



Market data	
EPIC/TKR	VTA .NA, VTA.LN VTAS LN *
Price (€)	7.22 / 7.15 / 655p
12m High (€)	7.80 / 7.50 / 655p
12m Low (€)	6.74 / 6.74
Shares (m)	36.6
Mkt Cap (€m)	264
Trail 12 mth yld	8.6%
Free Float*	100%
Market	AEX, LSE

\* Listing 03 September 2018

**Description**

Volta is a closed-ended, limited liability investment company that pursues a diversified investment strategy across structured finance assets (primarily CLOs). It aims to provide a stable stream of income through quarterly dividends.

**Company information**

Chairman Paul Meader  
Independent Graham Harrison  
Directors Stephen Le Page  
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**Key shareholders**

Axa Group 30.4%

**Diary**

Late Sept August monthly report  
Late October FY results

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## Volta Finance Ltd

### Delivering the structured finance opportunity

Volta invests in a broad portfolio of structured finance assets, maintaining flexibility to optimise long-term returns in highly dynamic markets. Its five-year 12.9% p.a. shareholder return has been generated by predictable coupons and dividends and not from capital gains. Volta's long-term NAV returns have beaten peers for an in-line volatility. Its deep market understanding has identified assets mis-priced for risk. Economic downturns create opportunities as well as threats.

- ▶ **Strategy:** Volta aims to preserve its capital across the credit cycle and to provide a stable stream of income (via quarterly dividends) by investing in a diversified portfolio of structured finance assets. It has a flexible mandate, meaning that Volta can respond rapidly to market opportunities.
- ▶ **Follow the cash:** While structured finance markets have their complexities, if investors "follow the cash", most of these become much clearer. Looking through the terminology, at its heart, Volta earns returns by collecting payments from hundreds of end-borrowers and by picking the right assets.
- ▶ **Valuation:** Volta trades at a 14% discount to NAV. Peer structured finance funds, and a range of other debt funds, on average, trade at small premiums. In the medium term, Volta has delivered faster NAV growth than its immediate peers and an in-line volatility, making this discount an anomaly.
- ▶ **Risks:** Credit risk is a key sensitivity (Volta has a widely diversified portfolio). We examine the valuation of assets, highlighting the multiple controls to ensure its validity. NAV is affected by sentiment towards its own and underlying markets. Volta's long \$ position is only partially hedged.
- ▶ **Investment summary:** Volta is an investment for sophisticated investors as there may be sentiment-driven, share-price volatility. However, long-term returns have been good: 12.9% p.a. returns (dividend re-invested basis) over five years. The current portfolio expected NAV return is similar. The yield is 8.6% and we believe will be covered by predictable income streams.

Financial summary and valuation (Hardman adjusted basis)							
Year-end July (€m)	2014	2015	2016	2017	2018E	2019E	2020E
Coupons & dividend	31.4	33.7	34.7	33.2	36.6	39.4	40.3
Operating income	37.5	46.0	36.5	35.0	38.4	41.1	42.1
Inv. managers' fees	-4.1	-4.5	-4.3	-4.6	-4.6	-4.7	-4.8
Adj. perform fees	-2.5	-3.5	-1.3	-1.2	-1.6	-2.1	-2.1
Total expenses	-7.9	-10.3	-7.2	-7.0	-0.9	-0.9	-0.9
Total comp. income	29.5	35.7	29.3	28.0	30.9	33.0	33.8
Statutory PTP	44.0	47.6	12.6	38.7	22.5	33.0	33.8
Underlying EPS (€)	0.82	0.98	0.80	0.77	0.84	0.90	0.92
NAV	273.6	299.2	289.3	305.5	305.5	316.0	327.3
S/P disc. to NAV	4%	12%	9%	14%	14%	17%	20%
Gearing	0%	9%	12%	12%	12%	12%	12%
Dividend yield	8.3%	8.6%	8.6%	8.6%	8.6%	8.6%	8.6%

Source: Hardman &amp; Co Research

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## Executive summary

*Focus on the cash. Volta earns returns from a widely diversified portfolio of loans.*

*Key attractions: 12.9% p.a. returns over past five years (to end July); well controlled risks; flexible mandate to optimise returns; and buying at a greater NAV discount than peers, 8.6% dividend yield covered by predictable income streams.*

*Credit risk hugely diversified*

*Sentiment can create volatility but also creates opportunities*

*Favourable conditions in underlying markets make re-investment challenging, but flexible mandate means Volta can invest in areas benefiting from these conditions*

Volta's investments are primarily in the Collateralised Loan Obligation (CLO) market and related areas. We aim to unravel some of that market's complexity below. Looking through the terminology, Volta earns returns predominantly from corporate credit. It is no different from other fund managers and investors should apply the same basic principles to its investments as they do across the market. The cash to repay interest and principal on Volta's debt investments comes from a diversified portfolio of underlying borrowers. The cash to pay dividends and see capital appreciation on its equity-type investments comes from underlying companies managing their income (from hundreds of loans) and costs (mainly financing costs and credit losses). AXA IM's skill in picking the right underlying assets is crucial to performance. We believe the complexities that deter some investors create opportunities for a business with a deep market understanding.

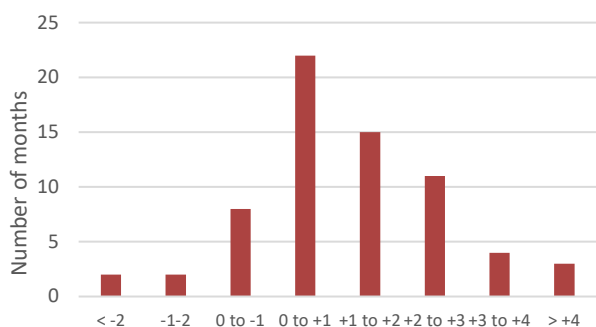
In the section "Why Invest in Volta", we highlight the following:

- ▶ long-term returns above peers and benchmarks;
- ▶ risks well controlled with the ideal bell-shaped distribution of monthly NAV;
- ▶ returns have been earned from predictable sources like interest and coupons from loans and bonds, which more than cover the high (8.6%) dividend yield;
- ▶ a flexible mandate to optimise returns depending on market conditions;
- ▶ leverages AXA IM's competitive advantages;
- ▶ a discount of 14% to NAV, a level above peers and historical levels.

Our review also considers the potential risks in investing in Volta.

- ▶ In the credit risk section, we demonstrate Volta's hugely diversified portfolio by individual borrowers (700+ in total, top five holdings representing just 2.02% of portfolio), by sector, by geography, and by macroeconomic sensitivity.
- ▶ With assets marked to market, changes in sentiment can have a dramatic effect and market prices can diverge from expected cashflows. While this creates short-term volatility, greater asset mis-pricing, potentially increases returns (CLOs originated in 2007 earned ca.2x the level of 2004 deals).
- ▶ When economic conditions are favourable (as they have been for some time), loan yields fall, credit covenants ease and existing loans repayments increase. This makes earning comparable returns on re-investment more challenging. Volta's flexible mandate means it can access value-added areas (e.g. warehousing or CLO equity portions which benefit from these conditions).
- ▶ In the valuation section, we detail the multiple checks and balances in Volta's approach noting asset sales have been in line with the accounting value.
- ▶ Other risks: Gearing has been kept modest and structured to ensure there are no forced sales of assets at a discount. Interest rate sensitivity is complex but at current levels is likely to be broadly neutral. Changes in FX rates can have a short-term impact as Volta does not fully hedge its net long \$ position.

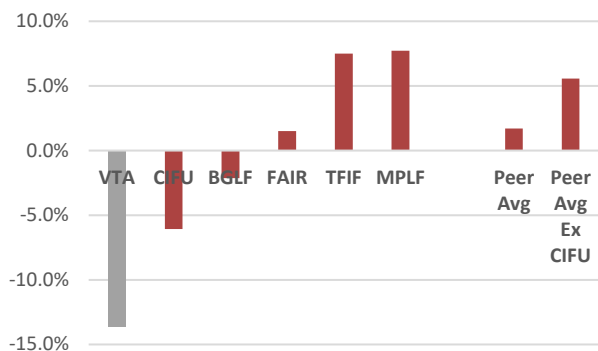
**Figure 1: Monthly distribution of changes in NAV since January 2013**



- ▶ In 33% of months, NAV increased by 0-1%. 67% of times, the increase was 0-3%.
- ▶ Fewer outliers in underperforming months than outperforming months and the scale of underperformance less than that of outperformance.
- ▶ Bell shape distribution indicative of good risk management in that returns are not excessively volatile.

Source Hardman & Co Research, Volta monthly fact sheet

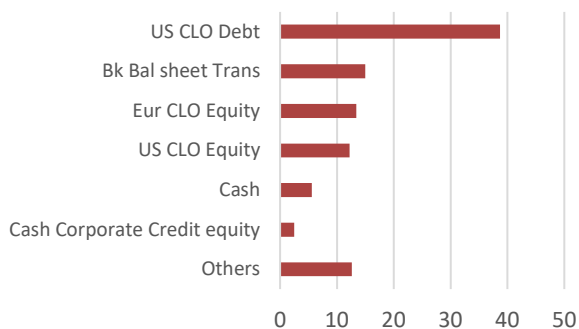
**Figure 2: Discount to NAV (%)**



- ▶ Volta discount is highest discount to NAV in sub-sector. Immediate peers trade, on average, at par (6% premium excluding CIFU).
- ▶ Since August 2014, Volta has the best NAV performance of the group (reported currency basis) and has a more flexible mandate to adapt to dynamic market conditions.
- ▶ Against a broader peer group of debt funds, Volta's discount is even more stark.

