CALCULUS EIS FUND

Calculus Capital Limited

	Positives	Issues
Why invest	▶ **Strategy:** To invest in a portfolio of more established unquoted companies with growth potential to attain capital appreciation.	▶ **Time to invest:** The target time to invest of 18 months is longer than many other EIS funds, although Calculus is looking to reduce this.
The Investment Manager	▶ **Team:** One of the longest standing managers in the VCT/EIS area, Calculus has a highly experienced and stable team.	▶ **Past performance:** Write-offs over the past couple of years have adversely affected the company's previously very good performance. An average realised 9% IRR is still credible.

Nuts & bolts

- **Offer period:** Closing dates are quarterly on last Friday of October, January, April and June.
- **Diversification:** The aim is to invest in 6-10 companies, with approximately one-third in each of healthcare, technology-enabled companies and others.
- **Valuation:** Investors will receive valuations twice a year. Industry guidelines will be used, with two auditors examining the figures.

Specific issues

- **Fees:** Mixture of direct fees and charged via the investee companies.
- **Performance fee:** 20% on gains over a return of total capital invested.

Risks

- **Risk mitigation:** The aim is to diversify by sector and the focus on more established companies should also help mitigate some of the risk.
- **Target return:** Overall, the strategy is medium risk relative to other EIS/VCT products, with the target company IRR of 20% and capital return of 2.5x towards the top end of what we'd expect for that risk category.

	Manager information	Manager contact details
Analyst *Brian Moretta* 0207 194 7622 bm@hardmanandco.com	▶ ***Scheme assets:*** *£4m* ▶ ***Scheme target:*** *£20m* ▶ ***EIS assets:*** *£158m* ▶ ***Total FUM:*** *£170m* ▶ ***Fund launch date:*** *2018 - evergreen*	***Investor Relations team*** *Phone: 020 7493 4904* *Madeleine Ingram, Head of Investor Relations and Marketing* *Email: Madeleine@calculuscapital.com*

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Factsheet

Calculus EIS Fund	
Product name	Calculus EIS Fund
Product manager	Calculus Capital Limited
Investment adviser	NA
Tax eligibility	EIS
Target return	For each company, an IRR of 20% with a return of £2.5 for every £1 invested
Target income	None
Type of product	Complying EIS fund
Term	3-7 years
Sectors	Generalist
Diversification:	
Number of companies	6-10
(Expected) Gini coefficient	0.1-0.167

Fees	Amount	Paid by
Initial fees:		
Transaction fee	2% (excl. VAT)	Investor
Non-advised investor fee	1% or 2% (excl. VAT)	Investor– see report for details
Dealing fee	0.65%	Investor
Arrangement fee	1.9% (on average)	Investee company
Annual fees:		
Administration fee	1.5% (excl. VAT) of NAV, payable quarterly in arrears	Investor
Audit and legal fee	0.1% (excl. VAT) per quarter	Investor
Monitoring fees	Average £16,000 per company	Investee company
Director's fees	Average £14,000 per company	Investee company if applicable
Exit fees:		
Performance fee	20%	Investor share of proceeds after return of original capital
Dealing fee	0.65%	Investor
Advisor fee facilitation		Yes
Advisor fee amounts		As agreed with investor
HMRC Approved fund?		No
Advance Assurance from HMRC		Yes
Reporting		Semi-annually
Minimum investment		£50,000
Current funds raised		£4m
Fundraising target		£20m in current financial year
Closing date(s)		Quarterly on last Friday of October, January, April and June
Expected exit method		Trade sale, IPO or other exit opportunity

Source: Calculus Capital Limited, Hardman & Co research

Fund aims

Calculus EIS Fund is a complying EIS fund, which will invest in 6-10 companies. The target return for each investee company is an IRR of 20% with a return of £2.5 for each £1 invested. Returns will be focussed on capital gains and investors are unlikely to receive any dividends. The aim is for the assets to be invested over the 18 months from closure of the tranche.

Calculus Capital Limited is the Fund Manager and there are no other companies involved in running the fund.

Summary of risk areas

Note: there are generic risks from investing in EIS or unquoted companies in addition to the specific ones commented on below. Comments on relative risk refer to other EIS investments and not to wider investments.

