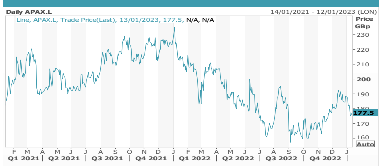
13 January 2023

Closed-ended investments



Source: Refinitiv

Market data

EPIC/TKR	**APAX**
Price (p)	**175.2**
12m high (p)	228.0
12m low (p)	154.0
Shares (m)	491
Mkt cap (£m)	860
Discount to Sep £ NAV (%)	30%
Free float	92%
Country of listing	UK
Currency of listing	GBP
Currency of reporting	Euro
Market (main)	STMM

Description

AGA has a global portfolio across four core sectors – Tech, Services, Healthcare and Internet/Consumer. 71% of the portfolio is private equity (PE) and 29% Derived Investments; the latter is held for liquidity. It targets an annualised net total NAV return across economic cycles of 12%-15% and a dividend yield of 5% of NAV. It has a Premium listing, and is a FTSE 250 constituent.

Company information

Chair	Tim Breedon
NEDs	Chris Ambler, Mike Bane, Stephanie Coxon, Susie Farnon,
Inv. Adviser	Apax
Contact	*investor.relations@apaxglobalalpha.com*
	+44 (0)207 666 6526
	www.apaxglobalalpha.com

Key shareholders

Witan IT	6.2%
Berlinetta Limited	5.9%

Diary

Early Feb'23	Fund valuations
Early Mar'23	FY'22 results

Analyst

Mark Thomas +44 (0)203693 7075

mt@hardmanandco.com

Discloser note: the relevant analyst is a shareholder in Apax Global Alpha

APAX GLOBAL ALPHA

Making pearls out of oysters

Apax Global Alpha's (AGA) core is the investment in the Apax Private Equity Funds, which, in turn, target the acquisition of private companies, whose performance is then transformed by Apax's global insights and operational expertise. On average, investee company EBITDA growth accelerates by 15%, and margins improve by 8%. They become more valuable, and their sale relative multiple is typically ca.30% higher than on purchase. Repeating this playbook in four sectors with resilient, secular growth, has given investors 2.5x the total returns of the FTSE All-Share index since IPO. Exit uplifts prove a conservative NAV, and AGA's strong outperformance through the COVID-19 turbulence proves its resilience. The current discount is 30%.

- **Apax's added value:** Apax improves the Apax Fund investments by i) improving revenue growth (up 8%) with customer segmentation, new market expansion and digital marketing, and ii) improving efficiency using cloud technology, acquisitions and digitalisation. Apax brings options not available to standalone entities.

- **Other AGA positives include** i) a high-performing debt investment portfolio, giving capital and liquidity flexibility, ii) a 2022E dividend yield of 7.6%, making AGA one of only a handful of PE investments attractive to both capital and income funds, and iii) Apax's scale, experience, brand, deal access, global footprint and market focus.

- **Valuation:** Adjusting for the debt portfolio, AGA's discount to (September £) NAV (30%) becomes significantly wider than that of its peers (42%) on its PE portfolio alone. This (like peers) rose sharply in 2022, to well above historical levels. The NAV appears resilient and conservatively valued, making the discount absolutely and relatively anomalous.

- **Risks:** Sentiment to costs, the cycle, valuation and over-commitment are issues for AGA, as they are across the PE-listed market. Residual positions in highly rated stocks, following IPOs in 2020-21, saw an exposure to underperforming 2022 names. The unique Derived Investments portfolio model of predominantly debt instruments brings liquidity and capital flexibility, but complicates the story.

- **Investment summary:** Apax has delivered market-beating returns by selecting businesses that it can transform post-acquisition. Buying these companies at over 20% below peer ratings, accelerating their revenue growth and improving their margins, and then selling the reinvigorated business at a ca.10% premium, is the playbook that has been repeated again and again. Investments are focused in sectors with structural growth and resilience. Capital flexibility is enhanced by the Derived Investments portfolio. The discount is the "icing on the cake".

Financial summary and valuation

Year-end Dec (€000)	2019	2020	2021	2022E	2023E
Investment income	20,852	18,106	26,853	34,508	37,277
Net gains on fin. assets /liabils. at FVTPL	206,026	153,518	336,123	(2,045)	228,434
Total expenses	(13,957)	(5,262)	(14,879)	(7,623)	(12,051)
Pre-tax	211,344	162,092	345,127	21,440	251,060
PE invest. (€m)	769	788	1,014	1,088	1,370
Derived invest. (€m)	342	319	336	340	225
Cash (€m)	3	125	108	10	16
NAV (€m)	1,099	1,201	1,490	1,438	1,611
NAV per share (£)*	1.88	2.19	2.54	2.59	2.90
S/P prem./disc. (-) to NAV	-21%	-8%	-12%	-27%	-40%
Dividend p/sh (p)	9.5	10.2	12.3	13.3	15.8
Dividend yield	5.4%	5.8%	7.0%	7.6%	9.0%

**2002-23 NAV converted at £1: €1.13; Source: Hardman & Co Research*

Table of contents

Executive summary ... 4
What AGA does ... 11
Summary: "mining" businesses where Apax ownership can add value ... 11
Portfolio ... 11
Investment in 78 private companies via 11 Apax PE Funds ... 11
Unique business model with distinctive Derived Investments portfolio ... 12
Global exposure to four sectors ... 12
15.2% five-year total post-cost return with capital appreciation and yield ... 12
Investment attractions ... 13
Investors: long-term, market-beating performance ... 13
PE is an attractive, growing market ... 13
Apax: unique operational value added to investee companies ... 14
Apax: strategic optionality for investee companies ... 17
Apax: valuation rerating seen through life of ownership ... 19
Apax: four-sector focus gives competitive advantages and diversification ... 20
Apax: other competitive advantages ... 21
AGA: why the current NAV is conservative ... 22
AGA: resilient NAV through downturns ... 27
AGA: conservative liquidity management, including unique derived portfolio ... 30
AGA's dividend yield ... 33
Investment-neutral issues ... 34
US: largest, deepest, most competitive market, but needs careful stock selection ... 34
Currency exposure ... 34
ESG ... 35
Exit and reinvestment ... 35
Other neutral factors ... 36
Investment downsides ... 39
Investor sensitivity to challenging 2H'21-9M'22 markets ... 39
Sentiment to costs ... 41
Sentiment to economic cycle and gearing ... 43
Sentiment to the valuation ... 45
Impact of Derived Investments portfolio on weighted returns and sentiment ... 46
Other issues ... 47
Valuation ... 49
Financials ... 52
Appendix: company matters ... 54
Disclaimer ... 59
Status of Hardman & Co's research under MiFID II ... 59

Apax Global Alpha disclaimer

The Company is a closed-ended collective investment scheme incorporated under the laws of Guernsey. The Company's ordinary shares are admitted to trading on the main market of the London Stock Exchange.

The purpose of this report is to provide general information. None of the information in this report constitutes investment advice or an offer to sell, or a solicitation of an offer to buy, any shares of the Company. The contents of the report may be amended at any time in whole or in part at the sole discretion of Hardman & Co.

The information in this report is directed at persons in the United Kingdom who are professional investors, investment professionals, high-net-worth investors, and/or advised individual investors who understand the risks involved in investing in the Company. If you do not reside in the UK, and you choose to access this report, it is your responsibility to comply with any applicable laws to which you are subject. If you are not permitted to view the materials in this report, or are in any doubt as to whether you are permitted to view the materials, please exit this report.

The information in this report is not directed at persons in any jurisdiction where the Company is not authorised to engage in any investment business or activity requiring registration or authorisation.

In particular, the ordinary shares of the Company may not be offered, sold or delivered, directly or indirectly, within the United States, Canada, Japan, Australia, South Africa, Singapore, Hong Kong, or the European Economic Area (with the exception of the Netherlands, Luxembourg, Belgium, Denmark, Sweden and Ireland, and then only to professional investors in each such jurisdiction). If you are reading this report from a country in which the shares of the Company cannot be offered or sold, you agree that you will not seek to acquire any shares of the Company unless such acquisition can be effected in the secondary market without breaching the securities and other laws to which you are subject.

If you are a US Person, you agree that you will not seek to acquire shares of the Company unless you are a "Qualified Purchaser" within the meaning of Section 2(a)(51) of the Investment Company Act of 1940 and an "Accredited Investor" as defined in Rule 501 of Regulation D, in a transaction not subject to the registration requirements of the U.S. Securities Act of 1933.

You also agree that you will not acquire or hold any shares of the Company with the assets of (i) an "employee benefit plan" as defined in Section 3(3) of the US Employee Retirement Income Security Act of 1974, as amended ("ERISA"), that is subject to Title I of ERISA; (ii) a "plan" as defined in Section 4975 of the US Internal Revenue Code of 1986, as amended (the "US Tax Code"), including an individual retirement account ("IRA") or other arrangement, that is subject to Section 4975 of the US Tax Code; (iii) an entity which is deemed to hold the assets of any of the foregoing types of plans, accounts or arrangements that are subject to Title I of ERISA or Section 4975 of the US Tax Code; or (iv) a plan, fund or other program that provides for retirement income, a deferral of income in contemplation of retirement or payments to be made upon termination of employment (including for example, a governmental, church, non-US or other employee benefit plan) that is subject to any federal, state, local or non-US law or regulation that is substantially similar to the fiduciary responsibility or prohibited transaction provisions of Title I of ERISA or Section 4975 of the US Tax Code (collectively, "Similar Laws"), and whose purchase, holding, or disposition of the shares (a) could subject the Company (and Persons responsible for the investment of the Company's assets) to any applicable Similar Law or (b) would constitute or result in a violation of any applicable Similar Law (each of the plans, accounts, funds, programs and arrangements described in clauses (i), (ii), (iii) and (iv) are referred herein to as "Plans").

Please read our full disclaimer which is contained at the end of this report.

Executive summary

What AGA does

Apax finds good-quality companies at attractive prices in coveted categories, improves them and then sells them at better prices

Apax finds businesses that are good-quality companies at attractive prices in coveted categories, and that are under-optimised relative to their potential. With the incremental skills and toolkit that Apax brings, their growth and profitability is improved, and the enhanced business is sold at a higher multiple. With Apax repeating this playbook again and again in selected sectors with structural growth, AGA has delivered market-beating returns (15.2% five-year adjusted NAV total return to September 2022). The model is relatively simple, even if the execution is both complicated and resource-intensive.

AGA gives all access to Apax Funds with balanced portfolio

AGA democratises the investment in this model by allowing all investors liquid and quoted access to Apax Funds (currently investments in and commitments to 11 funds, including both large flagship buyout funds and smaller specialist ones, such as digital ones). It is a balanced underlying portfolio of 78 companies by age and size of company, with key geographies being North America (66%), Europe (12%) and the UK (9%). There is a tight four-sector focus across Tech (39%), Services (29%), Healthcare (20%) and Internet/Consumer (12%).

Unique capital, liquidity and cash-drag minimisation feature in Derived Investments portfolio

To manage capital, provide flexibility in liquidity, and minimise the cost of holding cash, AGA also has a portfolio of what it calls "Derived Investments". This approach is unique in the PE world. Apax leverages the insights of the teams of its existing sectors to identify other investments (now primarily debt) that are more tradeable, and so could be realised quickly, if required. They are in the same sectors as the Apax Funds (28% of AGA's derived investments are in current or pre-owned PE companies) – so the knowledge base is very high.

Unique appeal to both capital and income funds

AGA's dividend yield, at 7.6% 2022E (set at 5% of NAV annually), is the highest in the sector, making it uniquely appealing to both capital and income investors.

Investment-positive factors

Key positive for investors is market-beating returns, with best returns made in uncertain times

AGA's share price has delivered a 2.5x FTSE All-Share return since the IPO because it adds value to the underlying companies. We concur with management views that some of the best investment returns are from investments made during, and immediately after, financial downturns, making now an especially interesting time.

PE an attractive and growing market

Apax, and so AGA, operates in the attractive and growing PE market. We believe PE is appealing because i) superior returns are earned by adding value to investee companies not taking risk, ii) there are more opportunities than in the past, as companies are staying private for longer, with more of the value chain being generated in private hands, iii) global fundraising was at a record in 2021, leaving significant dry powder concentrated in larger funds, and iv) the PE market has less valuation sensitivity, as it is driven by long-term views, not short-term noise. With PE still accounting for a small part of global investment assets, there is considerable room for growth, and we believe AGA is well-positioned in this attractive market.

In our view, key to Apax model is improving businesses

While it is vitally important that Apax find the right, good-quality companies at attractive prices in coveted categories that can be improved upon (and we do not under-estimate how hard that task is), in our view, the key to the model is improving businesses once they are owned by the funds. Apax has a specialist team (the "Operational Excellence Practice" (OEP) devoted to this purpose)). The OEP function is used broadly in due diligence (for example, to assess a target's digital competitive position), in discussions with management ahead of acquisition (for example, looking at customer metrics), on acquisition, and in a hands-on manner post-acquisition. About 60% of its resource is devoted to post-acquisition business improvement, where its toolkit includes improved technology, marketing, operations and purchasing. Its methods include best-practice transfer, economies of scale, state-of-the-art technology (including the proprietary "Apax Partners Data Intelligence Platform") and specialist expertise. Investee companies are not charged for the support and services of the OEP team, as the OEP is an Apax Fund service. The unit has grown rapidly, with use up ca.50% in two years. To us, the proof of the pudding is in delivery. The overall average investee company improvement during Apax Funds' ownership is that revenue growth accelerated by 8%, EBITDA growth by 15% and margins by 8%. Specific case studies were given in the recent capital markets day presentation to add flavour to these portfolio numbers.

Proof of pudding is overall improvements during Apax's ownership:

investee company revenue growth accelerated by 8%, EBITDA growth by 15% and margins by 8%

Additional support with financial capital structure but also technical, access and documentation expertise – well beyond just balance sheet

In addition to EBITDA improvements, we believe Apax provides support in the management of the portfolio company's capital structures. Using a dedicated capital markets team, this assistance is especially important in a rising rate environment. Apax can assist with technical expertise and provide access to the entire range of capital markets products, ensuring greater probability of cov-lite documentation. With the cushion of improved profitability also generating confidence in trading partners, we believe the financial position of investee companies is enhanced well beyond just the balance sheet.

Apax brings organic and inorganic strategic optionality to investee companies with its long-term focus

In addition to operational benefits, Apax brings strategic optionality. It brings expertise to facilitate deal-making for smaller companies where it is more likely that value will be added in M&A. Strategy can be enhanced by the right management team hires. Apax manages for long-term returns, which allows the opportunity for investee companies to invest and not sacrifice long-term returns to meet short-term market consensus expectations. For AGA investors, the long-term focus also means that the timing of exits can be managed through periods of uncertainty, as Apax Funds are never a forced seller at distressed prices.

Return to AGA investors is ca.30% expansion in relative rating, with good identification of potential downside situations

The return to investors from improving the businesses is that they become more valuable. In recent funds, Apax has seen a multiple rerating relative to peers of more than ca.30%. Apax's extensive due diligence means that it has been good at identifying potential downside situations, and we believe that investing for the long term means due diligence considers economic cycles, which helps here. There has been a focus on the ability to pass on cost inflation, resilience to weak demand and cost flex, which should limit downside going forward.

Sector focus adds value, and Apax's sectors have secular growth and resilient incomes streams, with benefit of some diversification

Sector focus adds value in PE. It creates expertise in due diligence and operational improvement. It also builds networks that are critical to identifying management teams and deal flow. Apax's chosen sectors and sub-sectors have structural growth driven by socio-economic and demographic trends with resilient earnings streams, and, unsurprisingly, have delivered above-average returns. By having four sectors, rather than just one, the Apax Funds (and so, in turn, AGA) benefit from diversification.

Apax, as adviser, brings many benefits

Apax, as the investment advisor, brings many advantages, including i) scale, with >$60bn deals to date, ii) experience, iii) a brand that brings deal access, iv) a global footprint, v) a focus in the attractive middle market (rather than mega deals, where there is less competition, and more value-add and exit opportunities), and vi) the current Credit Fund has expertise synergies with the Derived Investments portfolio.

Current NAV is real, supported by:

i) consistent, strong exit uplifts on sale

ii) NAV growth, driven by EBITDA growth

iii) nearly 40% of non-cash portfolio based off market prices

iv) stable underling ratings

v) multiple uplifts only significant as exit approaches

vi) sector mix

vii) no incentive for Apax to inflate valuations

We believe the current NAV is realistic, a view supported by:

- Uplifts on exits, with buyers doing due diligence, paying significantly more than the level at which Apax valued its companies in the last quarter, prior to exit (in the challenging 1H'22, Apax saw an average 15% uplift, and the two exits in 3Q'22 saw a weighted average 35% uplift).
- NAV growth is driven by EBITDA growth of 17% at the underlying companies over 2017-21 (3Q'22 YoY 17.6%).
- Of the invested portfolio, 15% is in PE-listed equities, 2% in derived equities and 26% in derived debt (of which ca.80% is priced from broker quotes and so market prices). Nearly 40% of the investment portfolio is thus directly market-priced. A further half is based on conservative earnings multiples, and just a tenth is based on revenue multiples that may be regarded as volatile.
- The underlying ratings have been broadly stable over time, and are well below the current market ratings for the growth sectors in which Apax operates. They are conservative on a PEG basis, especially bearing in mind good cash conversion. The earnings-based multiples are a mix of discounted current market ratings and comparable deal transactions, with a bias to the latter. They will be less volatile than pure market comparatives, but reflect what is going on in the market.
- There is a strong J-curve effect, with ratings uplifts largely being seen only as exits approach.
- The sector mix is to growth.
- PE performance fees are paid only on exit, not interim NAV; so there is no incentive for Apax to inflate valuations. Even after all these considerations, investors can still rely on the usual independent verifications of the board and external auditors.

Apax-backed companies resilient to downturns due to committed capital, strategic optionality, improving profitability, manager alignment and sector focus

We believe Apax-backed companies will be resilient in a downturn because:

- They have access to committed capital, and we believe creditors' knowledge of this support is important.
- They have strategic optionality – both acquisitive and organic – to add value. As weaker competitors fail, the value of this option for Apax-backed companies increases in a downturn.
- Apax provides operational, financial and strategic expertise, improving its investee businesses' profitability, which, again, is more important in a downturn.

Proved by experience through COVID-19 and wider listed sector resilience in previous cycles

- There is clear manager and Apax alignment, with a long-term, through-cycle focus.
- Apax's investments are in defensive sectors. Academic research shows that PE-backed companies outperform in recessions. Any drag from incremental financial gearing is more than compensated for by the factors we have identified above. AGA additionally comments that Apax Funds' investee companies have

pricing power, have managed their interest rate risk, and have medium-term debt and low entry multiples. In addition, operational improvements give a cushion, and the derived debt portfolio is floating-rate. The strong outperformance through the COVID-19 downturn, the rapid recovery after the trough and a 2021 record year provide hard evidence of AGA's resilience. In addition, listed peers with long track records have proven resilience of PE more generally through downturns.

AGA liquid and with prudent over-commitment policy

At end-September 2022, AGA had commitments of €1.19bn (including the $700m *Apax Fund XI commitment* that was announced on 28 June 2022), available resources of cash of €94m, €390m from the Derived Investments portfolio, and borrowing capacity of €250m. Assuming that €100m of commitments will not be called, ca.€350m will need to be met from PE realisation proceeds over five years. In 2021 alone, AGA received €275m from exits. We believe a prudent over-commitment policy, like AGA's, is very sensible. Short-term cash calls are very visible, as Apax Funds use capital call facilities to manage their calls on investors; for example, the first Apax XI call may not be expected until 2023, given that it will use such a bridging facility to fund initial investments. Apax Funds' financing facilities are incremental to, and independent of, AGA's own revolving credit facility. We expect a move to modest net cash outflow in 2022-23, at a time of high investment returns, but we believe that liquid resources will still exceed €200m and that the debt facility is unlikely to be drawn.

Derived Investments leverages existing skills as capital and liquidity management tool

The Derived Investments portfolio makes AGA unique among UK listed PE names. It is held for a capital buffer, flexibility in liquidity management and to minimise cash drag. The focus is on leveraging existing skills in Apax's core sectors, with 28% in companies currently or previously owned by PE funds. It is a low-risk, liquid portfolio of predominantly debt instruments with largely market, not modelled prices, that has achieved a 34.6% five-year cumulative return on a constant currency basis, compared with 15.8% from the S&P/LSTA leveraged loan index. The September 2022 yield was 10.4%, and 96% was floating-rate. The listed equity book within this portfolio is small. There is bottom-up investment selection, but top-down risk/liquidity management, which provides additional comfort.

