November 2022

Future Fund Early Assessment Report

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1. Executive summary

1.1 This study

The Future Fund is a UK Government scheme that was set up to support potentially viable UK-based companies that were facing difficulties in raising equity finance due to the Coronavirus (Covid-19) pandemic. It was launched in May 2020 and closed to new applications at the end of January 2021. Companies could raise between £125k to £5m from the scheme, subject to raising at least equal matched funding from private investors with the finance structured as a Convertible Loan Agreement (CLA).[1] The scheme provided £1.14bn of funding to 1,190 companies.

RSM UK Consulting have been commissioned by the British Business Bank (the Bank) to undertake the impact evaluation of the Future Fund. This early assessment report covers work undertaken between May 2021 to April 2022 and focuses on lessons learnt from a policy design, delivery and early impact perspective. The work is subject to limited data because the programme is still in its early days, and the full programme impact and associated data has not yet emerged.[2]

This report is based on the findings from a mixed methods approach involving: (1) desk research, secondary data analysis and modelling; (2) stakeholder interviews; (3) surveys of: CLA funded businesses/recipients, applicants (those who applied for the Future Fund but did not take up the finance), non-applicants (those firms that were eligible for the scheme but did not apply) and lead investors; and (4) case study interviews with a mix of businesses/recipients, applicants, non-applicants and lead investors.

1.2 Pandemic uncertainty reduced the supply of equity finance for early-stage companies

The Covid-19 pandemic led to an unprecedented economic situation across the UK in early 2020, affecting almost all industry sectors. Beauhurst data showed that the number of equity deals had fallen by 32% in Q1 2020 compared to Q4 2019. The rationale for setting up the Future Fund was to prevent potentially long-term viable companies with high growth potential being unable to raise equity funding, running out of cash and ultimately being forced to close because of the short-term pressures on equity funding markets caused by Covid-19.

Other countries such as Denmark, France and the Netherlands also experienced a reduction in equity finance for early-stage companies and similarly introduced schemes to support innovative and early-stage businesses affected by the pandemic.

[1] https://www.british-business-bank.co.uk/ourpartners/coronavirus-business-interruption-loan-schemes/future-fund/
[2] Most of the modelling and analysis within this report was carried out based on data in late 2021, approximately 18 months after the launch of the Future Fund.

1.3 The speed with which finance was supplied was seen as key in supporting companies during the pandemic slump

Policy decisions and actions to support companies needed to be taken at speed given the disruption to the economy. Within this context, the scheme was established by Her Majesty's Treasury (HMT) and the Department of Business, Energy & Industrial Strategy (BEIS) within three months of the pandemic emerging in the UK. The Bank was tasked with delivering the Future Fund. The programme was open for applications from the 20th of May 2020 to the 31st of January 2021.

The Bank did not have the existing capacity, facilities or time for processing a high volume of finance applications from small and medium-sized enterprises (SMEs) directly. It therefore appointed a delivery agent, Pricewaterhouse Coopers (PwC), to manage the application process as the programme was expected to have a high number of applications and enquiries.

Due diligence can be a lengthy and resource-intensive process in equity investment. In the case of Future Fund investments, due diligence would have been further complicated by high economic uncertainty at the time of the pandemic. Consequently, the Future Fund used a rules-based investment process, relying on the due diligence undertaken by existing market investors.

This approach contributed to getting funding to businesses quickly, with the mean average time between the start of the application and approval for the funding approximately 17 days based on the MI data (12 median).[3] The mean average processing time between when all the paperwork was submitted and approval for the funding was around 2 days (1 median).[4] However, the rules-based approach did limit the ability for the programme to actively direct or exclude funding for companies that otherwise met the specified criteria.

Future Fund recipients confirmed that funding conditions were difficult in 2020, with 63% of surveyed companies mentioning at least some degree of difficulty, and the speed of funding was a key attraction for recipients (46%). Other motivations that prompted recipients' applications included their inability to obtain funding from other sources and the Future Fund being the most suitable source for their business stage.

[3] These estimates are based on the management information on all 1,190 firms in the Future Fund portfolio. The period described is from the date the CLA was issued to all parties to sign/complete to the date the CLA was executed i.e., when the signed/completed CLA was approved by PwC.
[4] The period described is from the date the Director confirmation was received, Solicitor confirmation was received, or the CLA was received (whichever was the latest) to the date at which the CLA was executed.

The Future Fund used a Convertible Loan Agreement (CLA[5]) instrument as the structure for the finance. In times of economic uncertainty, it can be difficult to value companies: in contrast to equity investment, the CLA instrument defers valuation until later in time (if converted). 78% of lead investors agreed, to an extent, that the CLA structure helped to facilitate company valuations during the pandemic due to deferral, rather than structuring as equity investments (36% strongly agreed with the statement). Most (57%) lead investors preferred the CLA structure over a co-investment alongside government structured as equity. However, among the non-applicants, the main reasons for not applying were due to the structure and terms of the CLA instrument. Other reasons for not applying included the incompatibility of the CLA instrument with SEIS/EIS (25%) or failure in securing matched funding from investors (22%).

Furthermore, 67% of the CLA funded businesses had sought equity finance prior to receiving finance from the Fund and few had sought external debt financing. This highlights that there was demand for additional support to access equity finance, alongside demand for debt-focused schemes such as the Coronavirus Business Interruption Loan Scheme (CBILS) and the Bounce Back Loan Scheme (BBLS).

The programme was established quickly and feedback from participants suggests it was largely successful in addressing an immediate market need for funding. Processes were built and adapted to provide a quick rollout to respond to the economic disruption. The use of private sector matched funding and leveraging existing investors to undertake the due diligence of companies helped to overcome immediate capacity constraints for getting funding into the market. The Future Fund was set up and open for applications by the end of May 2020 and had made available at least £250m of funding for eligible companies by the end of September 2020. Completed applications were largely processed within 2 days.[6] This met the delivery aspects of the first and second objectives of the Future Fund.

1.4 Companies and lead investors considered the application process and features of the Future Fund to be clear

There was broadly positive sentiment amongst most stakeholders regarding the clarity, speed, and efficiency with which the Future Fund programme was launched. The funding was seen as timely, with just over half (51%) of the sample having already planned on raising finance at the same time.

Most investors found that the application process and features of the Future Fund were clearly explained. 89% tended to agree or strongly agreed that the application process was clearly explained, with 93% stating the same levels of agreement on the CLA terms and conditions. Clarity around complex financial instruments, especially amongst those who are considered non-financiers, was seen as important in avoiding unintended future consequences. Lead investors thought that most elements of the application process were clearly explained, with few disagreeing with this sentiment.

[5] See page 20, and Annex H, for more information on CLAs.
[6] 'Complete' is defined as where all the company, solicitor and investor information are present (including bank account and solicitor's confirmation) and the 'end point' is when the CLA is issued.

A large majority of CLA recipients either tended to agree or strongly agreed that the overall application process (90%), eligibility criteria (93%), and terms and conditions (87%) were clearly explained at the time of their application. Taken together with application processing times, this suggests the delivery aspects of the second objective were met. However, there are associated limitations with self-reported survey responses.

1.5 The key short-term objective of increasing the supply of finance to potentially viable UK equity backed companies was broadly met

The Future Fund reached a significant number of businesses in a short space of time. The relatively broad eligibility criteria of the scheme and rules-based approach for allocating funding meant that the sector and geographic characteristics of the CLA funded businesses was largely influenced by wider market trends. 35% of CLA funded companies were in the technology, services, information and communications sectors. This was consistent with the focus of the programme in supporting innovative companies – as technology and services are particularly dynamic sectors. Geographically, approximately 55% of Future Fund supported companies were based in London. This reflects the existing distribution of equity activity in the UK where equity deals are largely concentrated in the capital city – as well as the contribution of London to the tech and services sector in the UK.

Survey findings from participating companies indicate that only 26% of CLA funded businesses reported they could have raised similar equity finance in the absence of the Future Fund. Of these, 80% suggested it would have taken longer to raise equity finance (31% over six months longer). Just over a third (36%) of lead investor survey respondents reported they would have invested in the company in the absence of the Future Fund. This supports the finding that the Fund encouraged private investment into equity-backed businesses. Investors, however, were mostly familiar with their investee company as 83% had previously made an equity investment in their investee firm, prior to Future Fund involvement. While Future Fund co-investment may have helped to de-risk the investment, helping to allay concerns investors might have had about their investee firms due to the pandemic, some of the finance may not have been additional.

Most Future Fund recipients (62%) reported that they probably or definitely wouldn't have been able to obtain similar finance from elsewhere. Between 85% to 94% of recipients classed themselves as early-stage and/or high-growth businesses, based on their self-reported business stage of development or investment status respectively.[7] [8] Just under two thirds (63%) of companies that received funding may have had some degree of finance additionality[9] and growth prospects, or cannot be shown to be outside of the group of finance-additional, early-stage and/or high-growth businesses based on available data.

[7] Defined as those firms that identified as: Seed, Late-Stage VC, Early Stage, Expansion/ Growth capital, Start-up in their applications. These classifications were self-reported by recipients. We use this as a proxy for growth potential though we recognise that this is an imperfect measure and there can be instances where a relatively early-stage business has does not have significant growth potential.
[8] We use survey data based on the firms that have self-identified as (i) Not yet made substantial commercial sales or (ii) Company that had been around for more than three years – sales growing rapidly but not yet profitable or (iii) Company had been around for less than 3 years – sales growing rapidly but company now yet profitable. These categories were used as proxies for growth prospects.
[9] 'Additionality' refers to the extent to which something happens because of an intervention that wouldn't have occurred without the intervention. The concept of additionality is discussed further in section 5.4.

1.6 R&D was a key focus for recipient firms while revenue rose on average, though broad investment trends are less clear

Research and Development (R&D) (85%), developing new or modifying existing goods (67%), and services and expanding digital technologies (65%) were some of the main activities CLA funded businesses undertook post financing. This is similar to non-applicants and applicants. However, a key activity for applicants was to also build business resilience. The main intended use of Future Fund finance for CLA funded businesses was maintaining cash-flow followed by maintaining R&D. Lead investors also confirm that 72% of CLA funded firms used the investment to maintain their R&D activities. This suggests the Future Fund funded innovative and growth orientated businesses, helping these companies maintain their longer-term growth prospects during a time of economic disruption.

Looking at time trends, broad investment levels in capital and intangible assets[10] by recipients and applicants showed a mixed picture: it marginally declined in 2020 in terms of the average and increased in the median but is expected to rise in the near to medium term (from 2021 onwards). During the pandemic, early-stage companies may have redirected finance towards supporting business operations such as cash flow, which may partially explain the initial decline in investment across some of these groups. Non-applicant businesses noted an increase in investment in 2020 in the average and little change in the median compared to 2019.

The results from the economic modelling suggest funding could be linked to additional investment for the universe of early-stage firms analysed – when these are compared to the counterfactual case of no funding having occurred. The model findings suggest there was an approximately £122k expected greater investment[11] in capacity over a two-year period for firms that drew down the CLA funding compared to those who did not. However, the results are (marginally) insignificant.[12] This would translate to a total Future Fund portfolio contribution of approximately £145m greater investment after multiplying through by the total number of funded firms.[13]

The above impact figures are only indicative. It is also likely that much of the full impact is still to play out over coming years. At this early stage the results point to a degree of potential additionality – a finding which we should be better placed to confirm in future work.

[10] Survey respondents were asked to provide an estimate for all effective investment that increases capacity to deliver goods and services over the medium to long term. The broad nature of the question goes some way in reflecting working capital or short-term assets needed for business operations which, for the firms in scope, would be a relatively larger proportion of their investment expenditures.

[11] The question asked in the survey was: “Historically, what was your company’s annual investment in capital and intangible assets for the calendar years 2018, 2019 and 2020? The intention is to capture all effective investment that increases your capacity to deliver goods and services over the medium to long term”.

[12] p-value = 0.157.

[13] The model applied excluded 25 zero investment firms for technical reasons (see Annex K). This means that, strictly speaking, the investment coefficients presented here are for non-zero cases. We have nonetheless aggregated across the sample to work out a ceiling impact (detailed in section 4.5). It is worth noting that the zero investment cases accounted for only about 6% of the sample. It may however be appropriate to discount the above aggregations as a conservative measure. This result should also be treated with caution and not generalised across the population of firms across the UK. As with DiD regression, there are unobserved factors that influence the impact especially in non-random samples. Therefore, the impact figure should be considered with these caveats in mind.

Revenue growth for both recipients and non-applicant firms continued in 2020 and 2021, with self-reported expectations of an acceleration in the near to medium term. While applicants reported revenue falling marginally in 2020 compared to 2019, they expect their growth to return in 2022 and 2023. Revenue growth will be explored more fully as part of subsequent evaluation work.

1.7 Early evidence suggests the programme may have met its short-term objectives

This early assessment appears to broadly support the rationale for the Future Fund in providing finance to equity backed companies, given that the supply of equity finance declined sharply in Q1 2020. The programme was introduced quickly to meet this rapidly emerging financing need and helped fund a significant number of businesses affected by the pandemic. The higher-level characteristics of businesses supported point to innovative and high growth sectors being reached. Participating companies also show a considerable degree of ethnic and gender diversity, discussed further in Section 4.4.

Early evidence suggests the Future Fund has broadly met its short-term objectives regarding programme delivery. However, at this point in the life of the programme it is too early to assess whether the programme’s medium- and long-term objectives have been met.

There are also a few lessons that can be drawn even at this early-stage evaluation:

- Economic crises can have general and specific effects. Acute attention needs to be paid to businesses that face specific funding constraints.

- These specific firms that require help need to be targeted in some way to maximise the impact of the programme. However, the targeting needs to be done in a manner that minimises delays and ensures flexibility. In the case of the Future Fund, this was achieved using a self-selection process whereby the eligibility criteria were kept broad and limited to previous amounts of equity funding raised. This allowed the investors of firms that needed the funding to self-select and apply for it.

- This open approach was also coupled with the design of the programme that transferred due diligence processes onto investors, adding an onus on securing private sector investment to qualify for funding. This helped to ensure the funding stayed relatively focused on equity backed businesses with growth potential while providing speed of action and flexibility. Of course, no solution is perfect, and there were instances where the funding would have gone to firms that were different to the intended or preferred group.

2. Progress against objectives

The table below provides a summary of the stated objectives of the programme and an initial assessment of the extent to which each objective has been met at this early stage. Evidence from the early-stage analysis accompanies the assessment of the extent of the objective achievement. A full list of programme objectives and the key performance indicators used to measure them is in Annex F.

Table 1: Programme objectives and early assessment of progress

Objective	Supporting evidence	Objective met?
1. Increase the supply of finance to potentially **viable UK equity backed companies** that would otherwise have **problems raising finance, or been underfunded,** due to **adverse market conditions.** (Short term objective)	**Viable UK equity backed companies:** • 85-94% of firms appear to be early-stage, indicating growth potential. **Adverse market conditions:** • 63% of recipients reported funding conditions were difficult to some degree in early 2020 prior to the launch of the Future Fund, supporting the rationale of the programme. **Finance additionality:** • 62% of recipients didn't think they would have been able to raise similar funding elsewhere. Only 26% stated they could have raised similar finance in the absence of the programme – of these, some said it would have taken longer (80%) or they would have secured less finance (32%). • 36% of lead investors report they would have still invested in the company in the absence of the Future Fund.	At an early stage the objective appears to have been **met in most cases.** **Some evidence of possible financial additionality** based on survey results, though more rigorous analysis will be needed in subsequent evaluations.
2. Recipients have a **positive experience** (e.g., speed, clarity and ease of application). (Short term objective)	**Application process:** • A large majority of CLA recipients either tended to agree or strongly agreed that the overall application process (90%), eligibility criteria (93%), and terms and conditions (87%) were clearly explained at the time of their application. • Investors agreed objectives, application process, terms and conditions and eligibility criteria were clearly explained (80-90% agreed with these statements to some extent). • The MI data indicated that applications were processed within an average 2 days (1 median).[14] **Scheme design:** • Timeliness and suitability of funding highlighted by many recipients. 46% stated speed of funding as a motivation for applying to the Future Fund, with 41% stating the Future Fund as the most suitable source of finance. • Most investors happy with the investment being structured as a CLA (57%), with 78% agreeing the CLA structure helped to facilitate valuations during the pandemic due to deferral, compared to being structured as equity.	Based on the early analysis this objective seems **to have been broadly met.**
3. Funding **reduces risk of business closures** caused by potentially viable businesses running out of	• Too early to say but initial evidence suggests almost half (48%) of CLA funded businesses said their firm would have closed or been fairly likely to close without having received Future Fund finance. Year 2 and subsequent reports will explore business	**Some early evidence** that business closures could have been

[14] These estimates are derived by taking the average/ median number of days for portfolio firms (n =1,190) from the date all paperwork was received (i.e., whichever was the latest of the dates that the Director confirmation, Solicitor confirmation, or CLA was received) to the date of their CLA execution.

cash in the short run. (Medium term objective)	closure rates between funded businesses and wider comparison group. • According to investors, most investees (84%) intended to use the finance to maintain working capital, indicating that for most businesses, the funding was essential to their business operations, at least in the short-run, consistent with the Fund's focus. • Of those who brought forward their fundraisings (26% of recipients), declines in cash flow was the dominant motivation (60%), highlighting the short-run cash requirement.	averted. This will be more fully assessed as part of second- and third-year reports.
4. Funding **reduces the risk of companies' long-term prospects being damaged** due to adverse economic conditions. (Medium term objective)	• Almost three-quarters (72%) of investors indicated their investees wanted funding to maintain research and development activities. 85% of funded companies have since undertaken R&D and 67% continued to develop new or modified goods and services. • Modelling results suggest that there may be an additional £122k impact on investment in tangible and intangible effective capital (for recipient businesses who had invested) compared to those who did not participate. This should contribute to long term prospects for these businesses.	**Some early evidence** that this objective is being met – both based on the survey results and the modelling work.
5. To help ensure the **long-term pipeline of equity-backed companies** is not damaged due to adverse economic conditions. (Long term objective)	• Too early to tell - will be partly assessed in the Year 2 report and fully assessed in the Year 3 report by looking at companies raising follow on rounds and business growth profiles.	
6. Within the constraints of a standard set of eligibility criteria, to ensure that the funding provided is **used for the purpose intended**.	• Partly too early to tell. Investors reported that investees intended to use funds for working capital/cash flow and R&D, with most funded companies reporting that they have since undertaken R&D or continued to develop new or modified goods and services (85% and 67% respectively).	Early evidence suggests that the **funds may have helped to directly and indirectly support R&D** – but these are indicative results at this stage.
7. Funding provides **value for money** for the taxpayer and **net economic benefit** to the wider economy. (Long term objective)	• Largely too early to tell - will be assessed in the Year 3 report.	

Source: British Business Bank: (2021) Final programme objectives, RSMUK

3. Introduction

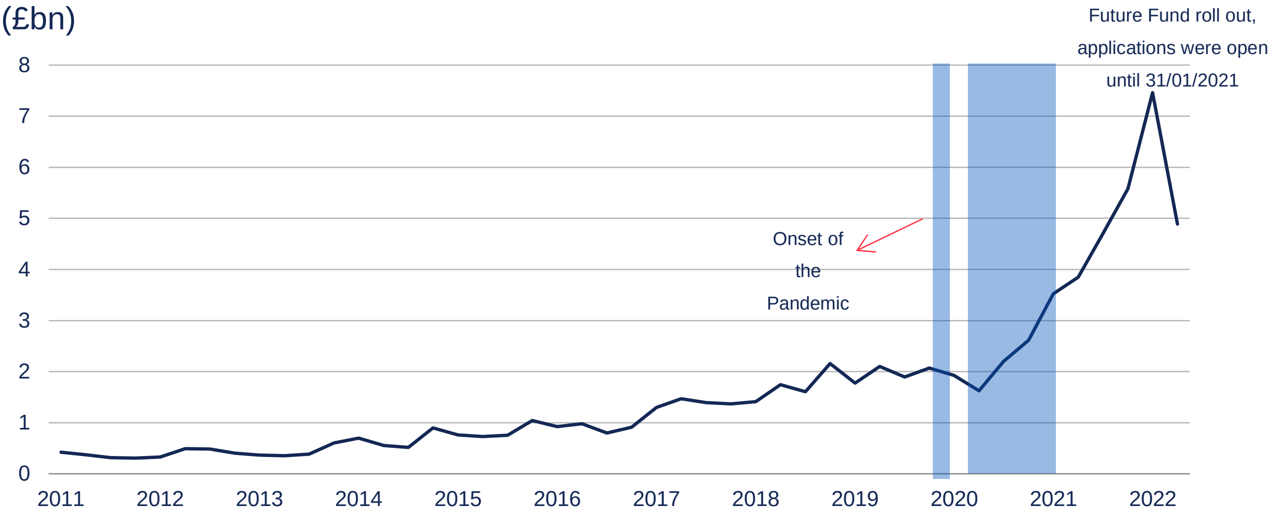
This section sets out the policy and economic context within which the Future Fund was designed and delivered, the rationale for intervention and objectives for the scheme, the evaluation methodology, and outline of this report.

3.1 Policy context

The pandemic has created unprecedented impacts on the UK economy across almost all industry sectors. At the time the Future Fund was being developed, forecasters were predicting record declines in economic activity across the developed world, including the UK.

Equity funding had increased from around £356m per quarter to almost £1,961m per quarter between 2011 and 2019, based on Beauhurst data in Figure 1. However, as the uncertainty surrounding the pandemic emerged in early 2020, Beauhurst data available at the time showed that monthly announced equity funding fell by 34% between January and March 2020, with a 28% decrease in deal numbers. In Q1 2020 there were 344 announced equity deals, which marked a 32% decrease from Q4 2019 (507).[15] Following that, the subsequent rebound was quite rapid - a possible result of government loan and other support schemes that were introduced between March and May 2020. In the Small Business Finance Markets 2020/21[16] report, the British Business Bank used Beauhurst data to estimate the Future Fund accounting for 11% of all announced equity deals in 2020 but was as high as 15% in Q3 2020.

Figure 1: Total value of equity fundraising for SMEs in the UK, not seasonally adjusted (£bn)



Source: Beauhurst Database

[15] https://www.beauhurst.com/blog/effect-of-coronavirus-uk-investment-q1-2020/. Subsequent, more complete, data shows that the scale of the decline was much smaller.
[16] SBFM Report 2021 (british-business-bank.co.uk), Page 27

The economic disruption as a result of Covid-19 and continued volatility in the period that followed created considerable challenges in designing, and measuring the impact of, policy interventions targeted towards the UK's smaller businesses.

3.1.1 Rationale for intervention and specifics of the Future Fund

The rationale for intervention underpinning the Future Fund was to prevent potentially viable companies with growth prospects being unable to raise a new equity round, running out of cash and being forced to close because of the short-term pressures on equity finance markets caused by the pandemic. It was therefore apparent that intervention would be needed to address the cyclical market failures constraining the supply of equity finance and the potentially viable high growth companies this would adversely impact as they could not raise finance. However, the mechanism(s) to be deployed were less clear in terms of what support would be most beneficial and feasible to implement within challenging timescales.

Schemes already mobilised by government, particularly in the form of loan finance, would not be suitable for this cohort of early-stage high growth potential business. Such schemes were predicated on applicants being able to demonstrate their trading track record. Many businesses in the Future Fund target group are cash-flow negative or loss making. As a result, this type of intervention would not be appropriate for these businesses, and many would have been ineligible.

As part of our early consultations, BEIS highlighted that the CLA model was chosen to provide speed, volume, and funding on a 'take it or leave it' basis, relying on due diligence undertaken by the co-investor. The CLA mechanism enabled finance to go to businesses that were unable to be funded to the required extent through other government funded interventions. A further description of the programme and CLA instrument is provided in Annex E.

As the pandemic emerged, the British Business Bank expected a tightening in the availability of equity funding and expected there would be a need to support around 400 seed and venture stage businesses over the 12-month period from Q2 2020. In designing the Future Fund, several decisions were made relating to various policy themes, the scheme platform operations, eligibility criteria and other scheme rules, including:

Compatibility with S(EIS) schemes – two issues were identified as potentially preventing existing investors providing further investment: (1) concern that participation in the Future Fund would make their current EIS-eligible investments lose their tax reliefs; and (2) the risk that participation would render them ineligible to make additional EIS-qualifying investments in that company in the future.

Treatment of diversity and inclusion in the scheme – it was decided that diversity and inclusion needed to be supported within the design of the Future Fund, in order to achieve successful policy outcomes in line with Public Sector Equality Duty. It was therefore proposed that the most effective way to increase access to the Future Fund for under-represented entrepreneurs was to provide as broad a range of investors with access to the scheme as possible, which was reflected in the broad eligibility criteria.[17]

Investor-led approach – An investor-led approach was pursued rather than a company-led one. This was to ensure the lead investor understood the implications of the CLA as early as possible, and that there was a named individual responsible for ensuring the application was correct. This approach may have also helped to create a more market-like process for investment into eligible companies, while providing a form of mitigation in the context of the more time-consuming due diligence processes that would be typical in a business-as-usual scenario.

Speed of delivery – This was emphasised as a key policy consideration given the nature of the shock and businesses urgent need for funding. The Future Fund relied on self-certification of investors and companies providing confirmations throughout the CLA process, with no due diligence undertaken on company viability, companies' articles of association, or companies pre-existing senior debt/ overdraft facilities. The need for the investor to provide matched funding alongside the Future Fund was intended to ensure incentives were aligned between government and investors.

3.2 Policy summary

3.2.1 Eligibility criteria

The Future Fund was open to UK companies that had previously raised at least £250k in equity from third party investors in previous funding rounds in the last five years (from 1 April 2015 to 19 April 2020 inclusive. The application process is discussed in more detail in Annex C, with full details of the eligibility criteria for investors and companies in Annex D. The scheme was designed after a wide range of consultations were undertaken to incorporate the spectrum of considerations in the design and delivery of the scheme, as well as addressing specific risks.

The eligibility criteria were expanded on 30 June 2020 to include businesses that contribute significantly to the UK economy, but do not have their parent company based in the UK because they participated in a non-UK based accelerator programme.[18]

The above Future Fund features can be illustrated in a worked example below:

[17] Section 4.4 of the report provides a summary of the gender and ethnicity com
position of the senior management team of recipient companies. It is important to acknowledge the Public Sector Equality Duty (PSED) covers a wider set of protected characteristics than gender and ethnicity.
[18] https://www.british-business-bank.co.uk/press-release/future-fund-extended-to-uk-companies-from-accelerator-programmes-outside-the-uk/

Lead Investor X submits a funding application to the Future Fund (on behalf of Company Y) for £125k. Lead Investor X must identify what investment they will make in Company Y as well as other any investors and amounts which will make up the match – taking the total funding amount to £250k. The application undergoes a range of due diligence and eligibility checks on the investor and underlying company by the appointed delivery agent. The proceeds from the loan cannot be used to repay any borrowings, dividends, bonuses, or advisory fees. After satisfying the eligibility criteria and associated checks, the British Business Bank, through the delivery agent, provides the £125k funding to Company Y. At the same time the Investors must also provide their investment. Both the Future Fund and the Investors enter into a CLA with Company Y to the amount of £250k. This is a debt instrument that may convert into equity shares of the company receiving the loan at a later date. Under the terms of the CLA, the company has up to 36 months until the loan matures at a minimum annual simple interest rate of 8% (subject to agreement). If at the loan maturity date or at Company Y's next equity funding round, Company Y has not repaid the Fund CLA, then the loan automatically converts into an equity stake in the company at a minimum discount rate of 20% to the last funding or the next qualifying round. The investor also has the option to require repayment of the loan (plus a repayment premium) instead of conversion, by giving the company notice no later than 10 business days before the maturity date.

3.3 Objectives of the Future Fund

The main objective of the Future Fund was to increase the supply of finance to potentially viable UK equity backed companies that would otherwise have problems raising finance, or been underfunded, due to adverse market conditions. It was expected that ensuring these companies were not underfunded would create additional economic and financial benefits. The aim was not to displace or crowd out existing private sector investment or provide funding to unviable businesses that would have been unable to raise funding in normal times. This assessment presents initial evidence on the extent of finance additionality amongst recipients and their growth potential according to self-reported stage of development, summarised in the matrix below. Further assessments of economic outcomes are to be presented in the Year 2 and interim evaluation reports.

Figure 2: Finance additionality and growth characteristics matrix of supported firms

		Higher growth potential firms	Lower growth potential firms
Likelihood of raising private sector equity finance pre-pandemic	High	Higher likelihood of continuing to be able to access finance from investors in the pandemic. Risk of Future Fund crowding out private sector investment where funding was provided in absence of Future Fund. These firms may still be important for the financial performance of the Future Fund as likely to include performance outlier companies, even if funding provided is not finance additional/risks crowding out private sector investment	**Out of focus** These firms don't show sufficient growth for equity investors but may be lower risk and suitable for funding through other forms of finance such as debt.
	Medium	Firms in this bracket likely to have experienced funding issues that they may have not otherwise have experienced had it not been for the pandemic. The pandemic therefore puts their future growth at risk.	**Out of focus** Firms here would not be seen as high growth and outside the typical profile of equity funded businesses.
	Low	**Out of focus** Firms in this bracket may have struggled with funding even before Covid-19 due to unproven technology/ business models. These firms may have difficulty attracting matched private sector funding to access the Future Fund.	**Out of focus** Firms in this bracket may have struggled with funding even before Covid-19. Firms outside of typical equity growth profile. These firms may have difficulty attracting matched private sector funding to access the Future Fund.

The eligibility criteria were kept intentionally broad in order to ensure funding could reach companies quickly to meet the emerging funding need. The eligibility criteria limited funding to UK companies who demonstrated evidence of raising at least £250k of equity from third party investors in the last five years and the Future Fund funding round required matched funding from third party investors to be at least equal size to the Government's funding. Within of these eligibility criteria, funding allocations were largely 'market-led'. The rules-based approach did not allow the Future Fund to actively direct or exclude funding to particular groups of companies (for example on a regional or sectoral basis).

To deliver economic benefits and programme value for money**, it was intended that funding would largely reach companies with growth prospects that would otherwise have had issues raising finance, or been underfunded (i.e., "finance additional" companies). While this was the preferred outcome, it was not possible to design the scheme to exclude companies that would otherwise have secured finance, without impacting on speed of delivery and application complexity.**

Given the broad eligibility criteria, it is somewhat inevitable that some of the funding will have gone to companies outside of the preferred group – such as those that did not have difficulty raising finance. Whilst not contributing to the programme's preferred economic outcomes, some of these companies may deliver above-average financial returns.

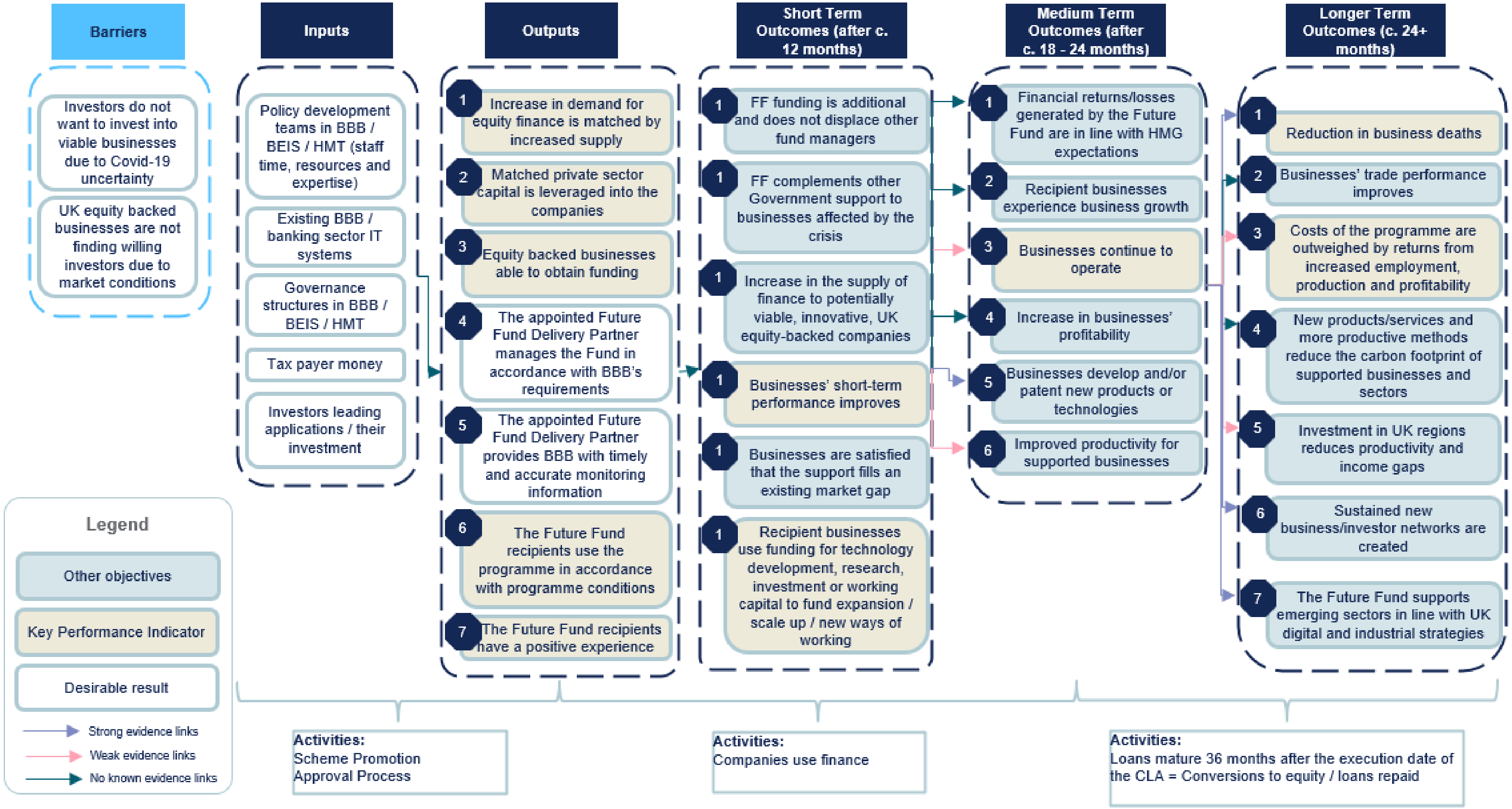
There are several factors that could lead to the Future Fund not achieving its objectives. The design and implementation of the Future Fund was developed at pace to meet the immediate policy need resulting from the Covid-19 pandemic. As a result, the programme operated outside of the British Business Bank's typical risk appetite and the programme's expected value for money was highly uncertain. There was a concern raised that the best companies would not use the programme as investors would keep these deals for themselves and the programme would be used by companies with higher loss rates. Given these risks, the Permanent Secretary of BEIS sought a Ministerial Direction, and the CEO of the British Business Bank issued a Reservation Notice in advance of the Future Fund coming into effect.[19] Ministers acknowledged the issues raised and confirmed their intent to proceed.

