictive power of the model is lower, leading to some uncertainty in the results, which should be taken into account in reviewing the findings. See Table A-18 for the full classification tests for each model specification.

beneficiaries that enter into longer-term arrears (three months or more).<sup>55</sup> The data analysed represented a snapshot of the state of arrears of the 2016 sample in September 2017.

The main finding was that female beneficiaries were less likely to enter a state of arrears (both for one month or more and three months or more). Those individuals that had businesses with employees in the previous financial year were also less likely to be in any form of arrears (short- or long-term). The results found that individuals with previous business experience were more likely to enter into longer-term arrears – although the statistical relationship here was weak.

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<sup>55</sup> Classification tests indicate that the predictive power of the model is high for the arrears for three months or more, providing confidence in the results (see Table A-20 in Annex A).

Table 6-4: Summary table for other outcomes

	Promoter	Detractor	Job prospects	Business confidence	Personal confidence	In arrears for 1 month or more	In arrears for 3 months or more
Age group (1=Age 18-30)		●					
Has business experience	○		○	●	●		○
Has a degree							
Gender (1=Female)				○		●	●
Unemployed pre-start		○		○	○		
<b>Region (base case = London)</b>							
Devolved Admin	○						
Midlands							○
North of England							○
South of England							
<b>Loan value (base case = 3k to 8k)</b>							
Up to 3k							
Over 8k			●				
Involved in other activities			○				
<b>Sector (base case = SIC A-F, manufacturing industries)</b>							
SIC G-I (wholesale, retail, transport, accommodation)							
SIC J-N (business, professional, scientific services)							
SIC O-U (administration, education, health, arts, other)			●				
<b>Business size (last FY, base case = No employees)</b>							
Micro						○	○
Small							
Not trading							
Business age							
Business age (squared)							
Has multiple owners							
Business plan prepared							
SUL mentoring		○		●			
<b>SUL mentoring hours (base case = No mentoring)</b>							
Less than 6 hours	○			●	●		
6 hours or more		●		●	●		

Source: SQW analysis; Note: ● = positively associated, highly significant (at 5% level or higher); ○ = positively associated, weakly significant (at 10% level) and/or sensitive to specification; ● = negatively associated, highly significant; ○ = negatively associated, weakly significant and/or sensitive to specification

## Commentary

The econometric analysis of business and other outcomes for the 2016 sample provides two different messages in terms of the characteristics of those that benefit most from the programme. From a business performance perspective, the results are clear in indicating that individuals with larger (in terms of businesses that employ staff at a relatively early stage) and more complex (in terms of businesses that have multiple owners) businesses appeared to generate the more significant benefits in terms of increasing levels of sales and employment over time. In terms of loan values, the analysis also found that the provision of smaller value loans (under 3k) was associated with lower rates of survival and low levels of additionality (i.e. the level of benefit a beneficiary attributes to the programme), while larger value loans (8k and above) were associated with a higher likelihood of business growth in employment terms. Although the majority of the findings on loan values were weakly statistically significant, there was consistency across the models on business outcomes.

The analysis on other outcomes, particularly in terms of personal development outcomes, provides a slightly different message. Overall, there is evidence that the programme provides benefits to confidence and prospects for beneficiaries without prior business experience, as well as to those that were unemployed at the time of applying for the programme. There are further interesting findings regarding mentoring. The analysis showed that both in terms of satisfaction with the programme, as well as personal development outcomes, beneficiaries that engage in substantial levels of mentoring (6 hours or more) were associated with deriving more benefit from the programme. This result may, however, be self-fulfilling. Those that engage in and value mentoring, are more likely to take up more substantial amounts of mentoring. In summary, the analysis provides evidence of different sorts of benefits reaching different groups. On the one hand, the analysis highlights beneficiaries and beneficiary businesses that derive bigger benefits in economic (sales and employment) terms, and on the other, we have a range of characteristics associated with beneficiaries that derive considerable personal benefits in terms of increased job prospects, and business and personal confidence.

## Section 7: Evidence on access to finance

### Key findings

- Many businesses have used their Start Up Loan alongside other finance sources. Since award of their Start Up Loan, 67% of the 2014 Year 3 sample and 55% of the 2016 sample surveyed have sought other sources of finance. The most common sources have been overdrafts, credit cards, and loans from friends and family.
- In the 2016 sample, the analysis did not highlight significant regional disparities in seeking business finance. In London, a slightly greater proportion of respondents had sought finance, which was particularly driven by an increased tendency to seek finance from friends and family (both loans and equity).
- Driven in particular by high success rates with friends and family, the overall success rate for obtaining some or all of the finance sought was high – at over 90% for both samples.
- The success rates for applications for bank overdrafts and bank loans amongst the 2016 sample appeared to be slightly lower than relevant benchmarks from the SME Finance Monitor, though some care is needed in interpretation given the small sub-sample sizes in our survey and the likelihood of differences in business characteristics. Where commercial finance was secured, this is an encouraging outcome for the individuals and their businesses, given the challenges faced by early-stage businesses in securing finance.
- Two issues may warrant particular consideration from the evidence. First, the vast majority of entrepreneurs did not seek advice when they identified a need for business finance (77% of the 2016 sample did not seek finance). London-based entrepreneurs were most likely to do so (31% vs 23% total). Whilst this evidence is consistent with wider evidence on finance behaviours of firms, these entrepreneurs were (or should have been) already within the business support network. Second, the evidence indicated a high proportion of 'discouraged borrowers' who had identified a need for business finance, but not acted upon it. The mentoring and/or links with Delivery Partners may provide options to seek to address some of these needs for finance advice.

### Coverage

This section sets out the findings from the evaluation regarding access to finance issues. The research questions focused on the access to finance needs and experience of beneficiaries *after* they had been supported by the programme, including the extent to which individuals have sought and secured follow-on funding. Drawing on the evidence, we have identified any implications for the programme offer in the future.

The evidence is presented separately for the 2014 Year 3 sample and the 2016 sample. These two groups are at very different stages in their post-programme experience, meaning that the data cannot be directly compared. As also discussed above, the characteristics of the two survey cohorts were different, for example in terms of age, and the businesses were likely to be different in terms of growth trajectories, which may also have implications for access to finance needs and experiences.

For each group the analysis covers:

- whether individuals sought external finance for their business in the period after they drew down their Start Up Loan, the nature of this finance, and their success in securing finance
- the behaviours of individuals when they identified a financing need for their business including whether they sought advice
- any barriers to applying for finance in the past, and expectation of financing needs in the future.

Note that the focus of the survey, and so the analysis, was on business finance i.e. whether individuals sought finance for the business, not personal finance. It is recognised that individuals with early stage businesses often take out personal loans/credit cards to fund their businesses. For example, the SME Finance Monitor found that 18% of SMEs using finance had a facility in a personal name, equivalent to 6% of all SMEs, and this was predominantly concentrated amongst the smaller SMEs (data by age of firm was not provided).<sup>56</sup> Taking on personal debt to support a business can be risky – and the SME Finance Monitor found that SMEs which had an average or worse than average risk rating were more likely to have a facility in their own name, compared to those with a minimal or low risk rating. There is a question on the extent to which those individuals supported by the programme that have been unsuccessful or not applied for business finance may be reliant on accessing personal finance to support their business, which could have some downside risks. This question has not been covered by this evaluation, but may warrant further consideration by BBB/SUL Co.

## **Evidence from the 2014 cohort**

The evidence from the 2014 cohort is set out in this sub-section. It is worth noting that in some cases the sample sizes of the analysis are low, and the findings should therefore be treated with some caution, and regarded as reflecting the experiences of the 2014 Year 3 sample only, not the wider 2014 cohort (of around 11,000 supported individuals).

### **Evidence on seeking external finance**

Around two-thirds (67%, n=107<sup>57</sup>) of the 2014 Year 3 sample sought or applied for at least one form of external business finance in the period after they drew down their Start Up Loan. Bank overdrafts and credit cards were the most common form of commercial finance sought (by 32 and 30 respectively). Approaching half of the individuals sought or applied for more than one form of external finance, with on average 2.5 sources identified in the survey.

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<sup>56</sup> BDRC, SME Finance Monitor Q2 2018 Report ([http://www.bva-bdrc.com/wp-content/uploads/2018/10/BDRC\\_SME\\_Finance\\_Monitor\\_Q2\\_2018\\_Final.pdf](http://www.bva-bdrc.com/wp-content/uploads/2018/10/BDRC_SME_Finance_Monitor_Q2_2018_Final.pdf))

<sup>57</sup> The data for the full 2014 cohort has been included in the analysis, including those that have not yet started-up a business; of the seven individuals that have not yet started-up five had applied for finance after the programme.

Table 6-1: Type of external business finance sought /applied for by the 2014 Year 3 sample

	Number
Bank Overdraft	32
Credit cards	30
Loans from friends or family	29
Loans from directors	22
Leasing or hire purchase	16
Bank Loan	15
Equity from directors or friends or family	10
Equity from another individual or organisation	9
Something else	8
Equity crowd funding platform	4
Commercial mortgage	3
Peer to peer lending	3

Source: Year 3 2014 cohort survey

Nearly all of the individuals that sought/applied for external finance (n=72) secured some or all of this finance, with 69 securing finance (equivalent to 64% of the total 2014 Year 3 sample). As may be expected, this was influenced heavily by loans from friends or family where 28 of the 29 that sought/applied for this type of external finance were successful in securing all or some of the value. The individuals experienced mixed success in applying for commercial finance including bank overdrafts and credit cards. A quarter of individuals that sought a bank overdraft were unsuccessful (8 out of 32), and over a quarter of individuals that applied for a credit card were either unsuccessful or provided with a lower level of credit than they sought (8 out of 32). In nearly all cases where commercial finance was not secured, the reason was that the finance was not approved by the potential lender/source.

### Finance behaviours

The most common thing that individuals did first when they realised they had a business financing need was to approach their main bank (16 individuals) or research finance types and products on internet (15 individuals). Seven of the individuals (10% of those that sought or applied for external finance) indicated that they spoke to a financial adviser or accountant.

Notably, over two-thirds of the individuals that sought or applied for external finance (49 of the 72) did *not* seek any external advice when applying for a finance facility. A small number of individuals approached their business mentor, friends and family and other specific sources of advice.

### Barriers and future expectations

Of the individuals with a trading business at the time of the survey (n= 83), 84% indicated that nothing stopped them from applying for external finance in the past 12 months. However, 16%

of those trading did identify barriers to applying for external finance (this included those that sought some finance, and those that did not seek any at all). Given the small sample sizes the reasons for this can be illustrative only. Most of these individuals identified that they assumed they would be rejected and/or they did not want to take on additional risk through applying for any/more external finance.

Approaching half (48%) of this group of individuals in the 2014 Year 3 sample with a trading business at the time of the survey (n=83) indicated that they were likely to have a need for and apply for external finance in the next 12 months, with a similar proportion (45%) stating they would not (7% did not know).

For those individuals that were likely to have a need for and apply for external finance in the next 12 months (n=40), most (28) did not identify any issues that would prevent them from seeking external finance in this period. Where issues were identified no consistent themes emerged, although this reflects the small number of individuals in the sample (n=12): individuals did note issues around credit history/rating, external economic conditions/policy contexts, and the performance of the businesses themselves, suggesting that external finance may not be required or viable.

## **Evidence from the 2016 cohort**

The evidence from the 2016 cohort on the same access to business finance issues as covered above with the 2014 cohort are set out in this sub-section, based on the survey evidence from the 2016 sample. Where the sample size allows, the data is presented at a regional level. We know from wider evidence that where a business is based can be an important factor in their search for, and their ability to find, the finance they need.<sup>58</sup>

### **Evidence on seeking external finance**

Over half (55%; n=574) of the 2016 sample that had started-up a business (even if they had subsequently closed) sought or applied for at least one form of external finance in the period after they drew down their Start Up Loan. Loans from friends and family and bank overdrafts were the most common form of finance sought. Over half of those that sought/applied for finance (n=318) sought or applied for more than one form of external finance, with on average 2.2 sources identified in the survey. The types of finance sought/applied for are set out below.

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<sup>58</sup> See <https://british-business-bank.co.uk/wp-content/uploads/2018/02/Small-Business-Finance-Markets-2018-Report-web.pdf>



Table 6-2: Type of external business finance sought /applied for by the 2016 sample

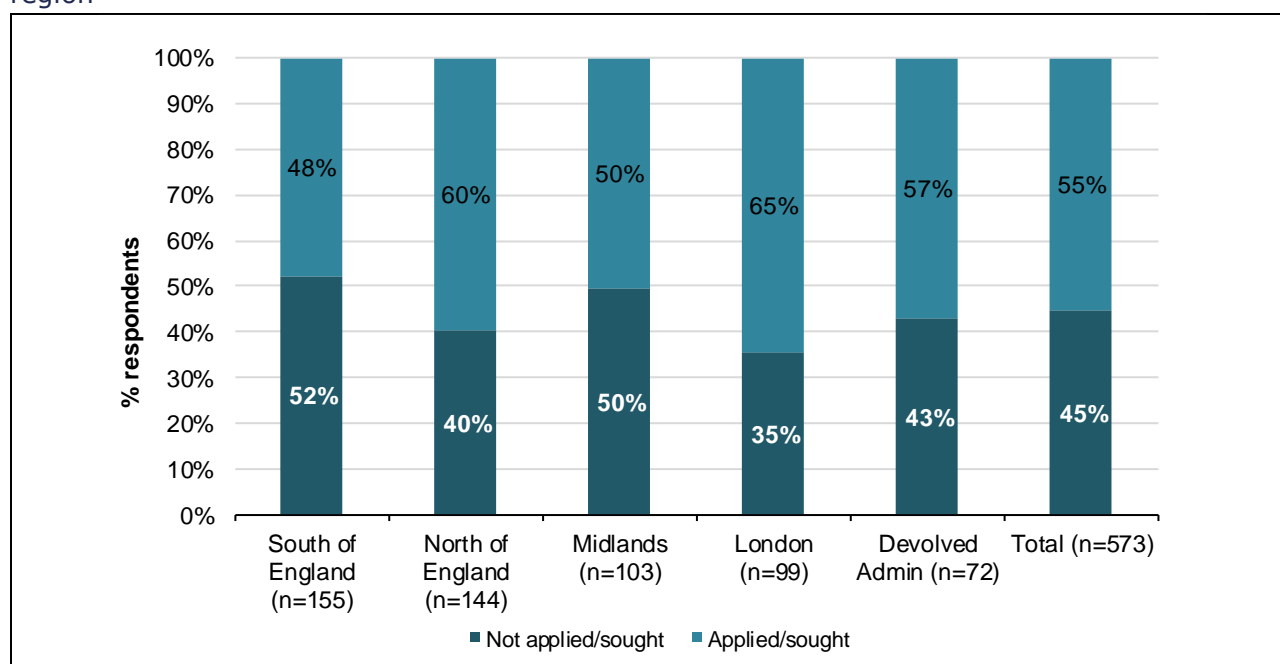
	<b>Number seeking finance type</b>	<b>% those seeking finance (n=318)</b>	<b>% that had started up a business (n=574)</b>
Loans from friends or family	118	37%	21%
Bank Overdraft	114	36%	20%
Credit cards	99	31%	17%
Loans from directors	83	26%	14%
Leasing or hire purchase	72	23%	13%
Bank Loan	56	18%	10%
Equity from directors or friends or family	52	16%	9%
Something else	36	11%	6%
Equity from another individual or organisation	28	9%	5%
Equity crowd funding platform	20	6%	3%
Peer to peer lending	9	3%	2%
Commercial mortgage	3	1%	1%

Source: Year 3 2016 cohort survey

The proportion of individuals that sought any form of external business finance by region is set out in Figure 6-1. The proportion of individuals seeking/applying for external finance was higher in London than any other region at 65%. This level in London is not significantly higher than the average across *all* regions of 55%, however, when London is excluded from the overall average, the variation is significant, with 53% of individuals seeking/applying for external finance in the rest of the UK, excluding London (n=474). This appears to be driven by a higher proportion of London-based individuals that sought loans from family/friends compared to other areas: 32% of individuals in London sought/applied for a loan from friends/family, compared to 21% across all areas (and 18% if London is excluded). Individuals in London were also statistically more likely to seek equity from directors or friends/family than the average across all regions.

In contrast to finance from personal contacts (i.e. friends/family or other directors), the numbers that sought/applied for commercial forms of finance were broadly consistent across the regions. Around a fifth of individuals had sought a bank overdraft, and just under a fifth credit card finance across all regions, with no significant variations evident – see Table 6-3.