Investments

Portfolio risk

Each investment will be into a company with growth potential. The target is for investors to receive shares in 6-10 companies. There will be sector diversification, with around a third in each of healthcare, technology-enabled businesses and others. As the portfolio will invest in more established companies than most EIS funds, there could be some economic sensitivity, but we would expect idiosyncratic risk to dominate.

The target company IRR of 20% and multiple of 2.5x is at the upper end of what should be expected for what is, in EIS terms, a medium-risk strategy.

Sourcing and external oversight

Calculus describes itself as having 'privileged sources of deal flow'. Historically, it has managed to find sufficient investments, usually with little competition from other investors. The deal flow has increased in the last couple of years. The Calculus VCT will usually co-invest alongside the EIS Fund.

The investment process up to the offer is entirely internal to Calculus. The majority of the Directors on the Investment Committee are not involved in deal negotiation/diligence, bringing an independent oversight to the decision-making process.

Ongoing support and monitoring

As is the case with many EIS managers, Calculus takes a board position on investee companies. Support goes beyond that, with a combination of guidance and mentoring for management. The latter, unusually, includes a CEO/CFO forum, bringing together all the investee companies to share experiences and solutions. It may also appoint an appropriately experienced non-executive director.

Exits

The intention is that exits will come through trade sales or other normal exit routes such as IPOs. This is supported by its track record.

Manager

Team

Calculus is one of the longest established EIS managers, having been investing since 1999. Its two founders are among the most experienced in the industry. The majority of the investment team of ten people are accountants and bring a broad range of fund management and corporate finance experience.

Track record

Calculus has built up an extensive track record over its existence. To the end of September 2018, it had invested in 68 companies with 35 exits (some partial). The latter have achieved a median IRR of 9% - short of the Calculus target, but still credible. The realised track record has been adversely affected in the last couple of years, with several previously written-down investments being written off.

Regulation

Product

Advance Assurance will be sought from HMRC for each company investment. Hardman & Co does not expect any issues to arise from the recent budget changes.

Manager

The Fund Manager is Calculus Capital Limited. It is FCA registered (number 190854) with fund management and custodian permissions. Submissions to Companies House appear to be up to date.

Risk analysis/commentary

As one of the longest standing EIS managers, Calculus Capital brings extensive experience of investing in its target market. This is its 19th EIS Fund. It has displayed a consistent ability to both raise and deploy capital. The investment process is well articulated and consistent, although retaining the flexibility that this sector requires.

The focus on somewhat more mature EIS-eligible companies is becoming rarer within the funds in the sector. This focus should bring risk benefits for investors, although with the trade-off that the fund is unlikely to produce many companies with spectacular returns either.

The expected diversification within the product might be limited. Individual investments should largely perform independently of each other. However, as the companies are more mature than many other EIS, they could show some correlation. Investors should consider this product in the context of their whole portfolio.

Investment process

Deeper dig into process

Calculus has a well-articulated process for investing, with some quite explicit criteria for choosing companies. In particular, it looks for each company to satisfy the following:

- Proven products or services, with some sectors requiring recurring revenues, including multiple clients;
- Relatively predictable cash flows and a healthy balance sheet;
- Either generating profits or there is a clear path to profitability within the next 12-18 months;
- The company's primary constraint is access to finance;
- Has a clear route to exit, with a target annualised IRR of 20%;
- Can benefit from the operating and financial experience of the Calculus team.

These requirements mean that Calculus is looking for more established, unquoted companies. It avoids seed and early stage companies, which are higher risk. It will only invest in a small number of AIM-listed companies, as it feels the unquoted sector usually offers better value and greater opportunities to scrutinise and influence outcomes. Of its existing EIS investments, 45% by company were invested at the pre-profit stage.

Split of Calculus's historic investments by type

Type	Amount invested (£m)	Number of companies
Early stage, pre-revenue	10.0	4
Later stage, pre-flotation	52.8	23
Later stage, pre-profit expansion	69.6	26
Expansion/growth capital	21.4	8
Mature stage	0.3	2
Mature stage - MBI/MBO	2.4	4
Not classified	1.4	1
Total	**157.8**	**68**

Source: Calculus Capital, Hardman & Co research

We note that two of the pre-revenue investments were some time ago and neither were successful, perhaps demonstrating a willingness to learn. In early 2017, Calculus invested in another early-stage business, but this was led by a specific market opportunity and is seen by management as a one-off.