Dividend makes AGA attractive to both income and capital investors

The dividend is set at 2.5% of NAV every half year, and so can be volatile. Over time, with returns being above this level, NAV growth has been seen and, with this, further dividend increases are generated. This trend is expected to continue. The current yield to shareholders (2022E 7.6%) is well above that of AGA's PE peers, and makes AGA attractive to both capital and income investors. It is also partially covered by income from the Derived Investments portfolio.

Investment-neutral factors

US deep but mature market

AGA reports in €, but £ listed

PRI A+ rated, with usual ESG disclosure

Locked-in shares no longer material

Discount management reviewed quarterly

The US PE market is deep and liquid, and, while it is the most competitive market, it can still offer AGA micro opportunities. AGA's reporting currency is euros, but its shares trade in sterling, and peer comparisons need to be reviewed carefully for currency consistency. The quarterly currency impact on returns can vary. On rare occasions, an exit from one fund and reinvestment in a following fund may enhance portfolio risk management, a specific fund and overall returns, although it changes the cashflows for investors such as AGA. In terms of ESG, Apax collects, and reports on, over 130 ESG-related metrics using its OEP platform. It has a Principles for Responsible Investing (PRI) A+ rating. Locked-in shares are no longer a material overhang. As detailed in the board's review of the management of the discount to NAV (see page 32 of the 2021 Report and Accounts), the board assesses discount management strategies quarterly.

Investment risks

3Q'22 listed exposure still 15% of portfolio

From trading at significant rating premium to private holdings in 2021, now in line

Listed businesses performing well, Apax under no pressure to sell, and exposure now only slightly above that of peers

Having been a long-term outperformer against its peers since the IPO, more recently, AGA saw a total return share underperformance in 2H'21-9M'22, before seeing a sharp relative rally again in 4Q'22. While PE should always be considered a long-term investment, we believe investors should understand what drove these trends, so as to not be alarmed by them and to understand the long-term value creation underlying them. Apax took opportunities in 2020-21 to crystallise significant gains via IPOs, but then held residual positions in a number of highly rated names. We estimate that AGA's proportion of listed holdings was over 2x that of its peers, and the share prices of many of these companies saw sharp falls, especially in 2022 (including its largest holding, which fell three quarters in value, reducing the NAV by ca.6%). We believe the falling NAV also affected sentiment. To put these holdings into perspective, they had already returned 2.6x their initial investment, they are still showing significant further gains and are generally showing strong operational performances. Apax is under no pressure to sell; so the fundamental investment proposition remains very strong. Looking forward, following the 2022 weakness, the valuation multiple is now in line with that of the unlisted PE book, with the previous "bubble" rating being eliminated. We note that, overall, Apax-backed IPOs have performed in line with the market, and there is no reason to believe that this exit route will not reopen when the market does. We also note management's comment that, despite the strong 2020-21 realisations, over the past five years, on average, IPOs have accounted for only ca.20% of total exits; so Apax is not dependent on them to crystallise value. The listed exposure is now only slightly above that of peer levels, meaning that exposure from here should also not be an outlier risk.

Market sentiment is that PE is high-cost business, although we believe investors should focus on net returns after costs, which is market-beating

At the trust level, AGA is the lowest cost provider on both an Association of Investment Companies (AIC) basis and a Key Information Document (KID) disclosure basis, but PE is a high-cost business, and we do not have full disclosure on the costs incurred at the Apax Funds level. There is no dual fee structure, with no management fees paid at the AGA level, as they are paid on Apax Funds. In addition, AGA's management fees to the Apax Funds reflect AGA's status as a large, anchor investor, and are below-average. There are performance fees on eligible portfolios, which amounted to only €8.4m in FY'21. The main costs, therefore, relate to the Derived Investments, which are outside the Apax Funds.

Sentiment to downturn risks (on leverage, weaker AGA operational metrics and lower valuation ratings) again appears overdone

Sentiment to the cycle again appears overdone relative to the actual resilience we have outlined above. The evidence shows that PE-backed businesses outperform in downturns. Gearing has been increasing, and the most geared element has been increasing at the fastest rate. However, part of the gearing reflects i) locking in fixed rates, which reduces risk and ii) bolt-on acquisitions, which improve profitability. Cov-lite documentation reduces risk, as does revenue growth, and we note that new deals have below-average risk. Apax Funds, like most in the market, use capital call facilities to manage investor calls, and AGA's share of gearing was €149m in September 2022. There are no drawings at the AGA level. While we expect AGA to move from cash generation to net cash outflow in 2022-23, this is at a time when investment returns are especially attractive and the residual liquid assets remain strong, and we do not expect any drawing on AGA's credit line.

Sentiment to valuation overdone

The fall in ratings across all PE-listed trusts in 2022 suggests that there is scepticism about NAV valuations, especially in technology names, despite the comprehensive disclosure by companies like AGA to convince otherwise and all the reasons discussed earlier that demonstrate a robust valuation methodology.

Derived debt portfolio earned 35% five-year returns and brings capital/liquidity flexibility, but complicates investment story

The Derived Investments portfolio brings a capital buffer, as well as liquidity flexibility. The debt portfolio has earned a 34.6% five-year cumulative return, compared with 15.8% from the S&P/LSTA leveraged loan index, but, for those investors who prefer riskier approaches to capital/liquidity buffers, its net returns are below the PE book, and this makes AGA a more complicated hybrid PE/debt story.

Other investor concerns include:

Sentiment to over-commitment overdone

- Some investors are cautionary regarding over-commitment in uncertain times, although we consider it a sensible tool when used, as by AGA and other PE vehicles, in a prudent manner.

KID disclosure unhelpful

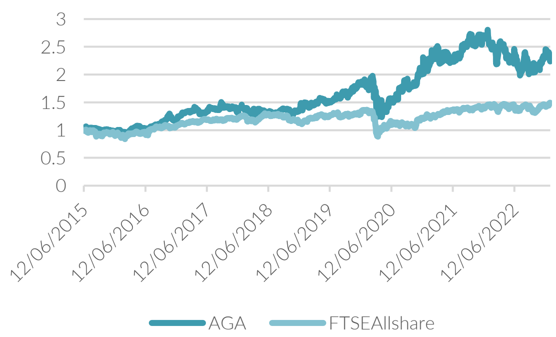
- We note, and concur with, the market's view that the methodology of calculation is not always helpful, but AGA's KID disclosure is out of line with that of its peers (although we gather that this is changing). AGA's costs are below those of its peers on both an AIC and a KID basis, albeit market-wide disclosure could be more helpful.
- While there have been short periods when AGA has traded at a premium to NAV, its shares have generally traded at a discount since IPO, making some question whether a discount is the norm.

Sum-of-parts (SoTP) implies PE portfolio discount to NAV is 42% – historical, relative and absolute anomaly

Valuation

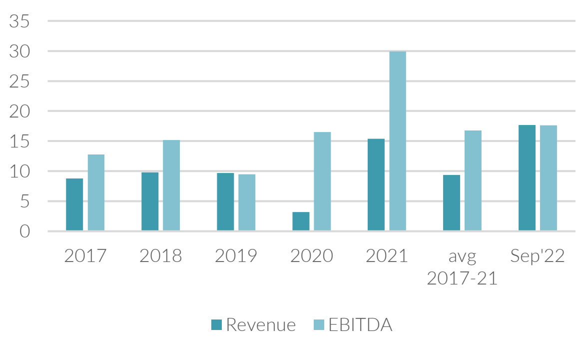
Applying a debt-sector discount rating to the derived book implies that AGA's PE portfolio discount to NAV of 42% is a historical, relative and absolute anomaly. Sector-wide valuation and resilience issues, for the reasons outlined in previous sections, do not appear relevant. A Gordon Growth Model (GGM) would indicate that AGA should trade on a multiple of book, given that its returns are well above cost of capital, and that AGA is growing.

AGA's share and FTSE All-Share total return, indexed to date of IPO at 1



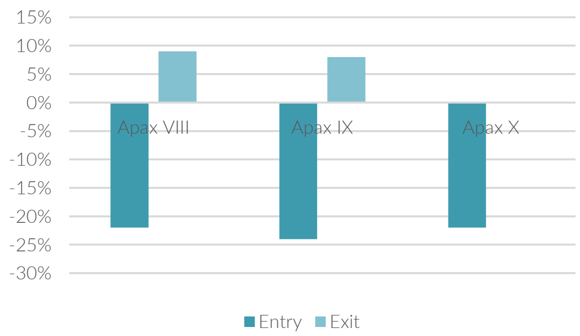
- 4Q'22 rally saw AGA recover much of 2Q'21-3Q'22 relative weakness. AGA's share price 2.5x total market returns since IPO. The NAV return has been even better.
- We believe the NAV is both realistic and resilient, and that, if the market values both, the share price return will move closer to the NAV return.
- The sharpest outperformance has been after periods of uncertainty (post-COVID-19). We note an experience consistent with listed PE with longer track records through previous downturns.

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



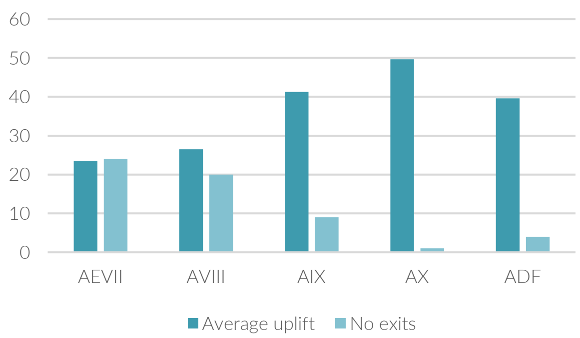
- Apax adds value to its companies by helping them to accelerate revenue growth (on average, by 8%) and improving margins (on average, by 8%) – so EBITDA growth accelerates (on average, by 15%).
- This is including digitalisation, technology, migration to the cloud, marketing, operations, customer segmentation, purchasing, staff upgrades, etc.
- Apax adds access across all capital markets, cov-lite documentation, treasury and in strategic development, including M&A and due diligence.

Entry and exit rating multiple relative to peers (%)



- Core competency is finding companies that are at attractive prices because they are underperforming their potential, but where the enhancements above can be effectively adopted. Usually, Apax buys 22%-24% below peer ratings.
- Once transformed, the businesses are much more attractive, and so can be sold for a premium – on average, nearly 10%.
- There is a swing between the entry and exit premium, after transforming an underperforming business of around 30%.

Average uplift (%) and number of exits (x) by Apax Funds



- The ultimate test of whether Apax is conservative in its valuation approach is what others are willing to pay.
- Apax has delivered, across a range of funds, a consistency of uplift on exit over time – hard evidence that its valuation approach is conservative.
- Even in the challenging 1H'22, Apax still saw 15% uplifts, with the two exits in 3Q'22 at an average 35% uplift.
- This is measured against the last quarter before exit – so a conservative number with little EBITDA growth built into uplift.

Source: Company data, Hardman & Co Research

What AGA does

Summary: "mining" businesses where Apax ownership can add value

Apax finds businesses at attractive valuations because they are under-optimised against their potential…

…improves their growth and profitability, and then sells them for a gain

Repeating this playbook again and again in selected sectors with structural growth has delivered market-beating returns

The heart of Apax is, in principle, a very simple model. It finds businesses at attractive valuations because they are under-optimised against their potential. It improves their growth and profitability using proven operational and strategic playbooks, and with experienced management teams. It then sells them for a gain because the company's profits and profitability are higher, and the market is willing to pay a higher rating for a better business. It repeats this playbook in a focused way, in a core of four sectors that have structural growth and resilient revenue streams. In practice, of course, to add the greatest value is far from simple and takes considerable resource, and, in the following sections, we outline all the unique nuances of the Apax model.

AGA is the investment company that democratises the opportunity to invest in this process. It gives investors liquid access of every trade size to the illiquid Apax Funds, but it is worth keeping in mind that the heart of the model is finding the right businesses (that are at attractive prices because they are under-managed), with the right skills to improve them.

Portfolio

Portfolio analysis (as at September 2022)

	NAV (€m)	Commitment (m)	Fund size (bn)	Fund stage	% AGA total	Comment
APAX funds						
AMI	26.4	$30	$0.5	Maturity	2%	2015 fund, 87% invested and committed.
AEVI	2.5	€10.6	€4.3	Harvesting	0%	2005 fund. €14m of distributions since 2015.
AEVII	25.7	€86	€11.2	Harvesting	2%	2007 fund. €91m of distributions since 2015.
AVIII	119.0	€160 + $218	$7.5	Harvesting	8%	2012 fund. €541m of distributions since 2015.
AIX	421.2	€154 + $175	$9.5	Maturity	30%	2016 fund, 93% invested and committed.
ADF	49.6	$50	$1.1	Maturity	4%	2017 digital fund, 93% invested and committed.
ADF II	(2.5)	$90	$1.9	Investment	0%	2021 digital fund.
AX	281.2	€200 + $225	$11.7	Investment	20%	2020 fund, 89% invested and committed.
AXI	0	€198 + $490	tbc	Investment	0%	2022 fund, not closed at September 2022.
AMI II	0	$40	tbc	Investment	0%	2022 fund, not closed at September 2022.
AGI	0	$60	tbc	Investment	0%	2022 fund, not closed at September 2022.
Total PE	**922.4**				**66%**	**70% of invested portfolio.**
Derived debt	368.6				26%	Been broadly stable over recent years.
Derived equity	24.9				2%	Falling part of portfolio (end-2017 was 15%).
Total derived	**394.5**				**28%**	**30% of invested portfolio.**
Cash/other	**89.3**				6%	
Total	**1,402.1**				100%	

Source: AGA 3Q'22 announcement, Hardman and Co Research

Investment in 78 private companies via 11 Apax PE Funds

Balanced PE portfolio of 78 companies across 11 funds

The table above shows that two thirds of the AGA portfolio consists of funds advised by Apax. As at September 2022, there were three funds in the harvesting phase (16% of PE assets), a further three in the mature phase (54%) and five at the investment phase (30%). Underlying these funds were 78 private companies, giving a degree of diversification to spread risk but still allowing individual companies the opportunity to impact on returns. Of the underlying companies, 30% were initially invested in before 2017, 32% were acquired in the 2018-19 period, and 38% of investments are from 2020 and later.

Unique business model with distinctive Derived Investments portfolio

Derived Investments approach gives AGA unique business model

AGA invests in portfolio of debt and equity investments, leveraging Apax team's insights to provide liquidity and capital flexibility…

…while minimising financial drag from holding cash

Managing liquidity is an issue for any listed PE trust investing in funds. It makes commitments to the funds that typically can be drawn over five years, and it receives distributions that are uncertain in their timing. Holding cash depresses returns, as the potential return is well below that expected from PE assets. Having credit lines carries a direct cost, and there is a degree of uncertainty as to whether they will be available at the time when they are required. While Apax has both these options, it additionally invests in a portfolio of predominantly debt investments identified using the Apax team's in-depth sector insights. This portfolio helps manage capital, and provides liquidity and flexibility for the portfolio, while generating enhanced risk-adjusted returns over simply holding cash, and the approach is distinctive to AGA.

Global exposure to four sectors

Total portfolio exposure: Tech (39%), Services (29%), Healthcare (20%) and Internet/Consumer (12%)

The Apax Funds give exposure to four attractively positioned and dynamic global sectors. As at September 2022, the total portfolio exposure sector mix was Tech (39%), Services (29%), Healthcare (20%) and Internet/Consumer (12%). The PE exposure had a slightly lower healthcare exposure and higher internet/consumer mix. We explore in the later sections of this report the benefits that AGA investors gain from i) these sectors over others (structural growth with resilient, recurring revenue streams), ii) a sector focus over the whole market exposure (focused expertise, network, playbook, evolution) and iii) having four sectors, rather than just one (diversification benefit).

Focused on most attractive sub-sectors within broader sectors

The *Bain 2022 PE report* has highlighted the importance of sub-sector selection within the overall sector allocations. AGA breaks its PE sub-sectors into software (22 deals), tech-enabled services (20), telecoms (11), density-driven business (10), outsourced sales & marketing services (8), online marketplaces (12) and medtech (6).

Wide geographical exposure

Geographically, the reported exposure is North America (66%), Europe (12%), United Kingdom (9%), Israel (3%), India (4%), China, (2%) and Rest of the World (4%), although we caution that this is by domicile of the headquarters of the investee company, and the revenue/EBITDA exposure is more global. The currency exposure is broadly similar, with a slightly higher US$ exposure and smaller £ one.

15.2% five-year total post-cost return with capital appreciation and yield

Delivered 15.2% five-year total return, with near-unique mix appealing to both capital and income investors

AGA targets a long-term total NAV annual return of 12%-15% (five-year actual 15.2%[1]), including a dividend target of 5% of NAV per year, aiming to generate both strong, compounding capital appreciation and an attractive yield income for investors. With the share price discount to (September £) NAV at 30%, the dividend yield is considerably higher (2022E 7.6%).

[1] Basis: annualised returns represent IRR returns based on the adjusted NAV and dividends paid

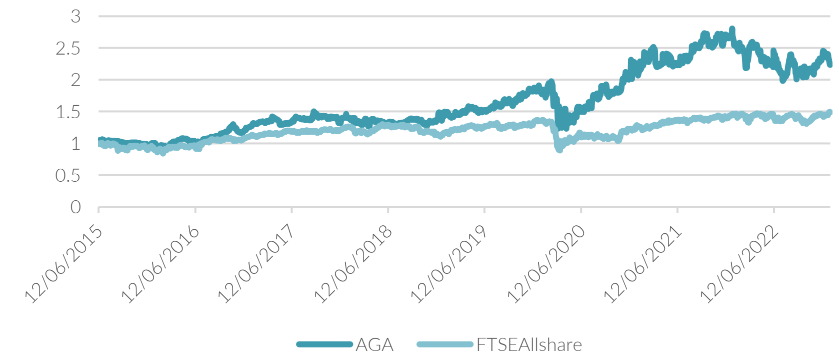
Investment attractions

Investors: long-term, market-beating performance

Key benefit to shareholders: AGA's share price has delivered 2.5x FTSE All-Share return since IPO

Since its market quotation in 2015, AGA's share price has significantly outperformed UK indices. This has not happened by accident, but reflects the value added by Apax to its investee companies. As we discuss below, AGA's NAV and its PE portfolio, accounting for a growing proportion of the book, have both delivered even better returns than the share price.

AGA's share price compared with FTSE All-Share (indexed to IPO)



Source: Refinitiv, Hardman & Co Research

We discuss the market's 2H'21/9M'22 loss of appetite for all listed PE vehicles in the main *Valuation* section of this report. For AGA, the discount to NAV has widened from just over 10% at end-2021 to its current level of 30%. As can be seen in the chart above, there has been a significant relative rally in the past quarter, but the discount to NAV remains above historical levels.

We concur with management views that some of the best investment returns are made from cohorts of investments made during, and immediately after, financial downturns

To date, in Apax's attractive sectors/sub-sectors, entry prices in new deals have moderated only slightly. This is both good news (for exits/valuations) and bad news in terms of reinvestment. In due course, we expect there will be more investment opportunities as and when large corporates look to divest non-core businesses through carveouts, and weak, standalone businesses look for stronger partners to support them. At the same time, we expect a realignment of sellers' pricing expectations. We concur with management views that some of the best investment returns are made from cohorts of investments made during, and immediately after, financial downturns, which provides a positive outlook in the current conditions.

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 Apax/AGA is that they are operating in a fundamentally 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. 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]

[2] *https://www.privateequitywire.co.uk/2022/03/15/312892/rise-private-equity-allocations-looks-unstoppable-now*

Key attractions include:

i) superior returns from adding value

ii) as companies stay private for longer, more of the value is generated in private hands

iii) global fundraising hit a record in 2021, leaving significant dry powder concentrated in larger funds

iv) PE markets see less valuation sensitivity, as driven by long-term views, not short-term noise

The key factors that make the market attractive are:

- 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. We explore, in the sections below, how Apax specifically adds value to its investee companies.

- Companies are staying private for longer. 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 IPOed 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.

