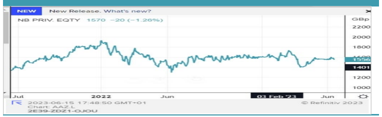
16 June 2023

Closed End Investments



Source: Refinitiv

Market data

EPIC/TKR	NBPE/NBPU
Price (£)	15.80/$20.05
12m high (£)	17.4/$20.8
12m low (£)	13.0/$15.5
Mkt cap (£m)	686
NAV (May)	£22.71/$28.15
Discount to £ NAV	30%
Free float	100%
Ctry/Ccy of listing	UK - GBP/$
Market	FTSE 250, STMM

Description

NB Private Equity Partners (NBPE) leverages the platform of its manager, Neuberger Berman (NB), including NB's relationships, deal flow and expertise, and has built a portfolio of 90+ direct investments diversified by manager, sector, geography and size. It focuses on investing in companies that benefit from secular tailwinds and/or lower cyclicality, with high barriers to entry, or the delivery of mission-critical products or services.

Company information

Chair	William Maltby
NEDs	Trudi Clark, John Falla, Louisa Symington-Mills, Wilken Von Hodenberg
Key NB Manager	Peter von Lehe, Paul Daggett

Tel: +1.214.647.9593

www.nbprivateequitypartners.com

Key shareholders (31 Dec'22)

Quilter Cheviot	13.3%
Evelyn Partners	9.0%
City of London IM	6.8%
Treasury shares	6.3%
Cazenove Capital	6.1%
New Jersey Div. of Inv.	5.3%

Diary

Mid-Jul	Jun factsheet

Analyst

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Discloser: the relevant analyst is a shareholder in NBPE.

NB PRIVATE EQUITY PARTNERS

Co-investments generating superior performance

NBPE's private equity (PE) portfolio has co-investments, alongside 55 PE managers (GPs) in 90 high-secular-growth and downside-resilient private companies. PE provides access to a different universe of companies versus public markets, and, by adding value to investee companies, has generated superior returns. Co-investments with good cashflow characteristics and potentially higher returns are especially attractive. NB adds further value in GP and co-investment selection. NBPE's 10-year share price total return is 4.2x the UK market. Exit uplifts prove a conservative NAV. Through multiple downturns, NBPE's outperformance has proved its resilience.

- **Appeals of co-investment:** Co-investment is appealing because it provides i) gross PE returns without the General Partners (GP's) costs, delivering superior long-term returns, ii) control of pacing of new investments, and the potential for earlier realisations, iii) no blind-pool risk, iv) control of diversification, v) control over the investment process, and vi) double due diligence.

- **NB added value:** To do co-investments well requires significant analytical resource, expertise and experience (to identify good investments and partners). It also needs good GP relationships, a track record of through-cycle investment, processes that respond rapidly and add value to GPs, and portfolio management. NB has them all.

- **Valuation:** The 30% discount is above that of direct peers (average 24%), and it (like peers) rose sharply in 2022, to well above historical levels. Adjusting for the legacy income-investments (7% of portfolio), NBPE's discount rises to 34%. The NAV appears resilient and conservatively valued, making the discount absolutely and relatively anomalous.

- **Risks:** Sentiment to costs, the cycle, residual positions in highly rated listed companies following IPOs in 2020-21, the duration of the discount and valuation are the key issues for NBPE, as they are across the whole listed sector. As we detail, below, they are sentiment issues, and do not reflect reality, as we see it. The benefits from the current strategy may not yet be fully appreciated.

- **Investment summary:** With over 92% of the portfolio invested in direct equity, NBPE is the most focused listed vehicle in the low-cost, attractive co-investment subsector of the market-beating PE sector. The company and GP selection have proved resilient in downturns, and consistent, large premiums on exit should give investors comfort in the NAV. Its portfolio is diversified by name, sector, GP and geographically, but it has enough concentration for individual investments to add value. The discount is anomalous with long-term, market-beating returns.

Financial summary and valuation

Year-end Dec ($m)	2019	2020	2021	2022	2023E	2024E
Interest and dividend income	13	10	6	5	7	7
Net fin. assets/liab. gains (FVTPL)	106	224	532	(76)	-	216
Total expenses	40	48	75	38	24	40
Net asset change from ops.	78	185	463	(109)	(17)	183
PE invest. ($m)	1,087	1,255	1,569	1,401	1,440	1,773
Net debt (incl. ZDP)	(184)	(189)	(46)	(66)	(86)	(176)
NAV per share ($)	19.11	22.49	31.65	28.38	31.21	36.42
NAV per share (£)	14.43	16.45	23.37	23.59	24.75	28.88
S/P prem./disc. (-) to NAV*	-16%	-29%	-21%	-33%	-36%	-45%
Dividend p/sh ($)	0.57	0.58	0.72	0.94	0.94	0.94
Yield	3.2%	3.2%	3.7%	5.5%	4.7%	4.7%
Year-end exch. rate (£:$)	1.324	1.367	1.354	1.203	1.261	1.261

**2023-24E NAV to current s/p; Source: Hardman & Co Research*

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Executive summary

Only listed vehicle focused on attractive co-investment subsector of PE

NBPE is the only UK-listed vehicle focusing exclusively on PE co-investment. The portfolio is well-balanced by individual companies, size, GPs invested alongside, maturity, residual listed holdings and geography. Co-investment has appealing cashflow characteristics, and NBPE has available liquidity of $306m, against adjusted commitments of just $44m.

Investment-positive factors

10-year performance 4.0x UK market

In our view, the key benefit to shareholders is superior returns: over 10 years, NBPE's total share return has been 4.0x the UK market, and 2.1x the MSCI World Index. NBPE's portfolio is in resilient sectors, giving it a lower risk profile. The superior returns reflect the operating performance of underlying companies and NBPE's skills in GP and investment selection.

NBPE in PE, which outperforms listed markets because of value added to investee companies

NBPE is in the attractive and growing PE market, which offers i) superior returns to listed markets, ii) returns that are driven by the value PE adds to investee companies by improving growth and profitability metrics – it is no longer a financial gearing story, iii) access companies not available on listed markets, and iv) less valuation volatility. NB and NBPE are well-positioned in this attractive market. As the outlook comment in the 2022 Report and Accounts (page 22) notes: "*For NBPE, we believe we have a high quality portfolio and at 106% invested we are under no pressure to invest and can be highly selective. Given the pricing environment for in-demand assets, excluding the possibility of follow-on activity for accretive M&A in our existing portfolio companies, we do not expect the pace of new investments to increase materially in the short term. We have a strong balance sheet and are well placed to take advantage of opportunities and benefit from an investment model that allows us to manage our new investment pacing, dependent on market conditions, deal-flow and the portfolio as a whole*".

NBPE uniquely focused on attractive co-investment subsector

Within the appealing PE market, NBPE has uniquely decided to focus on the co-investment market. For the multiple reasons given in the table below, in our view, this subsector has positive characteristics over and above the PE market as a whole.

Benefits of co-investments

Factor	Rationale
Financial returns	Co-investments, typically, have no/low GP management fees or carried interest. Analysis from Cambridge Associates indicates 0.5% incremental portfolio returns for every 10% of PE allocated to co-investment over primary funds. Blackrock analysis indicates a 2.9% higher IRR from co-investment.
Better cash management	Cashflow attractions include i) co-investment does not require five-year commitments and the associated cash drag effect, and ii) the pace of investment can be tailored to market conditions.
Asset selection standard	There is unlikely to be an adverse asset selection (where GPs could try to offload underperforming assets), because co-investment is good for GPs – they can do more deals. It also deepens relationships with 'Limited Partnerships (LPs) and builds their own franchises. Academic research confirms that there is no asset-selection bias.
No blind-pool risk	For co-investors, they are buying known companies. There is no blind-pool risk of committing to a fund but not knowing what underlying assets it will eventually buy.
Robust deal flows/sensitivity	NB saw 566 deals in 2022 (and a further 260 in 2023 to 8 June) – evidence of strong deal flow and access.
Diversification	Diversification is chosen by the end-investor, not a GP managing its fund.
Double layer of due diligence	Co-investments are reviewed by both the GP and co-investor. While it is uncommon for a major new issue to be identified, the extra pair of eyes gives comfort that target returns are achievable.
Access to inaccessible GPs	NB's scale, ability to transact and strong relationships give it access to deals led by the best GPs, whose funds have typically been heavily oversubscribed.
Flexibility on type of co-investment	Syndication processes are when the GP has already negotiated the final terms of the transaction, and the investment opportunity is on a "take it or leave it" basis from the co-investor perspective. In contrast, co-sponsor transactions are where a GP will approach a sophisticated investor like NB before final terms are agreed. Mid-life co-investment offers potentially quicker realisations and evidence of the GPs having added value.

Source: Hardman & Co Research

NB, the manager, brings incremental benefits to this value-added subsector

In addition to being in a value-added subsector of a market-beating sector, there is incremental value added by having NB as the manager. It has a substantial presence and experience in the PE market, and in co-investments specifically. Its large presence in these markets creates scale, meaning that there are resources available for multiple deals and an ability to participate in larger-ticket deals. It also brings extensive experience of the market, but also comparable deals.

NB value added in:

i) co-investment selection;

ii) GP selection;

iii) deal execution;

iv) deal access; and

v) portfolio management

In particular, we note:

- **Co-investment selection:** Based on its 2022 deal flow, NB is invested in only a small percentage of the potential deals originated by its platform, with NBPE even lower, given that (due to its developed portfolio) it does not do every deal that the NB platform does. It is resourced to conduct detailed, analytical due diligence, and has an investment process that requires approval by a committee of 13, highly experienced, PE professionals. The bottom line is that NBPE's company selection delivers a portfolio showing strong EBITDA growth, significantly ahead of the MSCI World Index.

- **GP selection:** PE has a broad distribution of returns; so, in our view, picking the right GP to invest alongside is essential if NBPE is to outperform. NB focuses on GPs with proven experience, who are investing in their core area of competency. It is highly selective in this process, and is currently invested alongside 55 GPs (compared with the 320 unique GPs whose opportunities were considered in 2022 alone).

- **Deal execution:** Only a larger investor with significant resources, such as NB, is placed to execute well. NB is positioned to do all types of co-investments, including complex co-sponsoring ones. In our opinion, NB is often viewed as a preferred partner for many GPs, and is frequently brought into a transaction early on in the process, due to NB's ability to work alongside the lead sponsor's timeline and the ability to write large equity checks.

- **Deal access:** GPs invite in co-investors; so, GP relationships are key to seeing the right deals. Some things GPs look for include i) flexibility of bite size in the capital provided, ii) certainty of finance being available, and the intent to complete deals or quickly notify of a non-interest, iii) rapid decision-making, iv) supportive partners, not just commodity finance (the latter can include input into the deal structuring, giving sellers comfort that the GP has credible finance and market information), v) clear and transparent investment processes and mandates, and vi) an investor partner who is not a competitor. Evidence of NB's attractiveness as a partner is shown in the strong growth in potential deals it originates – up from 4.4 per week in 2017 to 10.9 per week in 2022.

- Portfolio selection is an important value add, especially in diversifying risk.

NBPE's current NAV is real. Uplifts on exits (44% average over five years) is key proof.

In our view, across all listed PE, investors appear to be concerned about the reliability of the current NAV. We reach the conclusion that NBPE's NAV is real. We consider:

- Buyers of NBPE's investments, after conducting significant due diligence, have been willing to pay large premiums to NBPE's carrying value to buy them. The five-year average uplift to end-May 2023 was 44% (on the three quarters prior to the announcement).

- The NAV growth (five-year CAGR $14%, £17%) has been driven by EBITDA growth (average 2017-21: 13%, noting the portfolio changes over time and the change in methodology introduced in 2022).

- The underlying rating multiples are undemanding, and NBPE has a PEG ratio of 1.3x (average 2017-22: 1.4x).

- In our view, the sector mix is biased to high-growth, high-resilience companies, whose comparable listed companies trade at well above broad-market multiple ratings.

- The rating multiple, typically, increases gradually through NBPE's ownership (reflecting the company's improved prospects), with the sharpest increases in ratings seen only on exit (and reflected by the uplift on exit above).

- 13% of the portfolio is listed (as at end-May 2023), and so based off public prices.

- NBPE uses the valuations provided by its GPs for the valuation of the portfolio. As a co-investor, NBPE does not typically pay management fees or carry on its investments. However, more broadly, the GPs have no incentive to inflate the valuation. Management fees tend to be based on the lower of cost or value, and performance fees (the majority of their income) are paid only on exit, and are not based on interim accounting values.

- Valuations are verified by the GP's fund auditors, the GP's valuation processes, NB's valuation committee, and NBPE's board and auditors, with the key independent check being the prices paid by third parties on exit.

No evidence of selectivity in recent exits

We believe that some investors may have been concerned that there were unusually selective disposals in the challenging 2022 market, and this may have left a poorer-quality residual portfolio. We find no evidence of this at NBPE, with duration, sector concentration, revenue and EBITDA metrics all stable, indicating no material change in the quality of holdings. We also note that a core advantage of PE is its ability to optimise the timing of exits – so there is always an element of selectivity in sale. NBPE does not choose the manner or timing of exit, which is left to the lead underlying GP, and, therefore, NBPE is not able to choose specific assets over others to sell.

NBPE's NAV potential downturn resilience is supported by:

i) PE backers, strengthening the position of underlying companies;

ii) NB incrementally reducing risk in company selection; and

iii) NBPE's portfolio management

A second concern we believe investors have, marketwide, is whether the current NAV can be sustained in challenging economic times. We believe NBPE's portfolio will be resilient to any downturn, noting:

- PE-backed businesses outperform listed ones in downturns because i) they have access to committed capital, and creditors know of this support, ii) they have strategic optionality – both acquisitive and organic, iii) PE backers provide operational, financial, human resource and strategic expertise, which is unavailable to standalone entities of the same scale, iv) PE investors have a long-term perspective, with strong manager alignment, and v) PE funds are in aggregate overweight defensive sectors. Academic research shows that PE-backed companies outperform in a recession, with any drag from incremental financial gearing more than offset by improved operational performance, management and certainty in finance.

- NB has incrementally reduced risk further compared with the whole PE market through its company and GP selection. NBPE focuses on two key themes: long-term secular growth and/or companies with low expected cyclicality. NBPE seeks investments in companies with resilient business models, with the potential to grow earnings, while maintaining prudent capital structures. It has focused on companies that have pricing power, robust capital structures and GPs with good track records. Most investments have secular growth stories and multiple levers with which to generate growth. The strong outperformance through COVID-19 is evidence of this risk control.

- NBPE's portfolio positioning enhances resilience with i) sector diversification, which has seen less volatility than single-sector-listed vehicles like AUGM and

HGT, ii) GP diversity, limiting style volatility risk, and iii) company diversity, which allows strong outperformers to be visible but limits the downside risk.

NBPE has third-highest yield in AIC PE sector (2022: 4.7%). The dividend appears sustainable.

The dividend policy targets an annualised yield of 3%, or greater, of NAV. As long-term returns have been well above this level, the NAV and dividends have been growing over the medium term. The 2022 dividend gives a yield to shareholders of 4.7%, which is the third-highest in the Association of Investment Companies (AIC) PE sector. Importantly, NBPE's co-investment model and controls over the timing of new investments make it very different from Princess Private Equity (PEY), and the risk of a dividend cut appears remote.

NBPE low-cost model

In our view, one of the drivers to the outperformance of long-term returns is that the vast majority of NBPE's investments do not incur underlying GP management fees or carried interest. Its own performance fees are well below GP levels, and so NBPE is a low-cost PE model.

Action, the pan-European retail discounter, is NBPE's largest holding

NBPE's largest investment is Action, a pan-European discount retailer, with 3i as the GP investor. Given its importance to 3i, there is unusually excellent disclosure for a PE-held company. In our view, Action evidences NBPE's core objectives, including:

It is a case study of how the principles we have outlined in this report work in practice

- NB is looking for superior growth – Action registered a 27% EBITDA CAGR over 2005-22.
- NB is looking for resilient models – Action grew sales through the pandemic.
- NBPE's investments should have multiple levers for profitable growth. In Action's case, these include store expansion (currently, the network is around half the number of the potential coverage in existing markets alone), operational leverage from opening more stores, international expansion, supply chain optimisation, new products and increasing digitalisation.
- NB is looking for GPs, exploiting their core expertise – over a third of 3i's investments, by number, are in the consumer sector.
- NB is looking for differentiated models with market-leading positions – Action's price point is around 60% that of its competitors.
- NB is looking for a reasonable valuation – in our view, Action's EV/EBITDA is likely to be sub 10x within two years.
- NB's investments tend to be asset-lite – Action's capex was just 2.6% of net sales in 2022.
- NB is looking for low leverage – Action's end-2022 EV/EBITDA was 1.7x.

Proactive ESG, with closer relationship with investee companies

The percentage of the portfolio number of companies with a positive ESG impact is ca.10x those with negative ones. The co-investment model brings NBPE closer to its investee companies than, say, a funds of funds investor, which, in our view, brings benefits to implementing ESG policies.

Investment-neutral factors

Investment-neutral factors include:

i) geographical allocation;

ii) forex;

iii) managing conflicts of interest;

iv) historical fund/income investments;

v) buyback programme in place; and

vi) KID disclosure

Investment-neutral issues include:

- 73% allocation is to the US/North America (end-May 2023) – the deepest and most liquid PE markets, with good exit opportunities and a favourable regulatory environment. However, they are also the most competitive PE markets, and some academic analysis indicates that superior returns have now been fully eroded. In our view, the US still offers company-specific opportunities for an investor like NBPE (which does not pay underlying GP fees on the vast majority of co-investments), but the returns could be higher elsewhere (for greater risk).

- There is a forex exposure, with the reporting currency being $, and the shares listed in sterling and $.

- In our view, several potential conflicts of interest arise with the co-investment model. New investments are allocated by NB *pro rata* to all its funds interested in the deal (based off their indicated interest in each deal), with the process overseen by the legal and compliance teams. There are clear firewalls and compliance procedures to ensure that market knowledge is not abused.

- There was a historical allocation to funds (end-Dec'22 $7.7m, 0.5% of portfolio) and income investments (end-Dec'22 $107.3m, 7.7% portfolio, May'23 $95.7m, 6.9%), but these are being run down. However, they have depressed overall portfolio returns over the past five years compared with the co-investment portfolio.

- Modest buybacks were done in 2019-20, but there have been none since. A new programme was announced in October 2022, with a range of criteria, which was updated in April 2023. Other discount management policies include a strong communication programme and a broader-than-peer shareholder appeal, especially with NB's strong brand awareness in the US and income investors (because of the dividend). The programme is now active, with recent daily purchases generally, but not always, being around 50k shares (£750k) – details of the latest buybacks are shown on the RNS announcements, available *here*.

- We concur with the market's view that the KID methodology of calculation is not always helpful, but discounts have some correlation with the reported stress scenarios.

- The Class A & B share structure helps governance by ensuring that US regulations do not apply.

Key investment risks are:

i) sentiment to all PE being high cost;

ii) sentiment to all PE on reliability of NAV;

iii) sentiment to all PE on sustainability of NAV; and

iv) sentiment to all length of time NBPE has traded at a discount

Investment risks

The key investment risks are:

- In our view, market sentiment is that listed PE is a high-cost business, and, while NBPE has a low-cost model relative to PE peers, its ongoing charges are above the average AIC level. However, the AIC ongoing charges ratio does not include the underlying costs associated with a fund of funds or other direct strategies. While we note the sensitivity to costs, we believe investors should focus on NBPE's market-beating net returns, which are after all costs.

- In 2022, discounts widened across all PE-listed trusts, which, in our view, initially reflected scepticism about NAV valuations, especially in technology/high-growth names. Highly rated businesses, which had IPO'ed in 2020-21, saw sharp share price corrections, and, while it is hard to criticise GPs for realising at the top of the market, this meant that, in 2022, sentiment turned on the residual holdings in these names. We have outlined above why, in our view, the NBPE NAV is robust, and, looking forward, the risk from the 2020-21 IPOs is much reduced, as i) valuations have come down meaningfully, ii) the businesses continue to perform well, iii) NB is under no pressure to sell, and iv) the relative overweight in listed holdings has reduced significantly.

- We also note that, as economic conditions became more challenging through 2022, and investors adopted a risk-off approach, historical concerns rose about the resilience of the sector in a downturn. This was despite the proven outperformance of PE through the Dot.Com bust, GFC and COVID-19 crises, and incremental steps NB/NBPE have taken to reduce risk. Looking at the issues in more detail, we believe concerned investors have focused on the leverage of investee companies, the impact on realisations and cashflow, and the likely fall in multiple ratings. We believe these do not, in practice, apply to NBPE. *Inter alia*, we note that approximately 72% of the direct equity fair value at end-2022 was invested in companies that have cov-lite debt – reducing risk. We have also outlined above the superior cashflow characteristics of a co-investment model like NBPE's. Over the past several years, from an investment standpoint, NBPE has been a net seller, at a time when investment returns are especially attractive. Much of the multiple ratings effect has arguably already been seen.

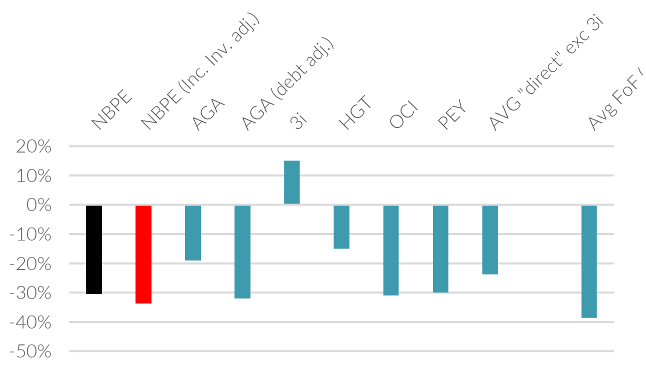
- The discount has been a feature for a long time, and so NBPE is at risk that some investors may think "it has always been on a discount and so it always will be". We note that a trading company delivering strong growth and returns above cost of capital should trade at a significant premium using the Gordon Growth Model (GGM) valuation approach – so there is a logical basis to the assumption. Additionally, other ICs have seen long-term discounts reverse (and some, which used to trade at a premium, now trade at a discount).