Figure 6-1: Proportion of individuals seeking external business finance in the 2016 sample, by region



Source: Year 3 2016 cohort survey

Table 6-3: Sources of business finance sought by the 2016 sample, by region

	Loans from friends or family	Bank Overdraft	Credit cards	Loans from directors	Leasing or hire purchase	Bank loan	Equity from directors or friends or family
South of England (n=155)	19%	21%	17%	15%	10%	10%	5%
North of England (n=144)	22%	19%	17%	13%	11%	11%	9%
Midlands (n=103)	14%	17%	14%	13%	11%	11%	7%
London (n=99)	32%	19%	19%	16%	7%	7%	17%
Devolved Admin (n=72)	15%	25%	19%	17%	10%	10%	10%
Total (n=573)	21%	20%	17%	14%	10%	10%	9%

Source: Year 3 2016 cohort survey

Most (92%) of the individuals that sought/applied for external finance (n=318) were successful in securing some form of finance, either in part or full. This success rate was broadly even across regions, although somewhat lower in the Devolved Administrations, at 83%. This overall level

was influenced heavily by loans from family/friends where the 'success rate' was 98%. The proportion of individuals that secured all or some of the main sources of commercial finance are set out below. To provide context to the figures in Table 6-4, the SME Finance Monitor<sup>59</sup> indicated that 73% of zero-employee businesses were offered all of what they wanted in relation to a new application for a bank overdraft (and 5% some of what they wanted). The report also indicated that 56% of 0-9 employee businesses<sup>60</sup> were successful in obtaining the full amount for a new bank loan (and 4% received some of what they wanted). Caution is needed in drawing too far on these comparisons as the SME Finance Monitor covers all SMEs, irrespective of age, whereas the Start Up Loans beneficiaries clearly reflect a particular segment of this.

Table 6-4: Success in securing commercial sources of business finance (where outcome is known) for the 2016 sample

	Bank overdraft (n=113)	Bank loan (n=51)	Credit cards (n=98)	Leasing or hire purchase (n=71)
All	56%	45%	67%	83%
Some	15%	10%	28%	13%
None	29%	45%	5%	4%

Source: Year 3 2016 cohort survey

It is also noted that where individuals have been able to secure finance for their business from commercial providers this does indicate that the businesses have been independently assessed by the providers as good, and sufficiently strong to warrant the provision of finance. The numbers are modest: individuals securing all/part of a bank loan (n=28) accounts for 5% of the 2016 sample; and the individuals securing all/part of a credit card facility (n=93) account for 16% of the 2016 sample. Nevertheless, for this sub-set of the beneficiaries, this is an encouraging finding given the challenges faced by early-stage businesses in securing finance.

Where finance had not been secured, the most common reason was that the finance had not been approved by the lender/provider, e.g. for the 33 individuals that identified that a bank overdraft had not been secured (n=33), three-quarters (25) indicated that the finance was not approved.

## Finance behaviours

Consistent with the findings from the 2014 Year 3 sample, and evidence from the British Business Bank 2017 Business Finance Survey, when asked what was the first thing they did when they realised they had a business financing need, the most common response from the 2016 sample was to go directly to their main bank, identified by 22% of individuals that sought/applied for finance (n=318). A further 17% researched finance types and products on the internet. Only 6% of the total spoke to a financial adviser or accountant.

Consistent with this data, over three-quarters of the individuals that sought or applied for external finance did *not* seek any external advice when applying for a finance facility (n=314).

<sup>59</sup> BDRC Continental (2017) SME Finance Monitor Q2 2017, September 2017.

<sup>60</sup> Data not available for zero-employee businesses.

For those that did seek external advice, accountants, and friends and family were the most commonly cited sources. The variations were not significant (at the 5% level). However, within the survey sample, the proportion of individuals that did seek external advice was 31% in London. This said, the evidence from the 2016 sample was consistent with wider evidence from BBB that most SMEs do not seek advice when applying for finance.

Table 6-5: Evidence on seeking finance advice when applying for business finance by the 2016 sample, by regions

	Did <u>not</u> seek external advice	Did seek external advice
North of England (n=84)	81%	19%
South of England (n=73)	75%	25%
London (n=64)	69%	31%
Midlands (n=52)	81%	19%
Devolved Admin (n=41)	80%	20%
Grand Total (n=314)	77%	23%

Source: Year 3 2016 cohort survey

### Barriers and future expectations

Of the individuals with a trading business at the time of the survey (n=480), 83% indicated that nothing had stopped them from applying for external business finance in the past 12 months. However, 16% of those trading did identify barriers to applying for external finance (this included those that sought some finance, and those that did not seek any at all). There was no variation by region in the proportion of individuals that identified barriers. It is also noted that take-up of programme pre-application support and/or mentoring, did not impact on the proportion of individuals that identified barriers to applying for external finance.

Care must be taken with comparisons given the nature of the 2016 sample. However, this does suggest a fairly high level of 'discouraged borrowers' in the Start Up Loans beneficiary group. The latest data from the SME Finance Monitor (Q2 2017) reported that 2% of SMEs (overall, and those with either 0 or 1-9 employees that are most common in the 2016 sample), said something had stopped them applying for either loan or overdraft funding in the previous 12 months.<sup>61</sup> This data from the SME Finance Monitor does not focus on new firms only, and is therefore not directly comparable to the 2016 sample, however, the data do suggest potentially that individuals supported by the programme have not to date sought the finance that they need more regularly than those in the wider business population, with potential implications for their growth and wider sustainability.

The most common reasons given why individuals in the 2016 sample did not apply for business finance (n=78) were not wanting to take on additional risk, the expectation of being rejected in the application, and thinking that the finance would be too expensive to service. A range of other

<sup>61</sup> This definition is more tightly defined than the question in the survey. However, when other forms of finance were included in the SME Finance Monitor, the level of 'would-be-seekers' (as defined in the SME Finance Monitor) remained at 2%. See [https://www.bdrc-group.com/wp-content/uploads/2017/09/BDRC\\_SME\\_Finance\\_Monitor\\_Q2\\_2017.pdf](https://www.bdrc-group.com/wp-content/uploads/2017/09/BDRC_SME_Finance_Monitor_Q2_2017.pdf)

individual, case specific reasons were also provided, including related to the time required to apply and receiving advice (e.g. from a mentor or other adviser) against applying for finance at that point.

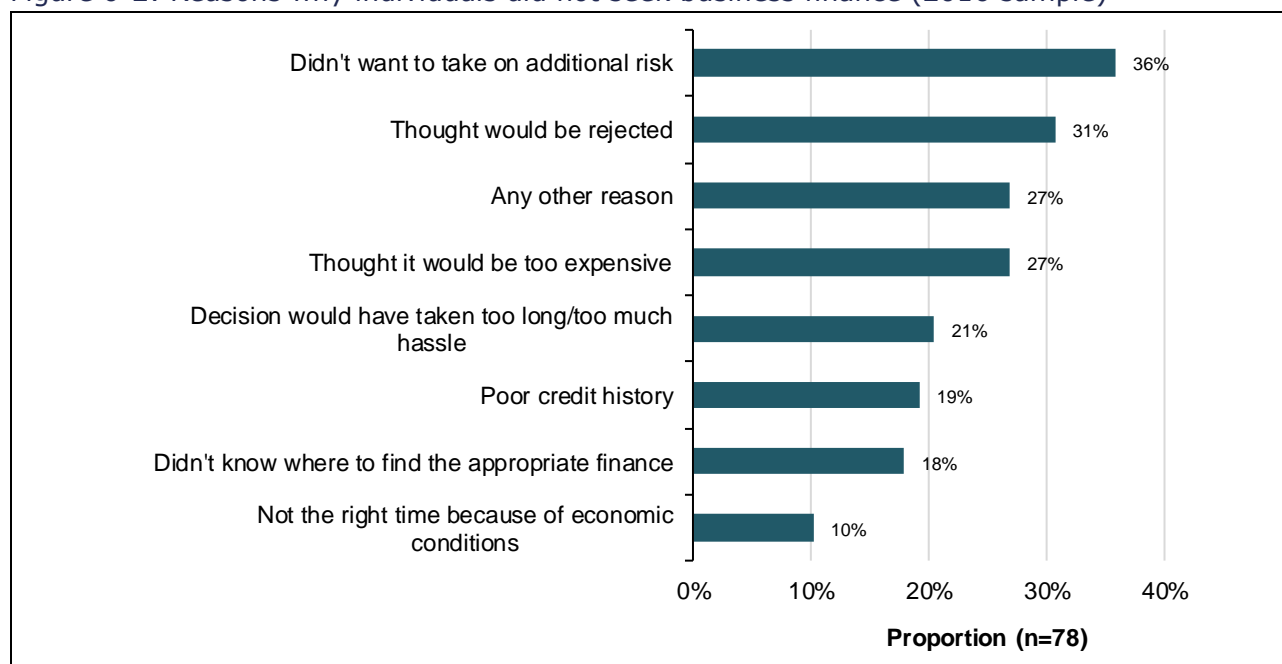
The reluctance or perceived reluctance of mainstream commercial financiers to lend to start-ups was also indicated in the Delivery Partner survey, with a number of respondents expressing that mainstream banks will not lend until start-ups have at least two/three years trading history. One respondent explained how this reluctance can;

*"put in jeopardy the future success and development of the business"*

In addition, concerns raised in the 2016 sample survey over finance being too expensive to service, were also reiterated in responses to the Delivery Partner survey;

*"The private market mostly offers short term lending, which may not be affordable and at much higher APR rates which stress the businesses"*

Figure 6-2: Reasons why individuals did not seek business finance (2016 sample)



Source: Year 3 2016 cohort survey

Looking forward, 43% of the 2016 sample with a trading business at the time of the survey (n=480) indicated that they are likely to have a need for and apply for external finance in the next 12 months, compared to 47% that indicated they would not (with 10% not knowing or refusing to answer). The regional split is set out in Table 6-6.

Table 6-6: Proportion of individuals with a trading business in the 2016 sample that are likely to have a need for and apply for external business finance in the next 12 months

	Proportion
South of England (n=130)	45%
North of England (n=121)	36%
Midlands (n=86)	37%
London (n=85)	51%
Devolved Admin (n=57)	54%
Total (n=480)	43%

Source: Year 3 2016 cohort survey

There were also some variations by loan characteristics:

- Individuals that came to the programme with an existing business and were trading at the point of the survey were significantly more likely (at 5% significance) to identify that they would have a need for and apply for external finance in the next 12 months, relative to those that started-up a business after support from the programme (50% of the former group (n=155) versus 40% of the latter group (n=325). This is likely to reflect the maturity of the businesses, which were further on in their development and therefore more likely to require external finance.
- 53% of individuals that drew down a loan of over £8k identified that they would have a need for and apply for external finance in the next 12 months, compared to 32% of individuals that drew down a loan of under £8k.

Note that there was no evidence that take-up of mentoring had any effects on the likelihood that individuals would have a need for and apply for external finance in the next 12 months. This is perhaps not unexpected, with the need for finance driven principally by business performance and plans for growth, and with limited evidence that business advice (in various forms) was driving finance need perspectives and priorities.

For those individuals that were likely to have a need for and apply for external finance in the next 12 months (n=207), over a quarter (27%) indicated that there were issues that would prevent them from seeking external finance in this period. The most common responses focused around business circumstances and performance e.g. issues related to cash flow, sales and performance history. For example, one respondent stating that their '*business is not making enough money to make applications*'.

There were also a number of responses around personal/business credit history representing a barrier to seeking external finance. Personal circumstances around risk, inexperience and personal doubts were also barriers identified by some respondents. A number of respondents stated other barriers, such as interest rates, difficulties with finding a financier, and concerns over loan repayments.

## Section 8: Evidence from the qualitative research on local and regional delivery

### Key findings

- The case studies identified three key ways in which delivery of the programme was influenced by the local/regional context, and these have facilitated an efficient delivery of the Start Up Loans model and enabled greater reach and profile of the programme. The three ways were:
  - the role of local/regional sources of referrals for potential applicants, with these often regarded as either equally or more important than national referrals – and alongside this the role of other support in beginning to help shape business plans before pre-application support is delivered
  - the availability of other funding that could 'top up' Start Up Loans offers of finance, and potentially act as a substitute for rejected applications to Start Up Loans that were still considered credible
  - the use of the wider business support landscape to provide signposting to relevant support, including access to mentor networks.
- There was some evidence that Delivery Partners believed they were able to make better, and more informed, lending decisions as a result of their local/regional knowledge, which would be lost with a centralised approach. This was due to their knowledge of the local/regional market, both in terms of the markets that businesses were intending to serve and the access to finance challenges specific to the area.
- Whilst explicit links to local or regional economic priorities were limited, there were several perceived benefits amongst Delivery Partners. These related to perceptions of: raising levels of business start-up and entrepreneurship in the area; providing access to employment opportunities via self-employment and enterprise that led to reduced unemployment levels; and reducing reliance on benefits/Job Seekers Allowance.
- On a cautionary note, some of the wider landscape that Delivery Partners have been able to access (and be part of) was supported by European funding, and so there is, at the time of writing, a degree of uncertainty about what may replace this in the future.

### Coverage

This section sets out the evidence from the Delivery Partner case studies regarding local and regional delivery of the programme. The section sets out the evidence on the extent to which the programme is tailored to reflect local needs, how delivery aligns with wider local and regional economic growth activity, the observed benefits of the programme at a local/regional level, and reflections on implications for the future of the programme.

In this context it is important to highlight the flexibility offered to Delivery Partners in how they deliver the programme, as suggested in the evidence presented in Section 5 around the offer and take-up of pre-application support and mentoring, and the Year 1 and Year 2 reports. The Delivery Partner case studies in Year 3 have further highlighted how different models are evident across different local areas and regions. The focus of the analysis is therefore not to seek to identify a single model that is most effective. Rather, the purpose is to draw out the evidence

on how local/regional delivery has been delivered in a number of cases to inform future thinking about the programme.

## Tailoring of support

The evidence from the case studies in Year 3 indicates that, generally, Delivery Partners do not tailor substantially or explicitly their offer to reflect specific local circumstances or needs. Rather, the support offer is dependent on (i) the overall delivery model adopted by the Delivery Partner to reflect its own organisational/delivery structure and (ii) the specific nature of support that individuals applying for/securing support require. Consistent with the evidence from the case studies in the Year 2 evaluation, the research this year demonstrates how the pre-application support and mentoring support is largely 'demand-led', albeit working within the approach taken by the Delivery Partner that reflects their capacity and structure.

This said it should be recognised that the delivery model itself may be influenced by local circumstances, particularly those related to the economic and physical geography of the area. This informs directly where support staff are located, and how activity is distributed across the team. In some cases, such as Business Finance Solutions in Manchester which covers a largely urban area centralised approaches were evident (e.g. a single team offering support from a single location), whereas in others, including more rural and/or polycentric geographies such as SWIG Finance, support teams were located across the area, with each taking a specific responsibility for particular locations. The latter seeks to respond in part to issues around accessibility, and the importance of face-to-face engagement at both the pre-application and mentoring stage, and the benefits from genuine local knowledge (discussed below).

The lack of tailoring is not unexpected given that the programme is open to individuals of all ages and in all areas. Further, the spatial focus of Delivery Partners tends to be quite large, with a number of examples in the eight Year 3 case studies where Delivery Partners have expanded their area of focus for the programme, moving from a 'local' to a 'regional' approach, including Transmit Start Up and First Enterprise. Whilst some areas may have socio-economic issues that are more pronounced than others – for example, around higher rates of unemployment and economic activity – the Delivery Partners are working across spatial areas with a wide range of socio-economic contexts, and therefore a diverse mix of individuals with different needs and expectations.

The Delivery Partner survey evidence also indicates that, generally, Delivery Partners do not substantially tailor their support across the geographical areas they serve. One respondent expressed;

*"we try to offer the same level and offers of support across the geographical area that we cover whether that is through us directly or through our various referral partners"*

Despite the lack of tailored support, a number of Delivery Partners acknowledged variation in the size of loans individuals apply for, and support taken-up by individuals, across their geographical areas. Therefore, indicating that the specific needs and requirements of individuals can vary geographically.



This said, the case studies did highlight three ways in which delivery of the programme was influenced by the local/regional context. First, the case studies highlighted the importance of local/regional sources of referrals for potential applicants. Across the eight case studies, the national referrals via the Start Up Loan Company were important – to varying degrees – but locally-sourced referrals were regarded as either equally or more important in a number of cases. Sources included local enterprise agencies, growth hubs (in England), devolved business support programmes (in the devolved administrations in Wales and Scotland), local banks and accountancy firms, private sector business advisors/consultants, and other local business networks and support organisations. In one case (First Enterprise), the Delivery Partner noted they attend business support sessions run by partner organisations in order to raise awareness of Start Up Loans (and their wider finance products), and generate increased demand, with the local relationships that have been established helping to enable this activity. Whilst it is possible that some of the local/regional referrals would access the programme via the national applications process, the case studies suggest that in most cases, the ability for Delivery Partners to access direct referrals from local/regional sources is an important part of their delivery model, and helps to access potential clients that may not otherwise be able to access the programme. There may also be some benefits in terms of the viability of applicants, and the ‘conversion rate’ from initial enquiries to applications for those individuals that have come through local/regional referrals. One Delivery Partner noted they ‘convert’ more of the local enquiries to applications than national referrals via the Start Up Loan Company, and another that many of the referrals from the national centralised system are not eligible for support, leading to some capacity issues in dealing with the volume of referrals, although this was reported to have improved over time.

