Midlands Engine Investment Fund – Interim Evaluation Report

Research report
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Contents

Executive Summary

SQW, supported by the Centre for Enterprise and Economic Development Research (CEEDR) at Middlesex University, Belmana and BMG Research, has been commissioned by the British Business Bank (the Bank) to evaluate the Investment Funds across the Northern Powerhouse, Midlands Engine, and Cornwall and Isles of Scilly. This report covers the interim evaluation of the Midlands Engine Investment Fund (MEIF) which took place between March 2022 and August 2022.

Evaluation scope, objectives and research questions

This evaluation focuses on the £250m Midlands Engine Investment Fund (MEIF), which was formally launched in August 2017 with an investment period to 2023. Government announced a further £50m for the current Fund in the 2021 Spending Review, but this had not been invested at time of the evaluation and was therefore out of scope. Government also announced a further £400m of investment in “MEIF2” in the 2021 Spending Review; this too is out of scope, but the lessons identified in this evaluation may be helpful to inform the design of MEIF2 and other regional finance interventions.

This interim evaluation report builds on the early assessment of MEIF, which was completed between June 2019 and March 2020. The interim evaluation explores the effectiveness of delivery processes, performance against targets (spend and outputs), and learning around what is working well (or not) and why. It also revisits evidence on the relevance of, and demand for, the intervention, alongside finance additionality. As the interim evaluation is taking place approximately four and a half years after the initial investment, the emphasis in this report is on net outcomes and impacts, and an overall assessment of performance and value for money.

Inputs, activities and outputs

By March 2022, £168.9m of MEIF finance had been deployed in 759 investments across 539 SMEs. Of this, 13% was microfinance, 49% was larger debt, 37% was equity investment (including proof of concept (PoC)). Qualitative feedback suggests that MEIF was relevant to meet business needs, and that the original rationale for the Fund was valid and remains so, especially for equity and small business loans.

The average size of investment was nearly double the expected value, largely driven by small business loans and PoC awards being larger than expected. One quarter of SMEs have received more than one MEIF award, demonstrating how MEIF is starting to make follow-on investments. Investments have been made across all Midlands Local Enterprise Partnership (LEP) areas and are broadly representative of the distribution of eligible businesses (with the exception of SEMLEP). Across all LEP areas, the value of MEIF investment exceeds their original LEP European Structural and Investment Funds (ESIF) contribution by some margin. Total MEIF deployment was slightly behind plan (by 6%) at an aggregate level by the end of March 2022, but performance is variable at a fund level. The deployment of PoC funding was ahead of target, and both equity funds and small business loans funds were in line with targets.

However, the performance of debt funds is more variable: two of the debt funds are now only marginally under-performing despite turbulent demand during Covid-19, but the third (more recently introduced) debt fund is further behind plan. Looking forward, demand for finance is difficult to predict given the current political and macro-economic challenges, but most consultees expect it to continue, for all MEIF funds, especially for equity.

The Fund had supported around half the number of SMEs anticipated by March 2022. This is explained in part, by lower demand (especially for debt) and by SMEs requiring larger than anticipated investments (and Fund Managers prioritising overall deployment targets). Given that total deployment was broadly in line with target, this means that cost per SME supported/pound invested is much higher than expected.

Finance additionality

The evaluation findings are very positive in terms of self-reported finance additionality: over two-fifths of respondents (44%) said they probably or definitely would not have accessed finance without MEIF, and over one-third would not have accessed finance as quickly and/or to the same scale. For the latter, accelerating access to finance is particularly important, enabling firms in the Midlands to respond quickly to challenges and/or opportunities for growth. There are differences in finance additionality between finance types: full additionality is notably higher for equity investments compared to debt, whereas MEIF plays a more important role in accelerating access to finance for debt. Deadweight is relatively low, with 17% of respondents arguing they would have secured finance anyway in the absence of MEIF (and similar for debt and equity). Overall, finance additionality has also improved compared to our early assessment of MEIF.

The evaluation has also tested the extent to which SMEs considered alternative finance at the point they applied for MEIF. The survey found that three-fifths of respondents did explore alternative sources of finance but were more likely to be unsuccessful than successful in these endeavours. Moreover, the reasons for rejection aligned closely with the rationale for MEIF, e.g., the lack of collateral, security, track record or risk.

Wider activities and processes

The Fund Managers provide support which is highly valued by SMEs, as demonstrated by survey feedback. This includes access to their networks and other investors, and advice and support in relation to business development more generally. Consultee also noted that their wrap around support has also been particularly important during the pandemic. More broadly, consultees suggested that Fund Managers have played an important role in ‘educating the market’ across the wider business population. These activities are not captured effectively in current metrics for non-financial support.

The visibility and local presence of Fund Managers has also improved according to internal and external consultees. Fund Managers are perceived as very experienced and professional, with strong local networks. Many staff are recruited locally from the finance community which has been helpful in this respect. Consultees also recognised that Fund Managers have been more proactive in terms of outreach since the early assessment. The role of the Bank and the visibility and networks of their regional representatives has also been important in terms of raising the profile of the Fund and opening doors for Fund Managers.

The Fund’s role in supporting the regional finance ecosystem is also more apparent now. Consultees argued that relationships between the Bank, Fund Managers and LEPs have improved, as have relationships between Fund Managers themselves. Intermediaries also commented on the role of MEIF in strengthening local networks and referral mechanisms.

The Fund has encountered some contextual and operational challenges during implementation. Consultees noted that investment readiness and the lack of/very variable support for businesses remains a challenge, as noted in the early assessment. Also, whilst referrals have improved, encouraging commission only advisors to engage with the programme has been difficult. At an operational level, staff recruitment and turnover within the Fund Managers has hindered relationship building and capacity for outreach work.

Outcomes and impacts

Firms

According to our beneficiary survey, the main uses of MEIF finance have been working capital (to varying degrees), developing new or improved goods/services, and staff recruitment and development. The latter are well aligned with Government objectives relating to productivity and economic growth. The majority of respondents had spent most, if not all, of their MEIF finance at the time of interview. Also, most had not changed the purpose or timing of their MEIF investment since their original application and, for those who had, it was mainly due to Covid-19.

MEIF has played an important role in helping SMEs to secure wider finance. In the survey, two-fifths of respondents had secured follow-on finance (excluding MEIF follow-on) from a range of private and public sector sources. Just over half of these SMEs argued that MEIF had a large or moderate influence in their ability to secure the finance, both as a consequence of MEIF finance *and* the wider support, guidance and networks of the Fund Managers. More broadly, MEIF is strengthening firms' access to finance capabilities, raising awareness of private finance available in the market and boosting confidence in their ability to secure it in future.

MEIF has generated a range of benefits for the SMEs supported. Almost all have become more resilient and three-fifths reported that they had avoided closure. These outcomes are particularly important given the current context to ensure that innovative firms and the region's capacity for future growth is not lost. MEIF has also led to a range of skills, efficiency and innovation outcomes which are crucial to underpin productivity improvements and economic growth in the Midlands. And MEIF has played a role in reducing businesses' environmental impact.

This is translating into business growth benefits: three-quarters of survey respondents reported an impact on employment, productivity and sales to date, and three-fifths of respondents have observed an impact on profitability. In terms of employment, MEIF's equity investment in particular is leading to high quality and well-paid jobs in senior occupations, although debt finance is also leading to high value jobs. Fewer firms have observed impacts on exports, despite the high prevalence of exporters amongst the SMEs supported, but this is likely to the context in which many SMEs received MEIF finance (i.e., during the pandemic).

Findings from the survey and econometric analysis demonstrate that MEIF is delivering impacts that are additional. In the survey, nearly a third of respondents argued that outcomes would not have been achieved in the absence of the funding. MEIF also plays an important role in accelerating and (to a lesser extent) increasing the scale of outcomes achieved.

Whilst the econometric analysis did not find a statistically significant difference between the results for debt and equity recipients (possibly due to the small sample size), the wider evidence gathered for this evaluation points to a number of distinctive features of the equity investments. At the outset, we observed how the equity ecosystem in the Midlands was particularly underdeveloped when MEIF was established. Reflecting this challenging context, full finance additionality was notably higher for equity investments compared to debt. The large majority of equity firms responding to the survey claimed that MEIF had a large or moderate influence on ability to secure follow-on finance, compared with around half of debt recipients. Equity recipients were more likely to use MEIF for recruitment, staff development, marketing, and innovation purposes. As a consequence, the majority of additional R&D investment was driven by equity recipients and MEIF's equity investment in particular have led to employment opportunities in senior occupations and high value jobs in the Midlands. We have also observed that SMEs in receipt of equity are more likely to experience an increase in employment, productivity, and exports as a result of the Fund.

Impacts

The report used Propensity Score Matching (PSM), difference in difference (DiD) and multivariate analysis to assess the differences in performance between the MEIF funded businesses and a matched control group. The control group was identified using propensity score matching. Because of the challenges of undertaking the analysis over the period of the Covid pandemic, the control group was also matched on whether or not businesses had made use of the furlough scheme. This produced estimates of the additional impacts on employment and turnover (i.e. over and above those that would otherwise have occurred). These are used to provide estimates of value for money.

MEIF has been supporting growing businesses. Across the sample, employment increased by 1,290 from the year of support, or 3.8 jobs per business in gross terms. Compared with a matched control group of applicants (that were not funded) the MEIF businesses grew employment faster over the first two years in particular.

MEIF businesses demonstrated faster turnover growth compared with the matched control group. After two years, 55% of their growth was estimated to be additional, or attributable to MEIF (and this was significant at a 5% level). The smaller sample size means that any differences between the performance of firms receiving loans rather than finance through equity could not be considered significant.

Triangulation with business survey results provides some reassurance on the overall scale of the results, although there is more consistency in the estimates of additional turnover than employment.

Applying the estimates of the additional employment and turnover attributable to the MEIF funding indicates that to the end of 2020/21 the programme has supported 760 jobs and additional turnover of £195 million. These figures are not adjusted for displacement which is done as part of the value for money calculations.

Commercial performance

The Fund is performing well to date commercially, especially given the challenging context in which it has been delivered. By the end of March 2022, one fifth of capital invested had been returned to the programme. As expected, returns from equity and PoC investments were limited at this stage, but some early exits had led to a small return. The extent of arrears and write offs were both low, at 0.3% and 2% respectively. This was explained, in part, by the robust approach to due diligence in the initial decision-making process, additional non-financial support provided to firms by Fund Managers, flexibility of Fund Managers in responding to the challenges of Covid-19 for businesses (e.g., by offering repayment holidays) and the availability of wider Covid-19 emergency funding to support businesses more generally. Looking forward, the majority of Fund Managers and stakeholders expect MEIF to perform well overall, but this should be monitored closely given the challenging economic context.

Fit and influence on the wider finance ecosystem

In broad terms, MEIF has been well aligned with other support available, including Covid-19 emergency funding, although a minority of consultees argued alignment with earlier stage funding could be strengthened.

It is still too early to fully assess the impact of MEIF in improving the wider finance ecosystem at this stage. Early evidence is encouraging but improvements are not yet in a position to be self-sustaining. On the supply-side, MEIF has increased the supply and the diversity of funding available in the Midlands. It has levered a substantial amount of match funding, and MEIF-backed Fund Managers are unlikely to be active in the region at all (or on a significantly smaller scale) without MEIF. More broadly, the Fund is beginning to strengthen the financial ecosystem across the region, influence the behaviour of intermediaries, create local access to finance 'communities', and build a pipeline of investment opportunities. In doing so, the Midlands is perceived to be better placed to attract new funds into the region. It is too early to assess whether MEIF has brought new investors into the Midlands; this will also depend on a positive demonstration effect in the longer term.

On the demand side, MEIF has contributed to a better awareness of external finance across the region, but more needs to be done in this respect. It has also strengthened the investment readiness of SMEs involved in the programme but had limited impact on the investment readiness of the region's wider SME community.

Net impact and value for money

The net impact and VfM estimates use the results from the econometric analysis and are based on the additional business turnover identified among the funded businesses. These are adjusted for displacement at a UK level and discounted at 3.5% as recommended by the Green Book. The model assumes that the benefits continue for 5 years, the length of a typical loan repayment period, and that all the loan/equity per business remains at the same level. The ratio of GVA to turnover is the average for UK SMEs, and the model does not include multiplier effects. Write off costs are tested at 3%, 5% and 10% of the total fund size and the opportunity cost of the fund is estimated using the Bank of England interest rate. The following table shows the main results for GVA, costs and the benefit/cost ratio (BCR) to date and for the full Programme up to 2027/28.

The total costs of the Programme *to date* are estimated to be £14.7 million and the net additional GVA *to date* is £32.8 million.

If write offs rise to 5% of the full Programme investment by 2027/28, costs rise to £31.8 million while the discounted GVA forecast *for the Programme* would be £82.6 million.

The BCR is generally between 2 and 3 depending on the level of write offs expected. Given the wider economic context and the pandemic, this is a reasonable level of return.

Table 1: Sensitivity of benefits and costs to changes the level of write offs

Write offs	GVA (£ millions)	Costs (£ millions)	Ratio
To date	32.8	14.7	2.2
Full programme: 3% write off	84.3	27.8	3.0
Full programme: 5% Write off	82.6	31.8	2.6
Full programme: 10% Write off	78.2	41.8	1.9

Overall assessment

Overall, MEIF has performed well against its original objective to generate economic growth by increasing the supply of finance in the Midlands, especially given the context in which it has operated for a large proportion of its lifetime. The finance has been targeted towards SMEs who, on the whole, would not have secured finance at all or as quickly in the absence of the Fund. This has led to business growth and innovation, and it has increased the productive capacity of SMEs involved. There is also emerging evidence that the Fund is influencing the wider ecosystem and making progress in addressing the original market failures. That said, the rationale for intervention remains valid. Given the scale and limited lifespan of the Fund so far and the scale of the challenge in the Midlands, we need to be realistic about the extent to which system-level impacts are plausible at this stage. Figure 9-1 sets out the Theory of Change in practice, summarising performance against the intended outcomes and impacts, routes to impact, and factors that have helped or hindered progress of the Fund.

Drawing on the evidence gathered, and lessons learned in this evaluation, the British Business Bank should consider the following lessons and reflections should help to inform the design of future policy:

- An ongoing gap in earlier stage equity funding in the Midlands
- The need for clarity on the strategic focus and investment strategy of future Funds, with scope to better align the Fund with local and wider HMG priorities, such as sustainability, and ensuring that investment criteria and monitoring metrics are appropriate in light of this.
- Recognition of the impact that (increasingly) limited demand-side support for investment readiness might have on the ability of a supply-side intervention such as MEIF2 to scale up deployment and clarify MEIF2’s role in providing non-financial support to SMEs, educating the wider market and facilitating the finance ecosystem in this context. Again, the programme needs to ensure that Fund Manager incentives are appropriate and monitoring metrics capture this activity more effectively.
- The importance of local stakeholder engagement and buy-in to the success of MEIF to date, and how this will be maintained in the absence of LEP European Regional Development Funds (ERDF) contributions.
- The need for continuity between the current Fund and MEIF2 so that its legacy is built on and momentum is not lost.

A final evaluation of MEIF is planned to take place 10-12 years after the first investments, at which stage a comprehensive assessment of long-term impacts will be possible, both through econometric and primary research. We recommend that beneficiaries from all three regional Investment Funds are pooled to provide a sample of sufficient scale to undertake discriminant analysis on the characteristics or factors that are most likely to lead to outcomes. The Bank should ensure that appropriate monitoring data on the characteristics of assisted businesses and funded are gathered to enable this. It will also be important to gather further evidence on spillover/multiplier benefits and wider market impacts, for example through more extensive consultation/survey work with wider market stakeholders, intermediaries and non-MEIF investors.

1. Introduction

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The research questions for the interim evaluation are summarised below. To note, the rationale, design and delivery questions were explored in more detail in the early assessment and were therefore covered in less depth in this phase; whereas the remaining questions were higher priorities in this phase, as set out below.

Table 1.1: Evaluation questions

Topic	Key Evaluation Questions	Prioritisation
Context, rationale and design	• What is the scale, nature and geography of applications and awards, and is this in line with expectations? • Are the Investment Funds relevant to meet business needs?	Lighter touch
Delivery	• How effectively have the IFs been aligned with the wider finance ecosystem offer? • How is the additionality of IF investment ensured? • How effectively and efficiently are the programmes being delivered, managed and governed? How could this be improved?	Lighter touch
Inputs, outputs and finance additionality	• How are the IFs performing against input and output targets? What are the reasons for under/over-performance?	Priority

	• To what extent is the funding additional and addressing the market failures? • What other sources of finance do applicants consider? • To what extent would applicants be able to secure other forms of finance? • What do SMEs use IF finance for?	
Outcomes and impacts	• What outcomes have been achieved for businesses involved in the programme, and to what extent are these additional? • To what extent has the IF levered follow-on investment? • What is the distribution of outcomes and impacts? • How are outcomes/impacts delivered, and how does this compare to assumptions in the ToC, and what can we learn about what works in terms of pathways to impact? • What is the contribution and relative importance of the IFs in enabling outcomes/impacts, compared to other internal/external factors? • What are the future expected outcomes/impacts? • To what extent have IFs been a commercial success, at the business and programme level? • What are the levels of repayment and arrears, and what drives arrears amongst SMEs? • To what extent are IFs adding value at the sub-national level in improving the wider finance ecosystem, addressing the finance gap, stimulating the supply and demand side of the market?	Priority
Overall assessment	• To what extent are IFs achieving their objectives and addressing market failures? • To what extent are IFs delivering value for money, compared to other programmes?	Priority

Source: SQW

Evaluation methodology

Overall approach

The overarching approach to the evaluation draws on mixed methods to collect data in order to test progress and performance against the logic models and theory of change set out in Annex A. Figure 1.1 shows the main strands of the evaluation.

Figure 1.1: Summary of main strands of research

Data analysis	Consultations	Primary research with beneficiaries	Econometric analysis
• Programme monitoring data • Review of Quarterly Reports • Secondary contextual data	• Fund Managers • Governance representatives • External stakeholders	• Large-scale survey • In-depth case studies	• Beneficiaries and matched withdrawn/ unsuccessful applicants • Analysis of Business Structure Database

Source: SQW

Approach to this interim evaluation

This section sets out the research tasks that were undertaken in the interim evaluation. In addition to the workstreams below, emerging findings were discussed at a workshop with the Bank and then presented to BEIS and HMT. The draft report was subsequently reviewed by the Bank, HMT and Cabinet Office, and subject to the BEIS Peer Review process.

Data analysis

We have analysed programme monitoring data to characterise the profile of applicant firms and assess spend and output performance against targets. In addition, our analysis of secondary data has been updated to track change since MEIF was launched and provide an overview of contextual conditions that form the backdrop to MEIF performance over this period.

Consultations

In-depth consultations were held with 23 individuals from the following organisations to discuss MEIF's design/model, position and value within its SME target market, the effectiveness of delivery to date and how it could be improved, and outcomes/impacts of the Fund, both on the SMEs involved and the wider economy:

- Representatives from the MEIF governing boards including the Strategic Oversight Board (SOB) and Regional Advisory Board (RABs), which includes LEP members and the Bank, BEIS and MHCLG.
- All Fund Managers involved in the delivery of MEIF.
- Wider stakeholders, including local business support/access to finance providers and intermediaries.

A workshop was also held with representatives from the Bank to present, test and calibrate emerging findings prior to drafting this report.

Business survey

A telephone survey was completed with 170 SME beneficiaries between March and May 2022. The interviews focused on finance additionality, follow-on finance, and outcomes and impacts arising as a result of MEIF support, and the extent to which this was additional. A census approach was adopted to maximise the response rate as far as possible.

Overall, the survey was completed with 38% of all beneficiary contacts made available to SQW by Fund Managers at the time of the evaluation[1], and 81% of SMEs that were contactable during the survey period (i.e., answered the phone).

The survey respondents accounted for 248 or 33% of all MEIF awards, and £53m or 31% of finance invested at the time of the survey. This covered 44% of all equity investments and 29% of all loans (by number of awards). The survey responses were slightly over-represented in terms of equity awards[2] and SMEs supported after 2020[3], but otherwise the sample broadly mirrored the population. The average investment amount amongst respondents[4] and the number of awards received[5] by the sample were closely aligned with the programme as a whole. Respondents were predominantly in manufacturing, wholesale, ICT, and professional, scientific and technical sectors (each of these sectors accounted for >10% of the sample), in line with the population.

Table 1.2: Awards coverage in survey, compared to population

	Survey[6]	Survey	Population (to end of March 2022)	Population (to end of March 2022)
	Number of awards	%	Total number of awards	%
Number of small business loans awards	79	32%	338	45%
Number of loan awards	86	35%	232	31%
Total debt awards (sub-total)	165	67%	570	75%
Number of equity awards	83	33%	189	25%
Total number of awards	**248**		**759**	

Source: SQW analysis of MEIF survey

Case studies

[1] Contact data was provided by Fund Managers for 442 SMEs, out of the 500 SMEs that had received MEIF finance at the time the evaluation survey was conducted.

[2] 33% of awards covered by the survey were equity, compared to 25% in the population; 67% of awards covered by the survey were loans, compared to 75% across the population.

[3] In the survey sample, 59% of respondents had received their first MEIF award between 2017 and 2020 and 41% had received support in 2021 or 2022, this compared to 64% and 36% for the population respectively

[4] The average investment amount across survey respondents was £213.6k compared to a programme average of £222.5k

[5] Most respondents had received one MEIF award (71%), which is similar to the population as a whole (74%)

[6] In the survey population there were 44 firms in receipt of equity finance from MEIF and 126 in receipt of debt finance (including small business loans) from MEIF

The case studies provide in-depth qualitative evidence of progression, outcomes and impacts, additionality, and contribution of the Fund. They are intended to be illustrative rather than representative and have been selected in discussion with the Bank to provide a range of experiences in terms of finance type, finance additionality and leverage, outcomes observed, location and sector.

Table 1.3: Introduction to the case studies

Firm name	Description
Boditrax Technologies	A health-tech business based in Nottingham with six employees. Founded in 2011, the company spent five years completing R&D to design the Boditrax Scanner, a precision body composition and health monitoring platform, which it has since been successfully selling across the world. The company secured £500k through MEIF debt finance in 2021 to finance the development of an upgraded to the platform, '*Boditrax V2'* and employ new three new staff and temporary R&D specialists.
METCLOUD	A technology company that develops and sells cyber secure cloud computing services. Operating since 1998, it currently employs 28 people and is based in Edgbaston. In 2021, it received £1m in equity finance from MEIF, which it used to accelerate the progression of growth plans, with the finance used for product development, marketing, staff recruitment and training.
Ekkosense	A software business that designs remote sensing and cloud-based analytics tools to corporate customers to reduce energy costs of data centres. Founded in 2014 in Nottingham, the company is now largely export-oriented and has 35 employees. In 2019 an initial round of £500k of MEIF equity investment was used to fund R&D and new market expansion, followed by a further £1m of debt finance in 2021, used for working capital during a growth phase and ongoing business development activities.
Autins Group	A manufacturer of thermal and acoustic insulation materials, founded in 1966 in the West Midlands as a key supplier to the local automotive industry. The firm's HQ remains in Rugby, but now has production centres across Europe and employs over 150 people. It received £1.5m of debt finance from MEIF in 2020, which was planned to fund an expansion of the R&D unit. However, as the pandemic hit, the became increasingly important to enable survival.

Data-linking and econometric analysis

Belmana have undertaken data-linking and econometric analysis to assess the changes in performance of MEIF beneficiaries and unsuccessful applicants against matched counterfactual groups.

Data from surveys and administrative data was accessed through the ONS Secure Research Service (SRS), which tracks the performance of funded businesses' employment, turnover and other linked data at firm-level and over time. Belmana were able to identify and match 337 beneficiaries of MEIF in the database. These were matched using Propensity Score Matching to "unfunded" firms, i.e., unsuccessful applicants and those that withdrew, to form a comparison group. Performance between the two groups was then compared through Difference-in-Difference analysis on employment and turnover. Further details on the methodology are presented in Annex C.

Context and limitations

The evaluation was undertaken following two years of the Covid-19 pandemic, which is important context when interpreting the findings below.

The evaluation took place approximately 4.5 years after the first MEIF investment in October 2017 and therefore almost half of the Fund's implementation had taken place during Covid-19 and the associated disruption to businesses. It is also important to acknowledge the lag time until impacts are observable after investment, and for many MEIF investments limited time had passed by the time of the evaluation. Across the MEIF beneficiary population, 57% of SMEs (and 60% of survey respondents) had received their first MEIF investment in 2020 or later. As set out in the MEIF logic model, the programme's intended intermediate outcomes (e.g., new jobs, firm survival, new products/services, and follow-on funding) were expected any time from 2-3 years after the MEIF investment through to 5-10 years after investment. Final outcomes (e.g., firm growth and diversity of funding options across the wider market) were expected 5-10 years after investment. We therefore need to be realistic about the extent to which it is possible to observe/evidence some outcomes/impacts at this stage. The evidence presented in this report is therefore likely to understate the ultimate impacts of the programme.

The decision was also made in discussion with the Bank that SMEs participating in the survey would not be asked to quantify future anticipated impacts of MEIF, given uncertainties regarding Covid-19 recovery/future outbreaks and more recent issues relating to cost and inflationary pressures.

Finally, the sample size was too small to undertake more detailed analysis to test the characteristics associated with positive outcomes or causation factors. This should be more viable by the time of the final impact evaluation, where beneficiaries from all three regional Investment Funds could be aggregated. Using data for the population of beneficiaries, the econometrics has assessed the difference between equity and debt finance, but again the sample is insufficient to test other factors.

Report structure

This report is structured as follows:

- Section 2 provides an overview of MEIF, including rationale, market context and objectives, and summarises the contextual conditions and key changes since the Fund was introduced
- Section 3 provides an overview of the Fund to date, the effectiveness of delivery processes and how these could be improved
- Section 4 presents evidence on finance additionality, including alternative sources of finance considered
- Section 5 presents evidence on firm-level outcomes observed to date, including outcome additionality and follow-on finance
- Section 6 presents evidence on firm-level impacts observed to date and expected in future
- Section 7 outlines emerging outcomes and impacts for the Fund Managers and the wider finance ecosystem
- Section 8 presents emerging evidence on value for money (VfM), including cost per output and cost-benefit analysis
- Section 9 presents conclusions and recommendations from the interim evaluation.

The report is supported by five annexes: Annex A provides the logic models for the Funds; Annex B presents further details on the surveys undertaken; Annex C provides data tables and detailed methodology for the econometric analysis; Annex D presents analysis of contextual indicators on the finance landscape; and Annex E presents the case studies.

2. MEIF and the finance context

This Section provides an overview of the MEIF programme, and its rationale and objectives at the time it was introduced. We also reflect on how the finance market has shifted since it began, not least in response to the Covid-19 pandemic, which is important context when testing how MEIF has been delivered and performed over this period.

Programme overview

MEIF was first announced in the 2016 Budget and was formally launched in August 2017[9], with the first investments made in October 2017. The Fund is designed to increase the supply of debt and equity finance to SMEs located in the MEIF area, enable recipient businesses to grow and innovate, and create sustainable financial ecosystems across the Midlands.

MEIF draws on funding from the European Investment Bank (EIB), the Bank and European Structural and Investment Funds (ESIF)/European Regional Development Funds (ERDF) committed by each Local Enterprise Partnership (LEP) to the sum of £250m. In the April 2021 Spending Review, Government announced a further £50m for the Fund recognising its important role in the context of levelling up, bringing the total for investment to £300m.

The MEIF is a “fund of funds”, overseen by the Bank in close partnership with the Local Enterprise Partnerships (LEPs), and delivered in each region by a series of contracted Fund Managers who are tasked with targeting funding towards ‘SMEs with growth potential’.

In the MEIF area the Fund offers:

- **small business loans:** loans from £25,000-£150,000, delivered by BCRS in the West Midlands and Enterprise Loans East Midlands in the East and South East Midlands
- **larger debt finance:** loans from £100,000-£1.5 million, delivered by Maven and more recently FSE, both covering the whole region
- **early-stage proof of concept equity**: up to £750,000, delivered by Mercia across the region
- **later-stage equity:** from £50,000-£2 million, delivered by Midven in the West Midlands and Foresight Group in the East and South East Midlands.

The Fund is nearing the end of its 5-year investment period, which will then be followed by a 5-year realisation and repayment period. In addition to finance, the Fund Managers can provide “non-financial” support to a small number of potential applicants comprising up to 12 hours of advice to assist in the development of business plans or strategy.

Rationale and context

The Midlands has faced well-documented and long-term economic challenges, with Gross Value Added (GVA) per capita, productivity and enterprise rates that are consistently below the UK average, and a low proportion of high growth and scale-up businesses. MEIF was developed in response to evidence that access to finance was a significant barrier to business development and growth in the Midlands.

On the supply side for equity, the Midlands suffered from less developed networks of equity finance providers and advisors in the region, and a general lack of awareness of potential investment opportunities from investors in London and the South East (i.e., information failures). This led to a weak private sector finance landscape, with local, regional and devolved Government funds disproportionately represented. Travel costs (including time) were higher for investors coming to/travelling across the Midlands, not helped by lower business density and poor transport infrastructure. Also, due diligence costs were comparatively high for (typically) smaller equity deals in the region. In terms of debt finance, banks and other mainstream finance providers were not always meeting the demand for loans for start-up companies due to lack of collateral, credit history and/or trading history, and the low margins associated with low value loans. Even more established businesses were struggling to secure mainstream debt finance due to similar issues and/or being outside of a bank's defined assessment categories to scale up and to grow. Furthermore, relatively low housing wealth in some parts of the region influenced availability of collateral for accessing finance. Across both types of finance, there was also a wider externality rationale for MEIF, whereby private sector investors do not capture market and knowledge spill overs – social benefit is greater than private – leading to overall under-investment.

On the demand side, information failures and investment readiness were also issues. SMEs lacked awareness of potential funding sources (especially equity) and ways to access finance, struggled to present their propositions to best effect, and (in the case of debt) lacked sufficient collateral or track record to secure finance.

These supply-side and demand-side factors combined to create a very 'thin' finance market at the time MEIF was introduced, whereby markets worked less effectively due to smaller number of providers and deal activity. The equity ecosystem in the Midlands was particularly underdeveloped at the time.

There was consistent feedback from consultees that the original rationale for MEIF was valid and that market and other failures outlined above remained across the region. This was particularly the case for equity and small business loans. Moreover, for equity, consultees argued that the lack of private sector investors in the region (excluding MEIF) had worsened over time, as investors who exited the market during Covid had not fully returned. They also argued the gap had widened in value terms from £50k through to £5m. The gap is particularly acute at the lower end, as investors have moved to later stage, bigger deal sizes (as has MEIF, it was argued – see below). In terms of small business loans, consultees continue to see SMEs struggling to get mainstream finance, with banks taking an increasingly tough stance on risk and other finance providers following suit. For example, as one external stakeholder noted, "*to be an entrepreneur there is a need to buy into the future rather than the past, but banks have no interest in buying into a future story, they will always focus on the history to determine whether SMEs can service a level of debt, which makes is so very difficult for SMEs*".

Consultees agreed the larger debt market has become more competitive, both since MEIF was set up as alternative lenders entered the market and more so during Covid-19, especially for loans in excess of £1-1.5m. Also, over the last 5 years consultees noted that it is taking longer to secure finance, because of the increasing volume of information required before banks will even consider investing, and that banks are increasingly focused on the "*fundamentals*" against narrow criteria rather than trying to "*understand a business and its past/future trajectory*". That said, consultees argued the gap in larger debt finance has widened again recently. They had observed bank retrenchment and expected them to be very conservative in their lending for some time. Demand for debt finance for SMEs was expected to continue, particularly in the £350k-£1m range. Consultees also expect a raft of SMEs to struggled to repay some debt and therefore move even further from mainstream finance.

Programme objectives

The main objective for the Fund was to increase economic growth by ensuring a healthy supply of and access to finance for scale-up and potential growth SMEs in the Midlands. Each type of finance was expected to deliver a different route to this overall goal:

- Small business loans were designed to support the growth, quality (through higher financial capital) and survival of young businesses in the region.
- Later stage debt finance was aimed at more established businesses that may be capital constrained to support business growth through facilitating expansion plans, funding the development of new products and enabling entry into new markets.
- Proof of Concept (PoC) early-stage equity finance was designed to enable start up, survival and faster growth among SMEs in the region.
- Later stage equity finance was designed to support innovative High Growth Firms (HGFs) that were too high risk to be supported by debt finance, lacked collateral and had unstable cashflows. Equity finance provided access to capital in order to fund growth, but also provides significant additional management capability through investors knowledge, experience and connections.

The Investment Funds have also been designed to maximise net additional outcomes and impacts by minimising deadweight/maximising additionality in the finance provided and outcomes achieved. To ensure that MEIF focused on market gaps where SMEs struggle to obtain similar finance from traditional sources, SMEs were required to demonstrate to Fund Managers that they were unable to obtain the requested finance through mainstream/commercial investors/lenders. The Funds also sought to minimise displacement within the Midlands (and ideally the UK) through ‘new’ growth and exports and minimise substitution within the firm[7] and leakage of benefits outside of the target geographies.

In addition to business growth objectives, the programme was also expected to deliver a series of longer-term policy objectives to create a better functioning and sustainable finance ecosystem across the Midlands:

- On the supply side, this included increasing the number private finance providers (and associated value of investment), increasing the diversity of funding options for SMEs, and increasing the capacity/skills/understanding of fund managers in the Midlands.
- On the demand side, the programme also sought to raise awareness of finance amongst SMEs and intermediaries across the region.

At an operational level, the programme was also intended to meet target financial returns for the Bank and Fund Managers, including through interim repayments on loans.

Please turn to Annex A for detailed logic models for each type of finance, and a theory of change for the programme as a whole.

[7] i.e., encouraging businesses to utilise finance to grow/improve their business (now/in future), rather than using the finance to substitute another activity already taking place (with no net gain overall).

Contextual conditions

Demand side indicators: the Midlands business base vis-à-vis the UK as a whole

The region[8] covered by MEIF was home to just under half a million firms in 2020, which represented 17% of all firms in the UK. Since MEIF was launched in 2017, the number of firms in the region has increased at a Compound Annual Growth Rate (CAGR) of 1.2% pa, which is slightly higher than the UK growth rate during the same period (CAGR of 1%). However, recent growth has been slower than in the five-year period prior to MEIF's launch (CAGR of 4.4%)[9].

The Midlands is also home to innovative, high growth firms. The region had just over 1,800 high growth firms in 2020[10]. Although the number of high growth firms has fallen slightly since MEIF began, similar trends have been observed nationally, and the proportion of firms in the West and East Midlands that were 'high growth' (4.0% and 3.8% respectively) has remained broadly in line with the UK average (4.3%). Many parts of the region also perform strongly in terms of the presence of innovative firms: for example, between 2016 and 2018 the proportion of firms that were innovation active matched or exceeded the UK average in all but four of the Midlands Engine LEPs[11].