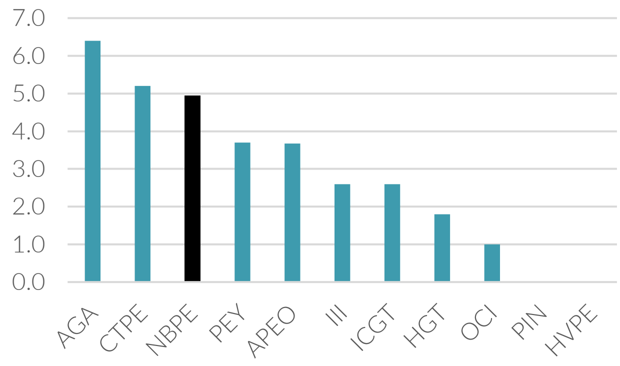
Discount above closest peers. Adjusting for income investments at par widens it further.

Valuation

The discount is above that of direct investing PE names, and is close to the fund of funds level, once adjusted for income investments. Sector-wide concerns about the validity of the current NAV and its resilience have been addressed earlier and appear to be more sentiment issues than reality.

Current share price discount to latest NAV (LHS, %), and dividend yield (RHS, %) for narrow and wider peers





Source: Company websites, factsheets and presentations, Hardman & Co Research, priced at 13 June 2023

Rerating could come in two stages – removal of sector discount and company-specific…

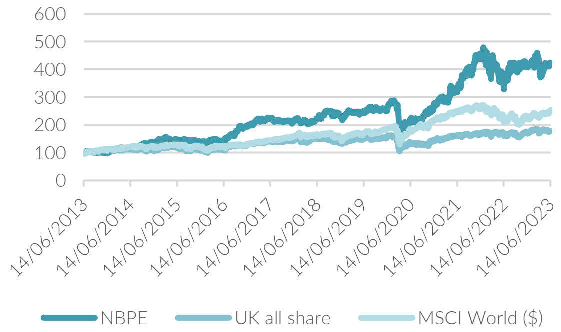
…noting that PE investment should be long-term…

…and, so, any discount narrowing is icing on the cake in terms of returns

We see two, broadly evenly split, aspects to a potential rerating.

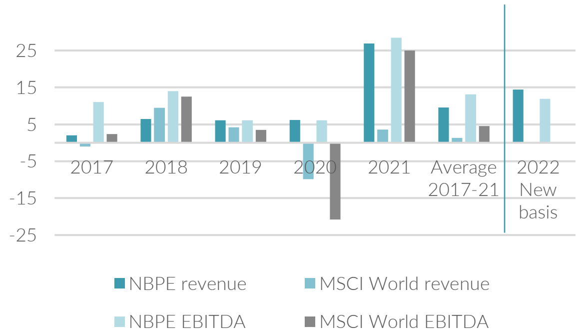
- First, is the reversal of the 2022-1Q'23 increase in PE sector-wide discounts. This could come from a greater investor appetite for risk, and more confidence in current NAVs and NAV resilience. It is likely to be helped by continued exit uplifts and above-market NAV returns. As the fall was rapid, any recovery could be too. Some progress has been seen on this in the recent past.
- The second element is company-specific, and involves the elimination of the historical average discount levels (15%-20%). This is likely to be supported by delivery of returns evidencing clearly the advantages of the co-investment model. This may take more time, but, in our view, eliminating the discount completely is just the icing on the cake.
- We see the primary investor benefit being from multi-year compounding growth well above listed market returns. PE should be considered as a long-term investment and, in this context, each element of the discount reduction is broadly just one year's worth of NAV return.

NBPE's share and benchmarks' total return, indexed to 100, 10 years ago



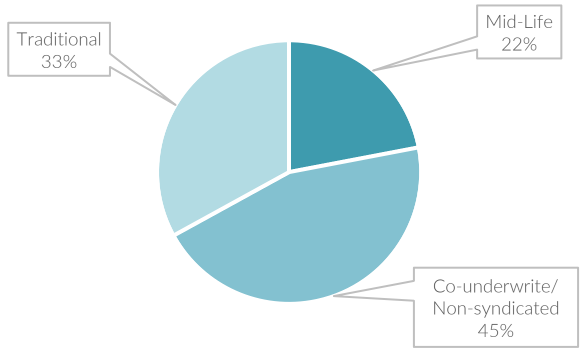
- Over the past 10 years, NBPE has outperformed the UK All-Share Index and the MSCI World Index considerably.
- Significant outperformance has been seen through all stages of the economic cycles.
- We believe the NAV is both realistic and resilient, and that, when the market values both, the share price return will move closer to the NAV return.

Key driver is revenue and EBITDA growth in underlying companies (%)



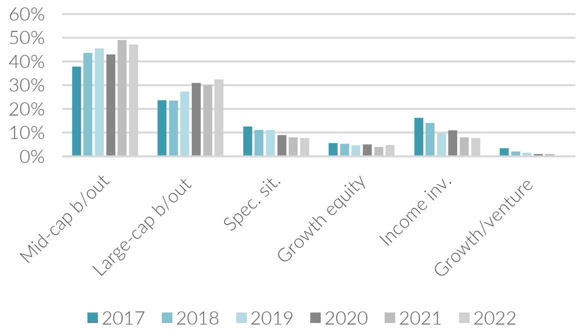
- NBPE's investee companies have consistently delivered faster EBITDA growth than the MSCI World Index. This was seen even in 2019, when new companies acquired in 2018 had yet to show the benefits of PE backing.
- Outperformance has been greatest in downturn scenarios.
- The average revenue growth for NBPE companies over 2017 to 2021 was 9.5% (unadjusted for the methodology change), against 1.3% for the index. The EBITDA average growth rate was 2.9x the index (13.1% and 4.5%, respectively).

Co-investment gives full control – mix of new deals by type of co-investment across whole NB platform (%)



- Co-investment gives the manager control over investment. This materially enhances the management of cash and allows a rapid allocation to exploit opportunities.
- NB is very selective, doing a tiny proportion of the deals it sees. The number of deals is accelerating sharply (2017 4.4 per week, 2022 10.9), creating more options and control.
- NB's long presence in co-investments and deep analytical resource mean it can choose the type of deal it does within co-investments. Typically, it is focused on more differentiated co-underwriting deals.

End-year asset class mix (%) – NBPE has a diversified portfolio



- With 90 core positions, NBPE's portfolio is balanced. It has enough concentration for individual names to enhance returns, and enough diversity to limit downside exposures.
- The bias of the portfolio (ca.50%) is to the middle market, where there are multiple levers to improve businesses and more exit options.
- There is broad sector diversity, with no sector being more than 21% of the portfolio. Subsectors focus on businesses with structural growth potential and resilience.

Source: Company data, Hardman & Co Research

What NBPE does

Summary: co-investing in businesses alongside value-adding GPs

NBPE is only UK-listed vehicle focusing exclusively on co-investment

At the heart of NBPE is a very simple model. It leverages the strength of NB's extensive platform, relationships, deal flow and expertise to co-invest in growing and resilient private companies alongside experienced GPs. By picking good GPs, who add value to their investee companies, NBPE can benefit from the superior returns seen in the attractive PE market. By co-investing, NBPE has more control over its investments, the timing of new investments and the portfolio mix, and avoids the management fee and carried interest charges that are associated with investing in a GP's fund. Academic research confirms the higher returns expected from co-investment over time, and NBPE is the only UK-listed investment company focusing so extensively on this subsector. Being listed, it democratises the opportunity to invest in this process alongside a leading PE investor.

Portfolio

Portfolio well-balanced by individual companies, size, GPs invested alongside, maturity, residual listed holdings and geography

Some of the key portfolio metrics as at end-May 2023 were:

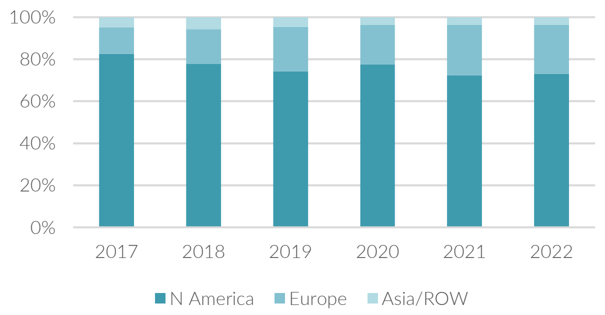
- 90 portfolio companies (and nine other, non-core legacy investments).
- 85% of the $1.4bn was in the top 50 companies. The largest holding was in 3i-managed Action (value $69m, 4.9% of NBPE's portfolio – see section on *Action* on page 37 below). This concentration is designed to give a degree of diversification, but also means that individual positions can still make a valuable and visible contribution to NAV growth.
- By value, at end-February 2023, there were 17 companies with a value in excess of $25m, 11 between $20m and $25m, 14 between $10m and $20m, and 50 companies under $10m. NBPE's portfolio is weighted towards the middle market, which has more options to add value and exits routes.
- There were 55 GPs invested alongside. These have been carefully selected – in 2022, NBPE reviewed opportunities from 320 unique GPs alone.
- The average company holding period at end-February was 4.3 years. As we show below, on pages 19-20, this has been steadily increasing since NBPE made especially heavy investments in 2018, and it is now at a level where significant holdings are reaching maturity, and so are in a "harvesting phase". As some co-investments are made mid-life, cash realisation, on average, across the portfolio is likely to take place earlier than from investing in funds, with the average life of NBPE being lower than, say, a fund of funds vehicle.
- At end-May, there were 16 public positions with a fair value of $186m (13% of total).
- Geographically, 73% is in North America (the US is the largest and deepest PE market), and 23% is in Europe.
- There is sector diversification with a bias to resilient, secular growth sectors.

$306m of available liquidity against commitments of $44m at end-May

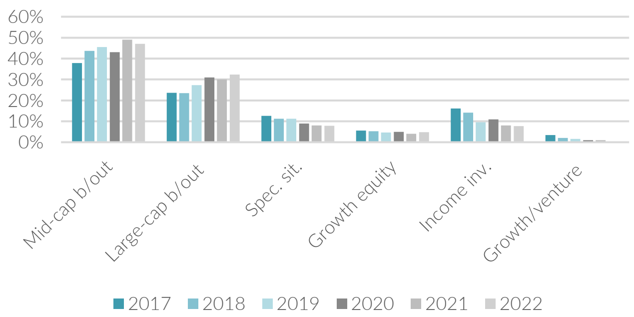
At the end of May 2023, there was cash of $6m and Zero Dividend Preference (ZDP) debt of $76m, allowing a 106% investment level as a percentage of NAV. At that date, none of the $300m credit facility was drawn, giving NBPE $306m of available liquidity. Because of the co-investment model, adjusted unfunded commitments are small ($44.4m, after an adjustment for the amounts NB views as unlikely to be called, 7x covered by the available liquidity). Its current appetite to invest reflects the quality of the portfolio, and the fact that the fund is 106% invested; so, NB is under no pressure to invest, with an uncertain outlook. It has complete control over the pace of investment.

The charts below show some of the trends in the portfolio. In FY'22, there was a continuation of trends, rather than anything dramatic, which is not surprising, given the long-term nature of NBPE's investments.

Geographical mix of assets (% portfolio value)

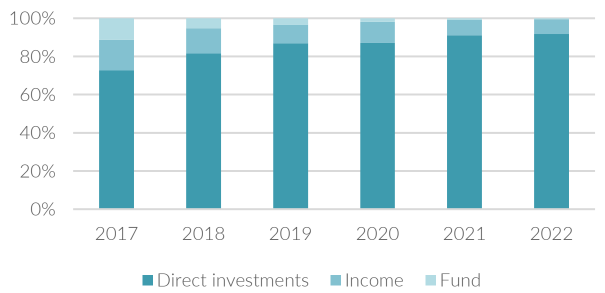


Mix by fund stage of investment (% portfolio value)

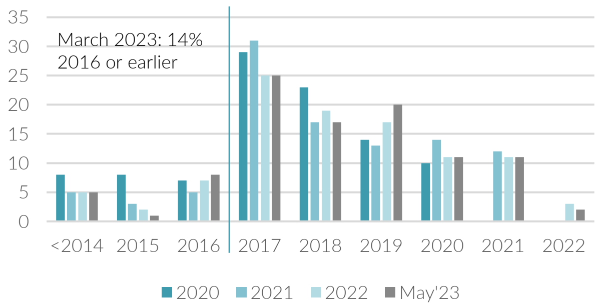


Source: NBPE Report and Accounts, Hardman & Co Research

Mix of investments (% portfolio value)

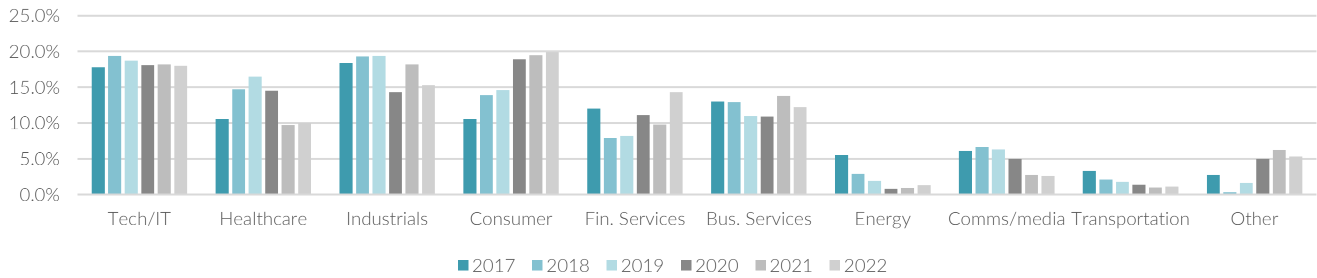


Mix by maturity of investment (% portfolio value)



Source: NBPE Report and Accounts, Hardman & Co Research

Sectoral mix of investments (% portfolio value)



Source: NBPE Report and Accounts, Hardman & Co Research

The table below gives a number of 2022 metrics, broken down by the key sectors and for recent investments.

Key 2022 metrics by sector and recent investments

	TMT	Consumer/ E-commerce	Financial Services	Business Services	Industrials	Healthcare	Recent investments
Sector fair value ($m)	289	212	181	157	146	55	n/d
Top 5 as FV	122	153	176	145	118	55	n/d
Sector % total fair value	22	16	14	12	11	4	n/d
No companies	22	14	6	7	13	5	n/d
% fair value with 2022 revenue. growth	83	100	70	99	94	100	Avg. 17% g.
% fair value with 2022 EBITDA growth	59	47% sector >40% g	52% of sector >15%	38% of sector >15%	63%, 54% of sector >15%	76	Avg. 20% g.
% fair value that was EBITDA-positive	83	100	100	99	100	100	n/d
EV/LTM EBITDA	18.6	15.7	13.3	13.0	14.0	16.1	16.4
Net debt/LTM EBITDA	6.7	3.7	5.3	5.7	6.1	3.0	6.5

Note: A few companies have been excluded from the sector analysis because their business dynamics make measurement by metrics such as EBITDA inappropriate. There are thus minor variances between this table and the chart directly above. Source: NBPE, Hardman and Co Research

The key messages we take from this are:

- TMT is the most diversified of the sectors, with the top five companies accounting for just 42% of the sector fair value.
- Strong revenue and EBITDA growth has been seen across all sectors. In its commentary on why there had been a limited number of EBITDA declines, NBPE noted that i) the vast majority of companies remained profitable and showed growing revenue, ii) the majority of declines were small, iii) in TMT, two companies were investing for future growth, and one was transitioning to a subscription pricing model, and iv) the operating environment was more challenging (especially in TMT consumer/E-commerce), with marketwide pressures on costs and supply chains.
- In all sectors, excluding TMT, the businesses are currently EBITDA-positive. NBPE's core is investing in relatively mature businesses with profits, not loss-making venture businesses.
- There is a wide dispersion of valuation multiples, with financial services, business services and industrials at approximately three quarters of the TMT sector.
- Debt multiples show a similar dispersion, with consumer at just over half TMT. NBPE manages the debt by company, with EBITDA and cash generation being the keys to the level of acceptable debt.
- New businesses are showing above-average revenue and EBITDA growth.

Investment attractions

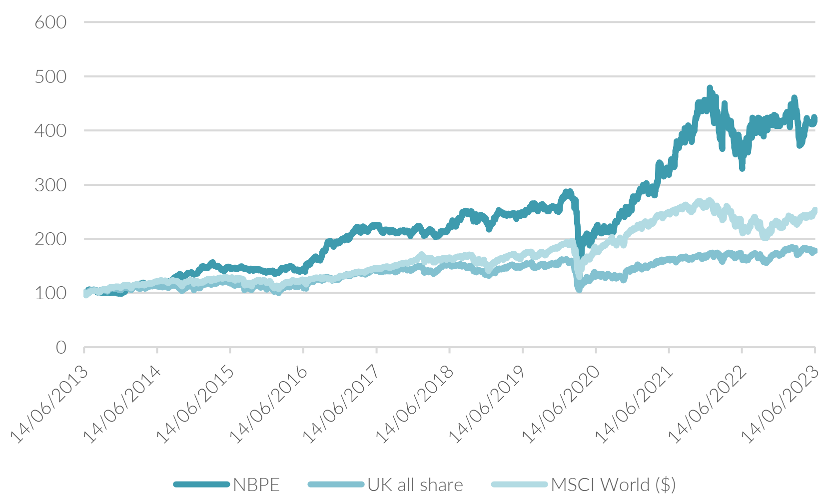
Investors: long-term, market-beating performance

The key benefit to shareholders is superior returns

Over 10 years, NBPE's share total return has been 4.0x the UK market and 2.1x the MSCI World Index

Over the past 10 years, NBPE's share total return has not only massively outperformed UK indices (4.0x the return), but it has also beaten the MSCI World Index (2.1x). The share price return is below the NAV return because of the wider-than-average discount. A closing of the discount to historical levels would see further outperformance against these benchmarks.

NBPE's share price total return compared with benchmarks (indexed to IPO)



Source: Refinitiv accessed 13 June, Hardman & Co Research

Consistent NAV outperformance through range of economic conditions

The *May 2023 Factsheet update* highlighted that the cumulative NAV total return had beaten the MSCI World Index over each of three, five and 10 years, showing a consistency in performance through all economic conditions.

Cumulative total return (percentage) as of 31 May 2023

Number of years	Three	Five	Ten
NBPE $ NAV	79.4	88.6	224.5
MSCI World Index	38.6	49.2	140.5
NBPE annualised rate	21.5	13.5	12.5

Source: NBPE, Hardman and Co Research

Driven by value added to companies

The May investor update also noted a 16.6% gross IRR over five years, with realisations at 2.4x cost. This has not happened by accident but reflects the value added by NB in selecting the right co-investment opportunities and partners that add value to their investee companies.

PE is an attractive, growing market

PE attractive and growing market

Still small part of total assets managed, leaving room for further growth

The starting point in considering NBPE is that it is operating in a highly attractive and growing market. The value added by PE can be seen from the rapidly growing number of US and European PE-backed companies (to ca.22.3k in the 10 years to 2021, from 7.2k in 2012). In contrast, the number of listed companies has fallen by nearly 2% over the same period. In the US, at end-2022, there were twice the number of PE-backed businesses compared with listed ones (9,958 vs. 4,805), having been equal in number as recently as 2010.[1] Despite this historical growth, PE remains a small fraction of listed markets, and the majority of surveys indicate increased allocations by most investor groups.[2]

The key factors that make the market attractive are:

Superior returns

- PE investor returns have beaten listed markets. This has been achieved because PE adds value to its investee companies. There are a range of strategies by which this is achieved, but the characterisation of leverage and asset-stripping is outdated and misplaced. The modern PE business is about operational improvement and growth. The Invest Europe 2022 Private Equity at Work report highlighted that the net job creation in European PE-backed businesses over 2019-20 was +2%, a 3.6% better performance than the 1.6% job contraction seen in European companies overall.

Access to innovation and disruptor companies

- PE gives access to exposures unavailable on public markets. According to the Bain Global Private Equity Report 2023, fewer than 15% of companies with revenue of over $100m are publicly held. Companies are staying private for longer. For example, technology companies, on average, are staying private for an extra two to three years, compared with a decade ago, and the average IPO valuation is consequently significantly larger. Amazon's market capitalisation at IPO was a mere $438m in 1997, while Facebook and Uber IPO'ed with market caps of ca.$104bn and ca.$82bn, respectively. More of the value chain is being captured in the private stage of company ownership.

Returns driven by PE adding value to their investee companies

No longer just a financial gearing story

- The tools by which PE adds value include:
    - Very extensive due diligence before an acquisition is made to give a deeper understanding of the company than is present with most public investors.
    - Optionality created for strategic change, with both the financial resources and expertise to execute M&A.
    - Operational improvements, which are not available to standalone businesses of a similar scale. These often include digitalising business models, access to human resources, specialist marketing skills and cross-fertilising best practice from one investment to another. During COVID-19, for example, lessons learnt in the countries affected early on gave investee companies in later-impacted countries a head start on managing supply chains and the lockdown restrictions. The scale of the PE backer brings both resource and sector-wide expertise.
    - Stronger alignment of interests, with the business management teams and GPs fully aligned and incentivised to deliver market-beating returns for investors.

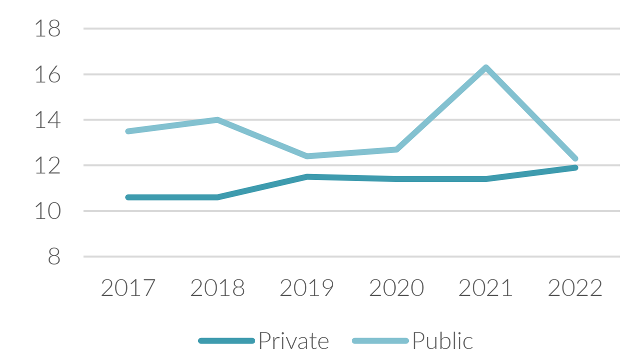
[1] Source: NBPE March 2023 investor update citing Pitchbook
[2] *https://www.privateequitywire.co.uk/2022/03/15/312892/rise-private-equity-allocations-looks-unstoppable-now*

- A long-term investment horizon, which prioritises fundamental value creation over short-term profits required to meet market expectations. It also means that PE backers build in downside scenarios, as their holding period is likely to cover a range of economic conditions.