Second, a number of the case studies highlighted how the Start Up Loans programme was situated within a wider landscape of enterprise and business support programmes, provided by both devolved government (e.g. the Business Wales programme, and Scotland’s Business Gateway), and by sub-regional and local agencies in England. Further to facilitating referrals to the programme noted above, there were examples of how the Start Up Loans model fits within this context:

- At the application stage, owing to previous support, applicants to Start Up Loans can come to the programme with a well-developed business plan in place. This does not preclude the need for pre-application support as part of delivering the Start Up Loans model, but enables greater focus on common areas of relative weakness, such as financial/cashflow projections.
- In terms of the financial support, other programmes can be used to ‘match’ or ‘top up’ the Start Up Loans finance, where the value of finance available through the programme does not meet fully the requirements of the business.
- Following award of Start Up Loans, business support programmes in the wider landscape provide a basis for giving access to mentors or other business support for beneficiaries that can enhance or complement the mentoring offer provided by Start Up Loans. For example, DSL Business Finance noted that their post-loan offer includes as a minimum a face-to-face meeting six months after loan draw-down (with extra support available before/after this, as requested by the individual), but that they also frequently signpost their client to mentors from another organisation to provide additional advice, and to avoid any duplication of support. In practice, therefore, the mentoring offer may be delivered through other existing support, with the post-loan support from the Delivery

Partner more of a 'keeping-in-touch' activity. In three other cases, Delivery Partners noted that they refer individuals that have received a Start Up Loan to partner agencies to receive additional support of specific business needs, for example industry-specific issues.

Common themes emerge from these examples: local/regional delivery enables a greater focus to Start Up Loans delivery allowing efficient implementation of the model; and Delivery Partners provide individuals supported by the programme with access to a broader suite of support, which may be less accessible without the networks and linkages facilitated by the local/regional Delivery Partners.

Third, there was some evidence that Delivery Partners believe they are able to make better, and more informed, lending decisions as a result of their knowledge of their local/regional area, which would be lost with a more centralised approach. A knowledge of local/regional market dynamics (and therefore what potential levels of competition and demand might look like), and access to finance challenges specific to the area were seen as important in making decisions and controlling risk in the loan portfolio.

Local knowledge was also noted to be helpful in ensuring that the advice provided at the pre-application and mentoring stage was appropriate to the specific spatial context within which a business will be based. This will not always be crucial, where businesses are looking to access national and international markets. However, many of the businesses started-up by individuals are dependent on local demand (as demonstrated through the survey evidence set out in sections 3 and 4), meaning that this local insight can be particularly important.

## **Engagement and partnership working**

The nature and depth of engagement and partnership working with other organisations in the local area/region, and engagement in wider local/regional strategic activity varied across the eight Delivery Partner case studies. Delivery Partners highlighted a role in engaging with professional services actors in the local areas/regions in which they operate, i.e. banks, accountants, financial advisors and enterprise agencies. These were relevant for referrals in both directions – although they were not always major sources for client acquisition for Start Up Loans, as discussed above. However, wider engagement and partnership working, related specifically to the Start Up Loans programme, was mixed.

As previously mentioned, in the publicly-funded landscape, Delivery Partners in the devolved administrations (Antur Teifi and DSL Business Finance) engaged with the main business support programmes of their respective devolved governments. This has provided opportunities to focus and ensure efficient delivery of the Start Up Loans model, as the Delivery Partners have been able to leverage wider resources. Delivery Partners in England also identified practical linkages with local and regional business support programme and organisations, enabling cross-referrals. There were some examples cited across Delivery Partners where quite specific local knowledge and embeddedness in the economic development landscape had helped with particular beneficiaries. For instance, one example was mentioned whereby a beneficiary was signposted to a specialist agricultural scheme that was relevant to the business (by Antur Teifi).

Delivery Partners were regularly engaged in local/regional groups and networks around business support, for example Chambers of Commerce, or consortia of business support organisations.

However, Delivery Partners were engaged in these networks/groups as organisations delivering a range of business support activity, not explicitly owing to their role as a deliverer of the Start Up Loans programme. This is not unexpected – all eight Delivery Partners covered in the case studies also delivered other activities outside of the programme, and some had been active in their local area/region for a long period prior to the programme. However, this exposure via local Delivery Partners, does provide an opportunity for raising the profile of the programme across wider partners. For example, one Delivery Partner (First Enterprise) noted they attend monthly meetings held by their Local Enterprise Partnership (LEP) where they provide a five-minute presentation on their activity to around 30-40 other business support organisations in the area. Another (SWIG Finance) noted they are part of a LEP group that holds a quarterly meeting with the Chamber of Commerce and banks, crowdfunders and other providers of finance – this affords an opportunity to provide details on the programme, as part of the broader access to finance offer available locally.

The Delivery Partner survey also suggests engagement with local/regional groups and networks. The quotes below indicate how Delivery Partners utilise these groups and networks to offer individuals tailored support;

*"we have the local knowledge and networks to ensure the correct support and advice is provided to our customers"*

*"if an applicant is at the very early stage of starting a business we will refer them to one of the business support organisations for example, Local Chamber of Commerce LaunchPad Programme to attend the pre-start workshops"*

There was limited evidence from across the case studies of Delivery Partners engaging with other providers of Start Up Loans in their area. The one exception here was in Wales, where at the time of the case study research Antur Teifi was one of three Start Up Loans Delivery Partners, and had a collaborative relationship with one of the other two. In practical terms the two Delivery Partners covered different geographical areas of Wales, thereby cutting any overlap and competition for clients. They also worked together as part of regular monitoring with SULCo, contributing to efficiencies and opportunities for sharing learning. Similar approaches to minimise duplication in specific loan areas/regions were not identified in the other case studies (although in the case of Scotland, the DSL Business Finance was the only Scotland-specific provider).

## **Local and regional benefits**

The nature of benefits to local areas and regions identified by Delivery Partners (rather than to individuals) were broadly consistent across the eight case studies, as may be expected given the overall purpose and focus of the programme. The benefits related to perceptions of: raising levels of business start-up and entrepreneurship in the area; providing access to employment opportunities via self-employment and enterprise that led to reduced unemployment levels; and reducing reliance on benefits/Job Seekers Allowance. A number of Delivery Partners also highlighted the role of the programme in providing economic opportunities in deprived areas and/or for disadvantaged groups; this included in one case engagement in the local area with growing ethnic minority groups.

It was noted in some (but not all) cases that the benefits were aligned strongly to the local economic development and policy landscape in their area, including those led by key local partners such as LEPs and Local Authorities. For example, a number of Delivery Partners reported that the programme contributed to key local priorities relating to boosting opportunities for economic activity, both directly for the beneficiaries concerned, and indirectly through the employment that new businesses may create and the services that the businesses provide. On a cautionary note, it was highlighted that the increasing pressures on credit assessments, and the shortage of capacity for spending more time with those that needed this as part of pre-application support, delivering these types of benefits were becoming more challenging.

One Delivery Partner (Transmit Start-Up) also highlighted that the scale of loans they delivered via the programme has helped to improve the profile of their region as a business location. The Delivery Partner noted that the programme sends out a wider message that the region has good business infrastructure and is an ideal place to start a business, and that the programme demonstrates the business support infrastructure in the region *'which boosts perception of the local area, and attracts further businesses.'*

## Reflections on local/regional delivery

Drawing on the evidence from the case studies, three key points are highlighted:

- The role of Delivery Partners in the local/regional/devolved business support landscapes has helped in delivering the Start Up Loans model, and in delivering it efficiently. There are examples of cross-referrals in/out of the Start Up Loans programme and the use of capacity in other programmes to deliver mentoring. It is noteworthy in this context, however, that some of this wider provision is supported by European funding, and so there is, at the time of writing, a degree of uncertainty about what, if anything, may replace this in the future.
- The reference to local economic strategies was limited in the case studies with Delivery Partners, and so the explicit role of Start Up Loans in delivering against local economic priorities was not evidenced strongly. This said, the evidence did point to examples of where local knowledge of key issues and priorities were relevant. There were examples highlighted of how the knowledge of local Delivery Partners had helped to provide beneficiaries with additional relevant signposting that they may not have got otherwise, and a sensitivity to local priorities and contexts, especially related to wider social challenges. Delivery Partners also noted that a knowledge of the local context can help in making better informed decisions around loan assessments.
- The profile and reach of the programme does appear to benefit from the fact that Delivery Partners commonly also deliver other business support and access to finance interventions, which means they are active in local and regional networks and groups. In a number of cases these mechanisms enable the programme to be communicated to a wide range of other organisations that can help to drive referrals and demand for support. So, whilst Delivery Partners are not engaged in local networks because of Start Up Loans, this engagement does help to maximise the potential of the programme to reach a wide base, and raise its profile across the adviser and business support landscape.

## Section 9: Conclusions and implications

This final section of the report summarises the main results of the evaluation at this final report stage. In doing so, we set out a reminder of the headline findings from the Year 3 evaluation, and reflect, where relevant, on the evidence from the previous years of the study to provide an integrated assessment of the programme from across the evaluation period. The section concludes with the principal implications of the evaluation evidence that the British Business Bank should reflect on as it considers the future for the Start Up Loans programme.

### Impact and value for money

Whilst the evidence in Year 3 was based solely on self-reported analysis, and therefore needs to be treated with some caution, the overall findings re-affirm the headline findings from the evaluation in Years 1 and 2, namely that the programme has generated benefits for individuals that have drawn down loans. The programme has supported the start-up or early growth of new businesses, and demonstrated additionality, whereby for a proportion of beneficiaries some or all of the benefits would not have been generated without the programme.

In both the 2014 Year 3 sample and the 2016 sample (that is, individuals surveyed in the Year 3 evaluation that drew down their loan over June-December 2014 and January-June 2016 respectively), the start-up rate for individuals surveyed was over 90%. The survey evidence suggested that more businesses have started up than would have been the case if the programme had not existed, resulting in an increase in the number of business starts across the UK: around one in five of the individuals in the 2016 sample, and one in four in the 2014 Year 3 sample, that started-up a business following support from the programme reported that the business would not have started without Start Up Loans. Timing effects were more common, with at least half of individuals that started-up a business following support in both cohorts indicating that the start-up was achieved more quickly than if they had not been supported by the programme.

The impacts of the programme in terms of net economic effects (measured using GVA) were estimated to be substantial. The evaluation estimated that (based on self-reported data): the 2014 cohort (of 11,000 loans drawn down over November 2013-December 2014) will generate a net GVA of £169m by 2019/20; and the 2016 cohort (the c.3,450 loans drawn down over January-June 2016) will generate a net GVA of £85m by 2021/22.

In both cases, the benefits in terms of GVA are expected to be higher than the costs associated with delivering the programme, the latter covering both the lending and non-lending costs (including pre-application support and mentoring). The BCRs (using Economic Costs) vary between the two cohorts from around 3.0 to 3.7:1 for the 2014 cohort, to 5.7:1 for the 2016 cohort. Three points are important in this context. First, all BCRs suggest that the value for money of the programme is positive, which is also consistent with the evidence from the previous years of the evaluation. Second, whilst the BCRs cannot be compared directly, owing to the changes in the characteristics of the individuals and loans in the two populations, the evaluation suggests that the value for money of the programme may have improved. One of the key reasons for improved value for money has been the more consistent and more efficient programme process. A second key reason identified is the increase in the size of companies started and developed.

Third, although the evidence from the Year 3 evaluation suggests that the BCR of the 2014 cohort is around 3.7:1, and this compares to the findings from the Year 2 evaluation of a BCR of 3.0, it is likely that this apparent improvement in the BCR does not reflect a genuine shift in the underlying value for money of the programme, rather that the 2014 Year 3 sample that has responded to the survey in all three years has previously, and continues to, perform better, than the 2014 samples from Years 1 and 2, owing to response bias. Given the uncertainties here – related to response bias and business survival in particular – it appears appropriate to consider that the value for money of the 2014 cohort, as expressed in terms of BCR (Economic Costs) is likely to fall within the range of the 3.0:1 from the Year 2 evaluation and the 3.7:1 from the Year 3 evaluation. This remains positive for the programme.

The change in BCRs between the 2014 cohort and the 2016 cohort also reflects in part selection into the programme, and the characteristics of entrepreneurs supported. The later population period – and in turn the survey sample – saw a shift towards older individuals securing loans, fewer that were unemployed when they approached the programme, and individuals securing higher value loans (associated with larger companies). This change in the socio-economic characteristics of the individuals supported has had implications in decreasing the wider social and distributional contribution of the programme (which is not reflected in the value for money model), and the extent to which these individuals may have been able to access other sources of finance. The increases in efficiency in programme processes, partly due to pushing costs of non-lending support down, may also have reduced the ability for Delivery Partners to support groups requiring greater hand-holding and with lower credit ratings.

Three further points are highlighted in relation to the impacts and value for money of the programme. First, the level of loan re-payment that is achieved will be an important influence on the final value for money of the programme. One of the key factors driving the higher BCR for the 2016 cohort relative to the 2014 cohort was an assumed 40% (rather than 50%) default rate on the loans. This was based on analysis of the loan book and expected lifetime re-payment by BBB/SULCo, which showed an improvement in default rates between the 2014 and 2016 cohorts. If a 50% default rate was assumed (as has been used throughout the evaluation for the 2014 cohort), the arrears adjusted BCR ratio for Economic Costs for the 2016 cohort reduces from 5.7:1 to under 4.9:1.

Second, most businesses started-up by individuals supported by the programme appear to be 'lifestyle' rather than 'scalable' businesses, designed principally to provide employment and an income for the founder, rather than 'scalable' businesses that are seeking to grow and generate further employment. Around 60% of businesses reported having no employees other than the owner in both the 2014 Year 3 sample (between three and three and a half years since they drew down their loan), and in the 2016 sample (between 18 months and two years since they drew down their loan). Whilst the businesses in the 2016 sample were on average larger – both in terms of employment and turnover – the evidence indicated that the principal route to economic impact of the programme will be via the turnover of these businesses started-up.

Third, the Year 3 evidence for the 2016 cohort, consistent with the evidence from previous years, suggested a relationship between the level of arrears and business performance. For example, the overall arrears rate in March 2017 for the 2016 sample was 12% (i.e. 12% of individuals were in arrears at this point); this increased to 30% for those individuals that had started-up a business that had subsequently closed (n=66). The average turnover for businesses started-up by individuals that were not in arrears was also higher than those that were (£116k compared

to £71k). This is what would be expected, and for both the 2014 sample analysis in Year 2 and the 2016 sample analysis in Year 3 the direction of causality is not clear.

Exploratory analysis sought to take account of distributional issues on programme value for money, drawing on Treasury guidance on the use of income distributional weights. The value for money analysis was re-run using distributional weights based on the income of beneficiaries when they first considered starting up a business, before their engagement with the programme, for both the 2014 and 2016 cohorts. The analysis suggests the value for money of the programme is higher once the pre-programme income of the beneficiary is taken into account, across both cohorts, although the effect is more pronounced for the 2014 cohort (using data from Year 2 given sample sizes), with a higher share of individuals in this group in the lowest income bands. The income adjustment does not fully close the difference in BCRs between the cohorts. However, the exploratory analysis highlights the economic and social value of the programme in supporting 'less advantaged' individuals, as part of the overall service offer, with improved value for money when the income distribution of beneficiaries is considered.

## **Employment and personal development outcomes**

The evaluation has found evidence that beneficiaries of the programme have seen changes in their employment status (with fewer people unemployed, and more self-employed), and perceptions of their longer-term employability and employment prospects. Notably, over three-quarters of individuals in both the 2014 Year 3 sample and 2016 sample reported that the programme had had a positive effect on their long-term job prospects, with positive effects also reported by a majority in terms of skills, both within and outside of business.

There was also evidence of transitions between unemployment and self-employment and employment. In the 2016 sample, 17% of the total survey sample moved from unemployment into employment, self-employment or a role as a proprietor/business owner after their engagement in the programme. Of those that moved specifically into self-employment, approaching half reported that they would not now be in self-employment if they had not been involved with the programme. However, it is noted that as the characteristics of the beneficiary cohort have shifted over time, the potential for the programme to support individuals out of unemployment may have been reduced.