- Global fundraising was at a record level in 2021, and new deal activity is likely to be increasingly focused in what are perceived to be the few areas of secular growth with resilient income streams. Apax's continued exits show that its businesses continue to have appeal for the larger funds. The larger end of the market is very different from the mid/small buyout market, with significant dry powder concentrated in the larger end of the market compared with mid-sized and small buyout funds. We also believe that larger funds have seen greater rises in debt multiples and in pricing for new deals, making it very different from the market in which Apax operates.

- The valuation dynamics of PE markets mean that they do not react with the same volatility as public ones. Commitments are made for the long term, and typically have less sentiment noise around them than listed markets.

Apax and AGA well-positioned in this attractive market

We believe that the manager's excellent long-term track record and the positive near-term market trends identified above reflect the fundamental fact that PE has, for a sustained period, added value. Both Apax and AGA are well-positioned to take full advantage of the opportunities in this attractive market.

Apax: unique operational value added to investee companies

Improved operational efficiency

Heart of Apax is finding good-quality companies at attractive prices in coveted categories that can be improved, and then improving them further

While it is vitally important that Apax find the right, good-quality companies at attractive prices in coveted categories that can be improved (and we do not under-estimate how hard that task is), in our view, the key to the model is improving businesses once they are owned. Part of this comes from more effective day-to-day running of the business. In its 2022 capital markets day, AGA gave details of the OEP (see slides 41 – 52). This unit has 27 specialists, and, by the date of the capital markets day, had engaged with 126 companies and optimised over $3bn of portfolio company expenditure.

Specialist team used in due diligence, in discussions with management ahead of acquisition, on acquisition and post-acquisition

In understanding Apax's competitive advantages, we believe it is important to appreciate how the OEP is used.

- Pre-management discussions: with zero access to the company or its records, the OEP is used to develop insights into its competitive landscape and positioning. By way of example, it reviews the relative market share of web traffic of the target compared with peers, by region. It can assess the "digital health" of the company without any access to the company data.
- Pre-acquisition:
  - Once discussions have commenced, but before a deal is completed, the OEP is then used to identify the upside opportunity in digital marketing and website execution. It uses its insights to identify where, for example, *Google* volatility indicated that there was risk of traffic loss (a possible reason to pass on a deal).
  - The culture of the investee company and its willingness to engage with Apax and work with OEP to improve the business after acquisition are key considerations in the discussions at this stage. If a company is not willing to change and improve, the task for Apax becomes much more challenging, and the execution risk in doing a deal becomes much higher.
  - Once data room access is granted, the OEP is used to validate the health of the customer file and identify customer segments that may have materially higher lifetime values, thus validating the deal metrics.

After acquisition, team is used to improve technology, marketing, operations and purchasing

- Post-acquisition: the main benefit from the OEP comes in improving the businesses post-acquisition. This work accounts for ca.60% of its time. There are four functional teams whose areas of expertise are largely self-explanatory: i) digital, demand generation and data science; ii) enterprise transformation; iii) technology and cyber cloud; and iv) impact and human capital. In addition to improving an investee company's own systems and staff, part of the OEP's skills include both negotiating skills and scale purchasing to improve contractual terms with suppliers. The Apax "Spend Insights Platforms" had a cumulative spend of over $22bn on its database as at 15 June 2022.

Its methods include best-practice transfer, economies of scale, state-of-art technology (including proprietary "Apax Partners Intelligence Platform") and specialist expertise

The OEP adds value, in practice, by:

- Transferring best practice in areas such as digitalisation, M&A, margin improvement, cost reduction, logistics/operations, impact/human resources and sales/marketing efficiency from one business to another, including cross-border best practice.
- Delivering economies of scale, as Apax can afford to have such a unit, while the individual, standalone business may not be able to.
- Ensuring state-of-the-art investment and technology, such as *Google* search engine optimisation.
- Allowing the purchase of market solutions, but also leveraging a sophisticated proprietary platform (the "Apax Partners Data Intelligence Platform").
- Having tailored, sector-specific knowledge and expertise.

Investee companies not charged for OEP – Apax gets paid through higher exit value

This creates clear alignment of interests and higher takeup

We highlight that an important feature of OEP is its remuneration. Apax does not charge its investee companies for its services. It views such an approach as a dis-incentive for management to take the service. Instead, the Apax Funds and Apax pay for the services of the OEP. The benefit is that the value of the investee company should be higher because the business should have a higher EBITDA. There is a clear alignment of interests among the investee company management, Apax management and the fund investors (including AGA) with such an approach. We know that some mid-sized PE houses also adopt this approach, but we understand that it is not the mainstream practice across larger PE businesses.

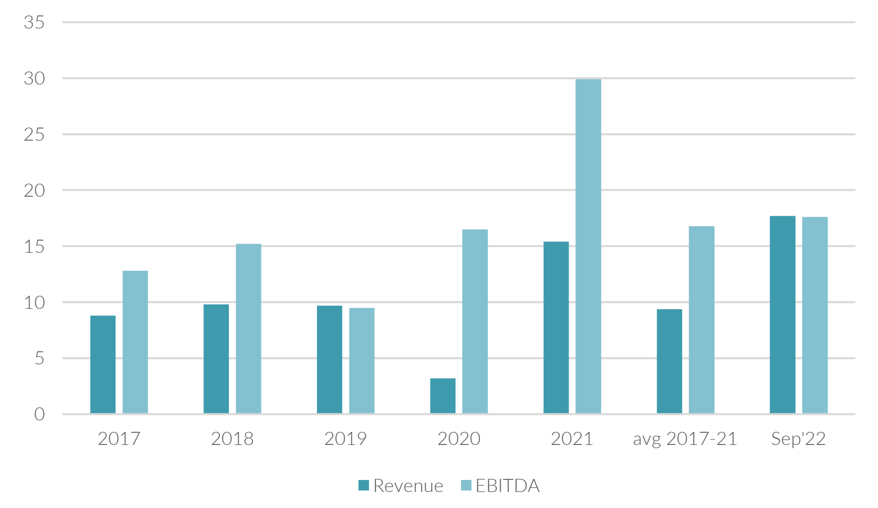
OEP growing rapidly – use up ca.50% in two years

The OEP has been expanding rapidly. In its *2020 CM day presentation, AGA advised* that the team consisted of just 18 specialists, had engaged with 87 companies and had optimised $2bn of spend. Within just two years, most of these metrics had increased by around 50%.

Proof of pudding is in delivery - overall improvements during Apax ownership resulted in investee company revenue growth accelerating by 8%, EBITDA growth by 15% and margins by 8%

The proof of the pudding is in delivery of revenue and EBITDA growth. Looking at the whole PE portfolio, the chart below shows the growth since IPO. Despite COVID-19, from 2017 to 2021, the average annual EBITDA growth was 17%, driven by 9% revenue growth. This shows margin improvement, as well as top-line revenue growth. During its 2022 presentation, management highlighted that the overall improvement to investee company performance during Apax ownership was revenue growth accelerating by 8%, EBITDA growth by 15% and margins improving by 8%.

Underlying average EBITDA growth rate in PE portfolio (%)



Source: AGA, Hardman & Co Research

Specific case studies were given in recent capital markets day presentation to add flavour to portfolio numbers

In its capital markets day presentation, management also gave several specific case study examples of improvements after the OEP had been involved.

- Across the portfolio of 12 online market places, revenue growth accelerated from 5% at entry to 13% at exit, while margins improved from 19% to 27%.
- Apax assisted Thoughtworks with sales and procurement, and saw revenue growth accelerate from 18% to 31%, and the EBITDA margin improve from 9% to 23% (2017 to 3Q'21). The entry multiple was 1.3x (EV/NTM revenue), against the peer multiple of 2.8x (a 54% discount). During ownership, EBITDA increased 5.2x, and the IRR on sale was 82%.

- Authority Brands was assisted with bolt-on acquisitions (seven deals) and organic growth (technology, digital marketing), and saw revenue accelerate from 7% to 19%, and EBITDA from 7% to 23%.

- Neuraxpharm was assisted with cross-border and cross-sale improvements (from a single country in Spain to 17 markets), resulting in revenue growth up from 3% to 28% and EBITDA growth from 15% to 85%, with an entry discount to peer multiple of 22%, converting to a premium to peer exit of 16%.

We recognise that, in a capital markets day presentation, the company will, of course, have chosen specific gems to highlight where the skills have worked, but, noting that caveat, the company does provide hard evidence of the theory working in practice.

Active management of capital structures/finances

Additional operational improvement is in management of capital structure – especially important in rising rate environment

While not running treasury functions, Apax also provides expertise and guidance in treasury and financial management. While some investors focus on the amount of leverage – and we detail, in the section on resilience below (see page 27), why we believe the NAV is robust in uncertain times – we also believe attention should focus on the structure and terms of financing. Being part of the Apax Funds gives investee companies options unavailable to them as standalone entities, including:

Apax gives technical assistance, access to whole capital markets, greater probability of cov-lite documentation, confidence to trading partners…

- Technical expertise in global financial markets.

- Access to the full range of capital markets, not just bank finance.

- A much greater preponderance to cov-lite documentation, reducing the probability of default.

…and cushion of improved profitability

…as well as balance sheet support

- With a well-financed backer such as the Apax Funds, counterparties will have much more confidence in the investee company as a trading partner, and are likely to offer much better trading terms. In periods of uncertainty, confidence is hugely important to continued operations. Management can focus on the business, and does not need to spend time worrying about credit lines.

- Apax is also likely to have improved investee company profitability, giving an increased cushion against market challenges. Being backed by a strong player means that investee companies can look for organic and inorganic investment opportunities that are unavailable to them as standalone players.

Apax: strategic optionality for investee companies

In addition to operational benefits, Apax brings strategic optionality

We believe the Apax-Funds-backed investee companies benefit from strategic options that they would not have as standalone businesses. For some potential partners, just having M&A skills will be critical, while, for others (say small, national players), the global footprint will be important. Over its 50-year history, Apax believes it has developed a reputation across its sectors, particularly within its focal area, the mid-market, and it is able to effectively leverage this sector-specific experience and expertise to unlock opportunities not always available, or obvious, to other firms.

Apax brings expertise and finance to facilitate deal-making for smaller companies where it is more likely that value will be added in M&A, anyway

Buy-and-build is a core part of PE's and Apax's playbook. In considering how Apax adds to a standalone business's ability to execute M&A, we believe the key considerations are that i) it brings expertise and experience in due diligence and deal execution, as well as finance, ii) by strengthening the franchise, the investee company becomes a more attractive partner to potential sellers, particularly in distress situations, and iii) it brings incremental management with a broader market awareness and network. We are cautious when a business "needs" to make acquisitions, as value is usually given to the target company. However, it is very different when a business "chooses" to make acquisitions and when the target companies are on low, private company multiples. Apax Funds' investee companies are usually buying in the middle market, where there is more opportunity to create value – a view confirmed in research done by The National Bureau for Economic Research[3], which highlighted value destruction in big deals and modest accretion in smaller ones.

Strategy enhanced by right management team hires

Apax helps its investee companies attract the right management teams. This affects Apax's ability to add execution skill, but also deal flow and access, and it is very much done in partnership with the incumbent management teams. A family business is very unlikely to sell to a "partner" who is seen to be going to treat long-standing employees unfairly. Given that Apax wants its investee companies to adopt OEP practices and its platform, causing friction with incumbent management will simply not work. Apax primarily changes senior staff to bring in incremental skills that the target company does not have in marketing, technology, operations and geographical distribution, etc, leveraging the skill base and network in the OEP team.

Apax manages for long-term returns, which allows opportunity for investee companies to invest…

…and not sacrifice long-term returns to meet short-term market consensus expectations

Apax is a long-term investor in its business, and the Apax Funds are managed to that timescale (investors will note, from page 11 above, that one of the funds originally closed in 2005). Each Apax Fund may take up to five years to deploy committed capital, and it may take each holding several more years to transform and exit. With such a mandate, Apax Funds' investments can take time to optimise returns. This has important implications in terms of the relationship with investee company management, how management, in turn, views its investment horizons, and the fact that it does not need to meet short-term market expectations at the cost of long-term returns. We explored some of these issues in our note, *The real costs of public vs. PE ownership,* published on 14 January *2021*.

Also means timing of exits managed through periods of uncertainty, and Apax Funds is never forced seller at distressed prices

For AGA investors, the long-term focus not only affects the investee companies and their performance, but it also has implications on the timing of realisations. Apax Funds can choose when to sell. If market conditions are not right, they simply wait until prices improve. There is not any pressure to sell at distressed levels or sub-optimal prices. There may be a deferral of cash proceeds, but the evidence shows that this creates significant long-term value.

Managing for exit in Apax's case starts before acquisition

Through hold period, relationships built with all types of potential buyers

Part of managing for the long term is consideration of the exit. The typical hold period for an investment is three to five years, but, even prior to investment, Apax has been identifying the likely exit routes and potential future buyers. Through the hold period, it monitors the exit environment and options, staying engaged with the potential buyers. It builds early relationships with them, and then maintains a close dialogue, well before exit is probable. As well as strategic acquirors, Apax also has a successful track record of selling to other PE firms.

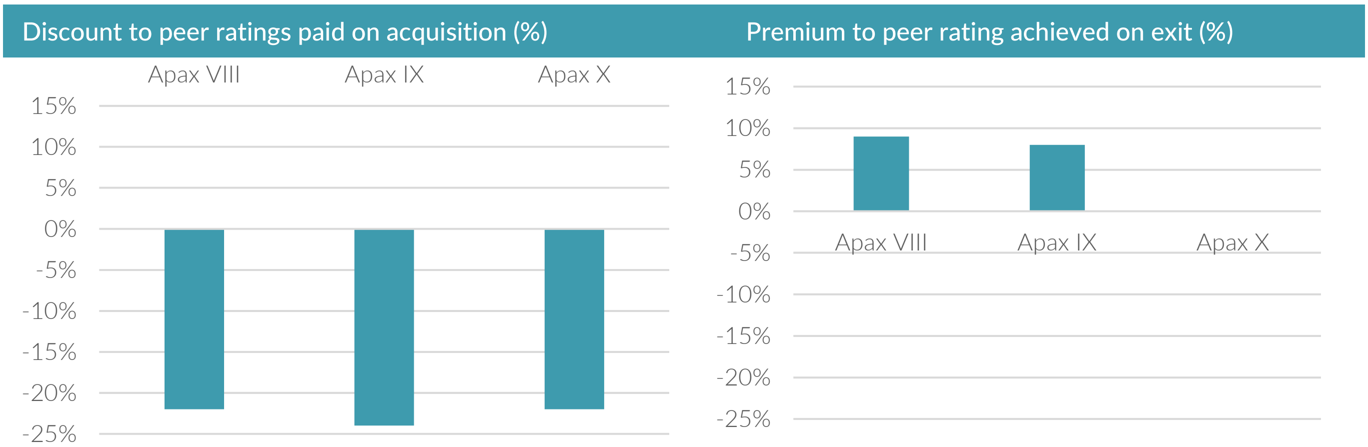
[3] The 2003 piece, *Do Shareholders of Acquiring Firms Gain from Acquisitions?* (NBER Working Paper No. *9523*, co-authors Sara Moeller, Frederik Schlingemann, and Rene Stulz), noted "Large firms have destroyed $226 billion of shareholder wealth over 20 years. In contrast, small firms, defined as companies whose market capitalization is equivalent to the smallest 25 percent of companies listed on the NYSE in each year, created $8 billion of shareholder wealth through their transactions."

Apax: valuation rerating seen through life of ownership

Bain report also indicates half value added in PE comes from multiple expansion

In recent funds, AGA has seen over 30% rerating relative to peers

Page 26 of the Bain 2020 PE report indicated that roughly half the value created by PE globally comes from multiple expansion. The chart below shows Apax's view on the multiple rerating it has achieved relative to its peers in its most recent funds. By using its sector knowledge and networks to identify companies that are being managed sub-optimally, it is able to buy them at attractive prices, on average 22%-24% below the peer rating. Having upgraded the business and delivered faster growth and improved margins, they can then be sold at a premium (on average 8%-9%), giving an average rating improvement of over 30%.



Source: AGA, Hardman and Co Research

Avoiding downsides

Extensive due diligence more likely to identify potential downside, but can be expensive to do

One reason PE is a high-cost-base business model is because of the extensive due diligence/"getting-to-know-you" work done before an investment is made. Cheap businesses can be cheap for very good reasons, i.e. ones that mean you do not want to buy them! 40% of OEP's resource is devoted to the pre-acquisition phase, and a significant part of this is due diligence. Its ability to assess a company's health without access to company data, and, for example, identify if there is a risk of major *Google* traffic loss, is a practical example of where an investment was declined. A relatively concentrated portfolio of under 80 companies gives Apax limited leeway for error, and Apax takes the time and effort to examine companies in great detail. In most cases, it is not the legal due diligence itself that takes a long time, but, rather, Apax tracking the business and its performance, meeting with management, and getting to know the company and leadership team.

Investing for long term means due diligence considers economic cycles

New deals in 2022 have focused on ability to pass on cost inflation, resilience to weak demand and cost flex

We have noted above that the Apax Funds are a long-term investor and that this is a critical differentiator in terms of resilience through the downturns. They are investing through economic cycles, and so have to assess this in its due diligence process. That does not mean that they are insensitive to market conditions at the time of acquisition. In considering new propositions currently, in an environment where inflation risk is much higher than it has been for decades, Apax is focused on the target's i) ability to pass on input cost inflation in a timely manner, ii) resilience cushions to any weakening of demand, and iii) agility to flex costs. It is interesting that, in previous disclosure, the gearing at entry on new investments in Apax Fund X, at 30 June 2022, was 4.7x net debt/EBITDA – a lower level than the portfolio overall average (4.8x).

Potential investment ideas are initially assessed by teams of investment professionals and presented to the Investment Committee (IC). The IC provides guidance to deal teams on key areas of due diligence, assessment of risks and rewards, and the general attractiveness and suitability of an investment for the fund; once a potential investment is sufficiently progressed, the IC will make an investment recommendation.

Apax: four-sector focus gives competitive advantages and diversification

Sector focus adds value in PE

The Bain 2020 PE report (page 23) highlighted that a disproportionately large concentration of outperforming buyout funds was those focused in a narrow range of sectors. We do not find this surprising, as a focus on sectors allows the development of industry operational expertise, proven playbooks, a network of key people (to originate new business, as potential buyers and as management teams), an awareness of deal flow and appropriate valuations, and brand value.

Chosen sectors have structural growth with resilient earnings streams

There is a tight, four-sector focus across Tech (39%), Services (29%), Healthcare (20%) and Internet/Consumer (12%). Apax has focused on these four sectors for their attractive common traits:

- Structural growth, driven by socio-demographic trends, including greater adoption of technology/cloud usage and an ageing population.
- Recurring income streams, generating resilient EBITDA.

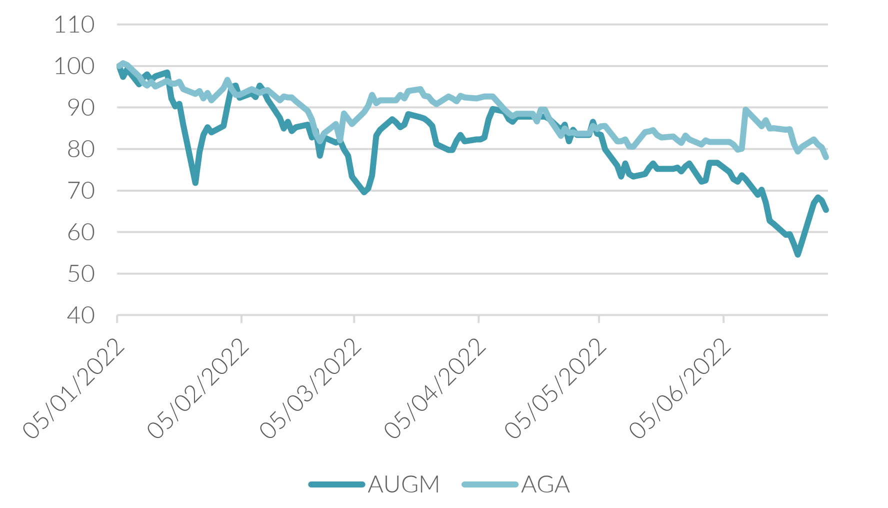
Chosen sectors delivered above-average returns

Given their attractive traits, the chosen sectors have delivered above-average returns in the recent past. The Bain 2022 PE report noted that the median multiple on invested capital over 2009-21 for technology was 2.6x, and for healthcare 2.4x, against an all-sector average of 2.2x. The median return for technology is only marginally below the top-quartile performance for financial services, or media and telecom sectors.