Source Hardman & Co Research, company July monthly fact sheet

**Figure 3: Portfolio composition currency and regional mix**



- ▶ 67% of portfolio in €, 32% \$ and 1% SWF. Geographically, 60% in the US, 37% in Europe and 3% in the rest of world.
- ▶ Since January, the cash proportion is down by 6% with 4% of the fund now in warehouse lines and investment in both US and European CLO equity positions.
- ▶ Other assets include: Warehouse facilities (3.9%), ABS residual positions (2.5%); ABS debt (2.4%); and European CLO debt (2.2%); and CMV (1.8%).

Source Hardman & Co Research, Volta July monthly fact sheet

**Figure 4: Top holdings**

Altice France SA/France	0.70%	Media
Ziggo Bond Co BV	0.36%	Media
TransDigm Inc	0.32%	Aerospace/Defence
Calpine Corp	0.32%	Electric
Asurion LLC	0.32%	Insurance

- ▶ Top 5 holdings 2.02% of portfolio. Top 10 underlying holdings just 3.39% of portfolio. Total loss of these would see annual return decline to ca.7-8%.
- ▶ Total loss on largest holding would reduce company expected annual return, but it would still be in excess of 10%.
- ▶ Sectoral exposure of largest names also highly diversified.

Source Hardman & Co Research, Volta July monthly fact sheet, Discounts from latest monthly reports and LSE priced at 4 September 2018

## Why invest in Volta

*Key attractions: 12.4% p.a. returns over past five years; well controlled risks; flexible mandate to optimise returns; and buying at a greater NAV discount than peers.*

Over the past five years, Volta has delivered 12.9% share price returns (dividends re-invested basis), a higher return than benchmark indices (both equity and bond). Manager projections on the existing portfolio indicate a similar income yield outlook. Critically, the distribution on monthly returns has a bell-shaped pattern indicative of a business that manages risk well. We note the Sharpe ratio (another measure of risk/return) has been more attractive than peers. One reason for this attractive profile is that the fund's income has primarily been driven by interest coupons and has not been reliant on volatile capital gains (or losses). We also note that the underlying exposure is to hundreds of end-borrowers, creating credit risk diversification. AXA IM, the fund manager, has a proven track record and has the scale to: (i) access and negotiate attractive deals unavailable to smaller participants; (ii) build a significant market presence with the associated market intelligence across a broad range of investment opportunities; and (iii) invest heavily in back- and mid-office control functions. In terms of valuation, Volta's discount to NAV is greater than immediate and broader peers and high by historical comparisons. Such a discount appears anomalous with Volta's superior long-term NAV returns and in-line volatility profile.

## Company core attractions in detail

Volta has a number of attractions as an investment.

*SP returns 12.9% over the past five years, over 11% p.a. since inception*

▶ Volta has delivered a 12.9% annualised share price performance over five years and over 11% p.a. since inception (dividends re-invested).<sup>1</sup> Part of this return has been achieved by dividends being re-invested at below book value, but this option is still available to investors today (see section below).

*Beaten equity and loan indices and not correlated with them*

▶ Since inception, Volta has delivered higher share price returns than the following major benchmarks: S&P 500, MSCI European (total return, US High Yield Bonds (H0AO Index); US Loans Market (S&P LSTA Index); European High Yield Bonds (HE00 Index); and the European Loans Market (S&P ELLI Index). In any period, there will be volatility as Volta provides non-correlated returns with equity markets (correlation coefficient 0.43 with S&P 500, 0.16 with AEX and 0.1 with FTSE 100), but over time it has delivered superior returns.

*Forecast yield on assets 11.4% of NAV*

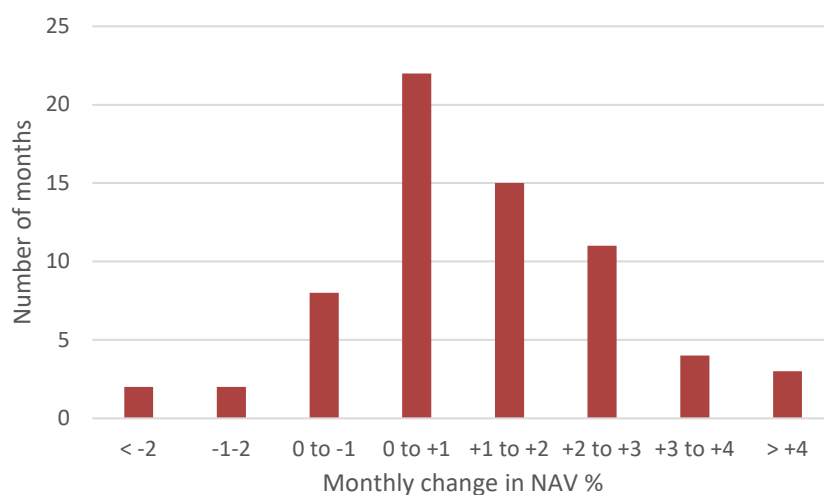
▶ Based on the manager's modelling, the portfolio at the end of 1HFY'18 had an expected gross yield of 10.5%. By introducing a modest degree of gearing, Volta expects to see pre-expenses NAV returns of 11.4%. Assuming no change in the discount, this implies bottom-line NAV returns broadly in line with those delivered since inception would be seen again in the near future. While market conditions will vary, we note that actual NAV returns have generally exceeded the projected IRR. Should current favourable credit conditions continue, this may recur in FY19.

<sup>1</sup> Source: Five-year return from Volta end July 2018 monthly report. The annualised return since inception in that report (9.8%) is sourced from Bloomberg and is currently being investigated. It was reported as 11.2% in March before dropping sharply in April despite a good performance in that month. We understand Bloomberg changed the way it computed performance for shares (including the benefit of dividend reinvestments) and it is currently working on the IT. The over 11% is sourced from base data provided by Volta and reviewed by Hardman & co.

*Ideal bell-shaped distribution of monthly returns*

- ▶ Importantly, the distribution of actual NAV monthly returns shows the bell-shaped pattern of a business which manages risk well. Most months deliver a steady NAV improvement (0% to +1%), there is a clear bias to positive months, and the number of months with extreme gains or losses is small.

**Figure 5: Distribution of monthly returns since January 2013**



Source: Hardman & Co Research, Volta monthly reports

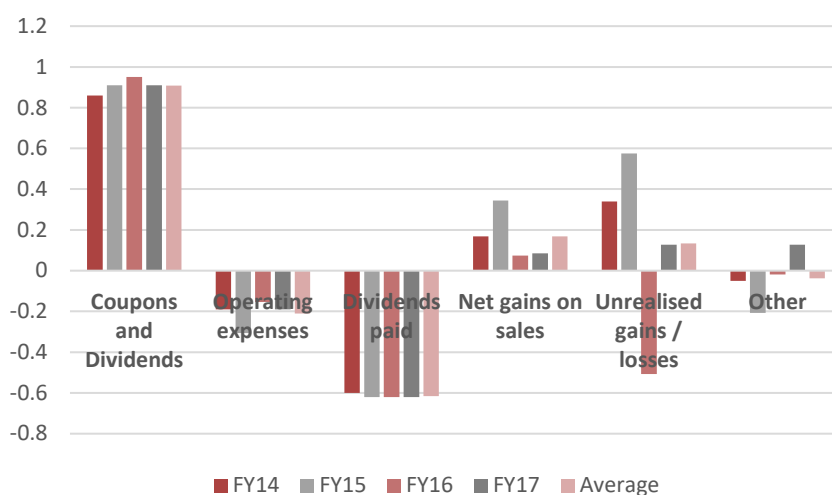
*Better Sharpe ratio than peers*

- ▶ Another measure of performance is the Sharpe ratio. This ratio is the average return earned in excess of the risk-free rate per unit of volatility or total risk. Subtracting the risk-free rate from the mean return, the performance associated with risk-taking activities can be isolated. Generally, the greater the value of the Sharpe ratio, the more attractive the risk-adjusted return. Volta reports this half yearly and has consistently delivered a higher-than-peer average Sharpe ratio.

*Volta's long-term performance is driven by the coupons and dividends received, rather than more variable capital gains*

- ▶ From FY'14 to FY'17 on average, dividends and coupons added €0.91 p.a. to Volta's NAV against an average of €0.17 per share for realised gains and €0.13 for unrealised gains (see Figure 6 below). The relative stability of these income lines is also visible in the figure below and occurs because the portfolio is highly diversified. On our estimates, even the total failure by all the largest five underlying borrowers would still leave the dividend covered.

Figure 6: Annual contribution to Volta's NAV since 2014 (€ per share)



Source: Hardman & Co Research, Volta annual reports

*Flexible mandate exploits broad range of market opportunities*

*Includes access to higher-margin investment opportunities such as selective warehouse funding...*

*...and greater ability to manage overall portfolio risk/reward profile through investments in, say, bank balance sheet transactions*

- ▶ The portfolio is also diversified by the nature of instrument and challenges in one area might enhance opportunities in others. Voltas flexible multi-asset mandate means it can exploit whatever opportunity arises.
  - By way of example, post global financial crisis regulation, banks are not willing to provide capital for CLO warehousing although they have provided financing to portfolios once fully established. Volta entered this business line and has successfully arranged CLO warehouses for several years (annualised returns of 10%-25% have been achieved). It helps greatly in sourcing CLO equity positions with competitive economic terms including superior economic on the equity pieces and often reduced CLO manager fees. The choice of warehouse is critical, and Volta is highly selective. It will predominantly lend to warehouses where it is willing to invest in equity positions of the CLO that will be eventually created. This significantly reduces the risk that the warehouse would be left with loans it cannot sell and the warehouse funder with an extended and uncertain commitment.
  - Another example is the investments in bank balance sheet transactions (synthetic transactions that permit banks to reduce capital charge through the transfer of a portion of their loan exposures). These vehicles have some of the good technical characteristics of CLOs (leverage is insensitive to market volatility) although they are legally structured differently. It is a specialist market and one where AXA IM is active for 14 years creating the opportunity for Volta to effectively access a good risk/return market. The returns from these positions are lower than the portfolio average, but the valuation is relatively stable and these assets provide strong diversification to Volta CLO portfolio.