Evidence from the British Business Bank Finance Survey in 2018 (i.e. when MEIF was launched) indicated that businesses in the Midlands had considerably lower awareness of equity-based finance or VC providers compared to their London-based counterparts[12]. Also, the BVA BDRC SME Finance Monitor identified that only around one in three SMEs in the Midlands were 'happy to use finance to grow' in 2017/18 (which was slightly below the UK average at the time)[13]. Other reports indicate that demand for and growth in the use of equity finance by businesses across the Midlands has been significantly lower than other parts of the country such as London and the South East. From 2020 to 2021, every region in England saw an increase in the value of equity finance deals, apart from the West Midlands which saw a 12% decrease[14]. A key explanation has been the Midlands having a relatively underdeveloped private sector finance landscape, due to limited networks of finance advisors and providers. This has led to firms having lower awareness of, and demand for equity finance relative to other sources (e.g., debt finance and central and local government grants). Issues around access and demand for finance are also exacerbated for small and micro-businesses in the region who have limited asset bases or track records[15]. The BVA BDRC SME Finance Monitor also found that only one-quarter of SMEs in the Midlands have a formal business plan to underpin growth plans (compared to nearly one-third nationally).

[8] The region refers to the ten Local Enterprise Partnerships (LEPs) in the West, East and South East Midlands.
[9] ONS Business Demography (2020): Active Enterprises
[10] High growth refers to firms with at least 10 employees in 2017, that had an average growth in employment of greater than 20% per year between 2017 and 2020. Rates are based on the number of active enterprises with at least 10 employees. Source: ONS Business Demography.
[11] BEIS analysis of innovation activities by UK businesses, from UK innovation survey (UKIS). Innovation active is when a business engages in any of the following activities: a. The introduction of a new or significantly improved product (good or service) or process; b. Engagement in innovation projects not yet complete, scaled back, or abandoned; or c. New and significantly improved forms of organisation, business structures or practices, and marketing concepts or strategies. The proportion of innovation active firms was below the UK average in South East Midlands, Black Country, Greater Birmingham and Solihull, and Lincolnshire.
[12] British Business Bank (2020) Spotlight: The Midlands Engine Investment Fund
[13] BDRC (2018): SME Finance Monitor, 2017 Annual Report
[14] British Business Bank (2022): Small Business Equity Tracker 2022
[15] British Business Bank (2017) Spotlight: The Midlands Engine Investment Fund

Overall, this evidence provides useful insight into the context in which MEIF has operated and supports the rationale for intervention, as discussed above. It suggests that there is as strong potential for continued growth in the MEIF business base, particularly in high growth and innovation active firms. However, challenges are faced on the demand-side of finance, linked to limited long-term business planning, and unbalanced perspectives within the region on the use of finance for growth. Lower demand for finance has also been linked to supply-side issues of the region having an underdeveloped private finance ecosystem, leading to firms having relatively limited awareness of equity investment options. This has been compounded by nation-wide trends of low levels of SME confidence, falling business investment and recessionary periods due to Covid-19 (and Brexit), as reported in the British Business Bank's Small Business Finance Markets 2020/21.

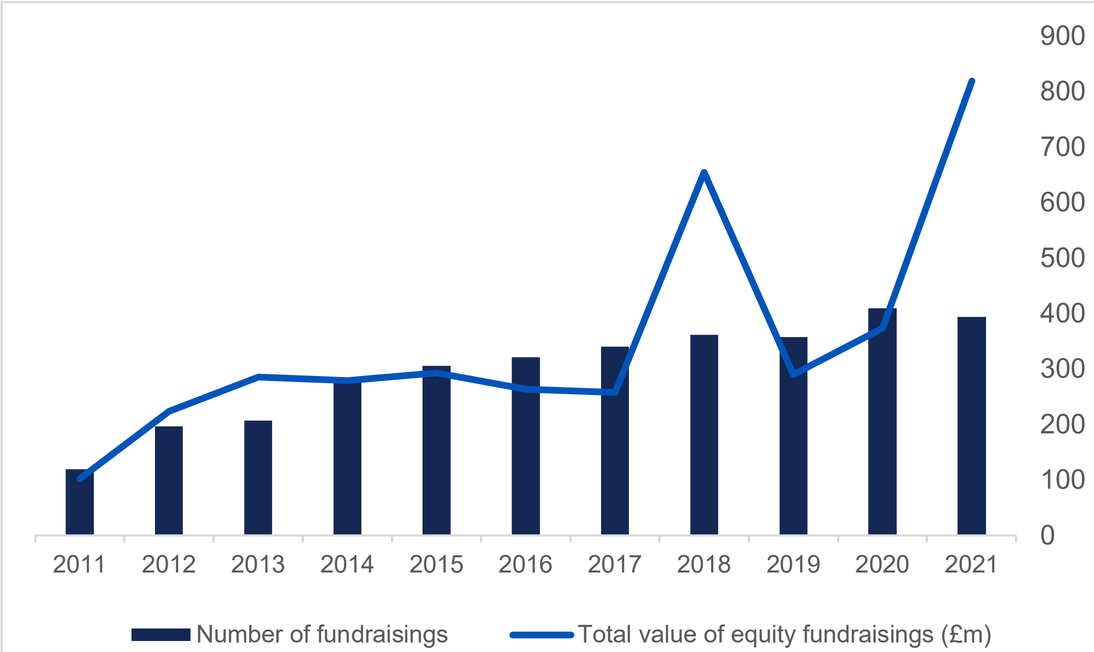
Supply side indicators: the finance landscape in the Midlands vis-à-vis the UK as a whole

In terms of equity, the Midlands was home to only 6% of the UK's equity investors (2011 – Q2 2021) and 6% of the UK's angel investors (2019)[16]. As noted in the British Business Bank's 'Regions and Nations Tracker: Small Business Finance Markets 2021', the lack of investors in the Midlands matters when the majority of investors have an office within two hours travel time of the company they are backing.

Data from Beauhurst shows that SMEs in the Midlands secured just under £2.4bn in equity finance between 2017 and 2021, which was only 5% of the UK total over the same time period[17]. The Midlands share of all equity investment in the UK fluctuated in the six years prior to MEIF, reaching a ten-year peak of 15% in 2013, and then declining to 4% in 2017. Following the launch of MEIF, the region's share of UK equity investment has followed a similar trend, initially increasing to 8% (2018), before decreasing and remaining relatively static over the following years (c.4-5%). That said, Figure 2.1 shows that since MEIF has launched, there has been an overall positive trend in the value and number of equity fundraisings secured by SMEs in the region, with the total value of equity fundraisings peaking in 2018 and 2021 (and so the Midlands has generally matched national trends). Since 2017, MEIF PoC and equity finance deals made the 2nd and 6th highest number of fundraisings in the region respectively, and deals made through MEIF accounted for approximately 30% of all deals completed in the region.

[16] British Business Bank (2021) Regions and Nations Tracker: Small Business Finance Markets 2021
[17] The Beauhurst database tracks all firms that have an equity investment. Data includes all announced and unannounced deals.

Figure 2.1: Number and value of equity deals secured by SMEs in the Midlands (2011-2021)



Source: SQW analysis of Beauhurst data. Announced and unannounced deals

Detailed data on micro and larger scale debt finance is more limited. Evidence from UK Finance on the number of new SME loans and overdrafts approved in 2020 suggest the Midlands secured 13% of the UK total[18].

The Levelling Up White Paper reiterated the disproportionate challenges faced by SMEs outside of the Greater South East in accessing financial capital, and the implications of this for private sector growth and productivity, jobs and living standards more broadly.

The impact of the Covid-19 pandemic on the UK's finance landscape

The Covid-19 pandemic has also had a significant impact on the UK's finance landscape over the last two years, which is important to bear in mind when considering how MEIF has supported businesses and performed to date. Published evidence shows how, as the pandemic started, some banks tightened lending conditions on new borrowers across all sectors, and private fundraising markets were challenging UK (with private debt deal numbers declining significantly, particularly for smaller businesses) and equity investors moving towards smaller size deals at the seed stage but larger size deals at later stages[19].

UK Government introduced a suite of interventions to support businesses throughout the period of disruption and profound economic challenge caused by the Covid-19 pandemic. Key debt interventions included Bounce Back Loan Scheme (BBLS) and the Coronavirus Business Interruption Loan Scheme (CBILS), which were designed to support the majority of 'mainstream' SMEs and small businesses. The Future Fund also provided equity finance, targeted specifically at high-growth business unable to secure equity finance to support their ambitious growth plans. In April 2021, BBLS and CBILS were replaced by

[18] British Business Bank (2021) Regions and Nations Tracker: Small Business Finance Markets 2021
[19] Source: British Business Bank (2021) Small Business Finance Markets Report 2021

the Recovery Loan Scheme, which was designed to support the continued recovery and growth of businesses through Government-backed (80%) loans.

There was some overlap in the parameters of MEIF and Covid-19 emergency funding. For example, BBLS also offered loans up to £50k, which overlapped with the lower range of MEIF's small business loans (£25-150k). CBILS provided larger loans of £50k-£5m to SMEs compared to loans of £100k-£1.5m from MEIF. In practice, the funds were positioned as being complementary to MEIF, with CBILS/BBLS, and Future Fund co-invested alongside some MEIF equity deals. Covid-19 emergency funding was also delivered by some of MEIF's Fund Managers. This was corroborated through the consultations, where MEIF was perceived to align well with Covid-19 funding. More broadly, MEIF was generally seen as complementary to other (non-Covid) support available, but two external stakeholders felt that the programme could better align with grant funding (notably early-stage grants) and other the Bank products in the region.

3. Assessment of inputs and activities

This Section presents an analysis of MEIF investments and outputs (compared to targets), and the characteristics supported, drawing on an analysis the Bank's monitoring data. We also provide feedback on delivery processes to date, informed by qualitative evidence from the consultations and findings from the beneficiary survey.

Inputs

Financial expenditure

A total of £272.6m has now been committed to the MEIF Fund Managers. By the end of March 2022, the MEIF had received 8,323 enquiries. Of these:

- 1,791 (22% of enquiries) reached application stage
- 759 investments were made (42% of applications)

The total value of investments was £168.9m by March 2022. Of this, 49% was debt finance, 37% was equity, and 13% was small business loans. Investment was slightly behind the cumulative deployment plan of £179.5m by the end of March 2022 (i.e., 6% below target[20]). This is explained entirely by the larger debt funds, as we explain further below.

Table 3.1: Investments and value to end of March 2022

	Number of investments to date	Total investment value (£m)
Total, of which:	759	168.9
…equity	189	64.3
…debt	232	82.0
…small business loans	338	22.6

Source: analysis of monitoring data provided to SQW by the Bank

Over the Fund's lifetime, **deployment has risen steadily and in line with expectations on aggregate** (until the slight under-performance in the most recent quarter). However, the Bank's monitoring data shows how the pattern of deployment has varied across the different types of finance over this period[21]:

- Deployment of PoC funding has exceeded expectations from the outset and remains ahead of target (113% by March 2022)
- Deployment of both equity funds was in line with targets by March 2022 (100% and 101% in the East/South East Midlands and West Midlands respectively). Prior to this, deployment of equity has

[20] All targets sourced from the MEIF Quarterly Report in March 2022

[21] Each area (and the associated Fund Manager covering the respective geography) has a different contracted target "plan" for the investment value and number of SMEs supported each quarter and for the Fund's lifetime. The targets depend on the size of the Fund and the LEP's contribution

been consistently strong and well ahead of target in the East/South East Midlands. In the West Midlands, deployment has tracked and, at times, exceeded expectations.

- Deployment of small business loans has been in line with expectations, and exceeded targets during the pandemic. By March 2022, deployment was 105% of target in both the East/South East and West Midlands.
- The picture for debt is more variable. Prior to the pandemic, deployment of the initial debt fund was substantially below target in both the West and East/South East Midlands. In the East/South East Midlands, the performance gap continued to widen through 2020 but has since narrowed (to 94% of target by March 2022). In the West Midlands, the performance gap had closed by the end of 2019 and deployment slightly exceeded targets during 2020/early 2021 but has dipped below target since mid-2021 (to 90% of target by March 2022). An additional region-wide debt fund was introduced in January 2020. Deployment of this fund has tracked below plan throughout (66% of target by March 2022).

According to qualitative evidence, the impact of Covid-19 on demand has varied. Some loan Fund Managers were "*overwhelmed*" by enquiries especially at the start of the pandemic and/or found that their accreditation to deliver schemes such as CBILS (which was used alongside MEIF) helped to sustain demand for MEIF. Other loan Fund Managers argued that demand dropped as SMEs were delaying investment decisions or opting for Covid-19 emergency funding instead which "*decimated*" their market. For equity and PoC funds, consultation evidence corroborates the monitoring data above, with demand less affected by Covid-19 overall. That said, consultees noted how lower appetite from other equity funders and businesses angels, alongside the impacts of the pandemic, has driven more follow-on rounds and larger investment levels.

Looking forward, Fund Managers and stakeholders consulted were consistent in their view that future demand for finance is difficult to predict given the current political and macro-economic challenges, and the extent to which these factors will impact SME growth and investment decisions. Whilst the liquidity of firms is perceived to be strong in general (largely due to the Covid-19 emergency funding), there is significant uncertainty over how long this will persist and how quickly firms will recover from the pandemic. Consultees also expressed uncertainty over the impact of the end of the Recovery Loan Scheme (RLS) on finance markets and expect a period of readjustment. Despite the uncertainty, **most consultees expect demand for all MEIF funds to continue, especially in terms of equity**. This is in part due to the banks retreating from the market, as well as increasing demand for "*hand holding lending*" and case-by-case investment decisions (rather than decisions based on algorithms) offered by MEIF. Demand for equity is expected to be particularly strong – and may be influenced by the increasing number of highly debt-geared firms (post-Covid-19 funding) looking forward.

Investments have been made across each of the 10 LEP areas involved in MEIF, as illustrated below. Broadly, the distribution of applications and investments across the LEPs broadly reflects the share of ERDF eligible businesses. The main exception is SEMLEP which has an estimated 21% of ERDF eligible businesses but had received 11% of investments / loans by end of March 2022. Across all LEP areas, the value of MEIF investment exceeds their original LEP ESIF contribution by some margin. Areas performing particularly well on this measure include Coventry and Warwickshire, Greater Lincolnshire, and Leicester and Leicestershire. **Across the programme as a whole, MEIF investment is nearly double the original ESIF contribution from LEPs.**

Table 3.2: Investments and value to end of March 2022

Fund	Fund Manager	Geographical coverage	No. of loans/ investments	Actual amount loaned/ invested	Target (% of target to date)
Small Business Loans	BCRS Business Loans	West Midlands	214	£12.8m	£12.2m (▲105%)
Small Business Loans	Enterprise Loans East Midlands	East & South-East Midlands	124	£9.8m	£9.4m (▲105%)
Debt	Maven	West Midlands	88	£36.2m	£40.4m (▼90%)
Debt	Maven	East & South-East Midlands	87	£30.2m	£32.3m (▼94%)
Debt	FSE Group	Midlands wide	57	£15.5m	£23.4m (▼66%)
Equity	Midven	West Midlands	64	£23.2m	£22.9m (▲101%)
Equity	Foresight Group	East & South-East Midlands	55	£23.0m	£22.9m (▶100%)
Proof of Concept	Mercia	Midlands wide	70	£18.1m	£16.0m (▲113%)
Total			**759**	**£168.9m**	**£179.5m (▼94%)**

Source: analysis of monitoring data provided to SQW by the Bank

Analysis of monitoring data also shows that the programme has invested across a range of rural and urban areas (see below). Whilst the majority of investment has been in SMEs based in urban locations (65%), a quarter of investments have been in SMEs based in largely/mainly rural districts, and a further 10% has been in SMEs located in districts with urban areas with significant rural typography (including market towns). That said, the proportion of investments into 'largely rural areas' is substantially under-represented compared to the share of businesses in these areas.

Table 3.3: MEIF investments to end of March 2022, by rural and urban districts and compared to the general business population

	MEIF investments	MEIF investments	Business population	Business population
Defra Local Authority Rural Urban Classification	Number of awards	%	Number of enterprises	%
Largely Rural (rural including hub towns 50-79%)	117	15%	160,500	27%
Mainly Rural (rural including hub towns >=80%)	75	10%	52,735	9%
Urban with Significant Rural (rural including hub towns 26-49%)	74	10%	77,569	13%
Urban with City and Town	226	30%	188,540	31%
Urban with Minor Conurbation	63	8%	26,850	4%
Urban with Major Conurbation	203	27%	96,005	16%
Total	758		602,199	

Source: analysis of monitoring data provided to SQW by the Bank and ONS Business Demography datasets

The Fund had provided finance to **539 SMEs**[22]. These SMEs are characterised below. Of these SMEs, three-quarters had received one MEIF award. A further 18% have received two awards and 7% have received three or more awards; these include firms that have received follow-on investment from MEIF and a very small number who have received investment from more than one Fund Manager.

The number of SMEs supported is about half of the target 1,045 by the end of March 2022. This is explained by the **average investment per SME of £0.31m, which is nearly double the expected value** (£0.17m), the slower progress in deploying the debt funding, and the Covid-related issues outlined above. There are, however, important nuances when the data is split by type of finance:

- **The average size of small business loans is more than double expectations** (at £70-90k vs a target of £30k) according to monitoring data. Consultees also noted that demand for small loans shifted towards the upper limit (£150k) during Covid-19, in part reflecting the overlap with BBLS at the lower end, as noted above. Even though these funds are meeting their deployment targets, a consequence of larger loans is that the number of SMEs supported by small business loan funds is considerably below target (36% of target in the East/South East Midlands and 51% of target in the West Midlands by March 2022). These funds were expected to account for nearly two-thirds of all SMEs supported, and so their under-performance makes a substantial difference to MEIF's overall performance.
- **The average size of PoC awards is also considerably higher than expected** (£570k compared to a plan of £220k). Qualitative feedback suggests that larger PoC investments have been needed to sufficiently de-risk propositions and progress firms to a point at which they can secure follow-on investment. It has meant, however, the number of SMEs supported is less than half of the target.

[22] Some SMEs have received more than one investment

- **The average size of equity deals has been broadly in line with expectations**, at £750k-£880k (vs a plan of just over £800k).
- **For debt, the picture is more mixed:** the average loan size per SME is higher than anticipated in the original debt fund for the West Midlands (£640k compared to a plan of 400k) but broadly in line with plan in the East/South East and Midlands-wide debt funds (note, the target loan size for the Midlands-wide debt fund was lower, at £310k).

Non-financial inputs

In addition to the financial inputs above, **the Fund Managers also provide wider, non-financial support to SMEs.** Consultee feedback suggests the extent and nature of this support varies across the Fund Managers, but there is evidence of Fund Managers providing additional support during Covid-19 to portfolio firms in distress through direct advice (e.g., on debt restructuring, financial management, and market opportunities), repayment holidays, information on accessing Covid-19 emergency support, and providing additional investments. The benefits of this support are discussed in more detail below.

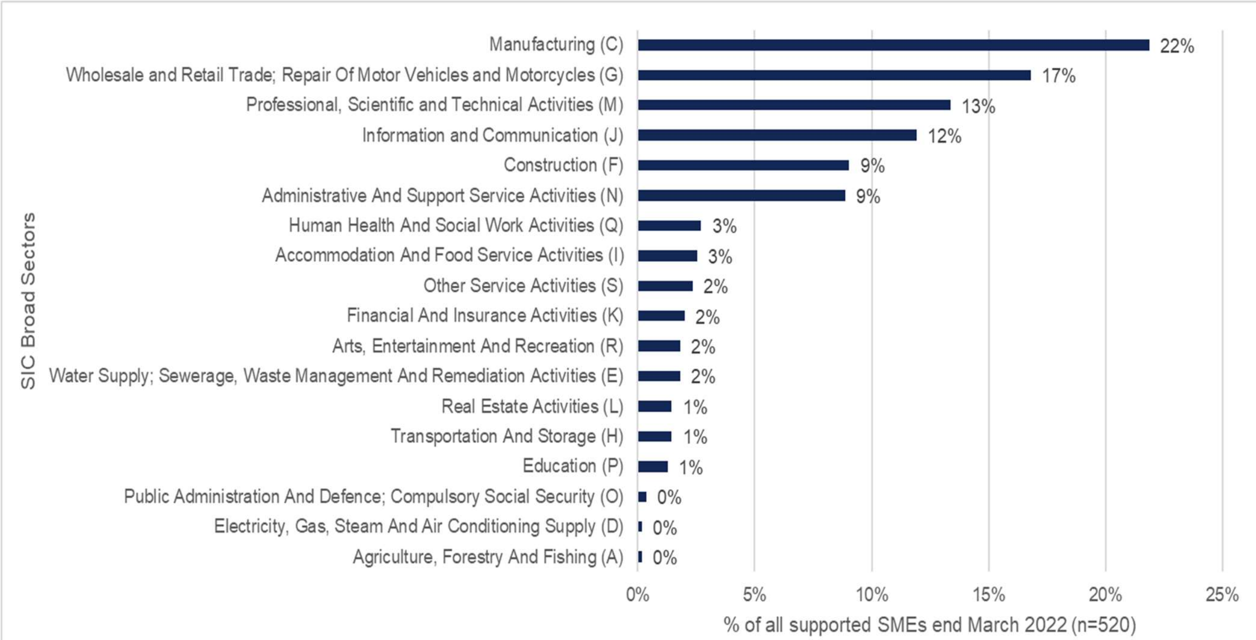
The Bank's two UK Network members have also continued to promote awareness of MEIF across the region. This has included attendance at various events and webinars with stakeholders and finance providers/intermediaries, as well as engaging in access to finance and investment readiness workshops. The latest Quarterly report noted that recent activities have focused on harder-to-reach places and local authority areas with fewer MEIF deals to date. In addition, the Bank maintains ongoing communications via monthly e-newsletters, blogs and social media, which have focused on key agendas such as levelling up and transitioning to a low carbon economy. The Fund Managers have also continued their own awareness raising activities, for example through presentations at angel groups and involvement in trade associations and technology networks.

Characterising firms supported

Based on the Standard Industrial Classifications (SIC) provided in monitoring data, the top five sectors supported by MEIF to date are: **manufacturing (22% of SMEs), wholesale and retail trade (17%), professional, scientific and technical activities (13%), information and communication (12%), and construction / administrative and support service activities (each 9%).** These sectors are prevalent (but differ) across the different types of finance, but there are several key distinctions to note:

- The proportion of SMEs that are in the manufacturing sector is particularly high for the debt funds (for example, 30% for the Midlands-wide debt fund).
- The share of SMEs that are in the information and communication sector is higher for the equity and PoC (for example, 39% and 24% respectively for the PoC and East/South East Midlands equity funds).
- The share of SMEs in the professional, scientific and technical activities sectors is also higher for equity (for example, 24% of East/South East Midlands equity fund).

Figure 3.1: SIC Classification of SMEs in receipt of MEIF investments/loans



Source: SQW analysis of MEIF monitoring data provided to SQW by the Bank
Note: n=520 as data on sector was not available for 19 investments/loans. Includes 27 SMEs which had more than broad sector listed.

Gender and ethnicity

The business survey asked, “thinking about the senior management team of your business, approximately what percentage of your senior management team are women and what percentage are from an ethnic minority background”. The results are shown in Figure 3.2.

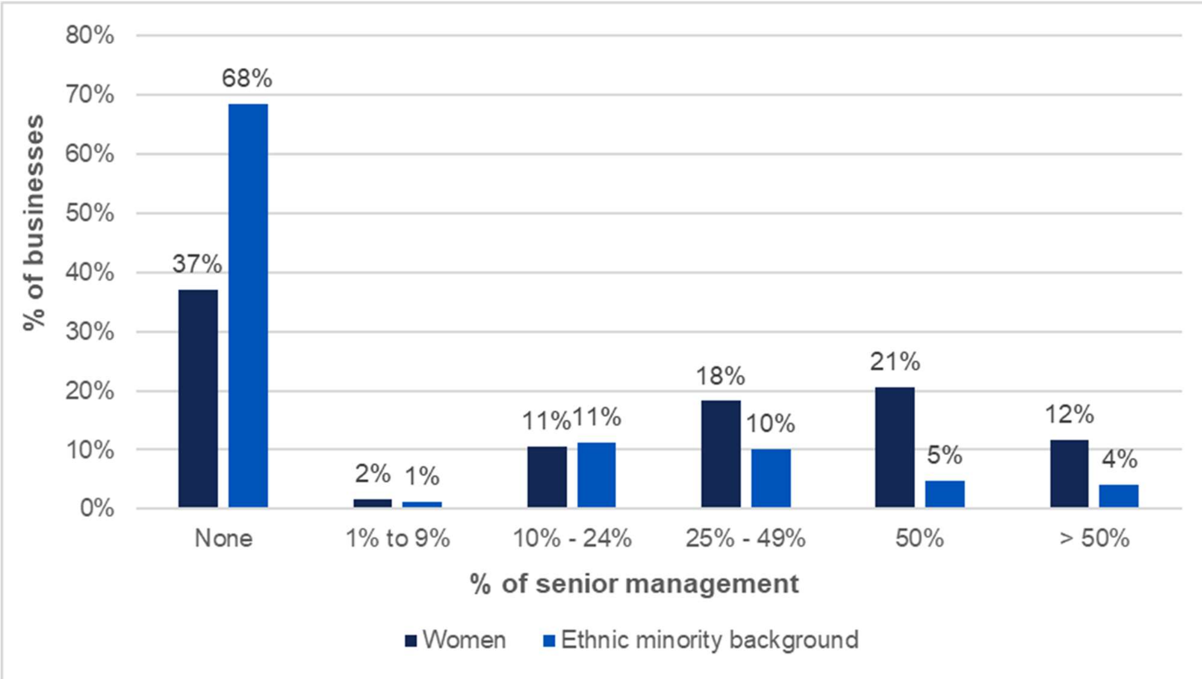
In total, 63% of MEIF funded businesses reported having women in the senior management team. Of these, 12% of management teams had a majority of women, and a further 21% had an equal number of men and women.

The MEIF survey also found that 68% of businesses had senior management teams with no one from an ethnic minority background, whilst 4% of firms had over half of senior management team members from ethnic minority groups.

Although not a direct comparison, the BEIS Longitudinal Small Business Survey (2020) found 5% of SMEs with employees were ethnic minority group led and 16% of SME employers were women-led[23].

[23] Note that the BEIS definition of being a minority ethnic group led business also includes whether the business is controlled by a person from an ethnic minority background and not just the proportion of the management team. There is a similar definition for women led businesses. These results only cover presence within the management team.

Figure 3.2: Percentage of senior management team that are women and percentage from an ethnic minority background – survey results (n=170[24])



Activities

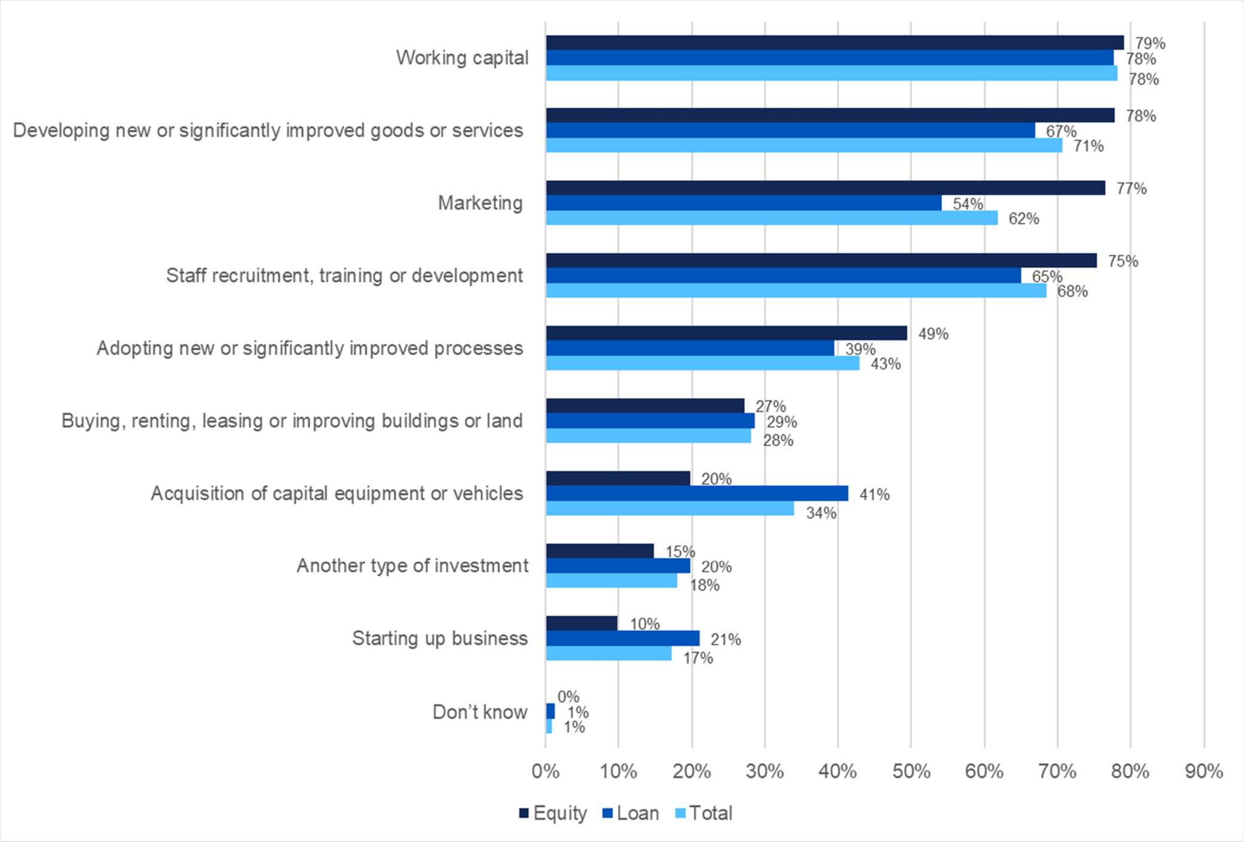
In the survey, firms were asked what they had used their MEIF finance for, which is an important determinant of the types of outcomes the programme is likely to achieve in the Theory of Change. As illustrated below, **over three-quarters of respondents have used MEIF finance for working capital**. This was similar for both equity and debt recipients, and in part reflected the need for working capital to support growth ambitions and ensure resilience during Covid-19. The proportion of finance used for this purpose varies widely: for example, a fifth had spent under 20% of MEIF finance on working capital, whereas a third spent over 80% on it.

A high proportion of SMEs have **invested MEIF finance in developing new or improved goods and services (71%) and staff recruitment and development (68%),** which are well aligned with Government objectives relating to productivity and economic growth. Equity recipients were more likely to use MEIF for recruitment, staff development, marketing, and innovation purposes, although use of MEIF for recruitment/skills and innovation purposes was still strong amongst debt recipients. Debt recipients were more likely than equity recipients to use MEIF to acquire capital equipment or vehicles.

Three quarters of survey respondents had spent 80% or more of their MEIF finance at the time of interview, and three-fifths (60%) had not changed the purpose or timing of their MEIF investment since their original application. Among those respondents who had made changes, most had used the finance for alternative purposes (19%), or delayed or brought forward investment, and most changes were due to Covid-19.

[24] Note N=2 answered don't know in relation the proportion of senior management from ethnic minority groups

Figure 3.3: Use of MEIF finance – survey results (n=238 loans/investments[25])



The case studies illustrate further how MEIF finance has supported businesses. For example:

- Boditrax Technologies has used the MEIF loan to accelerate product development. Changes to the product include developing a foldable and lighter machine, developing their own, more stable operating system, and creating new digital apps. Another key aspect of product development funded by MEIF is adapting the product to meet buyer's needs. For example, work is underway to integrate the product with the NHS' patient record system ('SystmOne'). The product will be launched shortly.
- Ekkosense used their first round of equity MEIF funding for critical software R&D (build on existing hardware sensing devices to tailor to the requirements of larger corporate customers), skills development and recruitment. It also included international marketing, product/service and process development, advancing commercialisation and improved IP. Together, these activities have strengthened the firm's market position internationally (notably in the US and Europe) and led to a number of sizeable new contracts with large international corporate companies. The subsequent MEIF loan provided working capital for stock purchases to develop new products for demonstration with clients (to address a situation where the company had orders and potential scale-up and required a stock of silicon chips). This has enabled further international market development, notably in the US and also Singapore.
- For METCLOUD the MEIF finance has been used for product development, marketing, and staff recruitment and development, and working capital. Marketing has been a key area of activity supported by MEIF, including the development of a new logo, website and collateral for customers,

[25] N=4 refused to provide a response about an award

improved search engine optimisation, and enhanced social media, PR and press activities. Linked to this, MEIF has supported recruitment activities (e.g., the sales team has been built up to generate and manage more business), the purchasing of technology for the firm's internal cloud platform, and staff development, through financing training and accreditation processes.

Output performance

At the end of March 2022**, the Fund was behind plan against the ERDF targets for the number of businesses assisted with finance** (as discussed above) **and new SME assists[26].** On the latter, most outputs were expected to be generated by the small business loans funds. The Bank's latest Quarterly Report notes that these funds have assisted fewer new SMEs than anticipated, in part due to the availability of Start Up Loans and Bounce Back Loans.

However, this has not impacted performance in terms of **jobs created or new to market/company products and services, which were both ahead of plan.** By March 2022, a total of 1,919 new jobs had been recorded in the Bank's monitoring data, slightly ahead of target[27]. Moreover, according to the Bank's latest Quarterly Report, the forecast number of jobs associated with investments made by March 2022 is 3,970 against a lifetime target of 3,833 by 2023 which provides "*plenty of comfort*" during the remainder of the Fund[28]. This said, it was noted that jobs were forecasted at the point of investment and may be downgraded owing to the economic impacts of the Covid-19 pandemic. The monitoring data also shows that 73 new products/services have been taken to market and 89 products/services have been developed that are to the company as a result of MEIF investment. This aligns with survey evidence below, where MEIF has played an important role in supporting innovation, including in SMEs securing debt finance. The Fund's impact on innovation outcomes was perhaps under-estimated at the outset, given how low output targets were set (especially in terms of new products/services taken to market, as illustrated in Table 3.4).

The Fund had also generated **£268m in private sector leverage by March 2022, considerably ahead of the target.** This is equivalent to a private sector leverage ratio of 1:1.6, i.e. for every £1 invested by MEIF, £1.60 has been leveraged in private sector funding. Fund Managers cited a range of sources of private sector funding, including high-net-worth individuals, Enterprise Investment Scheme (EIS) funds, angels, venture capitalists, and Community Development Finance Institutions (CDFIs). MEIF funding has often been used as part of a wider finance package, and in some cases contributed to deals where other financial providers are unable to commit to providing the finance in full themselves. Consultees also highlighted MEIF's role in sharing risk and undertaking due diligence for co-investors. MEIF's role in attracting other finance is explored further below.

Performance in private sector leverage is mixed at a fund level. The West Midlands debt fund accounts for 60% of private sector leverage secured to date, and the PoC fund accounts for a further 20% (and

[26] A new business is one which has been registered at Companies House or HMRC for less than 12 months before assistance is provided; or is a business locating in the England programme area for the first time, to start trading.

[27] Note, this refers to gross jobs created across the programme as a whole, and is based entirely on monitoring data. It therefore different in nature/source/coverage to job figures presented later in this report using survey evidence or econometric analysis.

[28] Forecast jobs are the number of new, paid, full time equivalent (FTE) jobs expected to be created due to the support under the ERDF project at the time of application/investment. Lifetime target sourced from full term MHCLG Contract to December 2023.

both funds exceed their target). However, both equity funds and the two other debt funds are significantly below target. For equity, according to consultees, several factors have contributed to this including private financiers retreating from the market and the expectation that follow-on funding will leverage considerably private funding, but this will only be realised over the longer-term. For debt, qualitative feedback suggests that MEIF deployment has taken priority in the early period of the fund given under-performance against targets, but leverage has since become more a higher priority.