AGA benefits from diversification

Having more than one sector gives AGA investors a degree of diversification. The chart below compares the four-sector AGA against the single-sector Augmentum Fintech in 1H'22. As can be seen, Augmentum Fintech not only showed materially sharper falls but also much greater volatility than AGA.

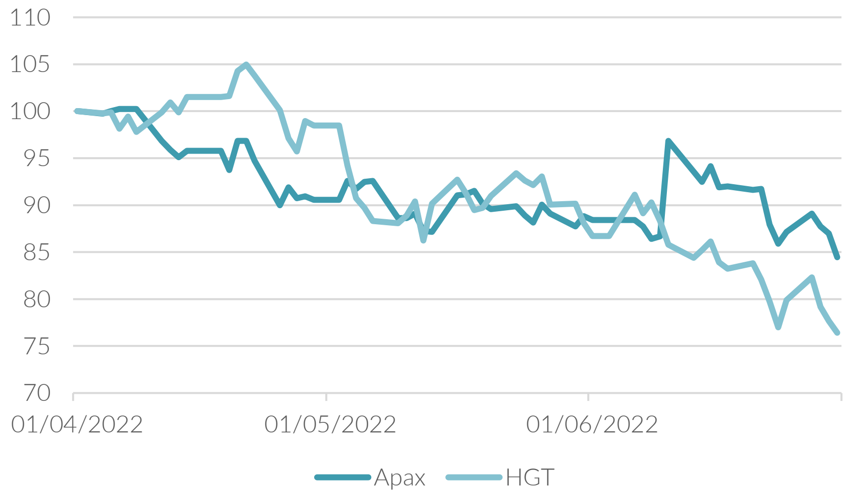
1H'22 share price (indexed to 100) for AGA vs. Augmentum Fintech



Source: Refinitiv, Hardman & Co Research

Taking the second quarter of 2022, when market sentiment turned against technology and growth, Apax outperformed the single-sector HGT by 8% in the three months from the start of April 2022.

2Q'22 total return (indexed to 100 at 01/04/22) for Apax vs. HGT



Source: Refinitiv, Hardman & Co Research

Apax: other competitive advantages

Apax, as investment advisor, brings many advantages, including:

We have outlined above some of the specific competitive advantages in having Apax as the investment advisor. Taking a slightly broader view, Apax also brings the following advantages:

scale: >$60bn deals to date…

…experience…

…brand, which brings deal access…

…and global footprint

Focus in attractive middle market, rather than mega deals

Faces less competition, and has more value-add and exit opportunities

- Apax brings scale, having raised, in aggregate, in excess of $60bn. Scale alone is of limited value, but what it brings are the resources that can add value to investee companies and are necessary to carry out in-depth due diligence before acquiring them. Looking at each of the four sectors, the cumulative equity invested has been Tech at ca.€14bn, Services at ca.€9bn, Healthcare at ca.€9bn and Internet/Consumer at ca.€6bn, and the number of investments, respectively, 205, 69, 89 and 21 (all to end-2021). In each of the sectors, Apax has a presence that is relevant.
- The average tenure of equity partners in the Tech sector is 19 years, Services 18 and Internet/Consumer 17. The depth of expertise and personal networks that this tenure gives is hugely important in identifying targets and their operational improvement and exit opportunities, as well as Apax's brand.
- It is hard to quantify a brand value built up over more than four decades, with over 350 people and invested in nearly 400 companies. The bottom line is that sellers and management teams appear to want Apax as a partner. We believe that being seen as the right partner is absolutely critical in deal access, and Apax appears to have this advantage.
- Apax has offices in seven countries, giving on-the-ground, local presences from which to build critical personal relationships.
- The main Apax Buyout Funds are middle-market (typical initial investment €200m-€800m), while the specialist funds are typically much smaller. We believe this is the sweet spot for value-added, because:

- While there is competition for such deals, it is less competitive than in the largest deals, and there is less public information on the companies, making deep sector knowledge a greater competitive advantage.
- The target companies (often family-owned/carveouts from larger businesses) are less likely to have the same degree of management sophistication, and so are more likely to benefit from Apax's expertise.
- They will also benefit from all the economies of scale, including technology and purchasing, and more opportunities for bolt-on deals.
- They are less likely to have Apax's global reach and networks.
- There are likely to be more exit opportunities, including sale into the deepest pools of dry powder in the large PE funds.

Credit fund experience incremental advantage

- Since 2021, Apax has also advised a dedicated private Credit Fund.

AGA: why the current NAV is conservative

Summary

Current NAV is real, supported by:

We believe that, in 2022, investors have given unusually high attention to the credibility of the NAV because of the volatility of public markets, the fall in valuation of some high-profile private companies and the strong outperformance of PE valuations to public markets. We believe AGA's NAV is realistic, for the following reasons:

i) consistent, strong exit uplifts on sale

- Uplifts on exits with buyers who have generally conducted significant due diligence, paying premiums significantly above the level at which Apax had valued its companies in the last quarter prior to exit. In the challenging 1H'22, Apax saw an average 15% uplift, and the two exits in 3Q'22 were at an average uplift of 35%.

ii) NAV growth driven by EBITDA growth

- NAV growth has been driven by EBITDA growth of 17% at underlying companies over 2017-21.

iii) nearly 40% of portfolio valued directly off market prices

- Of the invested portfolio, 15% is in PE-listed equities, 2% in derived equities and 26% in derived debt (of which ca.80% is priced from broker quotes and so market prices). Nearly 40% of the investment portfolio is thus market-priced (cash is 6% of NAV). A further half is based off conservative earnings multiples, and just a tenth is based on revenue multiples that may be regarded as more volatile.

iv) stable underlying ratings

- The underlying ratings have been broadly stable over time, and are well below the current market ratings for the growth sectors in which Apax operates. They are conservative on a PEG basis, especially bearing in mind good cash conversion. The earnings-based multiples are a mix of discounted current market ratings and comparable deal transactions, with a bias to the latter. It is unsurprising that this approach results in ratings that are less volatile than simple market comparatives.

v) multiple uplifts only significant as exit approaches

- There is a strong J curve effect, with rating uplifts being seen largely only as exits approach.

vi) sector mix

- The sector mix is growth-orientated and has resilient income streams.

vii) no incentive for Apax to inflate valuations

Investors can also rely on the usual independent verifications of the board and external auditors

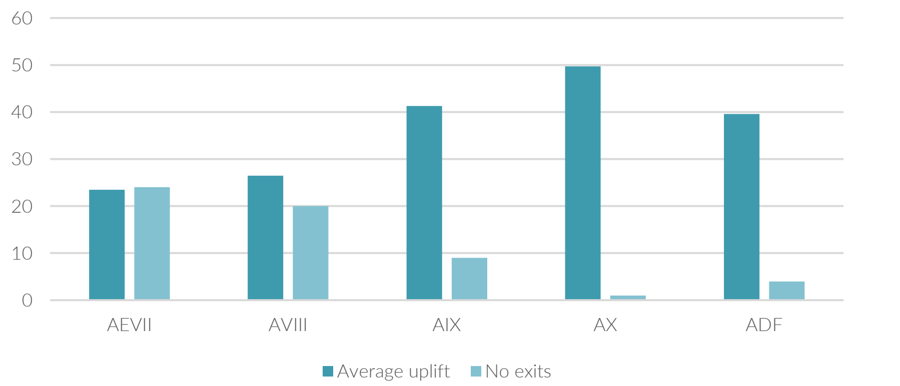
- PE performance fees are paid only on exit, and not on the interim accounting NAV – so there is no incentive for Apax to inflate valuations. Investors can also rely on the usual independent verifications of the board and external auditors.

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

Buyers conducting significant due diligence paying significant premiums to carrying value Apax has for its companies in books at last quarter prior to exit

As we show in the chart below, the reported uplift for each of Apax's funds is material (the AMI Fund is not shown, but the average for its three deals is 243%!) We additionally highlight that there is consistency across all the funds in seeing material uplifts, and that this figure is against the last quarter before exit. The key message is that, when the assets are being converted into cash, this is at an uplift to carrying values, and other buyers are willing to pay more for the assets than the level at which Apax is valuing them after conducting material due diligence on the assets.

Track record of uplifts on exits by PE fund (%)



Note: Uplift against the "unaffected valuation", which is determined as the fair value in the last quarter before exit, when the valuation is not affected by the exit process and the APAX Fund incorporated the expected exit multiple into the quarter-end valuation. Source: AGA, Hardman & Co Research

In challenging 1H'22, still saw 15% average uplift

In 3Q'22, average of two deals was 35%

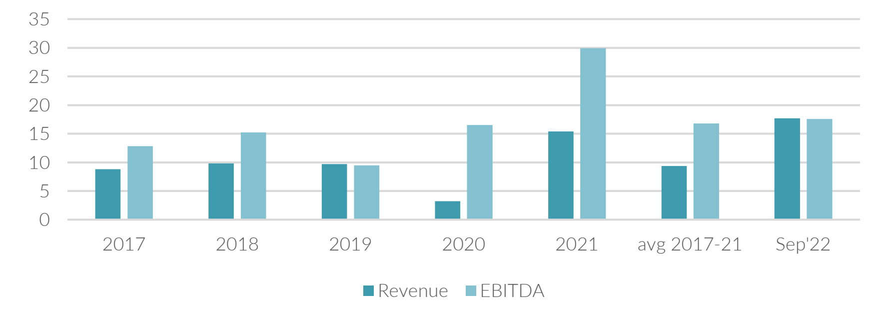
It is worth noting that, even in the more challenging 1H'22 exit environment, Apax Funds still achieved average exits above carrying value (average uplift 15%), and, in 3Q'22, the two deals averaged 35%.

Valuation increase driven by investee company growth

EBITDA growth at underlying companies 17% over 2017-21

The chart below shows the revenue and EBITDA growth of Apax Funds' PE investee companies over the past five years. The 17% annual average EBITDA growth 2017-21 (17.6% LTM to September 2022) came despite all the macroeconomic pressures and the noise around COVID-19. The long-term growth in AGA's NAV and in its total return (15.2% over five years to September 2022) is driven by this EBITDA growth.

Underlying average EBITDA growth rate in PE portfolio (%)



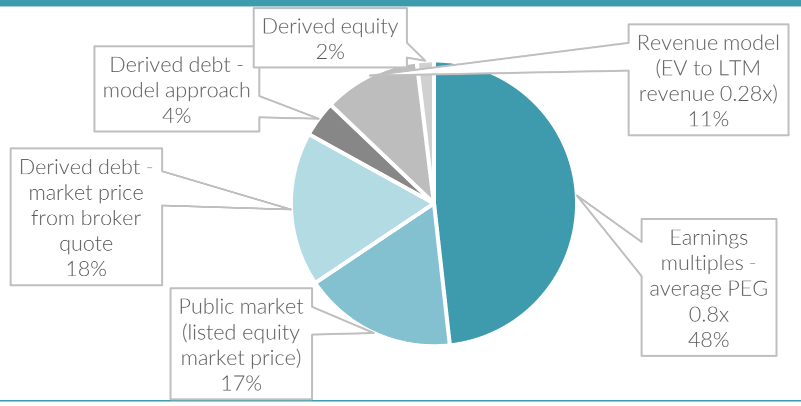
Source: AGA, Hardman & Co Research

AGA has given detailed breakdown of valuation derivation

Nearly 40% of portfolio market-priced, half based off conservative earnings multiples and just tenth on revenue multiples – which may be regarded as volatile

AGA's portfolio disclosure on its valuation approach is market-leading. In particular, we direct investors to slide 11 of its capital markets presentation, which, although a little dated (based off March 2022 data), is very helpful in terms of approach. Our interpretation of the elements of that slide is given in the chart below. The key messages to us are that ca.40% was market-price-driven, half was based off earnings multiples on a reasonable PEG (see below) and just 11% of the portfolio was valued on revenue multiples. That element consists of 16 companies where the average LTM revenue growth was 31% and the average EV/LTM revenue growth was 8.7x (as at 31 March 2022).

Robust and conservative approach to valuation (March 2022)



Source: AGA, Hardman & Co Research

Ratings conservative on PEG basis, especially bearing in mind good cash conversion

Apax Funds' investments – and so those of AGA – have, for some time, been focused on businesses with strong growth and a resilient earnings outlook, as well as good cash conversion rates. Those using EBITDA multiples accounted for over half the NAV, and the PEG ratio (EV/LTM EBITDA multiple divided by growth) was 1x at 3Q'22, in line with the five-year average level.

PEG ratios since 2017

Year	2017	2018	2019	2020	2021	Average 2017-21	2021 excl. public	3Q'22
EV/EBITDA (x)	13.8	13.9	17.2	16.9	23.2	17.0	18.1	17.2
EBITDA growth	12.8%	15.2%	9.5%	16.5%	29.9%	16.8%	29.9%	17.6%
PEG ratio (x)	1.1	0.9	1.8	1.0	0.8	1.0	0.6	1.0

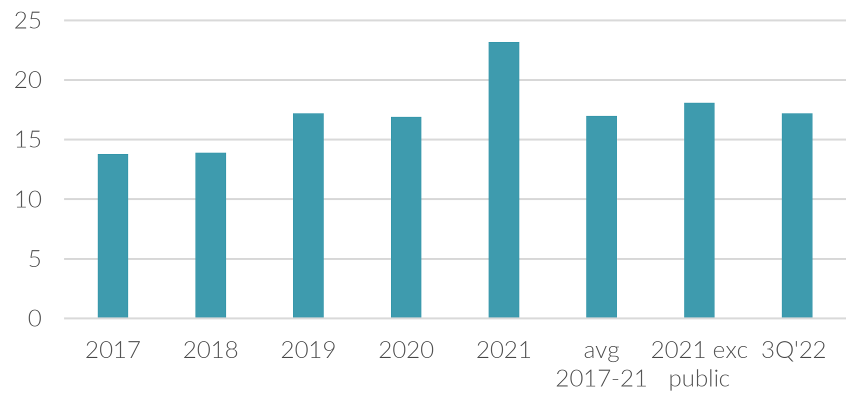
Source: AGA, Hardman & Co Research

Conservative and broadly stable underlying ratings over medium term

Broadly stable underlying ratings over time, and well below current market ratings for growth sectors in which Apax operates

The overall level of EV/EBITDA at 3Q'22 was 17.2x, in line with the average for 2017-21 (17.0x). As the chart below shows, the average is somewhat distorted by 2021 being above the level of prior years, reflecting a sharp rerating that year in the public market element of the portfolio (see later section on public market effects – page 39. If we exclude that distortion, the 2021 EV/EBITDA was 18.1x, more in line with the average from 2017.

EV/EBITDA (x)



Source: AGA, Hardman & Co Research

Limited uplift in ratings until exit is visible

Strong J curve effect, with rating uplifts largely being seen only as exits approach

Investors will note that there is a broad consistency between the uplift in valuation on exit (see page 23 above), which has varied between the large Apax Funds (23.5% to 49.7%) and the average relative rating improvement between purchase and sale (see page 19 above), at 30%. What this tells us is that, while the valuation of the company may rise during Apax's ownership, with its growth in EBITDA, the uplift in ratings is recognised primarily on exit, and not before. Even though the business has been improved, this is not significantly reflected in the rating until sale, which appears to us a conservative approach to valuation.

AGA in growth sectors and sub-sectors

Present in markets with structural growth

As noted, AGA is focused in just four sectors but, importantly, within these sectors, it targets sub-sectors and businesses that have structural growth opportunities and strong business models – for example, they often have recurring, resilient revenue streams. These are driven by socioeconomic trends across a range of factors, including:

- the accelerating shift to online for consumers with online marketplaces;
- the adoption of tech-enabled services;
- an ageing population with greater healthcare needs, especially in medical technology; and
- the outsourcing of sales and marketing services.

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

No incentive to inflate PE valuations

There is no financial incentive for Apax to inflate the NAV, as the cash payments on PE performance fees in the Apax Funds are not paid on the NAV, but only once investors have been paid back their commitments and received a hurdle return that is earned on realisations, not accounting values. If interim accounting valuations were over-inflated, Apax's reputation would be damaged by having to then write down on realisation. This is common across the whole PE industry, and we do not see any difference for Apax here, but if there is no incentive for the PE manager to inflate the valuation, why would it?

Independent checks include independent auditors/board, and prices paid by independent buyers on exit

Independent basis of valuations

The valuations have multiple layers of independence checks:

- This independence of the market is also overlaid by the usual independent checks of a listed vehicle, including the audit process.
- This is then overlaid by the independence of the AGA board, which requires not only the expertise to understand the business but also the character to challenge the investment adviser. This is impossible to quantify, but, clearly, having no related party directors helps the decision-making process. The nature of the NEDs and chair is important. We detail their bios in the *Appendix* in this report, and the track record would suggest that they have the necessary independence.
- For us, the ultimate independence check is what a third party will pay for an asset – so the uplift on exit is the ultimate independent check. Given that this is by far the single most important independent verification of valuation (and most comprehensive), we repeat the chart from a few pages earlier, emphasising both the quantum and consistency in uplifts.

Track record of uplifts on exits by PE fund (%)

Note: Uplift against the "unaffected valuation", which is determined as the fair value in the last quarter before exit, when the valuation is not affected by the exit process and the APAX Fund incorporated the expected exit multiple into the quarter-end valuation. Source: AGA, Hardman & Co Research

AGA: resilient NAV through downturns

Why PE-backed businesses are resilient in downturns

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

Our starting position is that PE generally outperforms in downturns, and then we will consider what Apax and AGA have done to incrementally reduce risk further. 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. 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. This may fund acquisitions that, in a downturn, are likely to be less expensive and also more readily available. Importantly, the optionality from committed capital also allows investment for greater organic growth, which can be even more important in challenging conditions. This strategic optionality means that earnings growth and cash can be generated at a time when a comparable standalone business would struggle.

PE backers may provide operational, financial and strategic expertise in downturn

PE managers can assist their investee companies with expertise that may not be available to the standalone entity, including i) operations, ii) finance, iii) strategy and iv) market opportunities (including acquisitions and mergers). Market-wide examples through COVID-19 included the transfer of experience from companies in countries that were hit by the pandemic early to ones affected later, supply chain management and human resource control. In the current challenging environment, the support that a scale operation can provide in managing pricing, margins and energy optimisation will be invaluable. The April 2020 McKinsey & Company's study, *Lessons for private equity from the last downturn,* highlighted the scale of outperformance by those firms with "value-creation" teams against those without. Apax's OEP is core to this support and was very evident through the COVID-19 pandemic. AGA gave some details of this in its 2020 *CMD presentation* (slides 10-19), especially through communication, collaboration and support, and highlighted that lessons learned in one area could be quickly transferred to others.

Manager alignment

As PE funds have a life of at least 10 years, if managers 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 managers with value-creation teams outperformed and raised more capital.

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 Apax's sector positioning below, but all its four sectors and sub-sector choices are ones with structural growth and recurring, resilient income streams.

Academic research shows PE-backed businesses outperform

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

Outperformance against the market is a common theme from several PE investors. This view 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".

It is, of course, impossible to predict what would happen to the operational performance in a downturn from here. As noted above, PE businesses can be run for the long term, allowing greater preparation for, and appropriate responses to, short-term economic conditions.

What Apax/AGA have done to incrementally reduce risk compared with PE market as a whole

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

AGA investee companies have pricing power, have managed their interest rate risk and have medium-term debt

Derived debt portfolio is floating-rate

Low entry multiples and operational improvements give cushion

- The sector/sub-sector 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 four-sector, global profile.
- In addition, in its interim report, AGA commented:
  - in facing inflation risk, "*Most of the portfolio companies have strong market positions and correspondingly have pricing power to pass on higher costs to customers, thereby minimising the impact on the bottom line*";
  - in facing rising interest rates, "*Higher interest rates will increase the cost of debt within the Apax Funds portfolio companies. However, much of the portfolio debt is either rate hedged or is fixed rate, limiting the impact of interest rate rises. The Investment Advisor is closely monitoring the capital structures in the portfolio to minimise the impact and portfolio companies are taking early action where necessary*"; and
  - for its own debt investments, the majority of positions within AGA's "*Derived Debt portfolio are floating rate, and thus the income generated by the portfolio benefits from rising rates*".
- In its capital markets day presentation, AGA highlighted the long-dated maturity of the debt in the underlying portfolio companies (83% beyond 2026 in Apax

Funds IX and X). This is important, as they do not face immediate refinancing pressure, and is indicative of the treasury expertise we noted earlier.