**Below-market credit losses**

- ▶ Volta's choice of CLO managers has resulted in a below market default experience. With market conditions seeing easing credit covenants, we believe picking the right manager becomes increasingly important.

**Appropriate checks and balances on reported valuations**

- ▶ The nature of Volta's investments is such that most are not valued from actual traded prices in liquid markets although there is hard evidential support for the majority of assumptions used. While exploiting illiquidity-driven mis-pricing presents the fund with business opportunities, it also makes valuation more complex. We detail on pages 31-33 how Volta has appropriate checks and balances in place for this complex valuation environment. In our view, Volta is less reliant on mark-to-modelling than some peers.

**Non-correlated asset**

- ▶ Volta's NAV performance is not correlated with equity markets (or indeed with other "CLO" funds) giving investors a high return with risk diversification. The correlation co-efficient between the Volta share price and the following indices since the start of 2018 has been 0.43 (S&P 500), 0.16 (AEX) and 0.10 (FTSE100). While some of the concerns driving these equity markets will have an impact on Volta, there are other factors at play. The long-term NAV correlation with peers is also relatively low.

**Figure 7: Correlation co-efficient of monthly NAV changes: Volta and closest peers (August 2014 to May 2018)**

	Blackstone /GSO €	Fair Oaks \$	Carador \$
Reported Currency	0.20	0.71	0.69
Converted to € (no hedge assumed)	0.20	0.77	0.72

Source: Hardman & Co Research, Fund monthly reports

**Fund manager with good track record...**

- ▶ The fund manager, AXA IM, has an excellent track record in structured-finance funds. In Figure 8, we highlight by way of example its performance in US CLO equity tranches. We have chosen the early 2000s to show performance over the long term. We note CLOs originated during the financial crisis have seen annualised returns roughly double those launched in more benign macroeconomic conditions shortly before.

**Figure 8: US CLO tranches annual IRR to June 2017 (%)**

Vintage	2001	2002	2003	2004	2005	2006	2007
Wells Fargo Market Data	7.6	10.5	3.6	8.0	14.2	16.4	17.6
AXA IM	16.2	21.6	11.9	12.2	14.7	19.6	20.7

Source: AXA IM

- ▶ Volta is supported by all AXA IM's structured finance departments, especially the securitized and structured assets (SSA) team. These units all sit on the same floor and have daily contact in addition to a weekly SSA market meeting in which the market situation is discussed. We see a number of practical advantages from being part of this team and AXA IM:

**...and strong negotiating position on deals and financing**

- Firstly, AXA IM's scale in structured finance gives greater access and pricing power when negotiating investments. AXA IM is approached with larger deals than many standalone businesses would not see. It also led to Volta having a lower funding charge and better terms on its Repos financing (see later section) than it could have been achieved on a standalone basis.

*With good market intelligence...*

*...and scale to invest heavily in risk and technical skills*

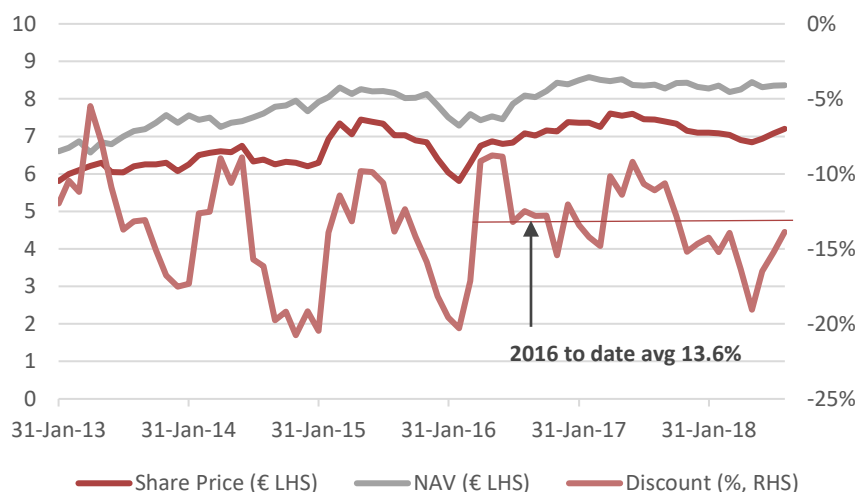
*Potential conflicts of interest carefully managed and transparent to Volta board*

*14% discount to NAV*

- Second, the Volta investment team is physically close to AXA’s CLO managing team and so derives immediate market intelligence, which can be especially important in times of stress. There are appropriate Chinese Walls concerning private information on specific credits, but this proximity gives an enhanced and timely understanding of the loan market as a whole.
- Third, the broader AXA IM team has the scale to invest in specialist skills. For example, AXA IM has a structuring team of 17, meaning there are few CLO structures that it is unable to thoroughly analyse. Getting into the detail of a deal is essential to appreciating when it is being mis-priced (or not). The Volta team also has access to AXA IM’s risk department, which regularly reviews valuation assumptions for reasonableness.
- With regards to potential conflicts of interest with other AXA IM structured funds, the fund manager advises that assets are allocated in relation with cash availability. For example, there are two large active funds currently investing in CLO equity tranches (Volta and Opera III). Volta is expected to purchase ca.€60m of CLO equity in the coming 12/18 months while Opera €120m (it is a fund dedicated to CLO equity). Trades would thus be allocated on a 1/3 to 2/3 basis. We understand the Volta Board sees trades retrospectively (unless there are “restricted assets”, which they see in advance) but we do not see this analysis underlying trading.

▶ Volta trades on a discount to NAV of 14%. We detail in the section below some factors that might be driving this level of discount and what could see the market re-evaluate it.

**Figure 9: Month-end discount to NAV for Volta since January 2013**



Source: Hardman & Co Research, Volta

*Some short-term volatility is to be expected, making Volta appropriate for sophisticated investors that can understand the risk and look to medium-term returns*

*Volta's "Key Information Document" gives stress tests*

*Noting the document is driven by historical share price volatility, not long-term NAV-driven returns*

## Appropriate for sophisticated investors

As we detail in the section below, Volta's assets are not held at amortised costs but valued on the basis of the best estimated market value. This means that, once owned, the instruments are subject to all the anomalies we detailed in the opportunities section above. Potentially, this can produce material changes in value (since January 2013 10% of months have seen NAV moves of more than 3%) and 29% of months have seen a swing of 2% or more. While virtually all of these have been positive performances, and critically the long-term distribution has the ideal bell-shaped curve noted above, there can be degrees of short-term volatility, which means that Volta is not suitable for unsophisticated investors.

The company's [Key Information Document \(KID\)](#) notes: "Volta's shares are available, due to their listing on Euronext Amsterdam and on the LSE Main Market, for retail investors who have good financial knowledge and/or expertise to understand the Fund but nevertheless may bear total capital loss. It is suitable for clients who seek to preserve capital and to receive a stable stream of income from it. Potential investors should have an investment horizon of at least 6 years."

**Figure 10: Average return, after costs, under different scenarios**

Scenario	1 year	3 years	5 years
Stress	-55	-20	-15
Unfavourable	-17	-9	-5
Moderate	3	3	3
Favourable	28	17	13

*Source : Volta Finance Key Information Document*

The KID does need to be treated with some caution, though. The methodology is based on historical share price movements (not NAV movements) and Volta shows a greater sensitivity to the different scenarios than peers even though its NAV volatility does not show such a trend. We believe, over time, the NAV will drive the shareholder return more than short-term price movements.

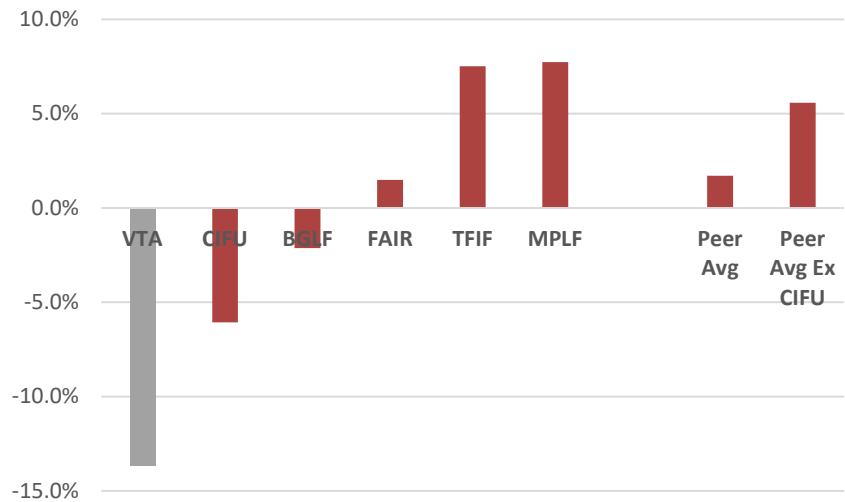
## Relative to peers

### Discount to NAV

*Discount materially larger than peers in structured debt fund space*

Compared with its structured debt peers, on market price to NAV, Volta is trading at a material discount. Given the historical performance, risk profile and portfolio mixes identified in the sections below, this relative discount appears anomalous.