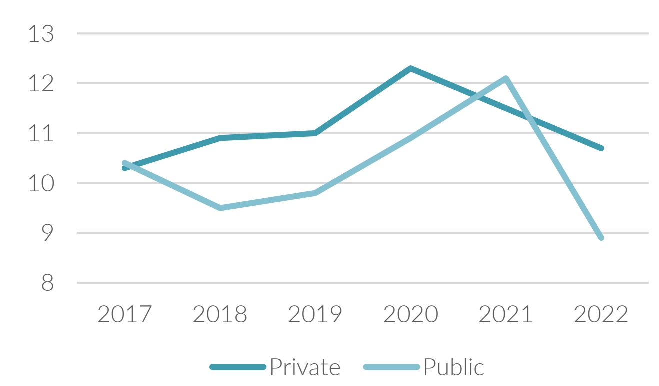
Less valuation volatility

- Valuations in PE, typically, show less volatility than listed markets. We review NBPE's specific approach in the section *NBPE: conservative NAV* below. Marketwide, however, we believe the business and sector concentrations, the timing of reporting (monthly/quarterly, not real-time) and the mix of using deal metrics and discounted cashflow approaches, as well as market comparative ratings, (typically discounted) lead to a naturally lower volatility. This is most evident in the mature US market (2017-22 EV/EBITDA ranges: public 12.4x to 16.3x, PE 10.6x to 11.9x), but it still applies in Europe (ranges: public 8.9x to 12.1x, PE 10.2x to 12.3x – see charts below). The bottom line is that, across the industry, there are consistent uplifts on exits, and there are no incentives for GPs to inflate valuations; so, we consider valuations to be real.

US – EV/EBITDA multiple for new deals



Europe – EV/EBITDA multiple for new deals



Source: NBPE March 2023 investor update, citing S&P LCD and S&P capital IQ, Hardman & Co Research

Current conditions

For NBPE, this means period of realisations below 2021 peak levels, combined with continued investment

After an exceptional year in 2021, activity in 2022 slowed. Cash received from the sale of, and distributions from, PE investments was ca.$120m, approximately 60% the 2020 level, while purchases of, and contributions to, PE investments fell to $40m, approximately half the 2020 level, and down on pre-pandemic levels. Year-to-date *pro forma* cash receipts reported in the June investor presentation are $55m.

- However, we believe the picture is more nuanced than a marketwide slowdown. Activity and pricing in resilient sectors with secular growth (to which NBPE is biased) are holding up relatively well, and other sectors have slowed more sharply. This also applies within sectors – so subsector activity can vary sharply between, say, e-commerce-driven consumer compared with general retailing. NBPE's unique co-investment focus means that it has complete control over its own pacing of investment, which, at present, reflects current market uncertainties.

- There remains significant dry powder within the larger PE funds (sometimes buyers of NBPE's investee companies). The market feedback we have received is that debt financing remains available for well-backed PE deals, even though it is more selectively available than in, say, 2021. In its recent CMD, HGT devoted a presentation to financing, and our takeaway was that pricing, covenants and availability of finance were all virtually unchanged.

- In our view, the weakness in listed market ratings has led to a dichotomy between sellers (looking for historical valuations) and buyers (looking at current ratings), which will keep deal volumes subdued until 2H'23, at the earliest.

We note that returns from investments made in challenging macroeconomic environments can be above-average. Weak standalone businesses have a greater need for strong partners, and large corporations dispose of non-core assets to strengthen their group finances.

Co-investment is an attractive subsector

Investors can access attractive deals on lower fee structure. Academic analysis confirms superior returns over time.

NBPE has chosen to focus on the co-investment subsector of PE. The key attractions are summarised in the table below. In terms of financial returns, we note the superior returns identified in long-term analyses by Cambridge Associates and Braun, Jenkinson and Schemmerl, who noted the superior performance, lower cost and use of co-investment by GPs to build LP relationships ahead of fund raises.[3]

Benefits of co-investments

Factor	Rationale
Financial returns	Co-investments, typically, have no/low GP management fees or carried interest. Analysis by Cambridge Associates indicates 0.5% incremental portfolio returns for every 10% of PE allocated to co-investment over primary funds. Blackrock analysis indicates a 2.9% higher IRR from co-investment.
Better cash management	Cashflow attractions include i) co-investment does not require five-year commitments and associated cash drag effect, and ii) the pace of investment can be tailored to market conditions. NBPE's end-Feb'23 average maturity was 4.3 years, below market of 5+ years.
Asset selection standard	There is unlikely to be an adverse asset selection (where GPs could try to offload underperforming assets), because co-investment is good for GPs – they can do more deals, it deepens relationships with LPs and builds their own franchises. Academic research confirms that there is no asset-selection bias.
No blind-pool risk	For co-investors, they are buying known companies. There is no blind-pool risk of committing to a fund, but not knowing what underlying assets it will eventually buy.
Robust deal flows/sensitivity	NB saw 566 deals in 2022 (and a further 260 in 2023 to 8 June) – evidence of strong deal flow and access.
Diversification	Diversification is chosen by the end-investor, not a GP managing its fund.
Double layer of due diligence	Co-investments are reviewed in great detail by both the GP and co-investor. While it is uncommon for a major new issue to be identified, the extra pair of eyes gives comfort that target returns are achievable.
Access to inaccessible GPs	Co-investments give the opportunity to access deals led by the best GPs, whose heavily oversubscribed funds may see only limited allocations, even to the closest LPs.
Flexibility on type of co-investment	Syndication processes are when the GP has already negotiated the final terms of the transaction, and the investment opportunity is on a "take it or leave it" basis from the co-investor perspective. In contrast, co-sponsor transactions are where a GP will approach a sophisticated investor like NB before final terms are agreed. Mid-life co-investment offers potentially quicker realisations and evidence of the GPs having added value.

Source: Hardman & Co Research

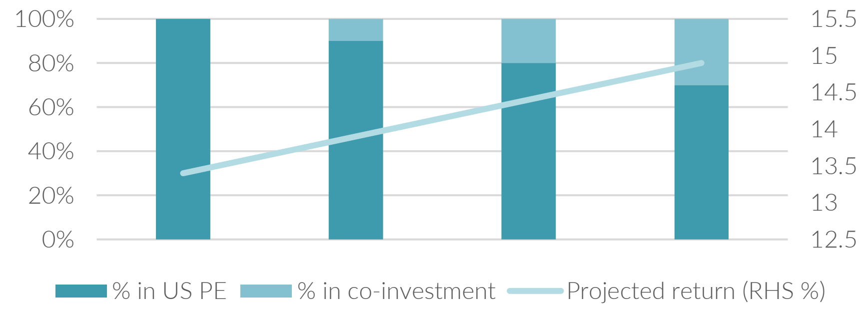
Co-investment generates superior returns

Cambridge analysis indicates 0.5% incremental portfolio returns for every 10% of PE allocated to co-investment over primary funds

The main benefit for investors being in co-investments is superior returns. They get the PE investment level of a gross return, but do not have to pay the full PE management fees or carried interest, so the net return is higher. Cambridge Associates looked at the incremental returns generated as a consequence, and estimated them at 0.5% p.a. for every 10% allocation away from primary PE funds to co-investments (see chart below).

[3] https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2871458

Projected return (RHS, %) by different mix of co-investments



Source: 2018 Cambridge Associates analysis,[4] Hardman & Co Research

Blackrock analysis indicates 2.9% higher IRR

A Blackrock analysis indicates that co-investment funds outperform primary funds in 9 out of 10 vintage years, and that the IRR spread is 2.9% on average.[5] The same review noted that lower costs increase median returns by 23% from primary market to co-investment funds.

Co-investments better for cash management

Cashflow attractions include:

NBPE targets an investment level over 100% (December 2022 105%, May 2023 106%); so, some intermittent use of its $300m credit line is to be expected. The level in any period will be driven by the investment and realisation opportunities (it was undrawn at end-2021 because of the record realisations that year). NBPE's focus on co-investment means it can prudently adopt such a level of gearing, because:

…it does not make 10-year commitments…

- There is no five-to seven-year potential call on cashflows that new investors into PE funds have to make. As at May 2023, unfunded commitments totalled just $44m, 7x covered by the then available liquidity and just 1/32nd of the portfolio. NBPE does not have to keep high cash balances (or liquidity lines) to support these multi-year commitments, reducing the cash drag on returns.

…the pace of investment can be tailored to market conditions…

- By investing on a deal-by-deal basis, NB can adjust the pace of investment. Being a reliable co-investment partner has real value in accessing the best deal flow, especially from hard-to-access GPs, but NB has the option of not investing at any time, and so NBPE's cashflows are more flexible. In addition, NBPE invests in co-investments, which are typically management fee and carried interest fee-free, with the benefits this brings to cashflow management. A Blackrock analysis estimates that a co-investment allocation of 20%-30% can reduce the J-curve by 12-18 months compared with a portfolio of 100% primary funds.[6]

…with some structures, potentially quicker time to realisation

- In many cases, NBPE is investing some years into the PE cycle (22% for deals 2009-1Q'22),[7] which means that the return on its investment is potentially quicker than when cash is committed at the initial investment stage. The chart on the next page shows the average maturity of the portfolio, which, at end-Feb'23, was 4.3 years, against 4.8 years at end-November 2022 at Pantheon International.

[4] https://www.cambridgeassociates.com/insight/co-investment-framework/
[5] https://www.blackrock.com/institutions/en-axj/literature/investment-guide/the-advantages-of-private-equity-co-investments.pdf
[6] https://www.blackrock.com/institutions/en-axj/literature/investment-guide/the-advantages-of-private-equity-co-investments.pdf
[7] Source NBPE 2022 Capital Markets Day presentation slide 25

Credit facility of $300m, against peak year-end borrowings of $60m. No utilisation at end-May 2023.

NB has adopted a very conservative approach to NBPE's credit facility. The level was increased to $300m in May 2020, even though its peak year-end reported usage in 2017-22 was $60m. It is a 10-year facility. The main covenant is reasonable – the loan to value (LTV) cannot exceed 45% (at end-Mar'23, this would have allowed $628m of borrowing). Pricing, is, as expected, relatively low – LIBOR or 1% plus 2.875% p.a. The commitment fee is 0.55% p.a. on the average daily unutilised facility. There is also a minimum drawing requirement (30% of the facility), which, if not used, still sees interest accrue on that amount.

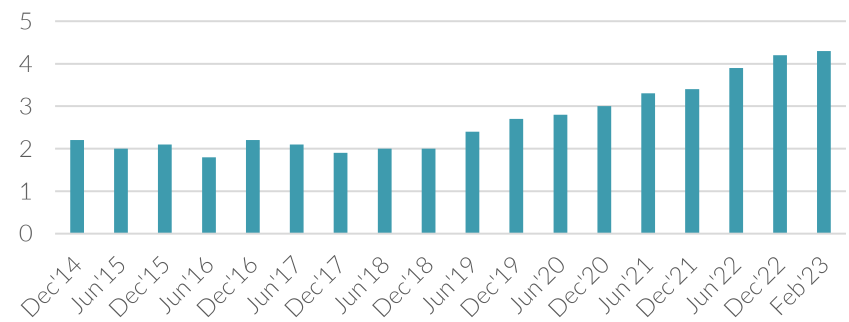
Also uses long-term debt via ZDPs

To diversify and extend the duration of financing, NBPE has also made use of ZDPs. The relative attractiveness of this option will depend on market conditions at any given time. As of 31 December 2022, there were 50m ZDP shares outstanding, at a gross redemption yield of 4.25%, and which will have a final capital entitlement of 130.63p per share on the repayment date of 30 October 2024 (cost £65.3m). These liabilities are accounted for at fair value; so there can be modest changes in the NAV as a consequence (the currency risk for the $ reporting means that NBPE has been hedged, at times, with forward foreign exchange contracts or through underlying GBP company exposure).

Average duration of book is 4.3 years, below market of 5+ years

We note, from NBPE's *March 2023 investor update,* that the average company holding period is 4.3 years (end-February 2023). This is below the PE market average, which is over five years. The rise in the past few years is because of heavy investment made in 2017-18, which is now reaching maturity.

Average age profile (years)



Source: NBPE, Hardman & Co Research

No adverse selection, as GPs benefit from co-investors

Co-investment structures allow GPs to do deals they otherwise could not

One investor concern is whether GPs could try to offload underperforming positions to investors to enhance their residual portfolios. We believe this is not the case, and detail below why a GP would want to bring in an LP co-investor:

Syndicating to other PE firms deepens relationships with LPs, builds their own franchises and gives an independent valuation check

- **Portfolio management:** The deal size could be too large for a GP's fund. A large deal could breach concentration restrictions on, say, sector or geographical exposure.

No incentive to use their underperforming assets

- **Portfolio diversification:** Using co-investors' capital, a GP's funds can be invested in a greater number of deals, diversifying risk. This also broadens the GP's franchise, brand and market knowledge.

- **Investment constraints:** Another situation might be where a GP has been invested in a company for 6-12 months, and is constrained from investing in an otherwise interesting follow-on opportunity. In these cases, bringing in a co-investor can provide further capital, which is critical in helping that company to reach its full potential.

- **Deepen LP relationship:** Co-investing is also a way to deepen the relationship with an LP, which could assist in future fundraising activities by the GP. Doing a co-investment deal means an LP knows the GP's investment process and can bring the parties closer together.

- **Maintain control:** A co-investment means one GP can avoid partnering with other GPs with whom the working relationship may be more difficult.

- **Independent valuations:** By bringing on a co-investor mid-life, there is a third-party valuation of the investment at an interim stage of the holding period. This independent assessment may see an uplift, but, more importantly, it gives confirmation to the GP's fund investors that the current valuations are realistic. The value of such a view rises in periods of stock market uncertainty.

Academic research[8] shows no evidence of adverse or positive asset selection.

No blind-pool risk

Co-investments are into known companies – so there is no blind-pool risk

With a primary PE fund, LPs make multi-year commitments upfront, without knowing what specific assets the fund is going to buy. The LP is dependent on its assessment of, and trust in, the GP. With a co-investment, the LP is investing alongside the GP, who maintains control over the asset's performance. GP selection is thus important. However, the company being invested in is known. LPs can analyse its performance directly and incrementally to their view of the GP, while building a bespoke portfolio on a deal-by-deal basis.

Diversification

Diversification is chosen by the end-investor, not a GP managing its fund

In the *Portfolio* section earlier in this report, we noted NBPE's current diversification by company, GP, geography, sector and maturity. NB's disciplined approach to co-investment selection results in a portfolio where an individual company's exceptional performance can make a visible difference to the overall NAV return, but, at the same time, there is not an over-concentration where problems at one investment would have an overly adverse effect. While most academic research suggests that 20-30 holdings are required to achieve diversification, they typically focus on liquid listed markets. A higher number is appropriate when considering less liquid, private assets.

Robust deal flows/sensitivity

NB saw 566 deals in 2022 – evidence of strong deal flow and access

A large, professional, through-cycle co-investor, like NB/NBPE, sees a large flow of potential deals from which to make a selection. NB, in 2022, saw 566 opportunities, and we discuss this in more detail in the *Deal access* section below (see page 22).

Flexibility on type of co-investment

NB has flexibility to join a co-investment syndicate, co-sponsor a deal at the start, or invest in a mid-life opportunity

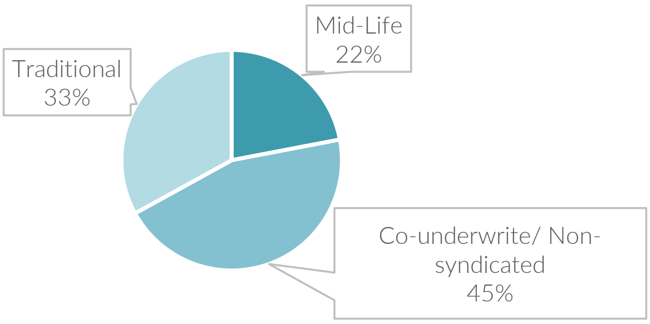
Each type of co-investment has specific appeals, and NBPE has invested in them all

Many of the benefits we have outlined above are applicable to the whole co-investment market. However, it is important to recognise that there are different types of co-investment, and NB accesses them all. The chart below shows that only a third of NBPE's investments were traditional deals, where the GP syndicates a position after final terms have been agreed and where, for investors, it is a "take it or leave it" situation. Owing to its scale and resources, NB is often viewed as a preferred partner, and is brought in early in a transaction where there may be only a small number of potential co-investors evaluating a transaction. Nearly a half have been where NB is co-underwriting the deal, and has all of the pre-acquisition due diligence material. From these deals, NB can better understand the GP's approach, and may allow a greater size of investment than on a syndicated deal. The remaining fifth are where NB makes an investment after the initial deal, often to finance bolt-

[8] Reiner Braun, Tim Jenkinson, Christoph Schemmerl. Adverse selection and the performance of private equity co-investments. Journal of Financial Economics, 2020, vol. 136 (1), 44-62.

on acquisitions. At this stage, the progress made under PE ownership is often visible, and the duration to exit significantly reduced.

Mix of deals by type, 2009-1Q'22



Source: NBPE, Hardman & Co Research

Incremental due diligence

Co-investments see second pair of eyes

The target company is subject not only to due diligence by the GP but also by each of the co-investees. The latter may have a broad sector knowledge and experience, which is especially valuable where the GP is focused on a specific niche. LPs will have seen comparable deals, and, where the purchase is from another PE house, they may already have seen the target company as a holding in a different GP's funds. The co-investees' insights may have a greater geographical reach.

Access to inaccessible GPs

Access to inaccessible GPs

Getting access to, or desired allocations from, the best GPs can be problematic. Co-investment is, typically, provided to LPs of the PE funds managed by the GP. The level of allocation in a particular co-investment depends on a number of factors, including the ability to analyse the transaction, write the equity check and meet the deal timetable. NB manages over $36bn of commitments to fund investments across a large network of underlying PE managers; these are relationships that are developed over a period of many years.

Risks in co-investment

Risks include resource intensity, selectivity in co-investments offered, complexity of deals and return volatility

Some of the risks of co-investment include i) it is very resource-intensive, requiring analysis of companies, in addition to understanding the GP, ii) some commentators believe GPs have an adverse selection bias – i.e. they keep the best deals for the funds and allow weaker deals to be co-invested (the academic evidence and NBPE's proprietary research do not support such a view), iii) deals can be complex, introducing deal execution risk, and iv) return volatility on individual deals, both positive and negative, may be more than the fund investment in aggregate. In our view, NBPE carefully manages the diversity and sizing of deals with this volatility in mind.

Value added by NB as the manager

NB has a substantial presence and experience in PE market, and co-investment specifically

NB has a substantial presence in PE investments. Since inception in 1987 to March 2023, the PE team made $115bn+ in capital commitments, including $33bn to co-investments. It has active commitments to ca.650 active PE investments, and sits on 265+ advisory board seats. NB Private Markets has a team of over 300 PE professionals across 14 offices globally (210+ working in primary and co-investments). The large, stable team includes 77 senior investment professionals with an average of over 22 years of experience (more details on the manager can be found *here*).

Scale means resources available for multiple deals, access to larger-ticket deals, more experience

NB's scale means that it can undertake multiple deals simultaneously, and give GPs the rapid and professional partnership they desire. Its experience means that it often knows the GPs' processes intimately, which makes for a much smoother deal execution, and provides much more to the GP than syndication deals. It has been a consistent investor, which is important to GPs. NB's investment approach means that its investee companies benefit from two core themes: long-term secular growth and businesses with low expected economic cyclicality. The sections below highlight how this platform is leveraged to NBPE's advantage.

Co-investment selection

Actual investment made in only ca.2%-3% of potential deals originated

NB focuses on i) sound business models, with sustainable competitive advantages, ii) multiple and clear options for value creation, and iii) a prudent capital structure. The selection process means that, in a typical year, potential deals are quickly screened down by ca.90% to deals where due diligence is actually undertaken with a smaller number of deals actually completed.

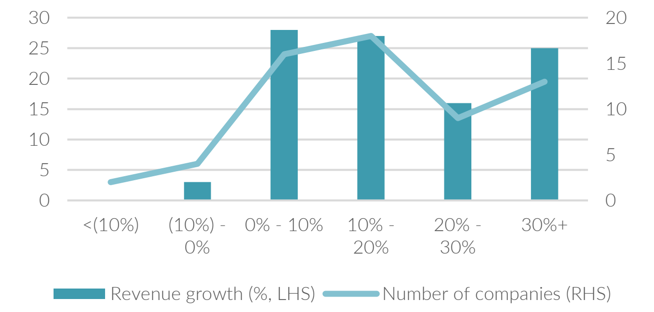
NB's processes ensure rapid decision-making, combined with deep experience and broad input

NB's processes are designed to meet both its and a GP's needs. Initial applications see a deal team assembled with the relevant experience for the deal (this does not always include the GP relationship manager). The application is reviewed quickly by a small screening committee, which includes investment committee members, in order to give a rapid initial indication to the GP of intent. GPs want certainty, and a quick "no" is much better than prolonged procrastination. Unsurprisingly, the most frequent causes for a decline are price, business model and capital structure. GPs seeking a co-investment outside their core area of expertise also face further scrutiny. After several reviews by a screening committee, an application is taken to the investment committee (13 experienced professionals), which typically meets once a week – again to ensure a rapid service to GPs. Applications are still declined at this stage, although relatively rarely, as it is a simple majority vote, and some investment committee members may weigh factors differently from the screening committee members. Examples given of different views include why the vendor is selling and the value given to the sponsor, as well as ESG, which is a fundamental part of the process.