- The operational improvements by the OEP, generating improved profitability, again give it a competitive advantage.

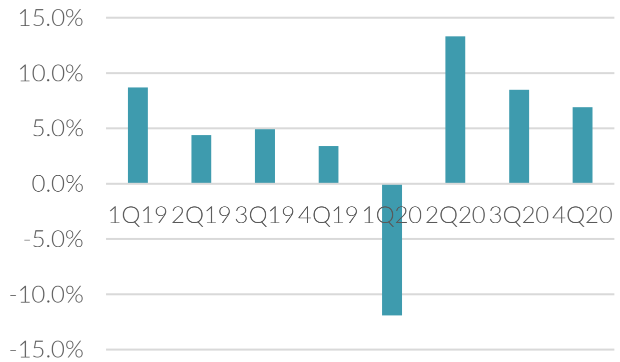
AGA evidence through COVID-19

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

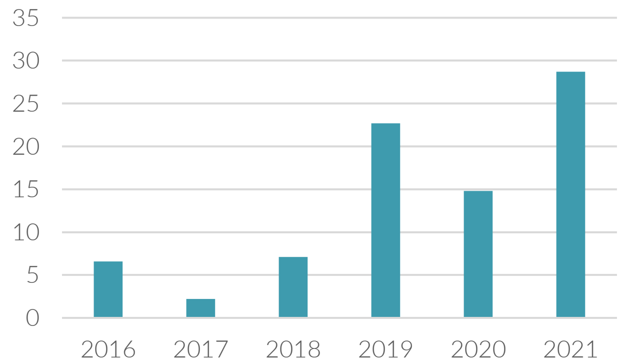
We believe the hard evidence of AGA's NAV through COVID-19, sustained into 2021, proves the thesis of resilience into a downturn.

- The left-hand chart below shows the quarterly total NAV return for 2019 through 2020. AGA's NAV in 1Q'20 fell by 12%, against much larger 1Q'20 falls in all the listed markets – FTSE All-Share (29%), MSCI World (24%), Euro Stoxx 50 (28%) – and even the NASDAQ (14%).
- There was a rapid recovery in 2Q'20 (13.3%), so that, by the half-year, the total return was just -0.5%. This, again, was a significant beat against most listed markets – FTSE All-Share (-18%), MSCI World (-6%), Euro Stoxx 50 (-14%) – albeit a few large technology names saw the NASDAQ up 18% by that stage.
- The quarterly numbers would, of course, be meaningless if Apax/AGA had, in some way, managed the numbers over the crisis. We do not believe that this would be sustainable over the medium term, and any spurious inflation of 2020 numbers would be visible in weaker 2021 numbers. As can be seen from the right-hand chart, 2021 delivered much higher performance than the previous five years, which negates that argument. We hasten to add that we do not believe that it is in the culture of AGA to distort numbers, anyway, but we include the charts to make the point.

AGA quarterly total NAV return, 1Q'19 to 4Q'20 (%)



AGA annual total NAV return, 2016-21 (%)



Source: AGA, Hardman and Co Research

In its 2022 *capital markets day presentation* (slide 23), AGA also made the point that market-wide PE outperformance is typically strongest during/following market volatility.

Evidence from the management team/previous vehicle

Apax management worked through previous crises

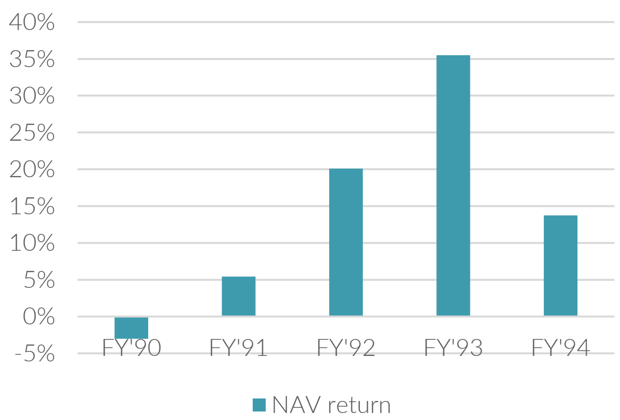
While AGA has been listed only since 2015, the management team's experience is much longer (see *Appendix* for biographies), and the predecessor vehicle also has an extensive track record. All the key individuals worked through the Global Financial Crisis (GFC), critically having experience in the years running up to the crisis, and so seeing the dangers of the hubris before it. There is also some experience of the tech bubble. The delivery through COVID-19 is indicative of management's historical experience being effectively delivered in downturns today.

Listed peers with long track records have proven resilience of PE model through downturns

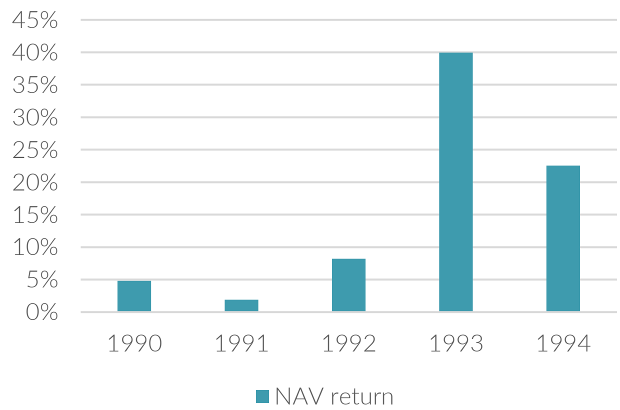
Evidence from PE peers

We believe that the resilience of peers through previous cycles is relevant to proving the fundamentals that the PE model outperforms in downturns, which we believe is contrary to many investors' perceptions of the market. As the charts below show, at the depth of the early 1990s recession, in the worst year, ICGT saw a -3% total return and Pantheon a +2% return. Clearly, the management teams have changed, and business models are not exactly the same, but we believe investors should bear in mind these resilient performances when thinking about PE, and so AGA.

ICGT's NAV total return, FY'90-94 (%)



Pantheon's NAV total return, 1990-94 (%)



Source: ICGT, Pantheon, Hardman and Co Research

AGA: conservative liquidity management, including unique derived portfolio

Commitments

Available resources include cash of €94m, Derived Investments of €390m and borrowing capacity of €250m

Assuming €100m of commitments will not be called leaves ca.€350m to be met from PE realisation proceeds over five years

In 2021 alone, received €275m from exits

Outstanding commitments to the Apax Funds (together with recallable distributions) amounted to €1.19bn at end-3Q'22, of which ca.€100m are unlikely to be drawn. To fund these commitments, AGA had cash balances of €94m after net liabilities. Management indicates that it expects calls before the year-end to fully utilise existing cash, and there is excellent visibility on this, as Apax Funds uses capital call facilities to manage its calls on investors. AGA also has access to a multi-currency revolving credit facility of €250m (undrawn). This was increased recently to reflect the increased size of AGA and the increased weighting of the portfolio in PE funds over Derived Investments. We understand that there is a loan to value covenant, which would restrict drawings to 35% of the NAV of PE investments, should there be a sharp correction. In addition, there are €390m of Derived Investments (which we discuss in detail below), giving total immediately available resources of €734m. This would leave ca.€350m to be covered by PE realisations, which averaged €150m p.a. in 2018-19, in the years pre-COVID-19 and before Apax saw exceptional IPO activity (which led to realisations peaking at €275m in 2021 alone).

Prudent over-commitment policy sensible, given five-year drawdowns within most Apax Funds

Managing cashflow is crucial to any business, including PE, and with investment drawdowns spread over many years. We are not averse to the industry-wide practice of "over-commitment", as long as it is prudent and the risk is kept in proportion to the asset base. This appears to be the case for AGA, which is in the middle of the pack of listed PE in terms of the degree of over-commitment.

AGA leading investor in Apax Funds, which, in practice, Apax would not want to see in difficulties

From a purely practical point of view, it is also worth bearing in mind that AGA is not only a leading investor in Apax Funds, but it is also a high-profile investor, linked directly to the adviser. In practical terms, it appears unlikely to us that Apax, the adviser, would want to create difficulties for a fund so closely related to itself, and, should opportunities arise to manage calls, which has not disadvantaged AGA, they would be taken.

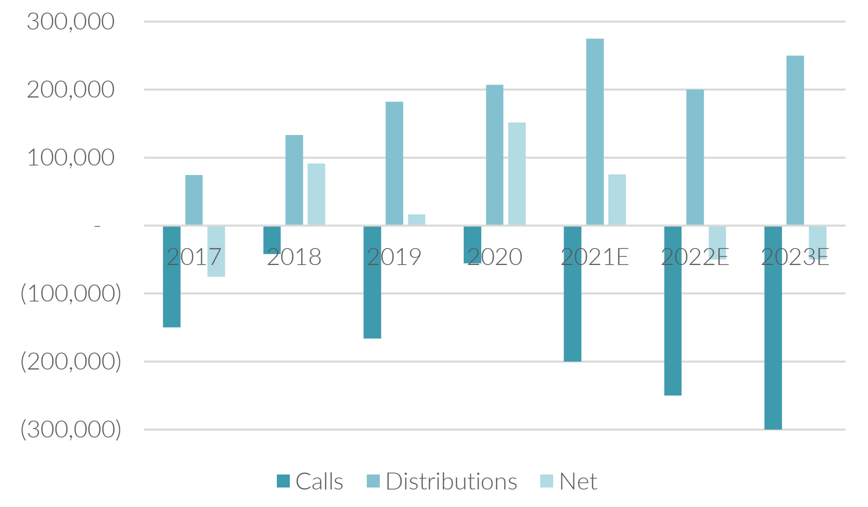
Near-term cash management

Short-term cash calls very visible

We expect move to net cash outflow at time of high investment returns

Visibility on drawdowns should be good, given that Apax Funds, in line with market practice, uses short-term (up to one year) capital call financing facilities, so as to ensure that it makes over-burdensome, continuous calls only on its investors. The chart below puts 2022-23E into the context of recent years. After several years of being cash-positive, we are expecting the recent commitments to the new Apax Funds to see a rise in the level of calls. At the same time, we expect a dip in realisations in 2022 (after the very active 2020-21 IPOs, a reduction in 2022, reflecting market activity, before a rise again in 2023). The rise we expect in 2023 reflects historical investments being realised and the attractive markets in which Apax operates. Investors will note that the rise is still slightly below the trend line growth of 2017-19, and, as such, is not dependent on a material market rally or recovery. On these assumptions, there is a modest net outflow in both 2022E and 2023E, which is covered by the sale of the portfolio assets of Derived Investments, which, on our numbers, fall to £225m by end-2023 (14% of total investments). There is no use of the credit facility of modest cash on the balance sheet at that stage.

PE calls and distributions, 2017-23E (m)



Note: 2018 includes £11m of direct PE purchase; Source: AGA, Hardman & Co Research

Derived Investments portfolio

The Derived Investments portfolio makes AGA unique among UK listed PE names

It is held for a capital buffer, flexibility in liquidity management and to minimise cash drag

In terms of managing the cost of liquidity, AGA adopts a unique approach through its Derived Investments portfolio. For historical reasons, the trust had excess capital and, rather than holding the assets in low-yielding (if not negative) cash/risk-free assets, it chose to make investments in higher-return, more liquid debt/equities securities, which were identified as a direct result of the PE investment process, insights and expertise of Apax. The reasons AGA has its Derived Investments are i) risk management in having a capital buffer against uncertain times with an illiquid PE portfolio, ii) flexibility in generating immediate cash against unknown liquidity calls, and iii) minimising the cash drag cost of holding liquidity against expected calls and after receiving distributions.

Other considerations include:

Focus is leveraging existing skills in Apax's core sectors – 28% in companies currently or previously owned by PE funds

- Critically, Apax is leveraging its existing expertise in specific sectors (and often specific companies) where it has unique insights, gained from the team's PE investment activity. It is not investing blind or in new areas. At September 2022, 28% of the debt portfolio was in companies that were in the PE portfolio (18%), or that had been in the PE portfolio (10%). AGA describes the residual 72% as having been through "PE-style" due diligence.

Liquid portfolio with largely market, not modelled, prices

- The focus on derived debt remains on investments in lower-risk, first- and second-lien loans, where there is a high degree of visibility on cashflow. The former accounted for the majority of the debt portfolio at 3Q'22, and, typically, have more liquid markets, which should make them more tradeable, but also means that investors can take greater comfort that the "market" price used for valuation purposes is an achievable one.

34.6% five-year cumulative return, compared with 15.8% from S&P/LSTA leveraged loan index

- Leveraging expertise means that the derived debt portfolio has delivered excellent performance (34.6% five-year constant currency return, vs. 15.8% for the S&P/LSTA Leveraged Loan Index to September 2022).

Current yield 10.4%, 96% floating rate

- Reflecting the rise in interest rates and widening of spreads in the market to date, the overall yield to maturity of the portfolio increased to 10.4% at 30 September 2022 (8.9% 30 June 2022). 96% of positions in the debt portfolio at end-September 2022 were in floating-rate securities, which makes it well-positioned for further interest rate increases.

Derived equity book now minimal

- In 2020-21, there was a reduction in the proportion of derived equity and an increase in cash, which reflected the IPO of a number of PE holdings. The overall portfolio at the time had more listed holdings than usual, and, consequently, the holding of derived equities was reduced, as there was already exposure to listed equity markets.

Bottom-up investment selection, top-down risk/liquidity management

- While individual investments are identified through a bottom-up process, Apax actively manages the portfolio top-down from a risk and liquidity perspective.

AGA's dividend yield

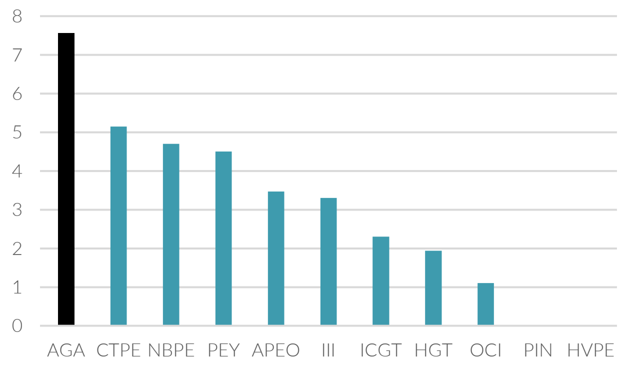
Dividend paid at 2.5% of NAV every half year. As returns have been above this level, NAV and dividends have been growing.

2022E yield to shareholders 7.6%, well above that of PE peers, and making AGA attractive to both capital and income investors

AGA has a policy of paying the equivalent of 5% of its NAV as an annualised dividend. As the left-hand chart below shows, with returns well above this level, the NAV has grown and so, over time, the dividend has grown too. By paying a dividend, AGA seeks to give its investors an immediate return on their investment, rather than seeking solely to give a long-term return. We believe that part of this philosophy reflects its unique approach to liquidity management, in having a material part of the portfolio in derived debt. As these assets earn revenue, there is a cash stream from which to pay dividends, which other listed PE vehicles do not generate. Over time, we expect the derived debt portfolio to be a smaller proportion of the overall portfolio and the proportionate cover of dividend to fall, but there will still be an element of income covered by it.

Dividend, final 2015 to interim 2022 (p)

Dividend yield (%) for AGA and



Source: AGA, LSE, priced at 10 January, Hardman and Co Research

Investment-neutral issues

US: largest, deepest, most competitive market, but needs careful stock selection

US market deep and liquid, but most competitive

Still offers micro opportunities for an investor like Apax

The US is AGA'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 Apax is 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. On the downside, we believe it is the most competitive PE market, with significant numbers of players potentially going head-to-head with Apax 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 is converging with public equity returns, having been a significant outperformer over the long term.[4] In contrast, less mature markets in Europe and Asia, in aggregate, continue to earn superior returns. 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. The top-quartile PE manager will significantly outperform, and having the right model in the US to identify micro opportunities will deliver significantly market-beating returns after all costs.

Currency exposure

Reporting currency €, shares £

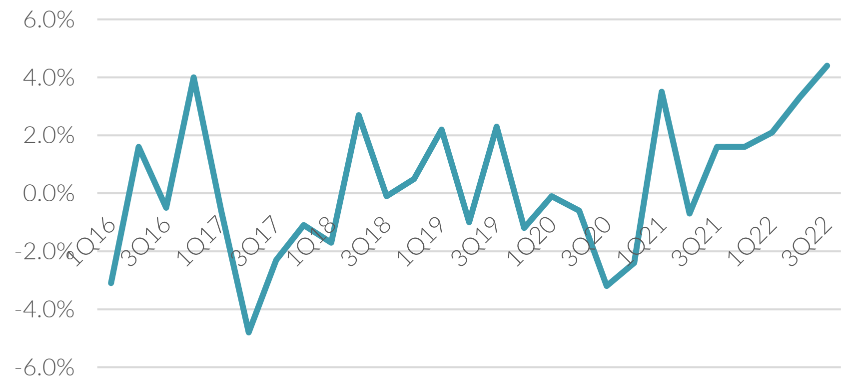
Peer comparisons need to be treated with caution

Quarterly impact varies. 2022 seen strong benefit.

The first point to note is that AGA reports in euros, 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, OCI and PIN) or the limited number that report performance in USD (such as HVPE).

AGA regards its exposure to exchange rate changes on the underlying investments as part of its overall investment return. Hedging would be incredibly complex and potentially very costly, as, *inter alia*, investee company business exposure does not reflect the location of a company's headquarters. In the 2021 accounts, AGA reported its currency risk as 55% US$ and ca.40% €, with a small £ risk. By AGA not hedging, investors may expect an element of short-term noise on currency movements. The chart below shows AGA's attribution to the total NAV return from forex, which can be volatile.

AGA's quarterly forex attribution to total NAV return (x)



Source: AGA, Hardman & Co Research

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

ESG

AGA's ESG focus is essentially on governance, as it has no employees and, like many others, it gives a high profile to its ESG reporting. This was highlighted on page 6 of the 2022 interim report, the key points of which we summarise below. In contrast, Apax is actively engaged with its investee companies, as well as having its own initiatives:

Apax collects, and reports on, over 130 ESG-related metrics using its OEP platform

Has PRI A+ rating

- Delivering sustainable returns has been a key focus for Apax and the Apax Funds' portfolio companies for over a decade. The focus has been on transparency, and on improving and enhancing the measuring of outcomes.
- Apax collects, and reports on, over 130 ESG-related metrics from the Apax Funds' portfolio companies.
- The annual assessment by the PRI rates the Apax ESG programme as A+.
- Apax established a new data analytics platform, designed to pool together all portfolio company data streams, including ESG aspects, within its systems. The platform enables Apax to conduct in-depth analysis on portfolio companies and their ESG footprints, while also providing investors in the Apax Funds with access to more, and better, data to monitor and track progress. This KPI data is also actively utilised by the OEP to engage in discussions with the individual portfolio companies on how to improve their ESG profile or identify opportunities for value-creation in each company. More details of how the OEP uses this platform were given in AGA's CMD presentation, slides 53-59).
- By the end of the year, Apax will have measured greenhouse gas (GHG) emissions across Scope 1, 2 and 3 for all current portfolio companies in Apax IX and Apax X. As a result, Apax will be able to report in detail on the carbon footprint and carbon intensity of the underlying entities.
- For more details, investors can review AGA's policies at https://www.apaxglobalalpha.com/media/2371/aga-esg-policy-2022.pdf and at https://www.apax.com/create/responsibility/sustainability/.

Exit and reinvestment

Exit and reinvestment add value where bigger PE houses better-placed to manage larger business and cost synergies, bearing in mind fixed life of fund

Performance fees paid only for performance

Apax Funds, and so AGA, has, on rare occasions, made a sale with rapid follow-on investments by later funds, e.g. on 22 September 2022, Apax IX agreed the sale of its stake in Authority Brands (AGA's share of proceeds: ca.€47m) and also agreed a reinvestment in Apax X (AGA's original commitment: ca.€49m, subsequently reduced by syndication to other LPs). This has led to some investors asking why this practice has been adopted. Looking through this specific transaction to the broader question of why exit and reinvest, we note:

- We highlight that the third-party buyers should give comfort on the independence of the price/process, given that they have their own investors to consider.
- Apax has a proven track record in upgrading and improving companies to a certain level. Once these companies' investments have reached that scale, there are other PE teams with proven records at managing larger companies, and specific skillsets and networks to leverage.
- Other PE funds can also provide incremental capital if a specific investment is likely to become too large for portfolio concentration reasons. This is a reason why, as in Authority Brands, a significant minority stake may be appropriate.