**Figure 11: Discount to NAV for Volta and “CLO” structured finance peers**



Source: Hardman & Co Research Monthly reports for Volta (VTA), Carador (CIFU), TwentyFour Income Fund (TFIF), Fair Oaks Income Fund (FAIR), Blackstone/GCO Loan Financing Ltd (BGLF), and Marble Point Loan Financing Date: 04 September 2018

Against a broader group of debt related funds Volta’s relative discount is even more stark.

**Figure 12: Discount to NAV for Volta and broad range of debt funds**



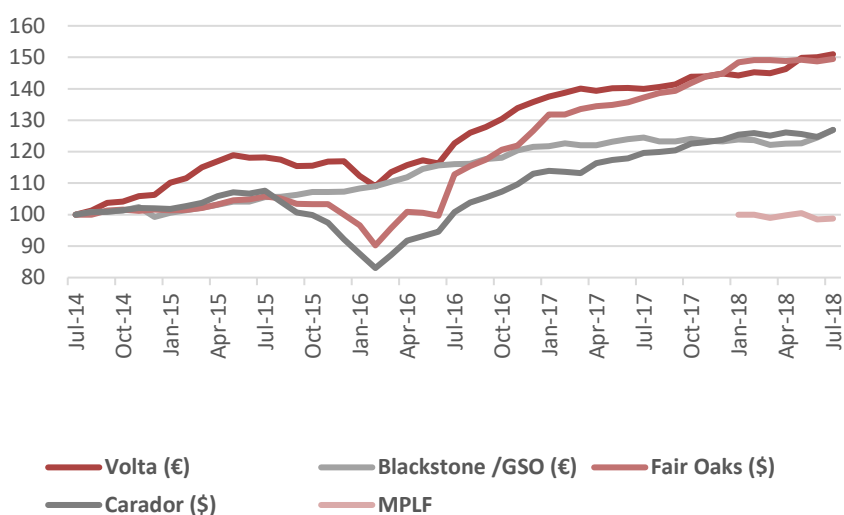
Source: Hardman & Co Research Date: 04 September 2018

NAV performance has been at top end of peer range

### NAV performance relative to peers

Figure 13 shows the cumulative performance of the funds most closely aligned to Volta based on the NAV as reported since July 2014 (a date reflecting the longest time available for public information for this group). It is impossible for us to re-translate the NAV on a constant currency basis as we do not know what the effect of hedging and different currency funding policies would be. However, if we assumed totally unhedged positions, the FX would increase the performance of Carador and Fair Oaks since July 2014. The former would still have underperformed Volta by ca.1% p.a. Fair Oaks would have outperformed; however, this is solely attributable to the performance in the month of July 2016 when, as can be seen in Figure 13, Fair Oaks delivered an exceptional 13% in one month (nearly twice the level of any other fund in any month since July 2014). Fair Oaks noted “significant increases in both of the Master Fund's equity and mezzanine positions” but we have no further details.

Figure 13: Performance indexed to July 2014, reported currency basis



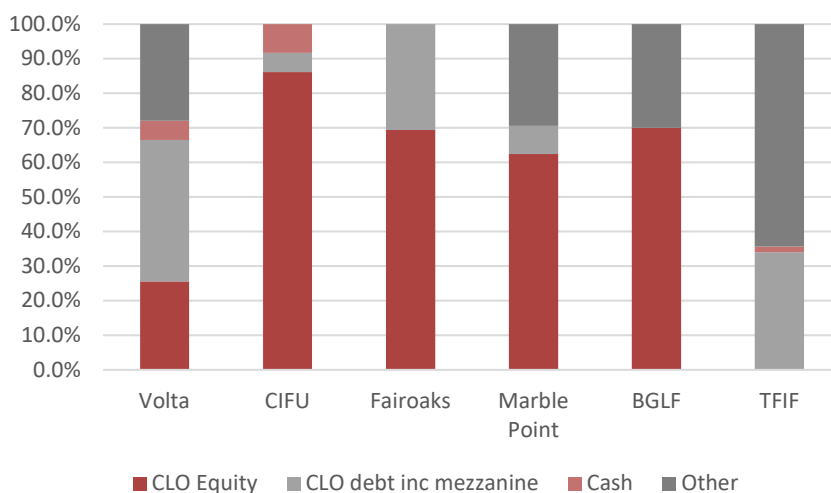
Source: Hardman & Co Research Note Marble Point from listing

More debt and less equity than most peers

### Portfolio mix relative to peers

We have highlighted that Volta has a flexible mandate across a broad range of CLO investments. Figure 14 below highlights this compared with immediate peers. Volta's other assets can be considered primarily as debt variants. Carador, Fair Oaks, and Marble Point, are weighted significantly more to CLO equity positions (for the first two the debt is mezzanine finance). In BGLF, most of the other assets are directly held loans (i.e. debt characteristics). In contrast, TFIF invests in asset-backed securities, not positions with equity sensitivity.

**Figure 14: Portfolio mix**



Source: Hardman & Co Research, July monthly reports

*Volta has greater underlying borrower and geographical diversity*

Relative to peers, Volta has a lower concentration in its largest underlying borrowers and has less US exposure (per Figure 15). Having more counter-party and geographical diversity would, in normal conditions, see less volatility in returns.

**Figure 15: Some key portfolio metrics**

	Volta	CIFU	Fair Oaks	Marble Point	BGLF
Top 5 U/L borrowers as % portfolio	2.1%	3.67%	3.2%	5.5%	5.1%
Number of U/L borrowers	700+	1,216	1,195	308	677
US-based exposure	58%	n/d	92%	100.00%	55%
<b>Largest sectors</b>	Health (6.5%)	Tech (12%) Health (12%)	Bus eqp (16%) Health (11%)	Health (14%) Tech (10%)	Health (15%) Tech (10%)

Source: Hardman & Co Research July monthly reports, TFIF disclosure is on different basis

TFIF is the exception to most structured finance funds. It notes that “The fund aims to generate attractive risk-adjusted returns, principally through income distributions by investing in a diversified portfolio of UK and European asset backed securities. The fund is targeting a dividend of at least 6% per annum, payable quarterly, and a net total return of 6-9% per annum.” With a different target return and portfolio mix it is the weakest peer comparator.

### Risk profile relative to peers

*Key information document sensitivity is to share price, not NAV performance*

As can be seen in Figure 16, Volta’s analysis for its Key Information Document suggests it sees a greater range of returns under stress or favourable conditions than peers. However, it should be recognised that the KID analysis is based on share price returns, not NAV, and it does not reflect historical NAV experience. As we detail below, the NAV volatility has Volta in line with peers using similar accounting. As the market becomes increasingly aware of the Volta story, the historical relative share price versus NAV volatility might not continue.

**Figure 16: Average share price return, after costs, under different scenarios**

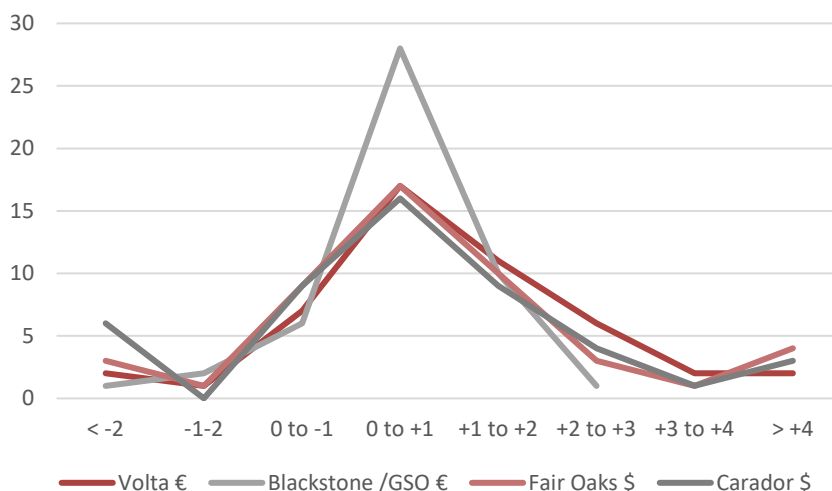
Scenario period (years)	Volta			Fair Oaks			BGLF			Carador			TFIF		
	1	3	5	1	3	5	1	3	5	1	3	5	1	3	5
Stress	-55	-20	-15	-47	-17	-13	-43	-13	-10	-32	-12	-10	-29	-9	-7
Unfavourable	-17	-9	-5	-2	4	5	-5	-1	1	1	7	8	-1	2	4
Moderate	3	3	3	12	11	11	6	6	6	15	15	15	8	8	8
Favourable	28	17	13	26	20	18	17	12	11	30	24	22	17	13	12

Source: Key Information Document for each company. Note Marble Point KID indicates similar sensitivities to Fair Oaks

*On monthly returns, Volta in line with peers on same accounting basis*

Looking at the distribution of monthly returns, VTA, Fair Oaks and CIFU all show a broadly similar trend. CIFU has a few more outliers (positive and negative) and Volta has a slightly higher bias to +1% to +3% returns but the core business message is that the distribution of returns is broadly similar over time. The outlier is Blackstone where we understand the valuation is a mark-to-model approach more than mark-to-market and this generates less volatility. Consequently, its returns are much more bunched in the 0%-1% outturn than the other CLO peers. Given Volta’s objective is to identify and exploit mis-pricing in the market, and to hold investments through volatility, having a model-driven approach does not make Blackstone valuations wrong, merely different.

**Figure 17: Distribution of monthly NAV returns since August 2014**



Source: Hardman & Co Research, Monthly factsheets in reported currency Note TFIF and Marble Point have not been listed for long enough

*Consistently higher NAV Sharpe ratio than peers with same accounting approach*

We also note the disclosure on the Sharpe ratio, which Volta makes in each of its semi-annual reports. In the January 2018 interim report, Volta’s NAV Sharpe ratio over the prior three years was reported as 1.6 against 0.6 at Carador, 1.2 at Fair Oaks, 1.1 at TFIF (it was 2.6 at BGLF but that company uses a mark-to-model valuation approach). As the Sharpe ratio reflects the excess return generated above risk-free rates relative to the volatility of returns, Volta’s higher ratio is positive.