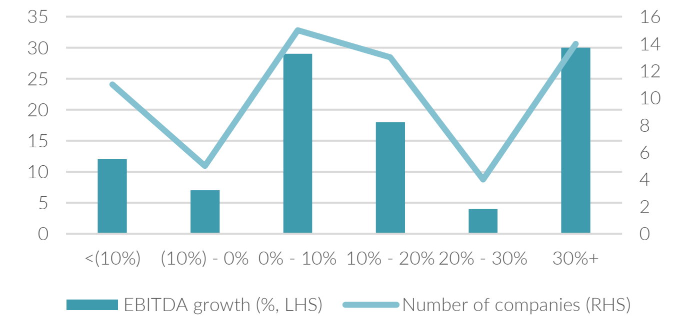
Bottom-line result is superior growth from NB-backed co-investments

The result of this selection process is a portfolio of companies that show revenue and EBITDA growth well ahead of the market (2022: 14.4% and 11.9%, respectively – see page 11), as outlined earlier. Importantly, the distribution disclosure shows that the growth is well-spread across the companies, with 95% of the portfolio at the time of the 2022 Capital Markets Day delivering revenue growth, and over 50% showing EBITDA growth in excess of 10%. A quarter, or more, of the portfolio showed more than 30% growth in revenue or EBITDA. Importantly, the concentration of the portfolio means that NB has good visibility on the drivers of both revenue and EBITDA growth, and the potential risks to them in the future.

Mix of portfolio by LTM revenue growth



Mix of portfolio by LTM EBITDA growth



Note: data LTM to June 2022; Source: NBPE 2022 Capital Market Day presentation, slide 39, Hardman & Co Research

PE has broad distribution of returns – so picking the right GP is core

NBPE is currently invested alongside 55 GPs

In 2022 alone, applications were considered from 320 GPs

Ultimate evidence is post-cost returns, and NBPE has a market-beating performance

GP selection

PE can see sharp variances between the quartile performances. The McKinsey Global Private Market Review[9] noted that the 10-year average inter-quartile spread of returns was 34% (2022 still 22%), making GP selection critical. Neuberger Berman's co-investment strategy focuses on partnering with the right GP, whose experience matches the opportunity. To put the intensity of the selection into perspective, NBPE is invested alongside 55 GPs, with NB having reviewed opportunities from 320 unique GPs in 2022 alone.

NB filters its GPs for a number of factors, which include i) deep sector expertise, such as technology, industrials or financial services, ii) geographical focus, iii) the ability and track record of investing in complex transactions, and iv) generating value through accretive bolt-on acquisitions. This does not exclude GPs whose funds it has not yet invested in, but NB has advised that such GPs are likely to face a greater degree of caution than ones that it knows well.

In terms of assessing NB's GP selection, the publicly available data on GP fund performance is, in our view, of limited value. NB is not investing in GP funds, and we have had little success in robustly trying to assess, on a consistent basis, the performance of GPs related to co-investments held by NBPE. The bottom line is, of course, post-cost returns and, as we have identified above, NBPE has outperformed over the past 10 years.

Only a larger investor with significant resources, such as NB, can execute well

NB positioned to do all types of co-investments, including higher-margin co-sponsoring

Deal execution

Co-investments are not the easiest asset class for PE investors. First, investors need access, which typically comes through the form of a limited partner relationship. Secondly, they need a large-enough network of GP relationships to achieve diversification across co-investments. In addition, co-investments require not only a skill set in identifying the right GP with which to partner, but also the expertise to understand specific companies and complex deal structures. To execute this well requires expertise and significant resource, creating high barriers to entry. The chart on page 22 shows the nature of investments from 2009 to 1Q'22 (as presented at the 2022 Capital Markets Day), and demonstrates NBPE's bias to more complex deals.

GPs invite in co-investors, so GP relationships are key to deal access

Deal access

The key to co-investments is the breadth, depth and duration of the GP contacts. The importance of GP relationships in co-investments is absolute, in that an LP, like NBPE, has to be invited into a deal. GPs can pick from a range of finance providers, and, so, it is important to understand NB's competitive advantages in being selected by GPs. In our view, they are often looking for more than commoditised finance, and rather a partner bringing professionalism and rapid decision-making, and often expertise and solutions, to the table.

Some of NB's key advantages include:

Flexibility of bite size, certainty of finance being available and intent are important considerations in capital provided

- Providing capital:
  - Across NB's platform, there is a broad spectrum of deal sizes, but it can be involved in opportunities as large as several hundred million dollars. Not all co-investors can match this range. NBPE's share of the deal can vary enormously, as allocation is made across the NB platform based off the pro rata funds of each interested fund, and the number of other funds can vary

[9] https://www.mckinsey.com/industries/private-equity-and-principal-investors/our-insights/mckinseys-private-markets-annual-review

by deal. NBPE, typically, invests 1%-2% of its portfolio value at the time of a new investment (see section *Managing potential conflicts of interest* below).

- In good economic times, NBPE faces co-investment competition from many PE investors. When economic conditions become more challenging, less experienced and more short-term-orientated investors tend to withdraw. In contrast, NBPE has been a consistent investor through economic cycles. In addition, across the whole NB platform, further through-cycle investments are being made, giving a presence NBPE would not have as a standalone entity. By way of example, the 2020 cash used to purchase, and make contributions to, PE investments was $126m, against $121m in 2019. We believe GPs value a partner who is consistent in making investments, rather than one who is in and out of the market.

- Certainty of intent is important. Hamilton Lane data (2016-18) showed that, for half the GPs it surveyed, less than a quarter of LPs who asked for co-investment opportunities were actually transacting on them. This is a huge potential waste of resource for the GPs who engage with those LPs. NB has deep relationships, and very quickly lets GPs know whether or not it has a genuine interest in a project, and does not waste a GP's time at a critical point of the deal.

Rapid decision-making important

- At the point of seeking co-investors, GPs are often time-constrained, and so are looking for quick feedback on proposed transactions. As noted above, NB has established procedures to deliver exactly that.

GPs wanting supportive partner, in addition to just commodity finance

Can be input into deal structuring, providing sellers with comfort of credible finance and market information

Clear and transparent processes, and mandate to ensure rapid deal progression, also help the GP

- GPs are often looking for more than just finance.
  - GPs are often looking for their co-investors to help with deal solutions, as well as finance. For example, sponsors are increasingly bringing their LP co-investors on board during the exclusivity periods, or at the bidding stage, rather than just once a deal has been agreed.
  - They are looking for partners who can move alongside their process and give potential vendors comfort that the proposed offer is credible. This requires a large, long-established, consistent and expert co-investor, such as NB, who has been active in co-investments since 2006.
  - They are also often looking for market information that may affect the deal and its terms. NB's broad reach across the whole PE market and large team of specialist research analysts mean that it can provide input into deals that the GP may not have.
  - The GP is looking for an investor whose processes and portfolio demands are well-known, so as to limit execution risks. It is a two-way flow, as involvement in such deals provides NB with invaluable insight into the workings and mindsets of its GPs.

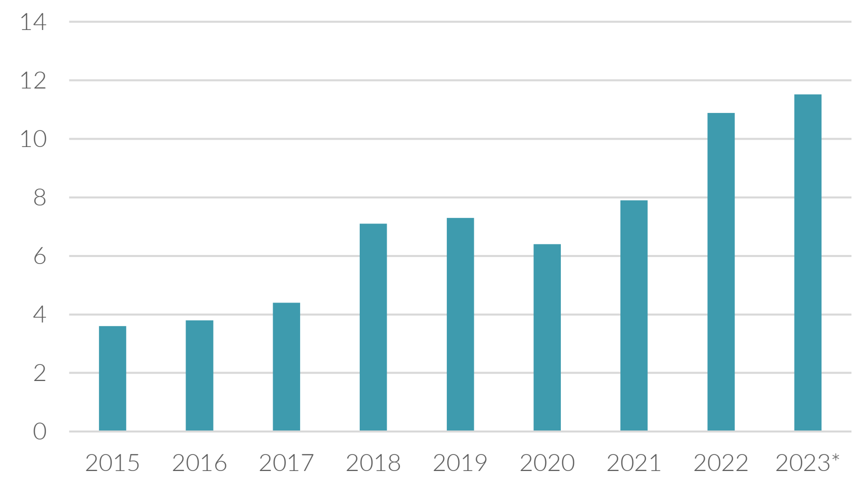
Post-investment input leveraging all the information flows and resources from its strong platform

- GPs operationally manage the portfolio company. NB currently has 265+ advisory board seats across its platform. Many of the information flows we identified above are relevant post-investment, including areas such as best practice, market appetite for such assets and valuation. NB also prides itself on the way in which its ESG controls can add value. Individual GPs in the mid-market space often do not have a dedicated ESG resource, and, without interfering in the management of the business, NB can add value post-investment.

Evidence of NB's attractiveness as partner is shown in steady growth in potential deals originated – up to 566 in 2022 alone

The evidence of NB's perceived value as a co-investment partner can be seen in the chart below, which shows the opportunities originated per week. In 2022, 566 opportunities were reviewed, which was more than double the level seen in 2017.

Average co-investment opportunities originated per week



**2023 YTD to 8 June 2023; Source: NBPE (Capital Market Day presentation, slide 23), Hardman & Co Research*

NB not a competitor to GPs

NBPE is not a competitor to its GPs. The financial rewards from any potential investment do not help a competitor's performance. NB has no aspirations to manage the investee companies. It is a more attractive co-investor than another GP.

Mid-market focus

NB brings bias to mid-market

In the portfolio section, we noted the bias to mid-market deals. We believe this is an especially attractive segment, as there are more tools to improve the business. For example, GPs can bring in marketing or technology expertise, which an investee company may not have the resources to do in-house. Bolt-on deals are more likely to be enhancing, and, when it comes to exit, there are more options, including larger buyout funds and trade buyers.

Portfolio management

Portfolio selection important value add, especially in diversifying risk

NB also adds value to NBPE in its portfolio construction. Key metrics in this include the diversification by GPs, sectors and geographies that we noted above. Within the overall portfolio constraints, each deal is considered on its own merits, and the portfolio is managed by deal size and the pacing of investments. We give more details in the *Portfolio* section above (see pages 12-14)

NBPE: conservative NAV

Summary

Current NAV is real, supported by:

i) consistent, strong uplifts on exit;

ii) NAV growth driven by EBITDA growth;

iii) underlying ratings below market levels;

iv) sector mix;

v) multiple uplifts, only significant as exit approaches;

v) 13% of portfolio listed and marked to market; and

vi) 86% of valuations coming from GPs, who have no incentive to inflate them

We believe that investors are giving unusually high attention to the credibility of the current NAV. This is because of the volatility of public markets, the fall in valuation of some high-profile private companies and the outperformance of PE valuations relative to public markets. We believe this concern is misplaced, and that NBPE's NAV is realistic, for the following reasons:

- After buyers have generally conducted extensive due diligence, they have been willing to pay large premiums above the level of NBPE's carrying value (at the prior year-end). Over the five years to May 2023, NBPE saw an average 44% uplift on exit to the prior year-end.
- NAV growth has been driven primarily by investee company 2017-21 EBITDA and revenue growth of 13% and 10%, respectively (calculations include a change in methodology). 2022 showed slightly below-average EBITDA growth (11.9%) and slightly above-average revenue growth (14.4%); however, NB notes that these figures excluded some outlying outperformers and, in doing so, depress the average growth rate.
- The underlying ratings are below the growth sectors in which NBPE operates. They generate a conservative, and well-below-market, PEG of 1.3x.
- In May 2023, listed holdings accounted for $186m of the $1.4bn portfolio (13%), and these are marked-to-market.
- GPs, have no incentive to inflate the valuations. NB knows its GPs well and sits on 265+ advisory boards, giving enhanced insights into the methodologies used and culture of the GPs.
- Valuations are verified by GP fund auditors, NB's valuation committee, NBPE's board and its auditors.

Looking beyond these metrics, the trust has multiple layers of independent checks, which include not only the audit and board supervision at NBPE but the valuation checks undertaken by NB's valuation committee and the audit and compliance processes of the GPs and their funds. There is no incentive for GPs to inflate valuations, as the performance fees they earn from their funds are paid only on exit, and not on the interim accounting NAV. Reporting is now more frequent than before the GFC, with quarterly dynamics.

Realisations above carrying value show others willing to pay more than book value

Buyers conducting significant due diligence paying significant premiums to carrying value (based on prior year-end)

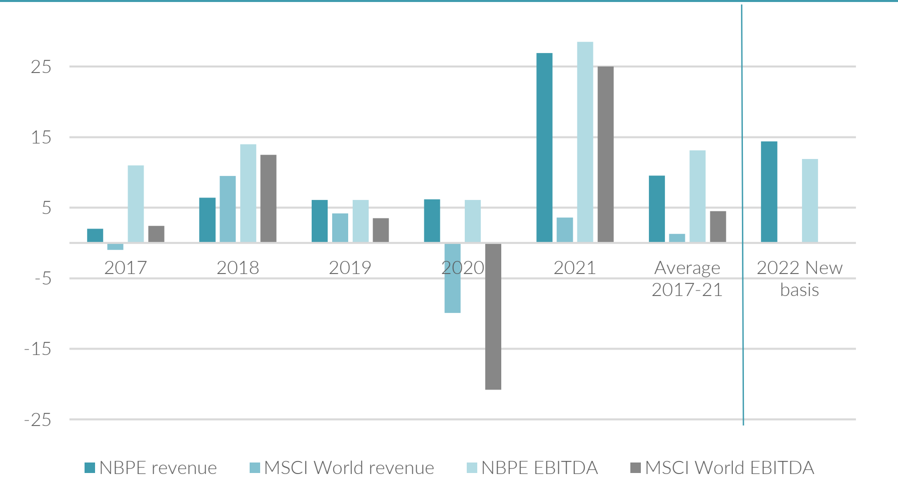
The key message is that, when the assets are sold, there have been large uplifts to carrying values. Buyers, who want to make a return themselves, and after conducting material due diligence on the assets, have historically been willing to pay a premium to the level at which NBPE was valuing them. Given the number of companies in NBPE's portfolio, the uplift, in any given year, can generate some volatility. Therefore, to smooth out part of this effect, we take a five-year view, which, to May 2023, saw an average uplift of 44%. NBPE provided some incremental data to end-2022, which shows the five-year average uplift at that date was 37.2% on three quarters prior, 21.8% on two quarters prior and 13.4% on one quarter prior. Given the range of disclosures by other PE firms, which use different comparative dates, we believe that the uplifts at NBPE are in line with those seen across the market.

Valuation increase driven by investee company growth

EBITDA growth at underlying companies 13% in 2017-22, against 14% CAGR $ NAV total return

The chart below shows the revenue and EBITDA growth of NBPE's investee companies since 2017 relative to the MSCI World Index. The 13% annual average EBITDA and 10% revenue growth 2017-22 (2022: 11.9% and 14.4%) came despite all the macroeconomic pressures and the noise around COVID-19. The long-term growth in NBPE's $ NAV and in its total return (89% over five years, 13.5% CAGR, to May 2023) is primarily driven by this EBITDA growth.

Average revenue and EBITDA growth rate in PE portfolio (%)



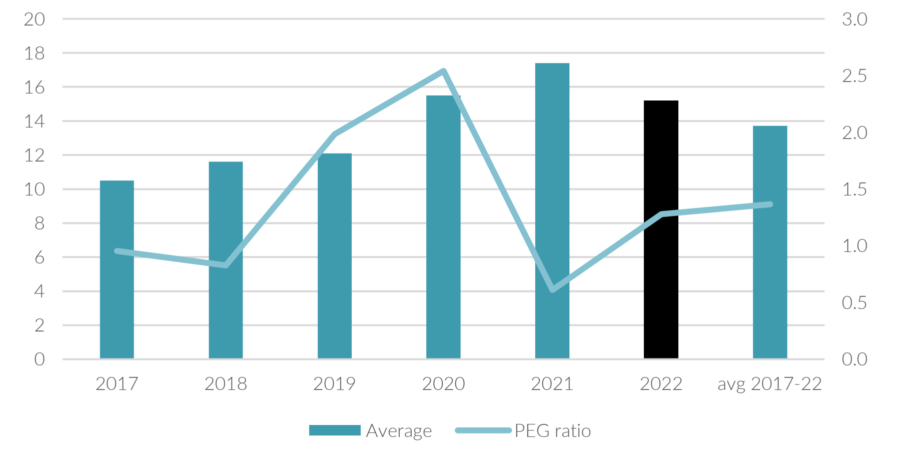
Source: NBPE, Hardman & Co Research

Conservative underlying ratings lead to modest PEG

PEG ratio in 2022 was well below market levels, at 1.3x

The overall level of EV/EBITDA at end-2022 was 15.2x. This is below the 2021 levels, as the strong operating performance (see revenue and EBITDA chart above), which may justify rating increases, was outweighed by comparative multiple declines, and higher discount rates. The PEG ratio of 1.3x is in line with the average since 2017 (1.4x), and we believe is appreciably below market levels for the resilient, secular growth sectors in which NBPE operates.

EV/EBITDA (x, LHS) and PEG ratios (x, RHS) since 2017



Source: NBPE, Hardman & Co Research

Limited uplift in ratings until exit is visible

Rating uplifts greatest as exits approach

The uplift of exit (average 44% over five years to May 2023) is a material trigger for rating increases. While every company is unique, we believe that, marketwide, GPs' valuations generally only see modest increases in the rating until this point. Across the industry, there was not, for example, the same uplift on tech-enabled businesses as public markets saw in 2021. Given NBPE takes GPs' valuations for the vast majority of its holdings, this marketwide trend is, in our view, also likely to apply to them. To us, this appears to be a conservative approach to valuation. Looking at the *Action* section below, its rating has increased only very modestly (ca.1 multiple) since NBPE's investment, even though there has been a sharp acceleration in growth.

NBPE in growing and resilient sectors and subsectors

Bias to highly rated sectors with structural growth

As noted, NBPE is well-diversified by sector, but its largest exposures are focused in growing and resilient sectors (TMT 21%, Consumer/E-commerce 19%, Industrial/industrial Tech 16%, Healthcare 10%, as at end-May 2023). Importantly, within all sectors, it targets subsectors and businesses that have structural growth opportunities and strong business models, often with recurring, resilient revenue streams. By way of example, at end-2022, 49% of TMT is in software and just 7% in hardware. Meanwhile, in the industrials sector, 44% is in industrial technology and just 9% in manufactured products and packaging. NBPE's sectors and subsectors are driven by socioeconomic trends across a range of factors, including i) the accelerating shift to online for consumers with online marketplaces, ii) the adoption of tech-enabled services, iii) an ageing population with greater healthcare needs, especially in medical technology, and iv) the outsourcing of sales and marketing services.

Many of the companies do not have good listed comparators

NBPE companies may not have comparable listed entities as they are often digitalised, tech-enabled market share winners whose valuations are not correlated to large incumbents. The sectors/subsectors are all on high multiple ratings. We review Action specifically in the section below.

No incentive for GPs to inflate PE valuations

GP performance fees paid on exit, not interim NAV – so no incentive to inflate

There is no financial incentive for GPs to inflate the value of the co-investments, as the cash payments on their performance fees are not paid on the NAV but on realised returns. They are only generated once investors have been paid back their investment and received a hurdle return that is earned on actual realisations, not accounting values. If interim accounting valuations were over-inflated, the GP's reputation could be damaged by having to then write down on realisation. This is common across the whole PE industry.

NB knows its GP partners and their approach to valuation

Part of the due diligence ahead of entering a commitment is to know all aspects of the GP's processes, including its valuation methodology and, importantly, culture. NB invests time to understand the varying investment approaches of different GPs. Additionally, across the platform, it sits on 265+ advisory boards, giving incremental insights into the investee companies and GPs.

NBPE follows GPs' valuations

While NBPE's management and performance fees are driven by accounting fair value, and so sensitive to interim valuations, we understand that it only deviates from GPs' valuations in extraordinary circumstances, none of which have happened in recent years. The valuations are overseen by the independent board and audit reviews. NBPE's opportunity to generate incremental fees at the listed entity level is thus minimal, even if it wished to (and we believe the culture is conservative).

Independent checks of valuations

The valuations have multiple layers of independence checks:

Independent checks include GP fund valuation checks, NB's own checks and NBPE independent auditors/board

- NBPE is usually invested in a company alongside the GP's funds. These fund valuations are independently verified by the fund auditors and processes.
- This independence of the GP inputs is also overlaid by the usual independent checks of the GP itself, including its audit process.

Key independent check, though, is regarding prices paid by third-party buyers on exit

- This is then overlaid by review by NB's valuation committee, which has good insight into not only market listings but, where available, deal and private company comparisons.
- The independent NBPE board oversees reported valuations. It has not only the expertise to understand the business but also the character to challenge the manager. While assessing the latter can be difficult to quantify, having no related-party directors helps the decision-making process. The nature of the independent directors and chair is important, and we detail their bios in the *Appendix* in this report. Their track records would suggest that they have the necessary independence.

No evidence of unusually selective disposals in 2022

In challenging 2022 environment, still saw 6% average uplift

Even in the more challenging 2022 exit environment, NBPE still achieved average exits above carrying value (average uplift 6%) to the end-2021 valuations (when a number of exits had been marked at, or near, their exit value). Despite the uplift being well below the ca.44% five-year average, we believe some investors are concerned that the 2022 exits may have been selective, with the GPs selling their best assets, leaving a poorer-quality residual portfolio as a result. The factors that we identify throughout this valuation section give comfort that the NAV is real, and unaffected by the macroeconomic or realisation environment. Additionally, we note:

A core advantage of PE: timing of exits can be optimised

- A core part of the PE model is long-term investment, and the timing of exits is always driven by GPs trying to optimise returns. GPs can choose when they want to exit and are under no pressure to sell. Selectivity on exit is not new in 2022.

Duration, sector concentrations, revenue and EBITDA metrics do not suggest any material change in quality of holdings

- If there were a material shift in the quality of the book, one might expect this to be reflected in several metrics, all of which are largely stable or improving:
  - One might also expect the average holding period to lengthen if poor investments became sticky and good ones were sold. NBPE has seen a multi-year trend for an increase in average age of its investments (see chart on page 20) with the 2022 change (0.8 years), being in line with increase in 2019 (0.7 years) and only slightly larger than 2021 (0.4 years) and 2020 (0.3 years). This trend has been driven by heavy investment in 2018-19 and is expected to stabilise from here.
  - If realisations were concentrated materially in "hot" sectors, one might expect this to be reflected in a change in the sector concentrations of the portfolio. Exits would reduce holdings in those sectors, offsetting valuation gains, while unpopular sectors would see increasingly more companies being retained. As shown in the chart on page 13, the portfolio sector mix has been relatively stable.
  - As shown in the chart on page 11, revenue growth has continued to be very strong, outperforming the world benchmark. If the best assets were being sold, one may expect a slowdown in such relative growth.