3.4 Theory of Change

The Theory of Change (ToC) sets out a framework which illustrates how the Future Fund intends to achieve outcomes over its lifecycle (and beyond). Figure 3 provides a summary of the barriers, inputs, outputs and intended outcomes of the Future Fund.

[19] https://www.british-business-bank.co.uk/reservation-notice-for-the-future-fund/

Figure 3: Theory of Change



Assumptions:
Funding becomes available in time to respond to the adverse market impacts relating to Covid-19. | Businesses adhere to terms and conditions (incl. not using funds to pay off other debt or stakeholders). | Funding is awarded to businesses that would have attracted investment in the absence of Covid-19. | Financial returns will be dependent on economic conditions (duration of downturn and shape of recovery) and other market factors.

3.5 Early assessment methodology

This report reflects an early assessment of performance and represents the first of three reports. It is based on the findings from a mixed methods evaluation involving desk research, interviews, surveys, and econometric impact modelling. The detailed methodology for this early assessment report is outlined in Annex K.

The survey fieldwork undertaken by BMG Research resulted in 629 interviews. The four surveys undertaken include:

- CLA funded businesses/recipients: 326 responses (out of 1,190 Fund recipients in total).
- Applicants - those who applied for the Future Fund but did not take up the finance: 36 responses (around 351 unique applicants in total).
- Non-applicants - those firms that were eligible for the scheme but did not apply: 91 responses (around 1,770 total filtered companies).
- Lead investors for the recipient firms: 176 responses (867 unique lead investors in total).

These surveys are used both for general data analysis and modelling purposes. It is important to note that work performed is deeply dependent on these surveys – based on self-reported data and early impacts. Additionally, survey response rates also emerge as an important limitation to the work, with low response rates for the counterfactual groups requiring a combination of the non-applicant and CLA applicant groups. This is detailed further in Annex K. The data analysis aspects of the work are obviously limited in terms of statistical robustness, so this is supplemented by modelling on investment data and a mixed methods analysis that includes stakeholder interviews and case studies.

3.6 Outline of the early assessment report

The early assessment report focuses on lessons learnt from a delivery perspective. For example, focusing on mechanisms that worked well, and why, as well as those that did not. The report also provides an indication of likely initial impacts. In sections 4 and 5, early findings from the Future Fund CLA funded business, CLA applicant, non-applicant, and lead investor surveys have been analysed and complemented with key stakeholder views.

4. Process Evaluation

4.1 Key findings

- The Future Fund deployed approximately £1.14bn of funding to 1,190 companies. Reviews of similar equity finance interventions delivered by international development banks suggest the Future Fund's broad eligibility criteria and government-backing helped deliver a relatively large-scale finance programme. This suggests the programme broadly met its first objective of making funding available to potentially viable equity backed businesses that would otherwise have had problems raising finance, or been underfunded, due to adverse market conditions.

- Funding broadly went to early-stage companies (85%). Initial estimates suggest approximately 62% of funded recipients would have otherwise had issues raising finance, suggesting funding largely went to the intended companies based on the limited data available at this early evaluation stage.

- In terms of design, delivery and process performance, there is a general positive sentiment among stakeholders regarding the clarity, speed, and efficiency with which the Future Fund programme was launched. Recipient businesses and lead investors were also largely positive about the delivery of the programme. For instance, a large majority of CLA recipients either tended to agree or strongly agreed that the overall application process (90%), eligibility criteria (93%), and terms and conditions (87%) were clearly explained at the time of their application. Businesses were attracted by the Future Fund's speed of funding as evidenced by 46% of CLA funded businesses and 47% of CLA applicants.

- Most lead investors also found that the application process and features of the Future Fund were clearly explained (80-90% agreed with statements around process to some extent). Most investors were experienced, having undertaken many investments previously. 57% of investors were happy with the CLA structure, with 78% agreeing the CLA structure helped to facilitate valuations during the pandemic due to deferral, compared to being structured as equity.

- Companies funded by the programme were generally happy with the CLA instrument, but some business managers highlighted that greater clarity around the complex financial instruments would have been beneficial. Some stakeholders also raised concerns over the EIS/SEIS tax benefit exclusion as a result of using the CLA structure, and it is apparent that some businesses in the non-applicant group also had concerns over the CLA structure.

- Awareness of the scheme was high even amongst those firms who didn't apply. 84% of firms had heard of the British Business Bank and 75% had heard about the Future Fund prior to the survey, and many had considered applying for the scheme. This suggests that in the wider market the scheme was communicated well – and that lack of awareness of the fund may not have been a central reason for not applying.

- In terms of overall programme governance, some stakeholders highlight the uncertainty surrounding the medium to long-term management of the £1.14bn Fund, post CLA repayment or conversion. Discussions around the management of the Future Fund portfolio at the time of writing were still ongoing.

4.2 Introduction

This section provides an assessment of the design and delivery of the Future Fund from early survey results and qualitative insights driven by stakeholder engagement. It covers international comparisons, summaries of the Future Fund portfolio covering CLA funded businesses and investors, the application process efficiency and performance, and management and governance.

4.3 International comparisons

This section compares international schemes with those of the Future Fund. Four comparable schemes were identified including the Business Angel and Syndication Loan scheme in Denmark[20], the Tech Bridge scheme in France, and TOPPS in the Netherlands.[21] Further detail is included in Annex G.[22]

Table 2 provides an overview of how the schemes in the benchmark countries compare to the Future Fund. The schemes differed in whether they were investor-led, as was the Fund, or (investee) company-led. For the French Tech Bridge, the majority of applications were submitted by investee companies themselves, although in a few cases the investor also submitted applications.

While each of the schemes, except for the French Tech Bridge Scheme, did not restrict the size, age, or stage of businesses that could apply for funding, they had requirements for businesses to not be in financial distress prior to the impact of Covid-19, as well as to demonstrate the need for funding. For example, the Danish Covid-19 Syndication Loan requires businesses as of 31/12/2019 to not have lost more than half of their share capital or be involved in or meet the criteria for bankruptcy proceedings. The TOPSS programme requires businesses to not have been in distress pre-Covid-19 and to have durable turnover and profit potential after Covid-19. The Future Fund requires businesses to demonstrate a significant track record of equity funding (£250k or more raised from 1 April 2015 to 19 April 2020) in order to focus funding on companies that are in the existing equity pipeline. The TOPSS programme states that businesses needed to have a strong track record pre-Covid-19 which was in relation to whether companies that applied to the scheme had achieved their goals and budgets, rather than a focus on equity fundraising success.

[20] The word ‘loan’ in the title refers to the finance instrument used which was structured as a mezzanine loan (a loan with equity features). The programmes were targeted at early stage equity backed businesses, similar to the Future Fund.
[21] Other potential schemes identified in the on-line search include Italy’s Convertible Subordinated Bond instrument, but it was not possible to engage with representatives of the scheme.
[22] Since fieldwork was completed, the authors have become familiar with Finland’s Venture Bridge scheme introduced in response to the Covid-19 pandemic which also used a CLA instrument.

The Future Fund involves a greater number of businesses, and therefore funding provided, than any of the other schemes. This is particularly apparent when compared to the French Tech Bridge Scheme, with France having a similar level of GDP as the UK. A potential explanation for the difference in the number of businesses supported is that the Future Fund had less strict eligibility criteria for both businesses and investors. The Danish schemes (Business Angel Loans and Syndication loans) substantially increased their investment activity in response to Covid-19 from historic programme levels but used approved investors to assess the company prospects. Criteria for the Danish schemes were less restrictive on international firm participation to encourage as many companies to use the scheme as possible.

Programmes also had different due diligence processes used to assess the applying companies' need for funding, prior track records and future growth prospects. The TOPSS programme for example specifically made investment terms less attractive in order to only invest in companies that needed investment. At this current time, no organisations were able to provide in depth assessments of likely portfolio quality or future returns. The difference in due diligence carried out by development banks can also be explained by whether they had loss guarantees by the state.

The British Business Bank was requested by the government to deliver the Future Fund and so had the full guarantee of the government regarding any potential losses incurred. Invest-NL on the other hand didn't have the guarantee of the Dutch state and thus had a target to be profitable in the long run. This meant that significant due diligence checks were needed, which resulted in longer lead times than intended. Vaekstfonden initially had a loss guarantee from the Danish government of 70%, which then increased to 80% and then 90% (the highest amount allowed under the state's temporary framework).

Key scheme characteristics

Table 2: International Covid-19 equity finance response scheme characteristics and country GDP[23],[24]

Scheme	Organisation	Country	GDP of Country	Scheme length	No. of Companies supported	Instrument	Total loan from Gov.	Total loan from investors	Size of individual loans from Gov.	Match funding ratio (Public to private sector)
Future Fund	British Business Bank	UK	£2,330bn	May 2020 – Jan 2021	1,190	Convertible loan	£1,137m	£1,161m	£125k - £5m	At least 1:1
Covid-19 Business Angel Loan	Vaekstfonden	Denmark	£267bn	May – Dec 2020	254	Mezzanine loan	881m DKK (£105m)	Data not provided	0.25 – 12m DKK (£0.03-£1.43m)	1:3 for loans < DKK 7.5m (£0.89m)
Covid-19 Syndication Loan				May – Dec 2020	140	Mezzanine loan	1.2 bn DKK (£0.14bn)	Data not provided	0.25 – 20m DKK (£0.03-£2.38m)	1:1 for loans > DKK 7.5m (£0.89m)
French Tech Bridge Scheme	Bpifrance	France	£2,379bn	Mar – Dec 2020	107	Convertible bond	€100m (£88.89m) approx.	€100m (£88.89m) approx.	€100k - €5m (£88.89k - £4.44m)	1:1
TOPPS	Invest-NL	Netherlands	£782bn	Apr – Sept 2020	7	Convertible loan	€38.35m (£34.09m)	€74.35m (£66.09m)	€1.35m - €10m (£1.2m - £8.89m)	At least 1:1

[23] Note the data presented in the table were compiled in late 2021.
[24] The brackets show the value equivalence after the currency conversion into English GBP (£); we used Annual average Spot exchange rate for 2020, Euro into Sterling (XUAAERS), Annual average Spot exchange rate, Danish Krone into Sterling (XUAADKS) from *Bank of England | database*

4.4 Summary of Future Fund CLA funded businesses, CLA applicants, and non-applicants

This summary is based upon the aggregate characteristics of the MI data, complemented by results from the CLA funded business, and non-funded business surveys. Case study extracts have been selected and merged into the relevant themes and presented in standalone boxes.

4.4.1 MI data analysis

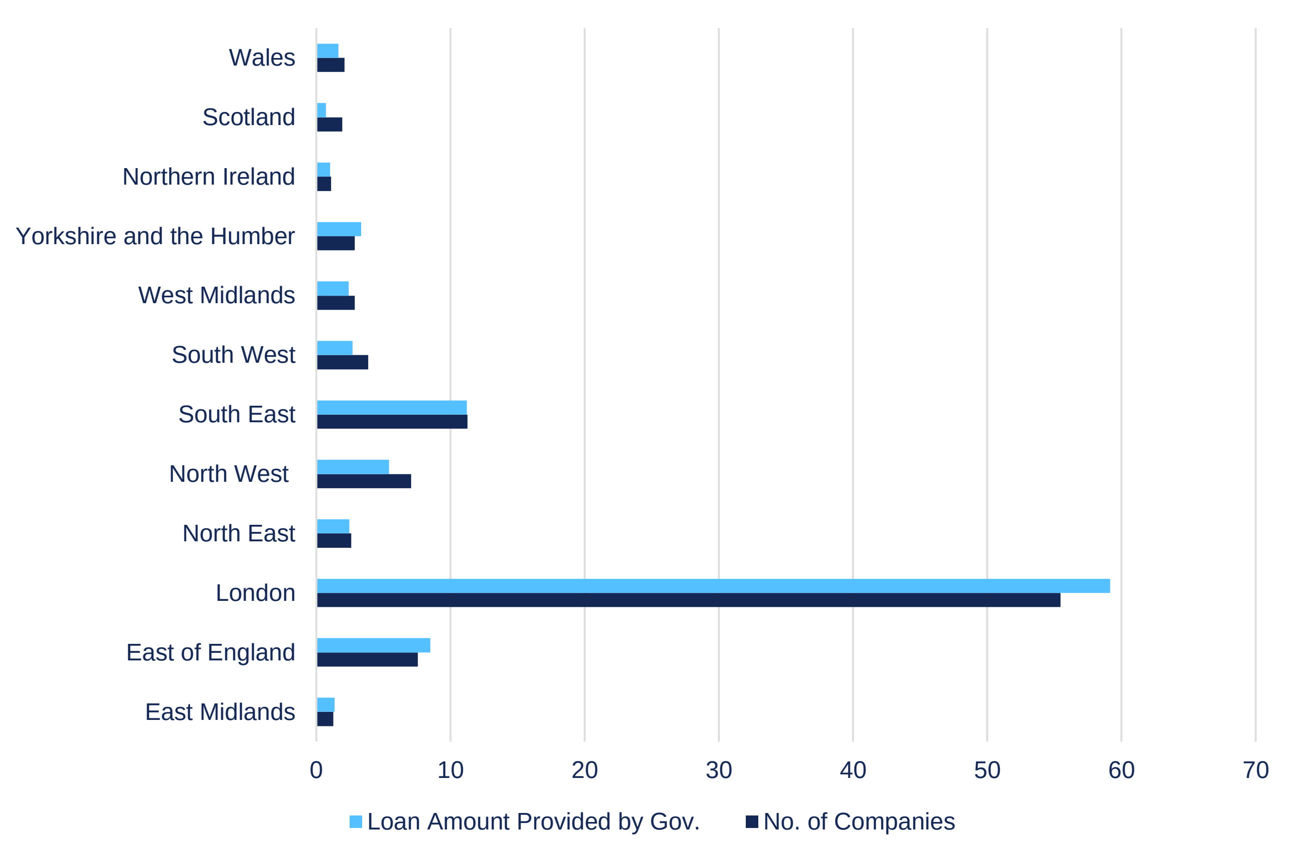
A key building block of trying to understand the economic and financial impact of the Future Fund is to conduct analysis on data covering the funding provided. It is also important to look at this data in terms of what it might tell us (in the aggregate) about the companies that received funding.

Future Fund CLA funded firms

The regional profile of the Future Fund portfolio is illustrated in Figure 4.[25] The very strong presence of London comes through in the distribution of participating firms and funding provided. This reflects the underlying geographic concentration of equity backed businesses, with clusters of activity also in the East and South East of England. This also covers a particularly dynamic part of the UK economy, with London and the South East featuring strongly in terms of the services and tech sectors.

[25] The statistics cover information on “Applications and Investors”, based on data received from the British Business Bank.

Figure 4: Programme participation and funding provided by UK nation and region (per cent)



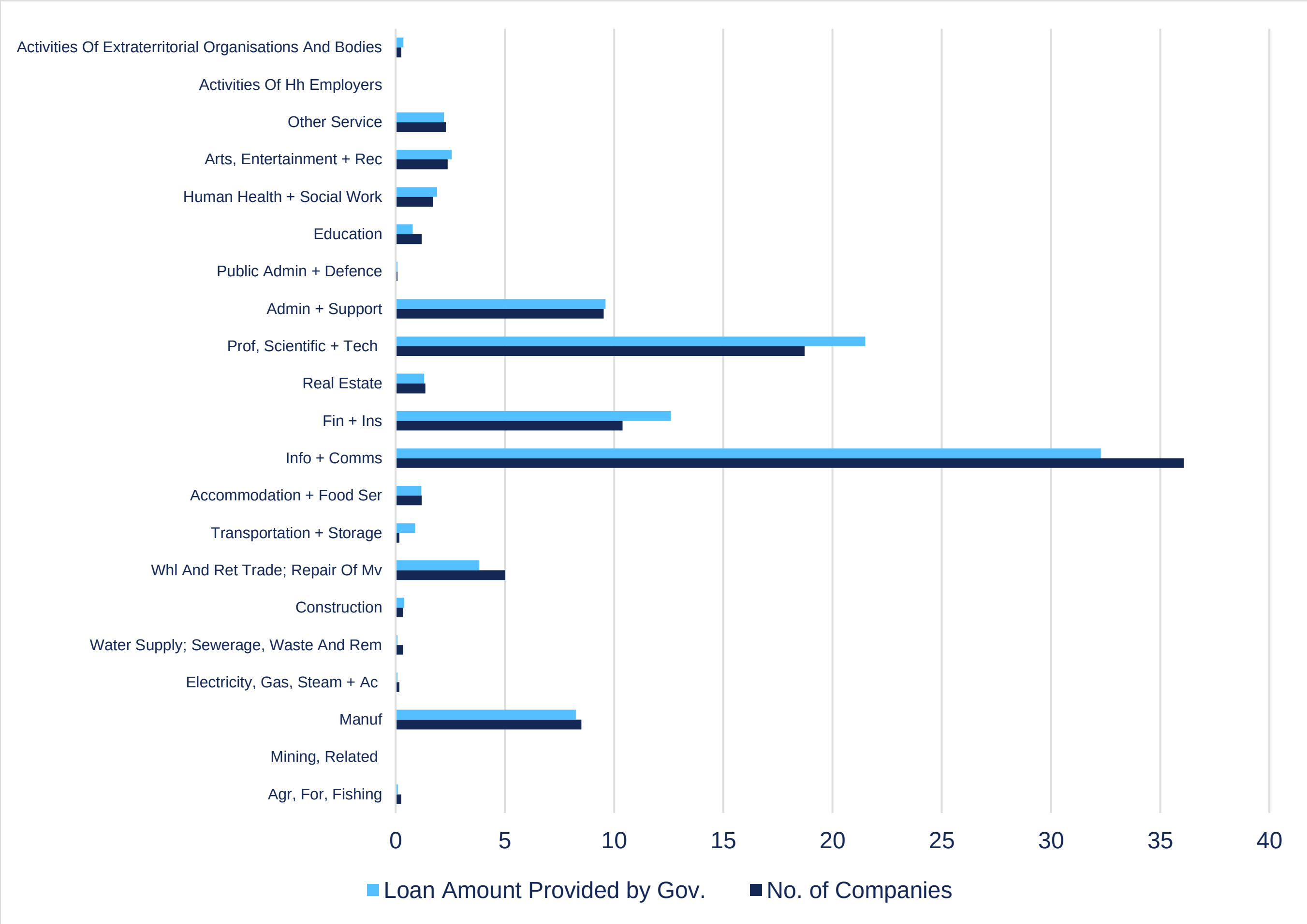
Source: British Business Bank data provided to RSM (June 2021)

The expansion of the eligibility criteria to UK companies from accelerator programmes outside the UK led to 9 such companies receiving funding. The total amount of funding received by these companies was £20.6m, so is relatively small in comparison to the total £1.14bn funding provided across the portfolio (1.8%).[26]

Looking at the sectoral profile of Future Fund recipients in Figure 5, the broad technology, information and communications sectors are well represented.

[26] British Business Bank, MI data.

Figure 5: Profile of programme participation and funding provided across broad UK economic activities by SIC (per cent)



Source: British Business Bank data provided to RSM (June 2021)

The distribution of firms across the CLA applicant group, i.e., those who applied for the Future Fund finance but did not draw down the funding, is similar to that of the CLA funded businesses, with a high concentration in London and in the information and communications sector, as well as other service-based business activities.

Companies funded by the Future Fund programme were relatively small. In 2020, the average employment size was 24[27], with 9.6% of firms having less than three employees. The revenue profile in Figure 6 also confirms the relatively small size of CLA funded businesses, with the up to £0.5m annual turnover category being the most prevalent. This is also reflected in the size of government funds received under the Future Fund, with smaller deal sizes being the most frequent (Figure 7).

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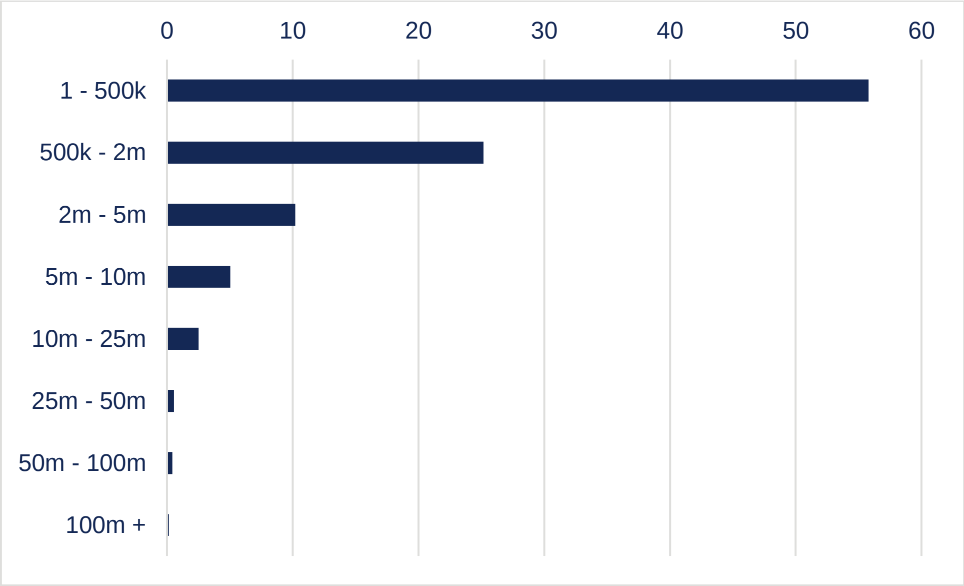
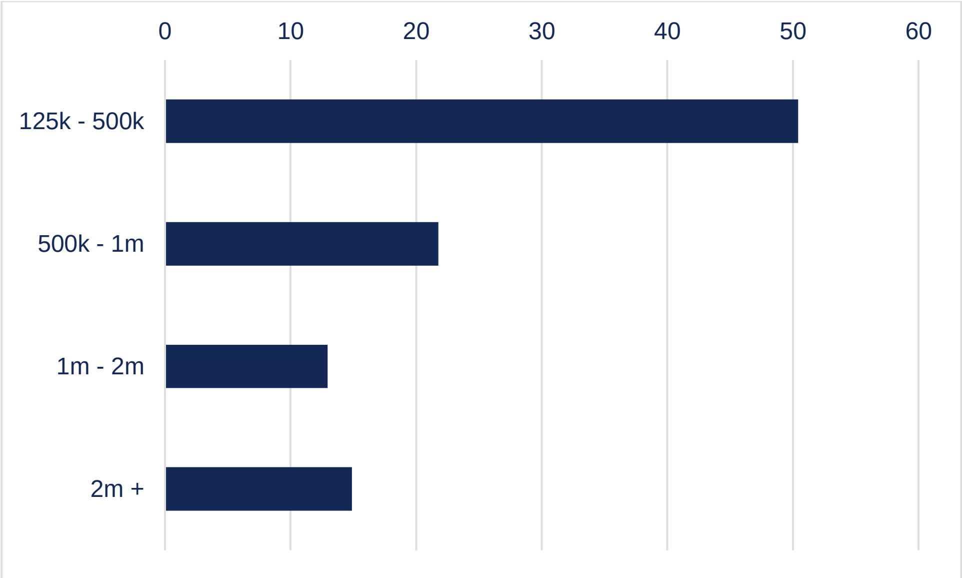
[27] This was estimated from the Application and Investor details spreadsheet provided on the 1,190 recipient firms. However, 1,172 provided estimates for the number of employees.

Figure 6: Revenue profile of CLA funded businesses, last year revenue in £ (per cent)



Source: British Business Bank data provided to RSM (June 2021)

Figure 7: Profile of government funding received, CLA amount in £ provided by Future Fund, Excludes private sector matched funding (per cent)

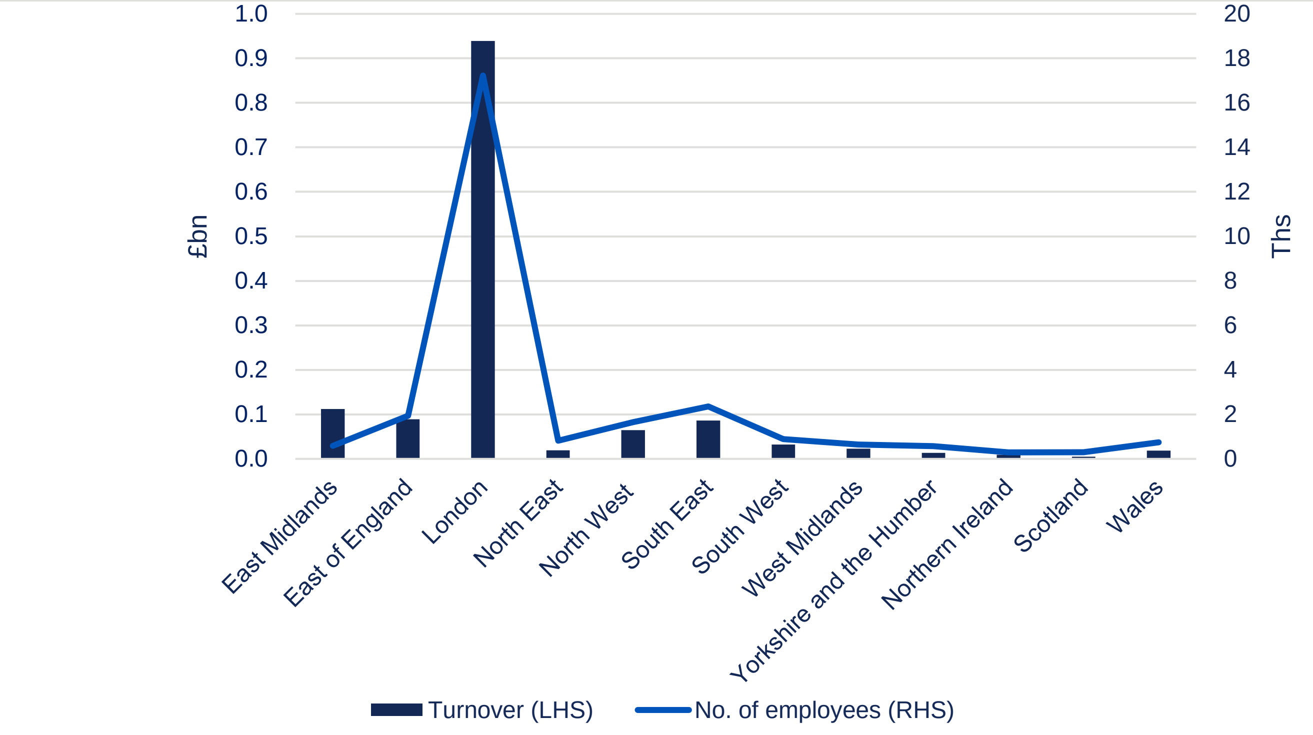


Source: British Business Bank data provided to RSM (June 2021)

Just over half of firms received less than £500k of finance through the Future Fund which was at least matched by private sector investment. Just under 15% of the portfolio of firms raised over £2m through the programme. This is a partially expected result given firms are “early stage” and the programme was designed to help these firms weather adverse market conditions brought about by the Covid-19 pandemic.

Nationally, the turnover footprint of the firms participating reached approximately £1.4bn, with 28k employees being directly supported by the £1.14bn of government funding provided (Figure 8). Within this the dominance of London is even more pronounced than when looking at metrics such as firm count or funding provided.

Figure 8: Geography of firm employment and turnover supported by the Future Fund

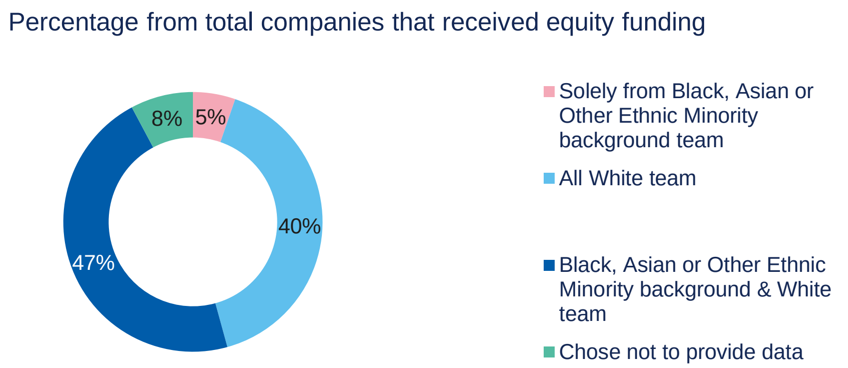


Source: British Business Bank data provided to RSM (June 2021)

In line with meeting Public Sector Equality Duty requirements, the ethnicity and gender of Future Fund recipient company management teams (on a self-reported basis) has been monitored.28 The participating companies also show a considerable degree of ethnic and gender diversity within the overall management team. Just over half (52%) of firms had at least one management team member from a Black, Asian or other Ethnic Minority background, with 47% of teams from Black, Asian or other Ethnic Minority and White backgrounds (Figure 9).

[28] Public Sector Equality Duty covers the monitoring of a programme's delivery and impact on a range of protected characteristics. The evaluation is not able to feasibly monitor and report against all protected characteristics covered by the PSED but has focused on ethnicity and gender only. It is widely documented that the amount of equity funding going to businesses founded by females and people from a non-white ethnic group is substantially lower than the general population. For instance, British Business Bank (2022) Equity Tracker shows 76% of funded equity deals in 2021 went to all male founded teams, with only 7% of funded deals going to all female founded teams.

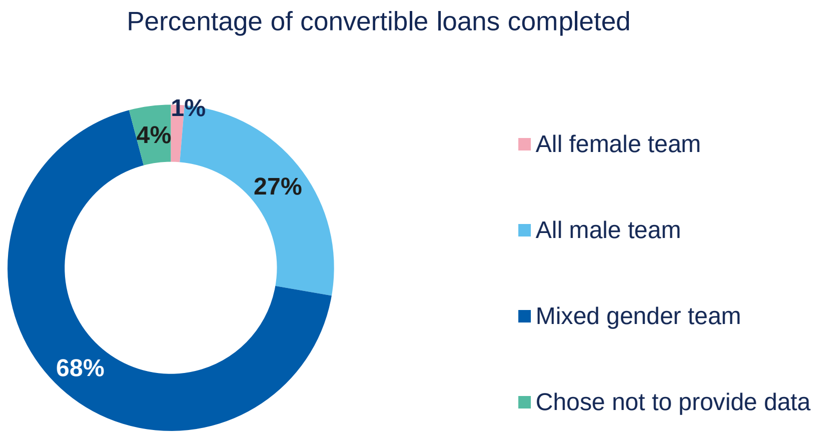
Figure 9: Ethnicity of management team by number of firms



Source: British Business Bank data provided to RSM (June 2021)

Most (69%) firms had at least one female management team member (Figure 10), however only 1% of deals were to all-female management teams. 42% of firms had at least one female founder, with 5% of deals in all-female founder teams.[29]

Figure 10: Gender of management team by number of firms



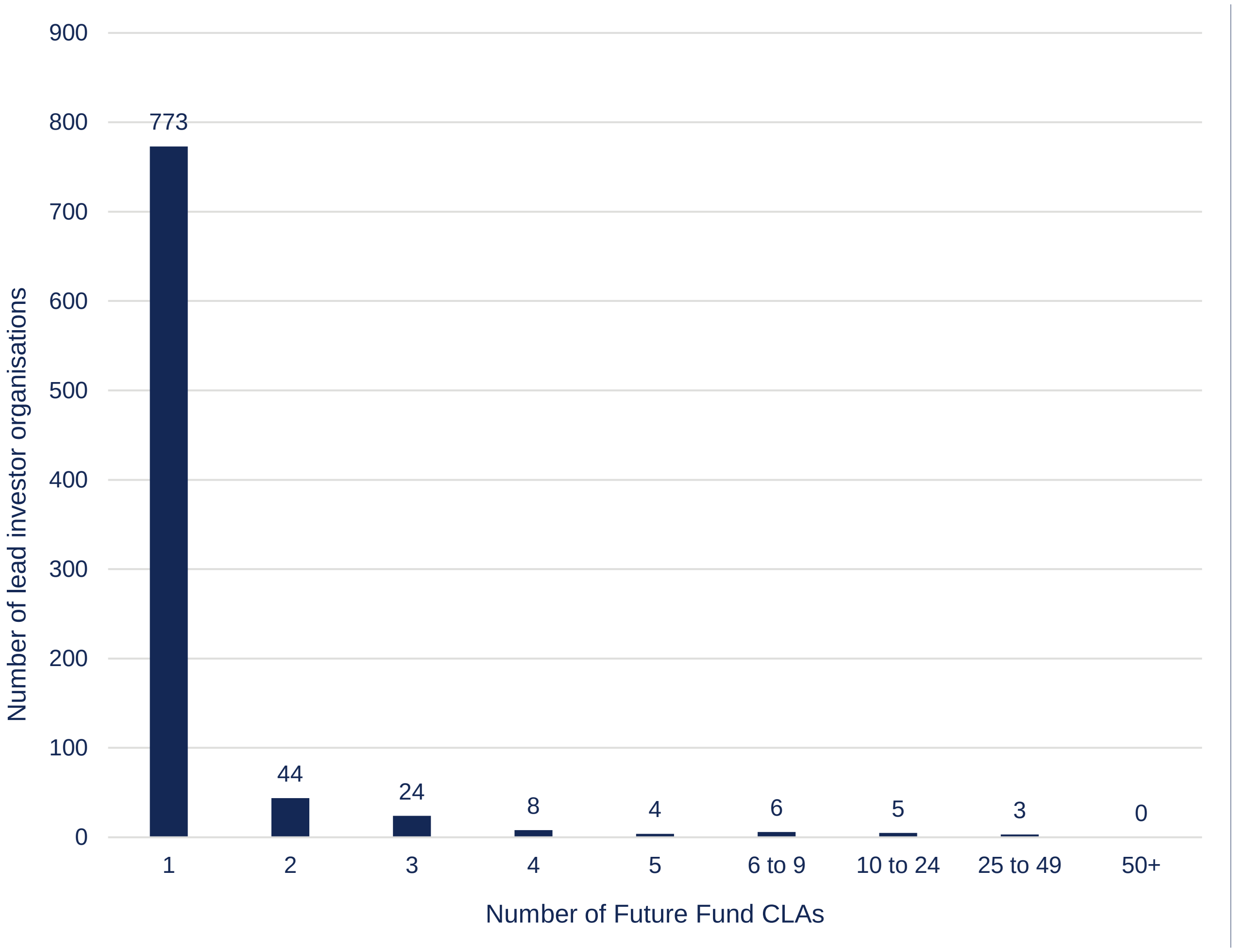
Source: British Business Bank data provided to RSM (June 2021)

[29] As a percentage of companies that provided founder gender data, or preferred not to say. Cases where data was missing or respondents answered 'don't know' were excluded.