## Triggers for market re-evaluation of discount

*Historically, dramatic reductions in discount to NAV generated by share price increases; these have been driven by a mix of market sentiment and company-specific issues*

Figures 9, 11 and 12 above showed that the share price discount to NAV is wider than historical and peer average levels. This could reflect a number of possible drivers each of which we discuss below. Putting this into context, Figure 18 below highlights the periods when the discount reduced by more than 3% in one month. As can be seen, the primary driver was share price appreciation not a material NAV change. The share price appreciation appears to have been a combination of sentiment towards favourable overall market conditions (including news flow on things like QE), company action (e.g. listing on LSE main market) as well as stock-specific share price performance.

**Figure 18: Drivers to major changes in reduction in discount to NAV**

Change in:	Share price	NAV	Discount to NAV	Comment
April 2017 *	+5.0%	-0.5%	-4.7%	The JP Morgan CLOIE post-crisis B rated index, & US Credit Suisse Leveraged Loan Index had modest gains.
Dec 2016 *	+3.5%	-0.5%	-3.4%	The JP Morgan CLOIE post-crisis B rated index was up 4.5%. The US Credit Suisse Leveraged Loan Index and High Yield Index monthly returns of +1.1% and +2.0%
April 2016	+7.3%	-2.1%	-8.0%	Dividend payment reduced NAV but share price still rose
March 2016 **	+8.3%	+4.1%	-3.2%	"good performance of credit markets"
May 2015	+5.5%	+1.6%	-3.4%	Company's shares were admitted to the LSE Main Market on the 29 May.
February 2015 **	+10.0%	+1.6%	-6.5%	"Credit market spreads tightened significantly both in the US and in Europe more pronounced in the latter following the introduction of QE from the ECB."
February 2014 **	+4.0%	-1.6%	-4.7%	"In February 2014, credit markets were positively oriented in Europe and US"
April 2013	+1.8%	-4.4%	-5.7%	Dividend payment reduced NAV but share price still rose

Source: Hardman & Co Research \* Fair Oaks monthly commentary, \*\* Volta monthly reports

We believe that the most likely driver of long-term share price growth, and a reduction in the discount to NAV, is the delivery of the expected total shareholder returns and the market having greater confidence in their sustainability over the medium term. Looking at the portfolio as it stands, the most critical feature will be delivery of returns as credit default increases. In the near term, a modest deterioration of credit is likely to see much greater opportunities for higher-return re-investment as the yield of all loans will increase. In addition to this macro-development, we note:

### *Broadening awareness of Volta*

*Volta Key Information Document disclosure not driven by business performance. Greater understanding of the business could see less share price volatility.*

- ▶ The board has taken several steps to broaden knowledge of the company and so ensure that there is a better understanding of the real (NAV) volatility. The UK listing was partially to do this and saw a positive reaction. On 3 September 2018 Volta added a sterling listing to its Euro listing on the UK exchange. We note that Volta has recently engaged multiple sponsored research houses to distribute the message to the widest possible audience. We sense the board has appetite to expand the fund, which should materially assist with the limited share price liquidity and, with that, we expect an active engagement with existing and potential shareholders in a range of fora. Improving awareness and the associated liquidity should help reduce the discount.
- ▶ The Key Information Document disclosure could be seen as a relative disincentive to potential investors with Volta having a longer hold period and greater sensitivity than peers. As noted above, the historical NAV performance does not justify the historical share price volatility. As the market gets a broader appreciation of how Volta's multi-manager approach has, and is likely to, deliver returns, there might be less share price volatility and KID disclosure more in line with peers.



*Checks and balances in place to ensure validity of monthly NAV.*

*Less reliant than some on mark-to-model due to both portfolio mix and valuation approaches.*

*Buyback but only as part of long-term programme*

*Volta delivered better short-term returns => portfolio positioning does not justify discount*

*Increased market confidence of sustainability of returns through weaker credit market conditions*

- ▶ The discount could reflect concerns that the NAV is not truly representative of the value of the business because the modelling/valuation assumptions do not reflect a realisable value. We detail in the section below why we believe Volta adopts appropriate valuation techniques. It is worth noting that the most-illiquid assets, for which modelling is important, form a lower proportion of the group than in most peers. We also note that the very stable performance in Blackstone's NAV is inconsistent with peers and partially reflects its mark-to-model valuation – in periods of stress, this is likely to give Blackstone a higher NAV and in favourable environments a lower one.
- ▶ The board is active in its consideration of a tender at NAV/repurchases in the market (which would be at a discount to NAV). It says it will use such discount control measures if it believes them to be in the best interests of shareholders, noting “these mechanisms can be a double-edged sword”. On the upside, it creates a buyer for the shares, and it could be perceived as putting a cap on the discount, which the market might then close itself. It is likely to reduce the discount in the short term. On the downside, it could create liquidity problems, the capital can be better deployed in the fund (subject to the level of discount), it shrinks the business and so worsens the total expense ratio and it sends a very mixed message especially if, as seems likely over the medium term, Volta has new investment opportunities and comes to market for further equity funding. We believe the board would use a buyback as part of a long-term strategy rather than a short-term “sticking plaster”.
- ▶ Volta has delivered a faster than peer NAV growth since the end of 2017 suggesting its portfolio positioning with less CLO equity does not justify a discount. Further delivery of returns could trigger a rating re-evaluation.
- ▶ We believe that performance over the past five years (12.9% p.a.)<sup>2</sup> reflects the favourable macroeconomic environment with limited credit defaults, CLO debt which had been purchased at a discount being redeemed at par, and a positive sentiment towards CLO investment generally. Looking forward, while Volta has accessed high return re-investments, it might take delivery of NAV to convince all in the market that such returns are sustainable. This might take more time (and effort) than Volta benefiting from the rising sentiment in good markets.
- ▶ The returns from the re-investment of dividends in the years post financial crisis (average share price July 2008 – Dec 2010 €1.64 against the current price of €7.20) are a material element of the total return since inception. We examine the impact of a downturn in the credit risk section below.
- ▶ We note the announcement by Carador on 28 August that it would put a possible orderly wind down to shareholders (with an opportunity to elect to roll over their holding in the company's shares into Blackstone/GSO Loan Financing Limited (TIDM: BGLF) for those wishing to keep CLO exposure). We believe this is driven by company-specific factors inter alia noting its performance has been behind Voltas, the different portfolio mix with returns generated from a different asset mix, and the dividend cut earlier in 2018. A continuation of Volta's historical delivery would generate good long-term returns for shareholders and we do not expect such a development here (noting of course that an orderly wind down, subject to the administration cost, would see the discount eliminated assuming the valuations are correct).

<sup>2</sup> July monthly report

## Portfolio (July 2018)

We believe investors should focus on the process by which Volta allocates assets rather than the exposures at any specific time. As can be seen in Figure 19, the portfolio mix has seen a reasonable degree of volatility over the past 30 months.

**Figure 19: Portfolio composition by asset type (%)**

	Jan-16	Jul-16	Jan-17	Jul-17	Jan-18	July-18	Average
US CLO Equity	13	11	11	13	11	12	12
US CLO Debt	33	41	39	39	39	39	39
Eur CLO Equity	5	11	12	12	12	13	12
Eur CLO Debt	13	11	5	3	2	2	4
CMV	0	0	0	0	2	2	1
CLO Warehouse	5	0	0	4	0	4	1
Bank Balance Sheet Transactions	13	13	14	13	15	15	14
Cash Corporate Credit equity	4	3	3	3	3	3	3
Cash corporate credit debt	1	1	0	0	0	0	0
ABS residual positions	7	4	2	2	2	3	3
ABS debt	1	3	2	3	2	2	2
Cash	5	2	12	8	12	6	8

Source: Hardman & Co Research; Volta Monthly Reports

### *Euro CLO debt down, equity up*

- ▶ The proportion of European CLO debt has reduced from 13% of the portfolio to just 2% (primarily in 2H16). This market did tighten due to lack of supply and was judged expensive relative to US equivalent. Volta has invested in European CLO equity (up from 5% to 13%) noting that some CLOs should benefit more from lowering their own financing costs than they lose on underlying loans re-pricing. We discuss the merits of CLO debt and equity on pp19-21 below.

### *US CLO debt and equity broadly stable*

- ▶ US CLO debt has increased from 33% to 39% (primarily in 1H'16) falling from 40% in April with two debts totalling €12m being called in May.
- ▶ Asset Backed Security (ABS) residual positions (equity) have reduced from 7% to 3% and ABS debt has been stable at ca.2%.

### *Capitalised Manager Vehicle likely to increase with drawdown of existing commitment; new deals unlikely to be material given change in retention rule*

- ▶ Capitalised Manager Vehicle (CMV) exposure is 2% of the portfolio and the committed facility means this might be expected to rise over time. Some CLO managers established legally separate CMVs, primarily to use third party capital to fund the 5% retention until recently required in the US. The underlying assets and exposures are the same as a normal CLO but their segregation into a CMV vehicle means the overall risk in the CMV is marginally higher. This generates higher returns (typically 3%-4%) albeit liquidity is low. Volta's detailed market knowledge is a competitive advantage in identifying which CMVs have an optimal risk/return.