NBPE detailed valuation breakdown

86% of valuations come direct from GPs, using a range of methodologies and subject to double-audit verification

In 2022, there was a reduction of two turns in the EV/EBITDA rating. Diving into more detail, the 2022 Report and Accounts, note 3, there is a detailed review of the valuation levels, ranging from liquid markets (level 1), through to modelled (level 3) and those accounted for at NAV.

Modelled valuations, typically, more conservative than the portfolio as a whole

- GP valuations account for 86% of the direct equity portfolio. They use a range of metrics, including comparable private and public market deals, comparable listed entities ratings (typically, discounted) and discounted cashflows. As we noted above, with these investments there is the extra layer of independent checks, as the funds the GPs hold them in are also audited. The 86% includes public holdings.
- Roughly half of the 14% based off level 3 accounting (i.e. using models not GP input), is mid-cap buyouts. As note 3 details (see pages 87-89 of the 2022 Report and Accounts), the valuation approaches are investment-specific, but the ranges of EV/EBITDA multiples (mid-cap buyout 8.8x-15.3x average 12.6x, large-cap buyout 12.0x,) are lower than the portfolio as a whole. We do not believe that the valuation of these investments should distort the overall view of valuation. These are outliers and do not drive the overall portfolio performance, which is why management now discloses its adjusted portfolio metrics.
- Debt investments made on a primary basis are generally carried at cost plus accrued interest, if any. Investments made through the secondary market are generally based on market quotations, to the extent available, and NB takes into account current pricing and liquidity of the security.

NBPE: resilient NAV through downturns

Summary

In our view, NBPE's NAV should prove resilient to any downturn. This reflects the incremental value of PE as a whole to investee companies with committed capital, strategic optionality, operational support, long-term focus and defensive sector positioning. This marketwide resilience is enhanced by incremental risk reduction adopted by NB and NBPE. Its strong outperformance through COVID-19 and, more recently, in 2022 with valuations increasing 4.4% (ex-FX), despite a decline of over two turns in the multiple, is ample proof that the theory works in practice. The manager's views on resilience were provided in a December 2022 review called *Private Equity in the economic headwinds* and a detailed analysis entitled *The historical impact of economic downturns on private equity*, published in May 2022

Why PE-backed businesses outperform in downturns

Access to committed capital, and creditors' knowledge of this, support important factors

Our starting position is that PE NAVs generally outperform listed markets in downturns. PE-backed companies have greater and faster access to committed capital than non-PE-backed ones. The "dry powder" (committed funding to PE that has not yet been drawn down) is now well over $1.3tr, although it is significantly concentrated in large funds. Importantly, knowledge of this support means that suppliers and other finance providers feel they are less at risk, and confidence can be critical in uncertain times.

Strategic optionality – both acquisitive and organic

As noted above, access to this capital gives more strategic optionality for PE-backed companies. They may fund acquisitions that, in a downturn, are likely to be less expensive and also more readily available. The optionality from committed aligned capital also allows greater investment for organic growth, which can be even more important in challenging conditions. Earnings growth and cash can be generated at a time when a comparable standalone business would struggle.

GPs may provide operational, financial and strategic expertise in downturn

GPs can assist their investee companies with expertise that may not be available to the standalone entity, including i) operations, ii) finance, iii) strategy, iv) human resources, v) technology, and vi) market opportunities (including mergers and acquisitions). Marketwide examples, through COVID-19, included the transfer of experience from companies in countries that were hit by the pandemic early on to ones affected later, supply chain management and human resource control. The April 2020 McKinsey & Company's study, *Lessons for private equity from the last downturn*, highlighted the scale of outperformance by PE firms with "value-creation" teams.

Long-term focus and manager alignment

As PE funds have a life of at least 10 years, if GPs want to earn performance fees or launch new funds, they have to manage through the cycle. Quoting again from the April 2020 McKinsey & Company report, *Lessons for private equity from the last downturn*, those GPs with value-creation teams outperformed and raised more capital. The long-term lifespan of PE funds also means that the GP always needs to consider downturn scenarios when making investments.

Defensive positioning by sectors

In recent times, every quoted PE company has been emphasising the defensiveness of its portfolio, and the importance of sectors such as Tech and Healthcare. We discuss NB's sector positioning above, but the sector and subsector themes are ones with structural growth and recurring, resilient income streams.

Evidence supporting sector resilience

Academic research shows PE-backed companies outperform in recession

Any drag from incremental financial gearing more than compensated for by improved management and certainty in finance

The resilience of the sector is supported by academic research reviewing what has actually happened to portfolio companies. In a piece called *Private equity firms show resilience in a downturn*, Stanford scholar Shai Bernstein noted, in September 2017, "*the decline in investment for PE-backed firms was significantly smaller than the comparable firms. Specifically, we found that in the years leading to the crisis, both the PE-backed firms and the control group followed a very similar trend in terms of investments. But this trend diverged in 2008, at the onset of the financial crisis, when the decline in investment among PE-backed firms was much smaller. Moreover, we found that PE-backed firms increased their assets more rapidly relative to the control group, and also enhanced their market share during the crisis*".

Reasons given include long-term horizon and "dry powder" capital built ahead of downturn

The reasons given were *"I think there were a couple of reasons that allowed PE-backed companies to gain better access to financing resources, and, as a consequence, invest more and grow more rapidly relative to their peers. First, the longer time horizon of the PE firms' funds (average fund life is 10 years) allowed the PE investors to support their portfolio companies during the crisis. Moreover, the PE firms themselves still had capital available to deploy – capital they had raised before the crisis. Consistent with this notion, we indeed found that PE firms with more "dry powder," or non-deployed capital, at the onset of the crisis were more able to alleviate financing constraints of their portfolio companies during the crisis*".

Academics from Leeds/Nottingham universities reached similar conclusion…

…with PE-backed companies showing stronger performance than quoted companies

Similarly, in a 2011 piece called *Private Equity Portfolio Company Performance Through The Recession*, academics from Leeds and Nottingham universities noted "*Private equity-backed buyouts show a stronger economic performance in the period before and during the recent recession than a matched sample of private companies and listed companies. PE-backed buyouts show a higher return on assets, sufficient ability to cover the interest payments on their debt and higher gross margin in the recession period than before it. Growth in value added and profit is stronger than for listed companies during* *the recession period. Growth in turnover and employment remains positive for the PE-backed buyout sample. ….. The results imply almost 14% higher productivity and 5% higher return on assets (ROA) during the recession than matched private companies and listed companies*".

Peak-to-trough drop in US buyout returns approximately half that of S&P 500 in Dot-Com bust and GFC and a quarter through COVID-19

In the *May 2022 NB report,* management highlighted that the peak-to-trough returns were i) in the GFC, S&P 500 -55% vs. US buyout -28%, ii) in the Dot-Com bust, S&P 500 -47% vs. US buyout -27%, and iii) COVID-19 S&P 500 -36% vs. US buyout -9%.

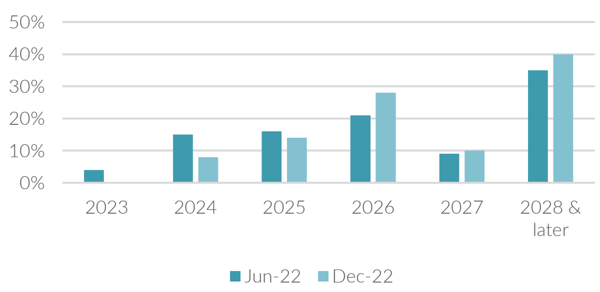
What NB/NBPE have done to incrementally reduce risk further, compared with the whole PE market

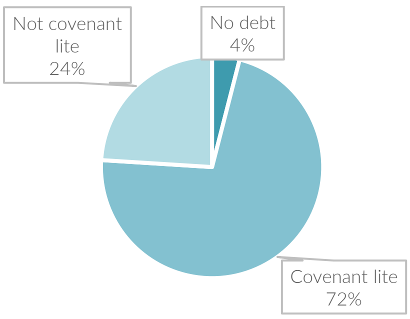
In addition to the comforting fact that PE, as a whole, shows resilience, it is worth noting the specific NB/NBPE features that could incrementally reduce risk.

NBPE investee companies proven incremental resilience and structural growth

- The sector/subsector focus, diversification and resilience from structural growth are important. We believe that other listed PE houses would make similar claims, although none have exactly the same sector profile.
- In addition, in its 2022 Capital Markets Day presentation (slide 41), NBPE highlighted the long-dated maturity of the debt in the underlying portfolio companies, as at June 2022, and this was updated to end-2022 with the results presentation (slide 13). We note not only the long duration of debt (78% beyond 2025 at end-2022) but also how duration has been actively managed through challenging conditions. The proportion of debt falling due in 2023-24 halved in the six months – see left-hand chart below. This is important, as the investee companies do not face immediate refinancing pressure, and is indicative of the treasury expertise PE backers can provide. Additionally, as at the latest disclosure, 76% of the portfolio either has no debt or is on covenant-lite terms. This is important as such terms extend the pathway before a default event and may see the business survive through any recession and into the recovery (see right-hand chart below).

Debt financing terms (%) | **Debt maturity (by % of fair value)**





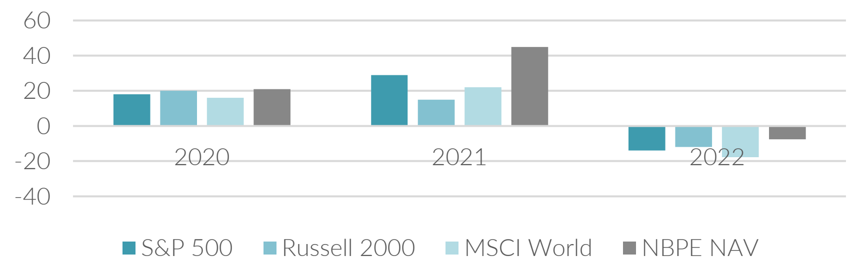
Note: data to December 2022, Source: NBPE Hardman & Co Research

NBPE evidence through COVID-19

Strong outperformance through COVID-19 downturn, rapid recovery after trough, and 2021 record year

The chart below shows NBPE's NAV total return against a range of indices through the pandemic. NBPE's NAV not only outperformed over the period but in each sequential year. It is worth noting that, on a constant currency basis, 2022 LTM private valuations increased by 4.4% in 2022, with the headline drop being due to forex and listed holdings.

Period total return (%)



Source: Refinitiv, Hardman & Co Research

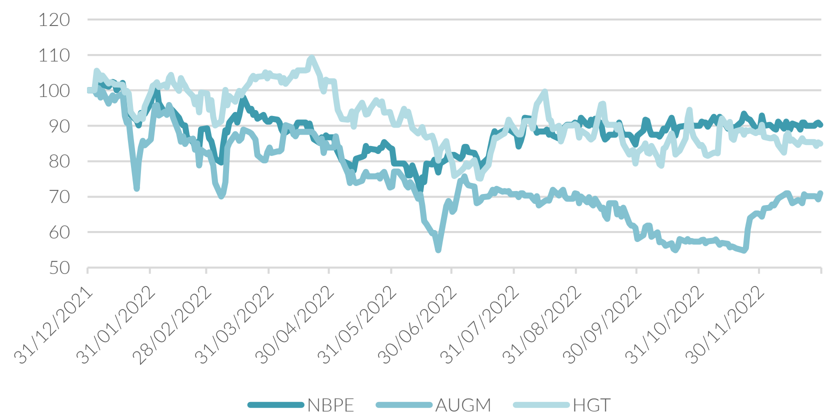
NBPE: attractive portfolio characteristics

NBPE has a broad diversification by:

Sector diversification has seen less volatility than single-sector-listed vehicles, like AUGM and HGT, in 2022

- **Sector:** As we show in the portfolio chart on page 13, NBPE has a broad sector diversification, giving it resilience compared with single-sector PE vehicles. The chart below shows the total return for NBPE against the single-sector Augmentum Fintech through 2022 when the dependence on one early-stage sector by the latter saw significant underperformance. Over the same timescale, NBPE's total return also outperformed HGT, as technology fell out of favour.

NBPE, HGT and AUGM share price total return in 2022 (1 Jan'22 at 100)



Source: Refinitiv, Hardman & Co Research

GP diversity limits style volatility

- **GPs:** NBPE has co-invested alongside many different GPs and its portfolio currently contains investments alongside 55 GPs and so is not dependent on a particular style or management team.

Company diversity means strong outperformers are visible but limits overall volatility

- **Company concentration:** There are advantages and disadvantages to both low and high concentration levels, and NBPE steers the middle path of 90-100 companies in the portfolio, against the typical sub-40 for other direct investors and multiple hundreds for the fund of funds. NBPE achieves a balance between being able to generate visible returns from individual names while not being overly dependent on any for returns.

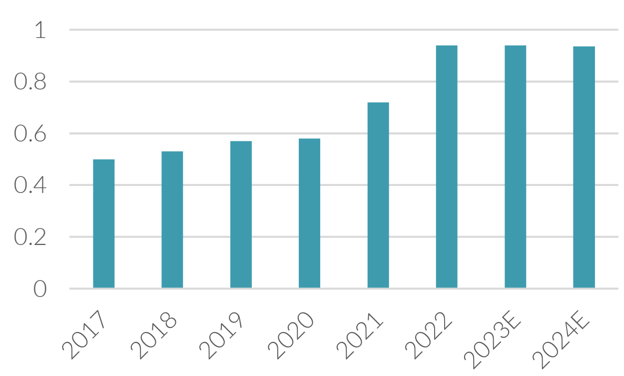
NBPE's dividend yield

Dividend policy at 3% of NAV p.a. As returns have been above this level, NAV and dividends have been growing.

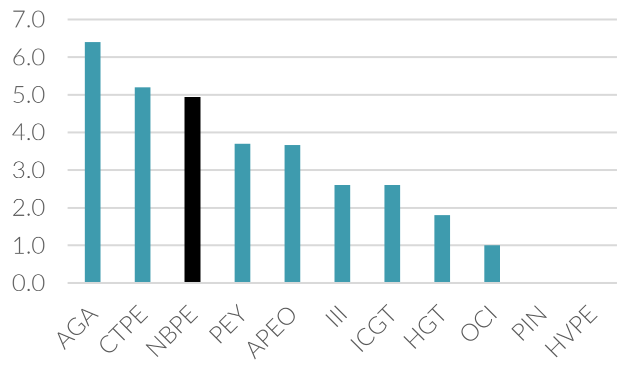
2023E dividend gives shareholders a 4.7% yield, third-highest in sector

NBPE introduced a dividend in 2013, and its current policy is to target an annualised 3% or greater dividend yield on NAV. As the left-hand chart below shows, as NAV has grown and so, over time, the dividend has grown too. By paying a dividend, NBPE seeks to give its investors an immediate return on their investment, rather than them relying exclusively on capital growth to give a long-term return. While, in recent years, with NAV growth, this has equated to the same as a progressive policy, in 2022 and 1H'23, the semi-annual dividend was maintained, despite the decline in NAV, resulting in an annualised dividend yield on NAV of 3.3%, at 31 December 2022. We expect the NAV to grow back into the dividend, with the 3% policy becoming effective in 2024 once again.

Dividend 2017 to 2024E ($)



Dividend yield (%) for NBPE and peers



Source: NBPE, LSE, priced at 13 June, Hardman and Co Research

NBPE's control over timing of new investment makes it very different from PEY and risk to dividend appears modest

The level of the dividend has been set to balance short- and long-term returns and also bearing in mind the likely realisations from the portfolio. Following Princess PE's (PEY) decision to temporarily halt its dividend in 2022 (now resumed) the sustainability of payments is an important factor. In our view, the risk of NBPE not paying a dividend is minimal because i) as noted above, NBPE's focus in co-investment gives it near-complete control of the timing of new investments, ii) proceeds from PE sales proceeds and distributions in the statutory cashflow statement from 2017 to 2022 totalled $1.3bn, against cash expenses totalling $259m, iii) the May 2023 available liquidity ($306m) compares with annual dividends costing $44m and adjusted commitments of $44m, which also includes reserves for follow-ons, and iv) unlike PEY, NBPE does not have material currency hedges, which may see large cash calls.

NBPE has a lower fee model

Lower fee structure

NBPE's investments do not incur GP charges. Its own performance fees below GP levels.

At the trust level, NBPE's management fee is calculated at the end of each calendar quarter, equal to 37.5bp (150bp p.a.) of the fair value of the PE and opportunistic investments less NB Funds and cash. There is an additional 7.5% performance fee, after a 7.5% hurdle rate. If losses are incurred for a period, no carried interest is earned and such loss amounts are carried forward to be included in the changes in net asset calculations for future periods. There is seven years of management fees and seven times the average carry of the preceding three years payable if NBPE terminates the contract without cause. The directors believe these fees are favourable relative to other listed direct funds, which often carry higher overall fee levels and listed funds of funds, which typically have a double layer of fees (charged at the vehicle level and underlying fund level).

Portfolio analysis (as at September 2022)	Vehicle level fees (management)	Vehicle level fee (carry)	U/L level fees (mgt. fee /carry))	% direct	Blended fee
Listed fund of funds	Generally, 1.0%-1.5% of NAV. In some cases, also a commitment-based fee	0-5% after hurdle	1.5%-2.0% on committed + 20% carry	0-~30%*	Vehicle fees + 1.5% - 2.0% fee and 20% carry on underlying committed
Direct Funds	1.5% management fee on PE NAV or greater	15%-20% carry	0	80%-100% (exc. Cash)	1.5% management fee 15%-20% carry
NBPE	1.5% on Private Equity Value	7.5% of gains providing 7.5% hurdle is met	0	99% PE fair value	1.50% management fee/7.5% carry at vehicle level

**Excluding single asset secondaries. Source: NBPE 3Q'22 announcement, Hardman and Co Research*

ESG

Across listed PE, we see ESG as strong. NB devoted significant resource to it and co-investment brings it closer to operational control of investee companies.

We believe PE ESG is strong, unlike the perception among some commentators. With many models improving efficiency and digitalising, the environmental impact is positive. Operational governance is good, with PE backers being much closer to the investee company managers than most public investors, especially passive tracking ones. As we outlined above, PE is growing employment much faster than non-PE-backed businesses. Across the listed PE sector, the depth of commitment to ESG has been outlined in numerous presentations, with dedicated teams focusing on this issue. It forms a core part of the investment decision process and post-acquisition management. It can be hard to differentiate between all the claims and awards claimed by the companies, but NB has devoted significant resource to this area over the long term. Its co-investment model does not mean it manages investee companies, but it does bring it closer to the operational control of companies than say a fund of fund manager.

Number of companies with positive ESG impact ca.10x those with negative

With 90 companies, and using tools such as RepRisk to identify potential problems, NBPE's portfolio is of a very manageable scale. At the manager level, NB Private Markets has 150 professionals with ESG responsibility. At the investee company level, NB conducts detailed ESG due diligence pre- and post-investment. Investment Committee memorandums include ESG analysis and it is an essential part of the due diligence process. Post-acquisition, NB has a materiality matrix to identify factors likely to be financially material to a company. As at end May 2023, only 2% of investments are perceived by NB's analysis to have a potential adverse effect, 77% are neutral and 21% have positive sustainability potential. With the GP having control over investee companies, and investments having a natural sale cycle, the 1% may be expected to be addressed in relatively quick order. NB's proprietary approach to ESG is outlined in its paper, *Integrating Climate Risk into Strategic Asset Allocation*.

At the investment company level, the main consideration is having good governance, with an independent board and appropriate policies

Case study: Action

NBPE's largest investment is Action, a pan-European discount retailer, with 3i as GP. Given its importance to 3i, there is excellent disclosure.

NBPE's largest single investment is in Action (website: here), which accounted for $68.7m, 4.9% of the portfolio as at May 2023. The original investment was $22.3m in January 2020, which, based off the latest 3i disclosure at the time, was at an EV/EBITDA multiple of ca.17x. At that stage, it did not even make the top 10 positions. Action is a discount retailer, which operates in the Netherlands, Belgium, Luxembourg, Germany, France, Austria, Poland, Czech Republic and Italy with nearly 2,300 stores. It sells more than 6,000 products across 14 retail categories. Unlike most private investments, there is substantial disclosure on the company as 3i's (the GP) 52.7% stake was valued at £10.3bn at 3QFY'23. On 23 March 2023, 3i held a capital markets seminar dedicated to the company with a 65-slide deck pack. 3i initially invested £106m in Action alongside EFV and other co-investors in 2011. 3i's 2023 FY results noted Action "*has started 2023 well. Action's LTM run-rate EBITDA to P3 2023, which ended on 2 April 2023, was €1,439 million (3 April 2022: €1,012 million), representing a 42% increase over the same period last year*."

Action evidences NBPE core objectives

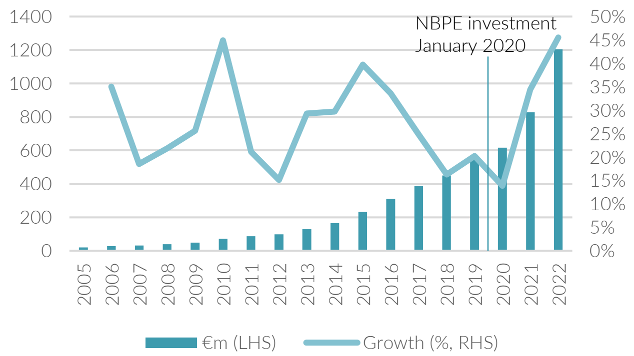
We are not going to comment on the long-term prospects for Action but rather show how it illustrates the principles of NBPE's investment strategy. In particular, it shows i) above-average growth, ii) low expected cyclicality, iii) multiple levers for value creation and exit, iv) partnership with GPs in their core areas of expertise, v) high-quality assets with sound and differentiated business model, including a market-leading position, vi) assets bought at a reasonable valuation with asymmetric risk/reward, and vii) an asset-lite business model.