- It is probable that the PE-backed buyer will be looking to make direct cost-saving-related synergies in its own business.
- Every fund has a fixed life. A certain offer has a value, which has to be considered in the light of the life of the fund.
- Experience, over time, had shown that value could be left on the table by too early an exit, and so reinvestment is a natural consideration, especially bearing in mind the information advantage that Apax has in its pre-owned companies. Every investment is considered on its own merits for each fund.

Mathematically, investors will get larger nominal return if a new PE firm adds more value

Performance fee will vary with performance

In terms of the crystallising performance fees against returns to investors, we have given a theoretical example below. Readers should recognise that the table is an over-simplified example to prove the point – the Apax Funds operate whole fund carry models on their buyout funds (not deal-by-deal carry models). Our assumption is an investment of 100 upfront, 15% CAGR returns, an 8% hurdle for performance fees, which are paid at 20% of the gain above the hurdle, and a 30% uplift on exit. In the first case, there is an exit after four years, and the full sum is immediately reinvested (we assume the new PE investor will also earn a 15% return on the amount invested). The performance fees in the first scenario account for 17.2% of investor returns, and half are paid at year four. In the second scenario, the fee represents 16.5% of returns. However, in aggregate, in the first scenario, investors have made 248 from their investment, against 211 in the second, with the total management fees being 43, against 35.

Theoretical examples of exit and reinvestment vs. holding in one fund

Scenario 1: Year	1	2	3	4	Exit	5	6	7	8
Fund 1 (investment compounding 15% CAGR)	100	115	132	152	198				
Hurdle return at 8% CAGR	100	108	117	126	126				
Performance fee at 20% of gain over hurdle					14				
Net return to investors					83				
Fund 2 (reinvesting proceeds from sale, 15% CAGR)					198	227	261	301	391
Hurdle return at 8% CAGR					198	214	231	249	249
Performance fee at 20% of gain over hurdle									28
Net return to investors									165
Scenario 2: Year	1	2	3	4	5	6	7	8	Exit
Fund 1 (investment compounding 15% CAGR)	100	115	132	152	175	201	231	266	346
Hurdle return at 8% CAGR	100	108	117	126	136	147	159	171	171
Performance fee at 20% of gain over hurdle									35
Net return to investors									211

Source: Hardman & Co Research

Other neutral factors

Locked-in shares

As we note in the *Company matters* section in the *Appendix* of this report, when AGA listed, it subsumed an existing fund that was created and funded by Apax partners and employees. At launch, current staff could sell 20% of their shares after five years (i.e. June 2021) and then 20% on each anniversary thereafter (completely free by June 2025). The residual locked-in shares now represent 16.1% (26.8% at IPO, with 40% now released). From here, the locked-in shares are only a modest overhang. Former alumni had five-year lockups at IPO, and so they are now all in the free float. The Future Fund, which held 7.1% at IPO, and was also subject to a lock-in arrangement, is also no longer a stock overhang.

Discount management

Board assesses discount management strategies quarterly

Within the *2021 Report and Accounts Risk Management Framework* (page 32), the board recognises how a persistent discount may create shareholder dissatisfaction. It addresses the issue with quarterly reports from its corporate broker and the Investment Advisor's investor relations team, and these reports include an assessment of discount management strategies.

In terms of those strategies, we note:

Buybacks reviewed but not done

- Every year, the convincing AGM passes resolutions authorising buybacks of up to 15% of shares (2021 vote: 99.99%). To date, the only shares that have been bought in the market have been to fund the performance fee, and none have been cancelled. We understand that the board is not opposed, in principle, to buybacks, but it weighs the expected return from a short-term potential closing of the discount against the compounding return from reinvesting in PE assets. The Derived Investments portfolio means that there is flexibility should the board choose to undertake a buyback at a future date. In our view, the case for buybacks is unproven.

  On the upside:

  - 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 better deployed in 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 the market.
  - 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. The depth with which it broke down the approach to valuations in the recent capital markets day presentation is an example of this. We also consider the willingness to engage a sponsored research house that engages in in-depth analysis as further evidence of an openness in communication.

Continuation vote

► AGA holds regular discontinuation resolution votes on a three-yearly basis. The last vote was held at the 2021 AGM, and was passed convincingly (99.8%). The next such vote is due at the AGM, to be held in 2024.

Investment downsides

Investor sensitivity to challenging 2H'21-9M'22 markets

Summary

Having delivered superior total returns, more recently, AGA has underperformed peers in 2H'21-9M'22, before staging sharp rally in 4Q'22

Having outperformed from IPO to March 2021, AGA then underperformed its peers in 2H'21-9M'22, before staging a sharp rally in 4Q'22, recovering all of its previous underperformance. While PE should always be considered a long-term investment, we believe investors should understand what drove these trends, so as to not be alarmed by them, and to understand the long-term value creation underlying them.

Decline in value of public holdings likely to have been major factor

Apax used the strong markets to IPO a number of companies, crystallising significant gains, but leaving it with residual holdings in listed companies on then high ratings. It is difficult to criticise Apax for taking a significant element of the gains off the table at the peak of the market, although, as the market appetite for such companies waned, this saw both a falling NAV and weaker sentiment for AGA. 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.

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

Looking forward:

i) public holdings' bubble ratings now gone

ii) businesses continuing to perform

iii) Apax under no pressure to sell

iv) Apax has realised considerable gains already, but more to come

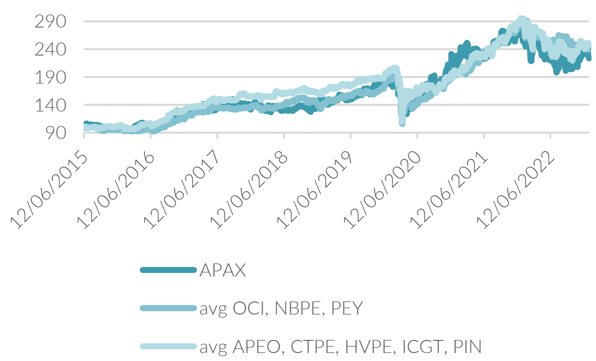
v) relative overweight in listed holdings reduced significantly

- The listed portfolio is now on ca.17x ratings, in line with the private PE portfolio and without the "bubble" valuations, reducing the risk of further weakness on valuation grounds. Excluding publicly listed companies, the average LTM EV/EBITDA multiple at 30 September 2022 was 17.1x (17.8x at 30 June 2022, 18.1x at 31 December 2021, 17.4x at 31 December 2020). The reported numbers were 17.2x, 17.9x, 23.2x and 16.9x, respectively, showing how the listed elements had distorted the overall valuations at end-2021. Both listed and private are now aligned.
- The businesses are continuing to perform well operationally, and are generally in resilient sectors (like the rest of Apax's investee companies). In the case of Thoughtworks (the largest listed holding), revenue to June was up 27.5% YoY, with good operational metrics. The share price dynamic, both on IPO and subsequently, has moved independently of the operational performance of the business
- Apax is under no pressure to sell at distressed prices. IPOs have accounted for only around a fifth of exits over the past five years, including the peak years of technology during COVID-19. There are multiple options for Apax Funds to crystallise value, and continued exits should lessen the IPO dependency concern. Management has commented that it does not believe the performance of its IPOs differs from that of its peers, and there is no reason to believe, therefore, that its ability to exit once markets reopen should be impaired. As we have highlighted earlier, a core feature of PE is the ability to manage over the long term. Apax is not a forced seller, and can wait until market conditions are more favourable.
- At current prices, there remain considerable uplifts on the original investment.
- The listed portfolio concentration is now slightly above the market average (down from over 2x the market average at end-2021), reducing the relative sensitivity.

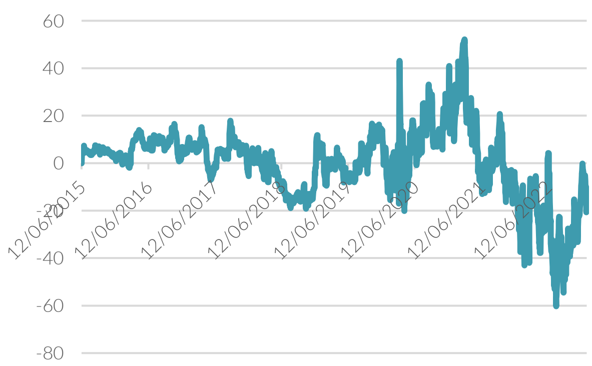
Share price total return

The left-hand chart below shows the share price total return for AGA indexed to 100 at the IPO, and the average for a number of listed direct investing PE vehicles and fund of funds. We have not included HGT or 3i in the analysis, given their specific models – pure technology/asset management arms – and the distorting impact this has on the performance. The right-hand chart then extracts the relative performance of AGA against the closest direct investing peers. The message that we draw is that, from the IPO to a peak on 12 March 2021, AGA's share price total return outperformed its peers by 52%. Since that date, there was a reversal through most of 2021 and 2022, before a sharp recovery in 4Q'23 recovered the vast majority of the losses.

Total shareholder return indexed to IPO date at 100



AGA vs. average of OCI, NBPE and PEY total shr. return



Source: Refinitiv, Hardman and Co Research

NAV performance

Pre-3Q'21, only one significant quarter of NAV falls

From 1Q'16 to 3Q'21, AGA reported six quarters of negative total returns, four of which were driven by forex and one by the Derived Investments portfolio. The PE book reported only one significant quarter of loss (1Q'20) over those 23 reporting periods. However, the three quarters to 2Q'22 all then showed small negative total returns (-0.1%, -1.7%, -1.9%), despite positive forex in each quarter, and the PE constant currency losses have been noticeable (-2.3%, -5.4%, -6.1%). The constant currency return from the PE portfolio returns from the PE book was worse than in 1Q'20. 3Q'22 showed a recovery.

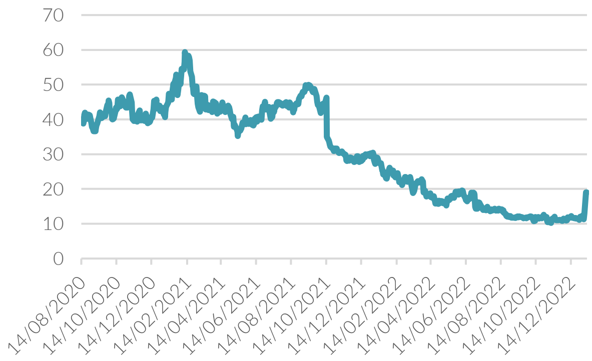
Apax was over 2x market weighting in listed equities at end-2021, following series of IPOs

Realised a lot of gains, but highly valued companies saw sharp falls in 2022…

…including largest holding falling two thirds in value, which alone reduced NAV by over 6%

One of the main reasons for this is that Apax Funds took advantage of the high valuations achievable in public markets during 2020-21 to IPO an above-average number of portfolio companies. These portfolio companies have returned 2.8x of the original investment in cash to the Apax Funds (by June 2022), but there remained significant positions in what were then public companies on high ratings. The loss of appetite for such companies thus affected AGA's NAV. At any given time, the public holdings will vary. At end-December 2021, it was 25% of the PE book, which we believe to be well over 2x the market average. By way of example, in December 2021, Thoughtworks (ticker TWKS) alone had a value of €127m, with 9% of NAV, but, by end-September 2022, this had fallen to 3% of NAV, with the share price falling by three quarters (see left-hand chart below). Another was Duck Creek Technologies (ticker DCT), which has fallen for three quarters (right-hand chart below). As can be seen in these charts, the share prices of both have more recently stabilised. Duck Creek received a $2.6bn PE offer to take it private on 9 January 2023.

Thoughtworks' share price since IPO ($)	Duck Creek's share price since IPO ($)



Source: Refinitiv, dated 10 January, Hardman and Co Research

Fall in listed portfolio was primary reason for falling ratings contribution for AGA

PE business continues to perform well operationally

It is important to recognise that the operating performance of the PE businesses has remained strong, and has continued to make a strong positive contribution to AGA's NAV growth. We highlight the contribution waterfall chart on page 12 of the *2022 interim report*, showing the +19.7% total return contribution from earnings, which was offset by a -26.3% multiple contraction effect. Similarly, in 3Q'22, a positive 7.9% return contribution from underlying portfolio company earnings was offset by a -4.1% impact from a multiple contraction.

Derived Investments' positive impact

Derived debt outperformed

The derived debt portfolio performed better than the equity portfolios in 1H'22, with a positive 3.4% contribution, including forex and a small negative constant currency total return, and a further 6% in 3Q'22 (0.4% constant currency). The derived equity element of the portfolio typically has shown greater volatility than the PE book. The fall in that element of the book in 2Q'22 was twice that of the PE portfolio, but the derived equities are now just 2% of the book, and management has indicated that it is not a priority for investment going forward; so the future effect may be expected to be *de minimis*.

Sentiment to costs

Summary

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

There is an adverse market sensitivity to PE costs, especially as some of the nominal performance fees and ongoing costs can be large. However, for us, the key point is that net returns to investors after all costs are market-beating, and it is on this that investors should focus.

PE a high-cost business, and market-wide disclosure could be more helpful

The ongoing costs in PE are also significant, because this requires material resources to assess deals, and to invest in management and improve performance once positions have been taken. Significant cost is also incurred in aligning manager and shareholder interests in a way that is not possible in public markets, and in operationally improving businesses once they are taken into ownership. There are costs in transforming the investee companies into digitalised models with upgraded systems and processes. Additionally, to identify all the costs is not simple, and requires detailed reconciliation.

On AIC/KID basis, AGA relatively low-cost, there are no dual fees, AGA costs one quarter of dividends paid in 2021, and NAV is, after all, carried interest

More positively, on the AIC/KID comparative basis, Apax has no dual fee structure, is a low-cost producer, and, at the AGA level, the total costs in 2021 were €15m (of which there was £4m in management fees and €8m in performance fees) – less than a quarter of the dividends received by shareholders (€64m). All valuations are inclusive of carried interests.

Management and performance fees

No management fee paid on Apax Funds at AGA level

The manager's fee is calculated in arrears at a rate of 0.5% p.a. on the fair value of non-fee-paying PE investments and equity investments, and 1.0% p.a. on the fair value of debt investments.

As AGA is typically a sizeable investor in each Apax Fund, it benefits from the better terms, which are also available to other similarly sized third-party investors in those funds. During 1H'22, the average management fee paid on AGA's commitments to the Apax Funds was 1.3%. Where the Apax Funds are subject to management fee payments, there is no additional fee charged to AGA. For the underlying PE funds, fees paid to their respective GPs differ, based on fund type/early close discounts, etc, and fund lifecycle stage. AGA pays fees based on commitment to the latest buyout fund GPs (ca.1.4%) until such time that a successor fund is raised or the investment period has been completed. Thereafter, the fees drop to 1.2% of net utilised capital. Subject to negotiation with LPs at the point of fund term extension, no fees are paid on funds that are greater than 10 years-old.

Performance fee on eligible portfolios only

The performance fee to the investment manager at the AGA level is payable on an annual basis, once the hurdle threshold is met by eligible portfolios. There is a tiny historical PE portfolio that is not material, and the 2% derived equity portfolio is now also not material – so only material performance fees are on derived debt. Performance fees are payable only to the extent that they do not dilute the returns below the required benchmark for each respective portfolio, as detailed in the table below. There is not a high watermark for the hurdle rate, but net losses are carried forward and netted against future gains. The table below summarises the performance fee hurdles and percentage payable by eligible portfolios. The performance fee is paid in shares – typically bought in the market. Performance fees at the AGA level were recently changed to be paid on the market value (i.e. accounting values), not realised gains. The board expects that fee payments to the Investment Manager and the Investment Advisor will, in a substantial majority of circumstances, reduce significantly, following these amendments. Consequently, the change in calculation methodology for the performance fee will better align the incentives of the Investment Manager with those of the company and shareholders. To transition to the new fee, applicable from 1 January 2020, the company's investment portfolio was assumed to be realised and reacquired for cash as at 31 December 2019.

Performance fee hurdle rate and rate paid

(%)	Net portfolio total return hurdle	Rate paid
Derived debt	6%	15%
Derived equity	8%	20%
Eligible PE	8%	20%

Source: LSE, Hardman and Co Research

Disclosure

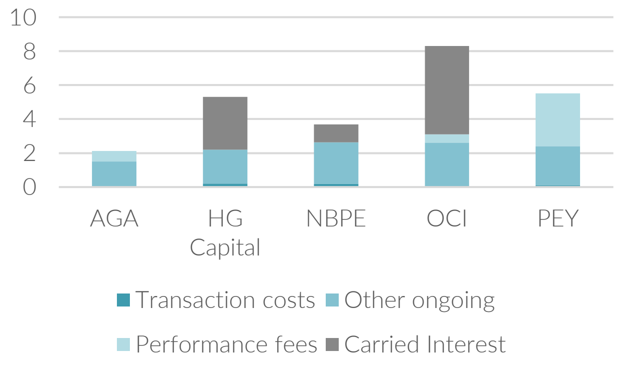
AGA's management fees to Apax funds reflect its status as large, anchor investor, and are below-average, but we do not have disclosure

The disclosure by AGA is at the listed vehicle level only. AGA has invested in Apax Funds, and Apax, the advisor, will receive fees for advising those funds. We understand that the fee levels, which are confidential, reflect AGA's position as one of the larger and most consistent investors in Apax Funds. Investors are reliant on the independent board oversight to ensure that the contractual terms between the listed vehicle and each Apax Fund are appropriate.

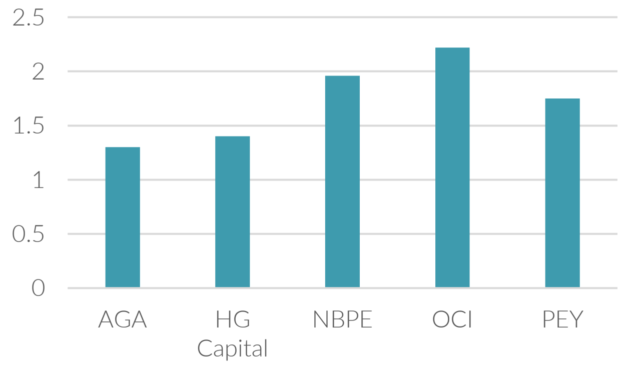
At trust level, AGA lowest cost on both AIC and KID disclosure bases

The market-wide requirements for public disclosure on costs are singularly unhelpful to investors. Apax has a good record on giving investors detailed information (see, for example, its detail on valuation in its Capital Markets day), but the standard auditing requirements do not fit with giving investors simple cost information. When we look at other companies, it is clear that they have received different advice, over time, on how they should interpret, for example, what is required to be disclosed in their KIDs (see, for example, the change in HVPE's disclosure of its costs). The AIC excludes performance fees, which, in PE, make up the majority of costs. Noting those caveats, on a disclosed cost basis, at the trust level, AGA has a lower cost to investors than is the case for its peers.

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 gearing

Summary

Proven resilience of PE and Apax/AGA incrementally to PE, but sector concerns remain with some investors

We have outlined above why we believe in the fundamental resilience of PE and what Apax/AGA 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, AGA 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.

We believe the concerns focus on several potential impacts:

Focus on leverage (and what Apax brings to manage it)…

- 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 Apax brings to investee companies in managing that risk.

…impact on trust's cashflows (and buffers maintained on our forecasts)…

- A weaker trading outlook for the operating metrics of the trust itself, in particular weaker cashflows, but we again highlight the strong liquidity position, based on our forecasts and the buffers it maintains.

…and ratings (and impacts already seen)

- A likely weakening in valuation ratings – arguably, this has already been seen, with an uncertain incremental effect from here. 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. We also note that there are likely to be more reinvestment opportunities at lower prices, assuming market-wide lower valuations.

Apax investee company gearing

Gearing has been increasing, and most geared element has been increasing at fastest rate

Despite the strong average growth in EBITDA, the debt multiple has been rising since 2019, with the most rapid increase in 3Q'22 (to 4.9x, from 4.2x at end-2021) – see left-hand chart below. The right-hand chart shows that the average has been driven by the increase in the highest-geared element of the book (percentage mix of debt to EBITDA 6x or more).