4.5 Summary of Future Fund lead investors

The MI data provided a distribution of lead investors by the number of Future Fund CLAs they were involved with (Figure 11). The distribution is skewed to the right, highlighting that most lead investors were involved in relatively few Future Fund CLAs. 773 lead investors were involved in only one Future Fund CLA. Just under 11% of the lead investor population were involved in more than one Future Fund CLA.

Figure 11: Distribution of Lead investor organisations per number of Future Fund CLAs

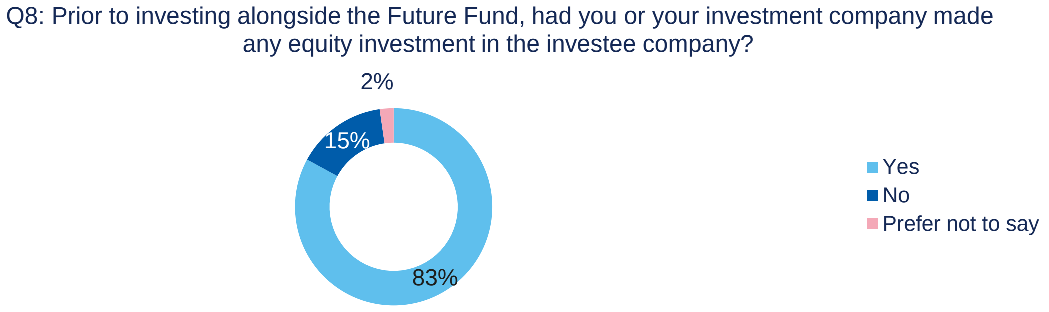


The lead investors survey provides an indicative sample of investor types and related experience. Almost 90% identified as private investors (non-angel), VC funds or angel investors (Figure 12). Lead investors, who identified as working within an investment company, were likely to be more experienced with VC than other private investors based on the average number of firms invested in, at 17 and 7 firms respectively (with a median of 10 and 4 respectively). Prior to Future Fund involvement, the combined samples' average amount invested between 2018 and 2020 was £14m with a median figure of £1m.

Figure 12: Investor type, investor (per cent)

Most investors had already invested in the companies they invested in alongside the Future Fund, implying they understood the investee companies' financial status, expected performance and nature of business from prior experience (Figure 13). Given investors' willingness to invest alongside the Future Fund, it potentially signalled their confidence to the government in the investee companies expected prospects. This substituted out the long due diligence process that would have been required on the part of government in normal circumstances for assessing the company's viability and future growth expectations.

Figure 13: Pre-Future Fund investor investment (investor)



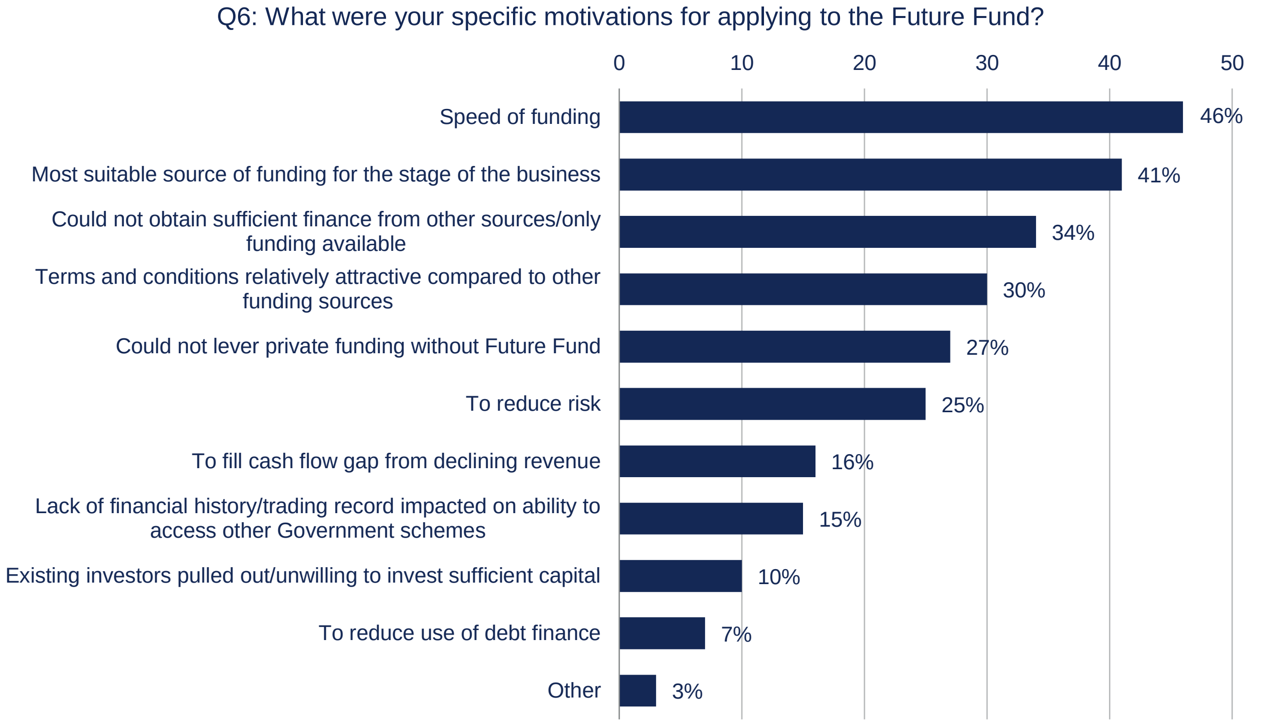
4.6 Process analysis

The Future Fund scheme was introduced very quickly over a matter of months compared to the usual time taken to deliver business finance programmes during normal times. This section aims to assess how well, given the time frame, the policy was communicated and delivered to industry. Communication, speed, clarity, and ease was important to ensure funding was introduced in a timely manner and was delivered to the businesses in need of support. The following section looks at the results from the CLA funded businesses, lead investor, and CLA applicant surveys supplemented by key stakeholder interviews.

4.6.1 Scheme design and motivations for applying

As outlined by both companies and investors in section 5, funding conditions were challenging during the onset of the pandemic and companies required an immediate supply of finance. Other alternative financing options may not have been so swift. Speed of funding was a crucial reason for firms applying for the Future Fund scheme (Figure 14), along with suitability and attractiveness of terms.

Figure 14: Motivation for applying to the Future Fund, CLA funded businesses (per cent)



One of the objectives of the scheme was to ensure potentially viable UK equity backed businesses received finance to meet their immediate cash flow needs and that the pipeline of innovative equity backed businesses was not damaged in the longer term. The requirement to provide finance quickly highlights the gap in the market and that the Fund may have come at the right time to mitigate adverse market impacts resulting from the pandemic.

By stage, 85% of the funding went to early-stage companies.[30] Of this, 43% went to companies that had not yet made commercial sales, 33% to those that had been around for more than three years with sales growing rapidly but were not yet profitable and 10% to those that had been around for less than three years with sales growing rapidly but were not yet profitable.

[30] 'Early-stage' is broadly defined here as those that were pre-sales, under 3 years old with rapid growth in sales, or over 3 years old with rapid sales growth but not yet profitable.

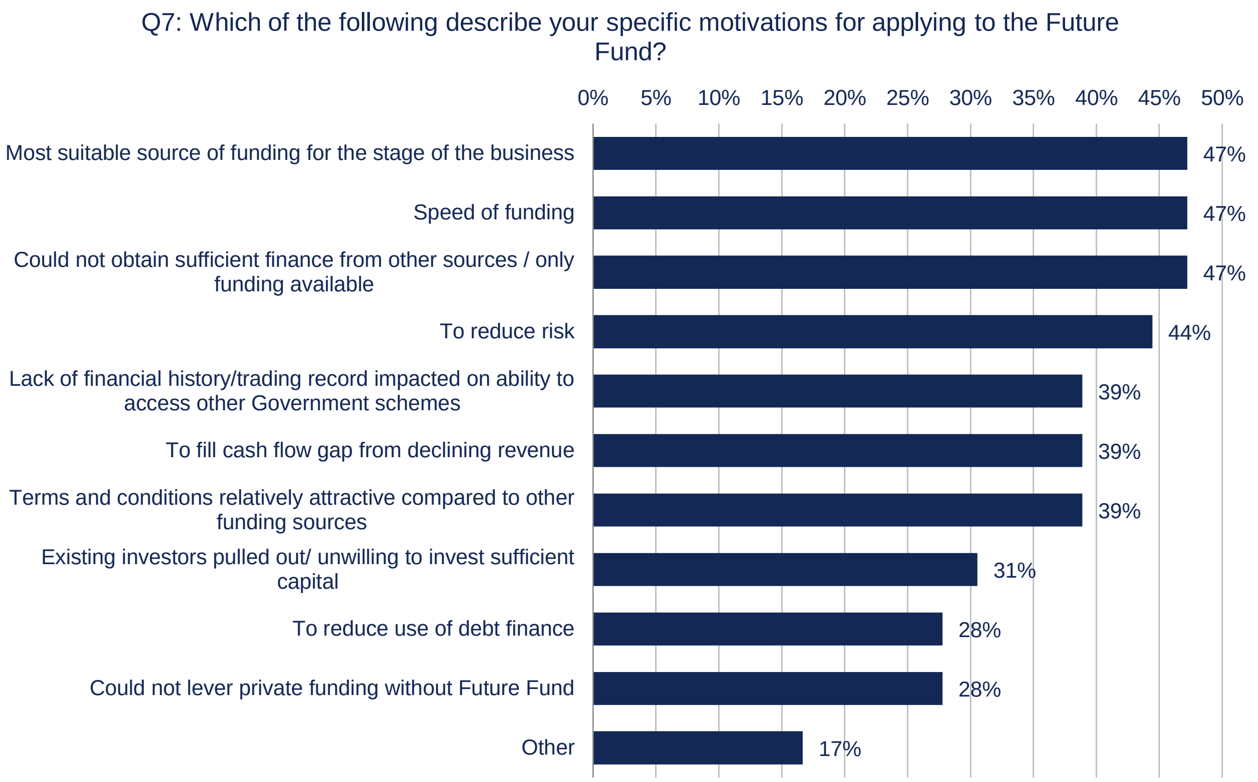
Table 3 highlights that early-stage firms did require finance quickly and the CLA financial instrument was often the most suitable or only available source of finance available to them. These firms were also more likely to lack the financial history/ track record required to access Covid-19 loan guarantee schemes.

Table 3: Attractiveness of CLA split by stage of business (CLA funded businesses)

Response	Pre-sales	<3 years/ rapid growth	>3 years/ pre-profit	Established / Steady	Established/ Recovering
Speed of funding	55%	34%	41%	54%	29%
Most suitable source of funding	44%	47%	37%	46%	38%
Could not obtain sufficient finance from other sources/only funding available	37%	31%	31%	23%	38%
Terms and conditions relatively attractive compared to other funding sources	30%	28%	31%	38%	21%
Could not lever private funding without Future Fund	26%	19%	31%	31%	29%
To reduce risk	29%	19%	23%	46%	17%
To fill cash flow gap from declining revenue	9%	9%	25%	38%	17%
Lack of financial history/trading record impacted on ability to access other Government schemes	18%	16%	16%	0%	0%
Existing investors pulled out/unwilling to invest sufficient capital	12%	3%	9%	15%	8%
To reduce use of debt finance	8%	6%	6%	23%	4%
Other	2%	0%	4%	8%	4%
Don't know - investor applied for funding	0%	0%	1%	0%	0%

Speed of funding was also a key factor in the decision to apply for Future Fund for applicants that didn’t draw down on the finance (Figure 15). The motivations across the CLA funded businesses and CLA applicant firms align, which points towards a specific funding need within a gap in the market. However, it should be noted the CLA applicant survey sample was small, at 36 firms – so results from this survey need to be considered critically.

Figure 15: Motivation for applying to the Future Fund (CLA applicants)



Further CLA applicant survey analysis has been presented in Annex I. Drawing inference from these findings are heavily caveated due to the small sample size and are more prone to the effect of outlier companies.

Investors favoured the CLA as it allowed for more flexibility and reduced risk as a sole investor – though this does create some doubt as to the extent of additionality, discussed further in section 5.4. Most (57%) investors preferred the CLA structure compared to only 27% who would have preferred using an equity investment (Figure 16).

Figure 16: Finance structure preference (Investors)

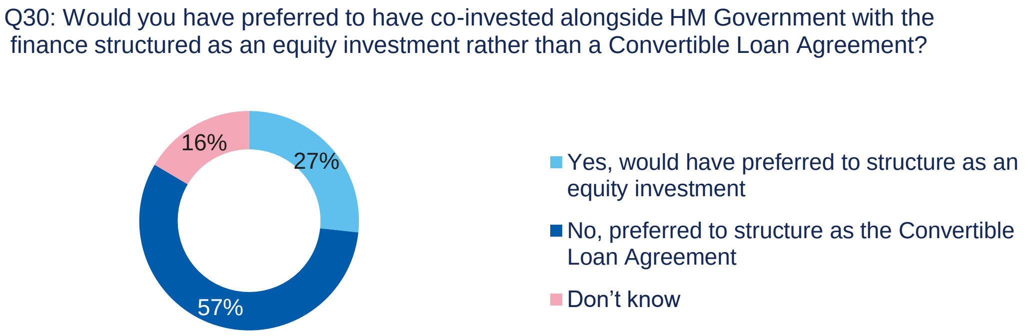


Table 4 below shows that having the flexibility for firms to have the option to convert to equity or repay the loan at maturity was favoured by investors. As shown below, investors felt the CLA structure allowed investments to be made more quickly and was favourable when there is difficulty in placing a value on a company's prospects, such as the one experienced during the pandemic. Given the speed of funding was favoured by firms, it is not surprising that investors preferred a CLA instrument. The terms and conditions of the CLA were attractive for investors and the repayment structure. This is despite the fact that approximately half of the sample stated they "strongly agree" or "tend to agree" that CLAs are more complicated than equity finance.

Table 4: CLA structure (Investors)[31]

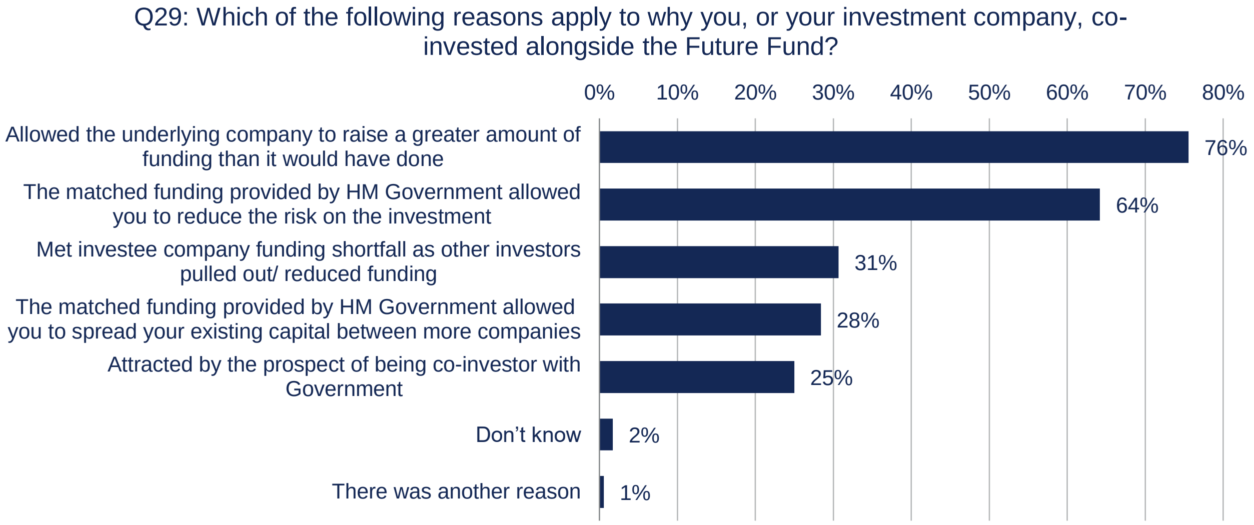
Q31: Thinking about the Future Fund using Convertible Loan Agreement instead of structuring it as an equity investment, to what extent do you agree with the following statements?

	Strongly agree	Tend to agree	Tend to disagree	Strongly disagree	Don't know
The Convertible Loan Agreement allowed you to invest in companies more quickly than equity finance	35%	43%	13%	5%	6%
Convertible Loan Agreements are more complicated than equity finance	14%	35%	32%	19%	1%
The terms and conditions of the Convertible Loan Agreement (CLA) and repayment terms were attractive to investors	20%	68%	10%	2%	1%
Convertible Loan Agreements allow company valuations to be determined in more certain economic times	36%	42%	10%	2%	9%

The two main reasons for investors choosing to co-invest alongside the government were that it allowed their investee companies to raise more capital and enabled them to reduce their risk. The matched funding feature made it easier for firms to raise equity finance, essentially halving the private investors' contribution with the one-to-one match. Negotiating third party private investment would have been made easier with the government backing. However, only 25% of investors stated that the prospect of having the government as a co-investor was attractive.

[31] Percentages may not sum to 100 due to rounding.

Figure 17: Investor reasoning for co-investment with the Government (Investors)



Stakeholders also agree that the Future Fund programme has positively augmented investor and business confidence in the government's ability to design an ‘equity financing’ intervention in response to an emergency.

4.6.2 Communication, speed, clarity, and ease of the application process

Table 5 below shows that a large majority of CLA recipients either tended to agree or strongly agreed that the overall application process (90%), eligibility criteria (93%), and terms and conditions (87%) were clearly explained at the time of their application. CLA recipients therefore broadly acknowledged a positive experience during the application stage and is indicative of objective 2 being largely met.

Table 5: CLA recipients application experience

Q9: Based on information sources accessed at the time of the application, to what extent do you agree or disagree the following were clearly explained?

	Strongly agree	Tend to agree	Tend to disagree	Strongly disagree	Don’t know
The overall application process	41%	49%	5%	3%	2%
Business and investor eligibility criteria	50%	43%	4%	1%	2%
The terms and conditions of the Convertible Loan Agreement (CLA)	43%	44%	9%	2%	2%

Most investors either “strongly agree” or “tend to agree” that the objectives of the Future Fund (95%), the application process (89%), the process in securing required documents (88%), the eligibility criteria (93%), terms and conditions (93%), and the role of solicitors (81%) were clearly explained and communicated (Table 6).

Table 6: Experience across the different application elements and stages (Investors)[32,33]

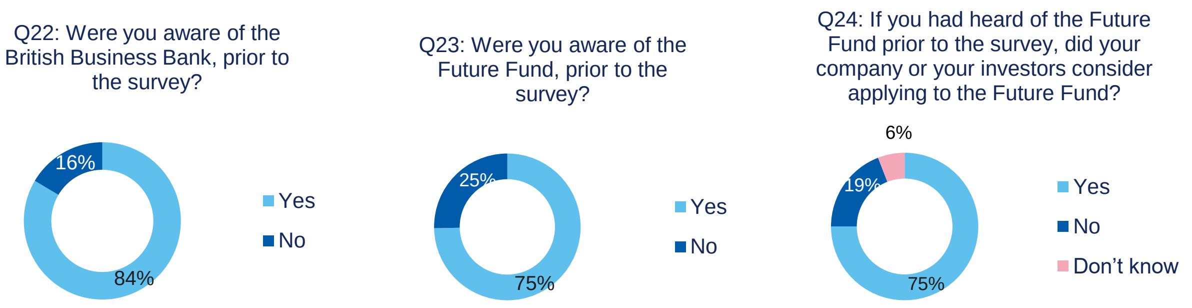
	Strongly agree	Tend to agree	Tend to disagree	Strongly disagree	Don't know
The objectives of Future Fund	55%	40%	3%	1%	1%
The overall application process	39%	50%	9%	2%	1%
The documents and information needed from the company to proceed with the application	30%	59%	8%	0%	4%
The documents and information needed by yourself and other investors to proceed with the application	34%	58%	7%	1%	1%
Business and investor eligibility criteria	48%	45%	6%	1%	0%
The terms and conditions of the CLA and repayment terms	48%	45%	6%	1%	0%
The role of the solicitor	30%	51%	10%	3%	6%

[32] Rows may not sum to 100% due to rounding
[33] Q17: Thinking about the information consulted before making your application, to what extent do you agree or disagree that the following were clearly explained?

Furthermore, most investors found the support timely, with 83% reporting no problems during the period between submitting their application and receiving the outcome.

Awareness of the scheme was high even amongst those firms who didn't apply. Figure 18 shows most firms had heard of the British Business Bank (84%) and the Future Fund (75%) prior to the survey as well as considered applying for the scheme. This suggests that, in the wider market, the scheme was communicated well to industry and firms had considered the Future Fund as a viable financing option.

Figure 18: Awareness of the Future Fund and application consideration (non-applicant)



4.6.2 Stakeholder perspectives on design and delivery

Stakeholders stated that the Future Fund was set-up specifically to help high growth, early-stage businesses but did not include very early-stage firms that had raised little to no equity funding previously. However, some stakeholders argued that the eligibility criteria may have left out many very early-stage businesses that showed potential to grow.

While this left a gap in the investment market that the Future Fund could not address, there was consensus among stakeholders regarding the need for stringent terms and criteria. Stakeholders recognised that:

- The government was looking to provide an instrument which could mimic deals that the market would have otherwise offered.
- The terms reflected a risk premium that was warranted to protect the interests of the government and the taxpayer in a time of uncertainty.

Stakeholders seemed to agree that the Future Fund's terms and conditions, eligibility criteria, and application processes were well communicated. The Future Fund was rolled out quickly and efficiently to meet the emerging market need. Its swiftness in releasing funds to businesses gave a much-needed boost to investor confidence in the market.

Stakeholders felt that the Future Fund was implemented with enough time to give the investment market much-needed breathing space to recover. While some stakeholders credit the cyclical nature of the market leading to its recovery, others believe that the Fund played a role in speeding up this process.

There was some disagreement regarding the investment instrument being structured as a CLA, with some stakeholders suggesting an Advanced Subscription Agreement (ASA), an alternative instrument which was compatible with EIS and SEIS tax relief. Regardless, the ease of implementing a CLA and its ability to postpone the valuation of a business to a more stable time in the future (if converted) were recognised by most stakeholders.

Stakeholders identified a trade-off between speed and due diligence in the implementation of the Future Fund, which has been a constant theme in this evaluation. There was a consensus that more importance was given to speed in the face of uncertainty, shifting the burden of due diligence on to lead investors.

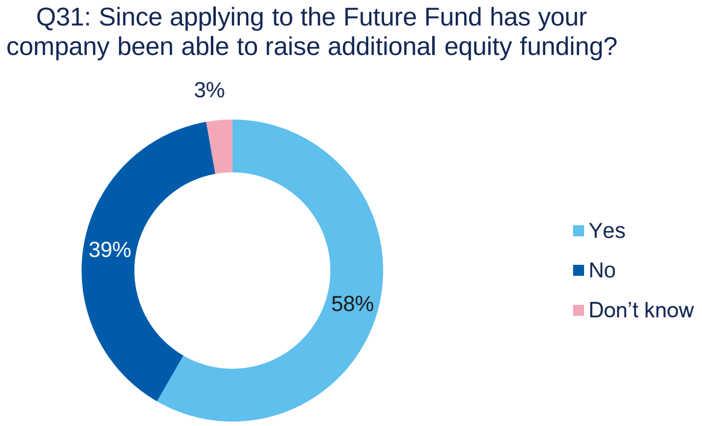
Despite minor problems in the application processes, most stakeholders expressed positive views on the user friendliness of the application portal. In the early stages of execution, stakeholders generally agreed that the Future Fund process was clearly explained. One of the examples that a stakeholder highlighted was that a few well-established Venture Capitalists had designed a general template for all their investee applications. The financial information required as part of the quarterly reports was therefore not as burdensome for firms to submit.

A few stakeholders pointed out that the portal and the eligibility criteria were amended based on market sentiment and investor feedback. This was done to ensure the Future Fund reached most intended businesses, e.g., some non-UK based holding companies that had participated in an overseas accelerator programme were given access to the Fund after analysing the companies’ activities and impact on the UK economy.

4.6.3 Reasons for non-use and not applying

This section assesses the reasons why the Future Fund was not taken up by some firms who were eligible but did not progress to the receiving of funds (the CLA applicants) and why non-applicants didn’t apply. However, as previously mentioned, the sample size of 36 CLA applicants is small, and results are indicative at this stage of the evaluation. Overall, 58% of CLA applicants were able to raise additional equity funding following their application to the Future Fund (Figure 19).

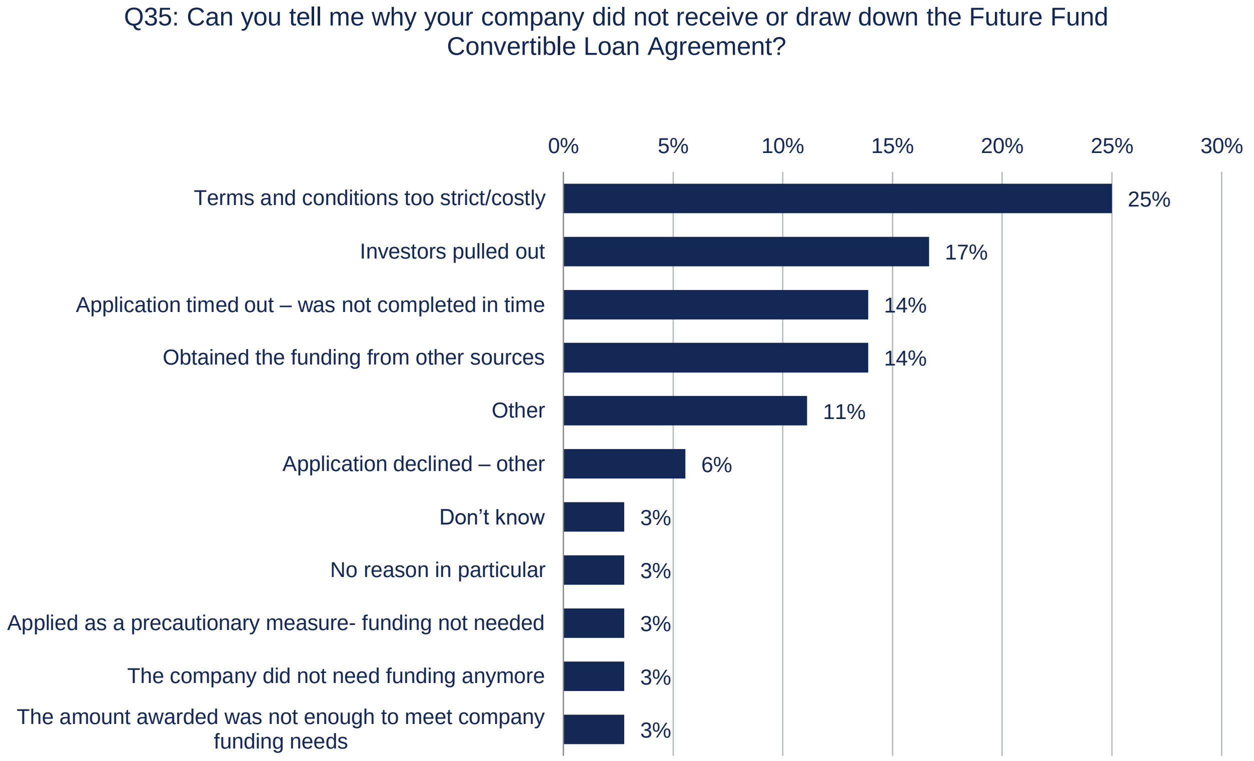
Figure 19: Leveraging equity funding from the Future Fund (CLA applicants)



The main reason CLA applicant companies reported they did not receive or draw down the Future Fund finance was due to its perceived stringent and costly terms and conditions of the CLA funding instrument (25%) (Figure 20). The idea of the government becoming an investor was not a concern for any business in the sample. At the time, most firms were predominantly focussed on survival during the pandemic and welcomed the support from the government.

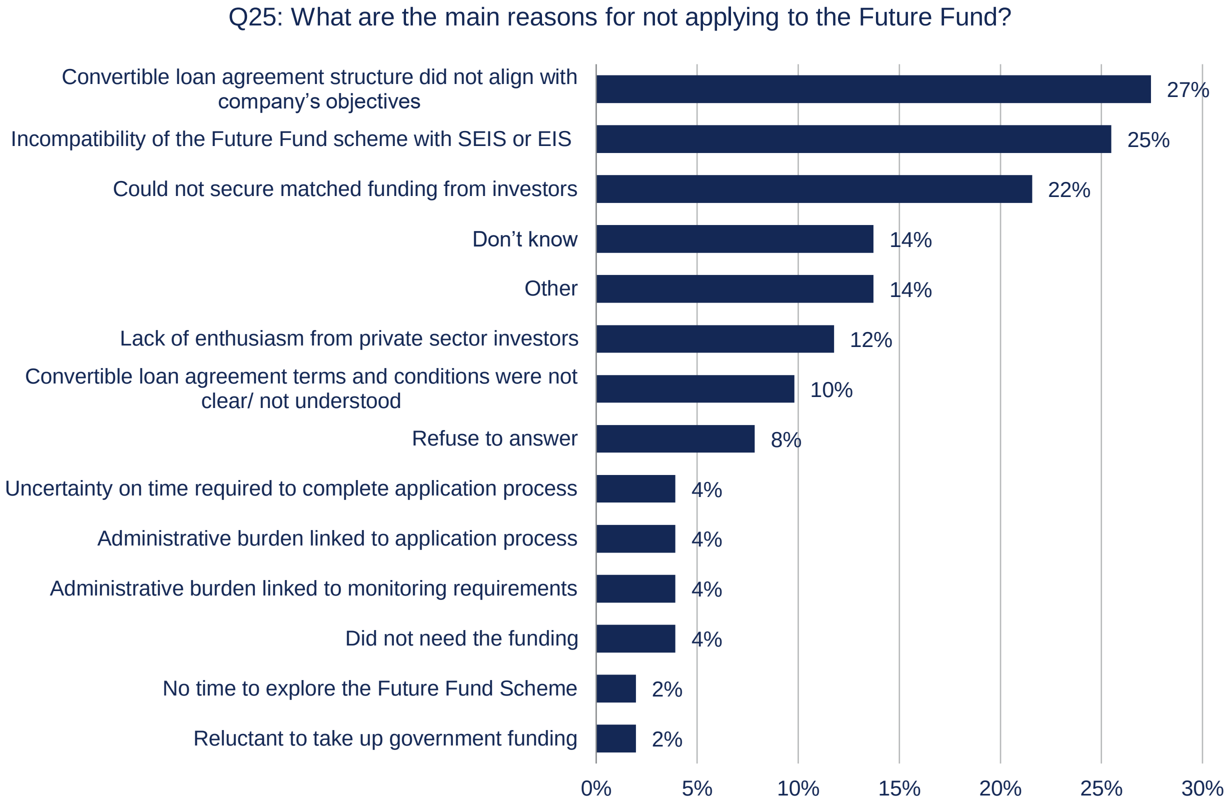
> … **Some shareholders were able to provide financial support, but others had no means of doing so, therefore, the firm couldn't raise more through the Fund.** The firm could have raised more equity finance, but this would have diluted some of the shareholders who were important stakeholders. … This funding was to pay for overheads such as staffing costs. One interviewee felt the matched funding element could have been more supportive in a 1 to greater than 1 ratio.
>
> - Case study G

Figure 20: Reasons for not receiving or drawing down CLA (CLA applicants)



Of those who did not apply to the Future Fund, but had similar general characteristics to portfolio firms, 27% cited a misalignment with their company objectives by using a CLA as a reason for not applying (Figure 21). This varies compared to CLA applicants, as given looser T&Cs, some CLA applicants would have been potentially more willing to draw down finance from the Future Fund.