Above-average growth

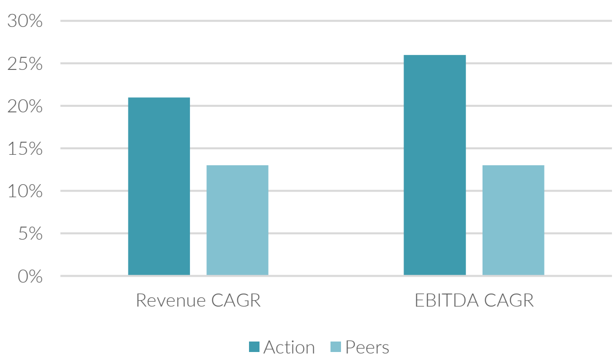
NB looking for superior growth – Action EBITDA 27% 2005-22

The left-hand chart below shows Action's EBITDA growth for every year since 2005 (CAGR 27% 2005-22). Since NBPE's investment in 2020, the rate of growth has been above-average and accelerating, *inter alia*, reflecting economies of scale benefits, as Action rolls out its store network. The right-hand chart shows the revenue and EBITDA growth, against peers over five years, with Action's EBITDA ca.2x that of peers.

Action EBITDA (€m and growth rate) 2005-22



Action five-year revenue and EBITDA vs. peers



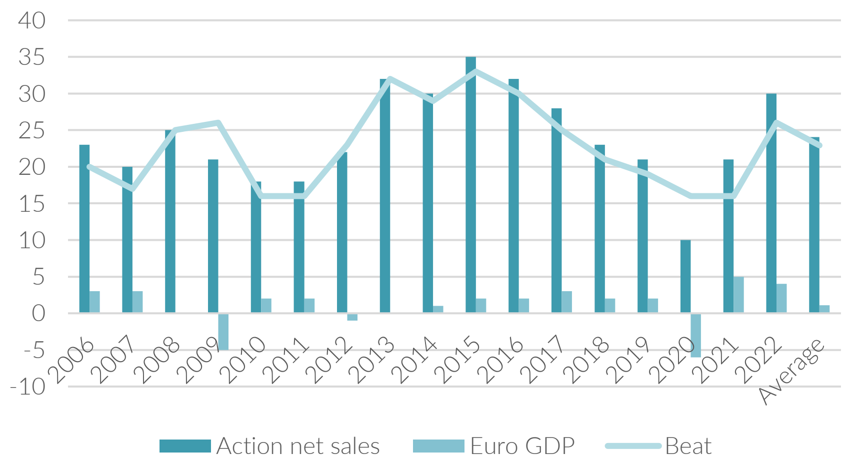
Source: 3i Action Capital Markets Day 2023, Hardman and Co Research

NB looking for resilient models – Action grew sales through the pandemic

Low expected cyclicality

The chart below shows Action's net sales, compared with Euro area growth. Since 2006, through every year and all economic conditions, with the exception of 2020, Action delivered at least 18%+ sales growth, with an average of 23%. In 2008-09, it was slightly ahead of this average and it was again above-average through the uncertainties of 2022. Even 2020, the period of greatest pandemic-related lockdowns, sales growth was 16% ahead of Euro area GDP growth. Part of this is driven by the strategic store expansion of the group (see section below), but it also reflects the inherent counter-cyclicality of a discount retailer (69% of products in 2022 were priced below €2 and just 7% over €5).

Action net sales compared with Euro GDP growth (%)



Source: 3i Action Capital Markets Day 2023, 2022 GDP growth latest estimate from eurostat, Hardman and Co Research

NBPE's investments have multiple levers for profitable growth. In Action's case, these include…

i) store expansion (currently, network around half the potential in existing markets)

ii) operational leverage from opening more stores

iii) international expansion

iv) supply chain optimisation

v) new products, and

vi) increasing digitalisation

Multiple levers for value creation and exit

Action has been outperforming both peers and its own expectations. The 2019 business plan (which would have formed the basis for NBPE's investment) planned for the 2023 operating EBITDA to exceed €1bn. The actual 2022 performance was €1.2bn, beating both the quantum and timing of the 2019 plan. In our view, this growth reflects the fact that Action has multiple levers for EBITDA growth, including:

- **Store number expansion:** In 2022, Action added 280 stores (a record number of openings), taking its footprint to 2,263. Action has given a current estimate of potentially ca.4,400 stores in existing and identified countries. Non-current or planned markets in Greater Europe have additional market potential of a further ca.100m population (current markets ca.400m).
- **Operational leverage:** The economies of scale from opening additional stores is material. Looking at the store contribution margin 2022 on 2019, France saw a 280bp improvement, Germany 290bp, the Netherlands 180bp, while smaller markets saw an even sharper improvement (e.g. Austria +600bp). In 2022, the group EBITDA margin improved from 12.1% to 13.6%, of which management attributed operational leverage as adding 1.6%.
- **International expansion:** Action is constantly rolling out into new markets. France, which is now its largest market, started with a single pilot store in 2012 and it now has 726 stores. Poland started with six stores in 2017 and now has

256. In 2022, Italy grew from seven stores to 28 and Spain saw its first five pilot stores. Action intends to enter Slovakia in 2023 and Portugal in 2024.

- **Supply chain management/logistics:** There are opportunities to manage costs while ensuring good all-year-round product availability. Action uses both global and local supply chains, as well as branded and own-brand products. Supply chain costs as a percentage of net sales fell from 5.9% in 2019 to 5.2% in 2022.

- **Product development:** On average, Action is adding 150 new items per week to its product lines (total currently ca.6,000). With products spread across 14 categories, Action can rapidly move to where the customer demand lies.

- **Increasing digitalisation:** Action is active in using digital distribution to increase customer touchpoints with 2.1m Instagram followers, 2.75m Facebook fans, 6.5m weekly website visits, and 6.2m email subscribers. In stores, it is rolling out new handheld terminals and is standardising and simplifying store processes. Using technology is a core part of the logistics process.

Partnership with a GP in its core areas of expertise

NB looking for partners exploiting core expertise – over a third of 3i investment by number in consumer sector

By 2020, when NBPE invested in Action, 3i had already held a stake in the business for nearly a decade. The 3i 1HFY'23 results portfolio disclosure showed 15 out of 41 companies are in the consumer sector, accounting for £10.5bn of £14.5bn carrying value. Even excluding Action, consumer was 3i's largest sector out of the four it focuses on. Nearly a quarter of companies are, like Action, originated by 3i's Netherlands office.

High-quality assets with sound and differentiated business model, including a market-leading position

NB looking for differentiated models with market-leading position - Action price point around 60% of competitors

It is gaining profitable market share with a clear proposition and positioning at the discount end of retailing (see table below). With 2022 sales approaching €9bn (up 18% like-for-like), the business is now substantial. All the factors identified above show the quality of the business model. The EBITDA margin in 2022 was 13.6%, up from 10.6% in the year before NBPE made its investments.

Price index versus competitors, by country

	France	Germany	N/lands	Poland	Belgium	Austria	Czechia	Italy	Spain
Action	100	100	100	100	100	100	100	100	100
Competitors 2Q'22	171	152	168	158	168	173	173	167	171
Competitors 4Q'22	180	155	170	163	170	178	186	173	175

Source: 3i Action Capital Markets Day 2023, Hardman and Co Research

Bought at a reasonable valuation with asymmetric risk/reward

NB looking for reasonable valuation – Action EV/EBITDA likely to be sub-10x within two years

As noted above, when NBPE made its investments, the multiple was 17x (as reported by 3i Group in its March 2020 results). This has been increased to 18.5x in the latest 3i valuation (reported January 2023), which is unsurprising given the accelerated growth seen since. Action reports that net sales to week 11 in 2023, compared with 2022, were up 37% (like-for-like, up 25%) and the 2023 store expansion plan is on track with 23 stores added YTD. Even if EBITDA growth was only in line with sales (and there should be operational leverage), this would suggest the multiple would reduce to single digits within two years.

Asset-lite business model

NB looking for asset-lite model – Action capex 2.6% of net sales in 2022

Despite its rapid store-opening programme, Action's capital expenditure accounted for just 2.6% of net sales in 2022. Another advantage of the operational leverage is that this percentage has been steadily falling from 5.2% in 2017 and 3.1% in 2020, the year NBPE invested. Cash conversion has been rising from 6.3% of sales to 10.6% in 2022.

Low leverage

NB looking for reasonable leverage levels – Action end-2022 EV/EBITDA 1.7x

Net debt/*pro forma* EBITDA, at end-2022, was just 1.7x, down from 2.4x in 2021 and 3.6x in 2020. The strong cash conversion, combined with an asset-lite model, has seen a rapid reduction in leverage.

Investment-neutral issues

Allocation to US

US market deep and liquid

The US is NBPE's largest exposure (by investee company location). We believe it has many attractions in terms of being the deepest, most mature PE market, where the operational practices that NBPE's GPs are looking to adopt are most likely to be accepted. In terms of exit, it also has deep capital markets, as well as many large PE buyers. There are different risks in investing in buyouts in Europe/Asia/Latam compared with the US where the political environment over the long term has not been as amenable. As in other markets, top-quartile funds have significantly outperformed the average private equity fund, as well as the MSCI World Index, highlighting the importance of, and opportunity in, manager selection. On the downside, we believe it is the most competitive PE market, with significant numbers of players potentially going head-to-head on each deal. While there is always an issue with precise data definitions, there is an argument that the net return from the average US buyout fund has converged with public equity returns over the past 10 years, having been a significant outperformer previously.[10] In contrast, less mature markets in Europe and Asia, in aggregate, continue to earn superior returns in this research. NBPE advises that, for its own portfolio, the risk-adjusted returns (which per our comments in the cost section above do not include GP carried interest) make the US attractive. A recent ICGT capital markets day also made the same point.

Still offers micro-opportunities for an investor like NBPE, which does not pay GP fees

We believe that, as is so often the case with PE, the opportunity is not just a macro consideration, but also a micro-company-specific situation one. The top-quartile GP will significantly outperform, and having the right model in the US to identify micro-opportunities will still deliver market-beating returns after all costs. It is also worth noting that the analysis of returns highlighted that PE-backed businesses still operationally outperformed in the US and investors only got market returns because the excess was absorbed by GP costs. NBPE is not paying these GP costs. With its low-cost, co-investment approach, NBPE can still benefit from the superior operational delivery of PE-backed companies.

Currency exposure

Reporting currency $, shares £ and $

Peer comparisons need to be treated with caution

NBPE reports in dollars, and so its reported NAV returns need to be adjusted when making comparisons with other UK-listed PE names, some of which report in sterling (such as HGT, ICGT, OCI and PIN), others in Euros (APAX) with only a limited number that report performance in US dollars (such as HVPE).

NBPE regards its exposure to exchange rate changes on the underlying investments as part of its overall investment return. The geographical reporting by NBPE is by the headquarters of its companies and the actual currency exposure is much more complex given the international nature of the many of the businesses. Effective hedging would thus be both difficult and potentially expensive. As shown by PEY, unpredictable margin calls from hedges can also be very disruptive. The one area where NBPE has hedged, at times depending on the level of GBP assets in the portfolio, its £:$ exposure generated with issuing £ ZDPs (see page 20).

[10] https://www.bain.com/insights/public-vs-private-markets-global-private-equity-report-2020/ or Ludovic Phalippou's book, *Private Equity Laid Bare*

Managing potential conflicts of interests

There are a range of potential conflicts of interest in any co-investment model. These include:

Allocation *pro rata* to funds interested in deal, with process overseen by legal team and compliance

- NB's primary funds are likely to be invested in funds run by the GP when a deal comes to NB. Additionally, other NB funds will be investing in the co-investment at the same time as NBPE. Potentially, these could cause a conflict of interest on who gets what allocation. Each NB vehicle has different end-investors, with specific mandates. NBPE is an evergreen vehicle (i.e. it has no maturity date), while the NB funds have fixed maturity dates and so very different liquidity requirements. We believe NB manages the potential conflicts carefully and transparently. Once the decision has been made to make an investment, the allocation is *pro rata* to interested funds, based off their available resources for the deal. There is no priority given to, say, a fund already invested with that GP or to other NB co-investment vehicles. There is an internal reporting process, so that all potential conflicts are recorded. The whole process is overseen by the legal and compliance team, including the internal Audit function.

Insights into GP's approach is two-way flow of information. Clear firewalls and compliance procedures to ensure other market knowledge is not abused.

- NB has a competitive advantage in being in all three strategies (primary, secondary and co-investment) and being able to use information from one unit to help make more informed judgements in others. By way of example, being involved in a primary fund helps in the understanding of how a GP thinks about deals. In our view, it helps the GP, as well, to have such a close relationship by reducing potential misunderstandings, and accelerating investment decisions. Co-investors also typically have market information advantages – e.g. pricing on other deals, how company managements have performed and even experience of a target investee company in another fund. Confidentiality is important and while such information may be useful to co-investors, it is not shared with GPs. Any potential conflict here is managed through deal team segregation, Chinese Walls between NB teams and transparency. Ultimately, in our view, it is not in NB's interest to abuse its position, as its reputation would be quickly destroyed, and, as we have noted throughout this report, the relationship with GPs is critical to all legs of its business.

Historical fund and income investments

Historical allocation to funds ($8m) and income investments (7% portfolio) are being run down

Before it focused on co-investments as a strategy, NBPE had a much broader mandate, investing in both funds and income investments. We understand that no new commitments have been made to funds in over 10 years, while the most recent income investment was made in 2018.

- At end-2022, NBPE reported fund investments of $8m (2021 $14m, 2020 $23m). They now represent less than 1% of the total portfolio, having been 11% in 2017.

- Income investments, at end-May 2023, were $96m (end-2022: $107m; 2021: $125m; 2020: $141m). They are primarily in NB Credit Opportunities and NB Speciality Finance programmes. They now represent less than 7% of the portfolio, down from 16% at end-2017. While NBPE has maintained the authority to invest in income investments (should a particularly attractive opportunity arise) none have been made for several years and the portfolio is running down. It reflects historical investments and should not be seen in the same strategic way as Apax Global Alpha's Derived Investments portfolio.

Other neutral factors

Discount management

Buybacks done in 2019-20 but not since. New programme announced October 2022 with range of criteria.

In terms of buybacks, we note that, every year, the AGM passes resolutions authorising buybacks of up to 15% of shares. To date, this has been used only intermittently (2019 $28.1m, 2020 $0.5m), and shares re-purchased have been cancelled. In addition, there are 3.15m shares in treasury, accounting for 6.8% of the shares in issue. The latest programme was announced on 5 October 2022 allowing the broker, Jefferies, at its discretion, to repurchase shares on behalf of NBPE, based on criteria set by the board. In the April results, NBPE commented "*The Board believes the share price represents a very attractive entry point for investors to gain exposure to high quality private companies*". These include the absolute level of discount, NBPE's discount compared with a peer group (given investors do look at relative discounts), as well as broader equity market movements, among other factors. The criteria have been set bearing in mind the compounding return available from reinvesting in PE assets and other uses of cash. Details of buybacks can be seen on NBPE's LSE regulatory news website here but most recently have generally been around 50k shares (£750k) per day.

- In our view, the case for buybacks is unproven.

  On the upside:

  - Buybacks, at wide discounts, are immediately accretive to NAV, which benefits all shareholders.
  - It creates a buyer for the shares. The immediate effect of a large tender offer may be more effective in removing potentially bulky sellers. If future offers are expected, it may also mean that such sellers do not continually drip shares into the market. Where there are likely to be a larger number of small-sized sellers, an ongoing programme may be more effective.
  - The liquidity provided by buybacks may encourage buyers, as it provides them with an exit route, without disrupting the market price.
  - It may be perceived as putting a cap on the discount, which the market may then close itself.
  - It is "fairer" to all shareholders. A seller may arise for specific reasons (such as death, divorce or liquidity calls), and, by keeping the discount tightly controlled, such sellers do not lose out to discount variability.
  - Where the discount is large, the returns on the cash used in the buyback may be above the levels targeted in the investment company.

  On the downside:

  - It could create liquidity problems.
  - The capital could be deployed for compounding returns within the trust.
  - By shrinking the business, it worsens the total expense ratio, and increases leverage where there is debt.
  - It sends a very mixed message, to investors especially, if the company later comes back to the market for further equity funding.
  - It can also send a very mixed message to GPs.

- An active buyback programme may be perceived as reducing the likely return of capital by way of dividends, and thus benefit capital investors over income investors.

Strong communication policy

Communication has historically been very detailed, and management has not been slow in addressing investor concerns. We consider the willingness to engage a sponsored research house that engages in in-depth analysis as further evidence of an openness in communication. The detail available on the website, in the report and accounts, regular updates and presentations is all very good.

Broader-than-peer potential shareholder bases, especially US and income investors

NBPE has positioned itself to appeal to the greatest possible range of investors. In particular, income funds (because of the dividend).

- NB's strong US presence gives it a brand awareness to US investors.
- The current dividend yield (2023E 4.7%) means that NBPE can compete for income fund investment, as well as those seeking capital growth. We see benefits and disadvantages in paying a dividend, but one key advantage is access to a broader investment base. We show the comparative yield in the *Valuation* section below.

Sentiment to KID disclosure

We note and concur with market's view that KID methodology of calculation not always helpful, but discounts have some correlation with reported stress scenarios

We support totally the market's antipathy towards KID disclosure and its value to understanding risk. That said, in our report, *Investment companies: understanding the deepest discounts*, published on 14 May 2019, we did identify a correlation between the KID stress-test scenario and companies with the biggest discounts. We recognise that the calculation is driven by historical movements; however, given the correlation we identified, we believe that at least some investors view it as indicative of prospective risk. As the table below highlights, within a broad range, NBPE's KID disclosure is in line with peers.

KID disclosure of one-year return in different investment scenarios for NBPE and selected peers

	NBPE	HG Capital	PEY	APAX
Stress-test scenario	-99%	-74%	-84%	-99%
Unfavourable scenario	-27%	-23%	-25%	-18%
Moderate scenario	10%	12%	13%	9%
Favourable scenario	61%	70%	16%	79%
Risk rating (no)	6	5	5	6
Recommended hold period (years)	5	5	5	5
Date	Dec'22	Nov'22	Oct'22	Dec'22

Source: Latest EU KIDS on company websites, Hardman and Co Research

Class A/B structure

Structure helps governance by ensuring US regulations not triggered

NBPE has a dual-share structure of class A and class B shares. The company's Class B shares, which were issued at the time of the IPO usually carry no voting rights. However, in the event the level of ownership of Class A shares by U.S. residents (excluding any Class A Shares held in treasury) exceeds 35%, the Class B Shares will carry voting rights, which will automatically dilute the voting power of the Class A shareholders to the extent necessary to reduce the percentage of votes exercisable by U.S. residents to not more than 35%. Each Class A share and Class B share participates equally in profits and losses. By adopting this structure, NBPE ensures that US regulations constraining US ownership in such vehicles do not apply. NBPE is not marketed in the US in the same way as a domestic investment company would be (the website disclaimer is very similar to ours on page 3).

Investment downsides

Sentiment to PE marketwide costs

Summary

Market sentiment is that PE a high-cost business – we focus on market-beating net returns after costs

There is an adverse sensitivity to PE marketwide costs, especially as some of the nominal performance fees and ongoing costs can be large. We have noted above that NBPE has a low-cost structure because its co-investments model does not incur GP carry costs. Its AIC-basis ongoing charges, which exclude performance fees, are 1.96%, broadly in line with the peers (average of 1.90%) but well ahead of an AIC all-funds average of 1.15%. KID disclosure, which includes look-through costs and carried interest, demonstrates much better NBPE's relatively low-cost model (3.68% vs. 5.92% average for the listed PE peers). For us, the key point is the net returns to investors, which, after all costs, are market-beating, and that is what investors should focus on.

Management and performance fees

Management fee 150bp fair value of portfolio excluding cash and NB funds

The management fee is calculated at the end of each calendar quarter and equal to 37.5bp (150bp p.a. on flat fair value) of the fair value of the PE and opportunistic investments (excluding any NB funds and cash). With the company typically adopting a conservative degree to leverage, the fair value of assets is above NAV, and so the management fee is a higher percentage of the NAV.

High termination fee if contract terminated without cause – reflects long-term nature of assets

If NBPE terminates the investment management agreement without cause, it has to pay a termination fee equal to: seven years of management fees, plus an amount equal to seven times the mean average incentive allocation of the three performance periods immediately preceding the termination, plus all underwriting fees, placement and other expenses borne by the Manager or affiliates in connection with the company's IPO.

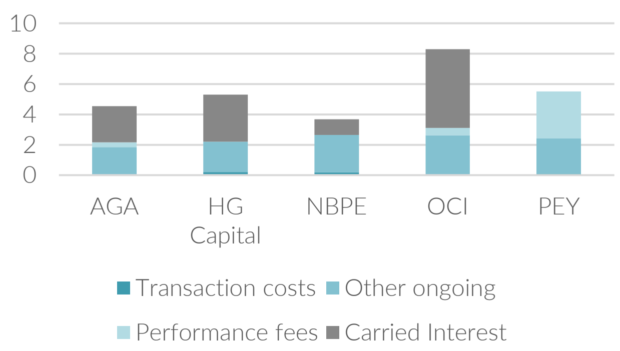
Single layer of performance fees at under half the rate of GP funds

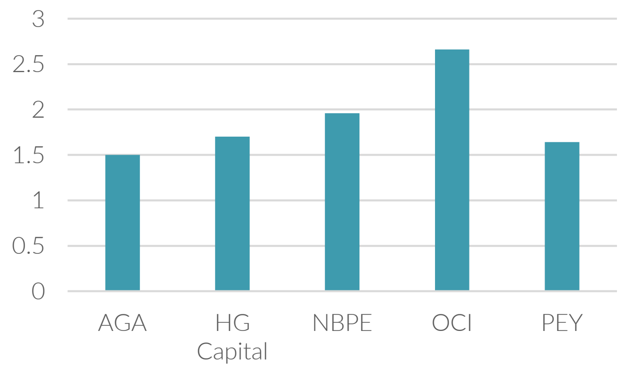
The performance fee is 7.5% after a 7.5% hurdle rate, and subject to a high-water mark. The rate is around half that seen in many GP funds (15%-20%) while fund-of-fund structures, typically, incur dual performance fees (at both the underlying fund level and then at the fund-of-fund level).