There is scope for improvement in terms of performance against non-financial business support (i.e., 12 hours of business support). It is important to note that if a firm receives 12 hours of business support and then goes on to secure MEIF finance, they cannot be claimed as a non-financial assist output. Qualitative evidence from Fund Managers suggests a range of issues have influenced performance including difficulties in delivering this support via in-person seminars (as planned) during the pandemic as intended, challenges in securing appropriate paperwork from SMEs to certify support provided (particularly when they have not received finance), and non-financial support not being viewed as a high priority compared to deploying finance. As illustrated elsewhere in this report, Fund Managers provide a range of wider 'softer' support, both to beneficiary firms and the wider SME community, that are not captured by the 'non-financial business support' metric. The evidence suggests that this output measure substantially underplays this wider role of Fund Managers.

The focus of investments against ERDF Priority Axes (PA) is also recorded in the monitoring data, which shows the majority of investments are focused on PA3 "*enhancing the competitiveness of SMEs*" (91% of investments). Within PA3, most investments are "*supporting the capacity of SMEs to grow in regional, national and international markets and to engage in innovative processes*" (three quarters of investments).

Table 3.4: Output performance to end of March 2022

Output categories	Achieved at end March 2022	Target (and % of target) at end March 2022
C1: SME assist	726	1,572 (▼46%)
C3: SME assist (financial support)	539	1,045 (▼52%)
C4: SME assist (non-financial)	193	527.2 (▼37%)
C5: new SME assists	76	427.8 (▼18%)
C7: private sector leverage (£m)	£267.55m	£212.4m (▲126%)
C8: new jobs	1,919	1,774 (▲108%)
C28: new products/service to market	73	6.17 (▲1183%)
C29: new products/services to the company	89	62.0 (▲144%)

Source: analysis of data provided to SQW by the Bank / Quarterly report

Financial performance

By the end of March 2022, **£34m of capital had been returned to the programme following the £168.9m investment (i.e., 20%).** Nearly two thirds of returns were from debt finance where, on aggregate, 64% of capital invested had been returned. Returns from the small business loans were naturally smaller in scale, but still represented 36% of small business loan investment to date. As expected, returns from equity and PoC investments were limited at this stage, but some early exits had led to a small return (6% of investment by the end of March 2022).

Across the portfolio**, 38 investments were in arrears, representing £0.46m of investment.** The majority of this (87% by value) related to small business loans, and the remainder was debt finance. The latest quarterly monitoring report noted that the Bank anticipates an increase in provisioning by Fund Managers as the impact of Covid-19 on portfolio companies continues to work through over the coming months.

By March 2022, just over **£4m of MEIF finance had been written-off, which represented 2.4% of investment at that stage.** The rate of write-offs was higher for the equity funds (7% by value, excluding PoC), and lower for debt finance (less than 1%).

Qualitative feedback from Fund Managers indicated that the Funds were performing well against financial targets. In terms of write-offs and arrears, Fund Managers indicated these were both lower than expected. This was explained, in part, by the robust approach to due diligence in the initial decision-making process, additional non-financial support provided to firms by Fund Managers, flexibility of Fund Managers in responding to the challenges of Covid-19 for businesses (e.g., by offering repayment holidays) and the availability of wider Covid-19 emergency funding to support businesses more generally. Looking forward, the majority of Fund Managers and stakeholders expect MEIF to perform well overall. However, some concerns were raised about the impacts of macro-economic challenges (e.g., inflation, supply chain issues, Covid-19 recovery) on businesses and their ability to repay investments.

Process

Strengths and improvements

Below we highlight key strengths of MEIF's implementation and aspects of delivery that have improved since our early assessment of the Fund, drawing on consultation, survey and case study evidence:

- **Highly experienced and professional Fund Manager teams with local presence:** Fund Managers typically recruit staff from the local financial professional community. This includes banks, accountancy firms and corporate finance, as well as local university graduates in the case of one Fund Manager. Their relevant experience and local knowledge were highlighted as key to success by most Fund Managers, particularly given MEIF's focus on SMEs who are unable to access mainstream finance or do not have a relationship with banks for accountants.
- **Strong local networks and proactive outreach**: Qualitative feedback indicates that Fund Managers are now more visible on the ground, and engaging more extensively with both local stakeholders/intermediaries and the local business base. For example, some Fund Managers are hosting networking events, collaborating with LEP-led investment readiness/business start-up programmes and university young entrepreneur programmes, and engaging with local science parks, innovation and technology centres. The strength of Fund Manager's local networks and representation on the ground have been key to gaining greater local traction across the region. The

role of Fund Managers in facilitating links between introducers/intermediaries, SMEs and wider finance providers (e.g., private equity and banks) and "educating" the local financial/intermediary community is also perceived to be critical to success of the programme. It was acknowledged that this has taken time (hindered in part by staff turnover at Fund Managers, see below) but now relationships are perceived by consultees to be much stronger and more self-sustaining.

- **Improved, collaborative relationships between Fund Managers**: consultees highlighted how Fund Manager relations have strengthened, with evidence of cross referrals (e.g., between small loans and larger debt funds) and collaborative working between the initial and new debt funds.
- **Improved marketing**: the Bank and Fund Managers have worked collaboratively to promote the Fund, and it is now perceived to be much better known in the region. The Bank's marketing, combined with the Fund Managers' own efforts (via social media and press releases, extensive networking and the use of local PR companies), have worked well in raising awareness of the Fund. That said, the beneficiary survey results below suggest there is still room for improvement in marketing the Fund looking forward. There was some concern amongst stakeholder consultees that Fund Managers were shifting their focus towards their existing pipeline as the Fund comes to the end of its deployment period and doing less in terms of awareness raising. Persistence with marketing efforts was seen as key, especially given the need to maintain momentum into MEIF2.
- **Positive feedback on the Bank's management of MEIF**:
  - There was consistently positive feedback on how relationships between the Bank (at a strategic and operational level) and Fund Managers had improved. Fund Managers referred to their "*honest and open*" relationship with the Bank, and the "*proactive*"/ "*helpful*" support, advice and networking links (e.g. to university spin outs, incubators etc) provided by the Bank, and their flexibility/pragmatism when required. That said, one consultee suggested the Bank could do more to encourage Fund Managers to work together further, especially on small debt and equity funds. The Bank's objectives for the fund were perceived to be very clear (on deployment levels) which has steered Fund Manager behaviour and focus.
  - Relationships between the Bank, Fund Managers and LEPs have also improved as a result of MEIF's governance arrangements and day-to-day implementation – as one consultee argued, it has "*matured into a good partnership*".
  - The Bank's regional representatives on the ground were consistently praised by consultees as being very visible, well connected and proactive. They have also played an important role in terms of networking. According to consultees, they have *"opened a lot of doors"* for the Fund Managers, helped to improve the intermediary/advisory community's understanding of the MEIF proposition and encouraging more referrals to MEIF, and helped to generate demand from a wider business base.
  - In terms of monitoring, feedback was consistently positive from consultees involved in programme governance: quarterly reporting was described as "*clear and transparent*", "*open and detailed*" and "*very professional and comprehensive*" and supporting explanation from Fund Managers at meetings is also helpful. Two consultees suggested digitising monitoring reporting processes would improve efficiency/reduce administrative burdens for Fund Managers.

Above and beyond the finance itself, beneficiaries and wider stakeholders gave **positive feedback on the support from Fund Managers**. In the survey, beneficiaries rated the delivery of MEIF highly in terms of communication and ongoing support/advice from Fund Managers throughout the process (see Figure 3-5). Two intermediary/stakeholder consultees had also received positive feedback on Fund

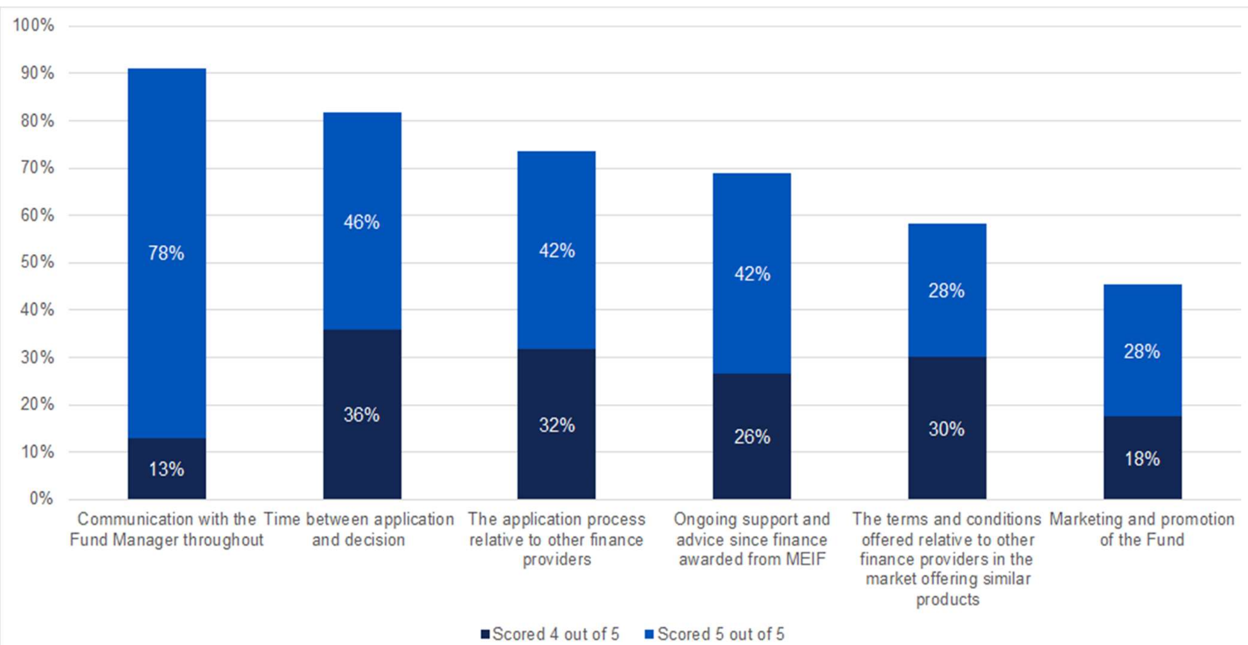
Managers from their own clients who have engaged with MEIF and valued the face-to-face contact and the high-quality support provided. External consultees also commended Fund Managers' responsive and "*sensitive*" approach during the pandemic.

There is also evidence from stakeholder and Fund Manager consultations to show how Fund Managers have helped firms to connect with other investors, contributed to business strategies, helped to develop management teams (for example, through involvement on the firms' Board or supporting recruitment directly using their own networks), introduced SMEs to their contacts (e.g. to suppliers, customers, insurance brokers, trade associations, technology networks, and grant funders), and provided advice regarding exits and follow-on finance. That said, only two-fifths of SMEs surveyed said that Fund Managers act as a board observer or advisor to the business (39%, 66 out of 170). Just over half of those said Fund Managers had made a 'moderate' difference to the management or performance of the business, but relatively few said it had made a 'major' difference and nearly one third said the Fund Manager had made no difference/not been helpful.

The survey results also indicate high levels of satisfaction with the speed of decision-making and the application process amongst beneficiaries. However, three intermediary consultees felt that the application and decision-making process was too slow, based on the experience of SMEs they had referred to the Fund, and suggested it could be streamlined for smaller awards.

Survey respondents scored MEIF's terms and conditions (relative to other finance providers in the market) and marketing notably lower.

Figure 3.4: Beneficiary ratings of MEIF delivery on a scale of one to five, where one is very poor and five is very good – survey findings (n=170)



The added value of Fund Managers is also evident in the case studies. For example:

- Boditrax Technologies noted how well their Fund Manager understands their business model and the product, and the Fund Manager's regular financial reporting requirements have led to the company to adopt more accountable and timely financial management practices.

- For Autins, MEIF has provided an invaluable level of flexibility in its terms and payback structure during Covid-19. This, combined with the wider support from the Fund Manager, has provided a significant level of added value that was very unlikely to have been offered through more traditional routes to finance (e.g., a commercial bank loan). The Fund Manager also sits on the firm's board to provide ongoing financial advice. This has brought about wider benefits for the firm in terms of strengthening management processes and strategic decision making and raising awareness of other sources of finance that could be available in the future.

"The fund has been ideal for us, and the process has been receptive, flexible and highly supportive during a challenging period" [Case study participant]

"I actually think it is a really good fund that has been developed by the British Business Bank, it has been both pivotal for us to transform our business but also for many other businesses that have secured investment. It has been a good experience, big tick to the Bank." [Case study participant]

Challenges in implementation

The Fund has encountered some challenges during implementation, some of which relate to the context in which it has been delivered, whereas others relate to operational issues.

In terms of context, the main substantive issue that has hindered the deployment of MEIF finance has been **low levels of investment readiness and limited/variable demand-side support** across the region. Fund Managers have found applicants were less investment ready than hoped, and engagement with/referrals from Growth Hubs has been very variable and generally very limited. The lack of access to finance specialists within some Growth Hubs has proved a challenge, alongside very limited budgets for investment readiness support locally. Some consultees wanted to see closer partnership working between LEPs and Fund Managers to tackle this issue. There have also been ongoing challenges around SMEs' attitudes towards equity investment in some parts of the region.

A second contextual challenge noted by consultees related to referrals. On the whole, **referrals from external stakeholders/intermediaries has been lower than anticipated**, despite the networking activities outlined above. Consultees highlighted several issues here: firstly, MEIF does not pay broker fees, which hinders referrals from commission-only advisors; secondly, it has taken some time to shift behaviours and further awareness raising is needed amongst intermediaries; and thirdly, in the case of the PoC fund, its focus on later/larger scale deals has made it difficult for some stakeholders to refer earlier stage propositions.

In terms of operational challenges, the following four points were raised by consultees:

- **Staff recruitment, turnover and capacity at Fund Managers:** A number of Fund Managers have found it difficult to recruit and retain staff with appropriate skills and capabilities. One Fund Manager argued that MEIF targets a "*difficult*" market segment to work and required staff who are able to assess a different risk profile and provide wrap-around support to SMEs effectively. Finding the appropriate staff in this context can be a challenge. In addition, some Fund Managers said the

Midlands was a very competitive labour market and struggled to compete with better paid jobs in the City of London. As a consequence, some Fund Managers have found it difficult to maintain consistency, momentum and relationships with stakeholders across the region. Some have also felt their outreach activities have been "*spread thin*" across a large area.

- **Volume of administration requirements:** several Fund Managers commented on the "*excessive*" and "*onerous*" administration, data collection and reporting requirements associated with the Fund, which has absorbed a disproportionate amount of time and resource. There was also some frustration that not all data was used, although we understand this is currently being reviewed by the Bank in anticipation of MEIF2.
- **Deal size restrictions:** A minority of consultees noted challenges associated with the deal size mandate set by MEIF given the risk profile of the MEIF portfolio and context in which it has been delivered, especially for equity deals. Whilst there has been provision for follow-on investment and some flexibility in 'exceptional circumstances', one consultee argued the maximum deal size "*was set too low to deliver sustainable investments*". A case study firm in receipt agreed with this point. The issue was also raised in relation to larger debt, where one consultee argued the £1.5m cap on debt was challenging and should be higher.
- **Larger than anticipated size of PoC deals:** As noted above, the average PoC investment per SME is much higher than expected. This was the source of some frustration amongst consultees. As a result, the Midlands still had a critical gap of early stage/small scale PoC equity funding (especially £50k-£500k angel/seed investment) and stakeholders operating in this space have found it difficult to collaborate with/refer to MEIF.

Points to consider in future policy design

Looking forward, consultees identified the following points for consideration in the design of future interventions:

- **Ongoing gap in earlier stage equity funding:** Linked to the PoC point above, there is still a lack of very early-stage funding in the Midlands for early revenue SMEs, and a real need to foster more collaborative early stage co-funding and syndication. According to consultees, the region (especially the East Midlands) struggles with weak business angel networks which are very small in scope and range. This point was also reinforced by a case study consultee:

> *"External funding requirements for early-stage R&D companies in the region remain persistently difficult. These requirements are still not being met by institutional investors – little has changed in this respect during the last decade." [Case study participant]*

- **Greater clarity on strategic focus and investment strategy**: There was concern amongst a number of consultees that MEIF's investment strategy and forward-looking plans were not well or widely understood. There were two dimensions to this: first, there is scope to clarify/place greater emphasis the Fund's focus and contribution to local specialisms and wider HMG priorities, such as productivity, levelling up and sustainability/low carbon/energy efficiency agendas; and second, the need to clarify the balance between the Fund's additionality/risk and financial return objectives. The Fund would also benefit from more effective outward-facing communication of its investment strategy/focus (with "*smarter messaging*" about how MEIF can help to address key priorities) and ensuring that investment criteria and monitoring metrics are appropriate in light of this.

- **Demand-side capabilities and support:** As noted above, demand-side support for investment readiness has been extremely variable/limited to date and is very uncertain looking forward, especially given that the Shared Prosperity Fund will be deployed at Combined Authority (CA)/Local Authority (LA) level and currently has no clear remit for access to finance. There was a concern amongst consultees that local funding to support the investment readiness will not be available. As the Fund scales-up in MEIF2, the Bank will need to consider if/how this is likely to influence deployment rates. At the same time, MEIF has played an important role in providing non-financial support to SMEs, educating the wider market and facilitating the finance ecosystem. The Bank should consider MEIF's continued role in terms of the demand-side and wider market looking forward and ensure that Fund Manager incentives are appropriate and monitoring metrics capture this activity more effectively.
- **Mechanisms to maintain local stakeholder engagement and buy-in:** LEPs' ERDF contribution and involvement in governance seen as key feature of MEIF. It has encouraged the Fund to have greater reach across the region, with each LEP wanting to see a deployment at least matching their ERDF contribution and monitoring MEIF deployment at a sub-regional level. LEPs having "*skin in the game*" has also helped to ensure LEPs work collaboratively with the Fund to generate demand and facilitate partnership working and ensure that the Fund is responsive to local demand. With the loss of ERDF funding and SPF arrangements outlined above, there was some concern amongst consultees about how these 'key features of success' would be maintained under MEIF2, and whether the geographical reach and relationships developed through MEIF will be sustained. This was particularly important for rural LEPs.
- **Dovetailing MEIF 1 and 2:** finally, stakeholders were keen to see continuity between the current Fund and MEIF2 so that its legacy is built on and momentum is not lost.

4. Finance additionality

Self-reported finance additionality

Finance additionality is the extent to which MEIF is providing finance to businesses which would not have been secured anyway and is a key element of the evidence base to test the rationale for MEIF set out above.

Overall, **the survey results were very positive in terms of finance additionality across the programme as a whole**, as shown in Table 4.1. In interpreting these results, it is important to remember this is self-reported evidence from finance recipients.

- **Deadweight is relatively low**, with 17% of respondents arguing they would have secured finance anyway, in the same timeframe and at the same scale.
- **Over two-fifths of respondents (44%)** said they probably or definitely would not have accessed finance without MEIF, so this is **fully additional.** However, full additionality is notably higher for equity investments compared to debt (52% vs 40% respectively), which reinforces the rationale for MEIF to provide equity finance and fill gaps in this market in the Midlands.
- **A further third (35%) of respondents would not have accessed finance as quickly and/or to the same scale, representing partial additionality.** Accelerating access to finance is important – for most respondents stating this, it would have taken up to six months longer, which is potentially time foregone in trying to secure finance elsewhere rather than focusing on business growth and missed opportunities in the market. For firms where MEIF influenced the scale of investment, most respondents argued that without MEIF, they would only have been able to raise between 25% and 75% of the investment.

Finance additionality has also improved compared to our early assessment of MEIF. Deadweight is now lower (down from 27% to 17%) and full additionality is higher (up from 37% to 44%). This suggests that, even though MEIF has helped to increase the supply of finance in the Midlands, it continues to fill a gap in the market. In terms of partial additionality, MEIF now appears to be playing a greater role in *accelerating* access to finance (up from 16% to 26%).

Table 4.1: Finance additionality – survey results (n=242 MEIF awards)

	Debt	Debt	Equity	Equity	MEIF Total	MEIF Total
	Cases	%	Cases	%	Cases	%
Would have secured finance anyway – in same time and scale	26	17%	14	16%	40	17%
Would have taken longer	41	26%	21	25%	62	26%
Would have been less	5	3%	1	1%	6	2%
Would have taken longer and been less	12	8%	4	5%	16	7%
Probably would not have secured	36	23%	29	34%	65	27%
Definitely would not have secured	27	17%	15	18%	42	17%
Don't know	10	6%	1	1%	11	5%

Total	157		85		242	

These findings were corroborated by the qualitative feedback from consultees. Fund Managers emphasised that they can only consider firms that provide self-certified proof that they have not been able to secure finance from their bank or another source. Similarly, most stakeholders thought the MEIF investments were fully or partially additional, as the funds can only invest in firms that have been turned down by other lenders because they were deemed too risky / early stage.

This was also supported by the case study evidence, for example:

- Boditrax Technologies, an innovative health tech business, lost income during Covid-19 but took the opportunity to undertake product development. The firm was able to secure a £500k MEIF loan. In the absence of MEIF, Boditrax definitely would not have been able to secure the finance elsewhere and argued they needed an investor who took the time to understand the business and its future value. The MEIF Fund Manager took a "*more nuanced*" approach to assessing the firm and was strongly receptive of Boditrax's proposition and recognised the future value of the firm.
- Ekkosense (a global software/AI company) received equity and then debt finance from MEIF and both investments were considered additional. In terms of the equity investment in 2019, the firm argued they would not have bene able to raise debt finance at such an early stage in the company's development. Without MEIF investment, they may eventually have raised the required funding, but this could have taken six months longer, factoring in time for searching, applying, undertaking due diligence and negotiating terms and conditions. The MEIF supported equity funding not only led to much speedier fundraising at the time, but also potentially enabled the firm to secure the full amount of £500k required at that time. By 2021, the company had established a trading track record and sought debt funding. Initial applications to their two company banks were both rejected because the company presented a negative balance sheet (due to their existing equity investment, which was considered as a convertible debt, thus presenting high debt gearing). The Fund Manager was considered to be well placed to understand the company's requirements by the firm in this context and, without MEIF, the firm believed it would not have secured debt finance at all.
- Autins also received debt finance from MEIF. The firm reported that, at the time of accessing the finance, there was a very limited choice of alternative finance providers and investors in the region, and the only other loans that Autins would have been eligible for had less attractive terms and would have been more difficult to secure due to the firm's lack of collateral. Therefore, in the absence of MEIF, the firm probably would not have been able to obtain similar finance elsewhere.

Alternative finance considered

As part of the survey, beneficiaries were also asked whether they considered alternative finance at the time they first applied to MEIF. Again, this provides useful evidence to test the rationale for MEIF, in terms of whether SMEs are able to find alternatives in the market and/or MEIF displaces other finance available.

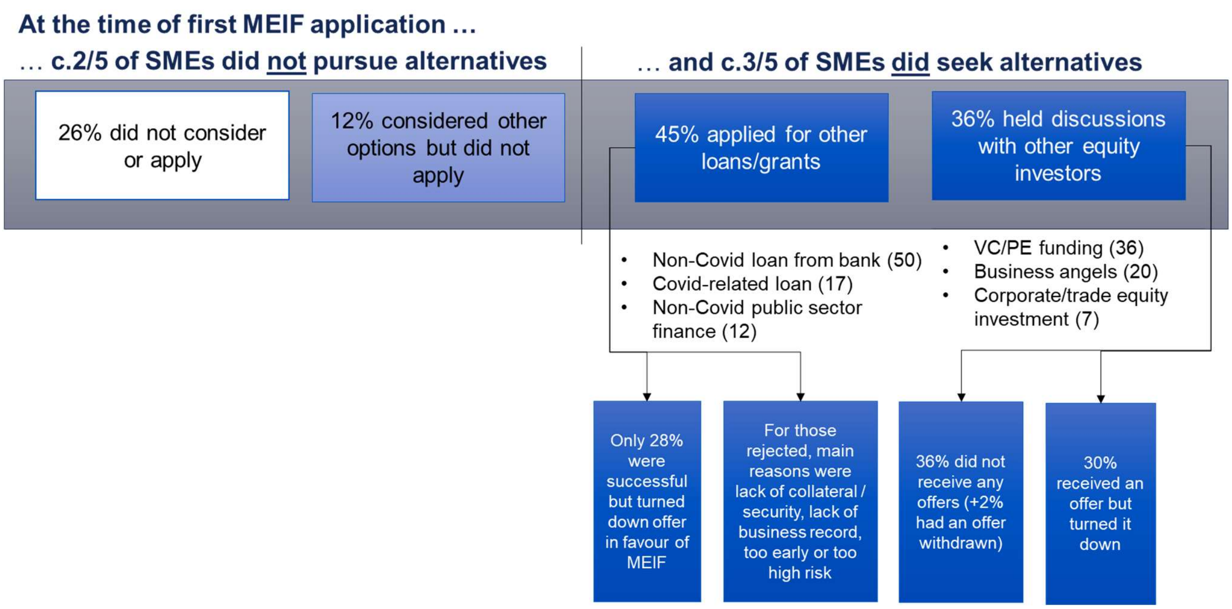
Overall, the survey found **approximately two-fifths of respondents did not attempt to secure finance from elsewhere** (see Figure 3.5). Most of these did not even consider alternatives, illustrating the lack of awareness of external finance in the region and/or the lack of finance options.

Of the remaining **three-fifths did explore alternative sources of finance**, this included loans (including non-Covid related loans from banks), grants and/or equity (notably venture capital/private equity and business angels)[29]. However, they were more likely to be unsuccessful than successful in these endeavours. In the case of loans, the reason for rejection aligned closely with the rationale for MEIF, e.g., the lack of collateral, security, track record or risk. For those who held discussion with other equity investors, over a third did not receive any offers, but 30% received an offer that they would have accepted in the absence of MEIF. Again, the reasons given for having been rejected aligned closely with the rationale for MEIF i.e. risk and insufficient business record.

Overall, **only 15% of respondents (25 out of 170) secured other offers of debt and/or equity finance at the time of their first MEIF application**. This aligns closely with the findings above, where 17% of respondents felt they could get the same finance anyway without MEIF, in the same time and scale.

Feedback from the Fund Managers suggests that most firms seek alternative sources of funding (e.g., banks, venture capitalist, high-net-worth-individuals) prior to MEIF investment, but are faced with a lack of options in the Midlands market.

Table 3.5: Alternative finance considered at the time of first MEIF application – survey findings (n=170)



Source: SQW analysis of survey results. Note: some firms applied for/received debt and equity finance, these options are not mutually exclusive.

Survey respondents were also asked for their top reason for choosing MEIF finance[30]. The most common response was expertise and support from the Fund Manager (29% of respondents), demonstrating the importance of the wrap around support and guidance from local Fund Managers in addition to the finance itself. Other reasons included the speed at which MEIF finance was put in place (15%) and MEIF's more flexible arrangements (13%).

[29] Note, respondents could select multiple sources of alternative finance sought, including loans/grants *and* equity.
[30] N=169

5. Assessment of firm-level outcomes and impacts

In this Section, we present results from the beneficiary survey on the follow-on finance secured, outcomes and impacts generated as a result of MEIF support, and the extent to which these are additional. This is supported by qualitative evidence from the consultations and case studies.

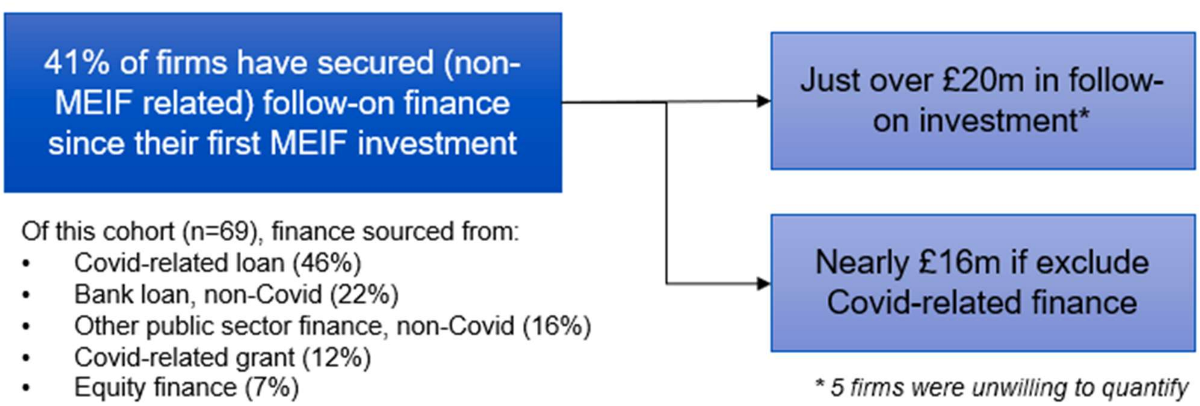
Follow-on finance

In the survey, **two-fifths (41%) of respondents had secured follow-on finance since their first MEIF investment,** excluding any follow-on from MEIF itself. This is particularly encouraging given the slight over-representation of firms supported in later years of MEIF and the limited time they have had to secure this follow-on. The survey results may therefore under-estimate the extent of follow-on finance across the population of beneficiaries as a whole. A similar proportion of debt and equity beneficiaries had secured follow-on finance when surveyed (41% and 39% respectively). Follow-on finance included Covid and non-Covid related loans, other public sector finance (both Covid and non-Covid related), and equity from other sources.

In total, **over £20m in follow-on finance** had been secured across the survey respondents. This is equivalent to approximately £292k on average per firm, but the range was wide ranging, from £3k to £2m. If we exclude Covid-19 related follow-on finance, the total value of follow-on finance across survey respondents is approximately £16m.

Scaling this up on a simple proportionate basis, this would mean that of the 539 businesses funded to date, 41% secured non-MEIF follow-on (220 firms) with a value of around **£65m.**

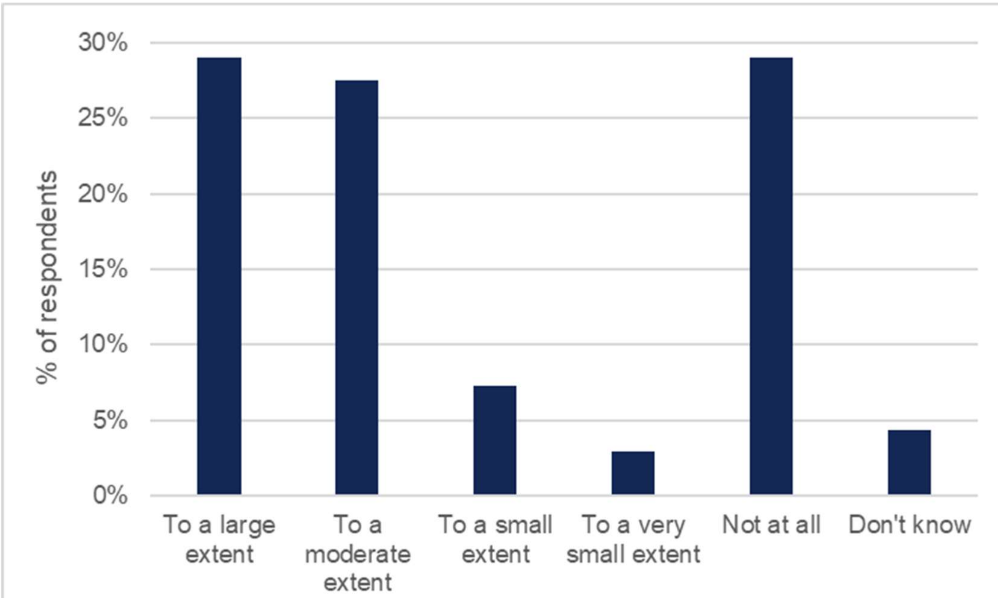
Figure 5.1: Follow-on finance secured – survey findings (n=170)



Survey respondents were also asked the extent to which MEIF finance influenced their ability to secure further external finance. As illustrated below, **over half of respondents believed MEIF had a 'large' or 'moderate' influence on their ability to secure follow-on finance.** This accounted for approximately 70% of the follow-on finance secured (by value, excluding MEIF and Covid-related follow-on finance).

There is substantial variation between equity and debt recipients here, with 82% of equity firms arguing that MEIF had a large or moderate influence, compared to 48% of debt recipients. The latter were much more likely to state, 'not at all', but access to Covid-19 emergency funding has played a role to some extent. If firms who secured Covid-19 funding are excluded, the proportion of both equity and debt recipients who felt that MEIF had a large/moderate influence was higher, at 87% and 59% respectively.

Figure 5.2: Influence of MEIF finance in ability to secure further (non-MEIF) external finance – survey results (n=69)



Qualitative feedback from Fund Managers and stakeholders also demonstrated the role of MEIF in the ability of firms to secure follow-on investment, by providing the initial finance to de-risk future investment and the support to seek external finance. However, it was noted by several Fund Managers that there is a tendency towards investing larger amounts of MEIF funding in order to sufficiently progress firms to become investable propositions for external funders. There was no evidence to suggest the MEIF investment has an adverse effect on a firm's ability to secure follow on finance.

Looking forward, the survey and case study evidence suggests that MEIF will also have a **legacy in terms of access to finance capabilities.** For example:

- 60% of survey respondents said that MEIF had raised their awareness of private sector sources of finance available in the market.
- Four-fifths (81%) said that MEIF has given them greater confidence in their ability to raise finance from private sector sources in future[31].

The case studies illustrate the importance of wider support from the Fund Manager, not just the MEIF finance itself. For Boditrax Technology, the MEIF-backed Fund Manager was a vote of confidence, thereby increasing the firm's confidence in securing external finance if ever needed in the future.

[31] N=170

Firm-level outcomes

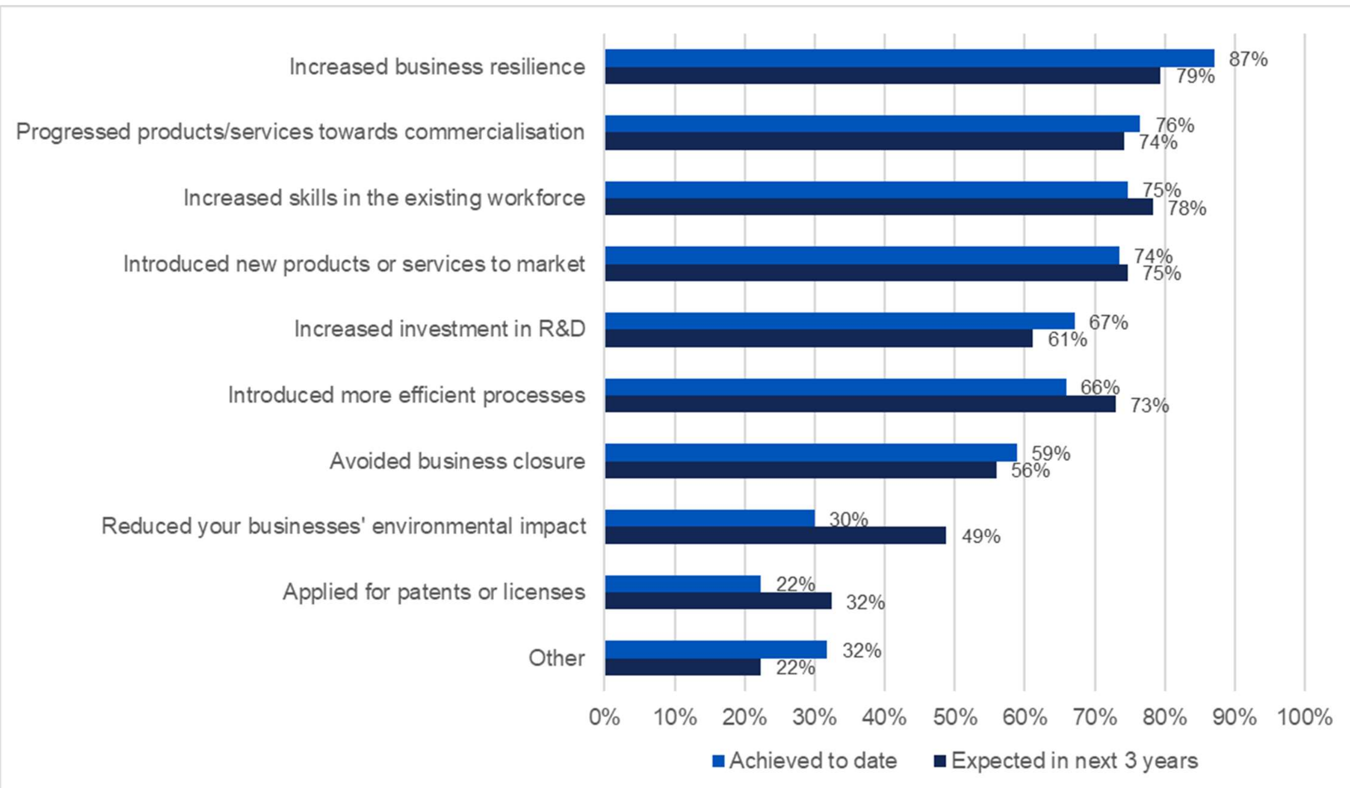
Figure 5.3 shows the outcomes observed to date and expected in the next three years by survey respondents, testing the extent to which MEIF is delivering against intended outcomes set out in the programme's original logic model.