Figure 21: Reasons for not applying to the Future Fund (non-applicant)



Interestingly, the compatibility with the EIS/SEIS tax relief was also noted in interviews as an application "headwind" i.e., a barrier to investing if the company was EIS-eligible, while 22% failed to match funding through the private sector, a requirement of access to finance.

4.6.4 Stakeholder perspectives on management and governance

Stakeholder consultations reveal a well-balanced process governing the implementation of the Future Fund. PwC were appointed as the delivery partner; the Bank is responsible for the design and delivery and HMT is responsible for setting the policy and agreeing design principles. BEIS were responsible for assessing how the scheme could be efficiently implemented in line with the objectives of the programme.

Prior to the launch of the Future Fund, the Bank, along with its legal advisors, worked closely with HMT, BEIS, and several firms towards designing the terms and conditions of the CLA. It was during this time that CLA was finalised as the investment instrument for the Future Fund. Stakeholders noted, mirroring sentiment in the Accounting Officer (AO) direction letter, that the pre-Future Fund impact assessments were difficult to assess and were based on assumptions that were too optimistic. Due to the uncertainty, further work was done to assess the likely Value for Money for the Future Fund. This, coupled with a ministerial direction, resulted in the approval of the Future Fund programme.

During the implementation of the Future Fund, PwC was contracted to build the application portal through which it would assess the applications in line with the terms and criteria set by HMT. PwC worked closely with the Bank, with meetings held twice a day to discuss the portal design and the implementation process. The daily meetings were later replaced with weekly updates as the programme progressed.

Once the Future Fund was rolled out, PwC screened all applications based on the eligibility criteria. The fact that each rejection needed to be justified, limited the selection bias in processing applications. Case clinics were set up, where PwC and the British Business Bank considered applications that fell into grey areas in terms of their eligibility. For instance, the form of the prior fundraising to meet the £250k target or eligibility of the proposed co-investors.

The portal and the programme's eligibility criteria were amended slightly based on feedback from investors. As announced by the Chancellor on June 30th 2020[34], the programme's eligibility criteria was widened to accommodate businesses that provide a significant contribution to the UK economy but are internationally head-quartered due to participation on a non-UK based accelerator programme. This was done to ensure the Future Fund reached its intended businesses.

Significant weight was placed on 'speed' during the implementation of the Future Fund, where most stakeholders agreed that the relationships and roles worked well and collaboratively.

Stakeholders agree that the Future Fund was an effective answer to boost investment during an emergency situation. This is seconded by the fact that one of the stakeholders mentioned applications exceeded £200m on the first day, warranting an extension of the programme to £1.14bn of public funding.

Some stakeholders expressed concerns that this could attract investors looking to strategically maximise their gains from the Future Fund, while staying within the bounds of the terms and eligibility criteria set by the programme. The biggest topic of ongoing debate from wider stakeholder consultations, however, was identifying how Government would be able to efficiently manage a significantly large portfolio of businesses to create value for the taxpayer.

However, stakeholders highlighted that the terms and criteria were designed in a competitive way to make it difficult to remove the government as a shareholder, post-conversion. This was intended so that the scheme would not be treated as a grant funding option and the government would share in the proceeds of any company upside.

[34] https://www.british-business-bank.co.uk/press-release/future-fund-extended-to-uk-companies-from-accelerator-programmes-outside-the-uk/

5. Early Impact Evaluation

5.1 Key findings

- There is some evidence to suggest that the programme has leveraged additional finance into equity backed businesses. Only 26% of businesses report they definitely or probably would have raised similar equity finance elsewhere. Most companies report that fund raising conditions were more difficult in early 2020 than previously with 63% of recipients reporting difficulty. This is confirmed by the lead investors, where only 36% of investors report they would have invested in the absence of the Future Fund, suggesting that the Fund was a factor in encouraging private sector investment during the pandemic. Of those investors who would have still invested, 81% would have invested the same or less.

- 85% of funded companies reported they had subsequently undertaken R&D and 67% continued to develop new or modified goods and services. This is confirmed by the lead investors who report their investee company intended to use the funding to maintain cash-flow (84%) followed by maintaining R&D (72%).

- Recipient firms reported a decline in investment in physical and intangible capital in 2020, a possible response to the uncertain economic outlook brought about by the pandemic and other macro uncertainties. Investment is expected to rise before tailing off over the longer term, which is a similar trend observed in non-applicant firms, albeit there is a slight lag in the non-applicant firms.

- Modelling results suggest that the Future Fund may have supported an additional £122k of investment in capital and intangible assets for portfolio firms when comparing firms that received Future Fund support with the appropriate counterfactual that did not receive support by the end of 2021. The results are not statistically significant at this time.

- Almost half (48%) of CLA funded businesses said their firm would have closed or been fairly likely to close without having received Future Fund finance. It must be noted however that this is self-reported survey data by the firms. This suggests progress on objective 3 but it is currently too early to definitively measure this.

- Average revenue growth continued in 2020 and 2021, with forecasts of an acceleration in the near to medium term for CLA funded businesses and non-applicant firms. Firms that received funding reported high rates of expected future revenue growth – with the median being between 50% and 100% growth expected over the 2021 – 2023 period. For non-applicants, median growth over the forecast horizon was broadly similar.

- For CLA applicants, revenue fell marginally in 2020 compared to 2019 but is expected to increase again in the near to medium term. Most CLA applicants were able to raise equity finance from other sources.

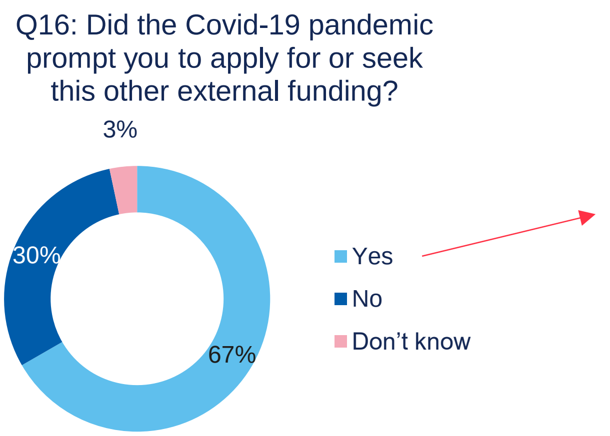
5.2 Introduction

This section provides an early assessment of the economic impact from the Future Fund focusing on finance additionality, businesses' use of finance, and impact on business performance. Survey results from CLA funded businesses, CLA applicants, non-applicants, and lead investors are complemented by detailed stakeholder engagement across government, arm's length bodies, and industry to describe the Fund's early impact. Case study extracts have been selected and merged into the relevant themes presented in blue boxes. This section also includes the results of the early economic modelling results assessing the programme's initial impact on business investment.

5.3 Business experience of raising finance

Over two-thirds of CLA funded businesses sought external financing as a direct result of the pandemic, with only 30% reporting this was not related to the pandemic (Figure 22). Of those raising finance due to the pandemic, the majority were raising it as a precautionary action against tightening finance conditions and as a precaution against falling cashflows.

Figure 22: Pandemic impact on external financing pre-Future Fund (CLA funded businesses)



Q17: Did the Covid-19 pandemic prompt you to seek access to additional sources of finance…?

	Yes	No	Don't know
… earlier than planned	75%	22%	3%
… as a precaution against future tightening in finance conditions	76%	19%	4%
… as a precaution against falling cash flows	83%	14%	2%

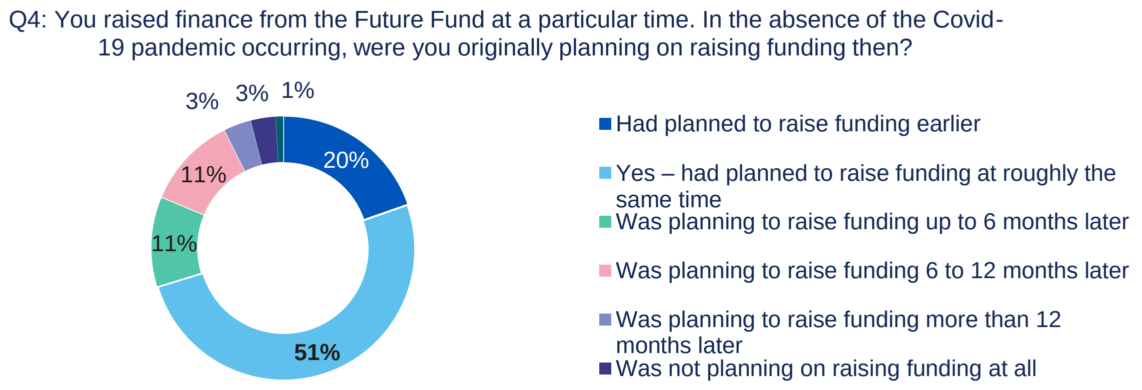
Prior to raising finance through the Future Fund, the firm had a **second-round of equity finance through the two VC investors**. The firm's **third round of fund raising was through the Fund** as a precautionary measure against an uncertain economic climate. … The COO stated that **it wasn't a requirement at the time to raise finance**, but the **attractiveness of the scheme gave a greater reassurance to investors**. …**They also received a small amount from the BBLS**.

- Case study D

Non-applicants were slightly less likely than CLA funded businesses to report that the pandemic prompted them to apply for or seek funding (62%). However, across both groups, most firms did have a need for additional financing as a result of the pandemic.

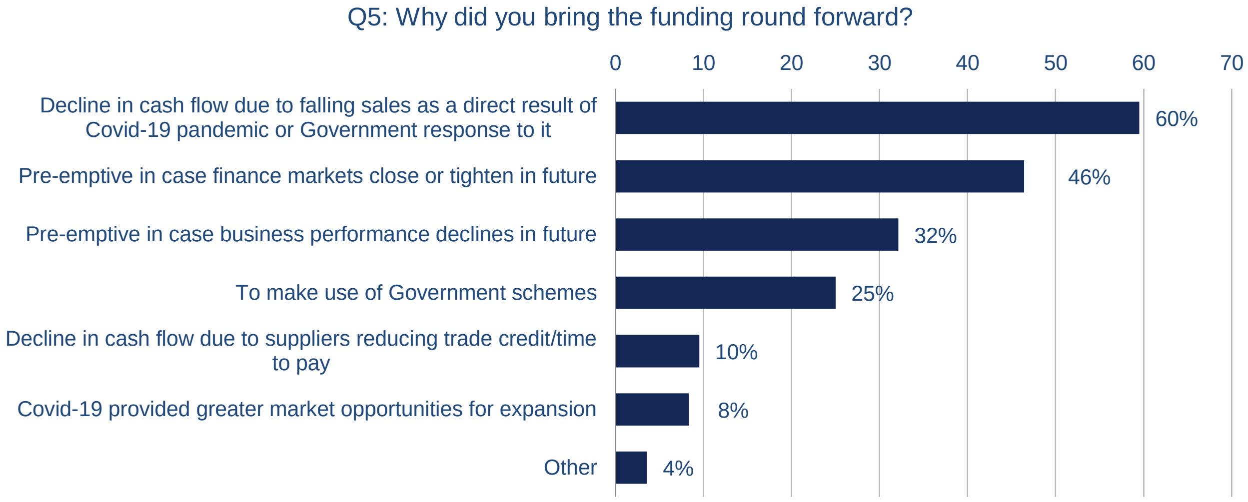
Half of CLA funded businesses were looking for funding around the same time the Future Fund was open for applications, suggesting the programme was introduced at an opportune moment. However, 29% of CLA funded businesses decided to bring forward their funding rounds to make use of the Future Fund (Figure 23), possibly as a precaution against worsening economic or financial conditions. The fact that 20% of firms had planned to raise funds earlier may indicate there was already a degree of disruption in the financial market that the Future Fund aimed to address. These businesses may have been experiencing difficulties raising finance in normal times, so were benefitting from the introduction of the scheme.

Figure 23: Raising funding in the absence of Covid-19 (CLA funded businesses)



Of the firms that brought forward their funding, 60% did so as a result of Covid-19 reducing cash flow and 46% to pre-empt difficulty raising funding later (Figure 24), indicating accessing the Fund may have been a precautionary measure. A quarter of the companies that brought their funding rounds forward did so to access other government schemes.

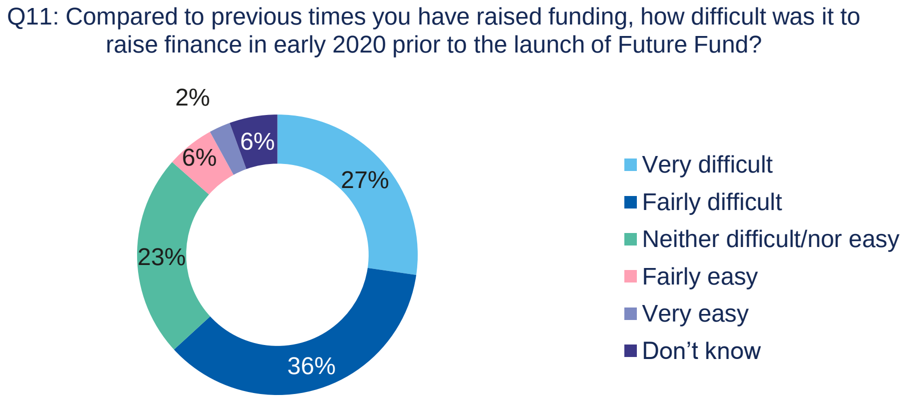
Figure 24: Reasons for bringing funding forward (CLA funded businesses)



Some of the main reasons (as seen in the Process Evaluation section) for the CLA funded businesses applying for Future Fund finance were speed, suitability, not being able to obtain alternative funding, and terms and conditions. The survey results highlight that 34% of firms could not obtain alternative sources of finance. 27% couldn't lever private funding without the Fund and 15% lacked sufficient track record to apply for other Government schemes. This provides some indication that the Fund may have filled a financing need for firms who would not have been able to access finance otherwise.

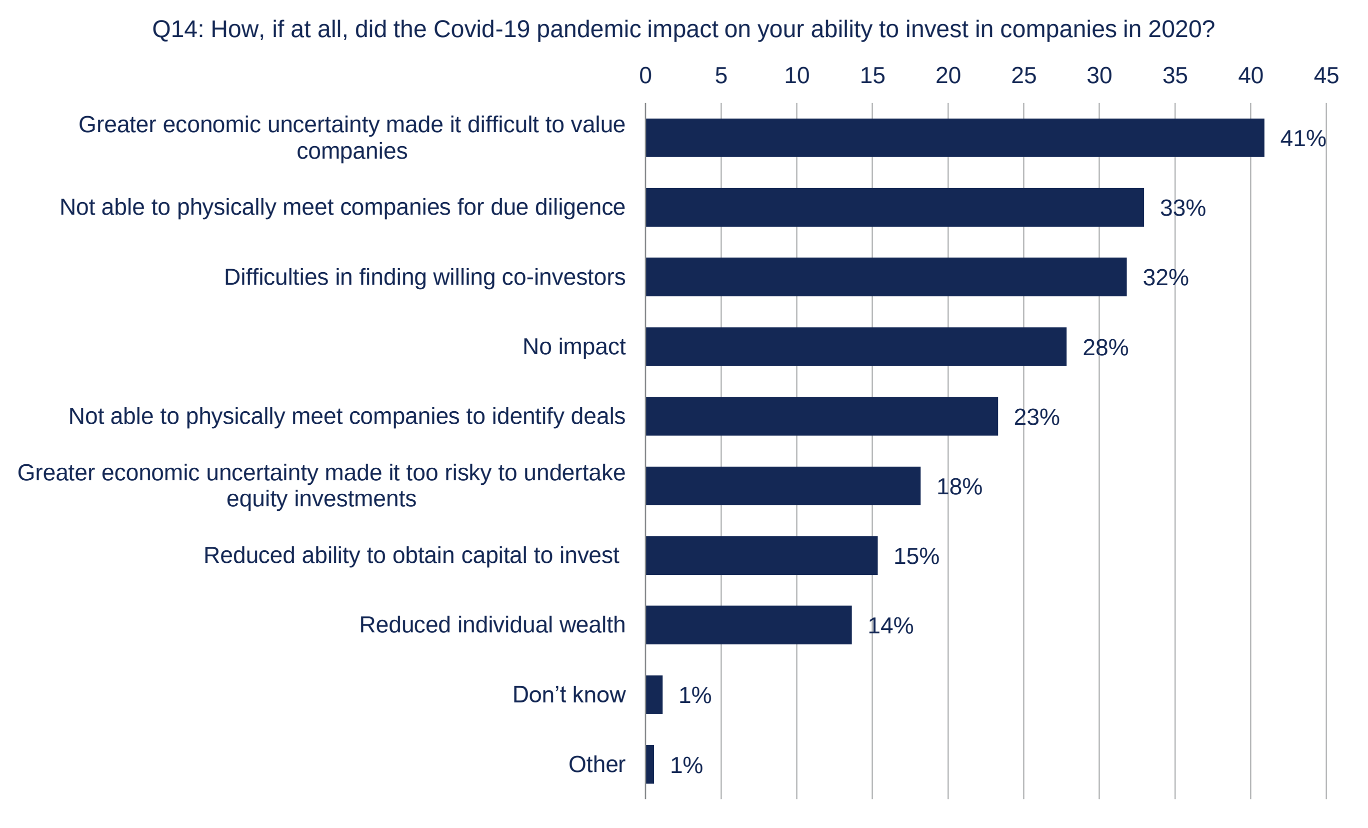
Figure 25 shows that around 63% of businesses reported that raising finance was 'very' or 'fairly difficult' in early 2020 compared to earlier times. The difficulty some firms faced in obtaining external funding at the time points towards a market need for support, providing some evidence of financial additionality and a lack of displacing private sector sources.

Figure 25: Raising funding prior to Future Fund (CLA funded businesses)



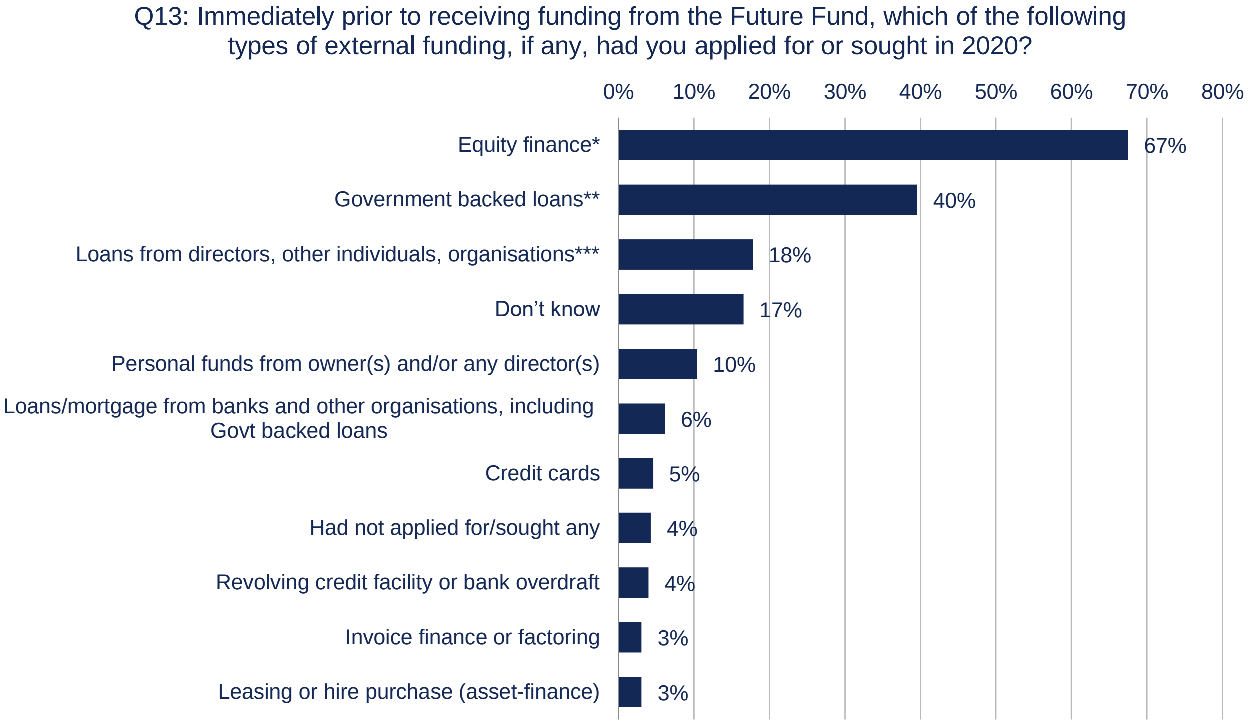
The survey of Future Fund lead investors also confirmed economic conditions made it more difficult for investors to make equity deals in early-stage companies. The pandemic led to increased economic uncertainty which increased the difficulty of accurately valuing businesses, especially early-stage, as part of the due diligence processes. Early-stage firms do not have extensive financial history or are at a pre-sales stage. Investors highlighted economic uncertainty (41%) and not being able to physically meet (33%) as challenges for valuing and undertaking due diligence (Figure 26). However, 28% of surveyed investors said the pandemic posed no impact on their ability to invest.

Figure 26: Covid-19 impact on company investment (investor)



Most CLA funded businesses (67%) had gone to equity investors to raise external finance ahead of the applying for finance from the Future Fund. Figure 27 also highlights these businesses were also seeking other types of funding, although with the exception of government-backed loans, demand for these other financing options was much lower, i.e., below 20%.

Figure 27: Other external financing options sought prior to Future Fund (CLA funded businesses)[35]



During the pandemic, firms sought support through government-backed schemes such as the CJRS or BBLS. In some cases, the firms faced difficulty in raising debt finance, highlighting the need for an equity specific scheme as noted in the case studies below:

[35]* Equity from directors, individuals, friends, family, crowd funding platforms, Venture Capital or other investment organisations, ** Government backed loans such as the BBLS, CBILS, and Coronavirus Large Business Interruption Loan Scheme (CLBILS), *** Loans from directors, other individuals, organisations [can include loans from friends]

Nominal amounts of funding were received through the **CJRS (£900/ month)** as only marketing/ administration staff were furloughed. **£400k equity was raised from the company's shareholders** in April to cover their initial 6-month period that was assumed to be needed to see the company through the pandemic… In late April 2020, the **company was denied a CBILS loan** as it had no historic sales and was also **denied a £50k BBLS loan** for the same reason.

- Case study A

… **Debt financing wasn't a viable option** due to the irregularity of cash flow and difficulty in measuring the liquidity, especially in the real estate investment space. The high-risk nature of the business makes it difficult for the firm to successfully raise debt finance in normal times which was exacerbated during the pandemic. **The most viable option seemed to have been to raise capital through shareholders.**

- Case study B

…Ahead of the announcement of any government schemes the company began by seeking support from their existing two VC investors. They also reviewed other sources but **raising debt finance would not have been possible** due to their negative EBIT (earnings before interest and tax).

- Case study C

Support during the pandemic came from their **commercial bank**, which provided initial flexibility through **overdraft extensions**. They were **turned down from the CBILS** as they did not meet the profitability requirement. The Chairman was then first **alerted to the Future Fund through the news** and saw this as a likely source of funding.

- Case study E

Businesses seeking equity finance seemed less successful than those raising other forms of financing such as loans, credit cards and government-backed loans. Whilst success rates for raising equity finance are likely to be lower than for debt finance, even in normal times, this suggests that there may have been specific problems affecting raising equity finance for these firms (Table 7).

Table 7: Other external finance options application outcomes (CLA funded businesses)[36]

Q14: What was the outcome of this application or search for other external funding? Did you successfully secure it, or were you successful and turned it down, or were you unsuccessful? ****

	Successful	Successful but we turned down the offer	Not successful	Not applicable (Did not apply for this type of finance)
Credit cards	87%	0%	7%	7%
Equity finance*	57%	2%	33%	7%
Government backed loans**	74%	0%	22%	4%
Invoice finance or factoring	60%	10%	30%	0%
Leasing or hire purchase (asset-finance)	90%	0%	0%	10%
Loans***	90%	0%	7%	3%
Loans/mortgage from banks and other organisations, including govt backed loans	45%	0%	40%	15%
Personal funds from owner(s) and/or any director(s)	88%	6%	6%	0%
Revolving credit facility or bank overdraft	46%	0%	54%	0%
Applied/sought other finance	29%	0%	43%	29%

[36] * Equity from directors, individuals, friends, family, crowd funding platforms, VC or other investment organisations. ** Government backed loans such as the BBLS, CBILS, and CLBILS. *** Loans from directors, other individuals, organisations [can include loans from friends]. **** Values may not sum to 100% due to rounding.

5.4 Additionality of finance

HMT's Green Book refers to additionality as the real increase in social value that would not have occurred in the absence of the intervention being appraised.[37] Finance additionality refers to the extent to which finance facilitated by the programme would not have occurred in the absence of the programme.

A narrow definition of finance additionality would consider the extent to which companies funded by the programme would not have been able to obtain the funding from other sources in the market.

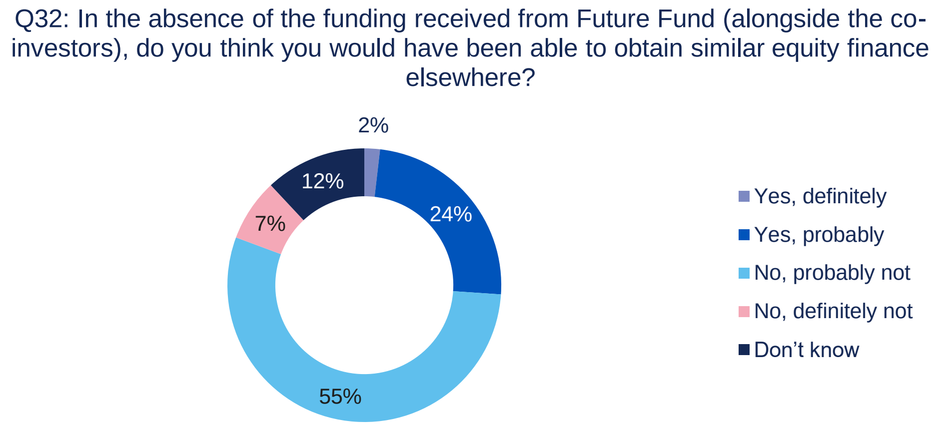
However, this definition does not capture two other important aspects of the programme, which were to provide funds to businesses in a timely manner, and of sufficient size. These factors can be considered as related to finance additionality. The additionality of investment is measured using survey-based indicators of recipient businesses' actual and perceived difficulties in accessing equity funding through other sources other than the Future Fund. It is conceivable that businesses owners may overestimate their abilities to raise finance from other sources, but it is also possible that business owners may have perceived the decline in the availability of equity finance to be far greater than it was.

The Future Fund also had two other objectives of preventing potentially viable companies from running out of cash and closing, and reducing the risk of their long-term prospects from being adversely impacted, e.g., by having to cut staff or reduce their R&D investment. These two factors can be classified as 'outcome additionality', which is a separate concept to finance additionality and will be considered separately within section 5.6 and 5.7 of the report.

Most firms report that they would have found it difficult to raise the same amount of finance in a similar time frame and from external sources. 62% of recipients perceived they probably or definitely would not have obtained similar finance in the absence of the Future Fund providing some evidence of pure finance additionality. Only 26% of firms suggested that they would definitely or probably be able to get similar funding elsewhere in the absence of the Future Fund (Figure 28). A significant proportion of firms stated they would have raised less (32%) (Figure 30). This indicative result highlights evidence of pure finance additionality, suggesting that some firms needed government support.

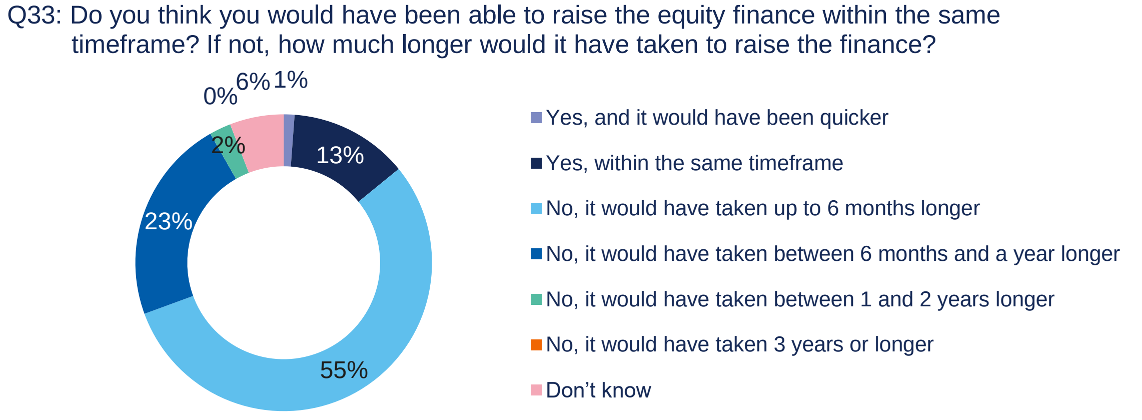
[37] Green Book Glossary, page 139, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/938046/The_Green_Book_2020.pdf

Figure 28: Without the Future Fund, would a similar amount of equity raising have been possible (CLA funded businesses)



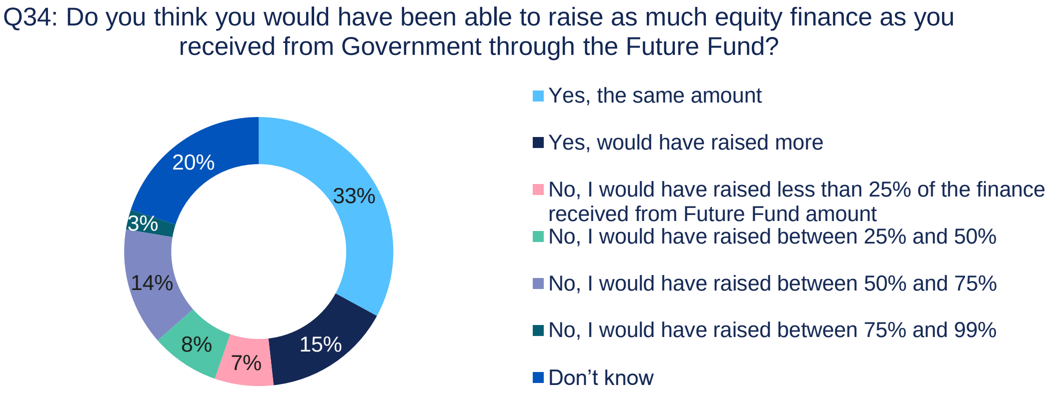
Of the 26% reporting that they could have raised funding in the absence of Future Fund, 80% said it would have taken longer. Most (55%) said it would have taken up to six months longer, with a quarter (25%) saying it would have taken six months to two years longer (Figure 29). Only 14% thought it would have been quicker or taken the same time. This also indicates strong partial finance additionality.

Figure 29: Quantity of equity finance in the same time frame if no Future Fund (CLA funded businesses)



Similarly, of the 26% reporting they could have raised funding without the Future Fund, 32% said would have raised less than that received from the Fund. However, almost half (48%) thought they could have raised the same amount or more (Figure 30).

Figure 30: Quantity of equity finance through external sources (CLA funded businesses)



Several of the case studies also highlighted examples of potential finance additionality:

… The company stated that, **without the Future Fund, they would not have been able to raise as much equity as they did**, and its contribution to the company's survival was stated to be **80-90%**. …

- Case study B

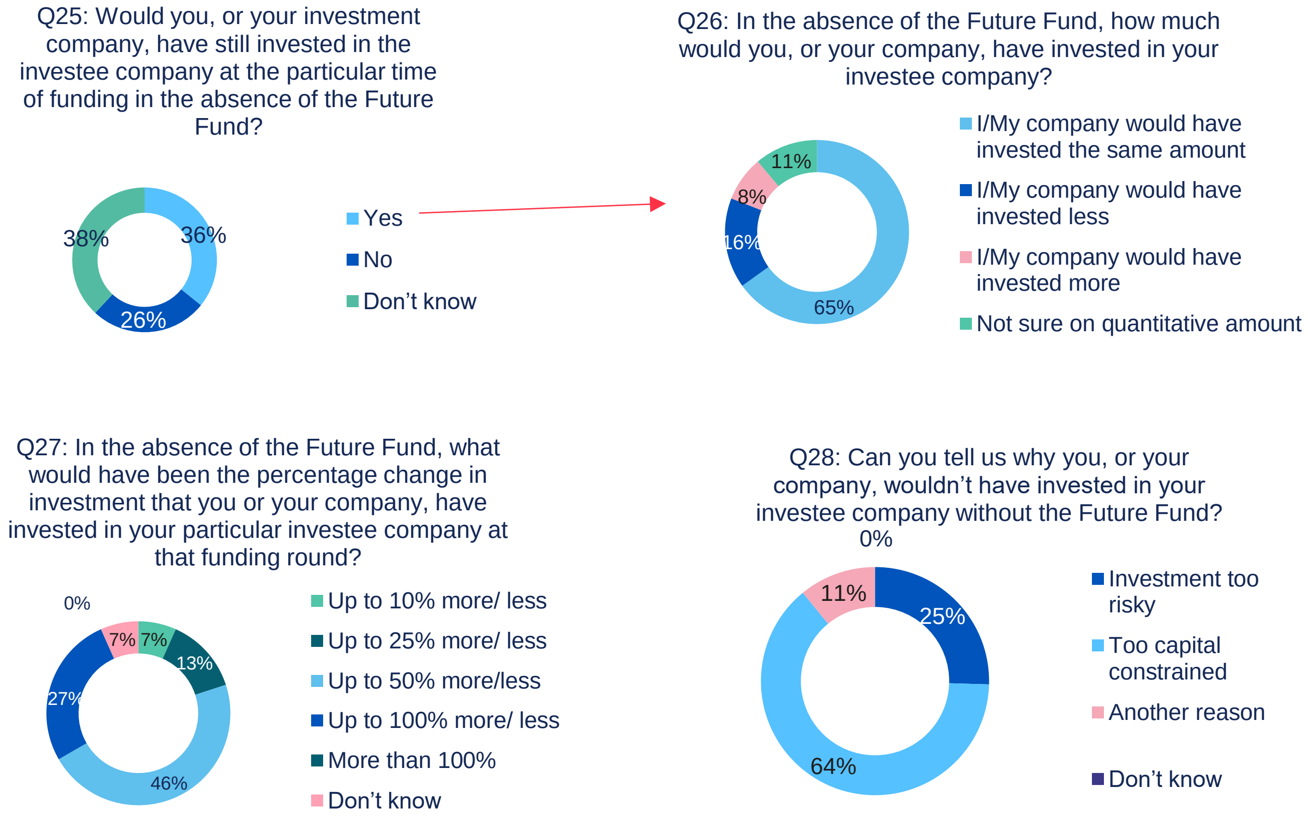
… Coincidentally, the lease on the London office space expired in May 2020, which helped in terms of cost cutting. The primary cost was staffing roughly 80%. Other uses of the funding were for paying suppliers and as a buffer due to the uncertainty of the business environment and economic outlook.