### *Selective CLO warehouse funding (only where Volta would invest in end CLO equity)*

- ▶ CLO Warehouse exposures are volatile. As we detail on p14, a CLO manager needs funding as it builds a portfolio of loans, which in due course will be placed in the CLO. Funding warehouses gives Volta underlying exposures that are similar to CLO equity, but the portfolio is less diverse at times. For bearing these risks, an incremental return is expected. Most of the time, Volta does CLO warehouse for the purpose of investing in the CLO Equity tranche that will result from the warehouse. Warehousing the loan portfolio permits a greater control of the portfolio that is built and better economic terms when purchasing the equity tranche (most of the time Volta commits to purchasing a significant portion of the equity and is paid for that).

### *Rapid churn likely*

*BBST provides diversification and lower risk portion of portfolio*

- ▶ Bank Balance Sheet Transactions (transactions that save banks some capital charge through the transfer of a portion of their loan exposures) have been broadly stable through the period. These investments form the lower-risk portions of the portfolio and are expected by the investment manager to provide stable performances going forward. Volta has not, nor intends to invest in Italian BBST (Italian debt is less than 0.5% of Volta's gross assets). We understand the higher margins in this business reflect its current specialist nature, and the fact that, through AXA IM, Volta can be a scale player and access deal flow that is unavailable to most players. BBST are bilateral trades and not supposed to be traded and so earn an illiquidity premium. As AXA IM's scale allows it to achieve purchase discounts, in normal trading a sale price should be similar to the acquisition cost although in period of stress it could be 10% to 15% below.
- ▶ Cash Corporate Credit Equity (mainly direct lending through two private loan funds) are also expected to be low risk, stable return investments reflecting their mature status and relatively low leverage.
- ▶ Cash has ranged from 7% in January 2016 up to 12% (January 2017 and January 2018) fell back to 7% in April and was 6% in May. The manager is being cautious about re-investment at this stage of the cycle.

## Vintage

**Figure 20: Vintage of portfolio (%)**

	Pre 2013	2013	2014	2015	2016	2017	2018
Proportion of portfolio	3.8	6.2	3.5	13.9	14.0	24.2	16.9

Source: Hardman & Co Research; Volta July monthly Report

## Arranging institution

*No dependence on arranging institution...*

As can be seen in Figure 21, Volta's investments have been arranged by a broad band of institutions with the top 5 accounting for less than half of the portfolio. This diversity should moderate the risk of one institution's CLO organising being too gung ho at the risk of the investors.

**Figure 21: Percentage of portfolio by major arranging institutions**

Name	% Estimated NAV	Main asset class
Citigroup	5.1	Half each Euro / US CLO
Credit Suisse	6.3	European CLO
Deutsche	5.7	US CLO
Goldman Sachs	7.4	Euro CLO, US CLO
Morgan Stanley	15.0	US CLO
Natixis	6.1	US CLO

Source: Hardman & Co Research, Volta July monthly Report

## Manager/servicer

...or on manager/servicer

**Figure 22: Percentage of portfolio by major managers/servicers**

Name	% Estimated NAV	Main asset class
Axa Investment Managers	11.5	Mixed
AC Asset Management	4.9	US CLO
ICG Capital/debt advisers	5.5	US CLO
MJX Asset Management	4.5	Mainly US CLO

Source: Hardman & Co Research, Volta July monthly Report

## CLO market overview

### What is a CLO – simplified example

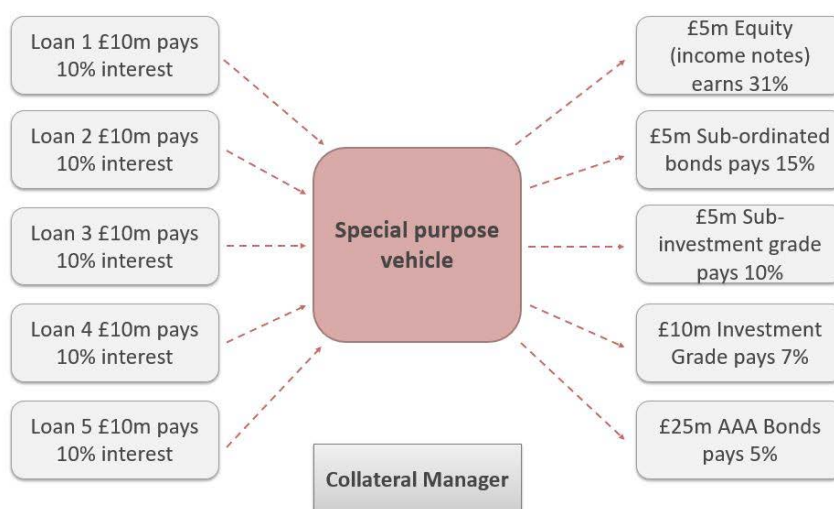
*CLOs are just portfolios of loans*

As illustrated in Figure 23 below, a CLO structure is, at its heart, very simple. A portfolio of loans is acquired by a company (a special purpose vehicle) which funds the purchase by issuing a mix of different tranches of bonds (CLO debt tranches) and an “Income notes” (CLO Equity tranche). The interest received from the loan portfolio is used to pay, firstly, the coupons on the CLO debt tranches and then all the excess cash flow is for the profit of the “equity” tranche.

*Individual loans are pooled, and different tranches of debt at different interest costs are issued as funding*

The example below is simplified to illustrate how a CLO works. If we take five individual loans of £10m each of which pays an interest rate of 10% driven by the market perception of the risk of loss, these loans generate total interest of £5m. The SPV issues tranches of bonds some of which are repaid ahead of others in bankruptcy. As the probability of all five loans simultaneously going into default is low, such bonds carry a lower coupon than each of the individual loans. In the example below, we assume £25m of bonds could be perceived as low risk of loss and so only pay 5% coupons. With different tranches of bond carrying different risk of loss, they each carry a different coupon with any residual profit attributable to the equity holders. In principle, the structure of a CLO SPV is exactly the same as a bank that takes a broad portfolio of credit risk and funds itself from a broad range of sources each of which carries a different interest cost.

**Figure 23: Simplified example of CLO structure**



Source: Hardman & Co Research

Such a structure has advantages for all the interested parties:

*Loan originators have additional source of funding*

- ▶ The originators of the loans (usually, but not necessarily banks) have access to different sources of finance and can manage the credit risk on their books. They will often service the loans in the SPV (for a fee) and keep their relationship with the borrowing customer. It is capital efficient for the originator as they do not need to hold capital against the loans sold to the SPV but still earn origination fees.

*Different tranches meet different investor appetites*

- ▶ By pooling multiple loans and dividing them into tranches, relatively safe ones can be created, which pay lower interest rates and are designed to appeal to conservative investors. The structure also creates higher risk tranches, which appeal to higher risk investors by offering a higher interest rate.

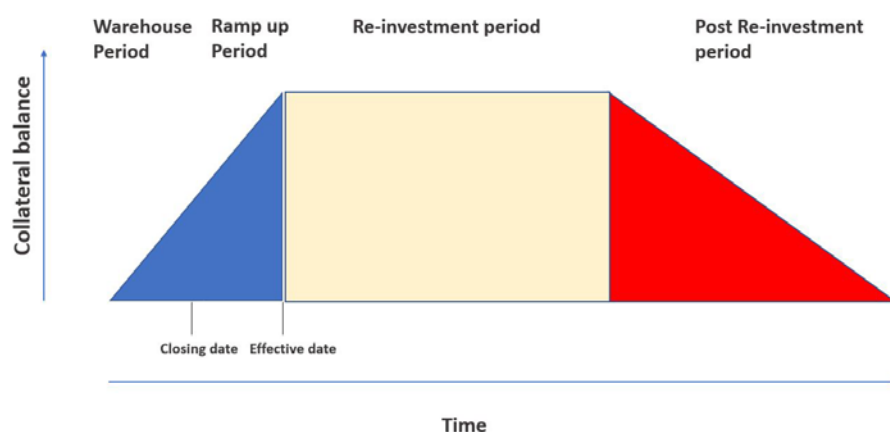
#### Lower overall funding cost

- ▶ The overall cost of money to businesses should be reduced as the CLO structure increases the supply of lenders (attracting both conservative and risk-taking lenders).

#### Loans initially go into a warehouse as the CLO pool of loans is built up

A typical lifecycle for a CLO is shown in Figure 24. In the initial stages, the collateral manager acquires assets on behalf of the CLO using a warehouse facility financed by a bank (Volta is providing capital at this stage). Once a closing date has been reached, loans previously warehoused are transferred to the CLO and the CLO moves into the “ramp up period” when further assets are acquired. The size of the CLO is set shortly after. For a set period, the cash generated from borrower may be re-invested in new loans with the collateral manager trading assets on behalf of the CLO. After a set period, the CLO goes into a wind down phase and any cash is no longer re-invested but used to repay the CLO debts and ultimately the equity holders.

Figure 24: Simplified example of CLO lifecycle



Source: Hardman & Co Research

#### CLOs build in a number of tests and covenants to ensure that all investors know the risks they face

To ensure that potential investors in CLO securities both know the risks they are taking and also to ensure consistency over time, CLO structures build in a series of tests for the portfolio of underlying loans. Inter alia, these include:

- ▶ over-collateralisation: the market value of outstanding loans has to exceed the value of non-equity liabilities;
- ▶ interest coverage;
- ▶ weighted average spreads (WAS);
- ▶ lifetime of loans (WAL); and
- ▶ credit rating factor (WARF).

While the terminology might appear somewhat unfriendly for generalist investors, we believe it provides useful trend analysis for the underlying market. In particular,

the rating agencies provide regular updates using such measures and commenting on the associated risk.

## CLO opportunities in the real world

### Risk/reward optimisation

The different tranches of CLO debt mean that investors can select how much risk they want and for what reward from a portfolio of CLO securities with distinct risk/reward characteristics. It also creates arbitrage opportunities where specific tranches of loans might be mis-priced for the reasons identified in the section below.