Disclosure

The marketwide requirements for public disclosure on costs are singularly unhelpful to investors. The costs associated with PE reflect the active management of the strategy and yet, net of all these costs, PE continues to outperform. NBPE has a good record on giving investors detailed information (see, for example, the detail in its quarterly investor updates), but the standard auditing requirements do not fit with giving investors simple cost information. KIDs include all look-through costs, which are reflected in the net returns, whereas the AIC basis, excludes performance fees and carried interests, which, in PE, make up the majority of costs.

KID disclosure of costs (%)	AIC disclosure of ongoing charges, excl. performance fees (%)





Source: AIC, latest KIDS on website, Hardman and Co Research

Sentiment to economic cycle and PE marketwide gearing

Summary

Proven resilience of PE and NB/NBPE incrementally reduce risks, but sector concerns remain with some investors

We have outlined above why we believe in the fundamental resilience of PE and what NB/NBPE has incrementally done to reduce risk over and above the PE market as a whole. Notwithstanding our analysis, we believe some investors harbour residual concerns about how PE and, consequently, NBPE may perform in the event of an economic downturn. The fact that this is a sector-wide issue, not company-specific, is, we believe, reflected by the sector-wide discounts to NAVs.

Focus is on:

i) leverage of investee companies;

ii) over-commitment (not an issue for NBPE);

iii) impact on trust's realisations and cashflow; and

iv) multiple ratings (impact already seen)

We believe the concerns focus on several potential impacts:

- The impact of leverage, and whether greater debt means that companies are more likely to fail, with a consequent impact on NAV. We have highlighted, in the section above, why the operating performance of PE-backed companies is materially strengthened relative to peers in downturns and, in the section below, we give more details on the structure of gearing and what NBPE's GPs bring to investee companies in managing that risk.
- Across PE, but very explicitly not an issue for NBPE other than sentiment, is the degree to which many listed PE vehicles commit to multi-year potential draw downs in excess of their current cash and liquidity. If realisations dry up, this over-commitment could cause liquidity issues for those PE vehicles using it. In our view, it is a sensible return management tool, but it does affect sentiment, including to companies such as NBPE, which do not have this exposure.
- A weaker trading outlook for the operating metrics of the trust itself, in particular potentially weaker realisations and so cashflows. We highlight below NBPE's own strong liquidity position.
- A decline in valuation multiple by over two turns – arguably, this means the effect on ratings of a downturn has already largely been seen, with an uncertain incremental effect from here. Despite the decline in valuation multiple, private investments grew 4.4% on a constant currency basis during 2022.

Evidence is that PE and NBPE are resilient and outperform to greater degree in downturns

As we detailed above, in the past, PE has outperformed through downturns, and the recent experience through COVID-19 should give investors great confidence in the current resilience of the model.

NBPE investee company gearing

Despite the strong growth in earnings, gearing at the investee companies has been on a steadily rising trend since 2018. We note that investors can be very sensitive to this issue, especially in challenging macroeconomic times, and highlight:

However, part of gearing reflects bolt-on acquisitions, which improve scale, if successful

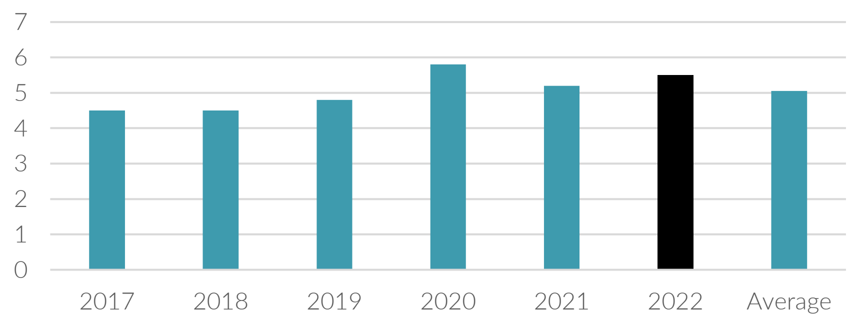
- In recent periods, there have been increased opportunities for bolt-on acquisitions. The gearing numbers reflect the debt to finance such deals, but may not fully reflect the EBITDA, nor the synergies that such deals bring.
- There is an element of investee companies restructuring their finances ahead of expected rate increases. This is part of the treasury management skills that NBPE's GPs bring to their investee companies.

Also, cov-lite documentation reduces risk, as does revenue growth

Much of PE market has higher gearing in its investee companies

- We also note that resilient sectors with sustainable growth are likely to see lenders more comfortable with a higher degree of gearing. The level of debt in NBPE's main sectors was detailed in the *Portfolio* section above with the key takeaway being that debt, by sector, is driven by the affordability and cashflow for each individual investee company. Higher debt gearing is only adopted where expected strong cash generation justifies it.
- The treasury expertise also brings a greater degree of cov-lite documentation, and access to the whole capital markets, in improving investee company funding options.
- Revenue growth on the new methodology, in 2022, was 1.5x the average rate of 2017-21, and EBITDA growth 0.9x despite marketwide margin pressure and continued investment. This bodes well for cash generation and the potential for a like-for-like reduction in the ratio.
- Across the PE market, we believe the average debt/EBITDA is in the range of 6x-7x. This, in part, reflects higher gearing in larger companies whose resilience should be supported by diversified revenue streams.
- Many of NBPE's peers are also reporting rising gearing levels. In its recent results, HGT reported gearing at 7.5x net debt/EBITDA at end-2022 (December 2021: 7.1x) for its top 20 companies.

NBPE average debt to EBITDA (x) 2017-22



Source: NBPE, Hardman and Co Research

Other gearing

Relative to some PE names, NBPE has less gearing risk and has superior cashflow characteristics

In addition to gearing at the investee company level, investors also need to consider gearing at two other levels:

- As NBPE is investing directly in companies, there are no significant off-balance sheet unfunded commitments, unlike many listed vehicles.
- We reviewed NBPE's own gearing in the section "*Co-investments better for cash management*" and highlight again the positive cashflow implications of a co-investment model. In particular, if the need arises, new investment can be stopped with immediate effect.

NBPE's cash generation

NBPE, *inter alia*, can pace new investment, bearing in mind expected realisations, market uncertainties and level of pricing

Despite the challenging conditions, in 2022, NBPE paced its investments so there continued to be positive operating activity cash generation in the period. There was a one-time cash payment ($76m associated with the maturity of the company's ZDP shares in September 2022), which reduced the net cash on 2021. With the exception of follow-on activity for accretive M&A within the existing portfolio, NBPE does not expect the pace of new investment activity to pick up materially in the near term. This reflects current uncertainties (with the potential for investment at lower prices if a downturn emerges) and the sustained pricing expected by sellers in resilient, secular growth sectors. In the first quarter of 2023, NBPE has also reported realisations of $26m, more than covering the first half 2023 dividend.

In our forecasts for 2023-24, we assume a broadly neutral cash generation. We expect nominal realisations to be well down on 2021 levels, albeit above the average for 2017-20 when the portfolio was two thirds of the size. In addition, we expect investments in 2023 to be closer to the 2017-20 levels, before rising in 2024. We expect the degree of investment to be stable in the range of 105%-107%, so NBPE is still more than fully invested. At peak, the credit facility headroom is still $250m+.

We believe this is the right approach to optimise returns. In 2017-18, the net outflow was significant ($111m), showing NBPE is not hesitant to invest when the risk/reward is appropriate.

Multiple ratings impact

Slowdown will affect valuation ratings – arguably already happened. Companies in areas with greatest falls only 2%-3% of portfolio.

We believe investors are also concerned about the impact of a downturn on multiple ratings. As of 31 December 2022, NBPE's weighted average EV/EBITDA multiple was 15.2x, down from 17.4x the year prior. There has already been a fall in the listed portfolio, and the question on investors' minds is what further impact there may be going forward, especially in the private portfolio. We believe investors will form their own judgments on this, but we highlight that the greatest falls in public markets, to date, generally have been in unprofitable companies whose valuations were often based off revenues, not profits. Note 3 of the Report and Accounts details that for such businesses, which are Level 3 accounted and in special situations or legacy growth/venture category at end-2022, the value was $33m out of the whole $1,401m of fair value.

Sector-wide sentiment to the reliability of the NAV

Worsening discounts across sector in 2022 suggest scepticism about NAV valuations, especially in high-growth names

For the reasons detailed above, we believe there is strong factual support that NBPE's direct equity valuations, 86% of which are provided by the GP, are conservative. NBPE's controls are in line with market practice and include appropriate due diligence measures. Despite all this, we believe that there is a degree of investor cynicism about the valuation of illiquid private companies in listed vehicles, sector-wide and especially ones with a high-growth bias. As we detail under *What could lead to a rerating?* within the *Valuation* section below, continued delivery and further exits above carrying value should assist in convincing investors that the NAV is real.

We acknowledge that the timing issue does not help. It takes time for the NAV to "catch up" with private market valuations, which are performed quarterly. FX and public valuations are incorporated into each monthly NAV estimate. A 10% drop in all share prices would, *ceteris paribus*, see a 10% fall in the share price of a PE business and in its NAV (leaving the discount unchanged), but the NAV could take a few months to reflect the lower market rating. For that period, the discount to NAV will appear higher, as it is based off ratings before the market fall. The reverse will also happen in rising markets, as the NAV takes time to catch up with them too. Recent market weakness may account for a small discount to (and widening of) NAV, but it does not justify anything like the movements we have seen overall.

Theoretical example of time lag impact on share price discount to NAV

Period	1	2	3	4
Market level	100	90	90	90
Market rating (x)	10	9	9	9
NBPE rating (x)	10	10	9.5	9
NAV (p)	100	100	95	90
NBPE share price (p)	100	90	90	90
S/P discount to NAV	0%	-10%	-5%	0%

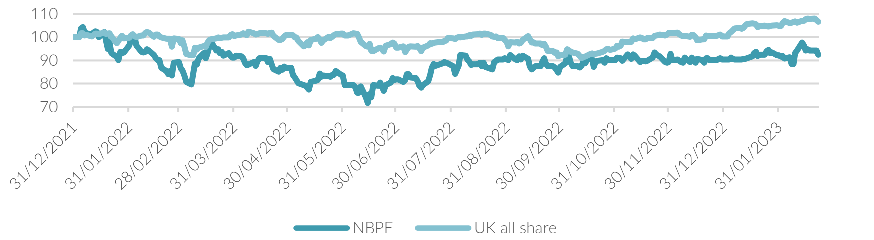
Source: Hardman and Co Research

2020-21 listings

2022 sentiment to highly rated businesses IPO'ed in 2020-21

Underlying GPs used the strong markets in 2020-21 to IPO a number of companies, crystallising significant gains on any partial sales but leaving it with residual holdings in listed companies on then high ratings. It is difficult to criticise GPs for taking a significant element of the gains off the table at the peak of the market. However, as the market appetite for such companies waned, this saw both a falling NAV and weaker sentiment for NBPE. We believe this reflected a number of issues, including the sensitivity to listed exposure, some worries about whether there was a dependence on IPO exits at a time when the IPO market appeared to be closed, and a focus on the headline valuation rating, rather than the underlying metrics.

Total return for NBPE and UK market indexed to 100 at 31/12/2021



Source: Refinitiv, Hardman & Co Research

We note, of the 16 listed holdings, at May 2023, 84% was accounted for by just five positions, three of which are in the top 10 holdings overall. Management highlights the realised gains on these top five holdings was 1.8x invested capital and that significant value is still to be realised (total return as at date 3.9x invested capital).

Looking forward, we believe the key risks are materially reduced, noting:

Looking forward:

i) public holdings revalued;

ii) businesses continuing to perform;

iii) NB under no pressure to sell;

iv) NB has realised considerable gains already, but more to come; and

v) relative overweight in listed holdings reduced significantly

- On average, the listed holdings are on ratings, now in line with the private PE portfolio, reducing the risk of further weakness on valuation grounds.

- The investee businesses are continuing to perform well operationally. They, like the private portfolio, are generally in resilient sectors. NBPE's largest listed investment (third-largest in whole portfolio) at end-May 2023 was AutoStore (website here) in whose 4Q'22 results, the CEO commented, "*AutoStore grew revenue by 58% year-on-year and achieved an adjusted EBITDA margin of 40% in the fourth quarter of 2022, representing substantial margin improvement of 280 bps since the last quarter….Adjusted EBITDA amounted to USD 238 million – up 50% from 2021. A robust quarterly order intake of USD 153 million brought the order backlog to USD 476 million at year-end, leaving us well-positioned for a successful 2023,*".

- The share prices of some of the largest holdings have reflected this performance in 2023 YTD, with a partial recovery of the losses seen in 2021 (as shown in the table below).

Share prices of four largest current listed holdings

Period	AutoStore Holdings	Agiliti	GFL Environmental	Chewy A
End-2021	34.79	23.16	37.85	58.97
End-2022	17.93	16.31	29.23	37.08
% fall in 2022	-48%	-30%	-23%	-37%
Current	24.50	18.56	37.05	39.62
Change in 2023 YTD	10%	-3%	18%	-19%

Source: Refinitiv accessed 13 June, Hardman and Co Research

- As we have highlighted earlier, a core feature of PE is the ability to manage over the long term. The managers that NB invests alongside are under no pressure to sell at what they may consider unattractive prices.

- NBPE advises that, of the $525m of realisations since the beginning of 2021 to end-2002, $187m came from sale to PE investors, $100m sale to strategic investors, while IPOs made up just $47m. NBPE is not dependent on any single exit route, but the well-capitalised PE market has been the largest source of realisations. It is not dependent on the IPO market reopening.

- The listed portfolio is now a low-teens percentage of the portfolio, broadly in line with listed peers, and down from over 20% (over $300m fair value) at end-2021. The concentration is now slightly above the market average, but well down from over 2x the market average at end-2021, thus reducing the relative sensitivity.

Other issues

Volatility of returns

Likely to see more volatile returns than fund of funds, less than more concentrated director investors

Compared with investing in GP funds, a co-investment strategy can lead to concentrated lumpy investments rather than a steady ongoing flow. The manager chooses when to make investments or not, unlike a highly diversified fund of funds. At heart, this simply represents having a less diversified portfolio than a fund of funds, but it could lead to a greater degree of volatility in returns. In contrast, the effect is less than in more concentrated direct vehicles, which may only have 20-40 investments.

Sentiment to the history of the discount

Discount been feature for a long time – noting that other ICs have seen such a discount reverse

Overcoming the sentiment that "NBPE has always been at a discount, so it always will be" can be a challenge, especially in an environment where the sector as a whole has seen widening discounts to NAV. We note that:

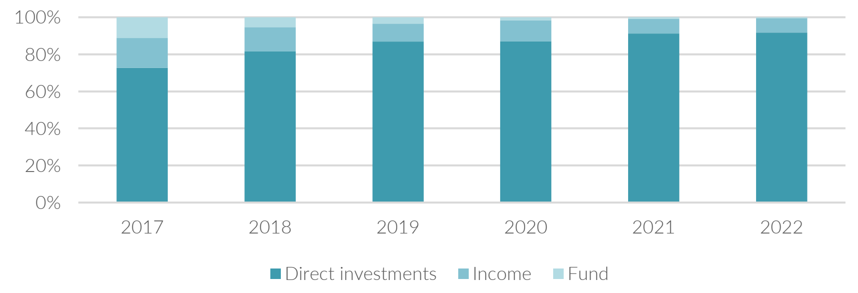
- This appears to be an anomaly in terms of the current NAV valuation, the outlook and the business model, as discussed in previous sections.
- Other PE vehicles (such as HGT) that are focused in high-growth sectors have historically traded at premiums. They currently trade at smaller discounts than the rest of the sector but, historically, were at premiums.
- A number of investment companies have overturned sustained discounts to trade at a premium. In the same way, others that have traded at premium now trade at significant discounts (including the likes of HGT).

Benefits from current strategy not yet fully visible

May take time for benefits of strategy to be fully appreciated as historical portfolios wind down

As we show in the *Valuation* section below, the current discount is above that of direct investing peers and, adjusting for the income-investments, it is trading close to the average for funds of funds, not a direct investment vehicle. This suggests to us that the full benefits from the current co-investment strategy are either not fully visible or not fully appreciated as yet. If we look at the five-year NAV total return, while it is beating market indices, it is not visibly above all peers (noting the currency issue above resulting in sterling funds having tailwinds from forex). We understand that this is, in part, due to the historical funds/income investments of the portfolio, which have been steadily reducing over the period and which have earned lower returns (five-year return to end-2022 11.2% from income investments against 16.6% from direct investments). Both are now insignificant, so any further drag is likely to be modest.

Mix of portfolio 2017-22 (%)



Source: NBPE, Hardman & Co Research

Not helped by performance of co-investments in some other vehicles

Additionally, we believe that investor sentiment can be affected by the performance of other listed PE holdings and their co-investment/direct units, which are very different from NBPE. We have reviewed HVPE's performance, another $ reporter, in the table below. This record is neither consistent with academic reviews, which report co-investment outperforming over the long term, nor been a helpful sentiment read across for NBPE's strategy. If this performance has created a sentiment headwind, it may take more time for the benefits of NBPE's co-investment strategy to be fully valued.

HVPE net investment gains by strategy

Year-end January/Half-year-end July	2018	2019	2020	2021	2022	average	1HFY'23
Primary	15%	11%	16%	33%	40%	23%	-5%
Secondary	19%	10%	13%	15%	24%	16%	1%
Direct	17%	20%	13%	27%	22%	20%	-5%

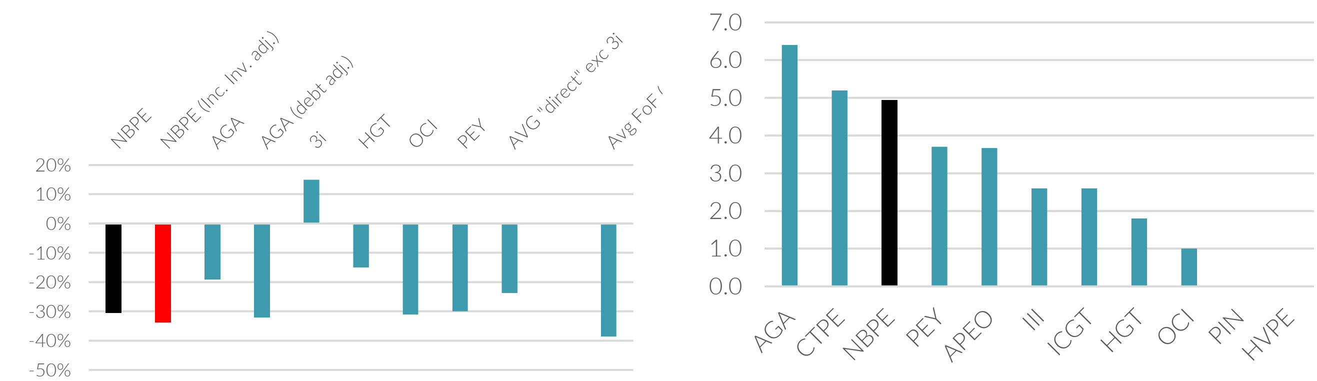
Source: HVPE results presentations, Hardman & Co Research

Valuation

Discount is above direct investing PE names and approaches FoF level, once adjusted for income investments

As the chart below shows, NBPE's current reported discount to NAV (30%) is at the higher end of the direct investing listed PE trusts. If we adjust for the income investments at their carrying value, the PE business discount rises to 34%. A similar adjustment needs to be done to the AGA rating for its Derived Investments, but, as the chart below shows, the adjusted NBPE rating is well above peers. This appears anomalous with its business model. Its dividend yield is appreciably above the sector average. We see a two-stage, evenly split, potential rerating – first the erosion of the marketwide discount widening seen in 2022 and, secondly, the elimination of the company-specific discounts.

Current share price discount to latest NAV (LHS, %), and dividend yield (RHS, %) for narrow and wider peers



Source: Company websites, factsheets and presentations, Hardman & Co Research, priced at 13 June 2023

Sector-wide issues

Sector-wide concerns about validity of current NAV and its resilience have been addressed in earlier sections and appear to be more sentiment issues than reality

One of the more noticeable features of the discounts across the PE sector is the broad consistency, despite very different business models and investment portfolios. This suggests to us that the market has concerns with the whole sector, which could include some of the issues discussed in the *Investment risk* section above:

- Lack of confidence that the current NAV is a realistic reflection of the underlying value of the investments. We discussed in detail above why, other than a small timing issue (which is positive in rising markets and negative in falling ones), NBPE's accounting NAV at the valuation date might be considered conservative – so this factor appears to be sentiment- rather than reality-driven.

- A concern that the current valuation may not be achievable in the future, because illiquid assets will fall in value before they can be sold. In essence, the key driver here is a sensitivity to the cycle/the resilience of NAV in a downturn, which, again, we have addressed above in terms of resilience.

- We can appreciate why sector issues, such as high costs, can mean that certain investor groups either cannot buy for regulatory reasons or may choose not to buy, but these do not appear to be a justification for a sustained, substantial discount, especially for the low-cost provider in the sector.

Gordon Growth Model (GGM)

If NBPE were a trading company, we use a GGM model, to reflect the value added by management

As an investment company, it is standard practice to consider the discount/premium to NAV. However, if NBPE were a trading business, we would consider the GGM as a legitimate valuation methodology, as it focuses on the value added by management. A business that delivers returns above cost of capital should trade at a premium to book value, as it is adding value for shareholders. A growing company delivering returns above cost of capital should be at a higher multiple than a company with no growth.

Using this model, it should trade on multiple appreciably above NAV, given returns are a long way above cost of capital and it has grown strongly over the medium term

There may be a debate about the assumptions as to what are sustainable returns, cost of equity and growth. Arguably, the actual five-year 14.1% £ NAV total return CAGR or 13.5% $ NAV CAGR (to May 2023) is a good starting point in terms of return on equity. In the current interest rate environment, for most of our trading companies, we would consider ca.10% as a starting point for cost of equity. Long-term growth above nominal GDP, at some stage, would make the company bigger than the economy, although, if NBPE grows at 3% below its return (to reflect the dividend), it should increase its NAV by ca.11% p.a. These assumptions would have a price-to-book appreciably above 1x.