… While 2020 was a difficult year for the business, **the CEO believes that they would have been able to raise funds at the time.** However, it would have been **more costly without the support of the Future Fund.**

- Case study C

The lead investor survey also suggests broad levels of finance additionality, as reported by funded businesses. Overall, 36% of investors said they would have still invested in absence of the Future Fund (Figure 31). 26% reported they wouldn't have invested in the company, but 38% were uncertain, reflecting the wider economic uncertainties at the time the Future Fund was introduced. Of those who would have invested (36%), 81% would have invested the same amount or less (this would represent private capital only, i.e., no government provided matched funding). So even in this case, firms may not have received sufficient funding given that most investors provided half the required investment amount.

Figure 31: Investment decisions in the absence of the Future Fund (investor)[38]



Most stakeholders consider the Future Fund provided much needed finance additionality to high growth early-stage firms that wouldn't have otherwise survived. It provided access to an alternative finance scheme for a group of equity backed firms that wouldn't have otherwise had support until the market recovered at the end of 2020. A minority of the stakeholders view the Fund as purely a contingent source of capital for businesses. Stakeholders generally believe that the Future Fund did not displace existing investors, with one pointing out that that there was nothing to displace.

Despite pre-existing structural deficiencies in the angel investment and VC markets, most stakeholders agreed early-stage businesses that were raising capital pre-pandemic, with deals in the pipeline, were suddenly left unworkable when said deals were withdrawn in the face of uncertainty. There was consensus in recognising the much-needed influx of equity financing that the Future Fund brought with it. This incentivised many investors to re-enter the market and gave the market sufficient breathing space to recover.

[38] Respondents who would have changed their investment amount were asked about the proportion of change and not the direction.

Future Fund supported companies combined finance additionality and growth potential characteristics

As highlighted in section 3.3, the main objective of the Future Fund was to increase the supply of finance to potentially viable UK equity backed companies that would otherwise have problems raising finance, or been underfunded, due to adverse market conditions. The aim was not to displace or crowd out existing private sector investment or provide funding to unviable businesses that would have been unable to raise funding in normal times. This assessment presents initial quantitative evidence on the extent to which supported firms demonstrated both finance additionality and potential for growth, according to their self-reported stage of development.

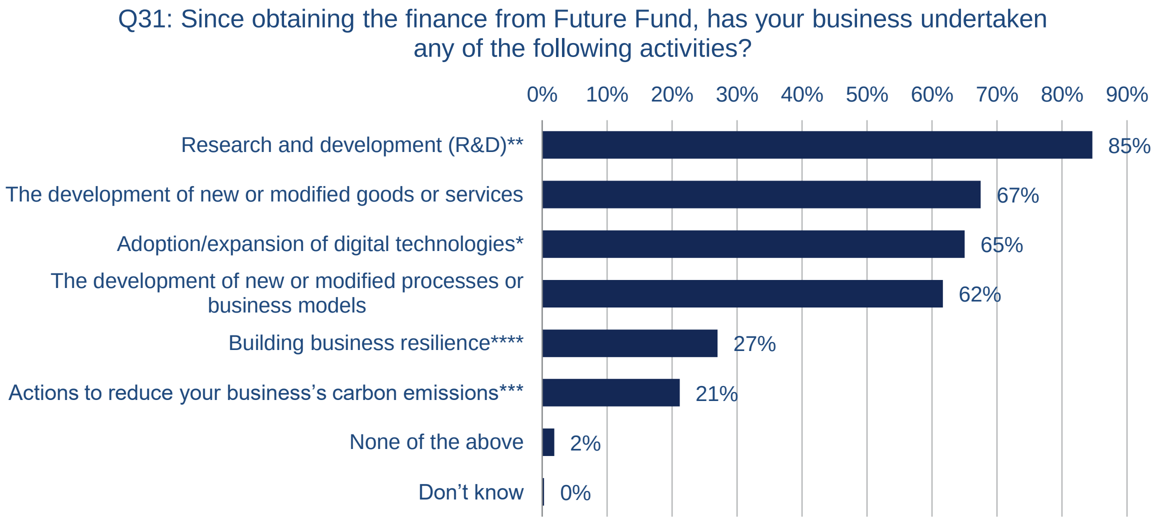
While it is not possible to estimate the exact number of firms falling inside the group of companies the programme was designed to help with certainty, the analysis does help to assess the share of companies that may have been outside this group. Analysis of the MI data showed that 94% of the portfolio may have self-identified as having higher growth potential using their business investment statuses. Survey results indicate this figure to be lower at 85% based on firms reporting on their business stage of development. We can also estimate that, based on recipients' feedback about their ability to raise equity finance in early 2020 compared to pre-pandemic, around 7% of the recipient firms looked likely to be able to raise funding even in the absence of the Future Fund. However, based on a broader measure, 26% of firms suggested that they either definitely or probably would be able to get similar funding elsewhere in the absence of the Future Fund.

When we control for the possibility of overlaps, the estimate of firms falling out of scope comes to **approximately 37%**. Therefore, just under two thirds (63%) of companies that received funding may have had some degree of finance additionality and growth prospects, or cannot be shown to be outside of the group of finance-additional, early-stage and/or high-growth businesses based on available data.

5.5 Use of finance

The top subsequent activity undertaken by CLA funded businesses is R&D at 85%, with 67% continuing to develop new or modified goods and services. This indicates that firms were predominantly the target companies the Future Fund aimed to support with a common characteristic being investment in research and development activities.

Figure 32: Activities undertaken post Future Fund finance (CLA funded businesses)[39]



This is also confirmed by the lead investor survey. According to the investors, most investees (84%) intended to use the finance to maintain working capital, and continue their research and development (R&D) (72%) (Figure 33). This indicates that for some businesses, the funding was essential to their continued business operations and others planned to innovate, consistent with the Fund's focus. Early-stage, high-growth firms will be investing heavily in R&D to grow their business. A specific objective of the Future Fund was to reduce the damage resulting from the pandemic on companies' long-term prospects, so the high proportion of companies maintaining their R&D provides some evidence to support this.

[39] * Adoption/expansion of digital technologies. Examples include: video conferencing, online marketing, social media, website for selling products or services, artificial intelligence, machine learning etc, ** Research and development (R&D) activities (excluding R&D related to the environment), *** Actions to reduce your business's carbon emissions (including R&D related to the environment). Examples include: increased reliance on renewable energy, training staff on environmental matters, conducting R&D relating to the environment, **** Building business resilience. Examples include: ringfencing funds for emergencies, developing resilience plans or a risk register.

Figure 33: Investee company use of CLA (Investor)

Econometric modelling was undertaken to assess if the Future Fund helped support the level of effective capacity-building investment into the company. The early results from the economic impact modelling show that, over a two-year horizon (2020-2021), investment for firms who participated in the program was approx. £122k[40] greater than those firms who did not participate. At a firm level, the funding was additional and supported the continued growth of early-stage firms. Notably, the coefficient was not significant at the conventional 5% or 10% intervals. Strictly speaking, we can't reject the null hypothesis of zero impact at 10% or below significance. The results do indicate a weak positive but insignificant effect. The results are at an early stage as the data is still not fully available, and the impacts of the intervention are still playing out. Whilst the above indicative results can be seen as encouraging, future analysis in the year 2 and 3 reports will provide more definitive estimates. With this caveat in mind, we have however drawn out some aggregations and impacts based on the estimated coefficients from the model.

The economic model had the following equation:

$$Investment_{it} = \gamma + \beta_1 Future\ Fund_i + \beta_2 t + \beta_3 (Future\ Fund_i \times t) + \varepsilon_i, \quad \varepsilon_i \sim N(0, \sigma^2)$$

$$i = individual\ firm,\ Time\ (t = 0,\ 1)$$

[40] The p-value here was 0.157.

Table 8: Variable descriptions

Variable	Value	Description
$Investment_{it}$	Continuous variable	Broad investment in capital and tangible assets.
$Future\ Fund_i$	Dummy variable	A dummy variable taking the value of 0 if the firm had not drawn down or applied for Future Fund funding, and a value of 1 if the firm had drawn down funds from the Future Fund scheme.
t	Dummy variable	A dummy variable taking the value of 0 for the period 2018/19 and a value of 1 for the period 2020/21.
ε_i	Idiosyncratic error	The idiosyncratic error term describes all the unobserved factors that impact the dependent variable.

This model above was estimated with the equation following a generic difference-in-difference structure. The coefficient of interest is β_3 which estimates the average treatment effect. If we nonetheless aggregate the impacts above across all the firms participating in the Future Fund (1,190 firms) we find the following aggregate economic impacts.

Table 9: Apportionment of impact

	Total
Model Impact	£145m

These impacts are indicative and provisional at this stage for reasons that go beyond the marginal significance limitations discussed thus far. The modelling was done on the basis of reported investment amounts. So, while the impacts reflect potential additionality across the universe of firms included in the model, they only provide a suggestion regarding the microeconomic additionality of these impacts.

There is less certainty regarding the wider additionality of the investment. On the basis of some macroeconomic modelling done and the survey feedback discussed earlier, there is evidence that the additionality of these impacts goes beyond the microeconomic universe modelled here, though the evidence is less robust than the case of microeconomic additionality. Therefore, the impact aggregations above could be seen as possible or as a ceiling for the overall economic contributions associated with this programme, given the role of investment in the GDP expenditure equation.[41] [42]

As part of this report, we have reflected at length on the limitations of the investment measure used with the modelling above as a short-term performance proxy. While investment can more conventionally be understood as activity that creates capital for long term value realisation – the nature of our survey question has deviated from this classical definition in some important ways. Within the question posed in the survey we specifically asked about expenditure activities that increase the firms' capacity to deliver over the medium to long term – and hence the question is interpretable as including broad expenditure that may not strictly be limited to long-term capital. This could include investment in short-term working capital, wages, and other categories that may help to build longer term viability by ensuring short term survival. However, we do recognise that while the measure is broad, it may have been interpreted in different ways by some firms, as evidenced by the 25 zero investment responses.[43] This would therefore suggest that the short-term performance measure may be underestimating the impact of the funding in some cases – meaning that the impact of the Future Fund computed above may have a downward bias for firms that are rapidly burning through capital as part of their relatively early stages of growth.

5.6 Business closure

The Future Fund had an objective of reducing the risk of business closure for viable growth potential businesses.

The extent to which the survey evidence found Future Fund supported business increased survival was nuanced. Just under half of respondents stated that without the Future Fund support, their business would have been at least fairly likely to close (48%). On the other hand, 46% of CLA funded business stated the opposite, in that the Future Fund support was at least fairly unlikely a contributing factor for their survival (Figure 34). At the extreme end of the spectrum, only 5% of firms would have definitely closed without the Fund, although over 7% mentioned they definitely wouldn't have closed.

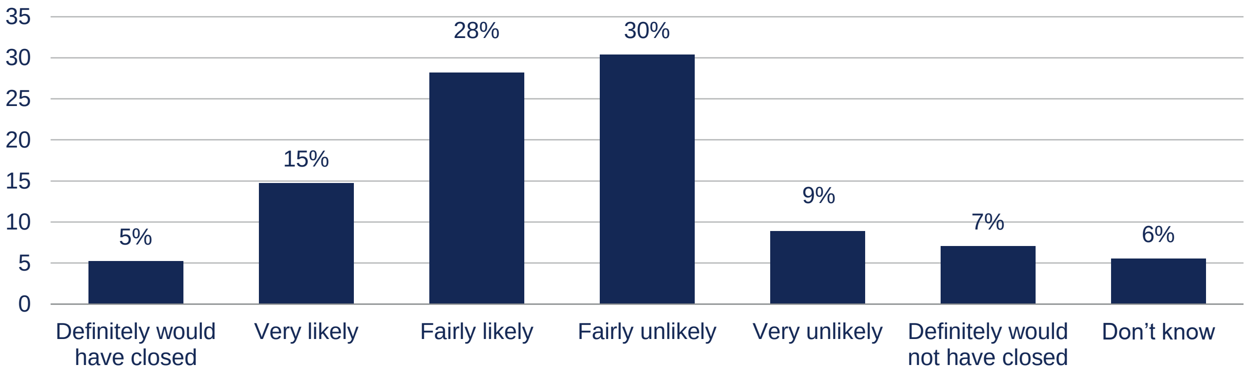
Figure 34: Likelihood of business closure without the Future Fund, CLA funded businesses (per cent)

[41] GDP = Consumption + Investment + Government Spending + Net Exports

[42] This should however also be considered alongside the fact that the model was constructed based on non-zero investment observations, which accounted for 5.5% of the survey sample. This may be a limiting factor when attempting to generalise the impact across all firms.

[43] These are firms that had specifically stated their broad investment to be 0 in 2018, 2019, 2020 and 2021.

Q28: If you had not been able to access funding from the Future Fund, how likely is it that your business would have permanently closed?



The case studies below highlight the Future Fund's impact on firm survival, but in some cases, the support was insufficient to ensure the companies' long term survival due to other factors. Business closure rates will be assessed in greater detail in the Year 2 report.

… The Chairman said that the company could not have lasted very long without the Future Fund support as it enabled them to go to shareholders with a proposition. The request for funding would have been more difficult to persuade investors and their bank. …

- Case study E

… The Future Fund was a relatively small proportion of fund raising; however, it helped the company to continue trading for a longer period. This was to pay for staff, development of the customer engagement platform and market the product to clients. … New prospective clients were in the pipeline however, there was a lack of funding and with no basis to go to investors to generate further new money, unfortunately, the firm had to begin the insolvency process.

- Case study F

5.7 Business growth

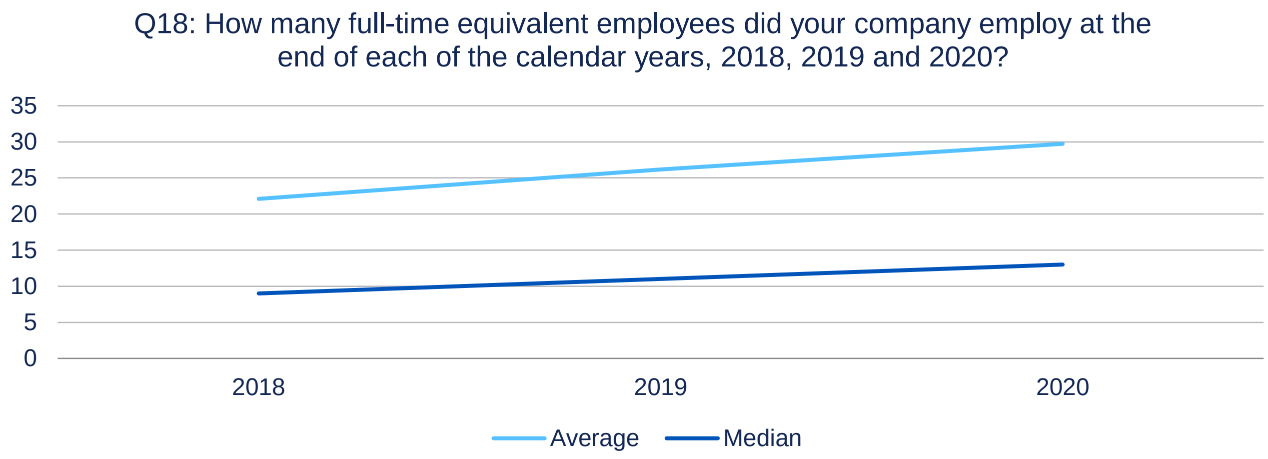
Business growth through increases in employment and/ or turnover contribute to wider economic benefits.

The sample of CLA funded businesses experienced average employment growth of 18% per year in 2019, providing support that these businesses were growth orientated, albeit under the OECD definition of at least 20% annual growth. Future Fund recipient businesses increased their employment by 14% in 2020 compared to the previous year (Figure 35), suggesting they were still growing rapidly, even during the pandemic.

At this stage this impact has not been distilled to control for other schemes such as the CJRS, which was specifically designed to support employment, and could have been used alongside support from other schemes that some firms would have participated in. Nonetheless, average employment growth remained high even though 2020 was an economically challenging year, with only a slight decline in growth.

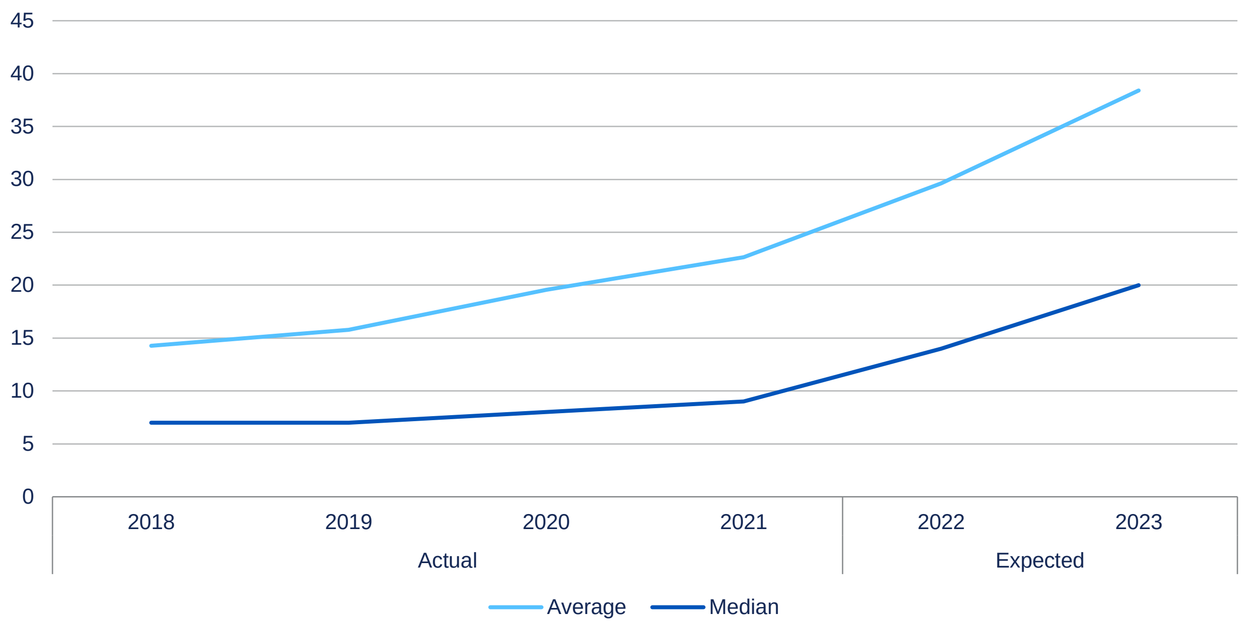
Figure 35: Average employee headcounts in 2018, 2019 and 2020, CLA funded businesses

(Number of Employees)



Some business impacts associated with the pandemic seem to have been less of a factor for non-applicants than for recipients – at least when simply examining the survey data. Employee headcount (Figure 36) rose year-on-year and is expected to accelerate in the medium-term – though we have already noted this is likely to be distorted by the furlough scheme. This may suggest that non-applicant firms had better prospects than recipients, which may have been an underlying reason why they did not apply for funding. It could also suggest some limitations in terms of the filtering undertaken to obtain the non-applicant sample.

Figure 36: Average employee headcounts, non-applicant (Number of employees)

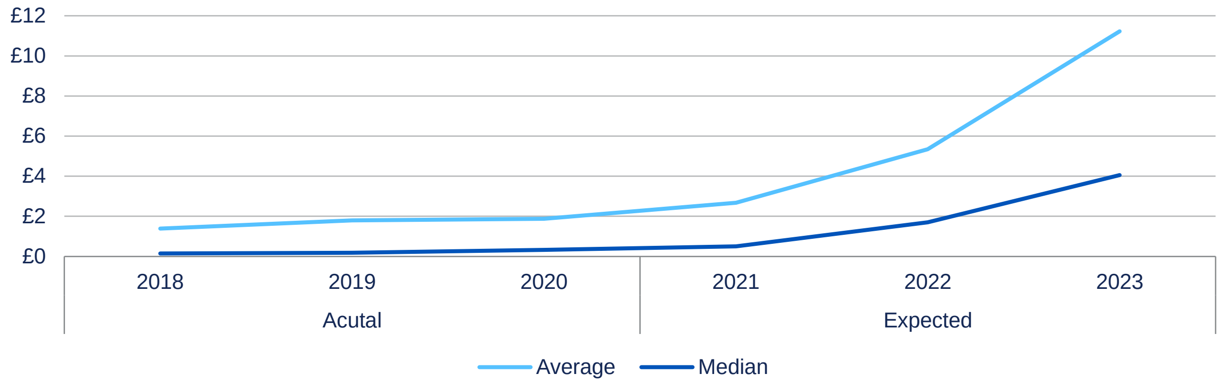


On average, the surveys also suggest that CLA applicants were unable to maintain employees as effectively as CLA funded businesses during the pandemic (see Table 15, in Annex I for more details).[44]

Figure 37 shows CLA funded businesses experienced robust revenue growth in 2020 and, on average, expected growth in 2021 despite the pandemic. On average, CLA funded businesses expect their revenues to continue to grow over 2022 and 2023. Average expected growth is 84% compared to the average historic growth of 17%. Growth slowed in 2020 to 5% from 29% in the previous year. These figures in themselves also point to the high growth prospects of these companies, suggesting they could make a significant impact on future UK growth.

[44] Analysis has also been run for average employee counts, turnover and investment for the CLA applicant businesses in Annex I. As noted previously, the small sample size of 36 applicants makes the insights vulnerable from the impact of outlier companies so the results should be treated as purely indicative and may not truly reflect the underlying population.

Figure 37: Actual revenue & firm expectations in millions, CLA funded businesses (£)[45]

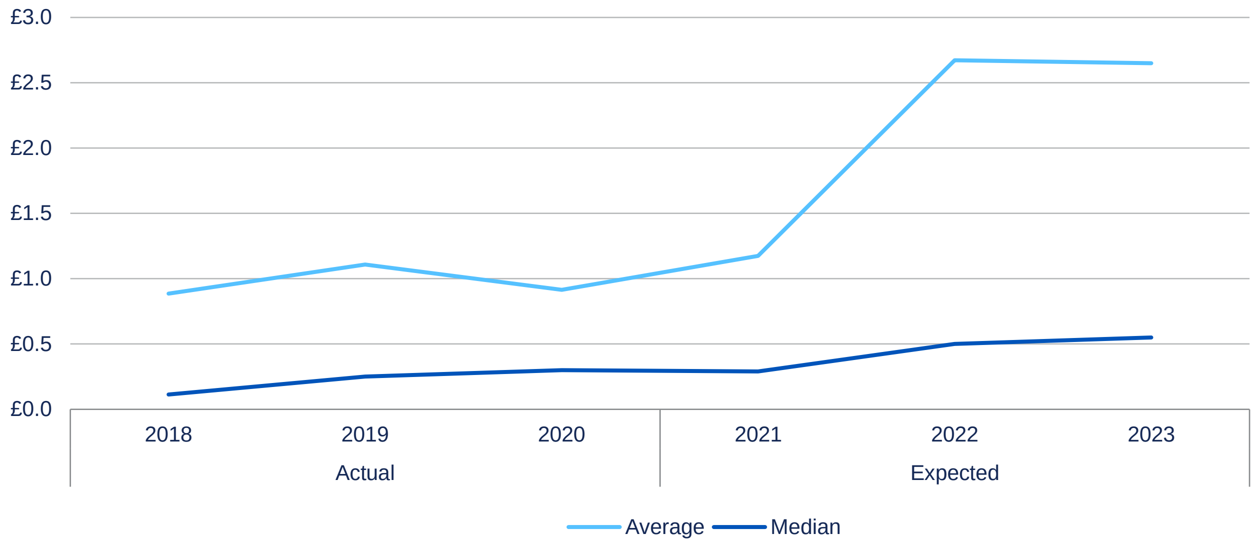


Return on Investment (ROI) is another key performance indicator that measures the efficiency of an investment. ROI is important because it tells us something about the expected returns on investment that could be funded by the Future Fund. The average ROI was 35%, so for every £1 of investment cost the firms experienced £0.35 in net benefit – which is again consistent with the high growth theme noted above.

Figure 38 below shows a slight dip in effective investment in 2020 in terms of the average, but with more stability in the median. The extent to which the Future Fund specifically supported investment is difficult to assess from the survey results, but there is an encouraging upswing in longer term capital investment growth expectations. Some stakeholders have also stated the Fund supported capital investment.

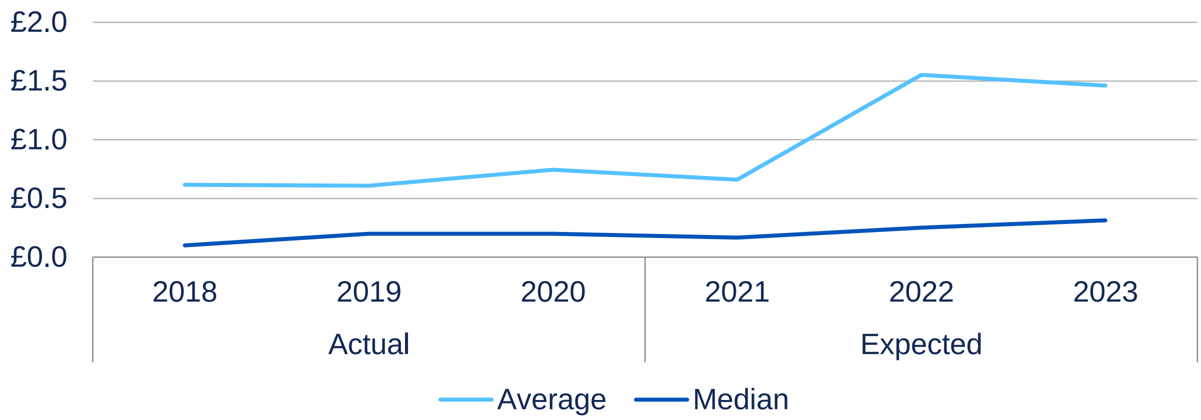
[45] The survey was rolled out in late 2021, so performance over 2021 can be considered as nearly complete.

Figure 38: Investment forecast for capital and intangible assets in millions, CLA funded businesses (£)



Comparing the investment trends for CLA funded businesses against non- applicant businesses shows non-applicants seem to have had a more tempered response. In the median, investment stayed flat in 2020 with a slight increase in the average. 2021 is expected to show a fall, however, in the near to medium term investment should accelerate. This suggests that non-applicants are taking precautionary steps against uncertainty in cash-flow. Similarly, this was noted in Annex I where respondents sought external financing as precautionary measures rather than for the purposes of investment in future growth.

Figure 39: Actual and expected broad investment in million, non-applicant (£)



Stakeholder perspectives on Future Fund impact

Stakeholders seem to agree that the high growth early-stage businesses that couldn't access other sources of funding like CBILS, or approach banks for funds based on their intellectual Property (IP), were provided with sufficient capital to survive and grow by the Future Fund. Stakeholders point to successful businesses spanning across sectors like Deep Tech, Life Sciences, Innovation, Health Care etc, that have used the Fund not only for survival but to grow their businesses in areas such as R&D.

While the future growth and performance of the businesses that accessed the Future Fund was uncertain, stakeholders remained optimistic given the number of conversions to date and survival rate of the businesses to date.

Whilst not a specific objective of the Future Fund, scepticism prevails regarding the Future Fund's ability to address pre-existing regional, ethnic, and gender disparities in the finance markets. Some stakeholders point to the increased amounts of funding availed to Ethnic Minority and women-led businesses through the Future Fund, mainly because of how automated the process was. Several other stakeholders have cited the difficulty faced by Ethnic Minority and women-led businesses in raising enough funds to be eligible to access the Fund.

Stakeholders expressed wide ranging views on the availability of alternate sources of funding for businesses. The debate stems from the fact that on the one hand, there were very few investors in the market when the Future Fund was introduced – which would support an assumption about financial additionality. On the other hand, many businesses and investors viewed the Fund as an emergency measure and not a long-term solution to structural inefficiencies in the equity finance market. This is important – as it poses interesting questions as to whether the cyclical funding gap comes in addition to a structural one.

6. Lessons Learnt

The Future Fund was a government-backed equity finance scheme that was launched within an uncertain and volatile economic environment. The lessons learnt need to be considered with this in mind, in that there was a focus on otherwise viable companies with good growth prospects that were having difficulty obtaining finance as a direct result of the pandemic. The programme was not designed to address structural or general market problems. The environment was broadly marked by three important and contrasting themes:

- A fast-moving economic situation that was challenging for policymaking to respond to, making it necessary for policy to be as dynamic as possible.

- As outlined in the broad programme objectives, specific types of companies needed help – meaning the policy had to be structured in a way that would help those companies, and thus achieve a form of targeting.

- The policy also required a degree of flexibility. The scale of the economic damage being incurred was not immediately clear in the short term and it would have been difficult to draw very prescriptive and forward-looking red lines over who should have been helped.

These three requirements above were challenging to meet simultaneously. A flexible approach, for instance, is one that will make certain compromises in terms of scope. A scheme that is rolled out quickly creates certain risks in terms of the funds going to companies that genuinely needed the funding and that are part of the intended group. A more prescriptive approach would potentially ensure more meticulous screening of companies that applied for funding, facilitated by stricter eligibility criteria. However, this also creates a situation whereby the process might be slower and may risk mis-specifying the parameters of the firms that needed significant help. A very prescriptive policy may also end up being overtaken by economic events in a volatile environment.

The ideal solution would be to do all the above, which would require a world with near perfect information and almost completely instantaneous implementation speed and quality. However, real economic environments make trade-offs unavoidable. The question is therefore how to make these trade-offs as efficient and rational as possible.

The lessons learnt could thus be summarised as follows:

- Economic crises can have general and specific effects. General fiscal and monetary policies are responsive to general concerns as these often have the biggest economic aggregate impacts. Having said this, acute attention needs to also be paid to firms and businesses that face specific constraints.

- These specific firms that need help also need to be targeted in some way – however the targeting needs to be done in a manner that minimises delays and one that also ensures flexibility. In the case of the Future Fund, this was achieved using a self-selection process – whereby the eligibility criteria were kept broad and firms that needed funding would have applied for it.

- This approach was also coupled with processes that were transferred to investors – adding an onus on securing private sector investment to qualify for funding. This helped to ensure the funding stayed relatively focused while providing speed of action and flexibility. Of course – no solution is perfect, and there were instances where the funding went to firms that were different to the preferred group.

As of late 2021, as far as we could find, the development banks in France, Denmark and the Netherlands had not conducted evaluations of their schemes. Therefore, it is difficult to fully compare the economic impact of the schemes. However, there are some lessons that can be learned from the experience of the development banks in rolling out their respective Covid-19 response schemes.

The Future Fund's broad eligibility criteria and government-backing helped deliver a relatively large-scale finance programme when compared to international peers. It is however also interesting to note that, in some cases, comparable funding programmes seem to have enhanced or consolidated schemes that existed before to plug structural funding gaps in these markets.

Additionally, the geographic distribution of the funded firms ended up being overwhelmingly focused on London and the South East. These geographies accounted for 67% of the funded firms. While it may be intuitive to criticise the fund for having such an uneven geographic distribution of activities, the reality of the situation is that the funding reflected existing economic disparities and geographic concentrations across the UK. The prevalence of tech and innovation focused industries in London and the South East is a present reality, together with the existing ecosystem that supports firm growth in these geographies. This degree of path dependency is very difficult to overcome as part of the scheme's immediate goal to help existing firms through on open application process. This degree of path dependency does however raise important questions about the scope of public policy and the stage of intervention. For instance, a more aggressive focus on firms outside London and the South East might have entailed encouraging new business or earlier stage firms in those areas rather than just focusing on growth or survival of businesses that already had a history of funding. Moreover, having more geographical requirements around eligibility criteria, as part of a structural funding scheme, might also encourage the growth of businesses in these areas. Such considerations may however be more appropriate as part of a permanent scheme as opposed to an emergency response scheme such as the Future Fund.

As part of the policy reflections around this work, the question did also arise as to whether the “modus operandi” of the fund could have involved earlier stage companies, particularly those without a funding history. Recent work shows that the category of finance most adversely affected by the pandemic was seed finance deals for UK start-ups which decreased by almost 40% in the first quarter of 2020 compared to that of 2019 whereas late-stage deals have shown much greater resilience.[46] The number of Future Fund deals in the £125k to £500k bracket suggest the scheme focused on smaller deals. Extending eligibility to those without prior equity investment would have changed the Fund’s risk profile, focus and eligibility criteria. However, this may still have matched the imperative to offset or mitigate the Covid-19 related funding difficulties experienced.