While the gearing has been increasing, and we note that investors can be very sensitive to this issue, we highlight:

However, part of gearing reflects i) locking in fixed rates, which reduces risk, and ii) bolt-on acquisitions, which improve profitability

- There is an element of investee companies restructuring their finances ahead of expected rate increases. Where they have locked in long-duration, fixed-rate funding, this not only reduces interest rate sensitivity but also refinance risk. This is part of the treasury management skills that Apax brings to its investee companies, and it also reflects Apax being able to access the whole spectrum of the capital markets, and not just limited bank finance.
- In recent periods, there have been increased opportunities for bolt-on acquisitions. The gearing numbers reflect the debt to finance such deals, but do not yet reflect the EBITA, nor the synergies that such deals bring.

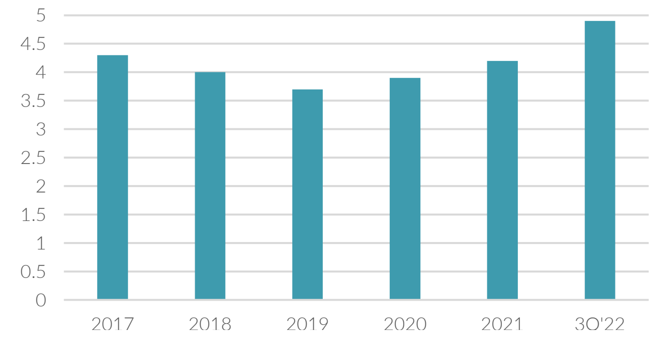
Also, cov-lite documentation reduces risk, as does revenue growth…

- Apax provides its investee companies with more than just finance opportunities; it also brings treasury expertise. We highlight again the importance of factors like cov-lite documentation, and access to the whole capital markets, in improving investee company funding options.
- Revenue growth in 3Q'22 was nearly twice the average rate of the past five years, which bodes well for future EBITDA growth.

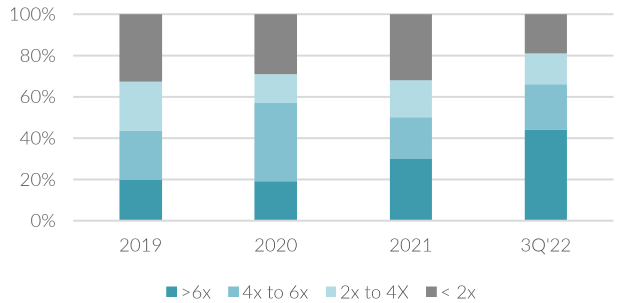
…and new deals have been at below-average gearing

- As noted above, new investee company gearing is slightly below the average for the portfolio as a whole.
- We also note that, despite the challenging economic conditions, organic LTM revenue growth to September 2022 was 15.4% (LTM to June 2022: 13.5%) and LTM EBITDA growth was 13.8% (LTM to June 2022: 10.5%). We do not read too much into an individual quarter's performance, as specific events/a company's performance can distort numbers, but it is nonetheless an encouraging fact that both organic revenue and EBITDA growth have accelerated in the most recent quarter.
- In its most recent results, HGT reported gearing at 7.5x net debt/EBITDA for June 2022 for its top 20 companies, up from 7.1x at December 2021.

Average debt to EBITDA in PE portfolio (x)



Percentage mix of debt to EBITDA (%)



Source: AGA, Hardman and Co Research

AGA's share of gearing in Apax Funds is €149m

The funds, like most in market, use capital call facilities to manage investor calls

No drawings at AGA level

Other gearing

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

- Like most PE funds, Apax Funds adopts gearing to manage cashflow demands from its investors. The funds have ongoing cash outflows associated with expenses and specific investments, and, rather than make repeated calls on their investors, the funds typically borrow and then make irregular taps on their investors. The level of debt at the funds is related to its stage of development (i.e. debt is much higher at investment funds than at mature or harvesting ones). AGA's share of debt at the Apax Funds level is €149m.
- The multi-currency evergreen revolving credit facility at the listed AGA entity level was increased on 6 May 2022, from €140m to €250m, and remains undrawn. The margin was unchanged, at 230bps. On our forecasts, it will remain undrawn.

We expect AGA to move from cash generation to net cash outflow, which optimises returns…

…as is at a time when investment returns are especially attractive

AGA's operational performance

We expect AGA to move from cash generation to net cash outflow, which optimises returns, as it is at a time when investment returns are especially attractive. However, there is a danger that investor sentiment may not react well to such a development.

- 2020-21 saw well above normal distributions, with a number of successful IPO distributions. With the IPO market being more challenged in 2022, especially in technology, we are forecasting lower distributions and higher calls.
- We forecast AGA's PE net cashflow to move from £227m of cash generation in 2020-21 to £100m of net cash consumption in 2022-23. Given that we expect some of the highest returns to be made in the periods of market uncertainty, and bearing in mind the strong and flexible liquidity position we have outlined earlier, we are entirely supportive of such a trend of cash deployment.

Slowdown will affect valuation ratings – arguably already happened

Ratings impact

The third element of investor concern to a downturn is the impact on ratings. There has already been a fall in the listed portfolio (see comments on 2022 above), and the question on investors' minds is what further impact there may be going forward. We believe investors will form their own judgements 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. Such businesses form only ca.10% of AGA's portfolio, and are not the driver to long-term value.

Sentiment to the valuation

Fall across all PE-listed trusts in 2022 suggests scepticism about NAV valuations…

…especially in technology names, no matter what companies like AGA do to convince otherwise

For the reasons detailed above, we believe there is strong factual support that AGA's valuation, provided by the Apax Funds, is conservative. AGA's controls are in line with market practice, and include appropriate due diligence processes. Despite all this, we believe that there is a degree of investor cynicism about the valuation of illiquid private companies in listed vehicles, especially ones with a technology bias. As we detail in the *What could lead to a rerating?* section within the *Valuation* section below, it may take time, continued delivery and further exits above carrying value for the market to be fully convinced that the NAV is real.

We acknowledge that the timing issue does not help. It takes time for the NAV to "catch up" with market moves. 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
AGA rating (x)	10	10	9.5	9
NAV (p)	100	100	95	90
AGA share price (p)	100	90	90	90
S/P discount to NAV	0%	-10%	-5%	0%

Source: Hardman and Co Research

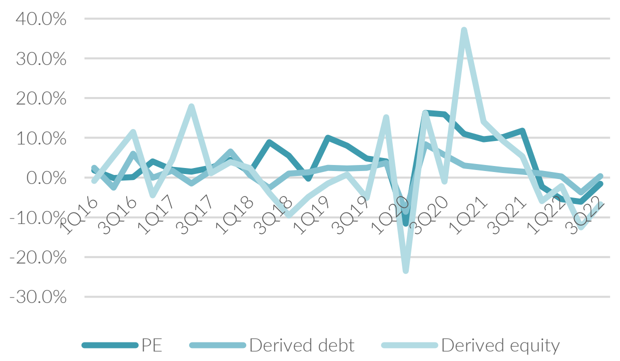
Impact of Derived Investments portfolio on weighted returns and sentiment

Derived debt portfolio brings key strategic benefits in capital and liquidity flexibility, and has delivered material outperformance against its benchmark

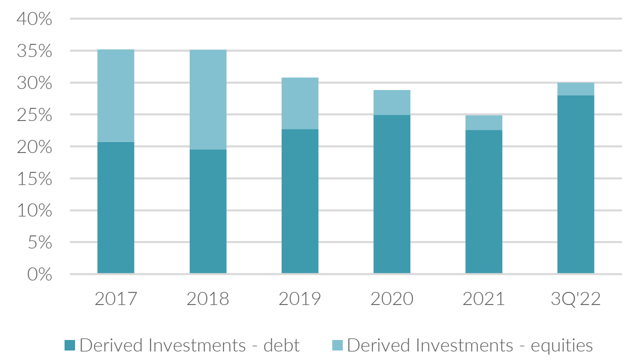
As an option to give this flexibility, it has outperformed, but return still below PE returns

We have discussed, in the section above, the benefits that AGA generates from its Derived Investments portfolio. These investments indisputably earn higher returns than cash, and give AGA flexibility in managing calls from the Apax Funds. The material outperformance relative to its benchmark is impressive, and, given the strategic necessity of having a capital/liquidity buffer, having an outperforming asset is evidence of a good track record. However, it is based on the assumption that one agrees with the management that holding a capital and liquidity buffer in the form of a Derived Investments portfolio is the best strategy. Some may argue that, if these assets were held in PE investments, the bank facility could be higher. With high-quality Apax Fund investments, which should have a good, liquid secondary market, if one assumed that a 35% NAV cap applied to total assets, syndicated banking facilities could rise to closer to €500m (end-2022E), rather than the current level of €250m. In 2023, the increased banking line would be less than the estimated size of our Derived Investments portfolio. In our view, such an approach carries risk – the banking facility is clearly tied to the size of the NAV, and so could fall just at the time it is required, and it is less under the control of Apax and AGA – but for those who would prefer such an approach, it is a mathematical fact that the return from this portfolio is below that earned from the PE element of the book. The left-hand chart below shows the constant currency total return by each quarter. On average, the quarterly total return has been 4.37% from the PE portfolio, 2.23% from the derived equity portfolio and 1.40% from the derived debt book. These are gross returns, with the PE book not incurring management or performance fees (to the same degree) as the latter two books. The right-hand chart shows that, for most of AGA's life, these portfolios have accounted for between a quarter and a third of the overall investment pool; so their earning returns of between a third and a half of the PE book are a significant depressant to the overall trust's return. Had the proportion of the book been reduced earlier, the drag effect would also have been less. In addition, we believe that, for some investors, having a trust that is a mix of PE and debt makes the story much more complicated than a simple PE investment. We recognise that, had the Derived Investments portfolio been reduced, AGA could well have come in for criticism that its overall liquidity management was less prudent, especially in the uncertain COVID-19 and recent crises.

Constant currency quarterly total return (%)



Proportion of total investments in Derived Investments (%)



Source: AGA, Hardman and Co Research

Other issues

Sentiment to the history of the discount

Discount been feature since IPO – noting that other ICs have seen such a discount reverse

Overcoming the sentiment that "AGA 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 been trading at a discount to NAV for a substantial period. However, we point out that:

- This appears an anomaly in terms of the current NAV valuation, the outlook and the business model, as discussed in previous sections.
- Through much of 2017, in late 2019 and late 2020, the discount was mid-single-digit. In February 2021/March 2021, ahead of the announcement of end-2020 results and when the latest NAV was still based off September 2020, APAX traded at a small premium to the last reported number.
- Other PE vehicles that are focused in high-growth sectors have historically also traded at premiums. They currently trade at smaller discounts than the rest of the sector, but historically were at premiums.

Sentiment to KID disclosure, which is inconsistent with peers

We note and concur with market's view that methodology of calculation not always helpful…

…but AGA's KID disclosure out of line with that of peers

We totally support 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, but, given the correlation we identified, we believe that at least some investors view it as indicative of prospective risk.

The table below shows an inconsistency in the results of AGA's KID analysis, with a much smaller distribution across the scenarios than is the case for AGA's peers. We note the different dates of the disclosure, which means that AGA does not capture 2022 movements. As we noted in our comment about HVPE above, we believe that companies may have received different external advice on the interpretation of KID rules. The table is based off the disclosures made before the recent rule changes, which means that tests are now described in commentary format, rather than in a numerical format.

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

	AGA	HG Capital	NBPE	OCI	PEY
Stress-test scenario	-10%	-74%	-74%	-93%	-80%
Unfavourable scenario	-6%	-22%	-27%	-5%	-20%
Moderate scenario	3%	11%	7%	22%	14%
Favourable scenario	7%	66%	53%	53%	63%
Risk rating	6%	5%	5%	4%	5%
Recommended hold period (years)	5%	5%	5%	5%	5%
Date	Dec'21	Sep'22	Aug'22	Jun'22	Mar'22

Source: Latest KIDS on website, Hardman and Co Research

Sentiment to over-commitment

Some investors cautious about over-commitment in uncertain times…

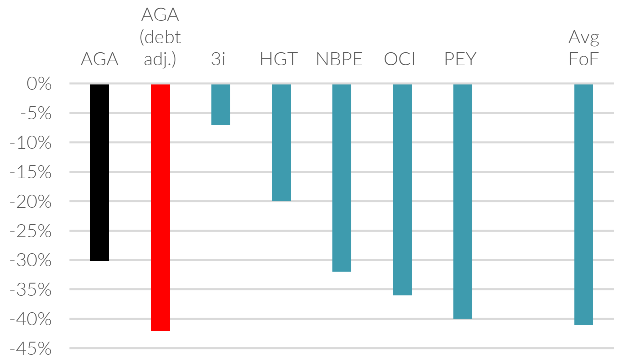
…although we consider it sensible tool when used, as by AGA, in prudent manner

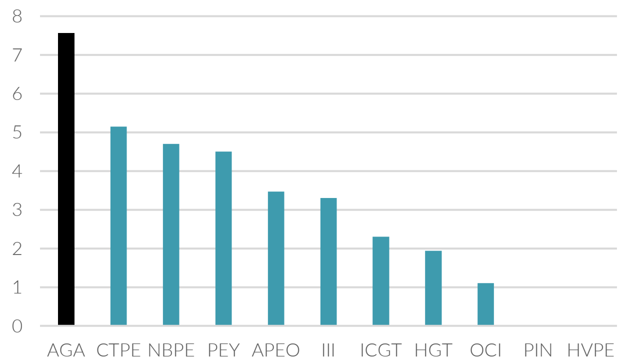
We have detailed above why we believe that AGA's approach to its multi-year commitments is appropriate and that its cash management is sensible. However, we are also cognisant of the fact that some investors do not like companies where commitments exceed current cash, liquid assets and financing arrangements. We note that the credit facility has a loan to value (LTV) covenant that could cause some investors a degree of caution, although, at 35% of PE NAV, it would require a material fall in NAV from there to be triggered, and we are not forecasting any drawings on the facility, anyway.

Valuation

As the chart below shows, AGA's current reported discount to NAV (30%) is at the higher end of the direct investing listed PE trusts. If we adjust for the debt element of its portfolio (see SoTP section), the PE business is being valued materially worse than that of its peers. Its dividend yield is well above the sector average.

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





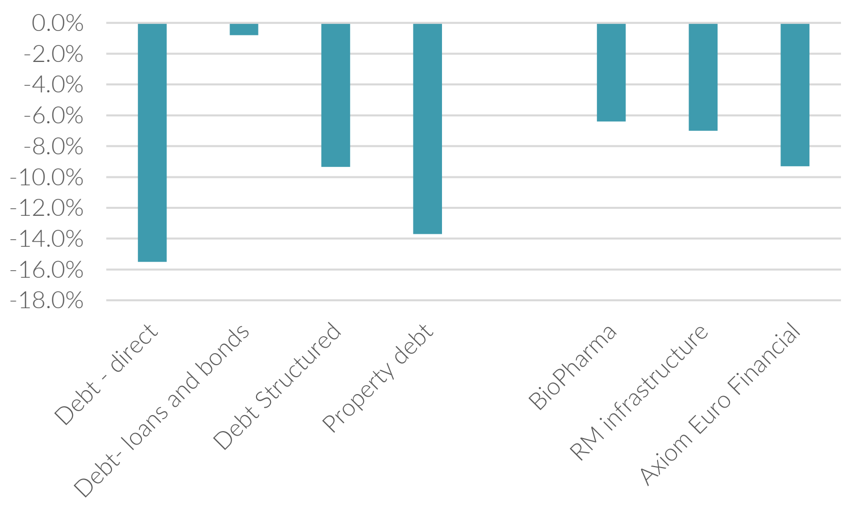
Source: Company websites, factsheets and presentations, Hardman & Co Research, priced at 10 January

Sum-of-the-parts (SoTP)

Applying debt discount to derived book implies AGA's PE discount is 42%

AGA could be broken down into a PE fund and a debt fund. The chart below shows the current discounts to NAV for the main AIC debt sectors and a range of specialist debt funds. It may be argued that AGA's niche approach means that it would attract the lower discount associated with the latter, rather than the 10% rating associated with the former. If we adjust AGA's discount by applying this discount to the proportion of its portfolio in debt (28%), the residual discount being applied to its PE portfolio rises from 30% to a level well above that of its peers, to 42%.

Discount to NAV for selected debt investment companies and sectors (%)



Source: AIC, sourced 11 January, Hardman & Co Research

Sector-wide issues

Sector-wide issues do not appear relevant

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 broad concerns with the whole sector, which could be:

- Lack of confidence that the current NAV is a realistic reflection of the underlying value of the investments. This could reflect concerns about the valuation approach or an illiquidity discount that would need to be applied to a current price to achieve a sale. We discussed in detail above why, other than a small timing issue (which is positive in rising markets and negative in falling ones), AGA's accounting NAV at the valuation date might be considered conservative – so this factor should not appear.
- A concern that the current valuation may not be achievable in the future, because illiquid assets will fall in value. 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 a justification for a sustained, substantial discount.

Gordon Growth Model (GGM)

GGM model would indicate AGA should trade on multiple of book…

…given returns well above cost of capital and that it is growing

As an investment company, it is a standard practice to consider the discount/premium to NAV. However, if AGA 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. There may be a debate about the assumptions as to what are sustainable returns, cost of equity and growth. Arguably, the actual five-year 15.2% NAV total return (to September 2022) is a good starting point in terms of return on equity. In the current long-term low interest rate environment, for most of our trading companies, we would consider ca.10% as a starting point. Long-term growth above nominal GDP, at some stage, would make the company bigger than the economy, although, clearly, in the short to medium term, if AGA were to deliver on its return and dividend targets, it should grow by between 7% and 9% p.a. These assumptions would have a price to book well above 1x.

What could lead to a rerating?

We believe there could be a two-stage element to a rerating:

First stage of rerating is reversal of 2022 increase in discount – this requires more confidence in NAV and economic resilience

Continued exit uplifts and returns may give investors this confidence

As fall was rapid, recovery could be too

- Firstly, there is the reversal of the sharp increase in the discount seen since the start of 2022. As noted above, we believe there are two sector-wide concerns that need to be overcome before this widening discount will reverse.
    - 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 elements are fairly valued. We have outlined above the multiple factors from which investors may take comfort in AGA'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:
        - AGA will continue its investor relations programme to further communicate its confidence in the valuation, demonstrating the

transformation of underlying companies and "mining" the hidden-gem messages highlighted through this report. 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 AGA's book, but also the conservative nature of the accounting. Most recently, we saw a 7% uplift for a minority stake in Authority Brands.

- 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, AGA, 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. Again, we have outlined above the underlying reasons why AGA has a resilient book and why its NAV has, in the past and should in the future, outperformed listed markets. In terms of timing here, continued delivery of NAV should be the main driver.

  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.