*Different tranches of CLO instruments provide varying opportunities for those with flexible mandates*

### Mis-pricing opportunities in CLO market

In a world with perfect information and transparency, each tranche of CLO funding would price perfectly to reflect the risk in the underlying assets. In the real world this is not the case and we highlight below several potential sources of mis-pricing. We do not believe investors should be concerned about these issues. In principle, they are identical to most other (non-CLO) investments and they create the opportunities for Volta to earn superior returns.

*Lack of understanding of real credit exposure*

- ▶ Some in the market focus on the gross exposure of a credit, not the real risk. Where a borrower has a loan of 100 the amount at risk will be somewhere between 0 and 100 depending on things like the collateral. Where investors focus on the gross 100 at risk, they will materially under-value a well secured loan. Investors need to appreciate both the probability of default and the degree of recovery in the event of default.

*Sentiment:*

- ▶ The lack of understanding of a specific credit risk is often related to sentiment towards a broader sector or market. A current example would be the view that retail is having a bad time, so all retailers are marked down. In the CLO market there are the same opportunities to identify specific companies/borrowers which might do well in a challenging market.

*Rating constraints can affect investor behaviour and with it pricing*

- ▶ Rating constraints can distort some investor behaviours. Insurance companies generally cannot buy tranches below BBB and this creates a mis pricing between BBB and BB tranches. While investors try to anticipate rating changes, significant pricing mis-matches might occur when a rating rapidly changes and some investors become forced sellers.

*Uncertainty:*

- ▶ Sentiment can be both positive and negative. For credit markets where there is an uncertain economic outlook, there could be a flight to safety creating a potential investment opportunity where real risk has not been priced.

*Illiquidity:*

- ▶ Trading in many CLO instruments is generally thin creating illiquidity-driven price opportunities. In the 2017 Report and Accounts, Volta noted that non-mainstream structured credit investments like warehouse and capitalised manager vehicles offered a higher return, partially due to their illiquidity. A forced seller may well have to take a material discount to the real value. Similarly, a large seller may have few buyers to match its scale (another example of a competitive advantage from being part of the larger AXA IM). It is also worth noting that illiquidity will affect different markets to varying degrees over time.

## Characteristics of CLO equity vs. debt

As noted above, CLOs give an end investor a wide choice of risk/return options from low yielding, low risk debt, through higher risk tranches of loans to equity-like instruments. CLOs operate as financing companies: every quarter the CLO receives income from the loan portfolio, pays the interest due on the financing and expenses and pays any remaining available cash (effectively its funding margin) over time to investors in its equity. CLO equity can take the form of preference shares, income notes or subordinated bonds. While CLO debt remains the biggest proportion of Volta's portfolio (41% July 2018), it has been steadily increasing its exposure to equity elements (July 2018 26% of portfolio vs. 18% in January 2016).

CLO equity gives investors a different risk profile. In particular:

*CLO equity takes upside if credit losses below expectations, but bears first losses in downside*

*Equity benefits when underlying loans re-set*

*Active re-financing can be a mixed bag. Underlying loans re-financing reduces CLO profitability... but CLOs can re-finance their own debt. Key is to identify which specific vehicles will see net benefit.*

*Rising rates help income from floating rate underlying loans in due course; many have "floors", so will not see benefit from initial rate increases.*

- ▶ It sees the upside from CLO structures being more profitable than expected. Current credit losses are below those built into initial pricing assumptions and it is the equity elements that capture this benefit. CLO equity bears first risk of loss and so is more sensitive to credit deterioration should that happen.
- ▶ In favourable economic conditions underlying loans may re-set (i.e. keep the same terms but extend the duration). The overall profitability of the CLO rises to the benefit of the equity holders.
- ▶ In good economic conditions, the underlying assets might see greater repayments with limited opportunity for the CLO to invest. However, such strong markets also mean CLO debt tranches might also be re-financed improving the CLO profitability. Volta mentioned in 1H'FY18 that "Another reason to purchase more CLO equity tranches is the fact that the strong appetite that currently exists for CLO debt, especially on the senior tranches, means that new CLO documentation incorporates much more favourable terms for equity tranches than previously as senior debt holders are more flexible than before. These terms mainly concern the provision of more flexibility in terms of re-investment capabilities and a greater ability to pay to the equity tranche the capital gains that could be generated by the CLO manager." To give an indication of the scale of the opportunity, in its FY'17 R&A, Volta advised that it saw increased yields on its CLO equity positions of ca.1% from debt refinancing and 2% from CLO re-sets.
- ▶ The interest rate risk environment affects CLO equity investments in a number of ways:
  - The underlying floating rate loans held by the CLO should generate more income. However, we understand many underlying loans are currently subject to floors (for example a loan might pay 2% over three-month LIBOR with a floor of 4%, which means it pays 4% if LIBOR is at 0%, 1% or 2%). Initial rises in rates might not lift the underlying loans off their floor rates and the CLO residual profit will fall if it has floating rate debt. This reduces the value of CLO equity.



*Defaults likely to rise with rising rates and will affect sentiment*

*Rising rates might see more re-financing with mixed effects*

*Basis risk between one-to-three month LIBOR could be an issue*

*Trading spread on CLO equity above debt*

*Volta undertakes detailed analysis to identify where an excess spread is, or is not, due to risk*

- Higher defaults will initially be borne by the CLO equity. The debt elements might see falls in price well beyond the likely economic loss (driven by illiquidity, uncertainty and negative sentiment) but the equity will take the bigger hit.
- Re-financing activity triggered by rate moves can be mixed. Re-financing, which is beneficial to the underlying borrowers, is initially adverse for CLO equity holders although re-sets, by extending the duration of cashflows, might see some long-term benefit. Re-structuring by CLOs of their debt is generally beneficial to the equity holders with improved terms/cheaper rates.
- The difference between one-month and three-month \$LIBOR (basis risk) was an average of 15bps during 2017, but it widened sharply in 1Q18 (end of April 2018 47bps) although it has fallen back somewhat in 2Q18 to 27bp by end July. A bigger gap is negative for CLO equity investors as loan borrowers can typically opt to switch from three-month to one-month LIBOR (and ca.60% of the US broadly syndicated loan market has done so, vs. 25% two years ago)<sup>3</sup>. CLOs' liabilities typically do not have this flexibility and continue to pay interest based on three-month LIBOR. Volta has commented that the peak impact would have been ca.1% to 1.5% per year on the annual cashflow to the equity, which, through the life of a CLO, will reduce the IRR by 0.5%-1%. It is important, but less than selecting the right deal with the right CLO manager. At this stage it is uncertain to what extent this gap will be sustained and so its effect on long-term dividends paid by CLO structures is unclear.

- ▶ The investment manager advises that the trading spread on equity is somewhat higher ("normal trading: Bid-ask spread is 0.2%-0.4% on best-quality debt, ranging up to 1%-1.5% on CLO equity; stress scenario 1%-2% and 4%-6%, respectively"). Volta's valuation would appear to have further relative support compared with peers, bearing in mind their equity weighting and the likely relative trading cost in a downside scenario.

## How Volta exploits such opportunities

Volta's investment approach is to optimise risk/reward through detailed analysis and market knowledge. Its culture is to avoid unremunerated risks and recognise where any excess spread is the counter-party of a risk (or several risks). The time spent understanding the extent to which the risks are credit, re-financing, illiquidity, structuring, interest rate or any other type of risk is critical to delivering its target returns.

<sup>3</sup> Fair Oaks estimates in its May report (<http://www.FairOaksIncomeFund.com/~media/Files/F/FairOaks-IF/Fair%20Oaks%20Income%20Fund%20-%20April%202018.pdf>)

*Volta a long-term investor*

Achieving such returns makes Volta typically a long-term investor, although when the market is offering specific opportunities (say oil and gas stress in the US) it might purchase assets for the short run (i.e. a few quarters). It will only purchase assets which it would be comfortable holding for the long run. Trading is not a driver to performance and we understand the active sales of positions is normally between 10%-20% of NAV and the cost of churning the portfolio is very limited.<sup>4</sup>

*Both bottom-up and top-down*

Volta's investment approach is both bottom-up and top-down. The type of assets it purchases, and the portfolio construction, are bottom-up, while selection of trades and specific ideas are top-down. When purchasing a CLO position in the secondary market the company looks carefully to the underlying portfolio (with the focus on industry and name-by-name exposure).

*Getting right CLO manager key*

The focus is actively on CLO manager selection. Volta believes that part of what makes a good CLO manager is its ability to manoeuvre within the CLO constraints (and anticipating them). The fund manager spends considerable time on its due diligence and follow-up processes with CLO managers (exactly the same way as a good fund manager behaves).

*AXA IM gives competitive advantage in documentation and deal structuring*

We think that being part of AXA IM gives Volta a competitive advantage in CLO documentation and deal structuring scrutiny (especially in the primary market).

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<sup>4</sup> The "sales" number in the cashflow statements of the accounts is a higher number but 70%-80% of the sales are normal business amortizations/calls and not active changes of position by the manager.

## Current market conditions

### Summary

*2017-18 provided favourable economic conditions, seeing lower loan yields, covenant easing and more debt restructuring; Europe more affected than US.*

In 2017 and 2018 to date, the positive macroeconomic outlook, low credit losses (Moody's forecasts a further decline to 1.6% in March 2019 from 3.9% in March 2018)<sup>5</sup> and relatively unattractive returns available from a range of asset classes has seen a very favourable credit market. This has led to loan price tightening, credit criteria being relaxed, and strong issuance (both new issues and re-set/re-financing). These favourable market conditions have been seen in the CLO market too. There is no evidence yet of a broad market over-exuberance, and specific periods have seen a degree of volatility against this trend (e.g. May saw some spread widening with uncertainty over trade wars, Italian politics, Brexit). Market commentary has been that European markets have seen above average weakening of credit criteria (i.e. weaker covenants) and we note Volta has reduced its European CLO debt positions.