[46] Brown, R., Rocha, A., & Cowling, M. (2020). Financing entrepreneurship in times of crisis: exploring the impact of COVID-19 on the market for entrepreneurial finance in the United Kingdom. International Small Business Journal, 38(5), 380-390.

7. Evaluation next steps

This early assessment is part of a multi-year evaluation of the Future Fund. Future stages of the evaluation will focus on measuring the programme's impact in more detail.

Year 2 assessment (finalised in 2023)

At this stage the report will provide further emerging indications of economic performance prior to the interim economic evaluation. This will draw upon secondary data analysis of existing MI data and third-party external market data - in conjunction with earlier primary research - to provide additional insights into how the portfolio is performing in terms of outcomes achieved to date.

Interim evaluation (finalised in 2024)

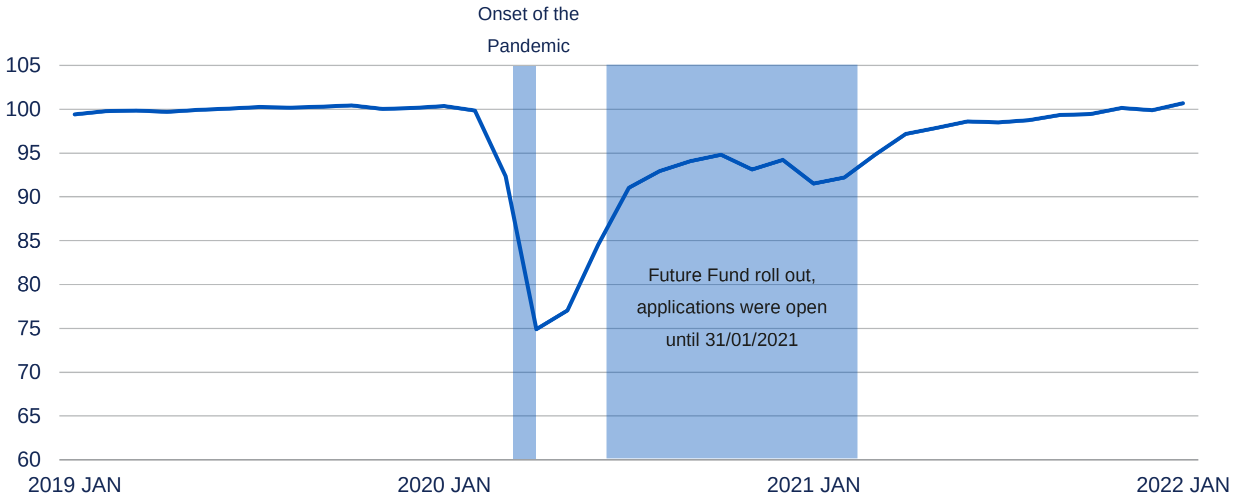
The Interim Evaluation will repeat the research methodology and modelling with the additional economic/ VFM analysis described above, in addition to including much richer IDBR (Interdepartmental Business Register) data and internal monitoring information. This will provide a comprehensive assessment of programme performance at a time when most of the CLAs will have converted, repaid, or written off. The key objective of this evaluation will be to assess the extent to which the programme has achieved its objectives, including: an assessment of the extent to which the funding has been used appropriately by companies and their investors, the benefits of the Future Fund for the UK economy, and whether the programme has achieved its key objective of preventing viable businesses from closing.

Annexes

Annex A: Macroeconomic environment at time of Future Fund launch

Smaller businesses faced unprecedented challenges because of the Covid-19 outbreak in the UK and associated government restrictions. Monthly GDP declined by 23% between December 2019 and May 2020 as a mixture of uncertainty and lockdown restrictions halted activity across many business sectors in the UK and across the globe. Signs of recovery emerged after May as restrictions began to ease over the summer period, as shown in the graph below. Aggregate funding peaked two months after GDP growth declined to its lowest point, before both indicators started to show some signs of normality.

Figure 40: Monthly UK GDP Index (2019=100)



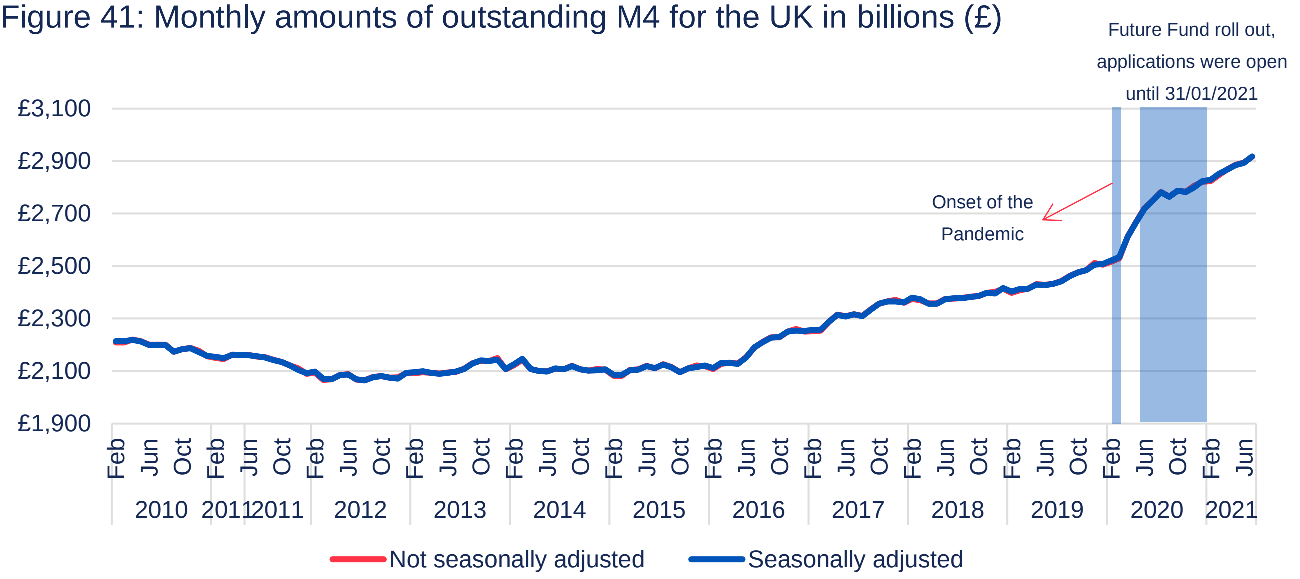
Source: ONS, Monthly GDP

Construction saw the greatest decline during that period of 38% in value added between December 2019 and May 2020, followed by services with a fall of more than 22% in GVA. This was not a surprise, given the introduction of restrictions on construction activity in the early part of the pandemic, compared to other business activities that could be moved to a remote setting.

The UK current account balance had tipped into surplus at the end of 2019 for the first time in over 20 years. During the first two quarters of 2020 however, at the height of the first national lockdown, the current account fell into deficit. Restrictions on travel and the closure of business and borders sharply decreased the demand for travel. Business investment and gross fixed capital formation (GFCF) plummeted at the same time, but record growth rates were noted following the easing of lockdown restrictions. Retail sales experienced a sharp decrease between Q1 to Q2 2020. They did pick back up between Q2 to Q3 2020, as restrictions eased over the summer months with some indicators back at pre-pandemic levels.

Although monthly amounts of outstanding M4 were increasing at a steady rate before 2020, the rate increased significantly from March 2020 and this steepening carried on into 2021 (even after aggregate funding peaked in mid-2020).[47] This reflects the extraordinary level of economic monetary accommodation provided at the onset of the disruption to the economy from the pandemic, with policymakers keen to ensure the economy had enough liquidity and overall funding support to minimise the damage from the supply-side shocks being experienced.

Figure 41: Monthly amounts of outstanding M4 for the UK in billions (£)



Source: Bank of England

Equity funding had increased from around £356m per quarter to almost £1,961m per quarter between 2011 and 2019 – based on Beauhurst data in Figure 1. However, as the uncertainty surrounding the pandemic emerged in early 2020, Beauhurst data available at the time showed that monthly announced equity funding fell by 34% between January and March 2020, with a 28% decrease in deal numbers. In Q1 2020 there were 344 announced equity deals, which marked a 32% decrease from Q4 2019 (507).[48] Following that, the subsequent bounce back was quite rapid - a possible result of government loan and other support schemes that were introduced between March and May 2020. In the Small Business Finance Markets 2020/21[49] report, the Bank using Beauhurst data estimated the Future Fund accounted for 11% of all announced equity deals in 2020 but was as high as 15% in Q3 2020.

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[47] M4 is a measure of "broad money", it is cash outside banks i.e., in circulation with the public and non-bank firms, plus private-sector retail bank and building society deposits plus private-sector wholesale bank and building society deposits and certificates of deposit

[48] https://www.beauhurst.com/blog/effect-of-coronavirus-uk-investment-q1-2020/. Subsequent, more complete, data shows that the scale of the decline was much smaller.

[49] SBFM Report 2021 (british-business-bank.co.uk), Page 27

Between 2011 and 2019 Bank of England data shows bank lending to SMEs was relatively steady. However, bank lending rose very sharply in the first half of 2020, with an increase of 329%[50] between April and May of that year. This happened alongside the introduction of government Covid-19 loan guarantee schemes to support smaller businesses.

The UK business population is, however, not homogenous. As such, the impacts of the pandemic have been differential, and the various types of interventions or support mechanisms needed have reflected that. High growth businesses, which are of policy interest to the Future Fund, are often technology based, innovative enterprises. They are credited with making a disproportionate contribution to job creation, economic growth and to the vitality of the communities they deliver within. According to Professor Colin Mason from the University of Glasgow, these businesses typically go through a 'valley of death'[51] in which their costs exceed their revenues as they develop their product, achieve market traction and scale-up.

For many high growth early-stage businesses and technology companies pursing significant growth, access to capital on an ongoing basis is critical. It provides a financial 'runway' with the opportunity to reach profitability. Companies often need to raise funding every 18-24 months to avoid running out of cash.

The UK, like most comparable countries, initiated a range of fiscal interventions in response to the pandemic. The focus, from April 2020, was on measures to protect jobs, livelihoods, and the fabric of communities. This included the government's Coronavirus Job Retention Scheme (CJRS), CBILS, and BBLS, and the Bank of England's Covid-19 Corporate Financing Facility (CCFF) among others. However, as Professor Mason argues, it is important that economies do not experience a drought of start-ups and scale-ups on account of the lack of seed stage funding.[52] A failure to proactively act could have detrimental economic and employment impacts in the longer-term. This longer-term aspect also complicates this evaluation as it will take several years to get reliable signals on the impact of the Future Fund – and even those impacts may not convey the full extent of the policy's impact.

As the Covid-19 shock hit there was concern within government about ensuring a continuous pipeline of funding for these high growth fledging businesses. This was primarily due to investor caution and risk aversion in pausing or stopping planned investment due to the high economic uncertainty. In this context, investors become more focused on protecting existing investment portfolios rather than providing the type of liquidity required by such emerging, early-stage companies. An illustration from a 'Start Up Genome' report suggests that in the economic downturn of 2000-2001, global venture capital (VC) fell by 22% over 12 months, taking three years to recover to pre-contraction levels. In the 2007-2009 economic crisis it fell by 29% over 12 months, taking one year to recover to its pre-contraction level. It would therefore have been a plausible assumption to expect at least a similar magnitude impact could have come through in response to the economic shock generated by the pandemic, if not something more extreme.

[50] Monthly changes of monetary financial institutions' sterling and all foreign currency gross lending to small and medium sized enterprises (in sterling millions) seasonally adjusted
[51] Mason, C. (2020) The Coronavirus Economic Crisis: Its Impact on Venture Capital and High Growth Enterprises
[52] (ibid)

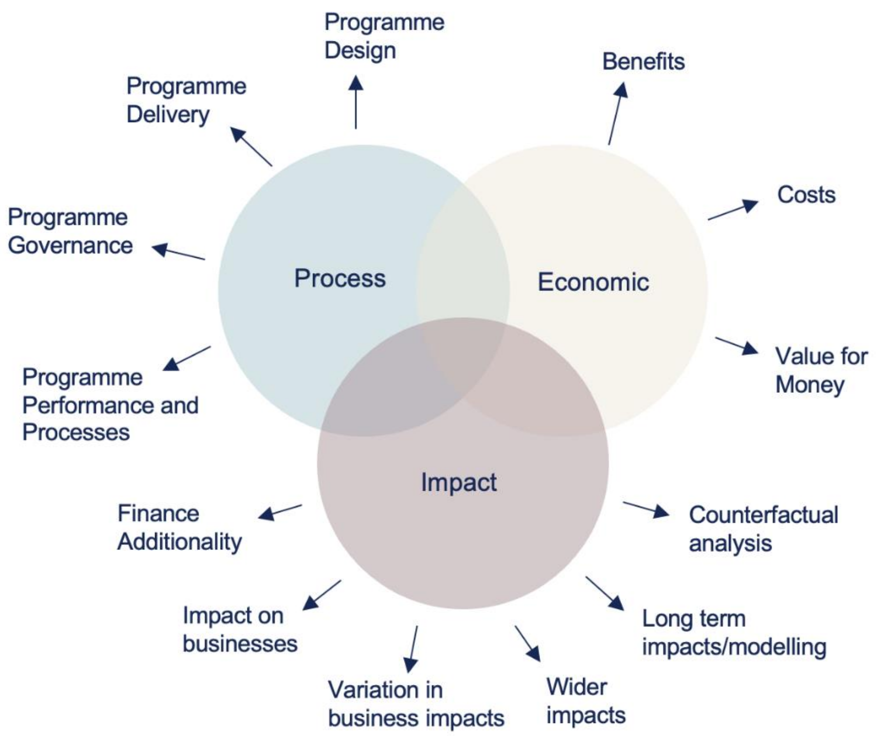
Equity funded businesses require investment at regular intervals and disruption in the availability of finance due to external factors could mean businesses run out of cash and not survive, putting both current and future employment and economic benefits at risk by damaging the pipeline of innovative companies.

Annex B: Evaluation questions

The study

The aims of the full evaluation are to conduct a process, impact, and economic evaluation to determine whether the programme has been successful in meeting its objectives and is likely to offer HMG value for money (VFM). The purpose of this early-stage evaluation is to understand if the objectives of the Future Fund were achieved with key research questions split into process, impact, and economic evaluation strands:

Figure 42: Key study areas and assessment outcomes for the full evaluation.



The full evaluation will address 22 research questions which are split between Process evaluation and Impact evaluation as well as more detailed sub questions which are organised under each of these headline questions (see below).

Programme design

How effective was the programme design in increasing the availability of finance for equity backed companies in the target group affected by Covid-19?

- Did programme design successfully mobilise private sector capital alongside HMG's investment?

- Was the programme design successful in generating sufficient demand from investors?

To what extent has Future Fund capital been used for the intended purpose?

- Has programme funding been used appropriately by companies and their investors in relation to; fraud, excessive risk taking, gaming of returns, etc.?

Programme delivery

How was the programme delivered?

- Was the programme established in sufficient time to respond to the immediate financing need?

- Were appropriate procurement procedures followed when appointing an agent to deliver the programme?

- Was the infrastructure in place to process the necessary volume of applications to desired timescales?

- Do businesses and investors have a positive experience of the application process and are applications processed in a timely manner.

Programme governance

How effective are the Future Fund processes and governance arrangements?

Programme performance

How is the programme performing in terms of its likely financial performance?

- What does the quality of the portfolio look like and how does it compare to the wider market of equity backed companies?

- Are CLA write-offs, repayments and conversions in line with expectations?

Additionality of finance

To what extent was the finance provided by the Future Fund additional?

- To what extent would recipient businesses have been able to raise finance in the absence of the programme?

- To what extent did the Fund displace funding by private sector managers in the market?

- To what extent did finance go to unviable companies, whom would have been unable to raise finance prior to Covid-19?

- To what extent did it not reach viable companies?

Impact of investment on businesses

How was the finance used by beneficiaries?

To what extent did the investment, unlocked by the Future Fund, impact on business survival in the short and long run?

To what extent did the investment, unlocked by the Fund, impact on employment and turnover levels in the short and long run?

What were the impacts of the programme on longer term business survival, growth and performance?

Long term impacts

What impact has the Future Fund had on recipient businesses in the longer run?

- Has the programme reduced the risk of recipients' long-term prospects being damaged?
- What long term growth outcomes have been achieved in terms of employment, turnover, and valuation?

To what extent were these outcomes additional?

- How did recipient businesses perform in the long run when compared to a suitable counterfactual group?

To what extent has the long-term pipeline of equity-backed companies been protected?

Costs

What were the administration costs of the programme?

What were the write-offs from the programme?

To what extent do write-offs align with expectations?

Benefits

What is the value of the economic activity saved by the programme?

What are the financial returns from repaid CLAs and successful exits?

What are the wider economic benefits in terms of supporting the wider equity eco-system?

Value for money

Did the programme represent good value for money?

- Is the overall GVA saved and generated by Future Fund recipients greater than the economic cost of delivering the programme?

What was the overall exchequer impact of the Fund?

- Are Exchequer costs & returns within the range of British Business Bank & HMG expectations?
- Are there any lessons that could be applied to future programme appraisals?

Annex C: Future Fund applicant journey

Application process

Based on our discussions with the Bank, and review of scheme documentation, the four main stages of the applicant journey from application through to a payment, subject to passing checks in all preceding stages, are outlined below.

However, preceding this there is likely to be a **stage zero where a lead investor, or group of investors, enters into dialogue with a prospective company**. This is not part of the formal Bank process but is an assumed crucial stage in terms of building relationships, assessing appetite and relevance to the Future Fund and its eligibility criteria. The existence of a stage zero is an important assumption for this evaluation.

Stage 1 – investor application: the formal process begins with the lead investor submitting a funding application through the portal designed and administered by the delivery partner PricewaterhouseCoopers LLP (PwC). This reflects the design principle of an investor-led approach and assumes that the investor has undertaken some form of due diligence on the nominated company prior to submission. However, all information and submitted data is self-certified by the investor.

Stage 2 – company checks application: the nominated company receives a portal notification that an application has been submitted that they are a party to. The lead contact is then required to review the information entered and approve that this is accurate. It is the responsibility of the delivery partner to engage in any required dialogue to address any concerns, inaccuracies, or supplementary information.

Stage 3 – due diligence and eligibility checks: the delivery partner takes the lead in carrying out a range of checks on both the investor(s) and applicant companies. As a minimum this includes identifying any State Aid conflicts and undertaking Anti Money Laundering (AML) and Know Your Customer (KYC) checks as a means of seeking to validate the self-certified data points from stages 1 and 2.

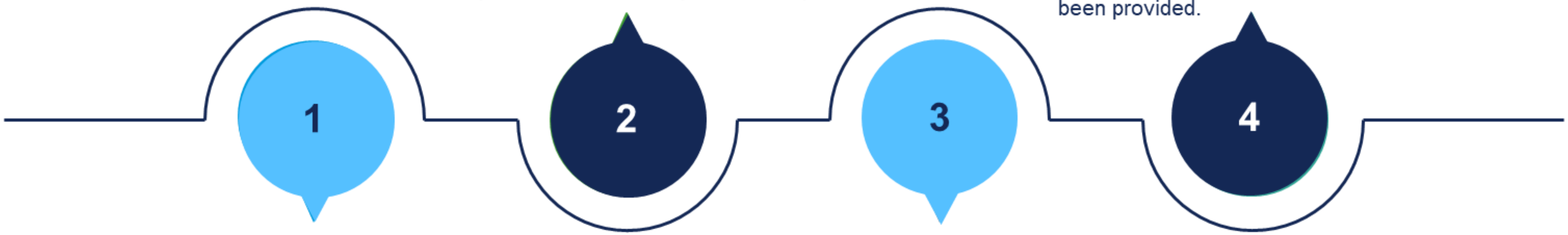
- This also includes Politically Exposed Persons (PEP) checks and seeking to identify any material stakeholders/shareholders with criminal convictions or instances of fraud. As this process evolves, the delivery partner will capture the outcomes of all reviews and checks on a large database and where any red flags and/or marginal decisions are identified, these are escalated to a Bank-led case clinic. These case clinics, convened daily, provide a forum for senior Bank personnel to review the details provided and to reach a decision as to whether the application had met the eligibility criteria or request additional information.

Stage 4 – issuing the CLA and releasing funds: on the basis that all key parties are satisfied that stated checks have been completed and eligibility criteria has been met, including having raised £250k in equity from third-party investors in the last five years, the CLA is developed.

- The applicant journey inevitably varies in time depending on size of application, level of complexity and checks, but stages 1 to 4 can be completed in straightforward cases within three weeks.

A high-level overview of the Future Fund applicant journey is shown in Figure 43.

Figure 43: High level overview of the Future Fund applicant journey



Investor Application

- Process begins with the <u>Lead Investor</u> submitting a funding application on the (PwC administered) portal.
- This is in follow-up to scoping consultations between investor and the business applicant that would <u>precede</u> an application submission.
- A <u>self-certified</u> application: i.e. including business/investor Companies House data and that they meet the FF eligibility criteria

Business Application

- The business – listed as a party to the Investor application at stage 1 – receives a notification via the portal.
- Lead contact is responsible for reviewing and approving the self certified information provided by the Investor.
- Data is initially reviewed/clarified by the Delivery Partner.

Due Diligence & Eligibility Checks

- DD processes are initiated on Investors and businesses. Has two main strands:
  - ✓ **State Aid**. To check for conflicts with Investors.
  - ✓ **AML/KYC**. Includes background PEP checks, fraud, criminal convictions, among others.
- Eligibility checks. Against published FF criteria.
- Case clinics. Convened on a daily basis to review escalated / cases for a final decision by senior Bank personnel.

Issuing the CLA & releasing funds

- The Bank are satisfied that all necessary checks and documentary source evidence has been received, to allow the CLA to be developed.
- This is primarily led by legal advisers, with the FF funds not released until the Investor match has been provided.

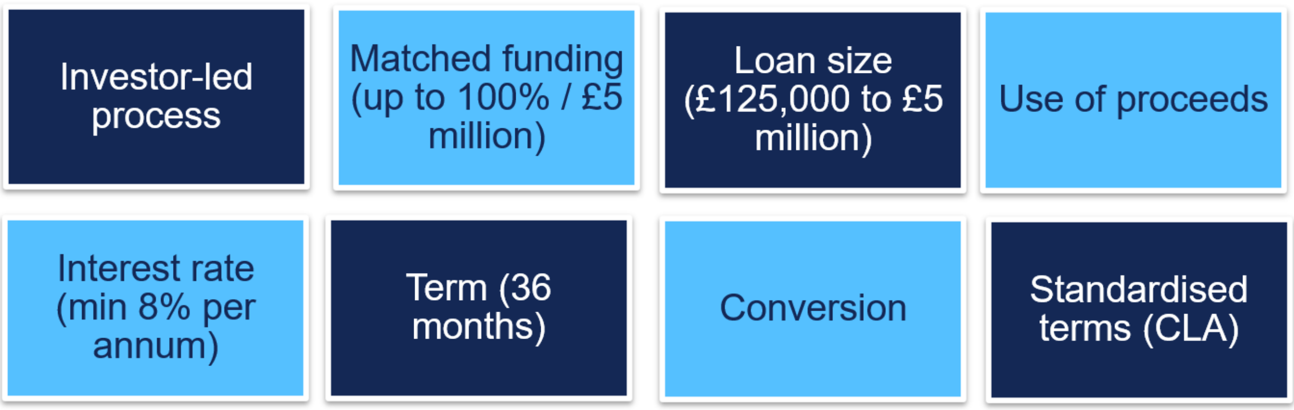
Annex D: Future Fund eligibility criteria

Investor	Company
An "investment professional" within the meaning given to that term in article 19 of the (Financial Promotion) Order (FPO)	The company must have raised at least £250k in equity from third-party investors in previous funding rounds in the last five years (from 1 April 2015 to 19 April 2020, inclusive)
A high-net-worth company, unincorporated associated or high-value trust falling within article 49(2) of the FPO	If the company is a member of a corporate group, it must be the ultimate parent company
A "certified sophisticated investor" or a "self-certified sophisticated investor" within the meaning given in articles 50 and 50A respectively of the FPO	The company does not have any of its shares or other securities listed on a regulated market, a multilateral trading facility, a recognised investment exchange and/or any other similar market, stock exchange or listing venue
A "certified high net worth individual" within the meaning of article 48 of the FPO	The company must be a UK-incorporated limited company or be eligible to apply as a non-UK parent company (see specific eligibility criteria in the FAQs for non-UK parent companies)
An equivalent professional, high net worth, institutional or sophisticated investor in accordance with applicable law and regulation in such investor's home jurisdiction	The company must have been incorporated on or before 31 December 2019 (or if you are a non-UK jurisdiction company, this criterion applies only to at least one UK subsidiary operating company)
An association of high net worth or sophisticated investors within the meaning of article 51 of the FPO	At least one of the following must be true for the company (this criterion applies to your group): (i) half or more employees are UK-based; (ii) half or more revenues are from UK sales
Capable of being classified as a "professional client" within the meaning given in the glossary to the FCA Rules	

Annex E: Overview of the scheme

The Future Fund was launched in May 2020 to support the UK's innovative businesses affected by Covid-19. These businesses had been unable to access other government support schemes due to either being pre-revenue or pre-profit - and typically rely on equity investment. The Fund was designed to be rolled out quickly, in order to immediately meet the needs of companies trying to raise finance during the pandemic.

Figure 44: Key features of the Future Fund



Investor led process – the investor is responsible for making the application to the British Business Bank.

Match funding – the Bank's investment must be matched by co-investment from private sector investors.

Use of proceeds – funding must not be used to (a) repay any borrowings; (b) pay any dividends; (c) pay any bonuses; (d) pay any advisory fees.

Interest rate – the loans have a minimum of 8% interest rate per annum or more and will accrue until the loan converts.

Term – the loan will mature after 36 months. The company cannot repay the loan early other than with the agreement of all the investors.

Conversion – the loans will convert into shares in the company in certain circumstances, including an exit or a new funding round.

Standardised terms - investors and the Bank both invest using a CLA instrument, which is predefined and cannot be negotiated.

Rules based application process – a loan is available provided investor meets the eligibility criteria and passes Anti-Money Laundering (AML) and Know Your Customer (KYC) checks.

Monitoring and reporting – daily monitoring and weekly reporting of progress on the scheme.

Roles:

HMT – responsible for setting the terms of the CLA instrument together with the scheme rules.

BEIS – responsible for assessing how the scheme could be implemented in a way that was consistent with the policy intent as well as consulting with industry representative groups on scheme mechanics. BEIS holds financial responsibility for the Future Fund as it sits on BEIS balance sheet.[53]

British Business Bank – responsible for all the operational aspects and day-to-day decision making on the approval/rejection of applications, particularly those escalated for further consideration.

PwC – appointed as Future Fund delivery partner responsible for delivering the portal by which applications are made, due diligence checks, and ongoing dialogue with investors and companies on application information, supporting documentation and clarifications.

[53] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1036058/1210-APS-CCS0621807886-001_BEIS_ARA_20_21_Web.pdf

Annex F: Future Fund stated programme objectives

<table>
<tr><th></th><th>Objective</th></tr>
<tr><td rowspan="2">Short term (programme delivery to end of January 2021)</td><td>1. Increase the supply of finance to potentially viable UK equity backed companies whom would otherwise have had problems raising finance, or been underfunded, due to adverse market conditions.
• Programme set up and open for applications by end of May 2020.
• Future Fund to make available at least £250m of funding for eligible companies by the end of September 2020.</td></tr>
<tr><td>2. Recipients have a positive experience (e.g., speed, clarity and ease of the application process).
• Over 75% of SME recipients report they are satisfied with using the programme (based on basket of measures using existing survey questions at time of early assessment).
• 90% of complete applications are processed within 21 days. ‘Complete’ is defined as where all the company, solicitor and investor information are present (including bank account and solicitor’s confirmation) and the ‘end point’ is when the CLA is issued.</td></tr>
<tr><td rowspan="2">Medium term (during first 2-3 years of programme before CLAs are repaid/ converted)</td><td>3. The fund is reducing the risk of business closures caused by potentially viable businesses running out of cash in the short run.
• The proportion of Future Fund recipient businesses that raise a subsequent equity round from external investors is similar to the wider market, with a lower incidence of company deaths.</td></tr>
<tr><td>4. To reduce the risk of companies’ long-term prospects being damaged due to adverse economic conditions relating to Covid-19 (e.g., cuts to employment/ reductions in R&D and product development)</td></tr>
</table>

	and companies return to their long-term growth path once conditions stabilise. • Qualitative assessment of how programme funding is used by recipient company to offset negative impact of Covid-19 and to enable company to return to its long-term plan. • Quantitative assessment of company long-term growth rates in line with other equity backed companies.
Long term (over the life of the investment)	5. To help ensure the long-term pipeline of equity backed companies is not damaged due to adverse economic conditions relating to Covid-19. • Qualitative assessment of the health of UK early-stage equity eco-system, with input using Beauhurst data on number and % of equity deals at each stage. Pre-Covid (2019), the distribution of equity deal volume is 41%, 40% and 19% between seed, venture and growth stages respectively, although consideration of long-term decline in % of deals going to seed stage is needed.
	6. Within the constraints of a standard set of eligibility criteria, to ensure that the funding provided is used for the purpose intended. • Qualitative assessment that programme funding is being used in an appropriate way by companies and their investors in relation to fraud, excessive risk taking, gaming of returns, etc. given the nature of the scheme where approval is based on a set of standard eligibility criteria. This will be considered on an ongoing basis.
	7. The programme provides a net economic benefit to the wider economy. • The NPV of additional GVA saved and generated by recipient businesses over the life of the programme should be greater than the economic cost of delivering the programme, so that overall economic welfare is increased. • Exchequer costs and returns are within the range of HMG and British Business Bank expectations detailed prior to launch and increased in line with budget.

Annex G: International comparisons

Identification

The benchmarking exercise began by identifying comparable countries to the UK that have a comparable economic context. This focused on advanced economies with relatively high GDP per capita levels.

Economic development banks were then identified for these respective countries and assessed for similar or comparable interventions to the Future Fund. These were interventions that aimed to provide finance for innovative or high growth equity backed businesses affected by the Covid-19 pandemic. After the development bank identification, schemes that were consistent with these three main criteria were chosen for benchmarking:

- whether it was a Covid-19 response scheme
- whether it involved the use of CLAs[54] and
- whether it involved match funding from private investors.

This was complemented through desk research and consultations with stakeholders at the respective economic development banks to identify the relevant schemes. Insight was gained into the workings of these schemes including a description of the product available to businesses, the target group, eligibility criteria, the number of companies supported and the size of investments.

Overview of international schemes

Danish Covid-19 Business Angel Loan and Syndication Loan

The Covid-19 Business Angel Loan and Syndication Loan are two of four Covid-19 response schemes delivered by Vaekstfonden to increase financing for Danish start-ups lacking liquidity due to Covid-19. The Business Angel Loan was structured as a loan for companies that receive equity investment from approved business angels (typically at pre-seed or seed stage), while the Syndication Loan was structured as a loan for approved venture funds and family offices designed to be more attractive for approved investors to invest in start-ups due to more risk capital being available.

[54] It was clear there is some overlap with convertible bonds and loans, and also mezzanine finance instruments, so this was widened to include these other instruments which are similar in design.

French Tech Bridge Scheme

The French Tech Bridge is a scheme funded by the Future Investments Program (PIA) and managed by Bpifrance with the aim of financing "equity bridges" between fundraising events for businesses (i.e., using bridging loans). Bridge financing was intended to be for 6 to 24 months before businesses' next funding round. The scheme is targeted at start-ups that had planned to raise funding in upcoming months, however due to Covid-19 faced a contraction in VC. The French Tech Bridge Scheme had already existed prior to Covid-19, under the name 'The French Tech Seed' but then was repositioned as a scheme responding to the Covid-19 pandemic.

Netherlands Temporary Bridge Loan Programme for innovative Start- and Scale-ups (TOPPS)

The TOPPS programme was designed to secure VC for innovative start-ups and scale-ups impacted by Covid-19, to ensure that their growth strategies could be continued. It was developed alongside the COL (Corona OverbruggingsLening) programme of the Regional Development Companies (ROM) which provided loans up to €2m (£1.78m). The TOPSS programme was intended to deliver a fast investment process of 3-5 weeks.

The broad rationale for the schemes is similar across the development banks contacted, with the focus on ensuring the availability of finance to high growth innovative start-up companies.

Summary

Denmark and France re-purposed and increased the scale of existing programmes to ensure they could meet additional demand from businesses. The French Tech Seed Fund was a co-investment programme investing in technology start-ups in the post-maturation stage using convertible bonds, and the French Tech Bridge was an extension of this but allowed larger firms to be eligible. The Tech Seed Fund allowed loans up to €250k, in comparison to €5m for the Tech Bridge Scheme. The Danish schemes were also largely increased, for example the Covid-19 Business Angel Loan supported 254 companies between May 2020 and September 2021 in comparison to 21 companies in the previous version of the scheme in 2019.

The Future Fund was similar to the Dutch scheme, being created to meet the economic conditions at the time of the pandemic. One difference was that Invest-NL already had direct investment capabilities, which differed to the British Business Bank who mainly worked through activities on the wholesale market and did not have direct channels to SMEs.

Several of the other economic development banks had schemes that targeted businesses requiring varying amounts of finance. For example, the Regional Development Companies (ROM) in the Netherlands deployed the COL programme, aimed at start and scale-ups requiring up to €2m in funding, in contrast to the TOPSS programme which was for start and scale-ups requiring more than €2m in funding. The ROMs assessed 2,276 loan applications with a total requested capital of €840 million. Of these, 974 applications were approved for a value of almost €300 million.[55] It was not possible to assess the COL programme as it was delivered independently by a number of regional agencies across the Netherlands, with differences existing between the regions. Vaekstfonden similarly deployed two additional schemes, the Covid-19 investor loan and start-up loan, however these were not reviewed as they targeted different companies to the Future Fund.