The wider evidence from Year 3 in relation to pre-application support and mentoring was, in some ways, consistent with the evidence from previous years of the evaluation. The support was generally valued highly by individuals, and there were self-reported benefits from both pre-application support and mentoring on skills and confidence. However, the survey evidence indicated that overall participation in mentoring may have reduced over time. This may reflect the different characteristics of the more recent sample that was surveyed, as older and more experienced business owners have tended to be less likely to take up mentoring. From the survey feedback and case study work, it was evident that the mentoring offer to individuals has remained varied across the Delivery Partner network, and there have been examples whereby Delivery Partners have drawn on the wider business support landscape to provide advice and mentoring to beneficiaries. Two consistent messages across the evaluation period have been that a significant minority of individuals did not understand the potential value of mentoring, and that approaching 20% of individuals supported by the programme have not been offered mentoring support.

Overall satisfaction with the programme amongst the individuals that it has supported is high, with a Net Promoter score (NPS) of around 50-60% across the two survey samples. This appears to perform well against benchmarks of other finance providers based on data reported by the Start Up Loans Company in their annual reports. The survey data suggested that satisfaction with the programme was associated with certain aspects of individuals' experience of the programme itself. Satisfaction was higher for those that had taken up pre-application support than for those that did not, and for those using more hours of mentoring. As may be expected, satisfaction was higher for those individuals that had a business that was still trading, compared to those where the business had closed. This indicates that satisfaction with the programme is reliant on external factors that it cannot control fully. However, the overall findings on satisfaction are positive, and suggests that the programme is in most cases meeting the needs and expectations of the individuals that it supports.

### **Characteristics of those who benefit the most from the programme**

Econometric analysis was undertaken on the 2016 sample to identify if there were any characteristics associated with individuals that had benefited the most from the programme, covering both business effects and those related to personal development. This analysis was not completed for the 2014 Year 3 sample owing to the sample size. The analysis indicated that the characteristics of those that benefited most varied dependent on the nature of the outcome with no consistent characteristics across different outcome types:

- where the focus is on business outcomes (i.e. business survival, sales and employment), the key characteristics associated statistically with positive benefits are businesses with multiple owners, and individuals with businesses that had some employees (compared to beneficiaries operating businesses with no employees)
- where the focus is on individual personal development outcomes (notably job prospects, and business and personal confidence), those individuals with no previous business experience, and those that were unemployed at the time of applying to the programme are statistically positively associated with benefitting more from the programme.

The findings on personal development outcomes are not unexpected, and reflect the 'distance travelled' by these individuals as a result of programme support. However, the econometric analysis does highlight the importance of the programme in generating different effects for different groups, including personal development effects for those that were unemployed, which needs to be seen alongside the impact and value for money assessment which are based on business outcomes only.

Two other points are noted from the econometric analysis of the 2016 sample: higher levels of self-reported additionality were associated with individuals aged 18-30; and take-up of higher levels of mentoring support (over six hours) was associated with more positive outcomes in terms of business *and* personal confidence (with the analysis controlling for other factors such as age, business experience, and qualification levels).

### **Access to finance**

The evidence from both the 2014 Year 3 sample and the 2016 sample suggested that there were some similarities in the behaviours adopted by individuals supported by the programme with the wider population of micro enterprises. For example, most did not seek any advice when they



first identified an access to finance need, and they have commonly relied on finance from friends and family to meet their financing needs.

However, the evidence has suggested a higher level of 'discouraged borrowers' amongst individuals supported by the programme than the wider business base. In both samples, 16% of the individuals surveyed indicated that they had wanted to apply for external finance in the last 12 months but did not do so, owing to a range of factors including an expectation of rejection and not wanting to take on additional risk. This may reflect in part the maturity of the firms and the nature of the businesses (as discussed above, there were many sole traders, which may limit levels of willingness to take on risk). However, this may also limit the potential for the growth and sustainability of the businesses if they are not accessing the finance they would need to grow.

The survey indicated that there will be demand for finance from the Start Up Loans population in the future. Between 40-50% of the individuals surveyed across the two samples anticipated that they will need and apply for external finance in the next twelve months. No consistent themes emerged around potential external barriers to finance; the most common factor that may prevent individuals seeking finance from across the two samples was related to the performance of the business itself.

## **Reflections on local and regional delivery**

A particular issue for the final year of the evaluation was to consider the local and regional nature of delivery of the programme. The case studies suggested that the role of Delivery Partners in the local/regional/devolved business support landscapes has helped in delivering the Start Up Loans model, and in delivering it efficiently. The ability for local/regional delivery to align with other interventions, particularly to generate referrals and raise the profile of the programme amongst stakeholders was a common theme across the case studies. It is noteworthy in this context, however, that some of this wider provision is supported by European funding, and so there is, at the time of writing, a degree of uncertainty about what may replace this in the future.

The case studies also highlighted the potential importance of local knowledge and insight in the successful delivery of the programme. There were examples highlighted of how the knowledge of local Delivery Partners had helped to provide beneficiaries with additional relevant signposting that they may not have got otherwise, and a sensitivity to local priorities and contexts, especially related to wider social challenges. Delivery Partners also noted that a knowledge of the local context helped in making better informed decisions around loan assessments, leading potentially to lower rates of default.

More broadly, the evidence suggests that the profile and reach of the programme has benefited from the fact that Delivery Partners commonly also deliver other business support and access to finance interventions, which means that they are active in local and regional networks and groups. In a number of cases these mechanisms have enabled the programme to be communicated to a wide range of other organisations that can help to drive referrals and demand for support. So, whilst Delivery Partners are not engaged in local networks specifically because of Start Up Loans, this engagement does help to maximise the potential of the programme to reach a wide base, and raise its profile across the adviser and business support landscape.

## Implications

Four key implications emerge from the evaluation evidence, drawing on the Year 3 evidence in the context of the evidence from previous years of the study:

- First, value for money, as assessed in terms of the benefits from the creation and development of new and early stage businesses against the economic costs of running the programme, has improved. This is a positive sign, and has been partly due to increased efficiencies in how the programme has been run and partly reflective of the increase in average size of the companies started and developed. However, there appears to be a risk that this is at the expense of the social and distributional rationale underpinning the programme – benefits that have not been captured fully in the value for money model owing to their natures. Going forward, clarity on the objectives of the programme is required, and then operationally this needs to be communicated from SULCo to Delivery Partners. If these continue to include the social and equity objectives, then there is a need to ensure that the incentives to Delivery Partners to drive down defaults rates, and support individuals with ‘better’ business ideas (that may represent lower risk), does not mean that the type of individuals that the programme was also established to support from the outset are no longer able to access the programme, i.e. individuals that are unemployed, seeking modest sized loans, younger and from more deprived communities. For these individuals, arguably accessing finance and business advice are more challenging or pressing.
- Second, despite its role as a core component of the programme, the evidence suggests that the offer, take-up and delivery of mentoring appears to remain very varied across the programme. For example, around one-fifth of individuals drawing down loans reported not being offered mentoring support. The evidence from across the evaluation is clear that not all individuals supported by the programme want mentoring support. However, it is important that the ‘offer’ is made consistently, and this does not appear to be happening.
- Third, there is evidence of a need to make further finance advice available to beneficiaries after their award, either through mentoring, other ‘aftercare’ advice or signposting. Many of those identifying a finance need have not sought finance advice, and a significant minority of individuals supported by the programme (around 15% according to the surveys) that required additional external finance following the Start Up Loan did not seek it, indicating a prevalence of ‘discouraged borrowers’. Some of this may be due to risk aversion (which may be high owing to the ‘lifestyle’ nature of many of the businesses), and for these businesses external finance may not be appropriate. This said, the proportion is higher than may be expected, even accounting for the maturity of businesses started-up by programme beneficiaries, and may be limiting the growth potential and/or sustainability of businesses started-up by beneficiaries. The data does not indicate a ‘gap’ on the supply-side, rather the need to help stimulate demand and awareness on the demand-side to ensure that beneficiaries of the programme are confident and able to access the finance they require following support.
- Fourth, the case studies suggested that there are benefits from a regional/local approach to delivery. These are hard to quantify, but have included the ability to align

and cross-refer between Start Up Loans and other local and regional provision (partly enabling access to the right kind of advice that beneficiaries require), raising the profile of the programme in the business support landscape, and having an understanding of local and regional markets (where applicable to beneficiary business ideas). Whilst there are also potential benefits from national providers (e.g. in terms of scale economies), the evaluation does suggest that there is a case for a provider mix that includes regional/local flexibility in the delivery of the programme. One issue identified, however, was that more could be done to avoid duplication, with limited joint-working identified at a local/regional level between Delivery Partners operating in the same geographies and competition for clients between national and local/regional players.

## Annex A: Econometric methodology and results tables

### Purpose

This annex describes the steps taken to obtain the econometric results presented in the body of the report. It also contains the full regression tables. The purpose is to provide a technical explanation on the steps involved, including a description of how the variables have been derived, how the model specifications were developed in light of data constraints (primarily related to sample size), and the sensitivity checks that have been applied to corroborate the findings.

### Rationale and Method

The focus of the Year 3 analysis was the 2016 sample of beneficiaries. The analysis sought to analyse the factors most associated with a range of outcomes ("dependent" variables), with the aim to assess the individual and business-level characteristics of SUL beneficiaries that benefit the most from the programme (in terms of economic and personal development outcomes). The econometric analysis did not seek to analyse the causal mechanisms associated with benefitting most – which was the focus of the Year 2 analysis and report – as this year's work did not collect data on the comparison/counterfactual group of non-beneficiaries needed for such analysis.

The method used for the econometric analysis was multivariate regression, employing cross-sectional logistic regression where the dependent variables were binary - i.e. the outcome was either achieved ( $y=1$ ), or it was not achieved ( $y=0$ ) – and OLS regression where the dependent variables were continuous (e.g. number of employees). Due to the limited sample size and the large number of potential co-variables ("control variables"), the approach to the analysis was to perform a series of "cascading" regressions to develop a picture of the main factors associated with a particular outcome. This involved specifying a "core" model – that contained a "core" set of key variables, including personal characteristics of the beneficiary and headline features of their business – and a set of "optional" variables that were one-by-one inserted into the model to check for their level of statistical significance (i.e. to confirm if the factor has a strong association) and the degree to which they improve the model. Finally, we performed a "read-across" of the full set of "cascading" regressions to arrive at a final model, containing the "core" and most important "optional" variables.

### Data

The final dataset, following data cleaning<sup>62</sup>, was comprised of 585 SUL beneficiaries. Table A-1 provides a descriptive overview of the outcome ("dependent") variables used developed for the analysis, including a brief description. The number of observations for each variable varies from 313 for the indicator measuring sales change (measuring if a beneficiary increased their sales

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<sup>62</sup> Which included removing 17 observations from the data for beneficiaries with businesses that had been operating for 5 or more years at the time of applications (a step taken to be consistent with the Year 2 analysis).

from the last to the current financial year), to completed data (i.e. 585 observations) for data on the extent of arrears for each beneficiary.

Table A-1: Outcome (“dependent”) variable descriptive statistics

Variable	Count	Mean	SD	Min	Max
Survived (excludes non-start-ups)	529	0.88	0.33	0.00	1.00
Sales change (binary, 1=reports an increase in sales from the last to the current financial year, 0=otherwise)	313	0.65	0.48	0.00	1.00
Gross sales (last financial year)	357	120,905	429,923	0.00	7,000,000
Gross sales (current financial year)	406	147,677	519,070	0.00	9,000,000
Gross sales (next financial year)	381	376,432	2,673,283	0.00	50,000,000
Additional sales (last and current financial year)	449	57,459	130,683	0.00	1,810,000
Additional sales (last, current and next financial year)	451	120,445	323,234	0.00	5,172,000
Level of attribution (0-100%)	573	0.53	0.38	0.00	1.00
Employment change (binary, 1=reports an increase in employment from the last to the current financial year, 0=otherwise)	362	0.14	0.35	0.00	1.00
Employment (last financial year)	373	1.94	4.83	0.00	47.00
Employment (current financial year)	460	1.85	4.57	0.00	47.00
Employment (next financial year)	444	3.45	7.01	0.00	53.00
Promoter (9 or 10 satisfaction score) (binary, 1=yes, 0=otherwise)	584	0.69	0.46	0.00	1.00
Detractor (6 or below satisfaction score) (binary, 1=yes, 0=otherwise)	584	0.12	0.33	0.00	1.00
Increased job prospects (binary, 1=yes, 0=otherwise)	581	0.76	0.43	0.00	1.00
Increased business confidence (binary, 1=yes, 0=otherwise)	580	0.75	0.43	0.00	1.00
Increased personal confidence (binary, 1=yes, 0=otherwise)	574	0.62	0.49	0.00	1.00
In arrears (March) (binary, 1=yes, 0=otherwise)	585	0.11	0.32	0.00	1.00
Arrears - 1 month + (Sept)	585	0.14	0.35	0.00	1.00
Arrears - 3 months + (Sept)	585	0.09	0.29	0.00	1.00

Table A-2 presents an equivalent set of descriptive statistics for the control (“independent”) variables. For the majority of the variables, the data was close to being complete, with a high number of observations. Exceptions included: whether a beneficiary was involved in other activities (497 observations); and data on the size of the firm in the previous financial year (413 observations). The latter variable was developed by allocating each beneficiary’s start-up into one of four categories - not trading, no employees, micro business (0-9 employees), and small

business or larger (>10 employees) – using employment data in the last financial year, or where absent the trading status. Any beneficiaries with trading businesses, but who did not provide employment data, were excluded from this variable.

Table A-2: Control (“independent”) variable descriptive statistics

Variable	Count	Mean	SD	Min	Max
Age group (1=Age 18-30)	584	0.36	0.48	0.00	1.00
Has business experience	584	0.27	0.44	0.00	1.00
Has a degree	575	0.59	0.49	0.00	1.00
Gender (1=Female)	584	0.36	0.48	0.00	1.00
Unemployed pre-start	584	0.27	0.44	0.00	1.00
Business plan prepared	582	0.96	0.21	0.00	1.00
Has multiple owners	584	0.36	0.48	0.00	1.00
Involved in other activities	497	0.29	0.45	0.00	1.00
Business age	528	2.28	0.69	0.50	4.67
Business age (squared)	528	5.66	3.73	0.25	21.78
<b>Region</b>					
<i>Devolved Administration</i>	584	0.12	0.33	0.00	1.00
<i>London</i>	584	0.17	0.38	0.00	1.00
<i>Midlands</i>	584	0.19	0.39	0.00	1.00
<i>North of England</i>	584	0.25	0.43	0.00	1.00
<i>South of England</i>	584	0.27	0.44	0.00	1.00
<b>Sector</b>					
<i>SIC A-F</i>	586	0.28	0.45	0.00	1.00
<i>SIC G-I</i>	586	0.24	0.43	0.00	1.00
<i>SIC J-N</i>	586	0.26	0.44	0.00	1.00
<i>SIC O-U</i>	586	0.21	0.41	0.00	1.00
<b>Size (based on employment in previous financial year)</b>					
<i>Not trading</i>	413	0.04	0.20	0.00	1.00
<i>No employees</i>	413	0.53	0.50	0.00	1.00
<i>Micro (1 to 9 employees)</i>	413	0.39	0.49	0.00	1.00
<i>Small business or larger (10 or more employees)</i>	413	0.03	0.18	0.00	1.00
<b>Loan value</b>					
<i>Up to 3k</i>	584	0.14	0.35	0.00	1.00
<i>3k to 8k</i>	584	0.35	0.48	0.00	1.00
<i>Over 8k</i>	584	0.51	0.50	0.00	1.00
SUL mentoring	559	0.43	0.50	0.00	1.00
<b>Mentoring hours</b>					
<i>No mentoring</i>	551	0.58	0.49	0.00	1.00
<i>Less than 6 hours</i>	551	0.19	0.39	0.00	1.00
<i>6 hours or more</i>	551	0.24	0.42	0.00	1.00

## Model specification and sensitivity checks

For each outcome variable a set of “cascading” regressions were specified. The starting point was a “core” model containing a set of primary variables that are used consistently in each regression, as outlined in the table below. The next step was to include each of the “optional”, secondary variables individually. The last step was to specify a “kitchen sink” model, which contained everything. The approach allows for an assessment of the key variables of interest, as well as a check on their consistency across model specifications (in light of potential issues in terms collinearity). This approach was used due to the sample size available, and the accumulation of missing data due to the addition of new variables.