The majority of survey respondents said the **MEIF had made their business more resilient (87%)**. This is particularly important in the context of Covid-19, supporting firms during difficult trading conditions and ensuring that capacity for future growth is not lost.

MEIF has also led to a range of skills, efficiency and innovation outcomes which are crucial to underpin productivity improvements and economic growth in the Midlands. This includes progressing innovations towards commercialisation (76% of respondents), improved skills across the workforce (75%), and the introduction of new products or services to market (74%). According to survey respondents, MEIF has also played a role in avoiding business closure (59%) of firms and reducing businesses' environmental impact (30%). These outcomes are explored in more detail in the paragraphs that follow.

We observe a similar pattern of outcomes expected in the next three years, as illustrated below, with MEIF's role in introducing more efficient processes and reducing environmental impacts becoming more important in future.

Figure 5.3: Outcomes observed to date and expected in the next three years, as a direct result of receiving the finance from MEIF – survey findings (n=170)



Business resilience and survival

Through the case studies, we can see in more detail how MEIF debt funding has played a key role in the survival of innovative and growing SMEs across the Midlands, including those who are suppliers in the region's key sectors. For example, Autins (a manufacturer of components for the automotive industry) argued that, without MEIF finance, it was very likely the firm would have closed by now. It has been instrumental in helping the firm to navigate external shocks whilst continuing to invest in improving its competitiveness. The firm is now well positioned to grow over the long-term when its markets recover.

> *"Without the funding and Maven's ongoing support we wouldn't have survived, it has been critical for us. And despite being in survival mode, a key benefit is that by still being in operation we have strong potential for achieving success into the future" [Case study participant]*

For METCLOUD, MEIF has strengthened the firm's resilience by helping to develop and broaden the senior leadership team beyond the CEO, and through investing in cloud-based technologies, both of which reduces the risk of operational and technical failures.

Skills

According to the survey, on aggregate, **MEIF had led to improved skills for 898 people**. The case studies provide further insight on the skills-related benefits arising from MEIF finance. For example, METCLOUD has been able to develop skills within the workforce, demonstrated by a 50% increase in the training budget. The funding has enabled the firm to fund further training to meet accreditations and certifications to meet client requirements, for examples associated with Microsoft. For Autins, MEIF finance has helped to strengthen their technical capabilities through training and the recruitment of specialist R&D staff.

More efficient processes

Where MEIF had enabled 112 firms in the survey (66% of respondents) to introduce more efficient processes, for the large majority of this cohort, this had **led to time savings, better quality outputs, and/or reduce costs.** The case studies illustrate how MEIF finance has helped them to introduce more efficient processes which are leading to cost savings and productivity improvements. For example:

- METCLOUD has used MEIF finance to acquire new business systems and technologies, such as a customer relationship management platform and a technical support platform. These have allowed the firm to enhance its efficiency by improving system integration and fewer manual interventions, which in turn has improved productivity performance.
- For Autins, the MEIF loan has helped to resource the management team's time in conducting strategic business planning, which has led to the identification of process improvements and annual cost savings to the scale of £0.5m.

Innovation outcomes

In the survey, 114 firms (67% of respondents) have increased their investment in R&D as a result of MEIF finance. Nearly all of this cohort could quantify this (91%), and this amounted to **just over £23m additional investment in R&D (£223k per firm)** by survey respondents on aggregate. The majority of this additional R&D investment was driven by equity recipients.

According to survey respondents, MEIF is being invested by SMEs to **help commercialise new products and services in high value added and advanced technology sectors**. This includes software, hardware, materials technology and cleantech. Of those who have introduced new products or services to market already as a result of MEIF (125, 74% of respondents), two-thirds said, 'at least some [products/services] were new to the market'. Through their adoption, these new products and services are also expected to deliver wider social and environmental benefits more broadly (see Table 5.1). Whilst it is important to recognise these anticipated impacts are self-reported by survey respondents, it does illustrate how MEIF is expected to indirectly contribute to environmental agendas.

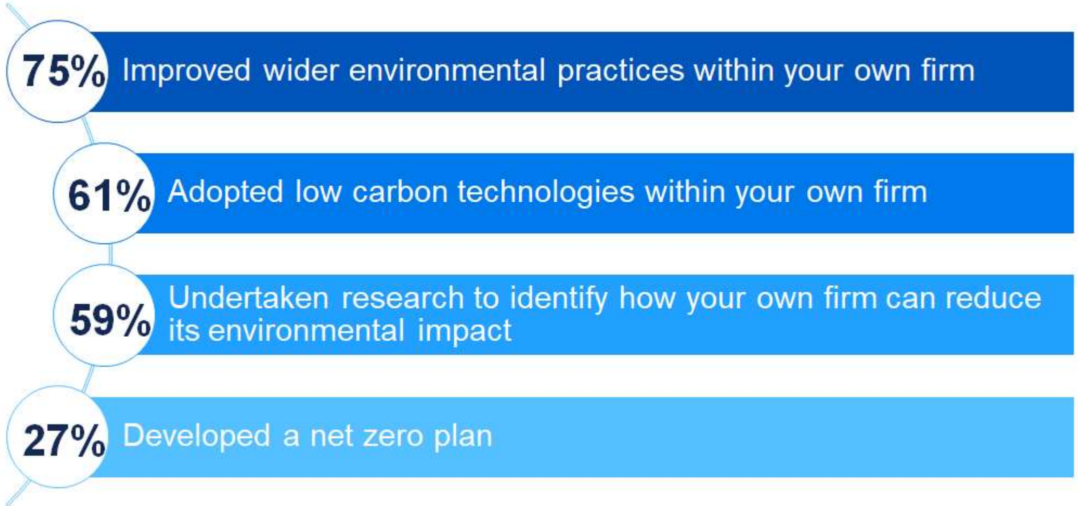
Table 5.1: Social benefits expected from the adoption of new products or services developed as a result of MEIF – survey findings (n=146)

	% of firms who have introduced new products/services
Yes, will reduce carbon emissions	48%
Yes, will have environmental benefits more broadly	58%
Yes, will improve health or delivery of health services	35%

Reduced environmental impact

The survey also explored how firms have reduced their environmental impact through the MEIF investment. Whilst a smaller share of respondents had observed this benefit and so the sample size is small (51 firms), the results show the MEIF enables firms to improve their own environmental practices (75%), adopt low carbon technologies within their firm (61%), and undertake research to identify how their firm can reduce its environmental impact (59%). A small proportion of firms have also developed a net zero plan.

Figure 5.4: Reduced environmental impacts as a result of MEIF investment – survey findings (n=51)



Qualitative evidence from Fund Managers and stakeholders on the use of MEIF to reduce environmental impacts was limited. However, a small number of examples cited where MEIF had been used to support firms' transition to a low carbon economy. For example, one Fund Manager has provided debt finance to firms that are involved in environmentally friendly merchandise and efficient laundry processes. It was noted by several consultees that MEIF could play a greater role in supporting firms themselves to reduce their environmental impact, particularly in the context of rising energy prices.

Wider outcomes

As part of the survey, firms were also asked whether MEIF has influenced the location of their business operations. In response, just over one-third of respondents (36%) argued that **MEIF has encouraged them to stay in the Midlands,** demonstrating MEIF's role in anchoring firms in the region. Moreover, MEIF appears to have played a much greater role in attracting equity recipients to the region (18% of equity respondents said that they previously operated outside the Midlands but were attracted into the region due to MEIF, compared to 2% of debt recipients. Approximately three-fifths of debt recipients said that MEIF has had no influence on the location of their business.

There is also evidence to suggest that MEIF investment and wider support from the Fund Manager has helped to **strengthen business confidence more broadly** (in addition to improved financial literacy and confidence in securing follow-on finance, as noted above). For example, in their case study, METCLOUD commented on the role of MEIF in boosting their confidence during the pandemic:

> *"The investment has enabled us to maybe strengthen all the areas that we have done. If we hadn't had the investment, we would have maybe been reluctant to invest in areas not fully understanding how covid would play out. [MEIF has] allowed us to continue to trade confidently without concern for covid" [Case study respondent]*

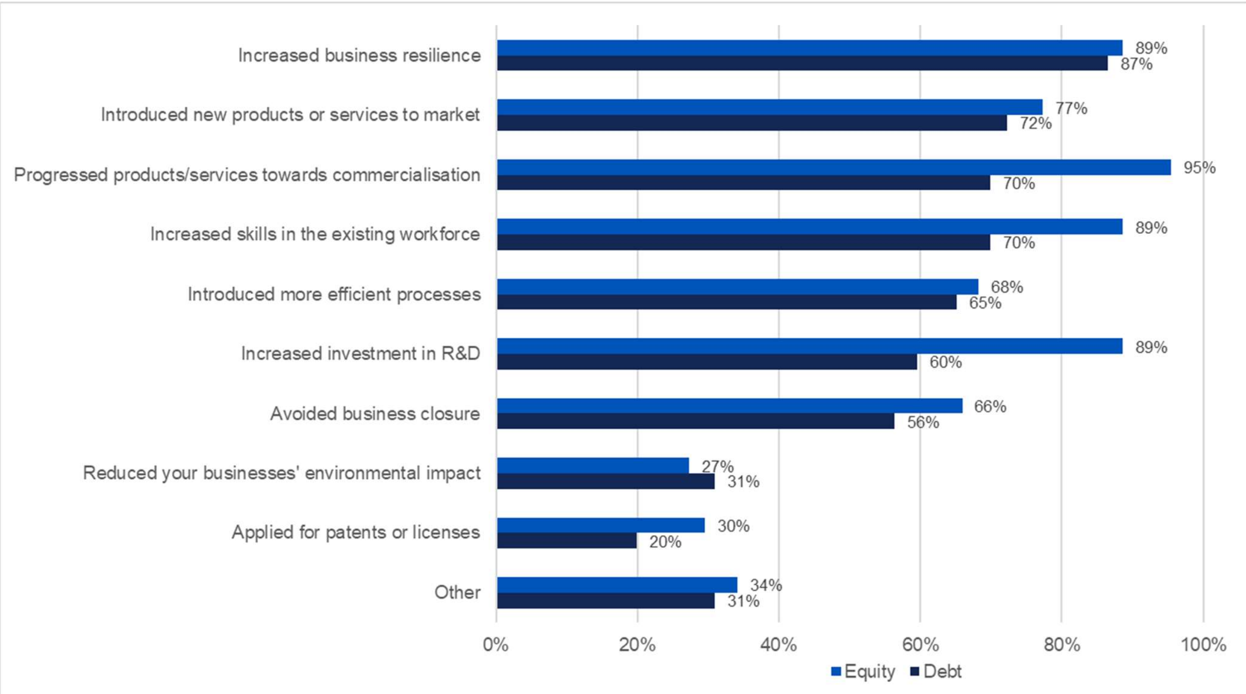
Distribution of outcomes

The survey evidence suggests that the type of finance makes little difference to the extent to which firms have observed improved business resilience, introduced more efficient processes or reduced their environmental impact to date (see Figure 5.4). However, as we might expect, **equity finance is more likely to lead to skills and innovation outcomes** and **also plays a more important role in helping firms to survive**.

More detailed analysis of the survey findings also suggests that:

- Firms with multiple MEIF awards are more likely to have observed outcomes, especially in terms of increased investment in R&D, technology progression, patent / license applications, and the introduction of more efficient processes.
- Firms in receipt of greater sums of MEIF finance are more likely to have observed innovation related outcomes such as investment in R&D, technology progression, and patent applications.

Figure 5.4: Outcomes observed to date cut by equity and debt recipients – survey findings (n=170; 44 equity and 126 debt)

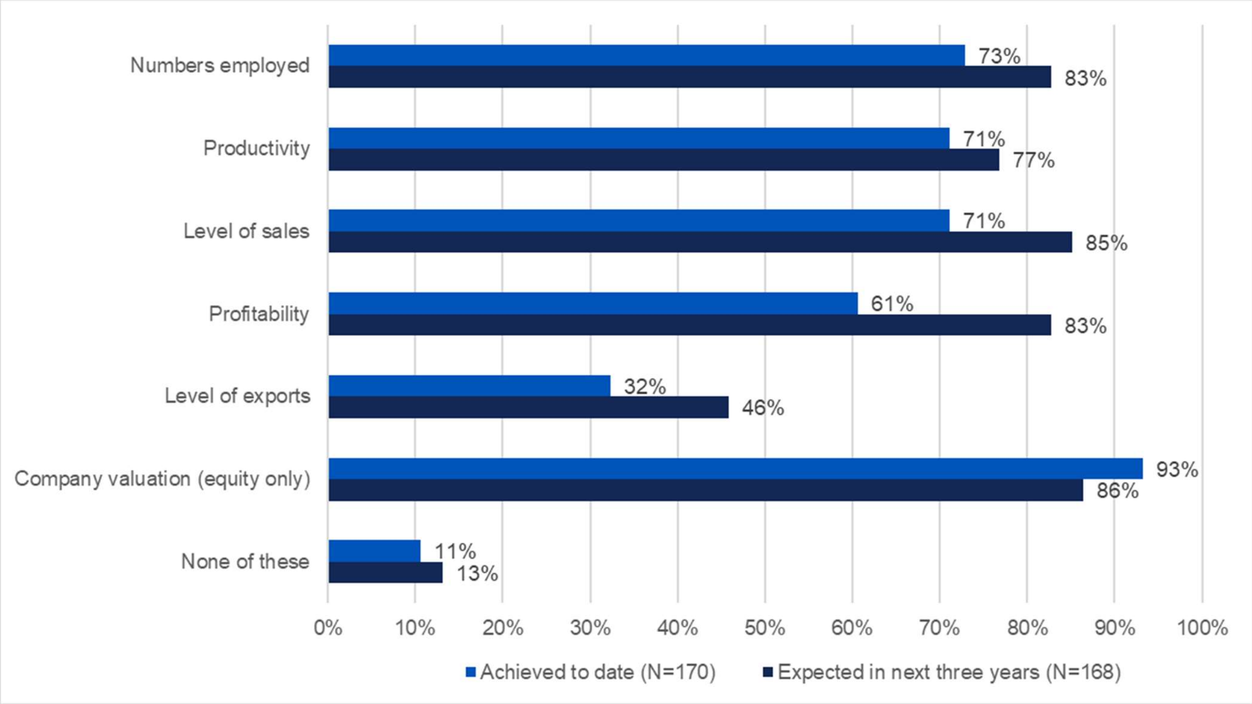


Firm-level impacts

Figure 5.5 presents survey results on the impact of MEIF on firm performance to date and expected in the next three years. Overall, approximately **three-quarters of respondents reported an impact on employment, productivity and sales to date.** However, it is important to note that the econometric analysis found that impacts on productivity were not statistically significant to the comparison group.

Three-fifths of respondents have **also observed an impact on profitability,** and over 80% of firms expect this benefit in the next three years. For equity recipients, the vast majority of firms identified an impact on company valuations to date and in future.

Figure 5.5: Impacts observed to date and expected in the next three years, as a direct result of receiving the finance from MEIF – survey findings (n=170 achieved to date; n=168 expected in next three years)



Number and type of jobs created

Across the survey sample, where firms were able to quantify the increase in employment[32], an **estimated 787 jobs (gross) were created through the MEIF finance**.

The survey demonstrates how **MEIF's equity investment in particular is leading to employment opportunities in senior occupations and high value jobs in the Midlands**: for example, one-third of jobs created through equity investment are in R&D occupations and over half are in the top quartile of average earnings in the UK[33]. **Debt finance is also leading to high value jobs:** the survey also found that 35% of jobs created through loans are in the top quartile of average earnings in the UK and 75% have salaries that are above the national median.

[32] 134 firms

[33] Survey of Personal Incomes, HMRC 2018-19 (published 2021), Percentile points from 1 to 99 for total income before tax (taxpayers only)

Table 5.2: Role and salaries of jobs created through MEIF investment – survey findings (n=134)

	Equity	Debt	Total
Total jobs across survey sample	**273**	**514**	**787**
Role of jobs created			
Directors and Senior Official	**14%**	7%	**10%**
Sales and Customer Service functions	**29%**	17%	**21%**
Research and Development	**33%**	16%	**22%**
Production – administration and logistic functions e.g., Process, Plant and Machine Operatives/Service operatives	12%	**41%**	**31%**
Other	12%	18%	**16%**
Salaries of jobs created			
Salaries or wages of less than £25,000 a year (before tax) – i.e., median nationally	16%	25%	**22%**
Salaries or wages of more than £37,800 a year (before tax) – i.e., upper quartile nationally	**52%**	35%	**41%**

The case studies provide further illustration of the types of jobs created through MEIF investment. For example:

- The MEIF loan has enabled Boditrax Technologies to employ three permanent employees and a temporary team of specialist contractors to build specific components of the new system. The firm was also recruiting an additional permanent software engineer position at the time of writing. Their MEIF experience has also reassured the firm that it can retain its highly skilled employees, which is important given the software/tech engineering labour market is highly competitive at present.
- For Ekkosense, the initial equity investment enabled the firm to progress R&D and IP and develop international markets, and which has enabled the firm to secure sizeable international/larger customer contracts and led to growth in jobs, turnover, and profitability. The firm directly attributes 10 FTE jobs to this MEIF investment, all of which were skilled positions (in sales, R&D, and production) and half commanding salaries above the UK upper quartile. Sales turnover has increased by 150% between 2019 and 2022, with the firm indicating that this would have been between 25-50% lower without MEIF investments. The firm's subsequent MEIF loan has enabled further scale-up (including international activities) at a critical time for the business.

Exports

In the sample, 80 of the 170 businesses exported goods or services outside the UK (47%) which is a very high proportion. For example, ONS data from the Annual Business Survey 2019 (released in 2021) suggests that across all businesses in the UK, 10.2% are exporters[34].

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34 https://www.ons.gov.uk/businessindustryandtrade/business/businessservices/datasets/annualbusinesssurveyimportersandexporters

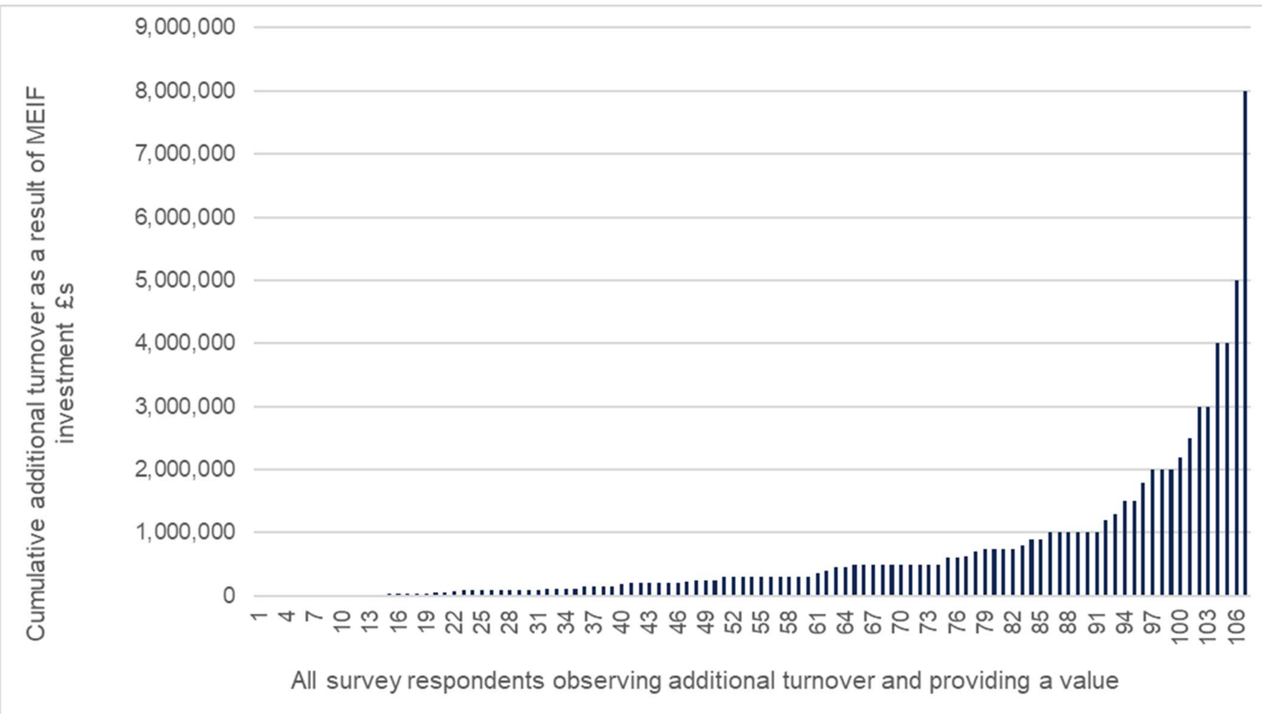
By value, across the sample, **25% of sales were to customers outside the UK** (12% to the EU and 13% elsewhere in the world.

Impact on sales

Overall, 71% of survey respondents (121 businesses) reported that the MEIF finance had an impact on their sales. The total, **cumulative estimate of gross new sales resulting from the finance was £73 million in the sample** (gross, since the funding was received). This is before adjusting the results for additionality. Of these 107 provided an estimated value of the increase.

The distribution of the new sales made varies substantially across the sample. Figure 5.6 shows the cumulative value of sales associated with the MEIF investments, including the cases where there has been no impact yet. This shows how the economic impact estimates depend heavily on a relatively small number of very successful cases. The chart shows that 32 of the SMEs surveyed (19%) have generated 80% of additional sales. This is a typical pattern for business support interventions (i.e., in line with the Pareto Principle of 80:20 - that 20% of the cases generate 80% of the effect).

Figure 5.6: Distribution of additional sales generated as a result of MEIF across sample – survey findings (n=107 firms that quantified additional sales impact)[35]

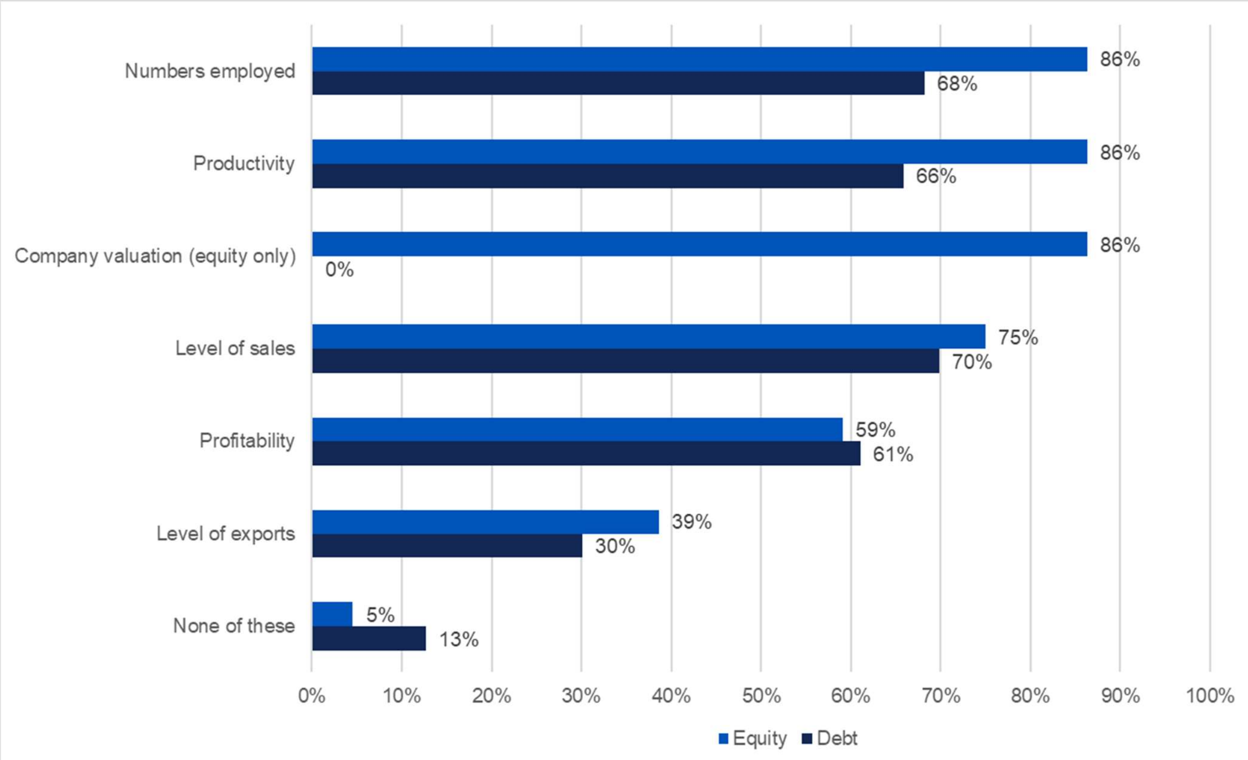


Impacts by type of finance

When the results are split by type of finance, the survey shows that firms in receipt of equity are more likely to observe in an increase in employment, productivity, and exports[36]. MEIF's impact on sales and profitability is similar for both debt and equity.

[35] These figures are cumulative sales since receiving the award
[36] The difference between debt and equity was statistically significant at the 5% level for employment and productivity.

Figure 5.7: Impacts observed to date cut by equity and debt recipients – survey findings (n=170; 44 equity and 126 debt)



Self-reported additionality

The survey explored the extent to which the benefits observed above are additional, i.e., would not have been achieved at all, or not as quickly or to the same scale in the absence of MEIF investment. It is important to emphasise that this is self-reported and retrospective evidence, based on responses from SMEs in our survey and therefore may include some optimism bias. Nonetheless, it is useful to inform our assessment of the counterfactual and, as we discuss in the next Section, as we triangulate evidence from the survey and econometrics the findings on additionality and net impact are broadly similar.

Overall, across the survey sample as a whole, deadweight is low at 9% and **nearly a third (29%) are fully additional and so they would not have been achieved *at all* without MEIF finance** (see Table 5.4).

MEIF also plays an important role in accelerating outcomes, with over two-fifths of respondents (42%) stating that outcomes would have taken longer to achieve without MEIF. Of this cohort, nearly a quarter argued it would have taken more than two years longer to achieve benefits. This suggests that, even though some firms thought they could have secured alternative finance at a later date (as discussed in Section 4), the implications in terms of delaying impacts are much greater.

A further **quarter of respondents stated that outcomes would have been achieved but on a smaller scale**. The vast majority of these respondents argued that without MEIF, outcomes would have been up to 50% smaller in scale (89%).

There are no notable differences in the extent and type of additionality between equity and debt recipients.

Table 5.4: Would the benefits experienced have been achieved without MEIF finance - survey findings (n=169)

	Debt	Debt	Equity	Equity	MEIF total	MEIF total
	Cases	**%**	**Cases**	**%**	**Cases**	**%**
The benefits would have happened anyway, over the same time period and at the same scale, without MEIF	13	10%	2	5%	15	9%
The benefits would have happened anyway, but they would have taken longer to achieve	52	42%	19	43%	71	42%
The benefits would have happened anyway, but on a smaller scale	33	26%	12	27%	45	27%
None of these benefits would have happened	36	29%	13	30%	49	29%
Don't know	1	1%	1	2%	2	1%
Total	**125**		**44**		**169**	

Note: Partial additionality options are not mutually exclusive

6. Assessment of net impacts

Introduction

Assessing the net impact that MEIF funding has had on recipient businesses is an important part of the evaluation. Our approach to quantifying the impact is based primarily on an econometric analysis that compares the performance of MEIF funded businesses with a matched sample of applicants that were not funded because they either withdrew or were declined by the Fund Managers. To provide validation of the results we have also used the responses from the business survey, including their own assessment of additionality.

Datalinking and econometric analysis[37]

The datalinking and econometric analysis was carried out by Belmana, a firm with access to the ONS business registers and which specialises in business data analysis techniques including Propensity Score Matching (PSM) to develop appropriate control groups and quantitative methods, such as the Difference-in-Difference analysis used here.

This is a first analysis, presenting results similar to the analysis undertaken for the Northern Powerhouse Investment Fund. It considers the overall and additional employment effects due to the Fund. It then explores the real turnover changes seen after the MEIF support and the turnover per employee index, a proxy for productivity. Some aspects where analysis differs are:

- **Effects of Covid on datasets used**: the analysis includes data that covers the period of the most severe lockdowns in 2020. We have sought to do this by using 'use of furlough' as a criterion in developing a better matched control group.
- **Differences between Funds**: The scale of MEIF and its mix of loans, small loans and equity is different to the Northern Powerhouse Investment Fund (NPIF), evaluated earlier this year. However, the majority of investments are through loans as was the case with NPIF.

Preparing firm level data and variables

To undertake the impact of MEIF funding, the quantitative analysis looks at the **supported firms in comparison to unsupported businesses**. In an ideal world, the evaluator would like to establish the outcome for a firm with and without the intervention. After an intervention, it is possible to observe outcomes for the firm, but of course, the performance of a firm without that intervention is unknown. Simply using non-users of the intervention has problems because users and non-users are likely to differ in economic performance. Under some circumstances, it is possible to randomise some businesses out of the support to provide a set of unsupported businesses that would approximately look similar to those that were funded. That was not the case with MEIF and our approach to developing the counterfactual is therefore *quasi-experimental*.

[37] ONS Secure Research Service Disclaimer: This work was produced using statistical data from ONS. The use of the ONS statistical data in this work does not imply the endorsement of the ONS in relation to the interpretation or analysis of the statistical data. This work uses research datasets which may not exactly reproduce National Statistics aggregates.

The aim is to prepare a control group whose characteristics and performance closely match those of the treated group prior to the MEIF award. **Propensity score matching (PSM)** addresses this problem by constructing a comparison group of non-users that are like the users along a range of characteristics not directly influenced by the intervention. So, if the firms being supported are generally large, the matching process will seek out firms that are not treated but are of a similar size. Propensity score matching is a quasi-experimental approach used in numerous studies.

The data for this can be accessed through ONS's Secure Research Service's (SRS) Business Structure Database (BSD). This holds data for UK businesses variables, over a number of years. The first step is to prepare details of the funded and unfunded businesses and link this into the BSD data. Not all Companies House numbers are linkable to ONS enterprise references and there is some attrition at this stage. This can be because a company is too small to be on the IDBR (it is not registered for VAT or PAYE is the most common reason), or a recent start-up among the supported businesses.

From the total of 500 (of which 84% were loan funded) businesses supported by MEIF by December 2021[38], 435 were identified and matched into the BSD with baseline data (368 were loans and 68 equity). Of these, however, 98 were funded in the 2021/22 financial year and therefore do not yet have enough data to measure changes. This leaves 337 matched businesses with at least two years of data that can be used for the analysis.

A propensity score is estimated by means of a probit model in which the dependent variable is a dummy equal to 1 if a business is in receipt of support and 0 otherwise. Modelling then matches the treated business' score finding to an untreated business with as close a score as possible (nearest neighbour matching). For consistent estimates of the effects, some assumptions must hold: firstly, after the modelling has developed a counterfactual, there is confidence that the treated and comparators are the same except for the treatment (the conditional independence assumption); and secondly that for the supported businesses, a comparable unsupported business is available (the common support assumption). There are some specific tests for these, and the annex provides evidence about whether the first two are satisfied, such as indicating how businesses appear to be on similar past growth trajectories before support when comparing the treated with the control. A third assumption is that there are no effects of support on the counterfactual businesses (the stable unit treatment value assumption, often shortened to SUTVA). This is a difficult assumption to test formally, and the annex discusses the evidence about this.

For this analysis, we focus on the following four groups:

- **The treated "MEIF funded" businesses;** i.e., beneficiaries of MEIF finance
- **Control Group 1: "Matched unfunded applicants";** MEIF applicants who withdrew from the application process or were rejected by fund managers and are "matched" to MEIF funded businesses on their characteristics. **This includes whether or not a business has received furlough support during the Covid period**
- **Control Group 2: "Matched unfunded applicants";** MEIF applicants who withdrew from the application process or were rejected by fund managers and are "matched" to MEIF funded businesses on their characteristics (but excludes whether or not a business has received furlough support)
- **Unmatched unfunded;** this is a baseline, presenting the pool of withdrawn or declined applications, where businesses have then been tracked to understand the behaviour of businesses that were interested in receiving MEIF funding.

[38] Note, at the time of the econometric analysis, this was the latest data on beneficiaries available from BBB

The research tests the robustness of results, contrasting the different models estimates and checking whether the matching provides comparable businesses varying the matching variables. In addition, the report presents some results where the control is selected from the wider business population and not just those that were unfunded. These are called Control Groups 3 and 4, differing due to the selection model in a similar way to the controls drawn from unfunded businesses.

Using the wider set of businesses provides controls that could be used to understand what happens without MEIF support, but there are advantages to using the unfunded applicants. **The applicants embody many of the unmeasurable characteristics of the MEIF funded businesses (such as interest in accessing funding and ambition)**.

Because this pool includes firms that withdrew from the process and those that were declined, further sensitivity testing was carried out as withdrawing from an agreed support is likely to be based on different business circumstances than an application being declined. This found that whether a firm had withdrawn or was declined, did not materially affect the results. For example, some businesses simply drop out by not following up enquiries or responding to Fund managers requests, so it can be unclear whether they are rejected or withdrew.

Matching for Control Group 1 was from a pool of 743 unfunded businesses. These were stacked, which pools the supported businesses across the years of first support, recasting the annual data in terms of years before and after support. Such lagged and forward variables are also estimated for the unfunded, and, once stacked, results in 1,698 observations based around the applicants[39].

Table 6.1 shows that the profile of the unfunded applicants was already a close match to the MEIF funded businesses[40]. Statistical matching has then further aligned the businesses selecting, on a one-to-one basis, a match for each funded business. The table indicates the matching process leads to more balance between the treated and control on the size measures, as funded businesses were somewhat larger in terms of employment and sales than the pool of unfunded businesses. After matching, the size of the control group is closer to the funded businesses.