Convertible instruments were used in some of these comparable schemes in order to reflect high risk and growth prospects of the companies, with the prospect of converting the debt to an equity stake in the company if the debt was not repaid. Loan instruments were used in Denmark to avoid issues of Vaekstfonden owning equity stakes in a large number of companies, an issue that is likely to occur in the Future Fund. Vaekstfonden structured the loans as mezzanine instruments with a variable returns' component based on company performance. For Invest-NL, a CLA was chosen to avoid a discussion on valuation initially, and to speed up the process.

The Future Fund has a higher stated basic interest rate than both schemes in Denmark and the French Tech Bridge Scheme but is similar to the TOPPS scheme which has an interest rate of 8%. In contrast to the Future Fund, the French Tech Bridge Scheme did not have the intention of loans converting to equity at the end of the term but rather for them to be repaid, however they would convert to equity if they could not be repaid. The Future Fund allows loans to be repaid either at maturity of the loan, specific exit events or in the case of default by the investee company.

[55] https://www.rom-nederland.nl/https-www-nom-nl-media-actueel-eindrapport-corona-overbruggingslening-e-300-miljoen-hield-innovatieve-bedrijfsleven-overeind/

Table 10: Overview of International Covid-19 response schemes financial instruments

Scheme	Product Instrument	Loan Duration	Early repayment	Interest rate	Event at maturity
Future Fund	CLA	3 years	Yes	8%	Convert to equity/ repaid
Covid-19 Business Angel Loan	Loan (Mezzanine)	6 years	Data not provided	4-6% + Performance fee	Repaid
Covid-19 Syndication Loan	Loan (Mezzanine)	6 years	Yes (if paid in full before the end of year 2, two years' interest is to be paid)	4-6% + Performance fee	Repaid
French Tech Bridge Scheme	Convertible Bonds	1.5 – 2 years	Minimum 50% of the nominal committed	7%	Convert to equity/ repaid
TOPPS	CLA/Equity	3 years	Data not provided	8%	Convert to equity/ repaid

Table 11: Eligibility criteria

Scheme	Size	Age	Sector	Stage	Equity finance raised	Turnover
Future Fund	n/a	Incorporated on or before 31 December 2019	n/a	n/a	£250,000+	n/a
Covid-19 Business Angel Loan	n/a	n/a	n/a	n/a	n/a	n/a
Covid-19 Syndication Loan	n/a	n/a	n/a	n/a	n/a	n/a
French Tech Bridge Scheme	Up to 250 employees	Less than eight years old	n/a	Maximum B series	n/a	<€50M
TOPPS	n/a	n/a	n/a	n/a	n/a	n/a

Annex H: Learnings from other schemes and takeaways from relevant documentation/ literature

The following provides a summary of our rapid document review and key learnings from other schemes. This was primarily based on identifying relevant sources and lessons that contextualise the focus of the Fund, the target cohort of businesses, the rationale for intervention and the logic behind the specific mechanism chosen.

High-growth businesses (and their needs)

In response to the coronavirus pandemic, the government rolled out a range of interventions for businesses aimed at protecting jobs and ensuring, as far as possible, that potentially viable businesses didn't fail. These interventions included the CJRS, CLBILS, and the Bank of England CCFF among others.

Early-stage high growth equity backed companies, the focus for the Future Fund, were not able to access some of these Covid-19 response schemes. Businesses accessing loans through the CBILS had to have been profitable prior to the pandemic, which excludes a large number of start-ups and scale-ups, as these businesses typically incur losses in their early stage while they invest in growth.[56] High growth companies require other specific forms of intervention, such as co-investment schemes, convertible debt instruments and grants, and tax incentives for business angels.[57] These companies disproportionately impact UK economic growth, and so an objective of the Fund was to ensure their survival.

The role of venture capital funding

VC is a particular type of equity funding aimed at providing finance for emerging companies or early-stage companies with high potential for growth.[58] VC investment is typically on a long-term basis allowing companies to setup or expand, and in return investors gain an equity stake in the company.[59] The three main sources of funding are:[60]

- Business Angels: high net worth individuals investing their personal finances in new and early-stage companies.
- VC Funds: professional investors managing money raised through financial institutions (e.g., banks, pension funds, insurance companies).
- Equity Crowdfunding platforms: Where a large number of people each invest relatively small amounts, allowing companies to raise finance.

[56] What will it take to save the UK's startups and scaleups? | Sifted
[57] Mason, C. (2020) The Coronavirus Economic Crisis: Its Impact on Venture Capital and High Growth Enterprises
[58] https://uk.practicallaw.thomsonreuters.com/0-500-8350?transitionType=Default&contextData=(sc.Default)&firstPage=true
[59] https://corporatefinanceinstitute.com/resources/knowledge/trading-investing/venture-capital-investing/
[60] Mason, C. (2020) The Coronavirus Economic Crisis: Its Impact on Venture Capital and High Growth Enterprises

The impact of VC for early-stage companies is significant, as finance and support from business angels and VC funds allows companies to grow more quickly than their revenue alone would allow, and this growth is seen over the longer term.[61] In addition, VC-backed companies develop products and bring them to market more quickly[62] and could also have large impacts in terms of job creation.[63]

Rationale for intervention

Early analysis in 2020 assessed that there would be a reduction in VC investing as a result of the coronavirus pandemic.[64] Initial market data for the UK showed a 32% decline in the number of equity deals in Q1 2020 compared to the previous quarter, with Q1 2020 having the lowest number of deals since Q3 2014. There were indications of conditions worsening including investors focusing on existing portfolios and investors delaying and withdrawing from existing deals.[65] Reports by Start-up Genome estimated that in China VC deals had dropped by 50-57% in the first two months of 2020, compared with the rest of the world.[66]

As VC is seen as a key driver of economic development, through financing high growth potential companies, a reduction in VC funding would have an adverse effect on the economy. In turn, economic recovery from the pandemic would rely on high growth and equity-backed start-ups and scale-ups.[67] A survey of 250 growth businesses in the UK found that 90% believed they would close within the next 12 months if their investment plans were disrupted.[68]

Analysis also pointed to the economic impact of the coronavirus pandemic causing a recession worse than the 2007/08 financial crisis, but also a recession that rather than removing less productive companies, causes good companies to close down.[69]

Examples from previous crises

A notable example from previous crises is the longer-term impact on VC. During the 2000/01 economic crisis, global VC investments fell by 21.6% in 12 months and took three years to return to previous levels, while the 2007/09 crisis saw VC fall by 29.3% in 12 months and took one year to return to previous levels.[70] This decrease in VC could equate to a decline of up to $86.4bn in global VC investments when projected for the coronavirus pandemic.[71] This points to not only the immediate impact the pandemic was expected to have, but also the longer-term impacts for early stage, high growth companies.

[61] Mason, C. (2020) The Coronavirus Economic Crisis: Its Impact on Venture Capital and High Growth Enterprises
[62] Mason, C. (2020) The Coronavirus Economic Crisis: Its Impact on Venture Capital and High Growth Enterprises
[63] What COVID-19 Means For Startup Ecosystems—And What Can Be Done (forbes.com)
[64] Mason, C. (2020) The Coronavirus Economic Crisis: Its Impact on Venture Capital and High Growth Enterprises
[65] The effect of coronavirus on UK investment: Q1 2020 | Beauhurst
[66] https://theusbreakingnews.com/startup-genome-the-coronavirus-is-hurting-global-startup-investments/
[67] Mason, C. (2020) The Coronavirus Economic Crisis: Its Impact on Venture Capital and High Growth Enterprises
[68] https://mailchi.mp/5cccf910d8d0/join-the-save-our-startups-campaign-update?e=e52146854c
[69] There will be no 'back to normal' | Nesta
[70] https://startupgenome.com/articles/impact-of-covid19-on-global-startup-ecosystems
[71] https://startupgenome.com/articles/impact-of-covid19-on-global-startup-ecosystems

The 2007/09 financial crisis caused a significant funding gap in financing technological development and innovation.[72] Further research shows that access to bank finance for innovative firms becomes more difficult during crises such as the 2008 financial crisis.[73]

However, the 2000 "dotcom" crisis may provide a better example to learn from than the 2008 global financial crisis, in that it was fuelled by easy availability of VC in the 'dotcom boom' which created a 'house of cards' that collapsed during the crisis.[74] In contrast, the 2008 financial crisis flowed in the opposite direction to the coronavirus pandemic, as a corporate debt crisis was triggered by the coronavirus pandemic resulting in losses for banks, rather than banks being part of the problem (as was the case in 2008).[75]

It is acknowledged, however, that "over-reliance on the experience of past crises would be fighting new battles with old weapons".[76]

Co-investment models

Co-investment schemes are a method of supplying finance to businesses involving a government-funded investment fund investing alongside funding from business angels and VC funds, committing a like-for-like investment with the private investors.[77] They can be particularly effective when dealing with multiple investors or when being delivered quickly.

The same terms and conditions apply for investments by the co-investment fund and private investors, while due diligence and sourcing of deals is largely carried out by the private investors in order to reduce costs for the co-investment fund.[78] In 2018, there were estimated to be 150 co-investment and related funds in Europe.[79] Due to the same terms and conditions adopted between Government and private sector investors, incentives are generally aligned between both parties.

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[72] Block, Joern & Sandner, Philipp & Vries, Geertjan. (2010). Venture Capital and the Financial Crisis: An Empirical Study across Industries and Countries. The Oxford Handbook of Venture Capital. 10.1093/oxfordhb/9780195391596.013.0003.
[73] Brown, R., Rocha, A., & Cowling, M. (2020). Financing entrepreneurship in times of crisis: Exploring the impact of COVID-19 on the market for entrepreneurial finance in the United Kingdom. International Small Business Journal, 38(5), 380–390. https://doi.org/10.1177/0266242620937464
[74] Mason, C. (2020) The Coronavirus Economic Crisis: Its Impact on Venture Capital and High Growth Enterprises
[75] Mason, C. (2020) The Coronavirus Economic Crisis: Its Impact on Venture Capital and High Growth Enterprises
[76] Mason, C. (2020) The Coronavirus Economic Crisis: Its Impact on Venture Capital and High Growth Enterprises
[77] Mason, C. (2020) The Coronavirus Economic Crisis: Its Impact on Venture Capital and High Growth Enterprises
[78] Harrison, R. (2018). Crossing the chasm: The role of co-investment funds in strengthening the regional business angel ecosystem. Small Enterprise Research, 25(1), 3-22. https://doi.org/10.1080/13215906.2018.1428910
[79] Harrison, R. (2018). Crossing the chasm: The role of co-investment funds in strengthening the regional business angel ecosystem. Small Enterprise Research, 25(1), 3-22. https://doi.org/10.1080/13215906.2018.1428910

One such co-investment scheme is the Scottish Co-Investment Fund (SCF), a £72m equity investment fund established by Scottish Enterprise in 2003. The Fund targeted investments of £10k to £1.5m, with total deal sizes ranging from £20k to £10m.[80] The Fund was aimed at commercially viable SMEs that had or were in the process of developing a significant operational presence in Scotland, proportionate to the level of investment sought.[81] In this case, deals were proposed by accredited Scottish Enterprise investment partners. A previous evaluation of the Scottish Co-Investment Fund found that it had a positive impact on the performance of SMEs as well as upon the wider economy.[82] Turnover, GVA and employment were all reported to have increased and were forecast to increase further.[83]

There is also the Angel Co-fund[84] overseen by the Bank. The fund has invested and committed £41.5m, alongside a further £238m from business angels and other investors, providing support for 82 businesses (as of December 2018).

Co-investment by itself was seen as insufficient due to many funds lacking the 'dry powder' to reinvest.[85] Co-investment did not seem to go far enough as it was believed "it may save the very best prospects, but a lot of start-ups will be left out".[86]

High-growth companies require longer-term investment in order to survive, so an equity-based form of investment was seen as necessary. There were suggestions put forward to government to create a convertible debt instrument aimed at seed stage start-ups in which a short-term debt is converted to equity at the next funding round. In this way the loan is "not a handout: it is an investment that should generate returns once the economy recovers".[87] There was a proposal for a not-for-profit UK Runway Fund which would provide CLN to early-stage companies (those who have raised less than £5m).[88]

Convertible loan agreements

Building on the co-investment model, the Bank structured the Future Fund around CLAs instead of outright equity instruments. The rationale for this is that, in times of economic turmoil, it is difficult for investors to value companies and make direct equity investments in those companies. To avoid lost investment and delays, the convertible structure allows investment to be made now. Later, the debt is either repaid or subject to conversion equity – occurring at a time when an assessment of the company's valuation can be made by the investors.

[80] https://www.scottish-enterprise.com/support-for-businesses/funding-and-grants/accessing-finance-and-attracting-investment/scottish-co-investment-fund
[81] https://www.scottish-enterprise.com/support-for-businesses/funding-and-grants/accessing-finance-and-attracting-investment/scottish-co-investment-fund
[82] Document details | Reading Room for Scottish Enterprise (evaluationsonline.org.uk)
[83] Document details | Reading Room for Scottish Enterprise (evaluationsonline.org.uk)
[84] https://www.british-business-bank.co.uk/ourpartners/angel-cofund/
[85] Most startups will fail, we should save them anyway — The Entrepreneurs Network (tenentrepreneurs.org)
[86] Most startups will fail, we should save them anyway — The Entrepreneurs Network (tenentrepreneurs.org)
[87] Mason, C. (2020) The Coronavirus Economic Crisis: Its Impact on Venture Capital and High Growth Enterprises
[88] Most startups will fail, we should save them anyway — The Entrepreneurs Network (tenentrepreneurs.org)

Annex I: Additional survey analysis

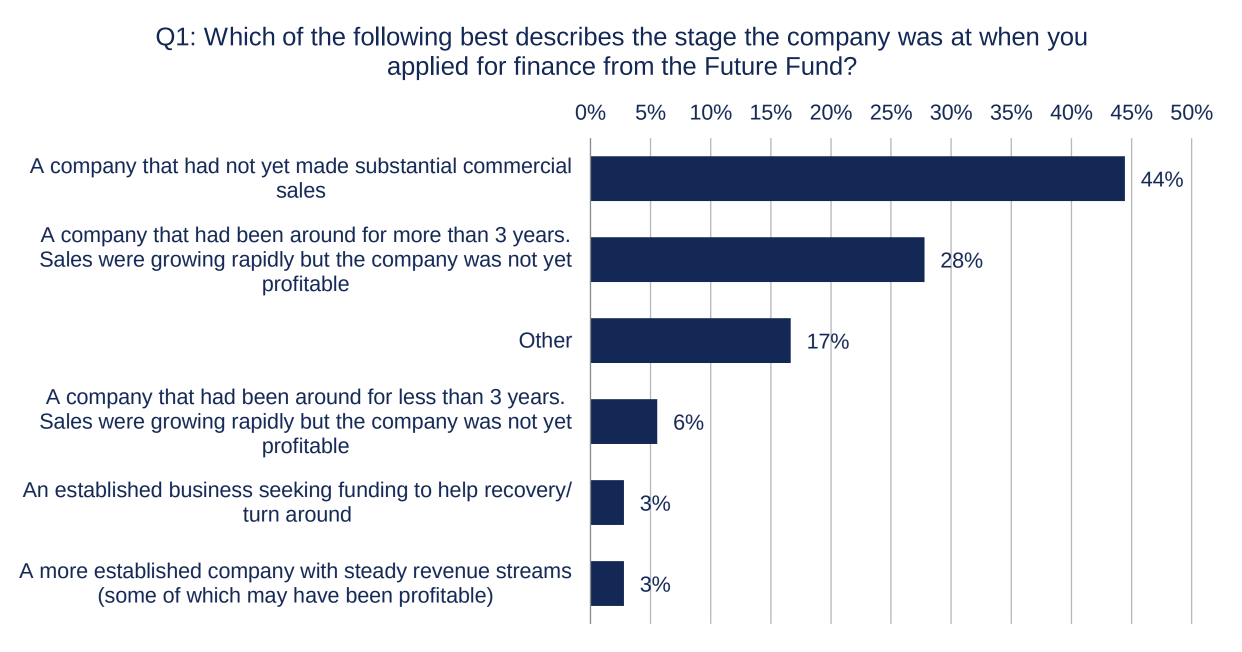
This section provides additional insights from the survey data analysis that follows the thematic results discussed in sections 4 and 5. Participants answered a variety of questions that primarily focussed on drawing out their experiences of the Future Fund process and impacts as a result of post-pandemic business developments. The insights below have been split by Process Evaluation which relates to insights in section 4 and the Early Impact Evaluation which is covered in section 5.

The following supplementary assessment is indicative analysis of a sample of 176 lead investors, 36 CLA applicants, and 91 non-applicants.[89]

Additional Process Evaluation insights

Early-stage business development confirmed amongst counterfactual groups

Figure 45: CLA applicants company status



The CLA applicants survey only consisted of 36 responses, which should be considered as a significant limiting factor when attempting to draw conclusions and insight. The CLA applicants sample also comprised of early-stage[90] businesses (around 78% of the sample identified their business as either at pre-sale or pre-profit stage) (Figure 45).

[89] See Annex L for definitions of user types.
[90] We use survey data based on the firms that have self-identified as (i) Not yet made substantial commercial sales or (ii) Company that had been around for more than three years – sales growing rapidly but not yet profitable or (iii) Company had been around for less than 3 years – sales growing rapidly but company now yet profitable. All of these categories were used as proxies for growth prospects.

Looking at the company status of firms that participated in the non-applicant survey, we can see a broadly similar distribution. 81% of non-applicant firms were pre-profit or pre-revenue compared to 85% of CLA funded firms and 78% of CLA applicant firms.

Figure 46: Non-applicant company status

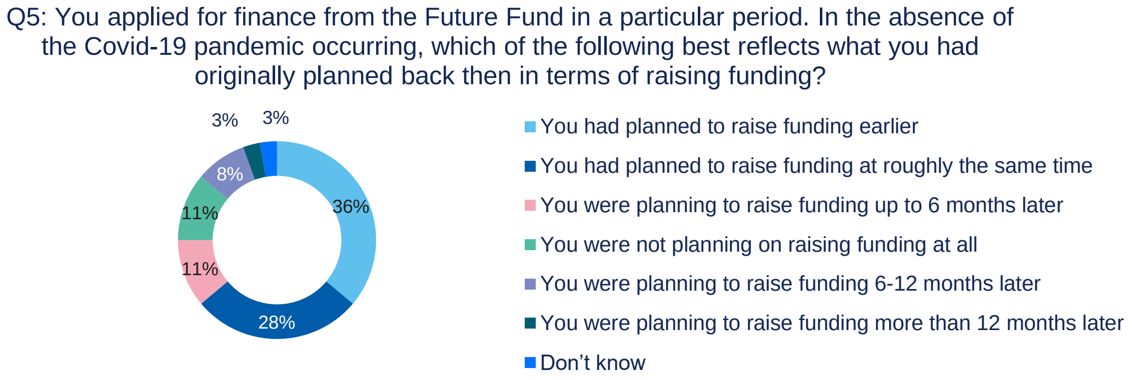
Around 80% of firms identified as early-stage[91] across each sample. However, the non-applicant firms differed in that the top identification, at 41% of the sample was, “a company that had been around for more than three years, but the company was not yet profitable.” This compares to CLA funded and CLA applicants’ top identification as, “had not yet made substantial commercial sales” at 43% and 44% respectively. We must bear in mind that the non-applicants were drawn from a wider sample which may reflect limitations in the filtering, alongside the higher share of self- identified established firms.

Pre-Covid financing schedules pushed forward

33% of applicants had been planning to raise finance later or not at all - but brought this forward, perhaps reflecting a degree of caution about the future environment and their ability to raise finance later. 71% of CLA funded firms had already planned to raise finance at the same time or earlier, compared to 64% of applicants. This likely reflects market factors associated with the pandemic and possible funding difficulties – concerns that seem to be slightly less prevalent among applicant firms.

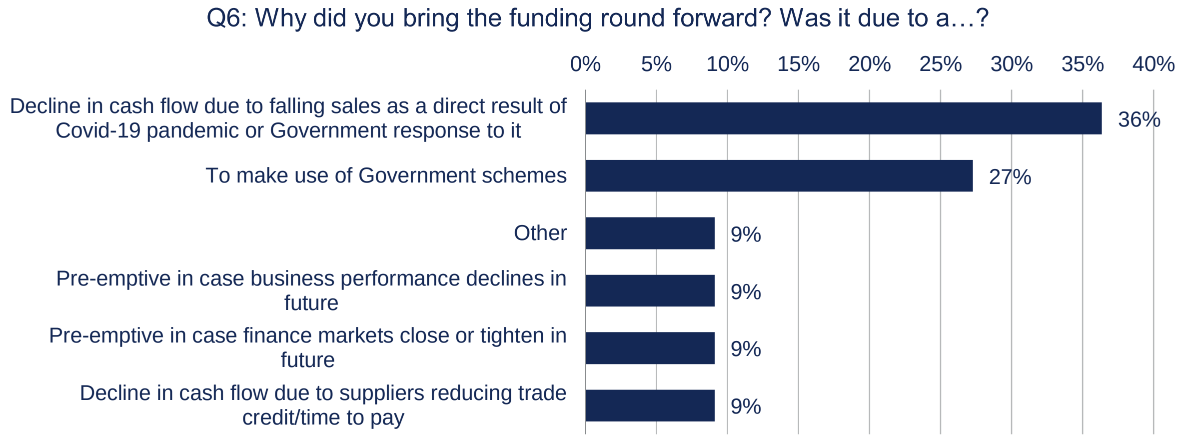
[91] (ibid)

Figure 47: Raising finance in the absence of the pandemic (CLA applicants)



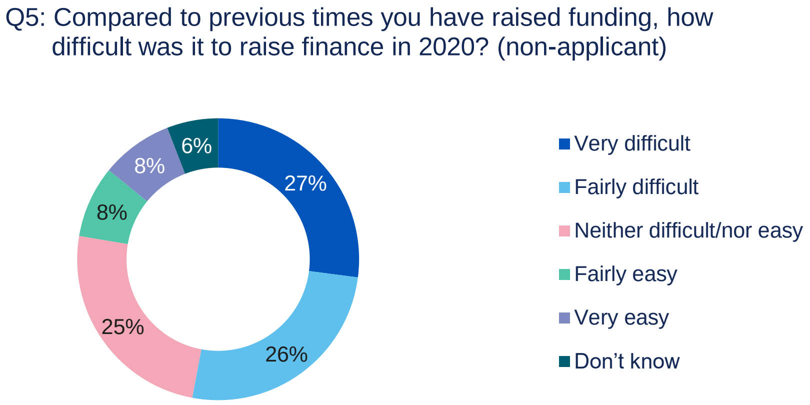
Of applicants who brought forward their funding rounds, 36% did so due to a fall in cash flow and sales as a direct result from the pandemic – suggesting they may have been concerned about future market and business prospects and could have sought funding as a precaution. Like CLA funded businesses (25%), a number of CLA applicants (around 27%) also brought forward their schedule to take advantage of the available funding opportunities.

Figure 48: Reasons for bringing investment forward (CLA applicants)



Over half of non-applicants (53%) found it relatively difficult to raise external sources of finance in 2020 compared to previous times they had raised finance. This indicates that firms who did not access the Future Fund finance may have found it easier to raise other finance given those who applied and drew down finance – as 63% of CLA recipients found it difficult to raise finance to some degree.

Figure 49: External funding difficulty (non-applicant)



Overall, the survey feedback across the board suggests that the Future Fund application process was seen as quick and clear, and firms were mostly satisfied. Table 12 highlights this with at least 83% of CLA applicants saying that they “strongly agree” or “tend to agree” that the overall application process, eligibility criteria, and the terms and conditions of the CLA were clearly explained. An area of improvement could be the communication from the Fund team on the progress of the application, where 22% of CLA applicants report some dissatisfaction.

Table 12: Application process experience (CLA applicants)[92]

Q10: Based on information sources accessed at the time of the application, to what extent do you agree or disagree the following was clearly explained?

	Strongly agree	Tend to agree	Tend to disagree	Strongly disagree	Don't know
The overall application process	39%	44%	6%	11%	0%
Business and investor eligibility criteria	31%	56%	11%	3%	0%
The terms and conditions of the CLA	44%	39%	14%	0%	3%

Q11: Thinking about your overall experience of the Future Fund application process, how satisfied or dissatisfied were you with the following?

	Very satisfied	Fairly satisfied	Neither satisfied nor dissatisfied	Fairly dissatisfied	Very dissatisfied	Don't know
Accessibility to the portal	33%	39%	19%	6%	3%	0%
The overall length of time it took to complete the application process	33%	33%	11%	6%	8%	8%
Communication from the Future Fund team on the application progress	42%	19%	11%	8%	14%	6%

[92] Percentages may not sum to 100 due to rounding.

Early Impact Evaluation

The CLA applicants survey sample size was 36 respondents, which is relatively low. Therefore, the inference from this analysis must be treated with caution as results are more likely to be swayed by large outliers.

Counterfactual groups more successful in external (equity) financing

As with CLA funded businesses (Table 4), Table 13 shows that the success rate of securing funding through equity financing (62%) and government-backed loans (83%) was high for applicants, whereas the success rate of securing bank loans (33%) was notably lower, which is expected for a majority of early-stage firms.

Table 13: Other external funding application outcomes (CLA applicants)[93]

Q15: What was the outcome of this application or search for other external funding? Did you successfully secure it, or were you successful and turned it down, or were you unsuccessful?****

External finance type	Successful	Successful but we turned down the offer	Not successful	Not applicable/ Did not apply for this type of finance
Personal funds from owner(s) and/or any director(s)	93%	0%	7%	0%
Loans***	88%	0%	13%	0%
Government backed loans**	83%	13%	4%	0%
Leasing or hire purchase (asset-finance)	83%	17%	0%	0%
Credit cards	67%	17%	0%	17%
Invoice finance or factoring	67%	0%	33%	0%
Other finance	67%	0%	33%	0%
Equity finance*	62%	10%	24%	5%
Revolving credit facility or bank overdraft	38%	0%	50%	13%
Loans/mortgage from banks and other organisations, including other Govt backed loans	33%	17%	50%	0%

93 * Equity from directors, individuals, friends, family, crowd funding platforms, VC or other investment organisations. ** Government backed loans such as the BBLS, CBILS, and CLBILS. *** Loans from directors, other individuals, organisations [can include loans from friends]. **** Percentages may not sum to 100 due to rounding.

Out of non-applicant firms who applied for other external financing options (and not the Future Fund), a majority sought equity finance and other government backed loans such as CBILS or BBLS. Those who applied for these specific finance types were in the main successful in their application. The pandemic was more influential in prompting non-applicants to seek external financing with 62% saying it played a role. Interestingly, non-applicants seem more successful than CLA applicants, maybe suggesting why the Future Fund wasn't considered as a first choice as other options could have been more favourable. Similarly, CLA funded firms were considerably less successful in securing equity financing options (Table 7) with only 57% of firms who applied being successful.

Table 14: External financing options success rates (non-applicants)[94]

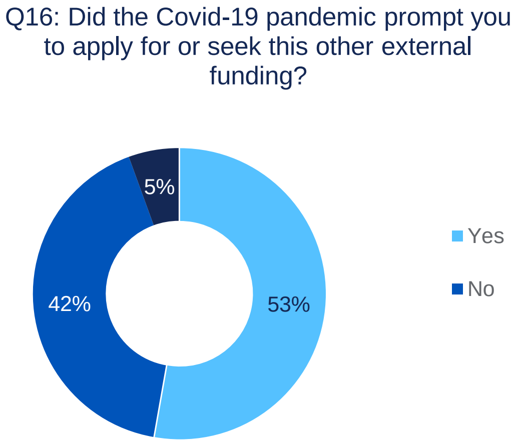
Q6: What was the outcome of this application or search for other external funding? Did you successfully secure it, or were you successful and turned it down, or were you unsuccessful?****

External finance type	Successful	Successful but we turned down the offer	Not successful	Not applicable/ Did not apply for this type of finance
Leasing or hire purchase (asset-finance)	100%	0%	0%	0%
Loans***	90%	5%	0%	5%
Government backed loans**	90%	0%	8%	2%
Credit cards	89%	0%	11%	0%
Equity finance*	88%	0%	7%	5%
Revolving credit facility or bank overdraft	75%	0%	25%	0%
Applied/sought other finance	71%	3%	16%	10%
Personal funds from owner(s) and/or any director(s)	69%	0%	0%	31%
Loans/mortgage from banks and other organisations, including Govt backed loans	67%	11%	22%	0%
Invoice finance or factoring	50%	50%	0%	0%

For CLA applicants, Covid-19 played a lesser role in prompting them to seek external finance (53% compared to 67% for CLA funded businesses). This suggests that CLA applicants could have been relatively less impacted by the pandemic.

[94] * Equity from directors, individuals, friends, family, crowd funding platforms, VC or other investment organisations. ** Government backed loans such as the BBLS, CBILS, and CLBILS. *** Loans from directors, other individuals, organisations [can include loans from friends]. **** Percentages may not sum to 100 due to rounding.

Figure 50: Covid-19 impact on external funding (CLA applicants)



CLA applicant KPIs and business investment decisions

The charts below show the key KPIs for the CLA applicant firms. Given the low sample size (36), there are limitations with the trends that are shown. Inferences alluded run the risk of significant swings in interpretation from any outliers.

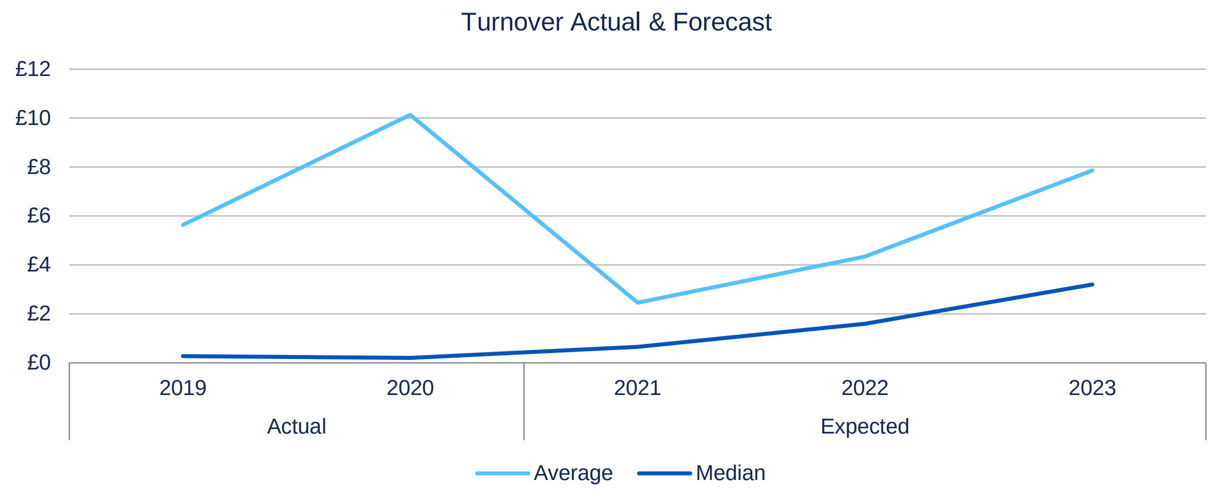
Table 15: Average FTE employment count (CLA applicants)

Q18: How many full-time equivalent employees did your company employ at the end of each of the calendar years 2019 and 2020?

	2019	2020
Average	17	18
Median	10	8
Sample size	35	35

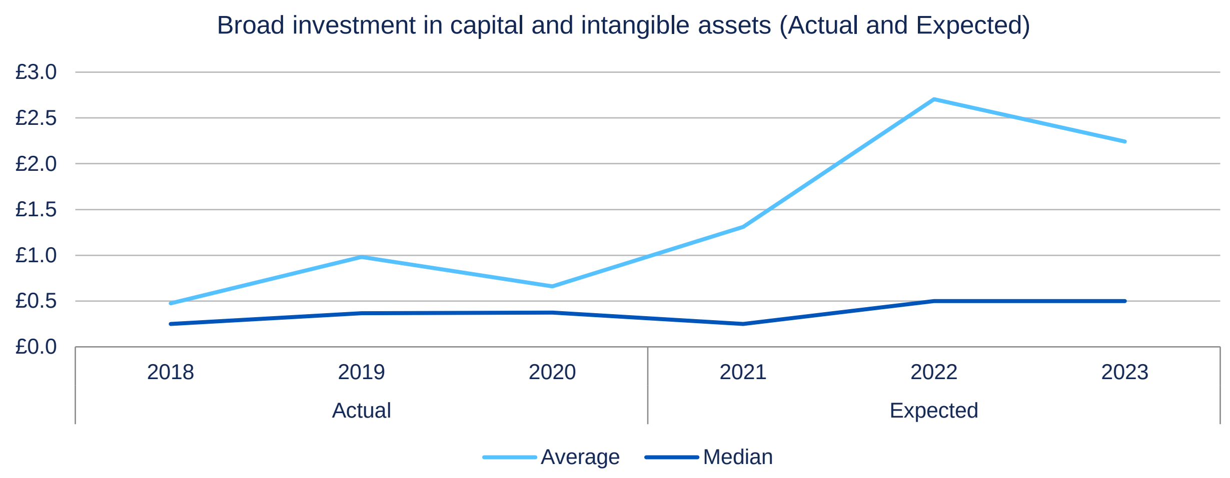
In contrast to the trend in employment, annual turnover increased significantly by 68% on average between 2019 and 2020 for applicant firms, followed by a fall in 2021. However, the small sample size leads the average estimates to be prone to larger swings from outlier companies. In the median, turnover fell, so the interpretation of the results is not so clear.