The low number of management buyouts/ins suggested the legislation removing those options for EIS investors would have little or no effect, something that has borne out so far. Indeed, in the three years since that change, and Hardman & Co's first report on a Calculus product, the latter has found new investments at a faster rate than before.

The target IRR of 20% is based off Calculus's own financial modelling of the company and what the team believes can be achieved in an exit in four to five years' time. Calculus observes that its own projections are always less optimistic than management's. However, it encourages the company to target the latter and keeps its own figures internal.

Calculus looks for companies into which it can make investments of £2m-£5m. The Calculus VCT will generally be co-investing alongside its EIS Fund. In some cases, newer funds might also be investing alongside earlier EIS Fund tranches. Priority for investment may be given to these earlier tranches. Allocations are generally pro-rata depending on available capital, with Calculus's Treating Customers Fairly Committee taking the final allocation decision.

Sourcing deals

Calculus describes itself as having 'privileged sources of deal flow'. Some of this derives from its position as one of the longest standing managers in the area. For example, one source is management teams that it has backed before. There are some on their second Calculus backed venture, and one is starting its third.

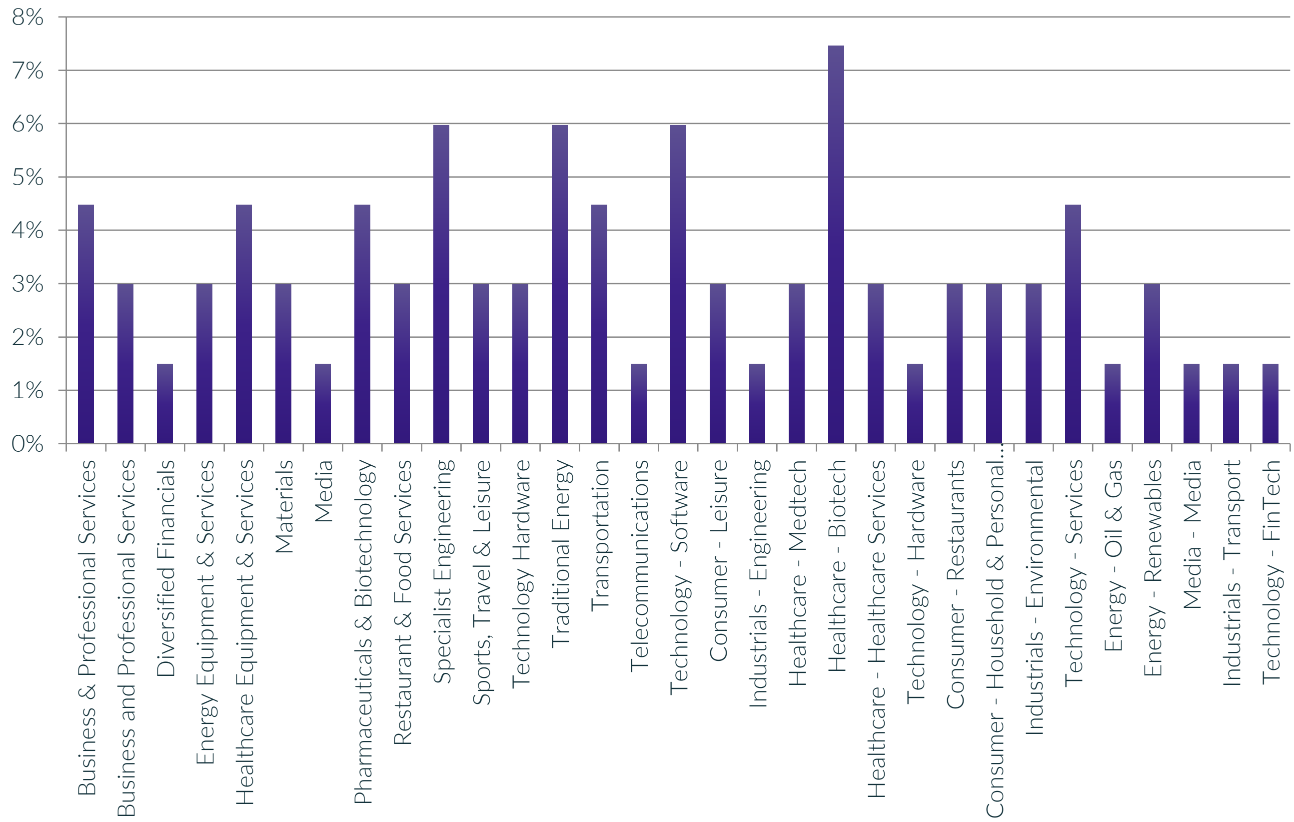
Having been established since 1999, and with most staff having a broader capital markets experience, the Calculus team has an extensive range of contacts. The company also cites its investor base as a slightly unusual additional source. A high proportion of its investors are city and finance professionals who are repeat customers and so are happy to refer opportunities to Calculus. The company also receives a large number of unsolicited approaches, although relatively few of those lead to investments.