[39] Also using data to December 2021, in line with the beneficiary data available at the time of analysis

[40] While management characteristics may also be a determinant of performance, it was not possible to use this as a matched variable, although the possibility of doing this should be investigated for the final evaluation.

Table 6.1: Variables for MEIF funded businesses, the overall unfunded applicant profile and the matched profile (Control Group 1)

	Businesses funded by MEIF	All unfunded, (before matching)	Matched control group I (after matching)
Employment (log)	2.13	1.96	2.13
Real turnover (log)	6.42	6.00	6.53
Emp in year before support (log)	1.95	1.81	2.04
Real Turnover in year before support (log)	6.30	5.97	6.42
Live local units	1.13	1.08	1.11
Patent owner	0%	1%	0%
High Know'ge Intensive Services	14%	23%***	14%
High Manufacturing	0%	2%	0%
Scaleup business	1%	4%***	0%
IUK Project Before	0%	0%	0%
Beauhurst Tracked	33%	40%**	34%
Recorded R&D	9%	10%	9%
Furlough received	62%	52%***	59%
Observations	338	1698	**338**

Source: Belmana analysis of BSD data. Note: The asterisks present the variables that are statistically significantly different from the treated group. Significance levels are 1% (***), 5% (**) and 10% (*). Log transformation of some variables is used to reduce or remove the skewness of our original data.

Impact analysis

Difference in difference (DiD) and multivariate analysis has been used to assess the differences in performance between the MEIF funded businesses and the matched control group, and to test their significance. DiD is used to look at the effect of MEIF funding, controlling for deadweight, either in terms of levels or growth. The latter is generally more robust and is applied to baseline estimates of the performance of the funded businesses. This produces estimates of the additional impacts over-and-above deadweight on employment and turnover, and these results are also used later to provide estimates of value for money.

Employment

Table 6.2 shows the gross employment change seen in the MEIF funded businesses. Measures of employment are headcount between treatment years 2017/18 and 2020/21, employment increased by 1,290 jobs in the years after funding. The table also highlights how the number of businesses that can be tracked in ONS data reduces over time. Across the three cohorts the increase in employment *per business* is 3.8 across the sample (regardless of the time since they received funding).

Table 6.2: Gross Employment in matched MEIF funded businesses

	Date of first MEIF award 2017/18	Date of first MEIF award 2018/19	Date of first MEIF award 2019/20	Date of first MEIF award 2020/21	Date of first MEIF award Total
Number of businesses	**19**	**86**	**114**	**118**	**337**
Year before support (t) (n=435)	213	1,209	2,025	2,341	5,788
Year one (t+1) (n=337)	237	1,491	2,114	2,536	**6,378**
Year two (t+2) (n=219)	260	1,660	2,371		4,291
Year three (t+3) (n=105)	279	1,892			**2,171**
Increase in Employment (t+3-t)	66	683	346	195	1,290

Source: Belmana econometric analysis, covering only businesses that have a complete employment record after support.

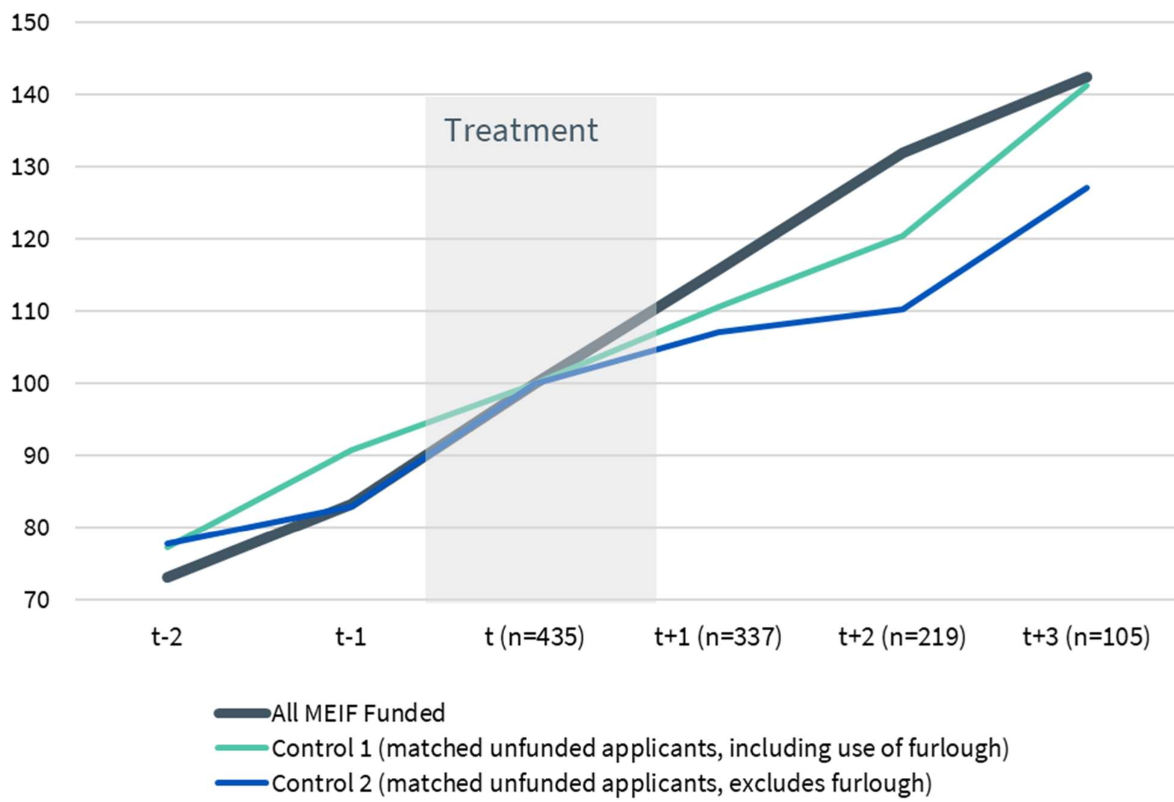
The key question is what proportion of these jobs are additional or can be attributed to the MEIF funding, as some of this employment growth is likely to be seen in businesses even without support. Figure 6.1 shows the employment change for the MEIF funded businesses compared to Control Group 1 (selected from those that withdrew or were declined) and Control Group 2 (selected from those that withdrew or were declined but not taking into account furlough).

The results show that employment in the MEIF funded businesses grew faster over the period, in a cumulative sense, to all comparator sets of businesses. It also shows that employment growth in the control groups was relatively close to the pre-intervention growth of the beneficiary businesses which indicates a good match.

Control Group 1 is a set of businesses matched to the supported businesses drawn from those that were not funded; Control Group 2 is also drawn from these businesses. The two comparators differ in how selection into MEIF is modelled. Both models use size, industry, and indicators of firm innovativeness. A difference is that the first model includes matching on whether a business secured furlough funding.

Employment in the MEIF supported businesses has grown by 43% after three years. Control Group 1 grew by a similar amount after 3 years, although this was significantly lower after 2 years. Control Group 2, selected from the same pool of businesses, but not including whether they received furlough has employment growth of 27% after 3 years, lower than the funded businesses' performance.

Figure 6.1: Employment growth comparing MEIF funded businesses with Control Group 1 (unfunded applicants – match includes use of furlough) and Control Group 2 (unfunded applicants – match excludes use of furlough)



Source: Analysis of BSD linked to the Bank beneficiaries and other datasets

Table 6.3 tests whether the growth rates for the funded and unfunded groups differ statistically and shows the results one, two and three years after support (t+1, t+2 and t+3). The first column shows employment growth among the MEIF funded businesses. The second column shows growth in Control Group 1 and the third shows the difference in difference result and its significance. The final column shows the "additionality" or the proportion of the growth in the beneficiary businesses that can be attributed to the MEIF funding.

The table focuses on additional growth. For example, in year 2, employment growth in the MEIF-funded businesses was 32% and that in the Control Group 20%, and the difference-in-difference is 9.5% which was additional. This estimate of the growth seen in supported businesses but not in comparators is positive, but this was not statistically significant.

The annex presents difference-in-difference estimates for alternative models and Figure 1 indicates that the results for the first two years are statistically significant (at 5%) for other controls, except for in the preferred Control Group 1. Further, across controls, there is no significant effect after three years. One feature of this modelling is that the three-year performance estimate, relying on those supported in 2017/18, has a sample size that is smaller. The results for t+3 are also likely to be affected by Covid when there would be less scope for the funding to generate stronger growth than the control groups.

As well as using the unfunded businesses from which to select comparable businesses, the wider business population can be used (with the same selection model, i.e., one without and the second with furlough variables). The annex indicates this same measure, the difference-in-difference, for businesses selected using the wider business population.

Table 6.3: Difference-in difference results for employment after 1, 2 and 3 years (using Control Group 1)

	MEIF funded (Cumulative)	Control group 1 (matched withdrawn or declined applicants) (cumulative)	Difference-in-Difference[41]	Additionality[42]
1 year after support	15.9%	10.6%	4.7% (1.36)	29.6%
2 years after support	32.0%	20.4%	9.5% (1.60)	29.7%
3 years after support	42.7%	41.4%	0.8% (0.07)	1.9%

Note: Significance levels of difference between MEIF funded and group 1 are indicated 1% (***), 5% (**) and 10% (*); using robust standard errors. Only the DiD statistics require significance level indicators.

Figure 6.1 also indicates the trends in employment growth seen in the years before support. An assumption for PSM is that, prior to the support, the funded businesses are experiencing a similar growth rate to that in the counterfactual. If this not the case, there is a danger that the post-intervention trends reflect pre-existing growth differentials. In the figure, employment indices for both a year before and two years before are presented. The preferred counterfactual is closer to the treated in terms of the growth seen over the two years before support, differing insignificantly.

Turnover

Figure 6.2 shows that the turnover growth of MEIF funded businesses was (significantly) higher than the matched Control Group 1 (applicants that were not funded without controlling for furlough). The growth in real turnover does track that seen in employment, in broad terms. Supported businesses outpace the comparator businesses and the wider unfunded businesses, growing real turnover faster especially in the second year after support. The t+3 results are based on a smaller sample (only cases funded in 2017/18). As for employment, the t+3 results are also likely to be affected by Covid when there would be less scope for the funding to generate stronger growth in comparison with the control groups.

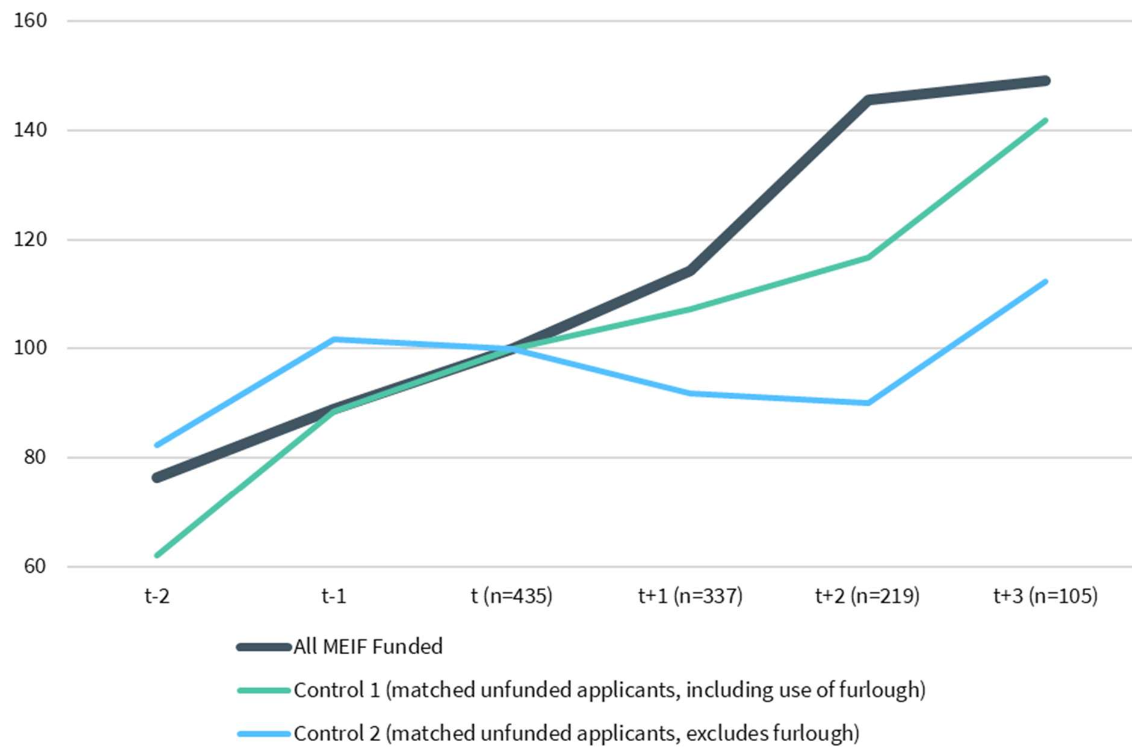
The control group selected without controlling for furlough receipt does differ more both than the preferred counterfactual and the wider set of unfunded businesses. Turnover changes were likely to be more affected by furlough as Covid-related closures and other restrictions would have reduced sales, while the Covid Job Retention Schemes would have allowed businesses to maintain employment. The adequate balancing for this using the fact of a business receiving furlough may contribute to reducing this effect.

There is an even bigger difference between the treated businesses and Control Group 2. This is primarily in year 2, where this Control Group 2 sees a 16.7% fall in real turnover. The fact that Control Group 2 does not select on the basis of businesses securing Covid Job Retention Scheme funding may be an explanation. In this set of comparator businesses there is a high chance that turnover effects of

[41] Difference in difference is calculated as growth in matched unfunded minus growth in funded in logarithms. These have then been exponentialized and, consequently differ from the difference in percentages.
[42] Additionality is calculated as the difference-in-difference divided by the growth in the funded.

furlough will be inadequately controlled for and substantial falls in turnover may reflect businesses being forced to close in the pandemic.

Figure 6.2: Turnover growth comparing MEIF funded businesses with Control Group 1 (unfunded applicants – match includes use of furlough) and Control Group 2 (unfunded applicants – match excludes use of furlough)



Source: Belmana

Table 6.4 shows the turnover growth after one, two and three years. For example, two years after the MEIF award, turnover among the beneficiaries had risen 45.2%. The Control Group 1 estimates indicate that around 24.7% of the growth in funded businesses is not seen in comparable businesses. In other words, 55% of the growth in turnover in the treated businesses is considered to be additional. This result is significant at a 5% level.

The annex has some further modelling results. The difference-in-difference estimate shows a consistently positive effect, ranging from 25% to more than 60%, but the wider span of estimates indicates any estimate is sensitive to the definition of the control group. This again may reflect the higher volatility in sales in the period being analysed. The t+3 results are based on a smaller sample and would only relate to businesses funded in 2017/18. They are also likely to be affected by Covid when there was less scope to generate stronger growth relative to the control groups.

Table 6.4: Difference-in difference results for turnover after one, two and three years (using Control Group 1)

Real turnover is cumulative in years after support	MEIF funded	Control group 1 (matched withdrawn or declined applicants)	Difference-in-Difference	Additional[43]
1 year after support	14.3%	7.3%	6.6% (0.89)	46.2%
2 years after support	45.2%	16.7%	24.7% (2.06**)	54.6%
3 years after support	49.7%	41.8%	5.2% (0.31)	10.5%

Note: Significance levels of difference between MEIF funded and group 1 are indicated at 1% (***), 5% (**) and 10% (*) using robust standard errors. Only the DiD statistics require significance level indicators.

Productivity

A similar analysis is produced to show the impact of MEIF funding on productivity (the change in turnover per employee). The supported businesses maintain a higher rate of productivity growth than the comparator businesses, but the difference is insignificant statistically. The pattern seen in the real turnover changes – especially the steep rise in real turnover in the second year of support – means there is as much as 13.9% productivity change seen in funded businesses not seen in comparators, with lower difference-in-differences in the first and third year. However, the difference-in-difference estimates are generally insignificant. Statistical significance is dependent on the variance of the growth being estimated. As the real turnover per job is the ratio of two variables which themselves have variance, and such ratio calculations are particularly affected by dividing two series, it is possible that measurement issues mean results are imprecise.

Table 6.5: Difference-in difference results for productivity after one, two and three years (using Control Group 1)

	MEIF funded	Control group 1 (matched withdrawn or declined applicants)	Difference-in-Difference[44]
Productivity growth, 1 year after support	-1.3%	-2.1%	1.8%
Productivity growth, 2 years after support	10.3%	-3.5%	13.9%
Productivity growth, 3 years after support	4.7%	0.4%	4.3%

Note: Significance levels of difference between MEIF funded and group 1 are indicated at 1% (***), 5% (**) and 10% (*) using robust standard errors; additionality not calculated as productivity measures a ratio (of real turnover and employment), rather than the level of an outcome (e.g., employment). Only the DiD statistics require significance level indicators.

[43] Additionality is calculated as the difference-in-difference divided by the growth in the funded firms.
[44] Difference in difference is calculated as growth in matched unfunded minus growth in funded in logarithms. These have then been exponentialized and, consequently differences differ from the difference in percentages.

Sensitivity

How do businesses fare in a year affected by Covid lockdowns?

Evidence from the BSD does cover the financial year 2020/21. As noted earlier, the data has been stacked. This means that the sample sizes for growth estimates are larger, especially for the first year after support, but means that estimation has to mix different periods. So, the estimate of year one growth will mix those supported across different cohorts and some would have a first year unaffected by Covid because their support was in 2019/20 or earlier.

To consider the sensitivity of the analysis to this, two approaches have been taken focusing on the first year after support. A first looks at the first-year growth difference between the supported businesses and the control groups, exploring if any part of the growth difference can be explained by the year of support being a Covid affected year. This proves not to be a significant explanator of the difference-in-difference. There is no evidence that the effect of support is different in 2020/21, with the unfunded businesses matched to the funded, showing similar performance. This is the case for both employment and turnover.

Table 6.6 presents some of the underlying dynamics of employment that may explain this. Whereas the analysis has used the unfunded businesses as a control group, the table looks at one year growth in both these businesses and the wider businesses.

While the wider population of businesses saw a decline in employment in 2020-21, the funded businesses sustained an average growth of just over 17% a year. Unfunded businesses have also grown, but more slowly and growth was weaker in 2020/21. These figures are also compared with the performance of firms in the wider BSD where there was negative average employment growth in 2020/21.

Table 6.6 comparing average employment growth, 2017-20 and in 2020-21

	MEIF funded	Unfunded	Wider businesses
Average Employment growth, 2017-2020	17.3%	13.1%	0.6%
Average Employment growth, 2020-2021	17.1%	9.5%	-1.6%

Source: Belmana analysis

Testing differences between Loan and Equity awards

The impact on those receiving only loan support or only equity has also been tested in two ways:

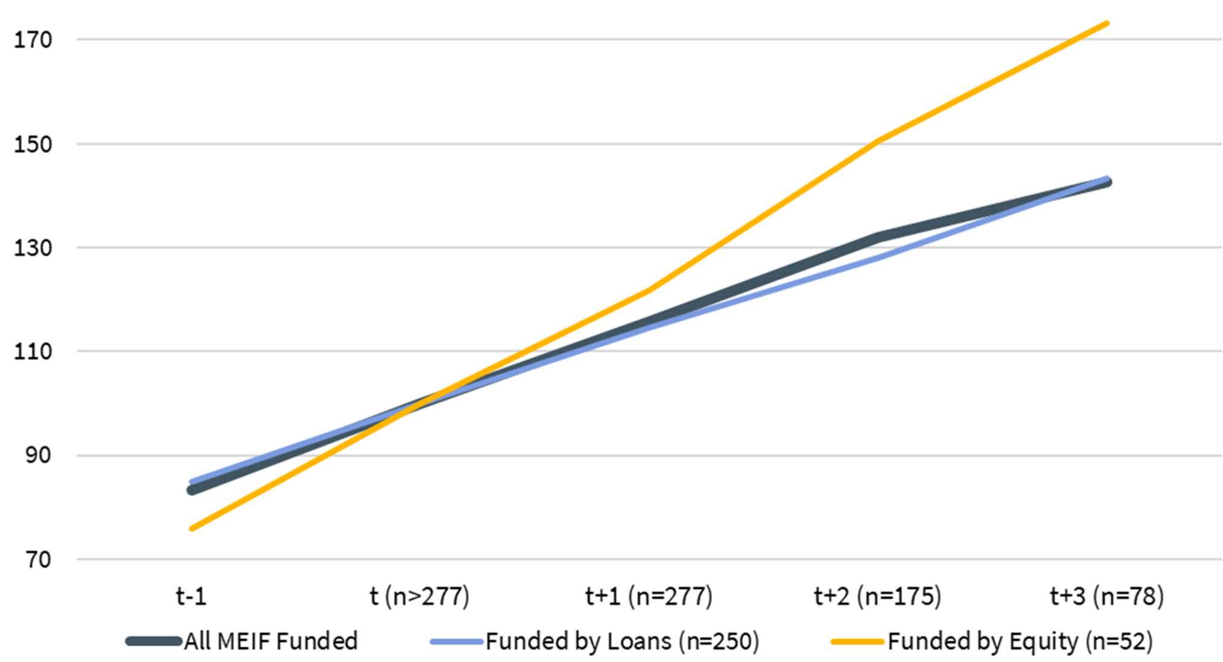
- Examining the performance of businesses that received loans and equity investments compared with the matched control groups
- Regressing the growth rates for funded and matched unfunded businesses on a treatment dummy and on being a loan recipient (to identify how much incremental growth is observed from being an MEIF loan beneficiary.

Figure 6.3 shows employment growth for loan recipients and those securing MEIF equity funding separately. It also presents the control group and the wider set of unfunded businesses. The sample for loans is relatively robust as there is a high proportion of MEIF beneficiaries, but weaker for equity.

Given that it makes up such a large part of the portfolio, the graph shows how closely the businesses supported by loans track the performance of the overall MEIF portfolio.

The graph also indicates the employment changes seen in those supported by equity investments. This is consistently higher than both comparators (All unfunded and Control Group 1) and the estimates for all funded businesses. The sample for this analysis is quite modest however and the difference-in-difference estimates prove insignificant. At present, 52 businesses with equity investment have a year of post support data and this then drops further in the year 2 and year 3 estimates. The small sample means that the results cannot be considered significant.

Figure 6.3: Employment Growth for Loan and equity funded businesses



Source: Belmana analysis

Do the businesses attract private sector funding?

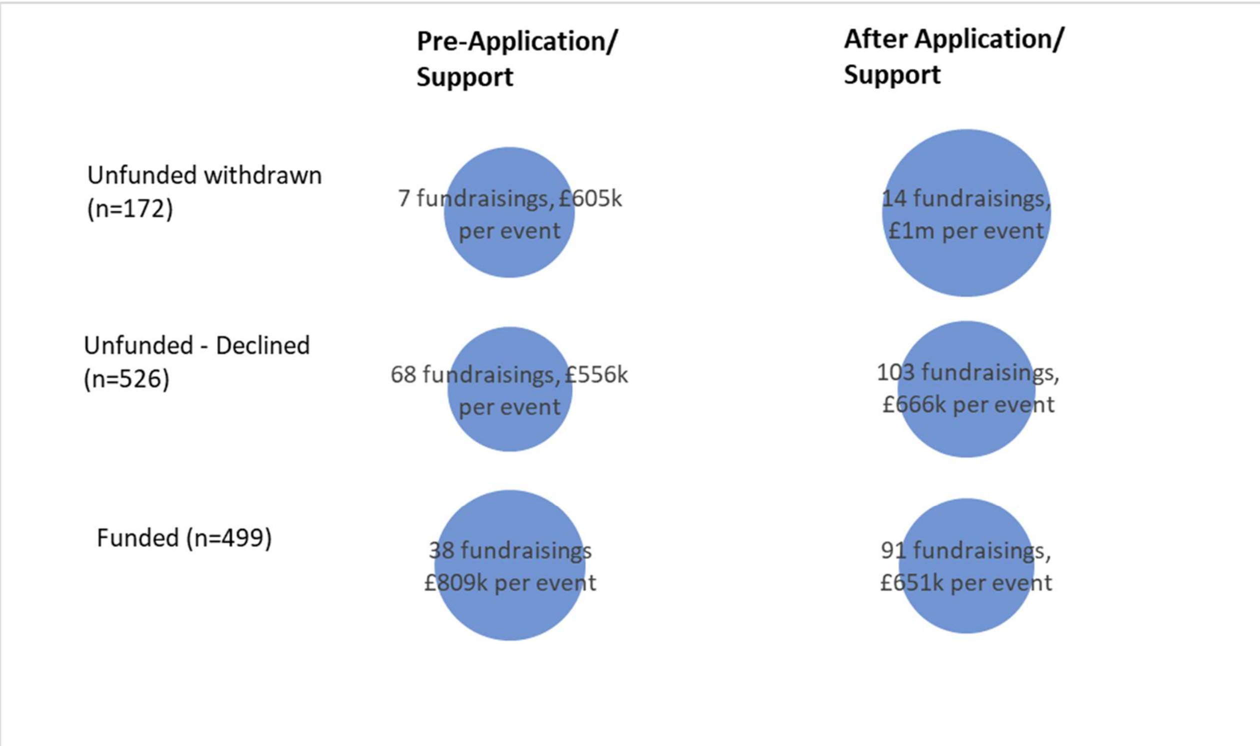
One of the aims of MEIF support is to encourage and attract additional private sector investment. This may take the form of equity or loans, but for equity the evidence is generally publicly available and compiled for analysis. The funded and unfunded businesses were linked to Beauhurst to analyse additional sources of fundraising received. Beauhurst focuses on equity and may not pick up all additional debt obtained:

- Among the 499 businesses that had received MEIF support and were identified in Beauhurst, there were 38[45] fundraisings in the year prior to MEIF support and 91 in the year after MEIF support[46]. The average amount of support being received per firm decreased from £809k before MEIF to £651k after being supported. Total amount raised doubled, from £30.7m to £59.2m.

[45] Not including MEIF fundraising
[46] Focusing on a single year as there are not many years after MEIF support

- The unfunded businesses also increased the amount of support they were receiving, and it appears **those businesses who withdrew rather than were declined were more successful at increasing the amount of funding received, after their MEIF application**. It suggests that among this pool of Beauhurst businesses, those that withdrew were often able to raise significant finance from elsewhere.

Figure 6.4: Additional Private Sector Investment



Triangulation with the business survey

The business survey provides a valuable source of triangulation for the results found in the econometric analysis. Triangulation is used to increase the credibility and validity of research findings by combining methods to help avoid fundamental biases that could arise from the use of a single method. The variables derived from the two approaches are shown for comparison in Table 6.7.

Employment

Within the business survey sample of 170 businesses, gross employment had risen by 800 (from 2,546 to 3,346) from the time of the MEIF award to the time of their interview (mid 2022) and average of 4.7 per business. Across the 337 businesses linked to the BDS employment rose from the year before receiving funding to the most recent 2020/21 data by a smaller increase of 3.8 jobs per business.

The proportion of these jobs attributed to MEIF is calculated in different ways by the econometric analysis and from the survey data. The econometric analysis compares the performance of funded businesses with a matched control group while the survey asks business to estimate the number of jobs they would attribute to the funding.

The employment and turnover additionality estimates from the datalinking use the t+2 results (Tables 6.3 and Table 6.4). These are considered to be the most robust (and for turnover, the result is significant). The t+2 results are based on a larger sample than t+3, which is also restricted to the 2017/18 funded businesses and uses only the 2020/21 data which may be more affected by Covid. The t+1 estimates use the largest sample but offer only a short time for any impacts to occur.

The calculation of outcome additionality from the survey is more complex and is based on each response to a question about the proportion of reported outcomes that could be attributed to the MEIF funding[47]. This is therefore the overall additionality of the outcomes and not finance additionality (whether or not the businesses would have accessed alternative sources of finance). Using firm-level responses, employment and turnover estimates are adjusted case-by-case on the following basis:

- Benefits would have happened anyway - 0% additionality
- Would have taken longer to achieve - based on estimated delay (up to a year 15%, 1 to 2 years 30%, more than 2 years 50%)
- On a smaller scale - based on respondents' assessment of reduced scale
- None of these benefits would have happened - 100% additional

Applying these assumptions reduced employment to 58% of the gross reported change. By comparison, the average additionality derived from the econometric analysis across years one and two (which produced the most robust estimates) is 30%.

The *additional* employment estimates for each method are shown in the table. To provide a direct comparison Table 6.7 also shows the additional jobs per business. From the econometrics this is 2.0 and 3.5 for the survey. The survey sample covers a longer period (up to mid-2021) so it might be expected that this would lead to a higher average per business.

Similar figures have been calculated for turnover. Although the survey did not capture turnover figures at the time of the MEIF award, it did gather data on businesses' estimates of the additional turnover that they attribute to the MEIF funding. The results are shown for the samples, per business and per business per year.

Overall, the turnover estimates are more consistent than the employment figures and provide reassurance that the estimates are robust.

[47] See Table 5.3: Would the benefits experienced have been achieved without MEIF finance - survey findings

Table 6.7: Comparison of derived econometric and survey variables[48]

	Data from econometric analysis	Business survey results
Number of firms	337	170
Turnover		
Implied additionality	54.6%	58%
Additional turnover in sample (£m)	96.8	38.0
Additional turnover per business	£287,100	£228,300
Additional turnover per business per year (£)[49]	£146,400	£120,500
Employment		
Implied additionality	30%	58%[50]
Additional employment change	387	464
Additional change per business	1.14	2.73
Additional change per business per year	0.59	1.44

Application of the results

These values can be used to provide estimates of the net employment and turnover effects of the MEIF funding to date. These are examined in more detail in the Programme in the Value for Money section.

The datalinking and econometrics analysis estimated that on average across the sample there were 0.59 additional jobs per business per year. These figures can be used to provide a broad estimate of the impact across the portfolio of businesses funded to 2020/21.

Table 6.8 sets out the calculations by applying these averages to the number of businesses funded in each year. The Table estimates that the 539 businesses funded to 2021/22 have generated an increase of just under 760 additional jobs. The same calculation using additional turnover per business gives a figure of £195 million. This is a cumulative figure, to date, not an annual figure, and before any assessment of the wider displacement effects.

[48] It is important to note that the proportion receiving equity finance was around 11% in the econometric sample compared with 28% in the business survey.
[49] Details of how the per year calculation is done are in Table 8.1
[50] The survey estimates one value for outcome additionality, not separately for employment and turnover which has been done through the datalinking.

Table 6.8: Estimates of impacts to date from 539 businesses funded to 2020/21

Cohort	Number of businesses	Jobs per business	Additional jobs
2017/18	21	2.8	60
2018/19	105	2.3	239
2019/20	131	1.7	224
2020/21	135	1.1	154
2021/22	147	0.6	84
Total	**539**		**760**

Source: SQW application of datalinking analysis

Conclusions

This report has used counterfactual impact evaluation to analyse the effects of the Midlands Engine Investment Fund on employment and turnover. This covered 337 funded businesses that could be tracked with ONS data and had more than one year's data up to 2020/21.

MEIF has generally been supporting growing businesses. Across the sample employment increased by 1,290 from the year of support, or 3.8 jobs per business in gross terms.

Compared with a matched control group of applicants that were not funded, the MEIF businesses grew employment faster over the first two years in particular. Because of the challenges of undertaking the analysis over the period of the Covid pandemic, this control group was also matched on whether or not businesses had made use of the furlough scheme. Compared with a control group that did not match on use of the furlough scheme, the funded businesses grew considerably faster. The analysis focuses on the impacts after two years (t+2) as the first year can include businesses that were supported part way through the year and where impacts may not yet be apparent, while the third year has a smaller sample size. The third year (which was only available for cases funded in 2017/18) also coincides with the height of the Covid pandemic when we would expect there to be less scope to generate stronger growth relative to the control groups.

MEIF businesses demonstrated faster turnover growth compared with the matched control group over the three years after receiving funding. After two years 55% of this growth was estimated to be additional, or attributable to MEIF and this was significant at a 5% level. The differences were bigger when compared with a control group that was not matched for use of the furlough scheme.

The analysis estimated that 30% of the increase in employment was additional, or attributable to MEIF after two years. The additionality estimates for the third year are lower, although based on a smaller sample.

The smaller sample size means that any differences between the performance of firms receiving loans rather than finance through equity cannot be considered significant.

Triangulation with business survey results provided some reassurance on the overall scale of the results, although there is more consistency in the estimates of additional turnover than employment.

Applying the estimates of the additional employment and turnover attributable to the MEIF funding indicates that to the end of 2020/21 the programme has supported 760 jobs and additional turnover of £195 million.

These figures are before any assessment of wider displacement effects and these businesses are also expected to continue to benefit from the funding. A fuller assessment of the impact of the Programme overall is set out in the Value for Money section.

7. Wider outcomes and impacts

Outcomes and impacts for Fund Managers

As part of MEIF's wider policy objective to strengthen the finance ecosystem, the Fund was expected to increase the capacity, skills, understanding and experience of Fund Managers in the region, in addition to direct benefits for the firms supported.

Based on the feedback from Fund Managers consulted, the main impact of MEIF has been to increase the scale of investment they are deploying in the Midlands. In the absence of MEIF, it is highly unlikely these Fund Managers would be active at anywhere near the same scale – if at all – in the region. Through the delivery of MEIF, Fund Managers said their profile, credibility and reputation has strengthened in the region. For one Fund Manager, this has enabled them to secure other funds which they have subsequently been able to invest in the Midlands: according to this consultee, MEIF has "*opened our sphere of influence*". There is also evidence that Fund Managers are now working more collaboratively across the region as a direct result of MEIF, suggesting that MEIF has helped to strengthen the finance ecosystem across the Fund Managers involved.

There is limited evidence to suggest that MEIF has influenced the attitudes, capabilities or behaviours of Fund Managers towards investment in the Midlands. One Fund Manager noted they have become more disciplined in terms of procedures and standards due to the processes/structures put in place by the Bank. However, beyond this Fund Managers said that MEIF aligns well with their ethos and priorities and therefore has not changed their investment strategy or desire to grow their regional presence. As one Fund Manager argued, "*MEIF is a 'natural fit' for the organisation*". The evidence suggests that MEIF has recruited Fund Managers who are well-placed to deliver a fund of this nature, but as a consequence, the scope to influence their behaviours/skills etc is inevitably more limited.

Impacts on the wider finance ecosystem

Supply side

As noted in the introduction, the programme was designed to encourage a better functioning and sustainable finance ecosystem in the Midlands over the longer-term (i.e., at least 5-10+ years after investment). Given the evaluation is taking place only 4.5 years since the first MEIF investment – and in a context where the finance market has been flooded with Covid-19 emergency finance over a third of MEIF's lifetime – it is difficult to fully assess the impact of MEIF on the wider finance market at this stage.

Nonetheless, emerging evidence is encouraging. In absolute terms, MEIF has **increased the supply and the diversity of funding** available in the Midlands, which was a key goal at the outset. As noted above, the Fund has levered a substantial amount of match funding, and Fund Managers are unlikely to be active in the region at all (or on a significantly smaller scale) without MEIF.