Table A-3: Model specification: core and optional variables

Variable type	Core variables	Optional variables
<b>Personal characteristics</b>	<ul style="list-style-type: none"> <li>• Age of beneficiary (18- 30=1, over 30=0)</li> <li>• Degree educated (yes=1, no=0)</li> <li>• Gender (female=1, male=0)</li> <li>• If unemployed at time of SUL application (yes=1, no=0)</li> </ul> Region (Devolved Administration, London, Midlands, North of England, South of England [excluding London])	
<b>Business characteristics</b>	Loan value (up to 3k, 3k to 8k, over 8k)	<ul style="list-style-type: none"> <li>• Industrial sector (SIC A-F, SIC G-I, SIC J-N, SIC O-U)</li> <li>• Business size - in last financial year – based on employment (not trading, no employees, micro, small or larger)</li> <li>• Business age (in years)</li> </ul> Business age squared
<b>Strategic/other characteristics</b>	If had previous business experience (yes=1, no=0)	<ul style="list-style-type: none"> <li>• If involved in other activities while running start-up (yes=1, no=0)</li> <li>• If business has multiple owners (yes=1, no=0)</li> <li>• If business plan in place at time of application (yes=1, no=0)</li> <li>• If beneficiary took up mentoring (yes=1, no=0)</li> </ul> Number of mentoring hours taken up (none, up to 6, 6 or more)

Due to the significant variation present in the sales-derived variables, we performed a set of sensitivity checks to ensure the results presented are robust to the exclusion of outliers (i.e. that significant results are not driven by large [or small] outlier values). Two similar methods were adopted. The first was to exclude the top and bottom 5% beneficiaries in terms of sales values in the current financial year. The second involved the removal of selected indicators

based on very large values or extreme (unbelievable) changes in sales over time (i.e. increases of over 500%). Both sets of sensitivity checks yielded similar results.

## Results tables

The following results tables provide the detailed counterparts to the summary results provided in the main report. Where the dependent variable was binary, a logistic regression was specified. Where the dependent variable was continuous, an OLS regression was specified. For each independent variable the tables provide a regression coefficient, a significance level (denoted using the following symbols: \*  $p < 0.10$  \*\*  $p < 0.05$  \*\*\*  $p < 0.01$ ). At the bottom of each table the number of observations for each model is presented, along with an indication of model fit (including an  $R^2$  value for OLS regressions and a pseudo- $R^2$  value<sup>63</sup>, chi-squared test score, log-likelihood ratio, and classification test of predictive accuracy<sup>64</sup> value for logistic regressions, to allow for assessments of model performance individually, and in comparison to alternative specifications, for each outcome variable). Where the field is blank, this denotes that the independent variable was not included in the model specification. All models exclude the constant term.

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<sup>63</sup> Multiple options for calculating the pseudo- $R^2$  are available. The data presented throughout are based on a McFadden's  $R^2$ , which is the default pseudo- $R^2$  value reported by the Stata statistical software package.

<sup>64</sup> Due to the large numbers of regression tables presented, the tables include the "hit ratio" (the percentage of cases correctly classified), rather than the full classification matrix for each logistic regression model.



Table A-4: Company has survived following start-up (binary, 1=yes, 0=otherwise)

Variable	1	2	3	4	5	6	7	8	9	10
Age group (1=Age 18-30)	-0.216	-0.023	-0.228	-0.160	-0.207	-0.219	-0.250	-0.265	-0.264	-0.306
Has business experience	0.291	-0.757	0.274	0.353	0.298	0.289	0.373	0.338	-0.513	-0.472
Has a degree	0.140	-0.867	0.119	0.089	0.147	0.135	0.224	0.281	-0.523	-0.479
Gender (1=Female)	0.670**	-0.456	0.615*	0.615*	0.661**	0.678**	0.659**	0.605*	-0.885	-0.894
Unemployed pre-start	-0.251	0.290	-0.247	-0.378	-0.265	-0.258	-0.217	-0.361	0.373	0.255
<b>Region (base case = London)</b>										
Devolved Admin	-0.401	-1.876	-0.423	-0.299	-0.404	-0.391	-0.223	-0.050	-1.560	-1.550
Midlands	0.050	-1.269	0.016	-0.015	0.052	0.053	-0.011	0.009	-1.407	-1.374
North of England	0.310	0.036	0.277	0.272	0.300	0.302	0.281	0.303	-0.198	-0.164
South of England	-0.131	-0.001	-0.167	-0.205	-0.130	-0.126	-0.178	-0.156	-0.261	-0.218
<b>Loan value (base case = 3k to 8k)</b>										
Over 8k	0.210	1.358	0.227	0.031	0.210	0.217	0.120	0.107	1.794	1.844
Up to 3k	-0.686*	-0.499	-0.682*	-0.715*	-0.697*	-0.674*	-0.600	-0.604	-0.071	-0.044
Involved in other activities		-1.960**							-2.639**	-2.678**
<b>Sector (base case = SIC A-F)</b>										
SIC G-I			-0.109							
SIC J-N			0.167							
SIC O-U			0.274							
Business age				-0.353					0.021	0.032
Business age (squared)				0.142					0.056	0.051
Has multiple owners					-0.037				-0.646	-0.675
Business plan prepared						-0.159				
SUL mentoring							-0.354		-0.546	
<b>SUL mentoring hours (base case = no mentoring)</b>										
Less than 6 hours								-0.549		-0.786
6 hours or more								-0.126		-0.364
Observations	540	465	540	515	539	539	518	511	428	424
(Pseudo) R-squared	0.045	0.203	0.048	0.053	0.045	0.045	0.051	0.053	0.263	0.264
Log Likelihood ratio	-187.699	-32.234	-187.182	-175.470	-187.550	-187.528	-180.165	-176.994	-26.328	-26.246
Chi-squared	17.682	16.395	18.716	19.760	17.726	17.772	19.166	19.732	18.813	18.845
% correctly classified	88.1	98.3	88.1	88.3	88.1	88.1	88.0	88.1	98.4	98.3

Table A-5: Sales change from last to current financial year (binary, 1=positive change in sales, 0=otherwise)

Variable	1	2	3	4	5	6	7	8	9	10	11
Age group (1=Age 18-30)	0.529*	0.569*	0.506*	0.573**	0.513*	0.559*	0.518*	0.691**	0.688**	0.848***	0.848**
Has business experience	-0.090	0.004	-0.114	-0.130	-0.067	-0.158	-0.096	-0.149	-0.142	-0.270	-0.241
Has a degree	0.397	0.550**	0.368	0.382	0.544**	0.393	0.386	0.341	0.375	0.600*	0.683**
Gender (1=Female)	0.015	-0.061	-0.021	0.043	0.001	0.039	0.025	-0.125	-0.182	-0.188	-0.250
Unemployed pre-start	-0.294	-0.251	-0.299	-0.286	-0.261	-0.158	-0.306	-0.266	-0.438	-0.167	-0.420
<b>Region (base case = London)</b>											
Devolved Admin	-0.110	-0.175	-0.161	-0.210	0.037	-0.093	-0.100	-0.173	-0.194	-0.115	-0.120
Midlands	-0.326	-0.281	-0.373	-0.377	-0.245	-0.324	-0.328	-0.257	-0.259	-0.154	-0.150
North of England	0.286	0.337	0.249	0.253	0.442	0.262	0.273	0.218	0.211	0.331	0.343
South of England	0.337	0.397	0.311	0.325	0.465	0.309	0.338	0.446	0.433	0.605	0.622
<b>Loan value (base case = 3k to 8k)</b>											
Over 8k	-0.547*	-0.577*	-0.532*	-0.620**	-0.434	-0.554*	-0.539*	-0.453	-0.394	-0.348	-0.253
Up to 3k	-0.424	-0.336	-0.398	-0.388	-0.489	-0.374	-0.407	-0.456	-0.465	-0.218	-0.193
Involved in other activities		-0.482*								-0.549*	-0.564*
<b>Sector (base case = SIC A-F)</b>											
SIC G-I			-0.001							-0.115	-0.138
SIC J-N			0.126							-0.154	-0.192
SIC O-U			0.424							0.598	0.586
<b>Business size (last financial year, base case = no employees)</b>											
Micro				0.528*						0.688**	0.711**
Small				0.022						-0.100	-0.235
Business age					-1.295					-1.516	-1.593
Business age (squared)					0.144					0.180	0.184
Has multiple owners						0.541**				0.945***	0.961***
Business plan prepared							-0.112			-0.272	-0.228
SUL mentoring								-0.001		0.191	
<b>SUL mentoring hours (base case = no mentoring)</b>											
Less than 6 hours									-0.415		-0.348
6 hours or more									0.405		0.688*
Observations	308	305	308	308	299	308	307	295	294	284	283
(Pseudo) R-squared	0.039	0.051	0.043	0.049	0.064	0.049	0.038	0.041	0.051	0.125	0.141
Log Likelihood ratio	-191.723	-186.431	-190.940	-189.709	-180.871	-189.683	-191.504	-180.487	-178.250	-157.767	-154.616
Chi-squared	15.628	19.871	17.195	19.655	24.620	19.709	15.202	15.488	19.142	45.076	50.571
% correctly classified	65.3	67.9	66.9	65.6	68.2	66.9	65.8	66.8	67.7	71.1	71.4

Table A-6: Expected sales change from current to next financial year (binary, 1=positive change in sales, 0=otherwise)

Variable	1	2	3	4	5	6	7	8	9	10	11
Age group (1=Age 18-30)	0.189	0.283	0.191	0.570*	0.085	0.202	0.242	0.192	0.208	0.576*	0.625*
Has business experience	0.342	0.381	0.323	0.542*	0.259	0.306	0.394	0.494*	0.503*	0.581	0.571
Has a degree	0.117	0.143	0.078	0.028	0.101	0.110	0.151	0.115	0.086	0.135	0.097
Gender (1=Female)	0.326	0.267	0.355	0.077	0.272	0.332	0.258	0.267	0.288	-0.155	-0.128
Unemployed pre-start	0.129	0.106	0.147	-0.189	0.169	0.181	0.187	0.160	0.105	0.142	0.061
<b>Region (base case = London)</b>											
Devolved Admin	0.122	0.106	0.125	0.826	0.044	0.137	0.079	0.172	0.158	0.970	0.903
Midlands	-0.123	0.006	-0.124	0.094	-0.267	-0.118	-0.117	-0.027	-0.044	0.253	0.219
North of England	0.182	0.164	0.175	0.173	-0.003	0.176	0.251	0.155	0.196	0.145	0.184
South of England	0.208	0.230	0.233	0.267	0.065	0.204	0.216	0.158	0.137	0.205	0.160
<b>Loan value (base case = 3k to 8k)</b>											
Over 8k	-0.098	-0.053	-0.089	0.198	-0.112	-0.102	-0.144	-0.088	-0.092	0.289	0.306
Up to 3k	-0.386	-0.296	-0.400	-0.323	-0.393	-0.373	-0.450	-0.211	-0.281	-0.248	-0.332
Involved in other activities		-0.172								0.227	0.201
<b>Sector (base case = SIC A-F)</b>											
SIC G-I			0.082							0.169	0.171
SIC J-N			0.284							-0.129	-0.065
SIC O-U			0.008							-0.131	-0.136
<b>Business size (last financial year, base case = no employees)</b>											
Micro				-0.472*						-0.708**	-0.694**
Small				0.153						0.586	0.490
Business age					-0.079					-1.102	-0.823
Business age (squared)					0.029					0.200	0.148
Has multiple owners						0.202				0.217	0.224
Business plan prepared							1.357**			1.409*	1.370*
SUL mentoring								-0.197		-0.398	
<b>SUL mentoring hours (base case = no mentoring)</b>											
Less than 6 hours									-0.428		-0.677*
6 hours or more									0.067		-0.071
Observations	369	365	369	295	360	369	368	353	351	274	273
(Pseudo) R-squared	0.012	0.011	0.014	0.035	0.011	0.014	0.027	0.013	0.019	0.062	0.068
Log Likelihood ratio	-215.849	-210.942	-215.372	-168.265	-207.482	-215.542	-211.414	-205.712	-202.980	-148.004	-145.872
Chi-squared	5.295	4.788	6.250	12.172	4.583	5.911	11.606	5.604	7.852	19.607	21.187
% correctly classified	72.1	72.9	72.1	72.2	73.1	72.1	72.8	72.2	72.4	74.1	74.7

Table A-7: Gross sales in current financial year (logged)

Variable	1	2	3	4	5	6	7	8	9	10	11
Age group (1=Age 18-30)	-0.210	-0.235	-0.031	-0.003	-0.011	-0.015	-0.032	-0.010	-0.003	0.077	0.090
Has business experience	0.205	-0.185	0.023	0.036	0.031	-0.019	0.020	-0.002	-0.004	-0.098	-0.095
Has a degree	0.021	-0.103	0.158*	0.173*	0.169*	0.154*	0.158*	0.146	0.153	0.141	0.152
Gender (1=Female)	-0.436***	-0.370**	-0.167*	-0.166*	-0.165*	-0.156*	-0.167*	-0.197**	-0.215**	-0.183*	-0.203**
Unemployed pre-start	-0.348*	-0.397**	-0.117	-0.091	-0.104	-0.022	-0.114	-0.090	-0.146	0.035	-0.033
<b>Region (base case = London)</b>											
Devolved Admin	-0.313	-0.386	-0.233	-0.227	-0.215	-0.211	-0.233	-0.265	-0.281	-0.278	-0.299*
Midlands	-0.072	-0.261	-0.263*	-0.243*	-0.233	-0.248*	-0.265*	-0.279*	-0.285*	-0.221	-0.232
North of England	0.038	-0.014	0.029	0.030	0.032	0.017	0.030	-0.005	-0.008	-0.042	-0.048
South of England	0.123	-0.008	-0.092	-0.063	-0.078	-0.091	-0.092	-0.084	-0.101	-0.049	-0.068
<b>Loan value (base case = 3k to 8k)</b>											
Over 8k	0.648***	0.426***	0.016	0.028	0.003	0.040	0.015	0.016	0.037	0.048	0.075
Up to 3k	-0.645***	-0.519**	-0.078	-0.076	-0.078	-0.063	-0.079	-0.072	-0.091	-0.034	-0.052
Involved in other activities				-0.067						-0.088	-0.090
<b>Sector (base case = SIC A-F)</b>											
SIC G-I				0.131						0.201	0.199
SIC J-N				0.137						0.152	0.147
SIC O-U				0.037						0.112	0.108
<b>Business size (last financial year, base case = no employees)</b>											
Micro		0.986***								0.342***	0.354***
Small		2.750***								0.512**	0.473*
Sales (logged, last FY)			0.834***	0.839***	0.859***	0.813***	0.835***	0.825***	0.825***	0.771***	0.771***
Business age					-0.483					-0.293	-0.293
Business age (squared)					0.073					0.041	0.039
Has multiple owners						0.361***				0.462***	0.464***
Business plan prepared							-0.039			-0.050	-0.039
SUL mentoring								-0.072		-0.037	
<b>SUL mentoring hours (base case = no mentoring)</b>											
Less than 6 hours									-0.222*		-0.213*
6 hours or more									0.065		0.126
Observations	388	314	288	285	279	288	287	275	275	264	264
(Pseudo) R-squared	0.204	0.385	0.763	0.765	0.767	0.777	0.763	0.757	0.761	0.792	0.796

Table A-8: Net additional sales in last and current financial year (logged)

Variable	1	2	3	4	5	6	7	8	9	10	11
Age group (1=Age 18-30)	0.197	0.068	0.088	0.131	0.102	0.096	0.089	0.100	0.121	0.198	0.228*
Has business experience	0.414**	0.113	0.095	0.116	0.098	0.082	0.104	0.129	0.115	0.143	0.135
Has a degree	0.154	-0.139	0.032	0.095	0.030	0.022	0.037	0.046	0.045	0.097	0.104
Gender (1=Female)	-0.505***	-0.340*	-0.116	-0.181	-0.107	-0.106	-0.124	-0.152	-0.165	-0.187	-0.200
Unemployed pre-start	-0.207	-0.219	-0.097	-0.062	-0.097	-0.062	-0.098	-0.077	-0.129	0.008	-0.044
<b>Region (base case = London)</b>											
Devolved Admin	-0.566*	-0.546*	-0.204	-0.216	-0.171	-0.213	-0.205	-0.202	-0.243	-0.210	-0.263
Midlands	-0.109	-0.328	-0.206	-0.104	-0.178	-0.202	-0.195	-0.188	-0.217	-0.071	-0.098
North of England	-0.076	-0.068	-0.005	-0.072	0.002	-0.007	0.002	0.002	-0.027	-0.081	-0.108
South of England	-0.090	-0.151	-0.101	-0.059	-0.086	-0.103	-0.096	-0.105	-0.159	-0.059	-0.113
<b>Loan value (base case = 3k to 8k)</b>											
Over 8k	0.642***	0.602***	0.047	0.080	0.042	0.064	0.049	0.036	0.062	0.098	0.129
Up to 3k	-0.925***	-0.936***	-0.164	-0.038	-0.159	-0.164	-0.166	-0.132	-0.153	0.007	-0.018
Involved in other activities				-0.086						-0.079	-0.086
<b>Sector (base case = SIC A-F)</b>											
SIC G-I				0.103						0.151	0.154
SIC J-N				0.163						0.154	0.137
SIC O-U				-0.049						0.007	-0.018
<b>Business size (last financial year, base case = no employees)</b>											
Micro		0.659***								0.098	0.111
Small		1.885***								-0.330	-0.368
Sales (logged, last FY)			0.825***	0.792***	0.832***	0.816***	0.822***	0.823***	0.822***	0.792***	0.793***
Business age					-0.181					-0.498	-0.513
Business age (squared)					0.026					0.075	0.078
Has multiple owners						0.136				0.244**	0.249**
Business plan prepared							0.139			0.112	0.116
SUL mentoring								0.013		-0.044	
<b>SUL mentoring hours (base case = no mentoring)</b>											
Less than 6 hours										-0.111	-0.183
6 hours or more										0.138	0.093
Observations	320	257	234	218	229	234	233	227	226	206	205
(Pseudo) R-squared	0.215	0.298	0.721	0.721	0.719	0.723	0.721	0.717	0.722	0.725	0.729