Second element is final 10% of discount to par, which, again, requires delivery of returns, but may take more time

- The second element to a rerating is the elimination of the historical discount seen from IPO to early 2021. For most of the period 2016 to pre-COVID-19, the discount fluctuated at around 10%, with peaks rising up to 20%, but on occasions approaching parity. This ballooned out to ca.40% on COVID-19, before reaching a small theoretical premium in early 2021. Within this noise, overall, we would characterise the trust as having a discount of around 10%. Given market-beating returns in underlying companies driving market-beating investor returns, and the strong capital structure supported by the flexible Derived Investments, 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 (€000)	**2017**	**2018**	**2019**	**2020**	**2021**	**2022E**	**2023E**
Investment income	27,560	19,442	20,852	18,106	26,853	34,508	37,277
Net gains on financial assets at FVTPL	20,870	56,739	208,767	153,518	337,190	-	228,434
Net losses on financial liabilities at FVTPL	-	-	(2,741)	-	(1,067)	(2,045)	-
Realised foreign currency (losses)/gains	1,799	(2,766)	(479)	1,224	(1,488)	-	-
Unrealised foreign currency gains/(losses)	(6,871)	116	762	(3,743)	787	-	-
Total income	43,358	73,531	227,161	169,105	362,275	32,463	265,712
Performance fee	(12,770)	2,123	(6,893)	(46)	(8,390)	(1,000)	(5,711)
Management fee	(5,216)	(4,610)	(5,013)	(2,853)	(3,782)	(3,808)	(3,300)
Administration and other operating expenses	(2,810)	(3,107)	(2,051)	(2,363)	(2,707)	(2,815)	(3,041)
Total income less operating expenses	22,562	67,937	213,204	163,843	347,396	24,840	253,660
Finance costs	(1,324)	(2,729)	(1,860)	(1,751)	(2,269)	(3,400)	(2,600)
Profit before tax	21,238	65,208	211,344	162,092	345,127	21,440	251,060
Tax	(733)	(261)	(412)	(109)	(223)	(223)	(223)
Profit after tax	20,505	64,947	210,932	161,983	344,904	21,217	250,837
Average no shares (m)	491	491	491	491	491	491	491
EPS (€c)	4.2	13.2	43.0	33.0	70.2	4.3	50.8
DPS (p)	8.41	8.45	9.54	10.15	12.3	13.3	15.8

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

Balance sheet							
@ 31 Dec (€000)	**2017**	**2018**	**2019**	**2020**	**2021**	**2022E**	**2023E**
Non-current assets							
PE financial assets	**590,185**	**591,458**	**769,019**	**788,307**	**1,013,922**	**1,087,715**	**1,370,375**
Derived investments – debt	188,429	178,272	252,543	275,739	304,609	330,000	225,000
Derived investments – equities	132,055	142,318	89,656	43,677	30,946	10,000	0
Financial assets held at FV through P&L (“FVTPL”)	**910,669**	**912,048**	**1,111,218**	**1,107,723**	**1,349,477**	**1,427,715**	**1,595,375**
Current assets							
Cash and cash equivalents	18,989	17,306	3,277	124,569	108,482	10,107	15,642
Investment receivables	0	2,125	129	1,338	33,603	1,000	1,000
Other receivables	1,987	1,454	2,143	0	1,347	1,001	1,001
Total current assets	**20,976**	**20,885**	**5,549**	**125,907**	**143,432**	**12,108**	**17,643**
Total assets	**931,645**	**932,933**	**1,116,767**	**1,233,630**	**1,492,909**	**1,439,823**	**1,613,018**
Current liabilities							
Financial liabilities held at FVTPL	0	0	2,741	0	1,067	0	0
Investment payables	0	0	13,352	30,965	67	0	0
Accrued expenses	1,729	2,162	1,705	1,481	1,708	2,000	2,000
Total current liabilities	**1,729**	**2,162**	**17,798**	**32,446**	**2,842**	**2,000**	**2,000**
Net assets	**929,916**	**930,771**	**1,098,969**	**1,201,184**	**1,490,067**	**1,437,823**	**1,611,018**
Shareholders’ capital	873,804	873,804	873,804	873,804	873,804	873,804	873,804
Retained earnings	38,617	56,967	218,272	327,380	607,873	564,019	737,214
Share-based pymt. perf. fee reserve	17,495	0	6,893	0	8,390	0	0
Total equity ownership	**929,916**	**930,771**	**1,098,969**	**1,201,184**	**1,490,067**	**1,437,823**	**1,611,018**
Period-end no shares (m)	491	491	491	491	491	491	491
Adj. NAV per share (€)	**1.86**	**1.90**	**2.22**	**2.45**	**3.02**	**2.93**	**3.28**
NAV growth (%)		2%	17%	10%	23%	-3%	12%
Adj. NAV per share (£)	**1.65**	**1.70**	**1.88**	**2.19**	**2.54**	**2.59**	**2.90**
Exch. rate (£: €)	1.126	1.115	1.183	1.117	1.188	1.130	1.130
s/p (£)	1.49	1.35	1.73	1.93	2.27	1.88	1.88

Source: AGA Report and Accounts, Hardman & Co Research

Cashflow

Year-end Dec (€000)	2017	2018	2019	2020	2021	2022E	2023E
Interest received	25,126	17,896	16,963	18,024	25,553	34,508	37,277
Interest paid	(70)	(43)	(200)	(259)	(1,750)	(500)	(500)
Dividends received	1,372	1,718	2,807	1,060	906	1,000	1,000
Operating expenses paid	(14,600)	(21,862)	(7,285)	(5,460)	(6,191)	(6,500)	(7,000)
Tax paid/received	(636)	(132)	(52)	17	3	0	0
Purchase of PE investments	0	(11,126)	0	0	0	0	0
Capital calls paid to PE investments	(149,581)	(30,812)	(165,904)	(55,651)	(199,941)	(250,000)	(300,000)
Capital distributions received from PE investments	74,478	133,362	182,324	207,270	275,140	200,000	250,000
Purchase of Derived Investments	(238,033)	(212,988)	(114,792)	(69,126)	(274,417)	(100,000)	(100,000)
Sale of Derived Investments	341,966	172,811	123,370	89,641	230,511	100,000	205,000
Net cash inflow/(outflow) from operating activities	**40,022**	**48,824**	**37,231**	**185,516**	**49,814**	**(21,492)**	**85,777**
Cashflows from financing activities							
Financing costs paid	(1,668)	(3,309)	(1,710)	(1,706)	(2,104)	(3,400)	(2,600)
Dividends paid	(46,356)	(47,314)	(50,312)	(51,805)	(64,584)	(65,071)	(77,642)
Purchase of own shares	0	0	0	(6,970)	0	(8,412)	0
Revolving credit facility drawn	44,312	94,248	88,824	6,106	0	0	0
Revolving credit facility repaid	(44,312)	(94,248)	(88,824)	(6,106)	0	0	0
Net cash used in financing activities	**(48,024)**	**(50,623)**	**(52,022)**	**(60,481)**	**(66,688)**	**(76,883)**	**(80,242)**
Opening cash and cash equivalents	33,862	18,989	17,306	3,277	124,569	108,482	10,107
Net increase in cash and cash equivalents	(8,002)	(1,799)	(14,791)	125,035	(16,874)	(98,375)	5,535
FX effects	(6,871)	116	762	(3,743)	787	0	0
Closing cash and cash equivalents	**18,989**	**17,306**	**3,277**	**124,569**	**108,482**	**10,107**	**15,642**

Source: AGA Report and Accounts, Hardman & Co Research

Appendix: company matters

AGA is a non-EU Alternative Investment Fund (AIF), being a closed-ended investment company incorporated in Guernsey and listed on the London Stock Exchange. The company's registered office is PO Box 656, East Wing, Trafalgar Court, Les Banques, St Peter Port, Guernsey GY1 3PP.

While AGA was listed in 2015, it subsumed a pre-existing fund that was created and funded by partners and employees of Apax in 2008.

Key biographies – taken from company website

Board of Directors

Tim Breedon – Chair

Skills and experience: Tim Breedon joined the AGA Board on 28 April 2015. He worked for the Legal & General Group plc for 25 years, most recently as Group Chief Executive between 2006 and 2012. He was a Director of the Association of British Insurers ("ABI"), and also served as its Chairman between 2010 and 2012. He served as Chairman of the UK government's non-bank lending task force, an industry-led task force that looked at the structural and behavioural barriers to the development of alternative debt markets in the UK. He is a Non-Executive Director of Barclays plc and Quilter plc, and was Chairman of Northview Group from 2017 to 2019. He was previously lead Non-Executive Director of the Ministry of Justice between 2012 and 2015. Tim was formerly a Director of the Financial Reporting Council and was on the Board of the Investment Management Association. He has over 25 years of experience in financial services and has extensive knowledge and experience of regulatory and government relationships. He brings to the Board experience in asset management and knowledge of leading a major financial services company.

Current appointments: Non-Executive Director of Barclays plc and Quilter plc.

Qualifications: Graduate of Oxford University and an MSc in Business Administration from the London Business School.

Susan Farnon – Non-Executive Director

Skills and experience: Susie Farnon joined the AGA Board on 22 July 2015 and was appointed as Chairman of its Audit Committee on 1 July 2016 and elected as Senior Independent Director on 18 November 2016. She served as President of the Guernsey Society of Chartered and Certified Accountants, as a member of The States of Guernsey Audit Commission and as a Commissioner of the Guernsey Financial Services Commission. Susie was a Banking and Finance Partner with KPMG Channel Islands from 1990 until 2001 and was Head of Audit at KPMG in the Channel Islands from 1999 until 2001.

Current appointments: Non-executive director of: HICL Infrastructure plc; Real Estate Credit Investments Ltd; and, Bailiwick Investments Limited and Board member of The Association of Investment Companies.

Qualifications: Fellow of the Institute of Chartered Accountants in England and Wales.

Chris Ambler – Non-Executive Director

Skills and experience: Chris Ambler joined the AGA Board on 28 April 2015. He has experience in a number of senior positions in the global industrial, energy and materials sectors working for major corporations including ICI/Zeneca, The BOC Group and Centrica/ British Gas, as well as in strategic consulting roles.

Current appointments: Chief Executive of Jersey Electricity plc; and Non-Executive Director of: Foresight Solar Fund Limited.

Qualifications: Graduate of Queens' College, Cambridge and an MBA from INSEAD. Chartered Director, Chartered Engineer and a Member of the Institution of Mechanical Engineers.

Mike Bane – Non-Executive Director

Skills and experience: Mike Bane joined the AGA Board on 3 July 2018. He has more than 35 years of audit and advisory experience with a particular focus on the asset management industry. Mike retired from *EY in June 2018 where he was a member of EY's EMEIA Wealth and Asset Management Board. Following an earlier career in London with PwC, he has been a Guernsey resident for over 20 years and has served as President of the Guernsey Society of Chartered and Certified Accountants.*

Current appointments: Non-Executive Director of: HICL Infrastructure plc, Standard Life Investments Property Income Trust Limited

Qualifications: Graduate of Magdalen College Oxford University and a Chartered Accountant.

Stephanie Coxon – Non-Executive Director

Skills and experience: Stephanie joined the AGA Board on 31 March 2020. She has 15 years' of experience of audit and advisory with PwC in the asset management sector, specialising in listed investment funds in a *multitude of asset classes. Over the past 9 years, Stephanie led the PwC capital markets team responsible for advising on the listing process for UK, Guernsey and Jersey investment funds. Stephanie has a wealth of knowledge in this area having advised numerous investment managers throughout the UK, US and Europe on initial public offerings and secondary offerings.*

Current appointments: Non-Executive Director of: JLEN Environmental Assets Group Limited, PPHE Hotel Group Limited, International Public Partnerships Limited, PraxisIFM Group Limited

Qualifications: Fellow of the Institute of Chartered Accountants in England and Wales..

Investment Manager

AGA's assets are managed by the Investment Manager: Apax Guernsey Managers Limited (AGML). AGML is managed by a board of experienced investment professionals and operational PE executives.

Paul Meader – Director

Paul Meader has acted as Non- Executive Director of several insurers, London and Euronext listed investment companies, funds and fund managers in real estate, PE, hedge funds, debt, structured product and multi-asset funds. He is a senior investment professional with over 30 years of multijurisdictional experience, 14 years of which were at chief executive level. Paul was Head of Portfolio Management at Collins Stewart (now Canaccord Genuity) between 2010 and 2013 and was the Chief Executive of Corazon Capital Group from 2002 to 2010. Paul was Managing Director at Rothschild Bank Switzerland C.I. Limited from 1996 to 2002 and previously worked for Matheson Investment Management, Ulster Bank, Aetna Investment Management and Midland Montagu (now HSBC).

Current appointments: Non-Executive Director of a number of other companies in fund management and insurance, *inclusive of the General Partners of the Apax Private Equity Funds.*

Qualifications: MA (Hons) in Geography from Oxford University and a Chartered Fellow of the Chartered Institute of Securities and Investment.

Martin Halusa – Director

Skills and experience: Martin Halusa was Chairman of Apax Partners from January 2014 to March 2016, after ten years as Chief Executive Officer of the firm (2003-2013). In 1990, he co-founded Apax *Partners in Germany as Managing Director. His investment experience has been primarily in the telecommunications and service industries. Martin began his career at The Boston Consulting Group ("BCG") in Germany, and left as a Partner and Vice President of BCG Worldwide in 1986. He joined Daniel Swarovski Corporation, Austria's largest private industrial company, first as President of Swarovski Inc (US) and later as Director of the International Holding in Zurich.*

Current appointments: Director of the General Partners of the Apax Private Equity Funds.

Qualifications: A graduate of Georgetown University, an MBA from the Harvard Business School and a PhD in Economics from the Leopold-Franzens University in Innsbruck.

Jeremy Latham – Director

Skills and experience: Jeremy Latham has held directorships for regulated financial services businesses *since 2008 and has worked in the financial services sector for 20 years, 15 of which he has spent specialising in private equity. Jeremy has extensive knowledge of the regulatory environment including compliance and anti-money laundering regulation and has working knowledge of listed and unlisted Open and Closed Ended Investment Schemes, including Equity Funds, Hedge Funds, Private Equity Funds and Unit Trusts.*

Current appointments: Director of Apax Partners Guernsey Limited and a Director of the General Partners of the Apax Private Equity Funds.

Qualifications: Jeremy is a Fellow of the *Association* of Chartered Certified Accountants (FCCA).

Mark Despres – Director

Skills and experience: Mark has been employed in the wealth management industry in both Guernsey and London for over 16 years, principally as an investment manager to a number of listed funds (both open and closed-ended), institutional and private client portfolios.

Current appointments: Director of Apax Partners Guernsey Limited.

Qualifications: First class honours degree in Mathematics from Royal Holloway University of London and a Member of the Chartered Institute for Securities and Investment.

Investment Advisors

Andrew Sillitoe – Co-CEO Apax Partners, Chairman of the Investment Committee

Skills and experience: Andrew Sillitoe joined Apax Partners in 1998 and has focused on the Tech sector in that time. Andrew has been involved in a number of deals, including Orange, TIVIT, TDC, Intelsat, Inmarsat and King Digital Entertainment PLC.

Current appointments: Co-CEO of Apax and a Partner in its Tech team. Member of the Apax Executive, Investment Committees.

Qualifications: MA in Politics, Philosophy and Economics from Oxford University and an MBA from INSEAD.

Ralf Gruss – Partner/Apax Partners

Skills and experience: Ralf Gruss joined Apax Partners in 2000 and is a former member of the Apax Partners Services team. Ralf has been involved in a number of deals, including Kabel Deutschland, LR Health and Beauty Systems and IFCO Systems.

Current appointments: Chief Operating Officer and a Partner at Apax and Member of the Allocation Committee.

Qualifications: Diploma in Industrial Engineering and Business Administration from the Technical University in Karlsruhe. He also studied at the University of Massachusetts and the London School of Economics.

Roy Mackenzie – Partner/ Apax Partners

Skills and experience: Roy Mackenzie joined Apax Partners in 2003. He led the investments in Sophos and Exact and was responsible for Apax's investment in King Digital Entertainment. In addition, Roy worked on the investments in Epicor, NXP and Duck Creek.

Current appointments: Partner at Apax in its Tech team. Member of the Apax Investment Committees.

Qualifications: M.Eng in Electrical Engineering from Imperial College, London and an MBA from Stanford Graduate School of Business

Salim Nathoo – Partner/Apax Partners

Skills and experience: Salim Nathoo joined Apax Partners in 1999 specialising in the Tech & Telecom space. He has both led and participated in a number of key deals including Thoughtworks, Candela, EVRY, GlobalLogic, Sophos and Inmarsat.

Current appointments: Partner at Apax in its Tech team. Member of the Apax Investment Committees.

Qualifications: MA in Mathematics from the University of Cambridge and an MBA from INSEAD.

Investment restrictions

The following specific investment restrictions apply to the company's investment policy:

- *no investment or commitment to invest shall be made in any Apax Fund which would cause the total amounts invested by the Company in, together with all amounts committed by the Company to, such Apax Fund to exceed, at the time of investment or commitment, 25% of the Gross Asset Value; this restriction does not apply to any investments in or commitments to invest made to any Apax Fund that has investment restrictions restricting it from investing or committing to invest more than 25% of its total commitments in any one underlying portfolio company;*
- *not more than 15% of the Gross Asset Value may be invested in any one portfolio company of an Apax Fund on a look-through basis;*
- *not more than 15% of the Gross Asset Value may be invested in any one Derived Investment; and*
- *in aggregate, not more than 20% of the Gross Asset Value is intended to be invested in Derived Investment in equity securities of publicly listed companies. However, such aggregate exposure will always be subject to an absolute maximum of 25% of the Gross Asset Value.*

The Company may borrow in aggregate up to 25% of Gross Asset Value at the time of borrowing to be used for financing or refinancing (directly or indirectly) its general corporate purposes (including without limitation, any general liquidity requirements as permitted under its Articles of Incorporation), which may include financing short-term investments and/or buybacks of ordinary shares. The Company does not intend to introduce long-term structural gearing.

Disclaimer

Hardman & Co provides professional independent research services and all information used in the publication of this report has been compiled from publicly available sources that are believed to be reliable. However, no guarantee, warranty or representation, express or implied, can be given by Hardman & Co as to the accuracy, adequacy or completeness of the information contained in this research and they are not responsible for any errors or omissions or results obtained from use of such information. Neither Hardman & Co, nor any affiliates, officers, directors or employees accept any liability or responsibility in respect of the information which is subject to change without notice and may only be correct at the stated date of their issue, except in the case of gross negligence, fraud or wilful misconduct. In no event will Hardman & Co, its affiliates or any such parties be liable to you for any direct, special, indirect, consequential, incidental damages or any other damages of any kind even if Hardman & Co has been advised of the possibility thereof.

This research has been prepared purely for information purposes, and nothing in this report should be construed as an offer, or the solicitation of an offer, to buy or sell any security, product, service or investment. The research reflects the objective views of the analyst(s) named on the front page and does not constitute investment advice. However, the companies or legal entities covered in this research may pay us a fixed fee in order for this research to be made available. A full list of companies or legal entities that have paid us for coverage within the past 12 months can be viewed at http://www.hardmanandco.com/legals/research-disclosures. Hardman may provide other investment banking services to the companies or legal entities mentioned in this report.

Hardman & Co has a personal dealing policy which restricts staff and consultants' dealing in shares, bonds or other related instruments of companies or legal entities which pay Hardman & Co for any services, including research. No Hardman & Co staff, consultants or officers are employed or engaged by the companies or legal entities covered by this document in any capacity other than through Hardman & Co.

Hardman & Co does not buy or sell shares, either for their own account or for other parties and neither do they undertake investment business. We may provide investment banking services to corporate clients. Hardman & Co does not make recommendations. Accordingly, they do not publish records of their past recommendations. Where a Fair Value price is given in a research note, such as a DCF or peer comparison, this is the theoretical result of a study of a range of possible outcomes, and not a forecast of a likely share price. Hardman & Co may publish further notes on these securities, companies and legal entities but has no scheduled commitment and may cease to follow these securities, companies and legal entities without notice.

The information provided in this document is not intended for distribution to, or use by, any person or entity in any jurisdiction or country where such distribution or use would be contrary to law or regulation or which would subject Hardman & Co or its affiliates to any registration requirement within such jurisdiction or country.

Some or all alternative investments may not be suitable for certain investors. Investments in small and mid-cap corporations and foreign entities are speculative and involve a high degree of risk. An investor could lose all or a substantial amount of his or her investment. Investments may be leveraged and performance may be volatile; they may have high fees and expenses that reduce returns. Securities or legal entities mentioned in this document may not be suitable or appropriate for all investors. Where this document refers to a particular tax treatment, the tax treatment will depend on each investor's particular circumstances and may be subject to future change. Each investor's particular needs, investment objectives and financial situation were not taken into account in the preparation of this document and the material contained herein. Each investor must make his or her own independent decisions and obtain their own independent advice regarding any information, projects, securities, tax treatment or financial instruments mentioned herein. The fact that Hardman & Co has made available through this document various information constitutes neither a recommendation to enter into a particular transaction nor a representation that any financial instrument is suitable or appropriate for you. Each investor should consider whether an investment strategy of the purchase or sale of any product or security is appropriate for them in the light of their investment needs, objectives and financial circumstances.

This document constitutes a 'financial promotion' for the purposes of section 21 Financial Services and Markets Act 2000 (United Kingdom) ('FSMA') and accordingly has been approved by Capital Markets Strategy Ltd which is authorised and regulated by the Financial Conduct Authority (FCA).

(Disclaimer Version 8 – Effective from August 2018)

Status of Hardman & Co's research under MiFID II

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.

research@hardmanandco.com

1 Frederick's Place
London
EC2R 8AE

+44(0)20 3693 7075

www.hardmanandco.com