However, beyond this, the Fund is **beginning to strengthen the financial ecosystem across the region and influence intermediaries' behaviours**. Fund Managers have sought to engage more extensively with financial intermediaries and argued that collaboration and capacity is growing in the region as a result. As one Fund Manager argued, MEIF is "*creating key links*" between partners in the region. This was corroborated in the interviews with intermediaries, where all five consulted regularly refer to MEIF and agreed that MEIF has helped to strengthen networks across the finance community. There is now more "*trust and knowledge in the local market in the quality of funding and support provided by MEIF funds*" and intermediaries are more willing to refer into the programme because they know "*the Fund Managers are supportive and offer proper due diligence and support for applicants*". Most other external stakeholders also agreed that MEIF is starting to bring actors together and strengthen the local finance ecosystem. By starting to strengthen the local finance ecosystem, raise its profile and build a pipeline of investment opportunities, consultation feedback suggests **the Midlands is now better placed to attract new funds into the region**. However, there is little evidence it has done so to date. Arguably it is too early to assess and will depend on the Fund being able to demonstrate positive returns and exits.

Finally, the Fund has brought about wider, unexpected benefits for the region's access to the finance community. One consultee described how LEP members on one of the RABs have established strong relationships through attending MEIF governance meetings. As a result, four LEPs regularly communicate, share good practice and provide peer-to-peer support on access to finance issues outside of MEIF governance structures. This has led to **a network/community of access to finance stakeholders** in the region which the consultee argued would not have happened without MEIF. Also, drawing on the experience of an investment readiness pilot in one LEP area, another LEP has been encouraged to invest in a similar programme.

Demand side

On the demand side, MEIF was intended to raise the awareness of the availability and use of loans/equity amongst SMEs and intermediaries in the Midlands.

Overall, the qualitative feedback from consultees suggests that **MEIF has contributed to a better awareness of external finance** across the region. The outreach and marketing activities of Fund Managers and the Bank have been key to this. However, some consultees found it very difficult to disentangle the role of Covid-19 emergency funding alongside this and comment on the relative contribution of MEIF, and most argued that more needed to be done to raise awareness further.

There were mixed views on the extent to which MEIF has strengthened investment readiness across the region. For supported SMEs, there is strong and consistent evidence to suggest MEIF has had an impact, as discussed above. Even for rejected/withdrawn applicants, the experience of engaging with the fund is perceived to have been beneficial in strengthening their investment readiness and ability to present stronger propositions. However, there is no evidence to suggest that MEIF has improved investment readiness across the wider SME community.

8. Value for money

Approach

The approach to estimating value for money is based on the results of the econometric analysis described in Section 6. This provides good data on the additional turnover attributable to MEIF over four years 2020/21. The results are used to provide GVA benefit values for businesses that received MEIF funding that can be compared with the costs of delivering the Programme.

The results of the econometric analysis are triangulated with separate calculations made from the business survey responses. This provides a useful sense check and reassurance on the validity of the values used. Finally, we have undertaken a number of sensitivity tests on the results to demonstrate the effects of changes in the programme costs and benefits over the remainder of the Programme.

Econometric evidence

A summary of the turnover data drawing on the IDBR data set is shown in 8.1. This allows us to estimate the average additional turnover per business per year. While the econometric analysis does provide results for each year, the sample is smaller in the third year and the results are likely to be less robust. To address this, we have combined the data across all the years and firms to produce a single figure. The estimate is also broadly consistent with the findings from the business survey.

The econometric analysis matched 337 businesses in the ONS data; 105 had data for three years, 219 (105+114) had data for two years and 337 had data for one year. Each of these cohorts is set out in the columns in Table 8.1. The next three rows show the change in turnover after one, two and three years for each cohort. Note that the cases in 2017/18 were funded towards the end of the year and are treated alongside the 2018/19 cases. The Table then shows the cumulative change in turnover over the period covered, for each cohort. For example, among the first cohort, turnover had risen by £84.8 million by year three, but they had also seen increases in years one and two.

The econometric analysis also used Difference-in-Difference comparisons with the control group to estimate the proportion of this change that could be attributed to the MEIF funding. Although the analysis provides additionality figures for each year, the year two estimate of 54.6% is the most robust statistically and has been applied to the gross turnover changes. Across the sample this gives a total of £96.8 million of additional turnover. This is divided by the number of years of data (661) to give the value per business per year of £146,400.

Table 8.1: Derivation of additional turnover per business estimates

	2018/19 (& late 2017/18)	2019/20 Cohort	2020/21 Cohort	Total
Number of firms	105	114	118	337
Change after 1 year (£m)	14.4	17.3	27.7	
Change after 2 years (£m)	32.6	47.4		
Change after 3 years (£m)	37.9			
Cumulative change (£m)	84.8	64.7	27.7	177.2
Average additionality	54.6%	54.6%	54.6%	
Net change in turnover (£m)	46.3	35.3	15.1	96.8
Number of years data per case	3	2	1	
Number of years data	315	228	118	661
Additional turnover/business/year (£)				£146,400

Source: SQW analysis of Belmana econometric results

Triangulation with survey data

The business survey provides a useful source of triangulation for the results found in the econometric analysis. The variables derived from the two approaches are shown for comparison in the earlier chapter in Table 6.7. Overall, the average turnover per business per year (£120,500) calculated from the survey results was broadly consistent with the econometric data (£146,400). However, the econometric analysis results are considered to be more robust and are used as the basis for the value for money calculations below.

Estimating Gross Value Added

To estimate the additional GVA attributable to the MEIF funding, the turnover estimates can be converted using a ratio of GVA to turnover derived from ONS data (collected by the Annual Business Survey). For the non-financial business economy, the 2020 results[51] indicate that across all sectors, GVA was 35% of turnover for SMEs. This ratio is applied to the additional turnover to give the estimates of GVA.

Displacement

Displacement occurs when an increase in economic activity or other desired outcome is offset by reductions in economic activity or other desired outcome in the area under consideration. In this case where increases in the output of funded businesses are at the expense of other unsupported business in the Midlands Engine area and more widely in the UK.

[51] Annual Business Survey - 2020 Results businesses with <250 employees https://www.ons.gov.uk/businessindustryandtrade/business/businessservices/datasets/uknonfinancialbusinesseconomyannualbusinesssurveyemploymentsizeband

The survey asked, "*If your business were to cease trading tomorrow, roughly what proportion of the additional sales do you think would be taken by competitors in the UK over the next year and what proportion would be taken by competitors Midlands Engine area (West Midlands and East & South East Midlands)*". This is extremely hard to estimate for businesses but, even so, almost all the businesses provided an estimate at both UK and Midlands levels.

The proportion of new sales that the business considered would have been made by competitors in the absence of the funding, is subtracted from their estimate of additional sales to give a net value for each case. Across the sample, this reduced the value of additional sales at a UK level by 52% (leaving 48% of their value). Displacement at a Midlands level was much lower.

While these figures are used in the VfM calculations we would stress that this is a fairly conservative assumption. It does not reflect that the additional sales of goods and services and GVA may provide better quality, or be produced more productively, than those that they are assumed to displace. Where they have generated additional sales at the expense of competitors, it is likely that they offer some form of better value for customers.

VFM modelling assumptions

Table 8.3 sets out the net additional GVA generated by the cohort of businesses supported in each year. The figures are adjusted for displacement and discounted. This allows estimates of the overall effects to be built up for the Programme as a whole. There are a number of assumptions made in these calculations:

- Discounting - the future GVA estimates, and cost values are estimated for each year of the Programme and discounted using the Treasury discount rate of 3.5%
- The model assumes that the increases in GVA estimated in the econometric analysis continue for five years. This is to reflect the length of a typical loan repayment period. It is a fairly conservative assumption given that other Business Bank programmes have used persistence effects of 10 years. In future years, there may be evidence to extend this.
- The model assumes that all the funding is deployed, and that the number of businesses funded continues at the historic rate i.e the current average loan/equity deal size.
- In the scenarios with write offs of 3%/5%/10% the model also excludes any GVA benefit from the equivalent proportion of businesses. This is conservative as in some cases finance could be recovered and there may be some benefits for a short period of time.
- GVA is calculated from turnover estimates using a ratio of GVA to turnover for UK SMEs.
- The model does not include any multiplier effects (as per the Bank guidance).

As MEIF costs

Estimating value for money requires reliable estimates of the costs of delivering the Programme, including the opportunity cost of the outstanding finance. Costs were estimated for each year and discounted.

- **Management and staff costs:** Cost data for management fees and staff costs has been provided by the Bank to the end of 2021/22. These have been set out for each year. Future costs have been estimated using the average over the past three full years (excluding start-up costs) for management fees and four years for staff costs.
- **Write offs**: We have modelled four scenarios for write offs over the length of the Programme. These are that write offs reach:
    - 3% of the full investment by the end of the Programme
    - 5% of the full investment by the end of the Programme
    - 10% of the full investment by the end of the Programme
    - We have also provided an estimate based only on the actual write off figures based on the data “to date”.
- **Opportunity cost:** This is calculated using the Bank Rate and applying this to all the outstanding finance[52]. This is the effective interest rate paid on the Bank of England’s gilt purchases and ranged from 0.75% in 2019 to 0.1% at the start of the pandemic. The opportunity cost is calculated for each quarter and aggregated to provide annual figures. Interest rates have risen substantially over the past few months and are forecast[53] by the Bank of England to reach 2.9% in 2023 before falling back to 2.2% in 2024. While this increases the opportunity cost, the outstanding balance starts to decline as the repayments start to exceed the new investments. We have modelled these values which increase the costs of the fund.

The total costs of the Programme *to date* are estimated to be £14.7 million and the net additional GVA *to date* is £38.3 million.

The results in Table 8.2 assume that write offs rise to 5% of the full Programme investment by 2027/28. This would give a full Programme cost of £31.8 million. The discounted GVA forecast *for the Programme as a whole,* assuming that write offs rise to 5%, is £82.6 million.

[52] This applies only to finance raised by the UK and is not applied to funding from the European Investment Bank
[53] https://www.bankofengland.co.uk/-/media/boe/files/monetary-policy-report/2022/august/monetary-policy-report-august-2022.pdf

Table 8.2: Net additional GVA estimates by year (Assumes 5% write offs by 2027/28)

Cohort	Number of SMEs	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28
2017/18	75	0.5	0.5	0.5	0.5	0.5						
2018/19	125		2.6	2.6	2.6	2.6	2.6					
2019/20	116			3.2	3.2	3.2	3.2	3.2				
2020/21	145				3.3	3.3	3.3	3.3	3.3			
2021/22	78					3.6	3.6	3.6	3.6	3.6		
2022/23	165						4.1	4.1	4.1	4.1	4.1	
2023/24	165							4.1	4.1	4.1	4.1	4.1
Total	869											
Total	**Annual GVA**	0.5	3.1	6.3	9.6	13.3	16.8	18.3	15.0	11.7	8.1	4.1
Total	**Cumulative GVA**	0.5	3.6	9.9	19.6	32.8	48.7	66.1	80.3	91.1	98.3	101.5
Total	**Cumulative discounted GVA**	0.5	3.6	9.9	19.6	32.8	47.1	61.7	72.4	79.4	82.8	82.6
Programme costs		2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28
	Net Write off	0.0	0.0	0.9	0.7	1.7	1.1	1.3	1.3	1.3	1.3	1.5
	Other Programme costs	1.0	3.0	4.9	1.2	1.4	2.2	2.6	2.1	1.7	1.5	1.2
	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Costs discounted	1.0	3.0	5.8	1.9	3.1	3.2	3.6	3.1	2.6	2.3	2.2
	Cumulative costs	1.0	4.0	9.7	11.6	14.7	17.9	21.5	24.6	27.2	29.5	31.8

Value for money

Value for money is measured as the ratio between the benefits, measured as the additional GVA attributed to the MEIF funding and the costs of delivering the Programme. There are two ratios:

- The net impact to date and the costs incurred to date
- The discounted forecast programme impacts and the full anticipated costs (estimated from the current values).

The estimates are heavily dependent on forecasts for the future value of write offs. Although these have remained low to date, currently 1.5% of the full investment value (2.4% of the value of investments to date), in anticipating the costs of the programme as a whole, it would be reasonable to assume a higher proportion of write-offs than has been seen to date. We have used a fairly conservative value of 5% for the base case in Table 8.3. It is important to consider that a substantial proportion of the funding has already been returned and 5% of the overall investment would mean an even higher percentage of the outstanding balance being written off.

It is also worth reiterating that our assessment of benefits is relatively conservative and does not include multiplier effects, and it is too early to fully assess future impacts of MEIF, as outlined above. The value for money assessment may therefore under-estimate the full/future benefits associated with the programme.

It has not been possible to benchmark these results due to the lack of directly comparable and recent evaluation evidence for relevant programmes (i.e., with a similar composition of small/large debt and equity) and comparable CBA methodologies.

Table 8.3: Net impact estimates

	GVA (£m)	Costs (£m)	Benefit/Cost Ratio
Net impact to date	32.8	14.7	2.2
Forecast programme impact (Using estimate of 5% write offs)	82.6	31.8	2.6

Source: SQW estimates

Sensitivity

Given the considerable uncertainties it is useful to consider several scenarios. Perhaps the biggest will be the proportion of write-offs over the remainder of the Programme. The table below shows the benefit cost ratios if this increases to 3%, 5% and 10% of investment value.

The second scenario is to consider the implication of GVA declining after the second year. Although the econometric analysis indicated a declining difference in the third year, it used a small sample and t+3 also coincided with the height of the pandemic. The results in the third year (t+3) are not sufficiently robust to apply, but it is appropriate to look at the effects if the GVA impact per business fell back in years three, four and five. To do this, the model looks at the effects of 10% and 20% falls per business, each year, after the second year.

Table 8.4: Sensitivity of benefit/cost ratio to changes in additional GVA per business and level of write offs

	Using t+2 results for all five years	Additional GVA per business declines by 10% per year after year 2	Additional GVA per business declines by 20% per year after year 2
	0%	**-10%**	**-20%**
Write off value			
To date	2.2	2.1	2.1
3% Write off	3.0	2.7	2.4
5% Write off	2.6	2.3	2.1
10% Write off	1.9	1.7	1.5

The results indicate that the MEIF Programme is delivering reasonable value for money. The analysis has been built up using the data from 2017/18 to 2020/21, which was affected severely by the Covid pandemic.

The sensitivity tests show the importance of both the write offs and the level of benefit for the benefit/cost ratios. At this stage write offs have remained low at around 1.5% of the full investment value (2.4% of the investment to date). Over time this may increase while the out-turn of the equity investments will not be known for some time. However, the sensitivity analysis shows that even if the value of write offs was to rise to 5% of the investment value, the benefit/cost ratio is likely to be around 2.6.

As discussed above, if GVA per business does decline after the third year, the results show that a 20% per year fall would reduce the benefit cost ratio from 2.6 to 2.1 (under the 5% write-off scenario).

9. Summary of findings and conclusions

Inputs, activities and outputs

By March 2022, £168.9m of MEIF finance had been deployed in 759 investments across 539 SMEs. Of this, 13% was microfinance, 49% was larger debt, 37% was equity investment (including PoC). Qualitative feedback suggests that MEIF was relevant to meet business needs, and that the original rationale for the Fund was valid and remains so, especially for equity and small business loans.

The average size of investment was nearly double the expected value, largely driven by small business loans and PoC awards being larger than expected. One quarter of SMEs have received more than one MEIF award, demonstrating how MEIF is starting to make follow-on investments. Investments have been made across all Midlands LEP areas and are broadly representative of the distribution of eligible businesses (with the exception of SEMLEP). Across all LEP areas, the value of MEIF investment exceeds their original LEP ESIF contribution by some margin. Total MEIF deployment was slightly behind plan (by 6%) at an aggregate level by the end of March 2022, but performance is variable at a fund level. The deployment of PoC funding was ahead of target, and both equity funds and small business loans funds were in line with targets.

However, the performance of debt funds is more variable: two of the debt funds are now only marginally under-performing despite turbulent demand during Covid-19, but the third (more recently introduced) debt fund is further behind plan. Looking forward, demand for finance is difficult to predict given the current political and macro-economic challenges, but most consultees expect it to continue, for all MEIF funds, especially for equity.

The Fund had supported around half the number of SMEs anticipated by March 2022. This is explained in part, by lower demand (especially for debt) and by SMEs requiring larger than anticipated investments (and Fund Managers prioritising overall deployment targets). Given that total deployment was broadly in line with target, this means that cost per SME supported/pound invested is much higher than expected. Despite this, the Fund is exceeding targets for jobs created or new to market/company products and services, and private sector leverage.

Finance additionality

The evaluation findings are very positive in terms of finance additionality: over two-fifths of respondents (44%) said they probably or definitely would not have accessed finance without MEIF, and over one-third would not have accessed finance as quickly and/or to the same scale. For the latter, accelerating access to finance is particularly important, enabling firms in the Midlands to respond quickly to challenges and/or opportunities for growth. There are differences in finance additionality between finance types: full additionality is notably higher for equity investments compared to debt, whereas MEIF plays a more important role in accelerating access to finance for debt. Deadweight is relatively low, with 17% of respondents arguing they would have secured finance anyway in the absence of MEIF (and similar for debt and equity). Overall, finance additionality has also improved compared to our early assessment of MEIF.

The evaluation has also tested the extent to which SMEs considered alternative finance at the point they applied for MEIF. The survey found that three-fifths of respondents did explore alternative sources of finance but were more likely to be unsuccessful than successful in these endeavours. Moreover, the reasons for rejection aligned closely with the rationale for MEIF, e.g., the lack of collateral, security, track record or risk.

Wider activities and processes

The Fund Managers provide support which is highly valued by SMEs, as demonstrated by survey feedback. This includes access to their networks and other investors, and advice and support in relation to business development more generally. Consultees also noted that their wrap around support has also been particularly important during the pandemic. More broadly, consultees suggested that Fund Managers have played an important role in ‘educating the market’ across the wider business population. These activities are not captured effectively in current metrics for non-financial support.

The visibility and local presence of Fund Managers has also improved according to internal and external consultees. Fund Managers are perceived as very experienced and professional, with strong local networks. Many staff are recruited locally from the finance community which has been helpful in this respect. Consultees also recognised that Fund Managers have been more proactive in terms of outreach since the early assessment. The role of the Bank and the visibility and networks of their regional representatives has also been important in terms of raising the profile of the Fund and opening doors for Fund Managers.

The Fund’s role in supporting the regional finance ecosystem is also more apparent now. Consultees argued that relationships between the Bank, Fund Managers and LEPs have improved, as have relationships between Fund Managers themselves. Intermediaries also commented on the role of MEIF in strengthening local networks and referral mechanisms.

The Fund has encountered some contextual and operational challenges during implementation. Investment readiness and the lack of/very variable support for businesses remains a challenge, as noted in the early assessment. Also, whilst referrals have improved, encouraging commission only advisors to engage with the programme has been difficult. At an operational level, staff recruitment and turnover within the Fund Managers has hindered relationship building and capacity for outreach work.

Outcomes and impacts

Firms

According to our beneficiary survey, the main uses of MEIF finance have been working capital (to varying degrees), developing new or improved goods/services, and staff recruitment and development. The latter are well aligned with Government objectives relating to productivity and economic growth. The majority of respondents had spent most, if not all, of their MEIF finance at the time of interview. Also, most had not changed the purpose or timing of their MEIF investment since their original application and, for those who had, it was mainly due to Covid-19.

MEIF has played an important role in helping SMEs to secure wider finance. In the survey, two-fifths of respondents had secured follow-on finance (excluding MEIF follow-on) from a range of private and public sector sources. Just over half of these SMEs argued that MEIF had a large or moderate influence in their ability to secure the finance, both as a consequence of MEIF finance *and* the wider support, guidance and networks of the Fund Managers. More broadly, MEIF is strengthening firms’ access to finance capabilities, raising awareness of private finance available in the market and boosting confidence in their ability to secure it in future.

MEIF has generated a range of benefits for the SMEs supported. Almost all have become more resilient and three-fifths reported that they had avoided closure. These outcomes are particularly important given the current context to ensure that innovative firms and the region's capacity for future growth is not lost. MEIF has also led to a range of skills, efficiency and innovation outcomes which are crucial to underpin productivity improvements and economic growth in the Midlands. And MEIF has played a role in reducing businesses' environmental impact.

This is translating into business growth benefits: three-quarters of survey respondents reported an impact on employment, productivity and sales to date, and three-fifths of respondents have observed an impact on profitability. In terms of employment, MEIF's equity investment in particular is leading to high quality and well-paid jobs in senior occupations, although debt finance is also leading to high value jobs. Fewer firms have observed impacts on exports, despite the high prevalence of exporters amongst the SMEs supported, but this is likely to be as a result of the context in which many SMEs received MEIF finance (i.e., during the pandemic).

Findings from the survey and econometric analysis demonstrate that MEIF is delivering impacts that are additional. In the survey, nearly a third of respondents argued that outcomes would not have been achieved in the absence of the funding. MEIF also plays an important role in accelerating and (to a lesser extent) increasing the scale of outcomes achieved.

Whilst the econometric analysis did not find a statistically significant difference between the results for debt and equity recipients (possibly due to the small sample size), the wider evidence gathered for this evaluation points to a number of distinctive features of the equity investments. At the outset, we observed how the equity ecosystem in the Midlands was particularly underdeveloped when MEIF was established. Reflecting this challenging context, full finance additionality was notably higher for equity investments compared to debt. The large majority of equity firms responding to the survey claimed that MEIF had a large or moderate influence on ability to secure follow-on finance, compared with around half of debt recipients. Equity recipients were more likely to use MEIF for recruitment, staff development, marketing, and innovation purposes. As a consequence, the majority of additional R&D investment was driven by equity recipients and MEIF's equity investment in particular have led to employment opportunities in senior occupations and high value jobs in the Midlands. We have also observed that SMEs in receipt of equity are more likely to experience an increase in employment, productivity, and exports as a result of the Fund.

Impacts

The report used difference in difference (DiD) and multivariate analysis to assess the differences in performance between the MEIF funded businesses and a matched control group. The control group was identified using propensity score matching. Because of the challenges of undertaking the analysis over the period of the Covid pandemic, the control group was also matched on whether or not businesses had made use of the furlough scheme. This produced estimates of the additional impacts on employment and turnover (i.e. over and above those that would otherwise have occurred). These are used to provide estimates of value for money.

MEIF has been supporting growing businesses. Across the sample, employment increased by 1,290 from the year of support, or 3.8 jobs per business in gross terms. Compared with a matched control group of applicants (that were not funded) the MEIF businesses grew employment faster over the first two years in particular.

MEIF businesses demonstrated faster turnover growth compared with the matched control group. After two years, 55% of their growth was estimated to be additional, or attributable to MEIF (and this was significant at a 5% level). The smaller sample size means that any differences between the performance of firms receiving loans rather than finance through equity could not be considered significant.

Triangulation with business survey results provides some reassurance on the overall scale of the results, although there is more consistency in the estimates of additional turnover than employment.

Applying the estimates of the additional employment and turnover attributable to the MEIF funding indicates that to the end of 2020/21 the programme has supported 760 jobs and additional turnover of £195 million. These figures are not adjusted for displacement which is done as part of the value for money calculations.

Commercial performance

The Fund is performing well to date commercially, especially given the challenging context in which it has been delivered. By the end of March 2022, one fifth of capital invested had been returned to the programme. As expected, returns from equity and PoC investments were limited at this stage, but some early exits had led to a small return. The extent of arrears and write offs were both low, at 0.3% and 2% respectively. This was explained, in part, by the robust approach to due diligence in the initial decision-making process, additional non-financial support provided to firms by Fund Managers, flexibility of Fund Managers in responding to the challenges of Covid-19 for businesses (e.g., by offering repayment holidays) and the availability of wider Covid-19 emergency funding to support businesses more generally. Looking forward, the majority of Fund Managers and stakeholders expect MEIF to perform well overall, but this should be monitored closely given the challenging economic context.

Fit and influence on the wider finance ecosystem

In broad terms, MEIF has been well aligned with other support available, including Covid-19 emergency funding, although a minority of consultees argued alignment with earlier stage funding could be strengthened.

It is still too early to fully assess the impact of MEIF in improving the wider finance ecosystem at this stage. Early evidence is encouraging but improvements are not yet in a position to be self-sustaining. On the supply-side, MEIF has increased the supply and the diversity of funding available in the Midlands. It has leveraged a substantial amount of match funding, and MEIF-backed Fund Managers are unlikely to be active in the region at all (or on a significantly smaller scale) without MEIF. More broadly, the Fund is beginning to strengthen the financial ecosystem across the region, influence the behaviour of intermediaries, create local access to finance 'communities', and build a pipeline of investment opportunities. In doing so, the Midlands is perceived to be better placed to attract new funds into the region. It is too early to assess whether MEIF has brought new investors into the Midlands; this will also depend on a positive demonstration effect in the longer term.

On the demand side, MEIF has contributed to a better awareness of external finance across the region, but more needs to be done in this respect. It has also strengthened the investment readiness of SMEs involved in the programme but had limited impact on the investment readiness of the region's wider SME community.

Net impact and value for money

The net impact and VfM estimates use the results from the econometric analysis and are based on the additional business turnover identified among the funded businesses. These are adjusted for displacement at a UK level and discounted at 3.5% as recommended by the Green Book. The model assumes that the benefits continue for 5 years, the length of a typical loan repayment period, and that all the loan/equity per business remains at the same level. The ratio of GVA to turnover is the average for UK SMEs, and the model does not include multiplier effects. Write off costs are tested at 3%, 5% and 10% of the total fund size and the opportunity cost of the fund is estimated using the Bank of England interest rate.

The following table shows the main results for GVA, costs and the benefit/cost ratio (BCR). The total costs of the Programme *to date* are estimated to be £14.7 million and the net additional GVA *to date* is £32.8 million.

If write offs rise to 5% of the full Programme investment by 2027/28, costs rise to £31.8 million while the discounted GVA forecast *for the Programme* would be £82.6 million.

The BCR is generally between 2 and 3 depending on the level of write offs expected. Given the wider economic context and the pandemic, this is a reasonable level of return.

Table 1: Sensitivity of benefits and costs to changes the level of write offs

Write offs	GVA (£ millions)	Costs (£ millions)	Ratio
To date	32.8	14.7	2.2
3% Write off	84.3	27.8	3.0
5% Write off	82.6	31.8	2.6
10% Write off	78.2	41.8	1.9

Overall assessment

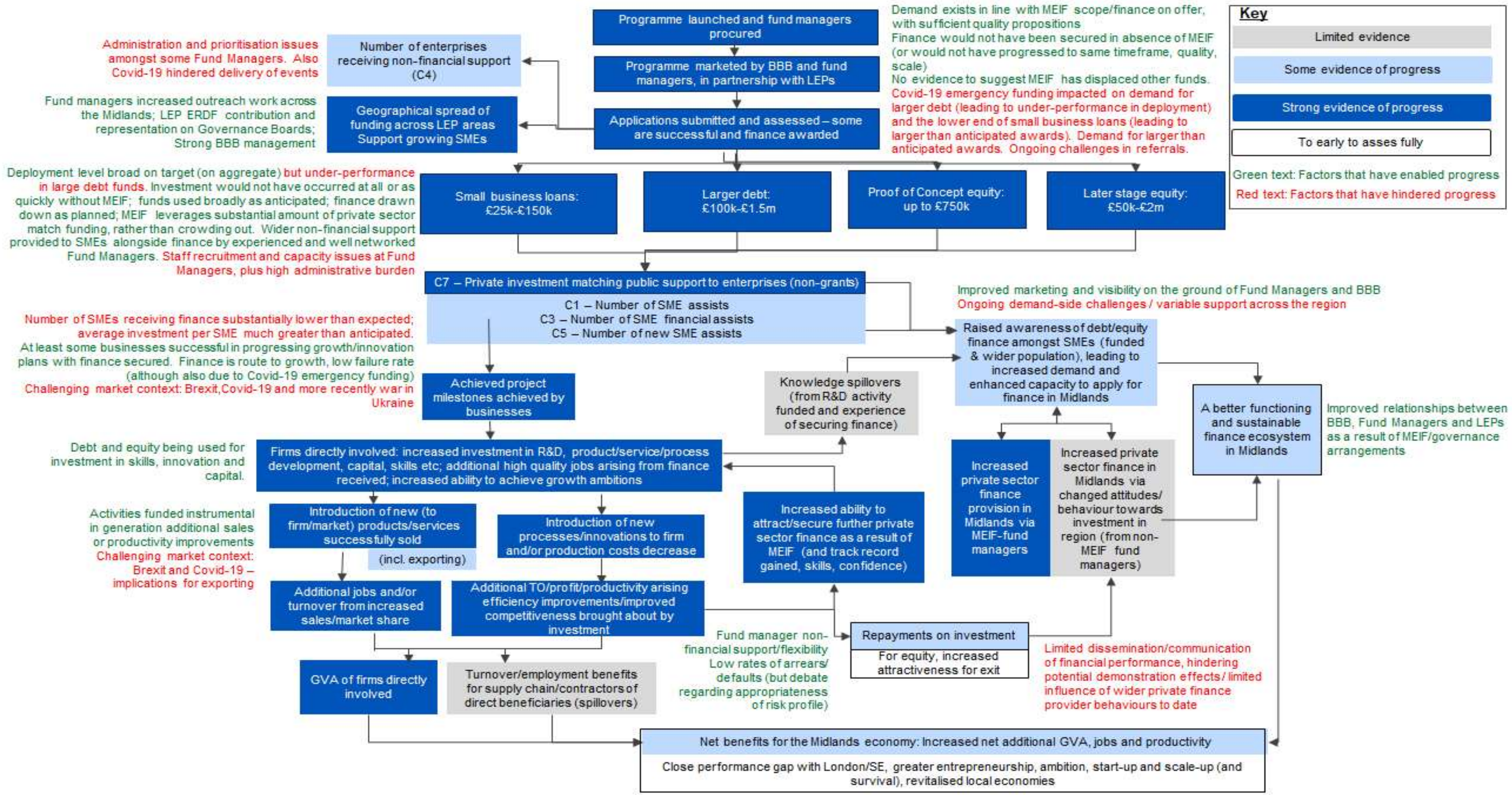
Overall, MEIF has performed well against its original objective to generate economic growth by increasing the supply of finance in the Midlands, especially given the context in which it has operated for a large proportion of its lifetime. The finance has been targeted towards SMEs who, on the whole, would not have secured finance at all or as quickly in the absence of the Fund. This has led to business growth and innovation, and it has increased the productive capacity of SMEs involved. There is also emerging evidence that the Fund is influencing the wider ecosystem and making progress in addressing the original market failures. That said, the rationale for intervention remains valid. Given the scale and limited lifespan of the Fund so far and the scale of the challenge in the Midlands, we need to be realistic about the extent to which system-level impacts are plausible at this stage. Figure 9-1 sets out the Theory of Change in practice, summarising performance against the intended outcomes and impacts, routes to impact, and factors that have helped or hindered progress of the Fund.

Drawing on the evidence gathered, and lessons learned in this evaluation, the British Business Bank should consider the following lessons and reflections should help to inform the design of future policy:

- An ongoing gap in earlier stage equity funding in the Midlands.
- The need for clarity on the strategic focus and investment strategy of future Funds, with scope to better align the Fund with local and wider HMG priorities, such as sustainability, and ensuring that investment criteria and monitoring metrics are appropriate in light of this.
- Recognition of the impact that (increasingly) limited demand-side support for investment readiness might have on the ability of a supply-side intervention such as MEIF2 to scale up deployment and clarify MEIF2's role in providing non-financial support to SMEs, educating the wider market and facilitating the finance ecosystem in this context. Again, the programme needs to ensure that Fund Manager incentives are appropriate and monitoring metrics capture this activity more effectively.
- The importance local stakeholder engagement and buy-in to the success of MEIF to date, and how this will be maintained in the absence of LEP ERDF contributions.
- The need for continuity between the current Fund and MEIF2 so that its legacy is built on and momentum is not lost.

A final evaluation of MEIF is planned to take place 10-12 years after the first investments, at which stage a comprehensive assessment of long-term impacts will be possible, both through econometric and primary research. We recommend that beneficiaries from all three regional Investment Funds are pooled to provide a sample of sufficient scale to undertake discriminant analysis on the characteristics or factors that are most likely to lead to outcomes. The Bank should ensure that appropriate monitoring data on the characteristics of assisted businesses and funded are gathered to enable this. It will be important to gather further evidence on spillover/multiplier benefits and wider market impacts, for example through more extensive consultation/survey work with wider market stakeholders, intermediaries and non-MEIF investors.

Figure 9.1: Theory of change, in practice



Annex A Logic Models

Original Logic models

Microfinance loans: £35k-150k in MEIF

Context and Rationale

Lack of access to microfinance is a barrier to growth and development projects among start up, early stage and established SMEs within these regions (e.g. for working capital, funding expansion projects, leasing commercial premises, asset acquisition).

Supply side market failures and barriers:

- Information asymmetries between financial institutions and small businesses, leading to a debt funding gap for businesses without collateral or track record [issues particularly acute for businesses likely to seek microfinance].
- High relative cost of administering microfinance for banks
- Private investors also cannot capture positive spillover effects, e.g. innovation and knowledge transfer.

Demand side market failures and barriers:

- Information gaps:
- SMEs do not fully understand potential benefits of raising microfinance
- Unaware of how/where to access microfinance or likely success
- Investment readiness – SMEs unable to present investment opportunities to best effect, particularly acute for businesses likely to seek microfinance; also more likely to lack financial/business management/planning skills typically required to secure commercial finance.

Aims & Objectives

Overall objective is to contribute to economic growth by ensuring a healthy supply of and access to finance for SMEs within the regions.

Policy objectives (all within the regions):

- Reduce the funding gap for growth and development projects by increasing the supply of microfinance to start up, early stage and established SMEs
- Increase the capacity/skills/understanding/experience of fund managers in the NPH, ME, CIoS areas
- Increase the diversity of funding options for SMEs

- Raise awareness of microfinance and providers among SMEs and intermediaries
- Increase the total value of microfinance loans
- Increase the number and growth of SMEs
- Generate a target return for BBB and providers.