Table A-9: Net additional sales in last, current and next financial year (logged)

Variable	1	2	3	4	5	6	7	8	9	10	11
Age group (1=Age 18-30)	0.204	0.085	0.095	0.160	0.104	0.109	0.098	0.104	0.138	0.221	0.273*
Has business experience	0.516***	0.213	0.160	0.158	0.165	0.139	0.172	0.194	0.170	0.156	0.141
Has a degree	0.113	-0.102	0.059	0.154	0.069	0.043	0.068	0.079	0.080	0.153	0.163
Gender (1=Female)	-0.407**	-0.323*	-0.126	-0.209	-0.122	-0.109	-0.137	-0.175	-0.197	-0.240*	-0.261*
Unemployed pre-start	-0.284	-0.264	-0.181	-0.161	-0.184	-0.124	-0.181	-0.141	-0.231	-0.042	-0.128
<b>Region (base case = London)</b>											
Devolved Admin	-0.651**	-0.698**	-0.371	-0.423*	-0.329	-0.387	-0.373	-0.374	-0.441*	-0.433*	-0.524**
Midlands	-0.231	-0.448	-0.346*	-0.238	-0.320	-0.339	-0.331	-0.348	-0.394*	-0.228	-0.275
North of England	-0.218	-0.220	-0.147	-0.240	-0.134	-0.151	-0.137	-0.148	-0.193	-0.253	-0.301
South of England	-0.187	-0.282	-0.229	-0.142	-0.218	-0.233	-0.222	-0.250	-0.340*	-0.173	-0.265
<b>Loan value (base case = 3k to 8k)</b>											
Over 8k	0.664***	0.583***	-0.056	-0.009	-0.049	-0.027	-0.053	-0.070	-0.025	0.042	0.093
Up to 3k	-0.827***	-0.963***	-0.142	-0.012	-0.127	-0.141	-0.146	-0.088	-0.124	0.059	0.015
Involved in other activities				-0.131						-0.099	-0.110
<b>Sector (base case = SIC A-F)</b>											
SIC G-I				-0.008						0.053	0.056
SIC J-N				0.220						0.228	0.198
SIC O-U				-0.101						-0.008	-0.052
<b>Business size (last financial year, base case = no employees)</b>											
Micro		0.512***								0.053	0.074
Small		2.103***								-0.015	-0.078
Sales (logged, last FY)			0.842***	0.788***	0.846***	0.827***	0.838***	0.843***	0.841***	0.769***	0.770***
Business age					-0.307					-0.541	-0.559
Business age (squared)					0.053					0.081	0.085
Has multiple owners						0.228*				0.374***	0.381***
Business plan prepared							0.194			0.194	0.200
SUL mentoring								-0.013		-0.114	
<b>SUL mentoring hours (base case = no mentoring)</b>											
Less than 6 hours										-0.233	-0.343*
6 hours or more										0.206	0.113
Observations	329	262	234	218	229	234	233	227	226	206	205
(Pseudo) R-squared	0.212	0.271	0.648	0.661	0.642	0.653	0.648	0.645	0.657	0.669	0.680

Table A-10: Additionality

Variable	1	2	3	4	5	6	7	8	9	10	11
Age group (1=Age 18-30)	0.125***	0.095**	0.125***	0.140***	0.117***	0.125***	0.126***	0.123***	0.124***	0.116**	0.105**
Has business experience	-0.036	-0.026	-0.037	-0.039	-0.028	-0.033	-0.038	-0.025	-0.021	0.000	0.007
Has a degree	-0.012	-0.005	-0.014	0.054	-0.004	-0.011	-0.012	-0.005	-0.006	0.064	0.075
Gender (1=Female)	-0.037	-0.071*	-0.038	-0.051	-0.052	-0.038	-0.036	-0.050	-0.061*	-0.071	-0.085*
Unemployed pre-start	0.029	0.090*	0.030	0.051	0.020	0.025	0.031	0.033	0.026	0.117**	0.108*
<b>Region (base case = London)</b>											
Devolved Admin	-0.027	0.007	-0.028	-0.039	-0.009	-0.029	-0.023	-0.030	-0.021	-0.006	-0.007
Midlands	-0.044	-0.035	-0.045	-0.069	-0.040	-0.044	-0.042	-0.042	-0.045	-0.014	-0.016
North of England	-0.007	0.021	-0.008	0.003	-0.001	-0.007	-0.004	-0.004	-0.010	0.041	0.033
South of England	-0.021	-0.027	-0.021	-0.022	-0.018	-0.020	-0.018	-0.010	-0.016	0.000	-0.013
<b>Loan value (base case = 3k to 8k)</b>											
Over 8k	-0.038	-0.044	-0.036	-0.021	-0.023	-0.037	-0.036	-0.045	-0.046	-0.005	-0.003
Up to 3k	-0.086	-0.093	-0.086	-0.139**	-0.082	-0.088	-0.086	-0.084	-0.070	-0.152**	-0.140*
Involved in other activities		0.018								0.030	0.034
<b>Sector (base case = SIC A-F)</b>											
SIC G-I			0.000							0.018	0.013
SIC J-N			0.017							0.035	0.021
SIC O-U			0.010							-0.017	-0.026
<b>Business size (last financial year, base case = no employees)</b>											
Micro				-0.013						-0.024	-0.031
Small				-0.294***						-0.258**	-0.267**
Not trading				0.165*						0.131	0.137
Business age					-0.126					-0.218	-0.244
Business age (squared)					0.005					0.028	0.032
Has multiple owners						-0.017				0.007	0.012
Business plan prepared							-0.066			0.070	0.080
SUL mentoring								0.003		0.016	
<b>SUL mentoring hours (base case = no mentoring)</b>											
Less than 6 hours									0.003		-0.018
6 hours or more									0.005		0.030
Observations	561	480	561	404	520	560	559	537	529	345	341
(Pseudo) R-squared	0.038	0.046	0.038	0.085	0.066	0.038	0.039	0.039	0.039	0.108	0.109

Table A-11: Employment change from last to current financial year (binary, 1=positive change in employment, 0=otherwise)

Variable	1	2	3	4	5	6	7	8	9	10	11
Age group (1=Age 18-30)	0.230	0.240	0.090	0.342	0.185	0.284	0.233	0.296	0.349	0.262	0.339
Has business experience	0.404	0.490	0.446	0.252	0.461	0.228	0.390	0.237	0.224	0.170	0.133
Has a degree	0.653*	0.740**	0.770**	0.663*	0.754**	0.615*	0.653*	0.560	0.538	0.915**	0.863*
Gender (1=Female)	0.124	0.086	-0.019	0.093	0.151	0.169	0.120	0.111	0.131	-0.193	-0.175
Unemployed pre-start	0.284	0.309	0.244	0.432	0.204	0.737	0.307	0.367	0.321	1.129*	1.038*
<b>Region (base case = London)</b>											
Devolved Admin	0.985	0.979	0.933	0.712	1.164*	1.083*	0.987	0.835	0.796	1.026	0.931
Midlands	0.215	0.260	0.016	0.030	0.205	0.287	0.210	-0.177	-0.201	-0.353	-0.424
North of England	1.039**	1.024*	1.088**	1.055*	1.064**	1.134**	1.050**	0.894*	0.889	1.237*	1.175*
South of England	0.802	0.800	0.719	0.754	0.912*	0.832	0.800	0.808	0.806	1.002	0.967
<b>Loan value (base case = 3k to 8k)</b>											
Over 8k	1.070***	1.107***	1.062***	0.875**	1.282***	1.067***	1.062***	1.030**	1.080***	1.450***	1.525***
Up to 3k	-1.549	-1.439	-1.478	-1.361	-1.475	-1.521	-1.583	-1.545	-1.674	-0.914	-0.955
Involved in other activities		-0.500								-0.776	-0.808
<b>Sector (base case = SIC A-F)</b>											
SIC G-I			-1.231**							-1.043*	-1.061*
SIC J-N			-1.025**							-1.093*	-1.075*
SIC O-U			-0.030							0.895	0.933*
<b>Business size (last financial year, base case = no employees)</b>											
Micro				1.398***						1.185***	1.234***
Small				2.589***						3.098***	3.009***
Business age					3.745*					4.686*	4.883**
Business age (squared)					-0.844**					-1.087**	-1.118**
Has multiple owners						1.396***				1.963***	1.962***
Business plan prepared							-0.252			0.226	0.192
SUL mentoring								-0.293		-0.259	
<b>SUL mentoring hours (base case = no mentoring)</b>											
Less than 6 hours									-0.515		-0.518
6 hours or more									-0.014		0.071
Observations	354	350	354	354	342	354	353	341	337	325	321
(Pseudo) R-squared	0.081	0.088	0.118	0.163	0.127	0.138	0.082	0.084	0.087	0.338	0.340
Log Likelihood ratio	-134.129	-132.525	-128.680	-122.168	-125.737	-125.784	-133.892	-128.616	-127.638	-91.173	-90.458
Chi-squared	23.637	25.593	34.533	47.558	36.616	40.326	23.798	23.490	24.196	93.280	93.394
% correctly classified	85.6	85.4	85.0	85.6	85.1	85.6	85.6	85.6	85.5	88.0	87.9



Table A-12: Expected employment change from current to next financial year (binary, 1=positive change in employment, 0=otherwise)

Variable	1	2	3	4	5	6	7	8	9	10	11
Age group (1=Age 18-30)	-0.067	-0.033	-0.105	0.193	-0.009	-0.017	-0.078	-0.085	-0.083	0.297	0.284
Has business experience	0.318	0.389	0.287	0.236	0.290	0.212	0.342	0.403	0.399	0.318	0.344
Has a degree	-0.031	0.032	-0.039	-0.003	-0.014	-0.063	-0.043	-0.062	-0.014	-0.071	-0.010
Gender (1=Female)	-0.065	-0.112	-0.062	0.114	-0.053	-0.047	-0.088	-0.146	-0.195	0.125	0.080
Unemployed pre-start	-0.266	-0.249	-0.293	-0.477	-0.328	-0.124	-0.305	-0.267	-0.389	-0.345	-0.467
<b>Region (base case = London)</b>											
Devolved Admin	-0.552	-0.521	-0.525	-0.440	-0.551	-0.534	-0.585	-0.627	-0.640	-0.635	-0.668
Midlands	-0.548	-0.479	-0.590*	-0.477	-0.477	-0.523	-0.556	-0.692*	-0.731**	-0.464	-0.504
North of England	-0.460	-0.473	-0.443	-0.498	-0.286	-0.499	-0.511	-0.561	-0.559	-0.555	-0.617
South of England	-0.539*	-0.536*	-0.569*	-0.600	-0.452	-0.566*	-0.564*	-0.625*	-0.646*	-0.730*	-0.757*
<b>Loan value (base case = 3k to 8k)</b>											
Over 8k	0.516**	0.558**	0.514**	0.326	0.510**	0.508**	0.518**	0.499**	0.554**	0.401	0.446
Up to 3k	-0.636*	-0.527	-0.614*	-0.612	-0.571	-0.692*	-0.598	-0.575	-0.593	-0.512	-0.515
Involved in other activities		-0.297								-0.194	-0.198
<b>Sector (base case = SIC A-F)</b>											
SIC G-I			-0.566**							-0.172	-0.189
SIC J-N			-0.217							0.058	0.020
SIC O-U			-0.210							-0.016	-0.046
<b>Business size (last financial year, base case = no employees)</b>											
Micro				0.682***						0.765***	0.751***
Small				0.920						0.425	0.320
Business age					0.450					0.415	0.383
Business age (squared)					-0.053					-0.027	-0.025
Has multiple owners						0.656***				0.808***	0.813***
Business plan prepared							0.774			0.324	0.390
SUL mentoring								0.010		0.323	
<b>SUL mentoring hours (base case = no mentoring)</b>											
Less than 6 hours										-0.317	-0.032
6 hours or more										0.353	0.601*
Observations	434	429	434	345	420	433	433	416	412	318	315
(Pseudo) R-squared	0.054	0.056	0.061	0.072	0.056	0.071	0.059	0.059	0.067	0.111	0.115
Log Likelihood ratio	-281.994	-277.558	-280.001	-219.096	-272.682	-276.397	-280.019	-268.873	-264.099	-193.320	-190.636
Chi-squared	32.344	33.040	36.330	34.194	32.261	42.359	35.115	33.855	37.808	48.093	49.524
% correctly classified	64.1	63.4	65.4	67.5	64.5	64.9	63.5	64.2	63.6	68.9	68.3

Table A-13: Total employment in current financial year

Variable	1	2	3	4	5	6	7	8	9	10	11
Age group (1=Age 18-30)	0.433	0.453	0.392	0.718	0.602	0.463	0.481	0.452	0.483	1.179*	1.201*
Has business experience	-0.102	-0.049	-0.174	-0.662	-0.243	-0.120	-0.048	-0.268	-0.252	-0.703	-0.650
Has a degree	0.092	0.120	0.009	-0.067	0.118	0.050	0.131	0.033	-0.025	-0.214	-0.308
Gender (1=Female)	0.085	0.053	0.063	0.100	0.061	0.081	0.049	-0.023	0.035	-0.076	0.044
Unemployed pre-start	0.678	0.710	0.774	0.846	0.883*	0.746	0.726	0.872*	0.990**	1.634**	1.834**
<b>Region (base case = London)</b>											
Devolved Admin	-0.406	-0.388	-0.637	-0.761	-0.383	-0.433	-0.489	-0.484	-0.490	-1.318	-1.358
Midlands	-1.810**	-1.714**	-2.030**	-1.717**	-1.781**	-1.804**	-1.827**	-2.171**	-2.169**	-2.125**	-2.237**
North of England	0.479	0.477	0.374	0.689	0.669	0.420	0.520	0.335	0.369	0.530	0.558
South of England	-0.421	-0.404	-0.628	-0.295	-0.616	-0.442	-0.477	-0.364	-0.336	-0.558	-0.500
<b>Loan value (base case = 3k to 8k)</b>											
Over 8k	0.546	0.571	0.554	0.881*	0.900*	0.529	0.500	0.463	0.403	0.951	0.877
Up to 3k	-0.544	-0.492	-0.541	-1.015	-0.646	-0.523	-0.604	-0.401	-0.469	-0.790	-0.905
Involved in other activities		-0.194								-0.461	-0.513
<b>Sector (base case = SIC A-F)</b>											
SIC G-I			-1.160**							-1.486**	-1.513**
SIC J-N			-0.013							-0.052	0.005
SIC O-U			-0.359							-0.191	-0.254
<b>Business size (last financial year, base case = no employees)</b>											
Micro				4.606***						4.717***	4.685***
Employment (last FY)	2.548***	2.546***	2.588***	0.472*	3.139***	2.566***	2.569***	2.430***	2.423***	0.748*	0.786**
Business age					-1.788					-2.993	-3.019
Business age (squared)					0.222					0.399	0.401
Has multiple owners						0.392				1.200**	1.174**
Business plan prepared							0.727			1.166	1.028
SUL mentoring								-0.712*		-0.745	
<b>SUL mentoring hours (base case = no mentoring)</b>											
Less than 6 hours									-0.379		-0.324
6 hours or more									-0.988*		-1.079
Observations	354	350	354	341	342	354	353	341	337	313	309
(Pseudo) R-squared	0.581	0.580	0.593	0.653	0.641	0.583	0.583	0.586	0.586	0.704	0.705
Log Likelihood ratio	-100.355	-99.695	-97.510	-78.955	-83.092	-99.878	-99.724	-95.170	-94.166	-61.616	-60.682
Chi-squared	278.404	275.477	284.094	297.278	296.627	279.358	278.610	269.136	266.234	293.494	290.540
% correctly classified	93.2	92.9	92.9	91.8	93.3	92.9	93.2	92.7	93.2	93.3	93.2