In broad terms, Calculus estimates that it sees about 500 opportunities a year, of which ca.100 get requests for more information and 25 are expected to advance to detailed due diligence. These are whittled down to about 6-8 new investments a year, of which roughly one third will be follow-on investments. 2017 saw a faster rate, with £30m into 11 investments while 2018 has been more normal, with £20m invested. The overall figures for deal flow are not dissimilar to other EIS managers, but for the deals that it acts on, Calculus generally finds itself in little competition with other capital providers.

Overall, Calculus has some differentiation in its sources of deals, and over the course of its history, has been able to source adequate deals. The VCT/EIS market as a whole has become more competitive in recent years, but the expanding of eligible companies means Calculus has not seen much effect from this. We see no reason why this should not continue, and note its increased rate of investment in the last couple of years or so.

Calculus aims to provide a diversified portfolio and its track record shows a wide spread of industries. Its 68 historic investments have been spread across 31 different industries (Calculus divides pharmaceuticals into three subsectors). The largest exposure is to the pharmaceutical/healthcare sector, with a combined 22.4% of the value invested and 17.7% of the number of companies. Eight sectors have seen investment in only one company.

Sector exposure of Calculus historic investments by proportion of companies



Source: Calculus Capital, Hardman & Co research

Overall, Calculus aims to have 6-10 investments in the EIS Fund. Going by its historic sourcing rate, this should be achievable. The expected diversification by sector is indicated at roughly a third into each of healthcare, technology-enabled companies and others. This is a slight change on previous years. Based on the data above, Hardman & Co feels there is good evidence that Calculus is capable of delivering on its diversification promise.

Decision making

Like many EIS & VCT managers, investment decisions in Calculus are made through an Investment Committee. The membership consists of at least three of the CEO, Chairman, Deputy CEO and Head of Investments. Added to this is the Investment Director leading the deal being proposed. There is no external membership, but at least three of the standing members are not involved in deals until this stage and should be able to provide an objective view.

The Investment Team meets weekly at the ‘Pipeline’ meeting to consider all new opportunities. All opportunities will have been pre-screened by a member of the team, but even those to be rejected are still double-checked by a senior Investment Team member, just in case. If an opportunity is to be taken further, it is assigned to a two-person deal team of an Investment Director plus another member of the team. As indicated above, their primary initial task is relationship building with management, and the emphasis on this is a little different from some other managers where it seems to be lower down the priority list.

Before Calculus commits to a deal, there are several formal Investment Committee meetings at which the investment is scrutinised. After this, an offer will be made subject to due diligence. Few investments fail at the due diligence level, although Calculus quotes examples where it has withdrawn based on due diligence findings – companies are usually incentivised by a clause that covers Calculus's costs if it has to walk away, which acts as an additional filter.

Typically, the full process takes between four and six months from start to end. The overall stake is usually ca.30-40% of the equity of the investee company, although some deals have been much higher or lower.

The intention is for funds to be invested over an 18-month period. Historically, Calculus has been close to that, with the average over the previous 10 tranches being 20 months. Calculus has noted that this is longer than other EIS funds and it is looking to bring it down, partly by reducing the fundraising targets. Approximately £8m remains to be invested from the previous EIS Fund.

Governance and post-investment monitoring

Advance assurance is received from HMRC for all investments prior to completion.

The values of investments are reviewed twice a year and reports are sent to investors as at 5 April and 5 October. The aim is to send these to investors and their advisors within 30 days of the valuation date.

Valuations are done using BVCA guidelines, which for unquoted companies means using comparable quoted companies as far as possible. Investors should note that this can lead to more movement in valuations than EIS funds that invest in earlier-stage companies. We note that 7 of the 35 current investments now have AIM listings. This is currently a popular option for biotech companies and we would expect a minority of investments in the EIS to move to AIM over time. Eight of the current portfolio are valued at the last price paid for shares.