Figure A-1: Logic model – Microfinance loans: £35k-£150k in MEIF

<table>
<tr><th colspan="2">Delivery</th><th colspan="3">Benefits</th></tr>
<tr><th>Inputs</th><th>Activities</th><th>Outputs</th><th>Intermediate outcomes</th><th>Final outcomes/impacts</th></tr>
<tr>
<td rowspan="3">Overall funding of:
• £20.2m* committed to date in NPIF (sourced from CLG/BIS legacy, ESIF, EIB, and BBB)
• £30m committed in MEIF (sourced from ESIF, EIB, ERDF legacy)
• TBC in CIoSIF (sourced from ERDF)

Plus:
• Time and resource invested by BBB
• Time and capital invested by Fund managers

*Note: only 75% of available funding has been committed to date</td>
<td rowspan="2">Fund manager activities:
• Awareness raising of loans and marketing and promotion of microfinance (esp. to start-ups/young SMEs)
• Pre-application and application support
• Provision of microfinance loans
o £25k-£100k in NPIF
o £25k-150k in MEIF
• Mentoring of applicants
• Monitoring of activities
• Technical and credit assessment of applications
• Contracting between providers and successful applicants
• Loans and guarantee book management
• Monitoring of loans</td>
<td rowspan="3">Enquiries/applications – conversion rates

Number and value of microfinance loans (£), gross

ERDF outputs:
• C1 – Number of enterprises receiving support
• C3 – Number of enterprises receiving financial support other than grants
• C4 – Number of enterprises receiving non-financial support
• C5 – Number of new enterprises supported
• C7 – Private investment matching public support to enterprises (non-grants), equivalent to private sector leverage

Geographical spread of funding across LEP areas

Achieved project milestones by businesses</td>
<td>For business beneficiaries

Additionality of finance secured

Leading to additional investment in:
• working capital, expansion projects, premises, assets, etc.
• skills, R&D, product and process dev. Marketing, internationalisation

• Leading to additional:
• new firm start-up and survival
• new products/services (C28/29) and processes
• new jobs created (MI data/ERDF output - C8)
• exporting
• leverage of follow-on funding.</td>
<td>For business beneficiaries

• Business growth:
• Impact on GVA/ turnover/employment, including new and better quality jobs created
• efficiency/productivity/profitability
• additional scale up businesses

For the regions
• Economic growth:
• GVA, jobs and productivity
• Reduce performance gap with London and South East</td>
</tr>
<tr>
<td>For Eco-system

• Increase in the number of providers and value of microfinance loans
• Stronger demand from firms for microfinance
• Better funding cases put forward by SMEs
• Follow-on investment.</td>
<td>For Eco-system:

• A better functioning and sustainable finance ecosystem in the regions with:
• Increased diversity of funding options for SMEs
• Reduced funding gap for growth and development projects
• Greater awareness of microfinance and providers among SMEs and intermediaries
• Reduce finance gaps with London and South East</td>
</tr>
<tr>
<td>BBB activities:
• Selection of fund managers
• Marketing and awareness raising
• Website creation & management
• High level monitoring
• Overarching fund of fund management</td>
<td>For BBB

• Interim repayments on loans (MI data)</td>
<td>For BBB

• Meet target return for BBB and fund managers</td>
</tr>
<tr><td colspan="2">Lending: 2017-2021
Portfolio management up to 2026</td><td colspan="3">Intermediate outcomes potentially from 2-3 years after lending through to 5-10 years after lending
Final outcomes: 5-10 years (+) after lending</td></tr>
</table>

Source: SQW, drawing on documentation and scoping consultations with BBB

Debt: later stage loans from £100k-£1.5m in MEIF

Context and Rationale

There are a lower proportion of high growth and scale-up businesses in the NP and ME regions compared to London. A lack of access to later stage debt is one of the barriers to enabling faster growth among potential scale ups and potential growth SMEs (e.g. funding to support SMEs move to a higher growth trajectory).

Supply side market failures and barriers:

- Information asymmetries between financial institutions and small businesses, lead to a debt funding gap for scale-up and potential high growth businesses [this is particularly the case for new, innovative and creative venture activities which do not have a proven track record and where ventures do not have the collateral to support their loan applications]
- Access to finance constrained outside London and South East
- High relative cost of administering debt
- Private investors cannot capture positive spillover effects, e.g. innovation and knowledge transfer.

Demand side market failures and barriers:

- Information gaps:
    - SMEs do not fully understand the benefits of accessing finance for growth (preferring to grow from retained profits)
    - Weaker networks among smaller businesses make it harder to know how/where to access growth finance or success of securing it
    - Unable to present investment opportunities to best effect [issues particularly acute for smaller growth businesses with limited financial/business management/planning skills required to secure commercial finance].

Aims & Objectives

Overall objective is to contribute to economic growth by ensuring a healthy supply of and access to finance for scale-up and potential growth SMEs within the regions. Policy objectives (all within the regions):

- Reduce the funding gap for later stage finance for growth by increasing the supply of debt funding for scale-up and growth stage SMEs
- Increase the diversity of funding options for growing SME
- Increase the capacity/skills/understanding/experience of fund managers in the NPH, ME, CIoS areas (and capacity of intermediary networks to support businesses in becoming investment ready)

- Raise awareness of the availability and use of debt finance among SMEs and intermediaries
- Increase the take up of later stage debt finance
- Increase the number of scale up and high growth SMEs in the region
- Generate a target return for BBB and providers.

Figure A-2: Logic model – Debt: later stage loans from £100k-£1.5m in MEIF

Delivery		Benefits		
Inputs	**Activities**	**Outputs**	**Intermediate outcomes**	**Final outcomes/impacts**

Overall funding of:
• £153.8m* committed to date in NPIF (sourced from CLG/BIS legacy, ESIF, EIB, and BBB)
• £90.91m committed in MEIF (sourced from ESIF, EIB, ERDF legacy)
• TBC in CloSIF (sourced from ERDF)
 	
Plus:
• Time and resource invested by BBB
• Time and capital invested by Fund managers
 	
** Note: only 75% of available funding has been committed to date*
	Fund manager activities:
	• Awareness raising of loans and marketing and promotion of later stage debt for growth (targeting established SMEs with high growth potential)
	• Pre-application and application support
	• Provision of later stage loans
	  o £100k-£750k in NPIF
	  o £100k-£750k in MEIF
	• Mentoring of applicants
	• Monitoring of activities
	• Technical and credit assessment of applications
	• Contracting between providers and successful applicants
	• Loans and guarantee book management
	• Monitoring of loans
	
	BBB activities:
	• Selection of fund managers
	• Marketing and awareness raising
	• Website creation & management
	• High level monitoring
	• Overarching fund of fund management
		Enquiries/applications – conversion rates
		
		Number and value of later stage loans (£), gross
		
		ERDF outputs:
		• C1 – Number of enterprises receiving support
		• C3 – Number of enterprises receiving financial support other than grants
		• C4 – Number of enterprises receiving non-financial support
		• C5 – Number of new enterprises supported
		• C7 – Private investment matching public support to enterprises (non-grants), equivalent to private sector leverage
		
		Geographical spread of funding across LEP areas
		
		Achieved project milestones by businesses
			For business beneficiaries
			
			Additionality of finance secured
			
			Leading to additional investment in:
			• working capital, expansion projects, premises, assets, etc.
			• skills, R&D, product and process dev. Marketing, internationalisation
			
			• Leading to additional:
			  • new products/services (C28/29) and processes
			  • TRL progression towards commercialisation, IP etc
			  • new jobs created (MI data/ERDF output - C8)
			  • exporting
			  • leverage of follow-on funding.
				For business beneficiaries
				
				• Business growth:
				  • Impact on GVA/ turnover/employment, including new and better quality jobs created
				  • efficiency/productivity/profitability
				  • additional scale up businesses
				
				For the regions
				• Economic growth:
				  • GVA, jobs and productivity
				  • Number of scale up businesses
				  • Supply chain impacts and knowledge spillovers from R&D activity
				• Reduce regional performance gap with London and SE

			For Eco-system
			
			• Increase in the number of providers and value of later stage loans
			• Stronger demand from firms for later stage debt
			• Better funding cases put forward by SMEs
			• Follow-on investment.
				For Eco-system:
				
				• A better functioning and sustainable finance ecosystem in the regions with:
				  • Increased diversity of funding options for SMEs
				  • Reduced funding gap for potential high growth firms
				  • Greater awareness of later stage debt and providers among SMEs and intermediaries
				• Reduce finance gaps with London and South East

			For BBB • Interim repayments on loans (MI data)	For BBB • Meet target return for BBB and fund managers
Lending: 2017-2021 Portfolio management up to 2026		Intermediate outcomes potentially from 2-3 years after lending through to 5-10 years after lending Final outcomes: 5-10 years (+) after lending		

Source: SQW, drawing on documentation and scoping consultations with BBB

Late stage equity to £2m in MEIF

Context and Rationale

Lack of access equity is a barrier to growth for SMEs in these regions. There is a significant difference in the awareness and availability of equity as a source of investment for growth in these regions compared with London and the South East. There is evidence that this is both the result of supply and demand failures. Specifically:

Supply side market failures and barriers:

- Information asymmetries – there is uneven product and market knowledge between SMEs and financiers
- Access to finance is constrained outside London and South East, challenges in bringing together multiple investors into a project
- Risk aversion amongst VCs and business angels (a rational market response, but delivering sub-optimal outcomes for target businesses)
- The high relative cost of identifying opportunities, due diligence and managing smaller equity investments
- Private investors cannot capture positive spillover effects, e.g. innovation and knowledge transfer.

Demand side market failures and barriers:

- Information gaps:
    - SMEs do not fully understand the benefits of using equity to unlock growth (preferring to grow from retained profits)
    - Unaware of how/where to access equity or the likely success of securing it
    - Unable to present investment opportunities to best effect [issues particularly acute for smaller growth businesses with limited financial/business management/planning skills required to secure commercial finance].

This leads to underinvestment in potential high growth SMEs, holding back their growth and the economic performance of the region.

Aims & Objectives

Overall objective is to contribute to economic growth by ensuring a healthy supply of and access to equity investment for potential growth SMEs within the regions.

Policy objectives (all within the regions)

- Increase the availability of equity investment for growth SMEs
- Increase the capacity/skills/understanding/experience of fund managers in the NPH, ME, CIoS areas (and capacity of intermediary networks to support businesses in becoming investment ready)

- Increase the diversity of funding options for growing SMEs
- Raise awareness of the availability and use of equity among SMEs and intermediaries
- Increase the number and total value of equity investments in the regions
- Increase the number of scale up and high growth SMEs in the region
- Generate a target return for BBB and fund managers.

Figure A-1: Logic model –Late stage equity to £2m in MEIF

Delivery		Benefits		
Inputs	**Activities**	**Outputs**	**Intermediate outcomes**	**Final outcomes/impacts**

Overall funding of:
• £116.75m committed to date in NPIF (sourced from CLG/BIS legacy, ESIF, EIB, and BBB)
• £69m committed in MEIF (sourced from ESIF, EIB, ERDF legacy)
• TBC in CIoSIF (sourced from ERDF)
 	
Plus
• Time and resource invested by BBB
• Time and capital invested by Fund managers
 	
** Note: only 75% of available funding has been committed to date*
	Fund manager activities:
	• Awareness raising and promotion of equity investment among SMEs, intermediaries and investors (esp. high growth potential)
	• Pre-application and application support
	• Provision of equity investment
	  o £50k-2m in NPIF
	  o To £2m in MEIF
	• Mentoring of potential investees
	• Monitoring of equity landscape
	• Technical and credit assessment of potential investments
	• Contracting between investors and successful SMEs
	• Investment book management
	• Monitoring of equity investments
	• Mentoring of investee businesses
	
	BBB activities:
	• Selection of fund managers
	• Marketing and awareness raising
	• Website creation & management
	• High level monitoring
	• Overarching fund of fund management
		Enquiries/applications – conversion rates
		
		Number and value of equity investments (£), gross
		
		ERDF outputs:
		• C1 – Number of enterprises receiving support
		• C3 – Number of enterprises receiving financial support other than grants
		• C4 – Number of enterprises receiving non-financial support
		• C5 – Number of new enterprises supported
		• C7 – Private investment matching public support to enterprises (non-grants), equivalent to private sector leverage
		
		Geographical spread of funding across LEP areas
		
		Achieved project milestones by businesses
			For business beneficiaries
			
			Additionality of finance secured
			
			Leading to additional investment in:
			• working capital, expansion projects, premises, assets, etc.
			• skills, R&D, product and process dev. marketing, internationalisation
			• management capability
			
			Leading to additional:
			• new products/services (C28/29) and processes
			• TRL progression towards commercialisation, IP etc
			• new jobs created (MI data/ERDF output - C8)
			• exporting
			• leverage of follow-on funding.
				For business beneficiaries
				
				• Business growth:
				  • Impact on GVA/ turnover/employment, including new and better quality jobs created
				  • productivity
				  • profitability/firm value
				
				For the regions
				• Economic growth:
				  • GVA, jobs and productivity
				  • supply chain impacts and knowledge spillovers from R&D activity
				  • number of scale up businesses
				• Reduce regional performance gap with London and South East

			For Eco-system
			
			• Increase in the number of investors and value of investments
			• Stronger demand from firms for equity investment
			• Better investment cases put forward by SMEs
			• Follow-on investment.
				For Eco-system:
				
				• A better functioning and sustainable finance ecosystem in the regions with:
				  • Increased diversity of funding options for SMEs
				  • reduced equity gap with London and SE
				  • greater awareness of equity among SMEs and intermediaries
				  • Greater awareness of opportunities among investor community

			For BBB • Value of equity (MI data)	For BBB • Meet target return for BBB and fund managers
Lending: 2017-2021 Portfolio management up to 2026		Intermediate outcomes potentially from 2-3 years after lending through to 5-10 years after lending Final outcomes: 5-10 years (+) after lending		

Source: SQW, drawing on documentation and scoping consultations with BBB

PoC early stage equity funding up to £740k in MEIF only

Context and Rationale

Historically, equity markets in the Midlands have invested in later stage businesses with the area receiving less early stage funding than the UK average. Start-ups in the Midlands receive a smaller proportion of seed stage and venture stage funding that start-ups in the rest of the UK. Access to PoC equity investment is one of the barriers to enabling start up and faster growth among SMEs. There is evidence that this is both the result of supply and demand market failures. Specifically:

Supply side market failures and barriers:

- Information asymmetries between investors and small businesses
- Access to equity for PoC is constrained outside London and South East
- The high relative cost of identifying opportunities, due diligence and managing smaller equity investments
- Private investors cannot capture positive spillover effects, e.g. innovation and knowledge transfer.

Demand side market failures and barriers:

- Information gaps:
    - SMEs do not fully understand the benefits of using equity to unlock growth (preferring to grow from retained profits)
    - Unaware of how/where to access equity or the likely success of securing it
    - Unable to present investment opportunities to best effect [issues particularly acute for smaller growth businesses with limited financial/business management/planning skills required to secure commercial finance].

This leads to underinvestment in potential high growth SMEs, holding back their growth and the economic performance of the region.

Aims & Objectives

Overall objective is to contribute to economic growth by ensuring a healthy supply of and access to equity investment for potential growth SMEs within the regions.

Policy objectives (all within the regions):

- Increase the availability of equity investment for growth SMEs
- Increase the capacity/skills/understanding/experience of fund managers in the NPH, ME, CIoS areas
- Increase the diversity of funding options for growing SMEs
- Raise awareness of the availability and use of equity among SMEs and intermediaries

- Increase the number and total value of equity investments in the regions
- Increase the number of scale up and high growth SMEs in the region
- Generate a target return for BBB and fund managers.

Figure A-2: Logic model – PoC early stage equity funding up to £750k in MEIF only

Delivery		Benefits		
Inputs	**Activities**	**Outputs**	**Intermediate outcomes**	**Final outcomes/impacts**

Overall funding of:
• £23m committed in MEIF (sourced from ESIF, EIB, ERDF legacy)
 	
Plus:
• Time and resource invested by BBB
• Time and capital invested by Fund managers
	Fund manager activities:
	• Awareness raising and promotion of PoC equity investment among SMEs, intermediaries and investors
	• Pre-application and application support
	• Provision of equity investment
	  o To £750k in MEIF
	• Mentoring of potential investees
	• Monitoring of equity landscape
	• Technical and credit assessment of potential investments
	• Contracting between investors and successful SMEs
	• Investment book management
	• Monitoring of equity investments
	• Mentoring of investee businesses
		Enquiries/applications – conversion rates
		
		Number and value of equity investments (£), gross
		
		ERDF outputs:
		• C1 – Number of enterprises receiving support
		• C3 – Number of enterprises receiving financial support other than grants
		• C4 – Number of enterprises receiving non-financial support
		• C5 – Number of new enterprises supported
		• C7 – Private investment matching public support to enterprises (non-grants), equivalent to private sector leverage
			For business beneficiaries
			
			Additionality of finance secured
			
			Leading to additional investment in:
			• R&D, product development and testing, market testing
			• management capability
			
			Leading to additional:
			• Prototypes, demonstrators
			• TRL progression towards commercialisation, IP etc
			• new products/services (C28/29) and processes
			• new jobs created (MI data/ERDF output - C8)
			• exporting
			• leverage of follow-on funding.
				For business beneficiaries
				
				• Business growth:
				  • Impact on GVA/ turnover/employment, including new and better quality jobs created
				  • efficiency/productivity/profitability
				
				For the regions
				• Economic growth:
				  • GVA, jobs and productivity
				  • supply chain impacts and knowledge spillovers from R&D activity
				  • Number of scale up businesses
				• Reduce regional performance gap with London and South East

	BBB activities:
	• Selection of fund managers
	• Marketing and awareness
	• Website creation & management
	• High level monitoring
	• Overarching fund of fund management
		Geographical spread of funding across LEP areas
		
		Achieved project milestones by businesses
			For Eco-system
			
			• Increase in the number of investors and value of investments
			• Stronger demand from firms for equity investment
			• Better investment cases put forward by SMEs
			• Follow-on investment.
				For Eco-system:
				
				• A better functioning and sustainable finance ecosystem in the regions with:
				  • Increased diversity of funding options for SMEs
				  • reduced equity gap with London and SE
				  • greater awareness of equity among SMEs and intermediaries
				  • Greater awareness of opportunities among investor community

			For BBB • Value of equity (MI data)	For BBB • Meet target return for BBB and fund managers
Lending: 2017-2021 Portfolio management up to 2026		Intermediate outcomes potentially from 2-3 years after lending through to 5-10 years after lending Final outcomes: 5-10 years (+) after lending		

Source: SQW, drawing on documentation and scoping consultations with BBB

Annex B Survey Respondent Profile

Further information on the survey

This section includes the results of analysis completed to test the representativeness of the survey sample against the total MEIF population. These checks have been completed for: geography, fund manager, sector, firms in receipt of multiple MEIF awards, and timing of support (Tables B-1 to B-6).

Table B-1: Geography

	Survey	%	Total population	%
Black Country	30	12%	97	13%
Buckinghamshire Thames Valley	1	0%	4	1%
Coventry and Warwickshire	21	9%	74	10%
Derby, Derbyshire, Nottingham and Nottinghamshire	32	13%	102	13%
Greater Birmingham and Solihull	39	16%	124	16%
Greater Lincolnshire	18	7%	49	6%
Humber	0	0%	1	0%
Leicester and Leicestershire	27	11%	77	10%
Oxfordshire	1	0%	5	1%
Sheffield City Region	1	0%	4	1%
South East Midlands	32	13%	93	12%
Stoke-on-Trent and Staffordshire	22	9%	52	7%
The Marches	13	5%	39	5%
West of England	0	0%	1	0%
Worcestershire	10	4%	36	5%
Total number of awards	**247**		**758**	

Source: SQW analysis of survey data and monitoring data provided to SQW by the Bank; note: this data was not available for N=1 business.

Table B-2: Fund Manager

	Survey	%	Total population	%
MEIF ESEM Small Business Loans	40	16%	124	16%
MEIF WM Small Business Loans	39	16%	214	28%

MEIF ESEM Debt	36	15%	87	11%
MEIF WM Debt	30	12%	88	12%
MEIF ME Debt	20	8%	57	8%
MEIF Proof of Concept	30	12%	70	9%
MEIF WM Equity	29	12%	64	8%
MEIF ESEM Equity	24	10%	55	7%
Total number of awards	**248**		**759**	

Source: SQW analysis of survey data and monitoring data provided to SQW by the Bank

Table B-3: Sector

	Survey	%	Total population	%
(A) - AGRICULTURE, FORESTRY AND FISHING	0	0%	1	0%
(B) - MINING AND QUARRYING	0	0%	0	0%
(C) - MANUFACTURING	52	21%	168	22%
(D) - ELECTRICITY, GAS, STEAM AND AIR CONDITIONING SUPPLY	1	0%	1	0%
(E) - WATER SUPPLY; SEWERAGE, WASTE MANAGEMENT AND REMEDIATION ACTIVITIES	5	2%	13	2%
(F) - CONSTRUCTION	19	8%	54	7%
(G) - WHOLESALE AND RETAIL TRADE; REPAIR OF MOTOR VEHICLES AND MOTORCYCLES	38	15%	124	16%
(H) - TRANSPORTATION AND STORAGE	3	1%	8	1%
(I) - ACCOMMODATION AND FOOD SERVICE ACTIVITIES	9	4%	23	3%
(J) - INFORMATION AND COMMUNICATION	35	14%	94	12%
(K) - FINANCIAL AND INSURANCE ACTIVITIES	6	2%	12	2%
(L) - REAL ESTATE ACTIVITIES	3	1%	8	1%
(M) - PROFESSIONAL, SCIENTIFIC AND TECHNICAL ACTIVITIES	31	13%	107	14%
(N) - ADMINISTRATIVE AND SUPPORT SERVICE ACTIVITIES	24	10%	60	8%
(O) - PUBLIC ADMINISTRATION AND DEFENCE; COMPULSORY SOCIAL SECURITY	0	0%	2	0%
(P) - EDUCATION	2	1%	7	1%

(Q) - HUMAN HEALTH AND SOCIAL WORK ACTIVITIES	7	3%	20	3%
(R) - ARTS, ENTERTAINMENT AND RECREATION	2	1%	12	2%
(S) - OTHER SERVICE ACTIVITIES	3	1%	13	2%
No match	8	3%	32	4%
Total number of awards	**248**		**759**	

Source: SQW analysis of survey data and monitoring data provided to SQW by the Bank

Table B-4: Number of MEIF awards

	Survey	**%**	**Total population**	**%**
One award	120	71%	401	74%
Multiple awards	50	29%	138	26%
Total number of businesses	**170**		**539**	

Source: SQW analysis of survey data and monitoring data provided to SQW by the Bank

Table B-5: Year of first investment

	Survey	%	Total population	%
2017	1	1%	7	1%
2018	28	16%	90	17%
2019	39	23%	136	25%
2020	32	19%	110	20%
2021	67	39%	157	29%
2022	3	2%	39	7%
Total number of businesses	**170**		**539**	

Source: SQW analysis of survey data and monitoring data provided to SQW by the Bank

Annex C: Additional Econometric results and methodology

Introduction

The econometric evaluation of the Bank Regional Funds identifies similar but unfunded businesses and compares them to those who received finance from the Bank. Important in this process is identifying the comparable businesses using secondary data sources. This annex describes the methods used for this.

Approaches to impact evaluation[54]

This annex describes the quasi-experimental approach used in Chapter 6 of this study. After an intervention, it is possible to observe outcomes for the business, but the evaluator cannot know what the performance of a business would have been without that intervention. The evaluation approach therefore seeks to resolve this problem of measuring what would have happened in the absence of an intervention, in this case the Bank finance (Caliendo and Kopeinig, 2005).

Simply comparing recipient businesses to all unfunded businesses is problematic because these two groups are likely to be very different. the Banks finance products target certain groups and require an application and approval process. The evaluator therefore constructs a comparison group of unfunded businesses that resemble the recipients by replicating the selection process. For example, in a scenario where funded businesses tend to be small, the matching process will identify businesses that are not funded but are of a similar size.

There are several “quasi-experimental” methods to match unfunded firms to the funded businesses. The particular technique used for this analysis is called propensity score matching (PSM) which matches each funded business to one that most closely resembles it from the unfunded businesses using a score.

Identifying the counterfactual

This study’s methodological approach centres on constructing counterfactuals or comparison groups, samples of businesses that were not funded by the Bank finance but are similar to recipients based on a number of identifiable characteristics. There are statistical techniques to match the funded businesses to unfunded businesses, but a constraint on statistical matching is that it can only be undertaken on measured or observable characteristics. Any control group derived may then differ from the funded group due to characteristics missing from the statistical matching model.

For the funded businesses, two pools are used as the population of businesses from which comparator businesses are selected – a trimmed version of the ONS Business Structure Database (BSD) and unfunded applicants to the MEIF. The wider BSD contains more than 3 million businesses. Using the entire population proves quite cumbersome for analysis and so a statistically representative sample is

[54] ONS Secure Research Service Disclaimer: This work was produced using statistical data from ONS. The use of the ONS statistical data in this work does not imply the endorsement of the ONS in relation to the interpretation or analysis of the statistical data. This work uses research datasets which may not exactly reproduce National Statistics aggregates.

drawn, large enough after this trimming for all funded businesses to be matched to other businesses similar based on their observable characteristics.

The BSD includes most businesses in the UK, and even with the range of variables available, it is not possible to capture subtleties in business model, strategy or management experience and motivation. To offer an alternative comparison group, the businesses who applied but were unsuccessful at receiving finance from the MEIF fund are the second pool of comparison businesses. These have been linked to the BSD.

By applying for funding, these businesses have demonstrated that they are similar to the funded applicants in terms of their motivation. They thought they might be funded, so they might also be similar to the recipient businesses in terms of hard or soft eligibility criteria that are not observable in the data. However, there are problems with using unfunded applicants: the fact that they were not funded might reveal that their application, product idea or business model was not as strong as those brought forward by other applicants. So, some tests of this matching pool are sensible.

Matching between beneficiaries and non-beneficiaries is done with businesses that were trading at the time of the evaluation. However, we do not know why non-beneficiaries could not be identified in the BSD. This could be because of name changes, inaccurate recording of business names, being too small, or because the firm has ceased trading. If some of the businesses that were not identified had ceased trading, this could overstate the average growth of the non-beneficiary group (and therefore understate the difference that the Fund has made. This is unlikely to make a significant difference but may lead to a slight underestimate of the impact.

Creating the selection model

The selection model estimates a business' propensity for seeking support, the propensity score. The analysis starts with the businesses that availed of MEIF loans and equity investments. A business is selected from the pool of unsupported businesses (either the trimmed BSD or the unfunded businesses) that has a propensity score closest to each of the funded businesses, i.e. based on all observed characteristics, they are as likely to have received the Bank loan or equity finance (Rosenbaum, 2002).

Estimating a selection model is through a probit where the fact of support is regressed on characteristics that drive businesses towards support. Three models with different independent variables are presented (labelled models I, II and III). Importantly, each model produces different propensity scores due to a different set of observable characteristics being used in the probit regression estimation.

Matching is undertaken through estimating a statistical model of the Bank selection process. The model's specification is primarily defined by the variables used.

Characteristics used for estimating the propensity score must be relevant for businesses' likelihood to receive finance, as well as changes in their turnover, employment, and productivity. Size, sectoral categories and indicators of innovativeness have often been the starting point for the selection model as these characterise the economics of a business, e.g. manufacturers tend to be plant/machine intensive, businesses in sectors with high levels of skilled staff can be flagged. Then there will be policy related drivers. For example, the Bank investment funds target growing businesses, so a variable to capture this would be useful.

Model I matches on current size, in the form of categorical variables for employment and turnover brackets and the number of live local units and approximates past growth using the scale-up dummy. This is a definition of fast-growing companies by the Scale Up Institute, identifying businesses with more than 20% employment and turnover growth for the last three years. Furthermore, the model also includes dummy variables for highly knowledge-intensive services and manufacturing as well as a dummy for whether the enterprise has received innovate UK support before, this indicates whether or not business businesses are likely to be innovative. The second model drops the industry and location variables and adds the fact of a business being in receipt of the Covid Job Retention Scheme support. The third model drops the year dummies, Covid support and the sectoral variables.

The selection modelling for this analysis uses a probit model. The dependent variable takes a value one for those in receipt of first support and zero for the unfunded businesses who did not receive any support in the wider BSD. When this is used to compare to unfunded applicants, the pool of unfunded applicants takes the value of zero and the wider BSD is removed.

Selection model results

Combinations of different control variables, sub-samples and match pools can yield a wide range of different specifications. This requires tools to assess their quality and pick the most appropriate ones for further analysis. Selection models are chosen based on their fit to the data and ability to explain which businesses get funded. Variables are chosen that have a statistically significant effect on this outcome.

Three model specifications were estimated and compared with model II chosen as the preferred specification. **Table C-1** shows results for probit selection models, for both the BSD and the unfunded applicants for all three models. The following section then presents quality and robustness checks to argue why this model was chosen.

Table C-1: Probit estimation of probability to be funded

	Model I BSD	Model I BSD	Model I un-funded	Model I un-funded	Model II BSD	Model II BSD	Model II Un-funded	Model II Un-funded	Model III BSD	Model III BSD	Model III Un-funded	Model III Un-funded
Variables	Coef	SE	Coef	SE	Coef	SE	Coef	SE	Coef	SE	Coef	SE
Live Local Units	-0.03	0.02	0.03	0.06	-0.06	0.02***	0.01	0.06	-0.03	0.02	0.05	0.06
Patent Holder					0.76	0.13***	0.05	0.15				
Total Patents					-0.08	0.05***	0.02	0.13				
Employment Categories												
3-9 Employees	0.31	0.05***	0.01	0.20	0.20	0.04***	0.04	0.15	0.28	0.05***	0.07	0.12
10-49 Employees	-0.02	0.06	-0.07	0.15	-0.12	0.05***	0.26	0.21	-0.08	0.06	0.02	0.15
50-249 Employees	-0.53	0.09***	-0.04	0.24	-0.67	0.07***	0.23	0.58	-0.59	0.08***	0.02	0.29
250+ Employees	-1.05	0.27***	-0.60	0.61	-0.93	0.18***	-0.35	0.09***	-1.18	0.27***	-0.33	0.59
Sectoral and Growth Variables												
Furlough beneficiary	0.40	0.03***	0.20	0.07***								
IUK Project Before					0.02	0.01***	-0.46	0.31				
Reported R&D	0.29	0.07***	0.02	0.17								
Scaleup	-0.03	0.16	-0.21	0.33	0.19	0.10***	-0.08	0.05	-0.35	0.16***	-0.69	0.27***
Tracked by Beauhurst									0.85	0.04***	-0.11	0.07
High KI Manufacturing	0.31	0.11***	-0.07	0.23	0.41	0.11***	-0.06	0.24				
Annuals												
2016 dummy	2.99	149.50	3.90	78.00	2.80	140.00	3.89	64.83				

2017 dummy	3.40	170.00	4.63	77.17	4.07	135.67	4.62	66.00				
2018 dummy	3.46	173.00	4.68	78.00	4.03	134.33	4.67	66.71				
2019 dummy	3.51	175.50	4.66	77.67	4.03	134.33	4.65	66.43				
2020 dummy	3.41	170.50	0.00	n.a	4.05	135.00	4.46	63.71				
Turnover Categories												
£101,000-500,000					0.20	0.04***	0.26	0.11***				
£501,000-1,000,000					0.47	0.06***	0.42	0.15***				
£1-5 mil					0.62	0.07***	0.44	0.16***				
£5-10 mil					0.63	0.09***	0.12	0.24				
£10-50 mil					0.52	0.10***	0.20	0.27				
Location												
North West					0.38	0.05***	4.07	203.50				
East Midland					-0.46	0.07***	4.53	226.50				
Yorkshire & Humber					0.22	0.05***	4.15	207.50				
East of England					-0.72	0.24***	4.37	218.50				
West Midlands					-0.69	0.16***	4.56	228.00				
South West					n.a	n.a	4.53	226.50				
London					-0.65	0.27***	3.75	187.50				
South East					n.a	n.a	4.31	215.50				
Constant	-7.02	175.50	-5.86	83.71	-7.34	146.80	-10.05	251.25	-7.02	175.50	-5.86	83.71

Source: Belmana

The dependent variable in these models is a dummy indicating whether or not the business received support. Looking at models I and II, selection tends to target smaller (positive on small size categories and negative on large), high growth businesses as well as those who have been a recipient of innovate UK support. Turnover tends to play a significant role in selection, as does being a patent holder. Looking at model I, the innovation variable, reported R&D, and high knowledge intensive enterprise appear to correlate with selection, as does being a recipient of the Covid Job Retention Scheme. Past performance is a strong correlate also, with employment and turnover growth before support resulting in an increased chance of selection. Model III drops the insignificant year dummies and the sectoral variables, and the results seem to remain the same.

Quality and robustness checks

The difference-in-difference estimates across models is presented in Table C-2. This covers the changes in employment in relation to comparators for one, two and three years after support. While there is a difference in the levels with which the funded businesses outgrow the comparators, there is a consistency in the difference-in-difference being larger. Control Group 1 using the unfunded pool – the preferred model in this analysis – is the estimate where growth differentials are most modest. The matching may be more robust, as better matching tends to lessen additionality.

Table C-2: Difference-in difference results for employment after 1, 2 and 3 years various models

	MEIF funded (Cumulative)	Unfunded businesses		BSD	
		Control Group 1	Control Group 2	Control Group 3	Control Group 4
1 year after support	15.9%	4.7% (1.36)	8.0% (1.90*)	11.2% (3.25***)	8.6% (2.15**)
2 years after support	32.0%	9.5% (1.60)	19.5% (2.82***)	24.7% (3.22***)	12.5% (1.79*)
3 years after support	42.7%	0.8% (0.07)	12.1% (0.98)	22.1% (1.52)	6.2% (0.50)

Note: Significance levels of difference between MEIF funded and group 1 are indicated 1% (***), 5% (**) and 10% (*); using robust standard errors. Only the DiD statistics require significance level indicators

The robustness of the turnover difference-in-differences is explored in Table C-3 in a similar manner. Again, the table indicates strong support for a positive difference-in-difference, with all models indicating the supported outpace comparator businesses in sales growth.

Table C-3: Difference-in difference results for real turnover after 1, 2 and 3 years various models

	MEIF funded (Cumulative)	Additional growth over matched Unfunded businesses		Additional growth over matched BSD	
		Control Group 1	Control Group 2	Control Group 1	Control Group 2
1 year after support	14.3%	6.6% (0.89)	24.7% (2.90***)	18.7% (2.77***)	18.7% (2.51**)
2 years after support	45.2%	24.7% (2.06**)	61.8% (4.04***)	66.2% (4.43***)	48.8% (3.53***)
3 years after support	49.7%	5.2% (0.31)	32.7% (1.63)	61.9% (3.28***)	61.6% (2.91***)

Note: Significance levels of difference between MEIF funded and group 1 are indicated at 1% (***), 5% (**) and 10% (*) using robust standard errors. Only the DiD statistics require significance level indicators

Robustness tests of PSM include considering whether- after matching- the funded business and the matched counterfactual are statistically similar. This is tested using balance tests after matching.

Balance tests look at whether, having been matched, the counterfactual is similar to the funded businesses. This tests for the so-called conditional independence assumption of propensity score matching.

A key characteristic that matching needs to produce is that the counterfactual group – prior to support – were on a similar trend to the funded in the key economic impact measures. If this is not the case, there is a concern that some unobserved characteristics remain, and these have put the funded businesses on a different growth trajectory prior to support.

Below in Tables C-4 and C-5 is the balance of the variables before and after the matching. Looking at table C-4, matching to the unfunded applicants, before matching the variables were – unsurprisingly – only slightly different. For many variables, there was insignificant differences in the characteristics before matching. There are a few exemptions: for example, for model I, before matching, 13% of the unfunded applicants were tracked by Beauhurst and after matching, this number remained the same. Looking at model II, before matching, the number of businesses in high knowledge intensive sectors was 18% and after matching, this decreased to 12%, getting closer to the funded level of 13%. Finally, looking at model III, the percentage of businesses being tracked by Beauhurst improved with the matching and, unlike model I and II, as did past turnover. The table shows that the matching process effectively creates a group of unfunded businesses that is similar to the group of funded businesses.