Table A-14: Promoter (9 or 10 satisfaction score)

Variable	1	2	3	4	5	6	7	8	9	10	11
Age group (1=Age 18-30)	0.172	0.095	0.170	0.239	0.238	0.172	0.181	0.248	0.243	-0.010	-0.055
Has business experience	-0.025	-0.044	-0.015	-0.042	-0.062	0.062	-0.036	-0.054	-0.025	0.162	0.208
Has a degree	-0.383**	-0.544**	-0.360*	-0.394	-0.266	-0.360*	-0.378*	-0.371*	-0.340*	-0.407	-0.323
Gender (1=Female)	0.160	0.013	0.173	0.113	0.110	0.142	0.190	0.164	0.116	-0.024	-0.100
Unemployed pre-start	-0.262	-0.104	-0.273	-0.180	-0.420*	-0.375	-0.280	-0.200	-0.271	-0.013	-0.186
<b>Region (base case = London)</b>											
Devolved Admin	0.613*	0.903**	0.632*	0.539	0.586	0.586	0.664*	0.637*	0.640*	0.671	0.636
Midlands	0.090	0.087	0.099	0.034	0.206	0.078	0.111	0.110	0.114	0.099	0.094
North of England	0.220	0.136	0.248	-0.138	0.315	0.207	0.238	0.226	0.275	0.077	0.055
South of England	-0.123	-0.179	-0.122	-0.179	-0.045	-0.114	-0.105	-0.126	-0.092	-0.250	-0.301
<b>Loan value (base case = 3k to 8k)</b>											
Over 8k	-0.149	-0.192	-0.165	-0.337	-0.147	-0.144	-0.139	-0.124	-0.079	-0.320	-0.255
Up to 3k	0.135	0.072	0.153	0.242	0.101	0.073	0.142	0.115	0.073	-0.045	-0.045
Involved in other activities		0.030								0.337	0.345
<b>Sector (base case = SIC A-F)</b>											
SIC G-I			-0.159							-0.437	-0.466
SIC J-N			-0.279							-0.454	-0.530
SIC O-U			-0.235							-0.614	-0.632
<b>Business size (last financial year, base case = no employees)</b>											
Micro				0.125						0.063	0.049
Small				-0.278						0.237	0.091
Not trading				-0.697						-1.576**	-1.469*
Business age					0.196					-0.410	-0.459
Business age (squared)					-0.101					0.002	0.004
Has multiple owners						-0.464**				-0.449*	-0.407
Business plan prepared							-0.935*			0.047	0.120
SUL mentoring								-0.100		-0.114	
<b>SUL mentoring hours (base case = no mentoring)</b>											
Less than 6 hours										-0.381	-0.568*
6 hours or more										0.221	0.325
Observations	573	487	573	405	521	572	571	549	541	346	342
(Pseudo) R-squared	0.018	0.028	0.020	0.026	0.028	0.025	0.023	0.019	0.024	0.063	0.076
Log Likelihood ratio	-347.957	-287.293	-347.254	-240.587	-308.950	-345.021	-345.357	-334.805	-328.778	-194.015	-190.134
Chi-squared	12.564	16.793	13.970	12.776	18.110	17.697	16.283	13.031	15.931	26.233	31.281

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% correctly classified	69.1	70.4	69.1	70.6	69.7	69.6	69.0	68.7	69.1	72.0	71.9
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Table A-15: Detractor (6 or below satisfaction score)

Variable	1	2	3	4	5	6	7	8	9	10	11
Age group (1=Age 18-30)	-1.313***	-1.313***	-1.181***	-2.276***	-1.345***	-1.214***	-1.216***	-1.140***	-1.152***	-1.953***	-2.202***
Has business experience	0.396	0.396	0.242	0.374	0.290	0.148	0.213	0.202	0.228	0.149	-0.036
Has a degree	0.368	0.368	0.270	-0.069	0.103	0.232	0.248	0.294	0.206	0.122	-0.098
Gender (1=Female)	0.279	0.279	0.186	0.042	0.072	0.064	0.043	0.105	0.185	0.344	0.439
Unemployed pre-start	0.500	0.500	0.797**	0.960**	0.975***	0.933***	0.842***	0.813**	1.005***	0.548	0.735
<b>Region (base case = London)</b>											
Devolved Admin	-1.324*	-1.324*	-0.163	-0.228	-0.467	-0.265	-0.314	-0.260	-0.366	-0.478	-0.584
Midlands	-1.098*	-1.098*	-0.554	-0.297	-0.945*	-0.626	-0.644	-0.723	-0.773	-0.959	-1.156
North of England	-0.115	-0.115	-0.069	0.086	-0.318	-0.145	-0.169	-0.187	-0.350	0.175	-0.170
South of England	0.288	0.288	0.405	0.550	0.185	0.330	0.353	0.362	0.291	0.894	0.732
<b>Loan value (base case = 3k to 8k)</b>											
Over 8k	-0.006	-0.006	0.111	0.283	0.137	0.148	0.156	0.134	0.018	-0.007	-0.134
Up to 3k	-0.336	-0.336	0.105	-1.284	0.096	0.159	0.054	0.048	0.122	-0.598	0.235
Involved in other activities	-0.008	-0.008								-0.351	-0.384
<b>Sector (base case = SIC A-F)</b>											
SIC G-I			0.014							0.029	0.175
SIC J-N			-0.199							0.006	0.233
SIC O-U			-0.990**							-1.040	-1.141
<b>Business size (last financial year, base case = no employees)</b>											
Micro				-0.297						-0.533	-0.357
Small				0.981						0.192	0.353
Not trading				1.598**						2.140**	2.107*
Business age					-0.285					0.308	-0.534
Business age (squared)					0.114					0.078	0.258
Has multiple owners						0.426				-0.179	-0.204
Business plan prepared							0.459			-0.315	-0.484
SUL mentoring								-0.124		-0.903*	
<b>SUL mentoring hours (base case = no mentoring)</b>											
Less than 6 hours									0.404		0.273
6 hours or more									-0.967**		
Observations	487	487	573	405	521	572	571	549	541	346	256
(Pseudo) R-squared	0.088	0.088	0.075	0.139	0.086	0.066	0.062	0.061	0.088	0.216	0.232
Log Likelihood ratio	-147.048	-147.048	-195.008	-114.342	-173.804	-196.765	-197.425	-193.030	-184.783	-83.656	-74.078
Chi-squared	28.210	28.210	31.435	36.824	32.650	27.665	26.087	25.195	35.660	45.997	44.751
% correctly classified	89.7	89.7	88.0	89.9	87.9	87.9	87.9	87.6	87.4	91.6	89.5

Table A-16: Increased job prospects (binary, 1=yes, 0=otherwise)

Variable	1	2	3	4	5	6	7	8	9	10	11
Age group (1=Age 18-30)	0.366	0.370	0.333	0.574*	0.318	0.373	0.365	0.342	0.345	0.342	0.375
Has business experience	-0.172	-0.251	-0.222	-0.473*	-0.341	-0.162	-0.162	-0.085	-0.103	-0.703**	-0.692**
Has a degree	-0.204	-0.119	-0.239	-0.158	-0.203	-0.195	-0.205	-0.241	-0.179	-0.137	-0.070
Gender (1=Female)	0.086	-0.118	-0.025	-0.061	0.064	0.081	0.092	0.016	0.008	-0.294	-0.285
Unemployed pre-start	-0.092	0.115	-0.088	-0.239	-0.128	-0.109	-0.119	-0.111	-0.167	-0.081	-0.100
<b>Region (base case = London)</b>											
Devolved Admin	0.081	0.357	-0.001	0.659	0.199	0.078	0.073	0.247	0.337	0.545	0.522
Midlands	0.249	0.436	0.173	0.193	0.223	0.251	0.249	0.328	0.344	0.470	0.457
North of England	0.178	0.193	0.100	0.169	0.142	0.169	0.165	0.138	0.159	0.184	0.181
South of England	-0.061	0.161	-0.135	0.107	-0.084	-0.059	-0.074	-0.134	-0.087	0.023	0.086
<b>Loan value (base case = 3k to 8k)</b>											
Over 8k	0.396*	0.505*	0.451**	0.431	0.352	0.396*	0.388*	0.463**	0.455*	0.754**	0.796**
Up to 3k	0.001	0.508	0.023	0.145	-0.119	-0.020	0.016	0.099	0.047	0.596	0.477
Involved in other activities		-0.567**								-0.507	-0.525
<b>Sector (base case = SIC A-F)</b>											
SIC G-I			-0.333							-0.313	-0.311
SIC J-N			0.250							0.109	0.150
SIC O-U			0.746**							1.266**	1.261**
<b>Business size (last financial year, base case = no employees)</b>											
Micro				0.126						0.539	0.513
Small				-0.153						0.143	0.043
Not trading				-0.764						-0.347	-0.318
Business age					0.882					1.514	1.539
Business age (squared)					-0.119					-0.246	-0.255
Has multiple owners						-0.047				-0.075	-0.093
Business plan prepared							0.185			0.322	0.345
SUL mentoring								0.071		0.073	
<b>SUL mentoring hours (base case = no mentoring)</b>											
Less than 6 hours									-0.095		-0.176
6 hours or more									0.254		0.322
Observations	570	484	570	403	520	569	568	547	539	345	341
(Pseudo) R-squared	0.014	0.033	0.034	0.032	0.022	0.014	0.014	0.017	0.018	0.093	0.094
Log Likelihood ratio	-307.727	-229.054	-301.447	-199.704	-271.139	-307.414	-307.105	-292.510	-287.909	-148.714	-146.482
Chi-squared	8.596	15.558	21.157	13.165	12.213	8.681	8.756	10.192	10.384	30.547	30.399

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% correctly classified	76.3	80.8	76.5	78.9	77.3	76.3	76.2	76.6	76.6	82.3	82.1
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Table A-17: Increased business confidence (binary, 1=yes, 0=otherwise)

Variable	1	2	3	4	5	6	7	8	9	10	11
Age group (1=Age 18-30)	0.037	0.100	0.034	0.236	-0.015	0.040	0.040	-0.031	0.020	0.107	0.235
Has business experience	-0.769***	-0.919***	-0.761***	-1.025***	-0.771***	-0.731***	-0.775***	-0.646***	-0.682***	-0.800***	-0.852***
Has a degree	-0.078	-0.117	-0.061	0.075	-0.057	-0.063	-0.076	-0.107	-0.059	0.169	0.229
Gender (1=Female)	-0.312	-0.514**	-0.350	-0.431*	-0.424*	-0.322	-0.297	-0.409*	-0.394*	-0.707**	-0.719**
Unemployed pre-start	0.547**	0.845**	0.543**	0.213	0.556*	0.495*	0.535*	0.459	0.334	0.285	0.109
<b>Region (base case = London)</b>											
Devolved Admin	-0.205	-0.055	-0.226	-0.265	-0.148	-0.224	-0.180	-0.162	-0.063	-0.005	-0.026
Midlands	0.155	0.149	0.147	0.103	0.140	0.153	0.167	0.295	0.305	0.401	0.413
North of England	0.126	0.101	0.116	-0.155	0.063	0.120	0.137	0.222	0.264	-0.011	0.022
South of England	0.010	-0.072	0.002	-0.051	0.038	0.017	0.021	0.033	0.125	-0.120	-0.029
<b>Loan value (base case = 3k to 8k)</b>											
Over 8k	-0.339	-0.362	-0.340	-0.394	-0.379	-0.338	-0.336	-0.369	-0.336	-0.377	-0.242
Up to 3k	-0.210	0.026	-0.205	0.265	-0.384	-0.249	-0.206	-0.238	-0.385	0.117	-0.203
Involved in other activities		-0.177								-0.155	-0.222
<b>Sector (base case = SIC A-F)</b>											
SIC G-I			0.040							0.186	0.171
SIC J-N			-0.076							0.169	0.217
SIC O-U			0.178							0.508	0.616
<b>Business size (last financial year, base case = no employees)</b>											
Micro				-0.032						0.231	0.249
Small				-0.811						-0.352	-0.669
Not trading				0.155						1.257	1.396
Business age					-0.105					-1.187	-1.015
Business age (squared)					-0.029					0.159	0.119
Has multiple owners						-0.214				-0.288	-0.352
Business plan prepared							-0.414			0.297	0.317
SUL mentoring								0.655***		1.006***	
<b>SUL mentoring hours (base case = no mentoring)</b>											
Less than 6 hours									0.283		0.336
6 hours or more									1.286***		2.384***
Observations	571	485	571	404	521	570	569	548	540	346	342
(Pseudo) R-squared	0.043	0.074	0.044	0.076	0.054	0.044	0.043	0.056	0.071	0.132	0.174
Log Likelihood ratio	-309.622	-239.423	-309.249	-213.958	-275.991	-308.942	-309.012	-292.822	-283.096	-168.457	-157.388
Chi-squared	27.839	38.014	28.586	35.031	31.208	28.614	27.885	35.032	43.317	51.120	66.530
% correctly classified	74.4	77.7	74.4	74.3	75.2	74.4	74.3	75.2	75.9	78.0	77.8



Table A-18: Increased personal confidence (binary, 1=yes, 0=otherwise)

Variable	1	2	3	4	5	6	7	8	9	10	11
Age group (1=Age 18-30)	0.062	0.225	0.045	0.211	0.071	0.070	0.085	0.060	0.059	0.221	0.234
Has business experience	-0.737***	-0.783***	-0.746***	-0.892***	-0.731***	-0.737***	-0.754***	-0.656***	-0.675***	-0.857***	-0.856***
Has a degree	-0.170	-0.206	-0.159	-0.109	-0.279	-0.165	-0.152	-0.219	-0.196	-0.196	-0.185
Gender (1=Female)	-0.096	-0.104	-0.114	-0.152	-0.075	-0.101	-0.089	-0.176	-0.174	-0.222	-0.227
Unemployed pre-start	0.410*	0.696**	0.409*	0.259	0.419*	0.405*	0.429*	0.418*	0.308	0.653*	0.511
<b>Region (base case = London)</b>											
Devolved Admin	0.406	0.515	0.406	0.285	0.476	0.407	0.439	0.395	0.476	0.401	0.402
Midlands	0.280	0.255	0.261	0.043	0.250	0.283	0.297	0.230	0.243	0.008	0.013
North of England	0.069	-0.007	0.072	-0.157	0.057	0.062	0.121	0.035	0.051	-0.077	-0.074
South of England	0.087	0.029	0.066	-0.188	0.110	0.088	0.103	0.031	0.068	-0.270	-0.247
<b>Loan value (base case = 3k to 8k)</b>											
Over 8k	-0.260	-0.130	-0.260	-0.397	-0.240	-0.261	-0.271	-0.266	-0.238	-0.221	-0.149
Up to 3k	-0.134	-0.065	-0.110	0.205	-0.202	-0.148	-0.169	-0.140	-0.167	0.057	0.050
Involved in other activities		0.032								-0.045	-0.056
<b>Sector (base case = SIC A-F)</b>											
SIC G-I			-0.309							0.069	0.088
SIC J-N			-0.202							-0.019	-0.026
SIC O-U			-0.059							0.225	0.309
<b>Business size (last financial year, base case = no employees)</b>											
Micro				0.252						0.341	0.379
Small				-0.004						0.370	0.281
Not trading				0.948						0.846	0.966
Business age					0.521					-0.440	-0.355
Business age (squared)					-0.155					0.015	-0.003
Has multiple owners						0.006				0.176	0.191
Business plan prepared							-0.585			-0.566	-0.529
SUL mentoring								0.267		0.399	
<b>SUL mentoring hours (base case = no mentoring)</b>											
Less than 6 hours									0.041		0.123
6 hours or more									0.513**		0.714**
Observations	567	482	567	402	520	566	565	546	538	345	341
(Pseudo) R-squared	0.039	0.057	0.042	0.065	0.054	0.039	0.042	0.042	0.045	0.093	0.097
Log Likelihood ratio	-362.042	-298.786	-361.116	-253.093	-326.260	-361.712	-359.508	-347.061	-341.323	-210.690	-207.429
Chi-squared	29.491	36.219	31.344	35.076	37.517	29.191	31.669	30.564	32.432	42.998	44.617

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% correctly classified	63.3	63.7	63.3	64.2	63.3	63.3	63.9	63.6	63.2	66.1	65.7
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Table A-19: Company is in arrears (binary, 1=yes, 0=otherwise)