As most of the investments will also be held in the VCT, their valuations will be subject to its audit requirements. In practice, all of Calculus's valuations, both in VCTs and EIS products, are subject to two external audits. Grant Thornton, which is also the auditor of the VCT, currently checks the valuations along with Hillier Hopkins.

Calculus, like many other EIS managers, usually looks to take a seat on the board of investee companies. It also looks to strengthen the board with an appropriate independent non-executive director. Sometimes, the independent director may take the place of the Calculus representative, with the latter taking an observer position.

The interest Calculus takes in its investee companies goes well beyond monitoring. Once the investment is completed, Calculus looks to change the tone to that of a partnership and sets a plan over the first 100 days.

There is a combination of guiding and mentoring of management. The former is mainly holding them to the targets and plans that have been set at the time of investing. The mentoring can take many forms, from suggesting appropriate ways of improving internal systems to a regular CEO/CFO forum for all investee companies. The latter is a mix of a seminar on a relevant topic and group support, allowing management to share experience, issues and solutions.

We note the latter is a distinguishing feature from other VCT/EIS managers, and seems a useful additional item of support.

Exits

Calculus has a member of the team whose investment focus is to manage companies after the three-year holding period and guide them towards an exit.

The expectation is that most successful exits will occur through trade sales. The track record shows this to be the case, though; as noted above, Calculus has had a proportion list on AIM.

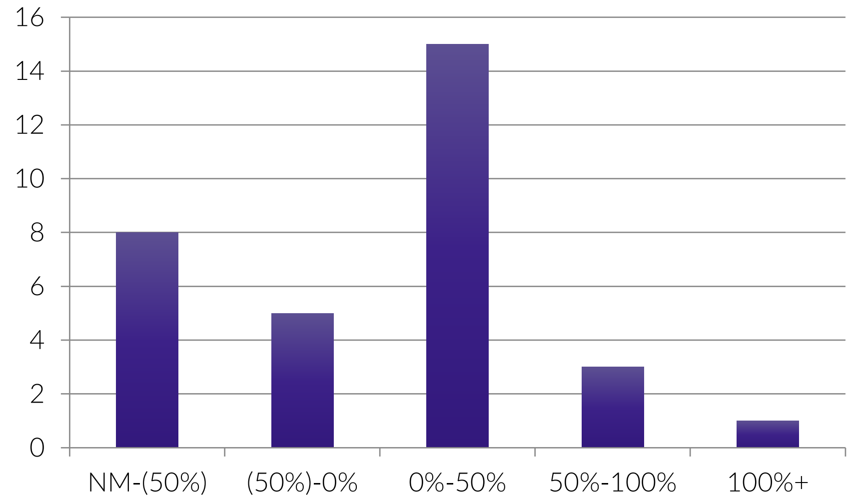
Track record

Hardman & Co has been supplied with details of Calculus's track record, with figures as of 30 September 2018. At the time of the first Hardman & Co review, the track record had exits that averaged close to Calculus's 20% IRR target. Unfortunately, in the three years since then, the exits have not matched that standard, although several of these were the crystallisation of losses that had already been recognised but not crystallised.

To date, Calculus has invested into 68 companies, of which 35 have achieved exits or partial exits. The vast majority of these took place between three and eight years after the first investment, although several had earlier dividends or partial realisations. The average exit proceeds (unweighted) are 2.0x the initial (gross) invested capital.

The median annualised IRR on the realisations is 9%. As the figure below shows, 13 were at a loss, eight of which were complete write-offs and do not have a meaningful IRR. Using an approximation for these latter investments gives an average IRR of 8.3%.

Number of companies exited with achieved IRRs



Source: Calculus Capital, Hardman & Co research

Overall, the pattern is what is to be expected from the Calculus investment process: investing in more established companies tends to give returns that are more steady than spectacular.

Giving an average time to realisation is not straightforward. There are some investments that have had several investment tranches, and some where realisations have taken place over time. The average time to first realisation is 4.9 years, with a median of 4.1 years. In 63% of investments, the time until the first realisation was less than five years.