Table C-4: Balance Tests for Models I, II and III, Unfunded

	Model I BSD unfunded	Model I BSD unfunded	Model I BSD unfunded	Model II BSD unfunded	Model II BSD unfunded	Model III BSD unfunded	Model III BSD unfunded
	Funded	after matching	before matching	after matching	before matching	after matching	before matching
Live local units	1.13	1.15	1.08	1.12	1.08	1.14	1.08
Patent owner²	0.00	0.00	0.00	0.00	0.00	0.01	0.00
Hi Know Intense²	0.14	0.14	0.23***	0.14	0.23***	0.21**	0.23***
Furlough²	0.62	0.59	0.52***	0.59	0.52***	0.57	0.52***
High Manu²	0.00	0.00	0.02*	0.00	0.02*	0.01	0.02*
UK Only²	1.00	1.00	0.99	0.98*	0.99	0.99	0.99
Scaleup bus. ²	0.01	0.01	0.04**	0.00	0.04**	0.01	0.04**
IUK Proj B/f²	0.00	0.01	0.00	0.00	0.00	0.02	0.00
BH Tracked²	0.33	0.34	0.40**	0.34	0.40**	0.29	0.40**
BERD²	0.09	0.06	0.10	0.09	0.10	0.09	0.10
Emp¹	2.13	2.04	1.96**	2.14	1.96**	2.06	1.96**
Real turn'r¹	6.42	6.40	6.00***	6.53	6.00***	6.20	6.00***
Lag Emp¹	1.95	1.85	1.81	2.04	1.81	1.93	1.81
Lag Real TO¹	6.30	6.42	5.97***	6.41	5.97***	6.18	5.97***
Emp Growth, 2yr bf supp¹	0.31	0.25	0.30	0.26	0.30	0.32	0.30
TO growth, 2 yr bf support¹	0.27	0.20	0.14	0.48*	0.14	0.18	0.14
Count of businesses	304	304	1,698	304	1,698	304	1,698

* show the significance level; *** significant at the 1% level; ** at 5%; * at 1%. Standard errors are robust; note (1) logged values: (2) Proportions.

Source: Belmana

Table C-5: Balance Tests for Models I, II and III, Wider BSD

	Model I BSD unfunded	Model I BSD unfunded	Model I BSD unfunded	Model II BSD unfunded	Model II BSD unfunded	Model III BSD unfunded	Model III BSD unfunded
	Funded	after matching	before matching	after matching	before matching	after matching	before matching
Live local units	1.18	1.21	3.25	1.38	1.78	1.18	3.26
Patent owner²	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hi Know Intense²	0.14	0.13	0.07***	0.17	0.08***	0.12	0.07***
Furlough²	0.62	0.64	0.32***	0.36***	0.31***	0.36***	0.31***
High Manu²	0.00	0.00	0.01	0.01	0.01	0.01	0.01
UK Only²	1.00	0.96***	0.94***	0.96***	0.95***	0.95***	0.94***
Scaleup bus. ²	0.01	0.00	0.02	0.02	0.02	0.01	0.02
IUK Proj B/f²	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BH Tracked²	0.33	0.06***	0.04***	0.37	0.04***	0.34	0.04***
BERD²	0.09	0.12	0.05***	0.09	0.05***	0.06	0.05***
Emp¹	2.39	2.50	2.42	2.55	2.23	2.58	2.42
Real turn'r¹	6.70	6.81	6.73	6.74	6.50	7.21**	6.74
Lag Emp¹	2.30	2.50	2.52	2.72	2.33	2.81	2.52
Lag Real TO¹	6.30	6.70	6.83	6.98	6.60	7.54**	6.83
Emp Growth, 2yr bf supp¹	0.31	-0.01***	0.03***	0.04***	0.03***	0.09***	0.03***
TO growth, 2 yr bf support¹	0.27	0.03***	0.01***	0.10*	0.00***	-0.01**	0.02***
Count of businesses	305	305	771,778	305	771,778	305	771,778

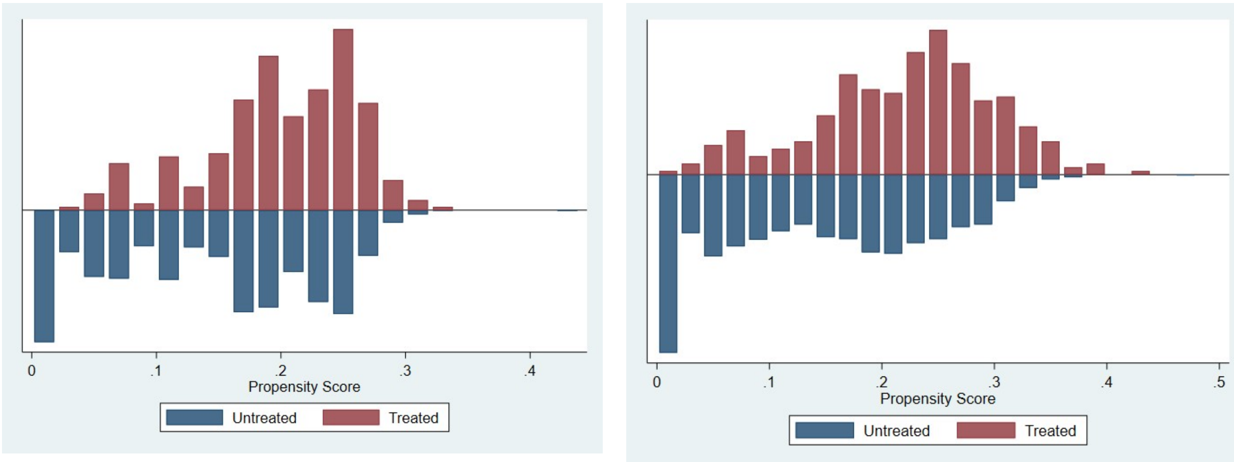
* show the significance level; *** significant at the 1% level; ** at 5%; * at 1%. Standard errors are robust.; note (1) logged values: (2) Proportions.

Source: Belmana

Figure C-1 plots out the propensity scores for model I matching and model II matching to the unfunded. This tests for the common support assumption of propensity score matching, that a comparable business can be found. Visual checks can identify whether the matching has covered the range of propensity scores.

The two plots indicated support the general finding that matching to the unfunded applicants is robust. For the unfunded applicants, there is a greater variation of scores and the matching then provides comparison businesses for these scores.

Figure C-1: Propensity score plots of Model I and Model II Non-Funded

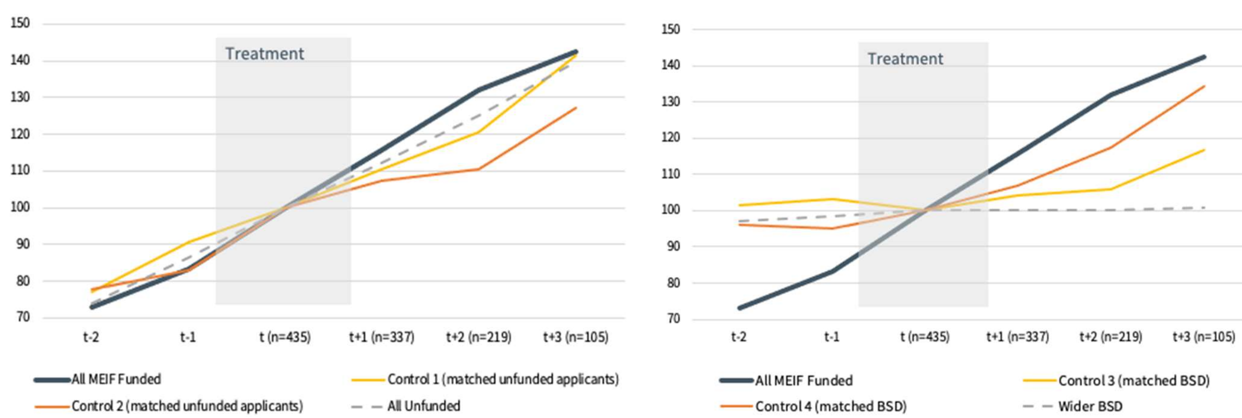


Source: Belmana

An important test for matching is looking into pre-treatment trends in employment. If businesses were growing at very different rates before treatment, this means the comparison group is not similar to the treatment group. Pre-treatment trends are tested checking if growth in employment before support differs in the funded businesses from the matched group.

Figure C-2 indicates the trends in employment growth for the businesses funded through the Bank, the matched comparable businesses and the pools of businesses from which matching was undertaken where the unfunded businesses were the match pool (left-hand side) and where the BSD was the match pool (right-hand side). The funded businesses were growing in the years before support, and that growth was faster than the wider business population. This indicates the importance of selection modelling being applied to unfunded businesses in the analysis, as businesses funded by the Bank were already on a growth path, and this underlines the preference for the results using this model. For the BSD matching, the matched control groups do not follow the funded group as closely.

Figure C-2: Pre Treatment Employment Growth matched to Unfunded Businesses and Wider BSD



Annex D Case Studies

Autins Group Case Study

Boditrax Case Study

Ekkosense Case Study

METCLOUD Case Study

Autins Group Case Study

Introduction and context

Autins Group are an established manufacturer of thermal and acoustic insulation components and materials, with a primary focus on supplying the automotive industry, whilst also offering services including research, testing and development of new materials. Founded in the West Midlands in the 1960's, Autins' HQ remains in Rugby, but the company has since expanded internationally with production centres in Germany and Sweden. It has an employee headcount of 150 and annual turnover of approximately £24m (2021). Over the last decade, it has been initiating activities in markets for new innovative materials as part of an ongoing growth strategy. This is underpinned by investments in internal R&D to develop new products and improve existing ones, whilst also growing its capabilities as a manufacturer of a patented lightweight material called 'Neptune' that originates from Korea.

Autins' received £1.5m debt finance from the Midlands Engine Investment Fund (MEIF) in early 2020 to facilitate the achievement of several growth-related activities. The loan was planned to support commercial expansion infrastructure, enhanced R&D activity and Neptune capacity by improving the factory in Tamworth with added capabilities. However as the pandemic hit, implementation was largely re-directed towards supporting the firm's resilience. This case study was written following a consultation with the Chief Financial Officer, and explores how the finance was used and the impacts it had on the firm's operations during (and after) the pandemic.

Business challenges and opportunities

Since Autins' underwent an IPO in 2016, it has pursued a growth strategy with serial and incremental progressions and success. This included the establishment of European operations and growth into markets for the 'Neptune' product[55]. The firm has increased its customer base to more than ten major automotive manufacturers including Jaguar Land Rover, Audi, Porsche, Bentley and BMW. It has also explored new markets including furniture and developed new services including foam production, sub-contractor product conversion and assembly and bespoke production management services. As a result, the management board expected a strong long-term growth trend from 2020 onwards.

At the start of 2020, the Board were focused on ensuring this growth could be sustained, which formed initial rationale for seeking external finance to make investments into their materials R&D and technology activities. This included expanding their pre-existing production site in Tamworth with improved R&D and production facilities, with expected outcomes of increasing capability to improve quality of products and production volumes. The management board believed this would allow Autins to stay ahead of market trends, particularly in anticipation of increased demand for more sustainable and low-cost products in the future.

"Our long-term growth strategy is focused on supporting customers in a range of industries to reduce heat and noise pollution. Our products couldn't be more relevant considering future contexts of achieving net-zero and operating more sustainably"

[55] The company gained an exclusive pan-European licence for Neptune in 2015.

Implementation to date

In the run up to 2020, Autins' began seeking sources of external finance. In August 2019 the firm secured £3.5m from shareholder equity, and after receiving a direct approach from Maven regarding the MEIF offer, made a successful application for £1.5m of debt finance. However, within two months of receiving this, the Covid-19 pandemic began. The lockdown restrictions initially affected Autins' ability to operate, but then ongoing disruptions to global supply chains significantly impacted the firm's largest customer base, the automotive industry. Sales dropped by 90% during the first 6 months of the pandemic, and the firm redirected the MEIF finance towards protecting the business, with it becoming a key source of cashflow for ongoing operations and activities.

As 2020 came to a close, Autins saw a slow recovery in customer demand, and to date the automotive industry remains at around 50% of pre-pandemic production capacity due to a global semi-conductor shortage (which is linked to the pandemic causing a surge in demand for electronic goods). This has continued a difficult trading pattern for the firm, and has meant production volumes have been almost halved since the pandemic began. As a result, Autins' allocated the majority of the MEIF loan into bolstering ongoing activities, with one third of the allocation being invested into the R&D and commercial expansion activities first proposed.

"The pandemic has had a drawn-out impact on industry supply chains and customer base, and we have had to work hard to move through this period."

Autins were supported by their fund manager, Maven, and the MEIF team to re-confirm the loan's spending plan and secure a repayment holiday until January 2023. The firm was granted the flexibility to spend the debt finance on supporting base operations and resilience throughout the pandemic restrictions.

With a portion of the loan still being invested in R&D, the company has been able to develop some outcomes in line with those first expected, but at a smaller scale. The expansion of the Tamworth factory has not been needed, and instead Autins used quiet periods of lockdowns to **invest in smaller R&D projects, purchase new machinery** and **invest in the skills and capabilities of R&D** staff through both training and by recruiting three specialist team members. This has enabled continued development of the Neptune material, leading to improvements its quality and consistency. Ongoing testing of the material in differing applications continues to show that Neptune has 30% better insulating performance than other products for the same weight, which the CFO confirmed remains a step change for the market.

Finance additionality and the wider finance package

The CFO reported that at the time of accessing the debt finance, there was very limited choice of alternative finance providers and investors in the region. The other commercial loans that Autins' would have been eligible for also had less attractive terms and would have been more difficult to secure due to the firm's lack of available collateral. As such the CFO advised that in the absence of the MEIF fund, Autins' **probably would not have been able to obtain finance at a similar scale and such suitable terms elsewhere.**

After the purpose of the loan was redirected, the CFO noted the MEIF fund was able to offer an invaluable level of flexibility in its terms and payback structure. Representatives from Maven regularly engage with Autins' Board members provide ongoing support, which has enabled further benefits for management processes and strategic decision making, and raised their awareness of other sources of finance. In July 2020, Autins secured £2.75m of CBILS funding via HSBC with support from Maven. The flexibility of the MEIF fund combined with the assistance received from Maven have led to a significant level of added value that was unlikely to have been offered through traditional routes to finance, such as a commercial bank loan.

"Receiving the repayment holiday works really well for us at the moment, and although the interest rate is relatively high, it allows us time to assess the market recovery and better plan making repayments next year"

Outcomes and impacts to date

By implementing the finance as a **working capital buffer to lost income** during the pandemic, the MEIF loan has enabled:

- **The firm's day-to-day operations to continue** during pandemic restrictions, which has supported the delivery of ongoing contracts.
- **Safeguarding employment** of approximately 50 staff, which following the termination of the furlough scheme could have otherwise been at risk of redundancy.
- **Continued growth of business activities** in smaller markets outside of the automotive industry.
- **Investments in R&D and business development**, which have enabled product improvements and will enable the firm to be responsive to the automotive industry's recovery.

A key impact of the finance's has been its role in been **enabling the business to continue operating against difficult trading conditions**. Autins' has been able to remain at close maintain production capacity throughout a challenging period. As a result, the CFO and Board report the firm is in an improved position to meet a rise in demand from automotive customers remain competitive.

In respect of the investments still made into R&D and achieving the growth strategy, the benefits have not been as prominent as first expected, but several outcomes have been achieved, including:

- Continued **product development**, resulting in **some new sales into new markets**, including includes developing PPE for the healthcare sector during Covid-19, which has provided a new revenue stream.
- Resourcing the management team's time in conducting **strategic business planning**, which has led to the **identification of process improvements** to the scale of £0.5m, and other **annual cost savings in total exceeding a further £0.5m.**
- **Increased capabilities within technical functions** through training and recruitment of three specialist R&D staff members and seven production operatives.
- Ongoing **marketing and business development** to promote the 'Neptune' product and continued awareness building with pre-existing and new customers across different markets.

"Without the funding and Maven's ongoing support we might not have been able to continue in our current form, and so it has been instrumental for us. Continuity in these difficult times means that we have a strong potential for achieving success into the future!"

Future outcomes, development and finance needs

Autins' recovery is closely linked to the recovery of the wider global automotive industry which is expected to recover from the semi-conductor shortage within the next one to two years. The company should also benefit from its ongoing R&D investments during the recovery cycle.

A wider impact of the MEIF scheme has been an improvement in Autins' ability to raise finance from private sector sources. In order to access more working capital, the business went on to raise more funding through a further round of equity share sales in December 2021.

"We would be confident taking finance in the future again, and may do this to accelerate our growth when markets bounce back."

Conclusions and lessons learned

In conclusion, despite the debt finance not being fully used for its original purpose, the scheme has been a very well-suited option. It has enabled a well-established manufacturing business to navigate external shocks, whilst continuing to invest in improving its competitiveness. Ultimately this has allowed it to remain well positioned to achieve growth in the long-term when markets recover. The size of the loan on offer, flexibility in its usage and ongoing partnerships that have formed have led to the achievement of numerus benefits and will support the businesses ongoing success.

"The fund has been ideal for us, and the process has been receptive, flexible and highly supportive during a challenging period"

Boditrax Case Study

Introduction and context

Established in 2011, Boditrax Technologies Limited is an innovative, health tech business based in Nottingham. After nearly five years of research and development the company designed and manufactured ‘Boditrax’, a precision body composition and health monitoring platform. The Boditrax scanner analyses cellular health and composition and delivers clinically validated data on up to 45 different metrics including muscle, bone, fat, fluid and cellular health. The information is stored securely online, and users can regularly use the machine to monitor and manage their fitness and health. The system also allows users to compare their body’s composition with over eight million other users of any age across the world, whilst organisations can collectively review the data to determine how best they can support their users, members, or patients.

Boditrax has now installed more than 1,000 systems worldwide. The platform is sold and licensed to both public and private sector organisations - such as hospitals, universities, gyms and leisure centres, and corporations – and clients pay a subscription fee to access the software and services.

Business challenges and opportunities

The Covid-19 pandemic was challenging for the business, as many of its customers (e.g. gyms and leisure centres) were forced to closed, resulting in a loss of income from monthly subscriptions. As a result, the firm was forced to reduce the workforce for a period. However, despite the challenges the pandemic provided the firm an **opportunity to pause and consider plans** to improve the product. The underlying architecture of the original Boditrax was reaching capacity as its usage had increased, so the firm set out ambitious plans to **develop a new Boditrax ‘V2’ using their own hardware and software**. The available technology and tools had changed markedly since 2011 and the shutdown presented the opportunity to recraft the entire product utilising the latest applications and best practice.

During this period, the firm has approached their bank for a Coronavirus Business Interruption Loan Scheme (CBILS) loan, however, their application was rejected. Shortly after, they were contacted by Maven who supported the company to apply for finance. The Fund Manager had already approached the company about their financing requirements several years earlier having been interested in the product, but at that time Boditrax was not seeking any external finance.

Finance additionality and wider finance package

In 2021, Boditrax Technologies received a £500k MEIF loan from the East and Southeast Midlands debt fund, backed by CBILS, managed by Maven[56]. In the absence of MEIF, **Boditrax definitely would not have been able to secure the finance elsewhere.** As outlined above, the company had been unsuccessful in securing a CBILS loan prior to MEIF. The treatment of future licence income and its impact on the balance sheet and a heavy requirement for R&D being examples of the challenge in securing finance. Therefore, the company required an investor who took the time to understand the business and its future value, and Maven took this *“more nuanced”* approach to assessing the firm.

[56] According to BBB’s monitoring data this was delivered in two tranches: £250k in March 2021 and £250k in May 2021.

Implementation to date

The MEIF investment has been used to accelerate product development. The funding allowed the firm to maintain the original Boditrax platform, whilst providing a *"once in a lifetime opportunity"* to create

brand new architecture, hardware and software for Boditrax 'V2'. Changes to the product include developing a foldable and lighter machine, developing their own, more stable operating system (including switching from Microsoft Windows to Raspberry Pi), and creating new digital apps. Another key aspect of product development funded by MEIF is adapting the product to meet buyer's needs. For example, work is underway to integrate the product with the NHS' patient record system ('SystmOne'). The first Boditrax 'V2' products have just been signed off and the product will be launched shortly.

Maven has been very supportive of Boditrax to date. The Fund Manager understands the business model and the product and regular financial reporting requirements have led to the company to adopt more accountable and timely financial management practices. Since the MEIF investment, the company has secured a small amount of EU funding for a PHD nutritionist to produce some content.

Outcomes and impacts to date

The MEIF investment has generated the following key outcomes and impacts for the business:

- **Investment in R&D** to **create a new product** (Boditrax 'V2')
- **Employment of three permanent employees** (two full-time and one part-time), **plus a temporary team of specialist contractors** to build specific components of the new system. Furthermore, recruitment of an additional permanent software engineer position is underway. Having the funds to recruit new staff allowed the business to keep existing staff working on the original product.

The investment has also led to a range of more practical benefits for the company, such as having the available cash to leverage volume discounts in their supply chain. It has also reassured suppliers the highly skilled employees, the latter is especially important given the software/tech engineering labour market is highly competitive at present. The consultee also explained that support from Maven after push back from their own bank, was a vote of confidence, thereby increasing the firm's faith in the process of securing external finance if ever needed in the future.

Other than the MEIF investment, **no other factors were identified as contributing significantly to the outcomes achieved.** However, in terms of the boarder context, it was noted that several unexpected positives emerged from the pandemic which has been the product even more relevant and should support future sales/subscriptions: first, the growth of subscription services was accelerated during the pandemic, and second, health and fitness has become a key trend as people return to gyms, leisure centres etc. following the lockdowns.

Overall, the outcomes achieved to date would not have been achieved without the MEIF investment. Without the funding, Boditrax would not have had the financial resources to commit to R&D or the capacity to develop the new product.

Future outcomes, development and finance needs

A key outcome will be the launch of the new Boditrax product. This is planned for Q4 2022. Testing was successfully completed in Q1 and Q2 for the software and the first 50 ‘second generation’ V2 folding scanners began production in August. These will begin to ship later in the year and the reduction in packaging costs will make the product more competitive in overseas markets and help the company in its drive to reduce environmental impact.

The new software architecture is also being deployed and this has delivered a **67% reduction in infrastructure hosting cost.** An ongoing saving that will directly recoup the development costs over the next two years.

Integration with public sector software platforms will also **open up substantial domestic opportunities** and the highly portable nature of the new generation hardware will allow increased use in portable applications supporting hard to reach and minority community health intervention programmes with the NHS. At present the company has no plans to seek any additional funding.

Conclusions and lessons learned

This case study demonstrates MEIF’s contribution to an **innovative tech business with high growth potential, which lacked the finance required to accelerate product development**. MEIF has supported the firm to develop new hardware and software for Boditrax ‘V2’, and in the process generate substantial new market opportunities both domestically and internationally.

In terms of process, this case study highlights how the Fund successfully filled a gap in the finance market when the firm was turned down by their bank. In contrast, the Fund Manager was strongly receptive of the Boditrax’s proposition and recognised the potential future value of the firm. As a result of the MEIF experience, the firm’s awareness and confidence seeking external finance has increased.

Ekkosense Case Study

Introduction and context

Established in Nottingham in 2014, with close ties to the University of Nottingham, Ekkosense is a global software leader using artificial intelligence (AI) and virtual reality (VR). The firm provides remote sensing hardware and software solutions to corporate companies to help them save energy and costs in running their data centres. A key area of development work has been the reduction of thermal risk power outages, through providing monitoring and cooling efficiencies resulting in reduced energy use, lower carbon footprint and increased profitability.

The company required substantial initial VC equity investment for software R&D and to establish working with significant corporate companies. An initial round of equity funding from the Nottingham Foresight fund in 2016 (£800k) helped the company to establish consultancy linkages and initial software applications for corporate clients. By March 2019 another round of VC investment was required to progress with combinations of software and hardware to scale up the business, including in international markets such as the US and Europe (notably in the Republic of Ireland). Their initial VC investor, Foresight, is one of MEIF's fund managers. This fund manager was approached and £500k of MEIF investment was secured. This enabled the company to secure large contracts with international companies like Telefonica, Daisy and Digital Reality.

Subsequently, during the Covid-19 pandemic the company, which was now in trading profit, sought substantial debt finance for working capital to support stock purchase and was able to secure in March 2021 a £1m Covid Business Investment Loan (CBIL) through Maven (supported by MEIF). The MEIF supported loan particularly helped their hardware demonstrator scale-up work.

Overall, the company has progressed from start-up in 2014 to currently being a global, export oriented, in profit business with 35 employees.

Business challenges and opportunities

As an early-stage R&D company, Ekkosense have been unable to obtain debt finance from traditional banks. This is because initially they had insufficient trading track record. They therefore sought substantial equity risk investment from a seed VC. This provided working capital, R&D, skills development and recruitment, product/service and process development. This was particularly helpful in providing marketing develop for overseas trade to the US and Europe.

More recently, a particular challenge has been raising debt finance, despite demonstrating an operating profit over several years. This is because their equity funding investment (from Foresight and MEIF) is seen as a substantial convertible debt – resulting in a negative balance sheet. The company required substantive working capital to secure product materials to assist scale-up of international operations. This was provided through the Maven (MEIF assisted) CBIL.

The two rounds of MEIF funding therefore addressed two key challenging development stages for the business. First, the equity funding from Foresight enabled R&D for software development, advancing IP rights and the development of international markets through securing contracts with large corporate clients. Second, the debt finance through Maven enabled working capital for stock and hardware development, facilitating demonstration and further international market development, including in Singapore and the US.

Finance additionality and wider finance package

The two rounds of MEIF investment are both considered as additional by the company, but were not part of a wider package of private investment leverage. The initial MEIF equity funding was offered through the company's existing seed VC investor, Foresight. The consultee suggested that; *"It was naturally the first choice that when the company required additional equity investment for R&D they enquired with their existing investor."* The suggestion is that at this relatively early stage in the company's development, they would not have been able to raise debt finance. Therefore, the only option would have been a search for other early-stage VC funding. The consultee believes that they would have eventually raised the required funding, but this could have taken six months longer, factoring in time for searching, applying, undertaking due diligence and negotiating terms and conditions. The consultee also noted that the MEIF equity funding not only led to much speedier fundraising at the time, but also potentially enabled Foresight to offer the full amount of £500k required at that time.

With regard to the subsequent £1m debt finance raised through Maven (MEIF/CBIL) in Spring 2021, at this stage Ekkosense had established a trading track record and believed that their substantial working capital requirement could be met by debt rather than further equity investment. Initial applications to their two company banks were both rejected because the company presented a negative balance sheet (due to their existing equity investment – which can be considered as a convertible debt, thus presenting high debt gearing, as noted above). Therefore, the provision of this debt finance via MEIF/CBIL was considered fully additional. The respondent noted that Maven, as experienced seed VC fund managers, were well placed to understand the company's requirements.

There were no negative displacement impacts on the East Midlands from the MEIF investments, since there were no direct local competitors and 90% of trade is outside of the region, with at least 40% being overseas.

Implementation to date

The first MEIF round of equity funding was used for software R&D, skills development and recruitment – including for international marketing, product/service and process development, advancing commercialisation and improved IP, resulting in market development internationally – notably in the US and Europe. The funding enabled critical software development to build on existing hardware sensing devices to tailor to the requirements of larger corporate customers and led to a number of sizeable new contracts with large international corporate companies, such as Telefonica, Daisy and Digital Reality.

The subsequent MEIF/CBIL loan supported working capital to address a situation where the company had orders and potential scale-up and required a stock of silicon chips. Securing the funding allowed stock purchase to develop products which they had orders for if they could provide the hardware investment and effective demonstration with clients. Further international market development took place – notably in the US and also Singapore.

Outcomes and impacts to date

The initial equity investment enabled the company to progress R&D and IP and develop international markets. The company grew in jobs, turnover and profitability. Directly attributable job creation related to 10 FTE jobs – all skilled, with half commanding salaries of above £37,800. The types of jobs created were in sales, R&D, production, administration and one senior post. Sales turnover has increased by 150% (between 2019 and 2022) with the consultee indicating that this performance would have been between 25-50% lower without MEIF investments. The benefits to the company are very clear from the first MEIF round of equity where this created high quality jobs and enabled the securing of sizeable international larger customer contracts. Additionally, the funding enabled software subcontractor support – typically supporting four FTE jobs per annum – all based in the UK, but with lower skill demands than for the permanent staff recruited.

The impacts of the more recent MEIF/CBIL loan have included enabling scale-up, including increasing international trade. This has generated increased sales turnover (contributing to the overall 150% increase since first MEIF investment in March 2019) and profitability. Jobs from the MEIF/CBIL loan are less easy to attribute, but overall, the company has increased employment from 18 at the time of the first MEIF equity investment to 35 at the current time.

Future outcomes, development and finance needs

Collectively, the MEIF funding from Foresight (equity) and subsequently from Maven (debt) has positioned the company better for a further round of investment which is currently underway. This is planned to be the final round of investment. However, it was noted that this would come from the internal resources of the company and its founders. The current internal funding round will aim to position the company for a trade sale exit planned for the next year. There are some potential buyers lined up and the trade sale will most likely take place with an overseas buyer. There is an expectation that the company will retain a UK presence.

Conclusions and lessons learned

The consultee reflected on his considerable knowledge of the East Midlands market over the past few decades, both as a VC fund advisor and also as a representative on the boards of several early-stage local R&D companies. *“External funding requirements for early-stage R&D companies in the region remain persistently difficult. These requirements are still not being met by institutional investors – little has changed in this respect during the last decade.”*

The consultee is critical of UK private VC, which has a preference for later stage deals and, where it does invest earlier, has a preference for software and software business to business (SaaS B2B) services which typically have lower investment requirements and shorter investment return horizons. This is at the expense of engineering and hardware solutions.

In summary, MEIF funding, both equity and subsequent debt finance, has provided timely and sufficient investments to the later R&D and early commercialisation and growth stages of the company, demonstrating additionality and attribution to improved business performance.

METCLOUD Case Study

Introduction and context

Operating since 1998, METCLOUD (previously Managed Enterprise Technology), is a technology company which delivers, and helps businesses adopt, customisable, cyber secure, cloud computing environments for today's organisations to work safely and efficiently. The company aims to be the global brand of choice for next generation, cyber secure cloud services offering a range of solutions and services to customers. In 2018, the company was rebranded to trade under the name of METCLOUD, following a management buyout completed by the CEO to become the sole owner of the company. METCLOUD is an established firm based in Edgbaston, and currently employs 28 members of staff.

Prior to applying for MEIF, METCLOUD had not received other external funding aside from an Innovate UK grant via the Knowledge Transfer Partnership programme secured in July 2020 to develop a cyber security platform harnessing AI and deep learning algorithms in partnership with Birmingham City University. In September 2021, the company successfully secured an equity finance deal of just over £1m from MEIF. This case study is based on the survey response and a follow-up, in depth interview with the CEO of the company.

Business challenges and opportunities

At the time of seeking MEIF, the business was aiming to **accelerate progress against its ambitious growth plans** and had identified the need to source external finance and go beyond organic growth and internal investment to achieve these. However, METCLOUD were faced with obstacles in securing finance, including that they were considered too high risk by other finance providers and the fact that the company's age excluded them from certain kinds of investment from VC firms:

"We talked to a number of investors, there were a couple of obstacles, one was that a lot of VCs wanted us to have various sort of tax positions. There are various vehicles in which VCs can get lots of benefits from investing in a company, but we were too old, so it excluded us from getting that kind of investment."

Finance additionality and wider finance package

In September 2021, METCLOUD secured just over £1m of equity investment from MEIF. In the absence of MEIF, **METCLOUD probably would not have been able to secure finance from another source**. At the time of securing MEIF investment, the firm did hold discussions with other private equity firms, however the consultee noted that they were deemed "*a bit too early stage*" and the options were limited. Overall, MEIF was seen as the most attractive in terms of "*the whole balance of the investment and equity ask*":

"We found ourselves in a place where it would be either high net worth angel investment, other VCs but their equity ask was too high, or MEIF which was the most attractive at that moment in time"

Implementation to date

Alongside working capital, the MEIF finance has supported METCLOUD to complete a range of activities including **product development, marketing, and staff recruitment and development**. Marketing has been a key area of activity supported by MEIF, including the development of a new logo, website and collateral for customers; improved search engine optimisation; and enhanced social media, PR and press activities. Linked to this, MEIF has supported recruitment activities (e.g., the sales team has been built up to generate and manage more business), the purchasing of technology for the firm's internal cloud platform, and staff development, through financing training and accreditation processes. No challenges to implementing planned activities were identified.

"Training wise, there is more pressure on the business. The technology sector does not rest, a lot of our accreditations with companies like Microsoft require training and accreditation and they don't do it for free, so MEIF has paid for those."

Since MEIF, METCLOUD has not secured further external finance, however it was noted that MEIF has improved the firm's ability to do so going forward. Specifically, the consultee expects MEIF to help in potential investors' confidence in terms of investing in the future.

Outcomes and impacts to date

The MEIF investment has generated the following key outcomes and impacts for the business:

- **Development and commercialisation of new products,** including a cloud back up service, 'Apollo Back Up', and a business continuity platform, 'Apollo 365', which allows companies to redirect their IT systems to the METCLOUD platform in the event of a disaster or cyber-attack.
- **Employment growth from 16 to 28 employees**, for example the firm has recruited a dedicated member of staff for information security who oversees procedures
- **Improved productivity**, through the acquisition of new business systems and technologies such as a customer relationship management platform and a technical support platform which have allowed the firm to enhance its efficiency through increased system integration and fewer manual interventions.

The investment has also led to two key wider benefits for the company. Firstly, the firm has been able to **develop skills within the workforce**, demonstrated by a 50% increase in the training budget. In particular, the funding has enabled the firm to fund further training to meet accreditations and certifications to meet requirements, for examples associated with Microsoft. Secondly, MEIF has **supported improved business resilience**, namely through developing and broadening the senior leadership team beyond the CEO and through investing in cloud-based technologies, which combined reduces risk of operational and technical failures.

Alongside the MEIF investment, the **motivation and existing expertise within the team** at METCLOUD was noted to have contributed to the outcomes achieved, with the "*highly innovative*" nature of the company seen a key. More widely, due to the company's offering, the **Covid-19 pandemic has had a positive impact on company growth**, with more companies requiring cyber security cloud services. Nonetheless, the **MEIF was noted to have enhanced internal confidence during the pandemic**:

"The investment has enabled us to maybe strengthen all the areas that we have done. If we hadn't had the investment, we would have maybe been reluctant to invest in areas not fully understanding how covid would play out. Allowed us to continue to trade confidently without concern for covid"

Overall, the outcomes achieved to date would have been achieved without the MEIF investment but on a smaller scale. MEIF is seen to have accelerated plans that would have "*just had to keep going organically*" and taken longer otherwise.

Future outcomes, development and finance needs

In the future, the firm expects outcomes to include:

- **Employment growth**: 52 jobs created plus 80 jobs safeguarded in the next three years
- **Increased turnover and exports**: without additional funding growth is expected to be to £7m in three years' time, however as the plan is for the company to secure additional funding, they are hoping to grow it to around £25m in the next five years
- **Increased investment in R&D**: following the completion of the Innovate UK research project, there will be increased investment in R&D focused on AI and machine learning.

Going forward, the firm intend to capitalise on the progress made through MEIF and to commercialise and launch the new AI machine learning platform developed through the KTP programme. If this is successful it will be *"transformational for the business, with no competitors globally"* and the opportunity to use it to strengthen the company's current platform. In order to do so however, the company plans to seek further external finance:

"The investment has allowed us to get so far which is very far in a very short space of time, but we will now need further funding at some point this year if we want to continue growing at the cadence we are at the moment."

Conclusions and lessons learned

This case study demonstrates MEIF's important contribution to an **innovative technology business which required finance to accelerate product development and company growth**. MEIF has supported the firm to develop and commercialise products, increase marketing activities, and deliver and improve staff recruitment and training processes.

One key lesson was identified that should inform future policy design, specifically that the limit on funding available to firms should be higher to ensure greater opportunities for follow up investments from MEIF. It was suggested that perhaps MEIF could align with other private equity or VC firms in terms of the amount of funding available to avoid "*missed opportunities*". Despite this, the funding received was noted to be transformational for the business:

"I actually think it is a really good fund that has been developed by the British Business Bank (BBB), it has been both pivotal for us to transform our business but also for many other businesses that have secured investment. It has been a good experience, big tick to the BBB."

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