Variable	1	2	3	4	5	6	7	8	9	10	11
Age group (1=Age 18-30)	-0.133	-0.174	-0.141	-0.547	-0.324	-0.139	-0.135	-0.175	-0.288	-0.482	-0.523
Has business experience	0.122	-0.224	0.098	-0.058	0.269	0.172	0.118	0.205	0.256	-0.327	-0.246
Has a degree	-0.377	-0.221	-0.418*	-0.472	-0.496*	-0.363	-0.377	-0.379	-0.404	-0.281	-0.151
Gender (1=Female)	-0.777***	-0.769**	-0.776**	-1.131***	-0.689**	-0.778***	-0.794***	-0.769**	-0.857***	-0.987**	-1.181**
Unemployed pre-start	0.467	0.565	0.498	0.935**	0.663**	0.405	0.489	0.550*	0.490	0.904**	0.638
<b>Region (base case = London)</b>											
Devolved Admin	-0.537	-0.903	-0.534	-1.050*	-0.834	-0.562	-0.565	-0.556	-0.696	-0.717	-0.878
Midlands	-0.243	-0.431	-0.270	-1.011*	-0.387	-0.243	-0.260	-0.187	-0.253	-0.925	-1.092*
North of England	-0.279	-0.306	-0.283	-0.878*	-0.259	-0.279	-0.286	-0.221	-0.360	-0.573	-0.720
South of England	-0.566	-0.513	-0.580	-0.812*	-0.616	-0.560	-0.568	-0.538	-0.523	-0.464	-0.498
<b>Loan value (base case = 3k to 8k)</b>											
Over 8k	0.012	-0.116	0.035	0.267	0.260	0.020	0.012	0.067	0.160	0.111	0.255
Up to 3k	-0.506	-0.667	-0.515	-0.981	-0.409	-0.516	-0.520	-0.477	-0.443	-0.942	-0.963
Involved in other activities		-0.061								-0.254	-0.254
<b>Sector (base case = SIC A-F)</b>											
SIC G-I			-0.194							-0.057	-0.126
SIC J-N			0.221							0.190	0.015
SIC O-U			0.042							0.103	0.125
<b>Business size (last financial year, base case = no employees)</b>											
Micro				-0.217						-0.726*	-0.788*
Not trading				0.203						0.132	0.348
Business age					-0.121					0.784	0.893
Business age (squared)					-0.011					-0.142	-0.176
Has multiple owners						-0.286				-0.255	-0.261
Business plan prepared							0.304			-0.650	-0.482
SUL mentoring								0.055		-0.063	
<b>SUL mentoring hours (base case = no mentoring)</b>											
Less than 6 hours									-0.690		-1.164*
6 hours or more									0.427		0.547
Observations	573	487	573	392	521	572	571	549	541	334	330
(Pseudo) R-squared	0.034	0.034	0.037	0.079	0.046	0.036	0.035	0.036	0.055	0.075	0.106
Log Likelihood ratio	-225.633	-175.671	-224.909	-137.830	-194.319	-224.977	-225.022	-214.519	-204.059	-113.158	-107.181
Chi-squared	15.646	12.212	17.094	23.597	18.778	16.651	16.257	16.120	23.688	18.470	25.408
% correctly classified	85.9	87.7	85.9	87.8	86.8	85.8	85.8	86.0	86.3	88.3	88.5

Table A-20: Company in arrears for 3 months (binary, 1=yes, 0=otherwise)

Variable	1	2	3	4	5	6	7	8	9	10	11
Age group (1=Age 18-30)	0.063	0.174	0.064	0.010	-0.006	0.060	0.063	-0.019	-0.101	-0.058	-0.076
Has business experience	0.594*	0.116	0.579*	0.338	0.725**	0.643**	0.586*	0.656**	0.702**	-0.354	-0.293
Has a degree	-0.456	-0.282	-0.465	-0.377	-0.512	-0.436	-0.451	-0.537*	-0.553*	-0.160	0.011
Gender (1=Female)	-0.895**	-0.909**	-0.879**	-1.342**	-0.896**	-0.890**	-0.900**	-0.929**	-1.061**	-1.235**	-1.620**
Unemployed pre-start	0.317	0.611	0.333	0.519	0.438	0.247	0.347	0.450	0.427	0.375	0.092
<b>Region (base case = London)</b>											
Devolved Admin	-0.444	-0.766	-0.438	-1.119	-1.000	-0.477	-0.433	-0.624	-0.821	-0.650	-0.680
Midlands	-0.707	-1.042	-0.754	-1.415*	-1.025*	-0.701	-0.702	-0.876	-0.922*	-1.775*	-1.873**
North of England	-0.485	-0.580	-0.452	-1.140*	-0.487	-0.486	-0.465	-0.567	-0.693	-1.060	-1.342*
South of England	-0.469	-0.349	-0.505	-0.651	-0.591	-0.467	-0.450	-0.585	-0.567	-0.528	-0.567
<b>Loan value (base case = 3k to 8k)</b>											
Over 8k	-0.473	-0.521	-0.450	-0.387	-0.274	-0.466	-0.466	-0.426	-0.330	-0.550	-0.430
Up to 3k	-0.621	-0.873	-0.584	-0.947	-0.582	-0.637	-0.639	-0.564	-0.465	-0.920	-0.741
Involved in other activities		-0.001								0.328	0.347
<b>Sector (base case = SIC A-F)</b>											
SIC G-I			-0.608							-0.675	-0.762
SIC J-N			-0.132							-0.130	-0.443
SIC O-U			-0.268							-0.567	-0.574
<b>Business size (last financial year, base case = no employees)</b>											
Micro				-0.224						-0.965*	-1.061*
Business age					1.395					0.033	-0.196
Business age (squared)					-0.264					0.003	0.038
Has multiple owners						-0.299				-0.368	-0.403
Business plan prepared							-0.170			-1.464	-1.289
SUL mentoring								-0.030		0.150	
<b>SUL mentoring hours (base case = no mentoring)</b>											
Less than 6 hours									-0.391		-0.462
6 hours or more									0.133		0.472
Observations	573	487	573	375	521	572	571	549	541	325	321
(Pseudo) R-squared	0.053	0.052	0.059	0.077	0.066	0.055	0.053	0.061	0.070	0.114	0.136
Log Likelihood ratio	-165.135	-121.732	-164.045	-94.265	-138.672	-164.685	-164.840	-155.140	-148.592	-73.598	-69.300
Chi-squared	18.425	13.349	20.604	15.627	19.537	19.134	18.634	20.005	22.276	18.960	21.794
% correctly classified	90.9	92.6	90.9	92.3	91.7	90.9	90.9	91.1	91.3	92.9	93.1

## Annex B: Income distribution analysis

### Purpose

This annex sets out the findings of additional analysis requested by the British Business Bank for the Year 3 evaluation. The analysis seeks to take account of distributional effects, reflecting that part of the rationale for the programme was to address equity issues, with self-employment and enterprise seen as a way to improve individuals' economic prospects. In order to do this, the value for money of the programme – as reflected in the Benefit Cost Ratios (BCRs) assessed using self-reported effects – has been re-assessed using distributional weights based on income.

The analysis has been completed for: the Year 2 survey sample for the 2014 Cohort<sup>65</sup>; and the survey sample from the 2016 Cohort.

### Approach

The overall approach draws on HM Treasury Green Book guidance, which indicates that distributional weights should be applied based on incomes – in this case the incomes of the loan recipients. The incomes data used were the pre-programme income of beneficiaries, measured as when they first gave thought to starting-up the business for which they secured support. The benefits that have been weighted were the net turnover effects, based on the self-reported evidence from the relevant survey.

Table B-1 sets out the distribution of income bands from the survey for each of the three cohorts, and the weighting that has been applied to the net turnover effects reports in each survey.

Table B-1: Income groups of survey samples and weighting

Income group	2014 Year 2 sample (n=331)	Weighting for 2014 Year 2 sample	2016 sample (n=602)	Weighting for 2016 sample
£0-£9,999	34%	3.06	25%	3.23
£10,000-£14,999	9%	1.87	10%	1.96
£15,000-£19,999	12%	1.33	10%	1.40
£20,000-£24,999	8%	1.01	9%	1.07
£25,000-£29,999	8%	0.81	9%	0.86
£30,000-£39,999	10%	0.62	10%	0.66

<sup>65</sup> The Year 3 survey sample for the 2014 Cohort has a relatively small sample size (n=107) and we know that the characteristics of the survey group are very different to the population as discussed in the main report. The analysis has therefore been undertaken using Year 2 evidence where the sample size was larger (n=331) and the characteristics were less divergent from the population.

Income group	2014 Year 2 sample (n=331)	Weighting for 2014 Year 2 sample	2016 sample (n=602)	Weighting for 2016 sample
£40,000-£49,999	5%	0.46	6%	0.49
£50,000-£99,999	7%	0.27	8%	0.29
£100,000-£149,999	1%	0.15	2%	0.16
£150,000-£199,000	0%	0.10	0%	0.11
£200,000 +	0%	0.04	0%	0.05
Don't know/refused*	7%	0.88	10%	0.93
<b>Overall weight</b>	-	<b>1.66</b>	-	<b>1.55</b>

\* Average of weightings used

The weightings have been derived using Green Book guidance (as used by DWP in distributional analysis<sup>66</sup> using the following formula:

$$ww_d = (M/I_b)^{1.3}$$

Where  $ww_d$  is the welfare weight for each income banding ( $b$ ),  $M$  is the median equivalised income of average taxpayers (proxied by Gross Disposable Household Income per head<sup>67</sup>) and  $I_d$  is the mid-point of each income banding ( $b$ ) used in the beneficiary survey. The calculation within parentheses is raised by the power 1.3 in line with research to estimate the elasticity of marginal utility of income.<sup>68</sup>

As the surveys of the 2014 and 2016 samples gathered gross income data (i.e. individual gross annual income before any deductions for National Insurance, taxes etc.), each income banding mid-point was adjusted for income tax and National Insurance, to derive a gross disposable income figure. This figure is directly comparable to Gross Disposable Household Income per head, as used in the formula above. The tax and National Insurance data used in the adjustments were based on taxation levels/bandings in 2013/14 for the 2014 Year 2 sample and 2015/16 for the 2016 sample respectively. This explains the small differences in weights used for the two cohorts.

For the lowest income banding (£0 to £9,999), a mid-point value was not used, but rather the mid-point between an estimate of a minimum level of unemployment and housing benefit and the upper value (£9,999). The rationale for this adjustment is that this figure is more likely to reflect the actual income of individuals in this category, who will have some income via benefits

<sup>66</sup> See Annex A3 for distributional analysis [here](#)

<sup>67</sup> £18,323 for the 2014 Cohort and £19,432 for the 2016 Cohort (Source: <https://www.ons.gov.uk/economy/regionalaccounts/grossdisposablehouseholdincome/datasets/regionalgrossdisposablehouseholdincomegdhi>)

<sup>68</sup> See Layard et al. (2008) "The marginal utility of income" Journal of Public Economics, Vol. 92, pp. 1846-1857

rather than zero income. This adjustment has the effect of reducing the magnitude of the welfare weight applied to this category.

The weighting relevant to each beneficiary in the 2014 Year 2 sample and the 2016 sample was then identified (e.g. where a beneficiary in the 2016 sample reported their income was between £10,000-£14,999, their weighting would be 1.96), and this weighting was applied to the individual-level net turnover effects identified from the relevant survey. Two worked examples are set out below in Table B-2.

Table B-2: Worked examples of adjustment to new turnover effects

Group	Income band	Weighting	Net turnover effect	Income adjusted net turnover effect
2014 Year 2 sample	£10,000-£14,999	1.96	£100,000	£196,000
2016 sample	£30,000-£39,999	0.66	£100,000	£66,000

*Source: SQW analysis*

The income adjusted net turnover effects have then been aggregated and applied to the Value for Money model used in the Year 2 evaluation (for the Year 2 2014 sample analysis), and the Year 3 evaluation for the 2016 Cohort (for the 2016 sample analysis). This provides an adjusted net GVA effect for the survey sample, which is then compared to the costs (which have not been revised) to provide an adjusted BCR.

## Findings on income weighting

The findings from the income weighting adjustment analysis are set out in Table 3. The aggregate GVA effect has increased in each case following the adjustment, by 33% for the 2014 Year 2 sample, and 27% for the 2016 sample. The higher uplift for the 2014 Year 2 sample reflects the income distribution of the survey samples, with a higher proportion in the three lowest income bandings compared to the 2016 sample (55% compared to 45%). Given that the average net turnover effects are higher for those individuals with higher incomes pre-programme<sup>69</sup>, where the survey sample has a higher share of individuals with higher incomes, the effects of the weighting are less pronounced. It is also worth noting that there is a statistically significant correlation in both samples between pre-programme income and loan values, which are also associated with higher average net turnover effects.<sup>70</sup>

<sup>69</sup> For example, for the 2014 Year 2 sample the average net turnover effect (over 2014/15 to 2017/18 including optimism bias) for individuals in the income bands from £0-24,999 was £67.5k, compared to £129k for those in the income bands from £50,000 to £199,999.

<sup>70</sup> The standard method that statisticians use to measure 'significance' is the p-value. In seeking to determine if the relationship between income and loan value is significant, we start with the 'null hypothesis' which is that the 'income and loan value are unrelated'. The p-value is a number between 0 and 1 representing the probability that this data would have arisen if the null hypothesis were true. In this case, the p-value is 0.000 for the 2016 sample and 0.07 for the 2014 Year 2 sample i.e. rejecting the null hypotheses at the 1% and 10% level of significance respectively; in both cases, the correlation between the income and loan value is therefore considered statistically significant.

In Table B-3 the income weighting adjusted BCRs are compared to the unadjusted BCRs for the two samples, demonstrating the improvement in the suggested value for money of the programme when the income distribution of beneficiaries is taken into account.

Note that the BCRs 'without income weighting' that have been used are those that excluded any consideration of arrears rates. In Years 2 and 3 of the evaluation, the BCRs for each sample have been adjusted to take into account the difference between the arrears rate of the sample and the population, providing an arrears adjusted BCR. However, for the income weighting analysis, the income distribution of the entire population is not known, meaning that it is not possible to adjust for arrears rates as well as pre-programme income.

Table B-3: Income adjusted benefits and BCR

Cohort	Economic costs (£)	GVA benefits <u>without</u> income weighting adjustment (£)	BCR <u>without</u> income weighting	GVA benefits <u>with</u> income weighting adjustment (£)	BCR <u>with</u> income weighting adjustment
2014 Cohort – Year 2 survey group	1,400,446	4,226,924	3.0	5,615,320 (+33%)	4.0
2016 Cohort	2,552,089	14,891,770	5.8	18,975,426 (+27%)	7.4

Source: SQW analysis

## Commentary

Three points are noted from the analysis:

- The **findings should be treated as exploratory and illustrative**, particularly as the approach is based on combining data on individual (personal income) and businesses (net turnover effects). Given the high level of businesses with no employees/self-employment in the survey samples (where it is reasonable to expect there will be a strong correlation between business performance and personal income), the approach is considered reasonable. However, in using the findings this caveat should be noted.
- This point noted, the analysis suggests that the **value for money of the programme is higher once the pre-programme income of the beneficiary sample is taken into account** across both the 2014 Year 2 and 2016 samples (based on self-reported evidence).
- This **effect is more pronounced for the 2014 Year 2 sample using the data from Year 2**, where the net benefits and BCRs increase by a third. This reflects the pre-programme income distribution of the survey sample for the 2014 cohort, with high proportions in the lowest income bandings. Taken alongside the wider evaluation evidence in Year 3 that personal development outcomes are particularly associated with those with no previous business experience, and those that were unemployed at the time of applying to the programme, the analysis does highlight the economic and social value of the programme in supporting 'less advantaged' individuals, as part of the overall service offer. The income adjustment does not fully close the difference in BCRs between



the 2014 and 2016 samples; other factors such as more efficient programme delivery and lower rates of expected default influence the BCR for the 2016 sample.

## Annex C: Summary of BCR findings

This annex provides a summary of the range of BCR findings presented in the main report, covering:

- sensitivity analysis on arrears, business survival, and for the 2014 cohort the use of data from the Year 2 survey
- the scaled-up BCRs for the population (which account for the variation in the level of arrears between the surveys groups and the population for both the 2014 and 2016 data)
- the findings from the income distribution analysis.

### 2014 cohort

	BCR: Exchequer costs	BCR: Economic costs
Sample - Unadjusted impacts	4.4	4.5
Sample - Impacts adjusted for arrears	3.8	3.9
Sample - Impacts adjusted for business survival	3.6	3.7
Sample - Year 2 data, but only using respondents from Year	4.2	4.0
Population	3.9	3.8

### 2016 cohort

	BCR: Exchequer costs	BCR: Economic costs
Sample - Unadjusted impacts	5.7	5.8
Sample - Impacts adjusted for arrears	5.5	5.7
Population	5.6	5.7

### Income distribution analysis

	BCR: Exchequer costs	BCR: Economic costs
2014 Cohort – Year 2 survey group	4.1	4.0
2016 Cohort	7.3	7.4

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