This, of course, is not the whole story as there are 39 current investments. Currently, these are showing an average return on investment of 12% over a median time since first investment of 3.9 years. There are 11 investments that are more than five years old but are still currently held. Three of these have been written down, one fully and the others by less than half. Some of the AIM-listed positions have had adverse movements since the latest report too. We don't have IRR data for these investments, but the crude median return of -1.8% gives an indicative figure.

The less mature investments show better movements on average, although a narrower spread of returns and a median of zero indicates that several have yet to show a valuation movement. Seven of the unrealised investments are now AIM-listed companies and we note some of these have followed market weakness and seen disappointing performance in the last couple of years.

Overall, the last couple of years, unfortunately, have adversely affected Calculus's previously good performance. An achieved IRR of 9% is still credible, albeit somewhat short of its target.

Fees

The fees for the Fund are set out in the table on page 3 and are a mixture of payable directly by the investor and by the investee companies. These are straightforward, other than as noted below:

- **Non-advised investor fee:** Where an investor does not come through an intermediary, Calculus charges a fee to reflect the additional support these investors need. This is normally 2%, but is discounted to 1% for existing Calculus EIS investors.

- **Administration fee:** This annual fee is expressed as a percentage of NAV, rather than funds invested. Given the audit process, there is good oversight of the objectivity of this measure. Although the bulk of a value gain on an investment is often on exit, if the fund performs as expected then the fee will be more than if it was based on the amount invested. Two years' worth of fees are held back at the outset, with any outstanding fees paid from exit proceeds if there is no cash available.

- **Investee company fees:** These are not fixed, and the figures given reflect an average. It is worth noting for context with the cash amounts that Calculus invests larger sums (£2m-£5m) into individual companies than many EIS funds. Note that the Director's fee may be paid to an independent director rather than Calculus.

- **Performance fee:** This starts when the investor has their capital returned, making it on a fund basis.

The fees and charges are quoted net of VAT. Where investee companies have sufficient VATable revenue, the VAT can be offset; however, where a project is unsuccessful, that might not be the case.

Fundraising targets

The target fundraise is £20m, with four tranche closings during the year. These will take place on the last Friday in October, January, April and June. We note that for the last few years, Calculus has comfortably exceeded a similar or larger fundraising target for its EIS funds. Hence, the number of investee companies is not likely to be dependent on the amount raised.

The minimum subscription is £50,000 per investor.

Fund Manager

Calculus Capital Limited is one of the longest established fund managers in the tax-enhanced area, with the founders still running the company. It manages a series of EIS funds as well as the Calculus VCT.

People

John Glencross – CEO and Co-Founder

A chartered accountant, he has had a long career in private equity, corporate finance and operational management. Qualifying at Peat, Marwick, Mitchell & Co, he was a founding member of Deloitte's corporate finance business, head of M&A at Philips and Drew and also an Executive Director in European Corporate Finance at UBS.

Susan McDonald – Executive Chairman and Co-Founder

Started her career in the energy, then pharmaceutical industries. She moved into the finance world at Jardine Fleming in Hong Kong and subsequently to associated companies. Was Director and Head of Asian Equity Sales at Banco Santander before founding Calculus and now has more than 28 years of experience.

Lesley Watkins – Finance Director

Accumulated 18 years of corporate finance experience at senior director level. Most of this was at UBS, but she was with Bankers Trust Alex Brown when it was purchased by Deutsche Bank. Joined Calculus in 2002.

Robert Davis – Deputy Chief Executive

A chartered accountant, he has more than 25 years of advisory experience covering a whole range of transactions, but especially M&A. As well as spells at, inter alia, JP Morgan and Robert/Jardine Fleming, he held senior roles at Avendus Capital and Nomura International. Joined Calculus in 2014.

Ken Edwards – Non-executive Director

Spent 20 years at Hill Samuel, where he rose to Managing Director of the intermediary distribution arm. He followed this with a role at Barclays Unicorn, before becoming a Director of Baillie Gifford's retail investment team for 12 years.

The Calculus investment team has eight other people: four experienced Investment Directors and four less experienced staff. The majority of the team are qualified accountants and bring experience of capital markets, mostly through corporate finance or investment banks, but also hedge funds and fund management at, inter alia, JP Morgan, Robert Fleming, Citigroup, Apollo Management and Ernst & Young.

As well as the investment team, Calculus has nine other permanent staff in finance, investor relations and marketing roles. It also employs a specialist management consultant for compliance requirements.