What could lead to a rerating?

We believe there are two elements to a rerating, namely:

First element of rerating is reversal of 2022-1Q'23 increase in sector-wide discounts – this requires more confidence in NAV and economic resilience

- First, there is the reversal of the sharp increase in the discounts seen since the start of 2022. As noted above, we believe there were two main sector-wide concerns that need to be overcome before this widening reverses.

Continued exit uplifts and returns may give investors this confidence

Risk-on rather than risk-off environment will help

As the fall was rapid, the recovery could be too

    - The first concern is that the market needs to be convinced that the current valuation is a fair reflection of the current realisable value of the portfolio. In particular, we believe it needs to be convinced that the technology investments are fairly valued, even though NBPE is not invested materially in the early stage, revenue-valued elements of this market. We have outlined above the multiple factors from which investors may take comfort in NBPE's valuations, even before they need to rely on the independent verification by the board and auditors. In terms of timing as to when this may be recognised:

        - NBPE will continue its investor relations programme to further communicate its confidence in the valuation, demonstrating that the positive issues highlighted through this report have continued to apply. Should investors take greater comfort from the continued reiteration of these messages, the discount may be expected to reduce.

        - Further exits at premiums to carrying value will not only reinforce the message about the quality and attractiveness of NBPE's book but also the conservative nature of the accounting.

        - Continued announcements across the PE market of rising NAVs, uplifts on exits and continued revenue/EBITDA growth in underlying companies ahead of publicly listed comparables will all prove the value added in PE-backed models.

        - If the overall sector discount reduces, NBPE, which saw an above-average derating, may be expected to see an above-average recovery.

- The second sector concern is that, in the current uncertain times, the illiquid PE assets will not be realisable at the current valuations – in essence, the downside risk in a recession. We have outlined above the underlying reasons why NBPE should have a resilient book and why its NAV has, in the past, outperformed and should, in the future, outperform listed markets. In terms of timing, continued delivery of NAV growth could be the main driver.

- If there is a sustained switch in investor sentiment from risk-off to risk-on, those companies that underperformed in the risk-off environment may be expected to outperform in a risk-on one. The noise around the timing of the discount widening in a falling market and narrowing in a rising market will vary with the specific market conditions at any given time, but a risk-on environment is more likely to see rising markets.

Second element is final 15%-20% of discount to par. NBPE requires delivery of returns but may take more time.

- The second element to a rerating is the elimination of the historical discount shown on page 1. At the end of 2019, pre pandemic, the discount had fallen to 16%. This rose to 29% at the end of 2020 on COVID-19, before falling again, at end-2021, to 21%. Within this noise, overall, we would characterise the trust as having a sustained discount of around 15%-20%. Given the market-beating returns in underlying companies driving market-beating investor returns, and the strong capital structure inherent in a co-investing vehicle, such a discount appears a fundamental anomaly. We believe eliminating it over the longer term is about delivery of returns.

Financials

Profit and Loss

Year-end Dec ($m)	2017	2018	2019	2020	2021	2022	2023E	2024E
Interest and dividend income	16.5	17.4	12.5	9.5	5.7	4.5	7.0	7.2
Expenses								
Inv. mgt. and services	11.9	14.3	15.3	16.7	22.5	21.1	18.8	19.4
Carried interest	7.9	-	6.9	15.2	37.2	-	(7.9)	8.1
Finance costs								
Credit facility	3.2	4.5	8.5	6.3	4.1	6.0	6.0	6.0
ZDP shares	3.4	4.8	6.0	6.4	6.9	6.0	2.2	1.8
Administration and professional fees	4.0	3.6	3.7	3.5	4.3	4.5	4.8	5.2
Total expenses	30.4	27.3	40.4	48.1	75.1	37.7	23.9	40.4
Net investment income (loss)	**(13.9)**	**(9.9)**	**(27.9)**	**(38.6)**	**(69.3)**	**(33.1)**	**(16.9)**	**(33.2)**
Net realised gain (loss) on inv. and fx	89.4	64.4	33.8	90.2	212.4	51.2	50.0	72.0
Net change in unrealised loss	23.9	(7.8)	72.1	133.3	319.7	(127.1)	(50.0)	144.0
Net realised and unrealised gain (loss)	113.3	56.6	105.9	223.5	532.1	(75.9)	-	216.0
Net change in net assets from ops.	**99.4**	**46.6**	**78.0**	**184.9**	**462.7**	**(109.1)**	**(16.9)**	**182.8**
Non-controlling interest	(0.1)	-	(0.1)	(0.4)	(0.5)	0.1	(0.5)	(0.5)
Net change in net assets	99.2	46.6	77.9	184.6	462.2	(108.9)	(17.4)	182.3
Average no shares (m)	48.8	48.8	47.5	46.8	46.8	46.8	43.4	43.4
EPS (€c)	2.03	0.95	1.64	3.95	9.88	(2.33)	(0.37)	3.90
DPS (p)	0.50	0.53	0.57	0.58	0.72	0.94	0.94	0.94

Source: NBPE, Report and Accounts, Hardman & Co Research

Balance sheet

@ 31 Dec ($m)	2017	2018	2019	2020	2021	2022	2023E	2024E
PE financial assets	961.4	1,019.9	1,087.0	1,254.6	1,569.3	1,401.4	1,440.3	1,772.5
Cash	25.8	23.0	9.5	3.0	116.5	7.0	7.0	7.0
Other assets	5.0	11.0	4.4	9.1	3.5	2.7	2.7	2.7
Proceeds receivable	7.6	8.1	1.5	0.6	0.3	0.2	0.2	0.2
Total assets	**999.7**	**1,062.0**	**1,102.5**	**1,267.4**	**1,689.6**	**1,411.3**	**1,450.2**	**1,782.4**
Liabilities								
ZDP share liability	71.1	134.9	146.1	157.0	162.0	72.8	72.8	0.0
Credit facility loan	60.0	40.0	47.0	35.0	0.0	0.0	20.2	183.0
Carried interest payable to Special LP	7.9	0.0	6.9	15.2	37.3	0.0	-7.9	8.1
Payables to inv.	3.2	3.7	3.9	4.6	5.8	5.2	5.2	5.2
Net deferred tax liability	3.5	0.8	0.0	0.0	0.0	0.0	0.0	0.0
Accrued expenses and other	1.5	9.4	2.6	2.4	2.2	4.1	4.1	4.1
Total Liabilities	**147.2**	**188.8**	**206.5**	**214.2**	**207.3**	**82.1**	**94.4**	**200.4**
Net assets	**852.5**	**873.2**	**895.9**	**1,053.2**	**1,482.3**	**1,329.2**	**1,355.7**	**1,582.0**
Class A	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Class B	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Additional paid in capital	525.2	525.2	497.1	496.6	496.6	496.6	496.6	496.6
Retained earnings	335.1	355.9	406.4	563.8	992.4	839.5	866.0	1,092.3
Shares in treasury	-9.2	-9.2	-9.2	-9.3	-9.3	-9.3	-9.3	-9.3
Total equity ownership	851.5	872.4	894.8	1,051.7	1,480.2	1,327.3	1,353.8	1,580.1
NCI	1.0	1.0	1.1	1.5	2.1	1.9	1.9	1.9
Total net assets	**852.5**	**873.3**	**895.9**	**1,053.2**	**1,482.2**	**1,329.2**	**1,355.7**	**1,582.0**
Period-end no shares (m)	48.8	48.8	46.8	46.8	46.8	46.8	43.4	43.4
Adj. NAV per share ($)	**17.45**	**17.87**	**19.11**	**22.49**	**31.65**	**28.38**	**31.21**	**36.42**
NAV growth (%)		2%	7%	18%	41%	-10%	10%	17%
Adj. NAV per share (£)	**12.91**	**14.03**	**14.43**	**16.45**	**23.37**	**23.59**	**24.75**	**28.88**
Exch. rate (£: $)	1.352	1.274	1.324	1.367	1.354	1.203	1.261	1.261
s/p (£)	10.45	10.03	12.10	11.65	18.50	15.80	15.80	15.80

Source: NBPE Report and Accounts, Hardman & Co Research

Cashflow statement

Year ended ($m)	2017	2018	2019	2020	2021	2022	2023E	2024E
NAV from ops attributable to cont. int.	99.2	46.6	77.9	184.6	462.2	(108.9)	(17.4)	182.3
Interest paid	0.1	-	0.1	0.4	0.5	(0.1)	0.5	0.5
Adjustments								
Realised (gain)/ loss	(89.4)	(64.4)	(33.8)	(90.2)	(212.4)	(51.2)	(50.0)	(72.0)
Unrealised (gain)/loss	(23.9)	7.8	(72.1)	(133.3)	(319.7)	127.1	50.0	(144.0)
Contributions to PE	(37.3)	(93.8)	(51.4)	(53.7)	(19.9)	(3.7)	(3.7)	(3.7)
Purchases of PE	(278.5)	(126.4)	(69.6)	(72.7)	(147.1)	(36.2)	(70.0)	(160.7)
Distributions from PE	133.7	128.1	119.9	73.3	105.5	56.0	-	-
Proceeds from sale of PE	108.4	92.5	50.4	117.2	281.2	63.5	120.0	200.0
In kind payment of interest	(0.5)	(3.9)	(4.0)	(4.7)	(4.4)	(3.8)	(3.8)	(3.8)
Amortisation of finance costs	0.6	0.9	(0.9)	0.7	0.7	0.6	0.6	0.6
Amortisation of purchase prem./disc	(1.8)	(1.4)	(0.7)	(0.4)	(0.3)	(0.1)	(0.1)	(0.1)
Change in other assets	(0.8)	(7.2)	14.7	(0.6)	1.0	0.3	0.3	0.3
Change in payables to Inv. mgr.	0.7	(7.8)	7.2	9.0	23.3	(38.0)	(7.9)	16.0
Change in accrued exp. and other	2.5	4.3	2.2	4.6	5.5	5.3	5.3	5.3
Net operating cash inflow/(outflow)	**(86.8)**	**(24.4)**	**39.8**	**34.2**	**176.3**	**10.9**	**23.8**	**20.7**
Cashflows from financing activities								
Dividends paid	(24.4)	(25.9)	(27.3)	(27.1)	(33.7)	(44.0)	(44.0)	(40.7)
Issuance (redemption) of ZDP shares	(15.5)	66.4	-	-	-	(68.1)	-	(72.8)
Purchase of own shares	-	-	(28.1)	(0.5)	-	-	-	-
Borrowing from credit facility	60.0	85.0	182.6	228.0	15.0	30.0	70.2	142.8
Payments to credit facility	-	(105.0)	(175.6)	(240.0)	(50.0)	(30.0)	(50.0)	(50.0)
Hedge settlement	(1.2)	1.1	(5.0)	(0.9)	5.8	-	-	-
Net cash used is financing activities	**18.9**	**21.6**	**(53.3)**	**(40.7)**	**(62.9)**	**(112.1)**	**(23.8)**	**(20.7)**
Opening cash and cash equivalents	**93.6**	**25.7**	**23.0**	**9.5**	**3.0**	**116.4**	**7.0**	**7.0**
Net increase in cash and cash equivalents	**(67.9)**	**(2.7)**	**(13.5)**	**(6.5)**	**113.4**	**(101.2)**	**0.0**	**(0.0)**
Forex	-	-	-	-	-	(8.3)		
Closing cash and cash equivalents	**25.7**	**23.0**	**9.5**	**3.0**	**116.4**	**7.0**	**7.0**	**7.0**

Source: NBPE Report and Accounts, Hardman & Co Research

Appendix: company matters

The group is a closed-ended investment company, registered in Guernsey. The registered office is Floor 2, Trafalgar Court, St Peter Port, Guernsey, GY1 4LY.

Key biographies

Board of Directors (biographies from 2022 Report and Accounts)

William Maltby – Chair, Independent Director

Appointed 21 March 2019

William Maltby was vice chair of Investment Banking at Deutsche Bank where he worked for more than 25 years. Mr. Maltby spent a further six years as a Senior Adviser to the Investment Banking Division of Deutsche Bank. Mr. Maltby was a corporate financier specialising in financial sponsors and leveraged finance, and was head of Deutsche Bank's European Financial Sponsor Coverage and Leveraged Finance businesses. He joined Morgan Grenfell in 1984, which was acquired by Deutsche Bank in 1989.

Mr. Maltby was chairman of Mithras Investment Trust Plc, a private equity fund of funds investment trust listed on the London Stock Exchange from 2012 to 2018, when it completed a successful realisation strategy.

Mr. Maltby is also chairman of Ekins Guinness LLP. He qualified as a Chartered Accountant with Peat Marwick and has a law degree from the University of Cambridge.

Mr Maltby's expertise brings a wealth of knowledge of listed investment trusts, investment banking and private equity to the board, in addition to being an experienced and effective Chairman.

Mr Maltby has no other public directorships.

Wilken von Hodenberg – Senior Independent Director

Appointed 21 March 2019

Wilken von Hodenberg is a businessperson with 39 years of experience in private equity, investment banking and senior management. Mr. von Hodenberg has been at the head of five different entities and, for some years, occupied the position of chairman of German Private Equity & Venture Capital Association. Mr. von Hodenberg was a member of the Supervisory Board for Deutsche Beteiligungs AG from 2013 until February 2020. He is also a non-executive director of eCapital Entrepreneurial Partners AG; Mr. von Hodenberg became vice chair of Wepa SE in April 2022.

From 2000-2013, Mr. von Hodenberg was CEO of Deutsche Beteiligungs AG. Mr. von Hodenberg also served as a managing director of Merrill Lynch in Frankfurt (1998-2000). Prior to this, Mr. von Hodenberg was managing director at Baring Brothers GmbH (1993-1997). From 1990-1992, he was CFO of Tengelmann Group, a major German retailing group. He started his career at JPMorgan in New

York and Frankfurt (1983-89). Mr. von Hodenberg holds a Law degree from the University of Hamburg.

Mr von Hodenberg's private equity investment expertise is highly valuable for board discussions and of particular relevance for the company.

Other public directorships: Sloman Neptun AG.

Trudi Clark– Chairman of the Nomination and Remuneration Committee and Management Engagement Committee, Independent Director

Appointed 24 April 2017
Trudi Clark qualified as a chartered accountant with Robson Rhodes in Birmingham, after graduating in Business Studies. Moving to Guernsey in 1987, Ms. Clark joined KPMG where she was responsible for an audit portfolio, including some of the major financial institutions in Guernsey. After 10 years in public practice, Ms. Clark was recruited by the Bank of Bermuda as Head of European Internal Audit, later moving into corporate banking. In 1995, Ms. Clark joined Schroders in the Channel Islands as CFO. Ms. Clark was promoted in 2000 to Banking Director and Managing Director in 2003.

From 2006 to 2009, Ms. Clark established a family office, specialising in alternative investments. From 2009 to 2018, Ms. Clark returned to public practice specialising in corporate restructuring services. Ms. Clark has several non-executive director appointments for companies both listed and non-listed investing in property, private equity and other assets.

Ms. Clark has significant expertise in both accountancy and Guernsey regulations, as well as being an experienced non-executive director of public companies, all of which have proven beneficial to both the board and its committees.

Other public directorships: BMO Commercial Property Trust Limited, The Schiehallion Fund Limited and Taylor Maritime Investments Ltd.

John Martyn Falla– Chairman of the Audit Committee, Independent Director

Appointed 21 December 2015
John Falla, a resident of Guernsey, is an Associate of the Institute of Chartered Accountants in England and Wales. Mr. Falla has a degree in Property Valuation and Management from City University London and is a Chartered Fellow of the Chartered Institute for Securities and Investment, holding their diploma. Mr. Falla qualified as a chartered accountant with Ernst and Young in London, before transferring to their Corporate Finance Department, specialising in the valuation of unquoted shares and securities, including private equity holdings. On Mr. Falla's return to Guernsey in 1996, he worked for an International Bank before joining The International Stock Exchange (formerly Channel Islands Stock Exchange) in 1998 on its launch as a member of the Market Authority.

In 2000, Mr. Falla joined the Edmond de Rothschild Group. Although based in Guernsey, he provided corporate finance advice to international clients, including open- and closed-ended funds, and institutions with significant property interests. Mr. Falla was also a director of a number of Edmond de Rothschild operating and investment entities. Mr. Falla has been a non-executive director of London-listed companies for a number of years, and is now a full-time non-executive director and consultant.

Mr, Falla has significant expertise as an accountant and as a non-executive director of listed companies for more than 10 years, both of which contribute to his role as a non-executive director of the company and as Chair of the Audit Committee.

Other public directorships: Marble Point Loan Financing Limited and Baker Steel Resources Trust Limited.

Louisa Symington-Mills – Independent Director

Appointed 15 June 2021
Louisa Symington-Mills has extensive experience of the listed private equity sector. She was a listed alternative investment funds equity research analyst at Royal Bank of Scotland and Jefferies, with a particular focus on listed private equity investment companies. She has played a key role in increasing awareness and understanding of listed private equity.

She subsequently became chief operating officer at LPEQ (now part of Invest Europe), an international association of listed private equity companies, and is now an award-winning entrepreneur. Ms. Symington-Mills began her career at M&G Investment Management in 2003 and has an English Literature degree from the University of Durham.

Ms. Symington-Mills' experience in listed private equity, and as a research analyst, provides a depth of insight to the board during meetings. Her input is particularly valued during discussions with the company's corporate brokers and other investor relations advisers.

Ms. Symington-Mills has no other public directorships

Investment Manager

The key managers of NBPE are given below, noting it has benefits from NB's Private Markets team of over 200 private equity professionals. The team is highly stable, with a 99% retention level among Private Equity Managing Directors and Principals.

Peter von Lehe – Head of Investment Solutions and Strategy Managing Director, New York

Peter von Lehe, JD, is the Head of Investment Solutions and Strategy and is a Managing Director of Neuberger Berman. He is also a member of the Athyrium, Co-Investment, Private Investment Portfolios, Marquee Brands and Renaissance Investment Committees, as well as a member of the NB Insurance-Linked Strategies Underwriting Committee and a chairman of NB Reinsurance Ltd. Mr. von Lehe sits on the Limited Partner Advisory boards of a number of investment relationships globally on behalf of Neuberger Berman funds. Previously, Mr. von Lehe was a Managing Director and Deputy Head of the Private Equity Fund of Funds unit of Swiss Reinsurance Company. At Swiss Re, Mr. von Lehe was responsible for investment analysis and product structuring and worked in both New York and Zurich. Before that, he was an attorney with the law firm of Willkie Farr & Gallagher LLP in New York focusing on corporate finance and private equity transactions. He began his career as a financial analyst for a utility company, where he was responsible for econometric modelling. Mr. von Lehe received a BS with Honours in Economics from the University of Iowa and a JD with High Distinction, from the University of Iowa College of Law. He is a member of the New York Bar.

Paul Daggett – Managing Director, Dallas

Paul Daggett, CFA, is a Managing Director of Neuberger Berman and a senior member of the Private Investment Portfolios and Co-investments team. He is also a member of the Private Investment Portfolios and Co-investments Investment

Committee. Paul joined Neuberger Berman in 2004, focusing on investments in private equity and venture capital funds and direct co-investments in venture capital, growth equity and buyout transactions. Paul sits on the Limited Partner Advisory Boards of a number of venture capital and private equity funds. Prior to joining Neuberger Berman, Paul worked in the European Equity Derivatives Group at JPMorgan Chase & Co. He holds an MBA from the Cox School of Business at Southern Methodist University and a BEng, with Honours, in Aeronautical Engineering from the University of Bristol. Paul is a Fellow of the Institute of Chartered Accountants in England and Wales (FCA) and holds the Chartered Financial Analyst designation.

Investment policy and restrictions

In order to achieve its investment objective, the company intends to maintain a diversified portfolio of private equity related assets composed predominantly of direct private equity investments, but which may also include private debt investments and private equity fund investments.

In addition, the company may make other opportunistic investments from time to time, provided that such investments will account for no more than 10% of the company's gross assets at the time the opportunistic investment is made without approval from a majority of the board and, in any event, no more than 20% of the company's gross assets at the time the opportunistic investment is made.

The company's investments are made across different levels of the capital structure of investee entities. There are no restrictions on the type or form of investments or securities which the company may hold. The company may make its investments in primary or secondary markets and either directly or indirectly through intermediary holding vehicles or collective investment vehicles (including co-investment vehicles or other funds) managed by either an affiliate of the Investment Manager or third-party managers.

The company will not invest more than 10%, in aggregate, of its total assets in other UK-listed closed-ended investment funds.

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(Disclaimer Version 8 – Effective from August 2018)

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Some professional investors, who are subject to the new MiFID II rules from 3rd January 2018, may be unclear about the status of Hardman & Co research and, specifically, whether it can be accepted without a commercial arrangement. Hardman & Co's research is paid for by the companies, legal entities and issuers about which we write and, as such, falls within the scope of 'minor non-monetary benefits', as defined in the Markets in Financial Instruments Directive II.

In particular, Article 12(3) of the Directive states: 'The following benefits shall qualify as acceptable minor non-monetary benefits only if they are: (b) 'written material from a third party that is commissioned and paid for by a corporate issuer or potential issuer to promote a new issuance by the company, or where the third party firm is contractually engaged and paid by the issuer to produce such material on an ongoing basis, provided that the relationship is clearly disclosed in the material and that the material is made available at the same time to any investment firms wishing to receive it or to the general public…'

The fact that Hardman & Co is commissioned to write the research is disclosed in the disclaimer, and the research is widely available.

The full detail is on page 26 of the full directive, which can be accessed here: https://ec.europa.eu/transparency/regdoc/rep/3/2016/EN/3-2016-2031-EN-F1-1.PDF

In addition, it should be noted that MiFID II's main aim is to ensure transparency in the relationship between fund managers and brokers/suppliers, and eliminate that is termed 'inducement', whereby free research is provided to fund managers to encourage them to deal with the broker. Hardman & Co is not inducing the reader of our research to trade through us, since we do not deal in any security or legal entity.

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