Figure 51: Actual revenue and firm expectation in millions, CLA applicants (£)



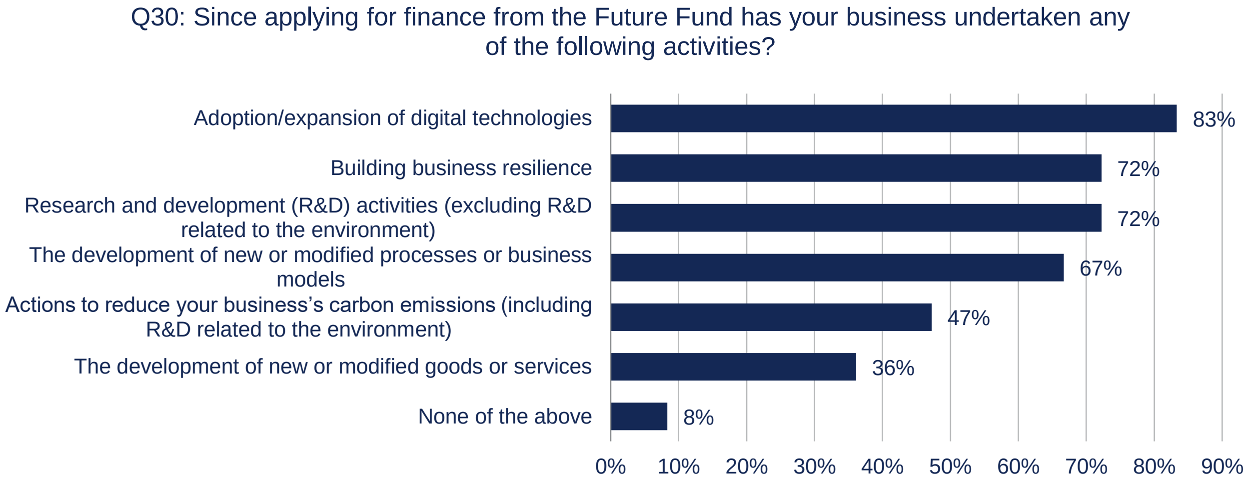
CLA applicants expected their average revenues and investment to accelerate in 2022 and 2023 (Figures 51 & 52). This general optimism is indicative of the fact that a sizable proportion of businesses may have viewed the economic slump as a short-term cyclical impact and expect the market to recover during the next few years. The picture is however clouded by the small sample, resulting a significant amount of potential volatility.

Figure 52: Average investment in capital and intangible assets in million, CLA applicants (£)



A majority CLA applicants invested in improving business operations or product development post-application, which are primary activities early-stage businesses are usually involved in (Figure 53). Interestingly, 85% of CLA funded businesses invested mainly in R&D compared to 72% of CLA applicants. However, caution must be taken in this cross-comparison due to small sample size (36 for CLA applicants).

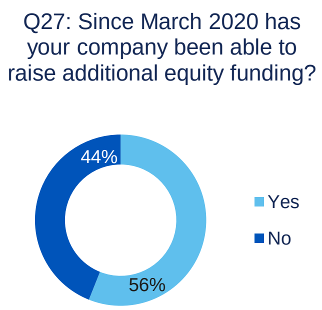
Figure 53: Business investment outcomes (CLA applicants)

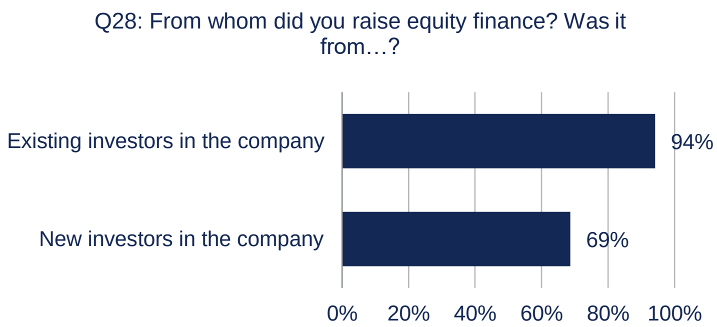


Mixed success for post March-2020 equity investment for non-applicants

Turning to non-applicants, an interesting observation is the mixed success this group of firms had in raising equity investment post March 2020. Only 56% of firms indicated they were able to do so, and of those firms, equity was raised mainly from existing investors. A contributing factor to those that were successful is the willingness of existing investors to invest during the crises period. Given the high proportion that were re-invested in (Figure 54) this could suggest that finance may not have been as additional as some results from the CLA funded surveys. There were a significant number that weren't able to raise finance (44%), but the number of firms that needed to raise finance since March 2020 has not been controlled for.

Figure 54: Equity financing post March 2020 (non-applicants)





Annex J: Matrix of portfolio firm's future growth potential and ability to raise equity pre-pandemic

Figure 55: Matrix of portfolio firm's future growth potential and ability to raise equity pre-pandemic

		Future growth potential – *in line with equity risk-reward profile*		
		Higher growth potential firms	Lower growth potential firms	**Percentage of firms by early-2020 finance**
Likelihood of raising private sector equity finance pre-pandemic	High	High likelihood of continuing to be able to access finance from investors in the pandemic. Risks of Future Fund crowding out private sector investment where funding was provided in absence of Future Fund. These firms may still be important for the financial performance of the Future Fund as likely to include outlier companies, even if funding provided is not finance additional/risks crowding out private sector investment	These firms don't show sufficient growth for equity investors but may be lower risk and suitable for funding through other forms of finance such as debt.	**7%** – estimated based on the likelihood of being able to raise finance (very easily and fairly easily) in early 2020. Given these firms found it easier to raise external financing in early 2020, just before the national lockdowns, it is highly likely that, pre-pandemic, raising finance would have been equally likely. This may be a slight underestimation **26%** of firms suggested that they would definitely or probably be able to get similar funding elsewhere in the absence of the Future Fund. This is a more conservative estimate - so will be relied upon to a greater extent. This gives a broad range of firms **(7%-26%)** that might have been able to substitute Future Fund funding.
	Medium	Firms in this bracket likely to have experienced funding issues that they may have not otherwise have experienced had it not been for the pandemic. The pandemic therefore puts their future growth at risk.	Firms here would not be seen as high growth and outside the typical profile of equity funded businesses.	Evidence to be detailed in subsequent evaluations.
	Low	Firms in this bracket may have struggled with funding even before Covid-19 due to unproven technology/ business models. These firms may have difficulty attracting matched private sector funding to access the Future Fund.	Firms in this bracket may have struggled with funding even before Covid-19 and are outside of typical equity growth profile. These firms may have difficulty attracting matched private sector funding to access the Future Fund.	Evidence to be detailed in subsequent evaluations.
	Percentage of firms by growth stage	**85% -** estimated based on classification in the survey, broadly as high or higher levels of growth. This is a more conservative estimate - so will be relied upon to a greater extent. **94% -** estimated by the financing stage as per MI data.		

Annex K: Early assessment methodology

This early assessment methodology outlines the steps taken as part of this report to arrive at the results as discussed in the earlier sections of the report. It details steps taken from early desk-based research, qualitative assessment approaches through to survey data analysis and subsequent economic modelling. In the full impact modelling, we will have access to a richer set of data (lagged impacts should feed through to KPIs such as turnover/ GVA) which will inform the fuller DiD modelling.

a) Completion of scoping interviews (May – June 2021)

Interviews were conducted with BEIS, HMT, and the Bank to understand the initial scheme design for the Future Fund and how this was developed; if and how this changed over time; roles and responsibilities in the design, planning and implementation of the Fund; risks and communications/ promotion of the Fund. The initial calls were also used to identify further stakeholders to be consulted as part of the stakeholder engagement for this Year 1 report.

b) Desk research and secondary data analysis (May – June 2021)

To understand perceived market failures and expected outcomes the following was reviewed:

- British Business Bank business case/ options appraisal of the Future Fund, including assumptions regarding expected programme goals.
- Bank documentation on how the Fund was delivered and updated over time.
- The existing Bank logic model and/or associated indicators for the Future Fund.
- Published data and research on equity investment gaps caused by economic shocks on early growth stage companies, working capital concerns of businesses and the decrease in business or investor confidence to provide a comprehensive understanding of the need for the Fund.
- Key learnings from a rapid review of other schemes, primarily based on identifying relevant sources and lessons that contextualised the focus of the Fund, the target cohort of businesses, the rationale for intervention and the logic behind the specific mechanism chosen.
- The secondary data analysis reviewed the Bank monitoring data to identify the financial and non-financial characteristics of the Future Fund portfolio companies. As part of the current assessment, this was used to inform the selection of companies to form the wider counterfactual.

c) Logic model/ ToC and evaluation framework – June/ July 2021

This stage ensures the evaluation captures the full range of impacts being delivered by the Future Fund. The logic model/ ToC was designed based on evidence from the rapid literature review to a) include short, medium, longer-term outcome and impact indicators; and b) document the conceptualised causal linkages between the CLA and the outcome/ impact measures. These informed the Method Paper and evaluation framework which included the data source(s) for each indicator as well as the methods for analysing the data collected.

d) Mapping of other schemes used by Future Fund companies

Measuring the contribution of the Future Fund to business performance ideally requires an understanding of which (if any) other Covid-19 support schemes were used by businesses. While the full evaluation will focus more on utilising this type of mapping for the development of an extensive list of non-applicant firms to compare to the user firms, some of this information was still collected from the Bank, BEIS and Her Majesty's Revenue and Customs (HMRC) to understand whether the applicant firms had shown any significant propensity to opt in or out of other non-Future Fund schemes. The development of a non-applicant counterfactual group at this early stage of the analysis has proven to be extremely difficult, with achieved survey numbers making it unviable to consider specific support programme mapping and subsequent matching - though we were able to analyse differences between other scheme uptake when comparing the treatment and counterfactual firms.

e) Comparison of Future Fund beneficiaries with counterfactual

Through the CLA applicant and non-applicant surveys, a comparison of the performance of Future Fund portfolio companies can be assessed. The counterfactual groups are defined as:

CLA applicants[95]: Those that applied and were approved for finance from the Fund but effectively did not utilise it. This was constructed through a filtering of British Business Bank non-funded applicant data to, as much as possible, exclude cases where the funding had been rejected and to reflect instances the application was made and approved, but the funding did not go ahead.

Non-applicants: Those that didn't apply but have comparable characteristics, so are likely to have been firms that could have applied and may have been successful in their applications.

Data from the Bank was received on the CLA (Future Fund) applications. This data was analysed and a number of assumptions and filters were applied to construct a relevant applicant "non user" sample.

[95] The British Business Bank provided MI data on those applicants who did not draw down the finance. The filtering approach reviewed companies KYC status, reasons for application terminating and accompanying comments on reasons for application terminating; to draw down a sample of firms as close as possible to the definition described. A small number of unknown cases where applications were withdrawn without further explanation was included in the sample of those companies contacted. If selected for interview, screening questions added another layer of filtering to remove any firms that didn't draw down finance due to ineligibility.

Distilling non-applicants is more complicated as this requires an application of filters to larger secondary datasets to identify potentially in scope companies. These filters will be broadly relevant for both the survey and the secondary data sources.

- The first step was to apply the Future Fund eligibility criteria in a manner that can map to the firm characteristics being collected. For instance, specifying non-public companies, filtering for recent transaction sizes – taking on board the importance of UK registered companies to the scheme.
- To the above filters the aim was to add insight gained from the data analysis of Future Fund portfolio companies, especially key statistics like employee headcount, turnover size, geographic profile, and relevant industries. This was important to make sure that the counterfactual companies were as “like for like” as possible with the portfolio companies.
- The above two steps were further rationalised based on what emerged from the document, rationale, and literature reviews. The rationalisation of filters also depended on the numbers of companies that end up coming out of the process, as well as the overall availability of data. As part of this there was an application of the existing pre-filters for “high growth” that exist in the Beauhurst database.

f) Surveys and interviews (fieldwork: November 2021 – March 2022)

Four surveys were developed in collaboration with BMG, the Bank and BEIS, namely:

- Online and CATI follow up surveys with recipient businesses and investors;
- Online and CATI follow up survey with CLA applicants[96];
- CATI survey with non-applicants;
- Case study interviews were completed with a mix of recipients, non-recipients, and lead investors.

[96] Those firms that applied, were successful, but chose not to draw down the Future Fund CLA for reasons other than having their application rejected.

Table 16: Survey response numbers

Survey	Number interviewed	Original sample
Recipient businesses	326	1,190
Lead investors	176	867
CLA applicants	36	594
Non-applicants	91	1,771

CLA funded businesses survey

Early assessment CLA funded businesses response rate = 326 out of 1,190 fund recipients. Expected 300 for the response rate.

The sample size and design for this research must be reflective of the universe of applicants for Future Fund CLAs. 1,190 Fund CLAs had been awarded, which initial estimates suggested would have arisen from 1,600 – 1,700 applications.

CLA applicant business survey

*Early assessment CLA applicant response rate = **36** out of **351** applicants contacted. Expected 50 for the response rate.*

The target number of completions for this group was 100 CATI surveys over the course of the evaluation (i.e., 50 at early assessment and 50 at interim assessment). The survey questions explored the reasons why these funds were not drawn down, as well as how the economic key performance indicators (KPIs) of these firms varied before and after the intervention would have otherwise taken place. As part of building the population on which the survey could be placed, several data filters were applied to further focus the list provided by the Bank and BEIS, to look beyond various firms that had been disqualified, or had otherwise now been successful in their applications.

Non-applicant business survey

Early assessment of the non-applicant response rate = **91** out of **1,771** total filtered companies[97]. Expected 200 for the response rate.

[97] Extracted from the Beauhurst database using the various filtering options.

BMG completed 91 interviews at early assessment. These interviews were obtained from an extended list of firms sourced from Beauhurst. The characteristics explored were consistent with the data filters discussed earlier. However, despite a filtered population of 1,771, there were difficulties getting a high level of engagement from these firms, partly due to changes in business work patterns resulting from the pandemic.

The non-applicant survey explored economic metrics such as turnover, employment, investment, operating income (consistent with the other surveys) – in addition to awareness of the Future Fund programme and other avenues of funding.

Lead investor survey

Early assessment Lead Investor response rate = 176 out of 867 unique lead investors in total. Expected 60-65 for the response rate.

Online interviews with CATI follow up were conducted with lead investors over the course of the programme, across deal size, geography, sector etc. The contacts were sourced from the Bank monitoring information data on funding granted.

Stakeholder consultations

Stakeholder interviews were completed to understand the emerging impacts. Consultations were 'front loaded' in Year 1 in order to capture their experience and perceptions at this stage.

Case studies

RSM produced eight case studies to demonstrate how the Future Fund contributed to the finance journey of users – as a practical illustration of the impacts of the Fund. Case studies were chosen based on sampling of sectors, geography, company size and turnover.

Benchmarking

This section provided benchmark studies from the UK and internationally to compare programme design and delivery. Identification of potential benchmark countries and schemes was conducted before selecting the five that met the criteria agreed with the Bank and BEIS, which included:

- Similar context to UK (i.e., advanced economies / similar projected GDP loss)
- Similar interventions (i.e., CLAs)
- Similar timing and scale of implementation; and
- Availability of similar administrative data.

g) Econometric difference-in-difference modelling on company investment

The purpose of the modelling at this stage of the evaluation was to try to isolate any early, indicative impact of the Future Fund funding on recipient firms. To estimate the average treatment effect and isolate the impact across time and across firm specific characteristics, we used a DiD model focussing on investment in intangible and capital assets as the dependent variable of interest. The short-term variable was more likely to show sign of significant impact and would be most likely to suggest any finance additionality benefit for the scheme participants.

Theory

Difference-in-difference is a quasi-experimental econometric design that leverages longitudinal data sets to determine a causal impact of an intervention.[98] It is a commonly used technique adopted within policy impact evaluations and has been selected for the early impact assessment of the Future Fund. The design requires data on a control and treatment group over an acceptable time frame, before and after the intervention or treatment. A general mathematical equation is outlined below:

$$y_{it} = \gamma + \beta_1 Treatment_i + \beta_2 t + \beta_3 (Treatment_i \times t) + \beta_4 x_i + \varepsilon_i, \quad \varepsilon_i \sim N(0, \sigma^2)$$

$$i = individual\ unit,\ t = time\ period, x = covariates$$

The coefficient of interest is β_3 which estimates the average treatment effect. Taking the differences in conditional expectations results in the coefficient on the interaction term.

Data

As part of any econometric modelling exercise, one needs to have relatively good and complete data to conduct credible analysis. One of the challenges we face as part of the early-stage evaluation has to do with the limited availability of data. Firstly, given the nature of the economic funding problem being faced, we are looking at relatively high growth early-stage companies that have only got limited current economic footprints. Secondly, the funding they receive is expected to help these firms to achieve higher economic returns and economic KPIs over the course of a number of years – and almost certainly not immediately. Thirdly, comprehensive firm level data is not something that generally exists or is created on a contemporaneous basis. Whether one is using official or private sector data sources, there can be a time lag associated with coming data coming through.[99] Hence, while we expect to face some data collection problems as part of the full evaluation, obtaining good near-term data poses the greatest challenge of all.

Therefore, in order to deal with the above we have had to consider the following for the early-stage evaluation:

[98] HMT's Magenta Book
[99] Most of the data analysis was performed in late 2021

- A process to collect data, given that secondary data sources and KPIs are mostly not viable at this point. While there are a number of emerging data sources that can be looked at, we still see robust analytical surveys as being the most practical and reliable immediate data sources, subject to the current constraints. Hence – the surveys conducted by BMG on Future Fund users, investors and the counterfactual groups proved to be the key data inputs into the modelling.

- Secondly, we have had to reflect on the most appropriate KPIs at this stage. While in principle we would prefer to use turnover as an appropriate economic impact driver, from which one can derive GVA, not only was relevant data not available, but the impact on it likely had not been fully realised. We finally came to the view that the most appropriate KPI that would start to show some impact within the early-stage period would be a broad physical and intellectual capital investment variable. This would both be driven by short term economic impacts, which is also a key transmission channel into long term impacts. While this KPI is still challenged by questions such as the underlying quality of investment – it seems to be the most viable one to consider as part of the early evaluation.

The use of survey data to measure investment is of course not ideal. Using bespoke surveys on such a specific group of companies creates some limitations in terms of the number of responses we are likely to get. Indeed, this envisaged problem did play out as we struggled to collect enough data for the counterfactual firms. Furthermore, the lack of data also limits the application of matching techniques, owing to the matching itself potentially resulting in too much data being stripped out – meaning we had to rely instead on general sample filtering based on the overall sample characteristics of the participating firms. The filters applied higher level categories, reflecting the Future Fund eligibility criteria, in addition to the recipient characteristics, such as the key industries present, turnover and employment ranges and geographic coverage. This approach helps to attenuate the differences between the control and treatment groups - for instance, the degree of participation in the CBILS/BBLS and the CJRS is broadly comparable across the two broad groups.[100]

The analysis itself is also imperfect as we will at best be picking up a proxy for early impacts, while the full and impacts will likely not have yet played out. All of this highlights the indicative and early stage of these findings.

[100] Our survey data shows that participation in the CJRS was at 63% for recipients, 50% for applicants and 65% for non-applicants – making the combined counterfactual rates broadly comparable with the treatment group. In terms of CBILS/BBLS participation – this stood at 46% for recipient firms, and 42% for non-applicant firms and 52% for applicant forms – which would again make the broad counterfactual broadly comparable to the treatment group. Comparing the distribution of our recipient firms across SIC group to the MI data and counterfactual samples we see broadly that firms fall in the same categories. Similarly sectors J (Information and communications) and M (Professional, scientific, and technical activities) are dominant. This somewhat validates the filtering approach taken to screen survey participants in the absence of being able to apply PSM. However – one also has to consider unobserved characteristics and how these might differ between the treated and counterfactual groups. The presence of unobserved differences can bias the sample – so we cannot say categorically that the samples are comparable, only that they seem comparable based on the analysis undertaken. The DID model specification is left to control for this.

As mentioned, the survey results were used as the primary data source. Investment, SIC sectoral group, region, and company status were variables extracted from each survey. Variables generated as part of the modelling requirement were the Future Fund dummy variable (1 = recipient firm, 0 = non-recipient), the Time dummy (1 = post-funding, 0 = pre-funding). These periods were grouped as the combined data for 2018 + 2019 (prefunding) versus 2020 + 2021 (post funding) to fully capture the period of time reflecting the onset of the Covid-19 crisis, as well as capturing period of time during which investment might have taken place following Future Fund support, and the interaction term which multiplied the intervention and time trend together. The CLA funded businesses survey was the data source for the treatment group. Combining the CLA applicant and non-applicant survey results allowed us to maximise the sample for the counterfactual group, as each of the samples separately were considered to be insufficiently large (n=36 for the CLA applicants and n=91 for the non-applicant survey) – even before adjusting for outliers, non-responses and considering overall data quality.

We recognise the limitations of this combined counterfactual, and it was not initially foreseen that we would combine the CLA applicants and non-applicant responses. However, the limited amount of data we got on each of the surveys, alongside the elimination of other observations as part of the data processing, make it prudent to combine the samples into a more viable combined sample for modelling purposes. Without combining the surveys, we would be relying on surveys with individually low response rates, which would in itself increase the risks associated with attempting to engage in statistical inference. This combined approach does however create potential sources of heterogeneity among the counterfactual firms, which can affect the power of the analysis owing to sources of variance between the counterfactual firms themselves.

The counterfactual non-applicant survey was designed to ensure firms were prefiltered based on overall sample characteristics that were driven by the applicant groups. This somewhat helps to minimise for structural differences and sources of bias between the two counterfactual surveys, which at least helps to attenuate some (but not all) of the problems with combining the two samples. This prefiltering was also completed as we were concerned that a specific matching process based on covariates might result in a data sample that is too small given the reliance on survey data for the early evaluation – meaning that the modelling would lack statistical power and robustness.

From the combined sample of 452 observations, we then proceeded to data cleaning, which involved several steps. Firstly, all three surveys had blank responses for investment removed. Any respondent who left a blank response to the investment questions were taken out of the sample. Respondents who stated zero investment for any period were also removed from the sample. Due to the nature of the firms in the sample, there was a significant clustering at zero investment. The problem this caused was that the distribution of the error term in the initial test models was skewed.

The clustering around zero could itself have indicated a potential tendency of firms to simply fill in zero where they might have been uncertain about future investment plans – or where these should have been blanks. However, this could have also been reflecting firms that were simply at a different stage of development - perhaps not yet spending cash and resources on what might be termed tangible or intangible investment and using resources to fund ongoing operations. Indeed, the zero investment could have simply been reflecting high levels of investment into working capital for early-stage companies - though within the wording of our investment question we kept the concept broad to pick up a range of expenditures. While these firms are removed from the modelling - they might be of significant interest as individual case studies given their potential stage of development.

The removal of the zero observations (25 were removed in total from an overall sample of 226 firms) does however also have potential analytical implications, in that the coefficients calculated do not specifically include potential cases where investment was legitimately at zero – so the modelling is actually performed for positive investment cases. At this early stage of the evaluation, we have not explored this analytical thread fully, and it would need to be considered alongside more sophisticated methods of normalising the data as part of the full evaluation. Some of that work may also need to include a case-by-case analysis of the different firms to see of any “signals” can be used to identify the legitimate zero investment cases. Other options to be explored may also include the addition of structural terms to the model to control for the zero-investment case, as such firms may have structural differences in terms of their behaviours that cannot be picked up by a simpler equation structure. All of this would also need to be considered alongside the fact that we expect to have far richer data for the full evaluation, which may itself make these measures moot.

The other issue faced was that there were a small proportion of firms with large levels of investment. This resulted in a long-left tailed distribution. To correct for this, an estimation of $+3\sigma$ was calculated for each period. Observations that were greater than this level were removed. Using 3σ as an upper limit restricted the sample to only 99.7% given the observed data followed a normal distribution. This data cleaning exercise cut the sample from 452 observations to 298. In line with our earlier observations, as part of the full evaluation we will consider a fuller and more sophisticated set of remedies to address the above – if this is indeed still a problem with a richer dataset.

However, we do note that from a limited data set of 452 observations we ended up with 298 observations. The response rates can however be a further source of bias based on the propensity of firms themselves to respond. For instance, we obtained a fairly high response rate from recipient firms - which could have reflected a higher level of engagement with the programme. If this engagement is positive, it may have swayed the self-reported outcomes in the survey to be overly optimistic and vice versa – though a high level of engagement with the Future Fund is not necessarily indicative of a source of bias and could simply respect a responsive attitude to their funding partner.

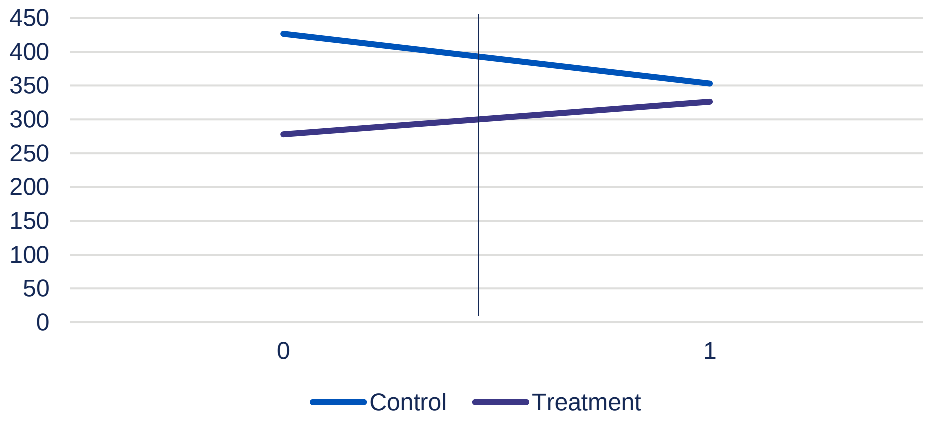
Similarly, though, lower responses from the applicant and the non-applicant firms could have signalled less engagement with the Future Fund, as well as other underlying reasons for not wishing to participate - perhaps driven by negative perceptions that would have prevented these firms from participating in the Future Fund scheme in the first place, which could bias the responses one does get. Additionally, within the population of applicant firms – the very fact that they chose to not follow through with the funding could indicate they had better funding prospects owing to healthier growth prospects. Survey response can therefore create multiple sources of bias when used in such an analysis – and the problem is potentially compounded by the presence of widely variable response rates.

An important clarification also needs to be made regarding the removal of outliers. Given the nature of the firms being supported by the Future Fund, it may indeed be the case that outliers are precisely the object of interest as these are the firms that have the potential to make large and transformative impacts in the future and will therefore go through periods of extraordinary levels of growth and investment. Paradoxically, while it was necessary to remove these from our sample for the modelling we were undertaking – these firms may turn out to be the most important indicators of the Future Funds long term success and value for money. However, the very fact that these are outliers means that they will need to be treated and analysed more specifically as part of the full evaluation. The modelling undertaken in the early evaluation is in itself based on assumptions of well-behaved distributions - but we will need to consider a more targeted case study approach to capture the disruptive and transformative impact of these firms that are being excluded above.

Assumptions

In DiD modelling, there are several assumptions that must hold to determine robust estimators. In standard linear regression, the Gauss Markov assumptions must hold, as with DiD. Additional assumptions include the parallel trends assumption. A visual check does however not allow us to go back several periods before the Bank started as data is limited – so the visual check below does not tell us anything immediately intuitive about the parallel trends assumption.

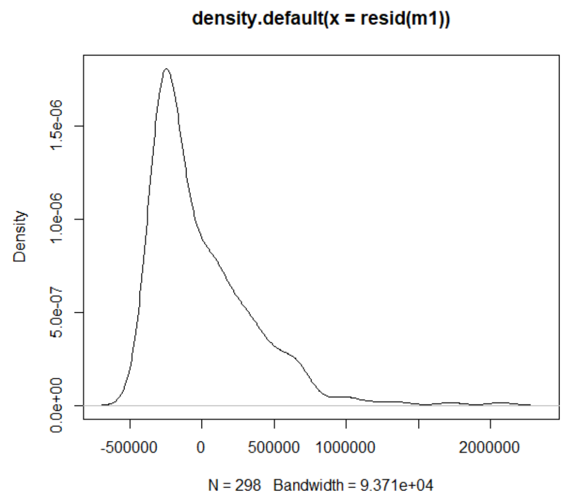
Figure 56: Broad investment trends in thousands (£)



For the “cleaned” sample, the treatment group clearly has a different trajectory compared to the control group. However, this may simply be telling the Covid-19 story – that the control group companies saw a decline in investment, while the treatment group companies saw an increase. A strong treatment impact would be consistent with the trends seen in the processes sample.

Another assumption we used a visual check for was for the distribution of the residuals. There was an improvement in the residual density plots following the data cleaning exercise. For our model the residual density plot is given below which shows a potentially quasi-normal distribution structure, which needs to be considered alongside the Central Limit Theorem regarding large samples.

Figure 57: Residual density plot for our model



Model testing

Several model structures were tested and rejected based on insignificance and violations of assumptions. The full panel data set (452 observations) suggested non-normality of the residuals.

Different model structures explored included controlling for covariates such as region, sectoral group and company status – recognising that the prefiltering applied was itself imperfect and fell short of full matching. These variables could be correlated to the amount of investment early-stage firms would receive and accessibility to financial support. Including controls was statistically insignificant however.

Propensity score matching was also considered as part of the modelling – notwithstanding the earlier mentioned concerns about sample sizes and surveys. Scoring was based upon region, company status and sector to match firms across control and treatment groups. The sample was reduced to 220 observations following the scoring exercise and the resulting DiD models were also statistically insignificant. This is likely a function of the limited power of the model with far fewer observations.

Table 17: Regression output

	Intercept	Future Fund (treatment) coefficient	Time trend coefficient	DiD interaction term (Future Fund participation and time trend)	Standard Error (DiD interaction term)	P-value (DiD interaction term)	Degrees of freedom
Model	£426,645	-£148,710	-£73,595	**£121,859**	£85,943	**0.157**	294

Other methodology challenges

As already noted, the non-applicants survey responses were well below the original 200, making it difficult to develop a robust counterfactual group. Discussions with the Bank resulted in several approaches to boost non-applicant responses. These included reaching out via mass emails to complete an online questionnaire rather than the original telephone interviews conducted by BMG. An uptake of around an additional 10 non-applicants within a two-week trial period was achieved, and this did not meet the minimum of 100 responses. This was followed by a charitable donation incentive scheme, whereby a £10 initial, rising to £20 per response was sent out to encourage participation – which increased the overall responses to 91.

Annex L: Abbreviations

Abbreviation	Full Title
AML	Anti-Money Laundering
ASA	Advanced Subscription Agreement
BBLS	Bounce Back Loan Scheme
BEIS	Department for Business, Energy & Industrial Strategy
BMG	BMG Research Ltd.
CATI	Computer-Assisted Telephone Interviewing
CBILS	Coronavirus Business Interruption Loan Scheme
CCFF	Covid-19 Corporate Financing Facility
CJRS	Coronavirus Job Retention Scheme
CLA	Convertible Loan Agreement
CLA applicants/ non-recipients	Businesses who applied, were successful but did not take up the funding.
CLA funded businesses/ recipients	Businesses who applied and received funding from the Future Fund Scheme.
CLBILS	Coronavirus Large Business Interruption Loan Scheme
CLN	Convertible Loan Note
COL	Corona OverbruggingsLening
Covid-19	Coronavirus disease (Covid-19) is an infectious disease caused by the SARS-CoV-2 virus.
DiD	Difference-in-difference (regression)
EIS	Enterprise Investment Scheme

Abbreviation	Full Title
EUR	Euro
FAME	Contains information on companies registered at Companies House in the UK
FAQ	Frequently Asked Questions
FCA	Financial Conduct Authority
FPO	Financial Promotion Order
GBP	Great British Pound
GDP	Gross Domestic Product
GFCF	Gross Fixed Capital Formation
GVA	Gross Value Added
HMG	Her Majesty's Government
HMRC	Her Majesty's Revenue and Customs
HMT	Her Majesty's Treasury
KPI	Key Performance Indicator
KYC/ CCD	Know Your Customer/ Customer Due Diligence
Lead Investor	A person/ firm who undertook the application process on behalf of the investee company.
M4	M4 money supply is defined as a measure of notes and coins in circulation (M0) + bank accounts
MI	Management Information
Non-applicant	Business that could have applied and did not.
NPV	Net Present Value
OBR	Office for Budget Responsibility
ONS	Office for National Statistics
ONS BICS	Office for National Statistics, Business Impact of Covid-19 Survey

Abbreviation	Full Title
ONS BSD	Office for National Statistics, Business Structures Database
PEP	Politically Exposed Persons
PIA	Future Investments Program
Private investor (not identified as a business angel)	These are a sub-group of private investors who do not actively invest in start-up firms. Usually, they consist of family, friends, company Directors etc.
PSM	Propensity Score Matching
PwC	PricewaterhouseCoopers LLP
Q1	Quarter 1 (January to March)
Q2	Quarter 2 (April to June)
Q3	Quarter 3 (July to September)
Q4	Quarter 4 (October to December)
R&D	Research and Development
ROM	Regional Development Companies
SARS-CoV-2	The virus that causes the coronavirus disease.
SEIS	Seed Enterprise Investment Scheme
SIC	Standard Industrial Classification
SME	Small and Medium sized Enterprise
Stakeholders	This group consisted of senior civil servants in Government, Arm's length bodies, government agencies, industry bodies, and non-profit organisations that were involved (directly/ indirectly) with the Future Fund design/ implementation stages.
TOPPS	Temporary Bridge Loan Programme for innovative Start- and Scale-ups
UK	United Kingdom

Abbreviation	Full Title
UKBAA	United Kingdom Business Angels Association
USD	United States Dollar
VC	Venture Capital
VFM/ VfM	Value for Money

Legal notices and disclaimers

British Business Bank plc
Steel City House
West Street
Sheffield S1 2GQ
t. +44 (0)114 206 2131
e. info@british-business-bank.co.uk
british-business-bank.co.uk
Publication date: November 2022