The Investment Committee comprises a minimum of three members. The standing members are Susan McDonald, John Glencross, Robert Davis and Richard Moore. Employees with the title "Investment Director" may be elected to the Committee on an ad hoc basis. The Investment Director responsible for a particular investment will be a member of the Committee when any matter related to that particular investment is under consideration, although three members other than that person are required to be quorate.

Appendix 1 – due diligence summary

Summary of core due diligence questions		
Investment Manager		**Validated by**
Company	Calculus Capital Limited	
Founded	1999	Hardman & Co
Type	Private limited company	Hardman & Co
Ownership	Calculus Holding Limited	Hardman & Co
FCA Registration	190854	Hardman & Co
Solvency	Yes	Calculus
EISA member	Yes	Hardman & Co
Fund Custodian	**Unquoted investments**	
Company	Calculus Nominees	Calculus
FCA Registration	Part of Calculus Capital	Hardman & Co
Fund Custodian	**Quoted investments**	
Company	Investec Wealth and Investment Ltd	Calculus
FCA Registration	124537	Hardman & Co

Source: Hardman & Co research

Regulation

Calculus Capital Limited is a limited company founded in 1999 as McDonald-Glencross Limited, changing its name to Calculus in 2005. The company has a very strong balance sheet with the last accounts (October 2017) showing £6.0m of shareholders equity and £1.4m of cash on the balance sheet. Calculus has confirmed that this is comfortably in excess of their solvency capital requirements.

Calculus Capital Limited is wholly owned by Calculus Holdings Limited. The latter is equally owned by John Glencross, Calculus CEO, and Susan McDonald, Calculus Executive Chairman, who were the co-founders of the company. The FCA permissions of Calculus Capital include permissions to act as a Custodian, as well as fund manager permissions.

Appendix 2 – example fee calculations

This calculates the estimated total amount payable to the manager under certain assumptions.

Basic assumptions

Term	5 years
Investor amount	£100,000
Company investment	£3,500,000
VAT is reclaimed by investee companies	

Source: Hardman & Co research. Five years used for consistency with other reports.

Example fee calculations

		Hardman & Co standard			Target
Gross return		**-50%**	**0%**	**50%**	**150%**
Amount (pre-tax relief)		**£100,000**	**£100,000**	**£100,000**	**£100,000**
Initial fees	**Rate**				
Transaction fee	2.00% (excl. VAT)	£2,400	£2,400	£2,400	£2,400
Setup fee	1.00% (excl. VAT)	£1,200	£1,200	£1,200	£1,200
Dealing fee	0.65%	£780	£780	£780	£780
Administration fee (two years deducted)	1.50% (excl. VAT)	£3,600	£3,600	£3,600	£3,600
Total deduction		£7,980	£7,980	£7,980	£7,980
Net investment		£92,020	£92,020	£92,020	£92,020
Company charges					
Arrangement fee	1.9%	£1,748	£1,748	£1,748	£1,748
Monitoring fee (annual)	£16,000 pro-rata	£457	£457	£457	£457
Director's fee (annual)	£14,000 pro-rata	£400	£400	£400	£400
Total over 5 years		£6,034	£6,034	£6,034	£6,034
Gross fund after investment return		£46,010	£92,020	£138,030	£230,050
Annual fees (balance)					
Administration fee	1.50% (excl. VAT)	£1,656	£1,656	£1,656	£1,656
Expenses	0.40%	£368	£368	£368	£368
Total over 5 years		£6,809	£6,809	£6,809	£6,809
Exit fees					
Dealing fee	0.65%	£299	£598	£897	£1,656
Performance	20%	£0	£0	£7,606	£26,010
Net amount to investor		£38,901	£84,612	£122,717	£195,735
Gain (pre tax relief)		-£61,099	-£15,388	£22,717	£95,735
Gain (post tax relief)		-£33,493	£12,218	£50,323	£123,341
Total fees paid		£21,123	£21,422	£29,327	£48,329

Source: Hardman & Co Research
Note: tax relief only allows for basic relief and makes no allowance for any loss relief or other benefits.
No allowance has been made for NAV movements in calculation of Administration Fee.

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The full detail is on page 26 of the full directive, which can be accessed here: http://ec.europa.eu/finance/docs/level-2-measures/mifid-delegated-regulation-2016-2031.pdf

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