*While little evidence yet of broad over-exuberance, Volta has adopted a cautious stance*

The loan price tightening and covenant easing reflect what may be expected at this stage of the economic cycle, and we concur with the the board's view that a conservative approach to the portfolio is appropriate. Volta has been increasing its bank balance sheet transactions as these investments offer lower risk exposure (albeit for lower returns).

*Volta seen gains as its CLO debt valuations "pulled to par". Unlikely to recur.*

Strong investor demand has pushed most CLO debt tranches to close to par valuations. Going forward, most of the returns are likely to be generated from holding positions and receiving dividends and coupon payments rather than buying CLO debt at a discount and having it repaid at par.

*Creates challenging re-investment but also areas of opportunity*

These conditions create a challenging market for re-investment, but they also create opportunities: if a CLO can benefit from its own funding becoming cheaper before it "suffers" on its loans repricing, it will become more profitable and the equity has a greater value. Another example would be warehousing: as banks become more cautious in lending to the warehouses that build CLOs, Volta can lend to warehouses at improved yields for the same level of risk.

*Volta forward-looking, modelled yields consistent with historical returns*

In its interim report, Volta noted a projected yield of 10.5% ungeared (11.4% geared) based on historical average loss rates. Should better-than-average credit conditions continue, and the return in the fund be enhanced by the 1%-2% indicated by the investment manager, the prospective NAV growth, after costs, might be in line with, if not slightly exceed, the historical level of share price returns. If the discount to NAV is due to investors being concerned about the sustainability of returns, near-term delivery at this level could see the discount reduce.

### Issuance

#### In underlying assets

Global loan new issue volumes fell in the US and Europe during July. US issuance fell to \$48.5bn from \$62.5bn in June. European issuance also fell to €8.2bn from €10.4bn last month. This brings year-to-date issuance to \$425.2bn and €70.7b, respectively.<sup>6</sup>

<sup>5</sup> <https://www.bloomberg.com/news/articles/2018-05-25/clo-machine-is-approaching-full-tilt-and-credit-quality-suffers>

<sup>6</sup> Carador monthly report

## By CLO structures

### *CLO issuance at record levels*

Wells Fargo & Co. is forecasting that there will be a record \$150bn of new US CLOs issued this year.<sup>7</sup> This estimate has been increasing through the year (2018 forecast in December 2017 was \$125bn)<sup>8</sup> and compares with \$118bn of new CLOs in 2017 and the previous record year of \$124bn in 2014. The same Bloomberg article also reported that Moody's Investors Service, the biggest bond grader for CLOs, can't keep up with the demand for its services, and is taking around a month more to rate the securities than it needed before.

July CLO new issuance volume fell globally versus June (\$15.0bn vs. \$17.9bn in June). This was driven by reduced US CLO issuance for July of \$9.7bn across 18 CLOs down from \$14.5bn in June. Europe, meanwhile, experienced its largest month of the year-to-date, as CLO issuance rose to €4.5bn across 11 CLOs from €2.9bn in June. Year-to-date issuance has reached \$78.8bn across 143 US CLOs and €17.9bn across 43 European CLOs.

Refinancing and reset activity fell globally in July, with refinancing and resets decreasing to \$15.4bn in the US (down from \$17.8bn in June), while increasing to €3.5bn in Europe (up from €1.7bn in June).<sup>9</sup>

## Impact of repeal of risk retention rules on US CLO issuance

*Without the need to fund this retention, US CLO issuance in theory is likely to rise, noting 2017 had been a record year, anyway, even while the retention rule was in place*

Included in Dodd-Frank (passed in 2010) was Section 941, which required any "securitizer" to retain and hold 5% of the credit risk associated with any such securitization, commonly known as risk retention. In October 2014, after a three-year rule-making process, the agencies concluded that CLO managers were "securitizers" and required each manager to purchase and retain 5% of the fair value of the securitization it originated. This was rigorously denied by the managers who claimed it was unjustly applied to those who purchase, rather than underwrite, collateral for asset-backed securities, was overly burdensome to asset managers with little balance sheet of their own and would raise borrowing costs for below-investment-grade companies. After three and a half years of litigation, this ruling was overturned and US Collateralized Loan Obligation (CLO) managers became completely free of this 'skin in the game' rule in May 2018.

*Volta advises that, while most of US market will not comply with European rules, it has, in the past, persuaded the managers it wants to deal with to structure deals that comply; not seen by Volta as a material issue.*

Volta can purchase only European retention compliant deals. It advises that last year 45% of US CLO did comply with European retention rules, and this year it is likely to be only 20% and, on an ongoing basis, probably only 10% to 15% of US CLO will satisfy European rules. Volta was already in this situation in years 2013-14-15 and was able to attract/convince US CLO managers to issue deals complying with European rules. We note that the need for new CMV structures is likely to reduce if CLO originators do not need to hold the 5% retention and this has been an area of high returns for Volta. However, it has been a relatively small part of the portfolio and the absence of this opportunity is expected to have a limited effect. Over the medium term, Volta does not view the change to the application of the retention rule as a material issue.

## Pricing

<sup>7</sup> <https://www.bloomberg.com/news/articles/2018-05-25/clo-machine-is-approaching-full-tilt-and-credit-quality-suffers>

<sup>8</sup> <https://de.reuters.com/article/clo-2108forecasts/lpc-banks-optimistic-on-2018-us-clo-volume-with-wells-fargo-predicting-record-year-idUKL1N1OD1HS>

<sup>9</sup> Carador monthly report

*Spread compression means WAS covenants coming under pressure*

## In underlying assets

Spread compression continues to be a problem for US CLOs. Fitch reports that 22% of the CLOs in its index of 407 US broadly syndicated CLOs failed, and another 54% were within 10bps, of their WAS triggers at the end of first-quarter 2018. WAS failures were also most prevalent in the 2014 vintage, with nearly 37% failing their test.<sup>10</sup>

## In CLO structures

In its July monthly report, Fair Oaks reported CLO funding spreads widening with US primary AAA spreads of 114.5bp (vs. 111.5bp end June). From 1Q'16 to 2Q'17, CLO debt spreads fell from LIBOR +220bp to LIBOR +170bp and for Volta the average price of its CLO debt rose from 89% of par value in July 2016 to over 99% in July 2018.

## Re-investment risk

*Halving repayment rate from current assumed levels adds ca. 1% to GAV*

In addition to the CLOs receiving interest on their loans, their cashflows reflect the degree to which principal repayments are made (including early repayments). An acceleration in the pre-payment rate means the CLOs have cash on which they initially earn lower returns and the value of CLO equity falls. The investment manager advises that reflecting the current market conditions the assumed constant repayment rate (CPR) is ca.30% in the US and 25% in Europe. Should these rates fall to 15% in the US and 10% in Europe, Volta advises that the impact on the gross asset value would be ca.1%.

The board states it is aware of the risk of “creep” in risk tolerance in order to maintain returns in less favourable market environments and regularly challenges the investment manager on this point. The company has a Risk Committee that regularly monitors a wide range of portfolio metrics and has set a number of reporting tolerances for the manager. The portfolio has been very stable on these metrics for a sustained period and the committee sees no evidence of risk creep. Further, the Committee is also alert to “unpriced risks” but again sees no evidence of this developing

## Risk covenants

*Risk covenants easing*

By several measures, the credit risk being taken on CLO structures has been increasing in recent years as risk covenants have been easing. With US securitization risk retention rules being repealed, weighted average credit rating factors (“WARF”) could deteriorate further. Some of the key drivers to this adverse risk profile have been:

*Makes manager selection even more critical*

- ▶ Weaker financial criteria. Fitch for example reports that the ratio of first-lien debt/EBITDA for issuers has been rising<sup>11</sup>. We also note that, according to the US Loan Syndications and Trading Association (LSTA), companies using adjustments to EBITDA figures for their leverage calculations reached an all-time high in 1Q'18 of ca.25% of all leverage deals.<sup>12</sup>. Volta manages this risk through its CLO manager selection based on years of experience.

<sup>10</sup> <https://www.fitchratings.com/site/pr/10034004>

<sup>11</sup> <https://www.fitchratings.com/site/pr/10031328>

<sup>12</sup> <https://www.globalcapital.com/article/b181044r65pvr2/clos-mutual-funds-fuel-us-leveraged-loan-market-past-1tr>

*Covenants in CLO structures  
weakening*

- ▶ We note that Moody's issued a report in April 2018 "[Loosening constraints in CLO documentation increase risk for noteholders](#)", which noted that not only had CLO constraints been weakening, but also that this trend that had accelerated recently and was one it expected to continue. The trend includes various changes to CLO structures that can distort collateral quality tests, increase the potential for par erosion or make CLO structures easier to change after issuance. The trend for weaker covenants is not yet at the stage when all deals are being affected, and having a deep understanding how these restriction changes can create opportunities for a business such as Volta.

*Underlying covenant-lite loans*

- ▶ MSCI reports that in US CLOs, covenant-lite loans are a marginally higher proportion of portfolios than the market as a whole. Selection bias was highlighted as one of the key drivers of the big deterioration in securitized loan performance during the 2008 financial crisis and MSCI concludes that its analysis indicates that selection bias is present in today's CLO market. Moody's reports that the CLO market has an inconsistent approach to reporting underlying covenant-lite loans. According to Moody's, covenant-lite (cov-lite) loans are roughly as prevalent in CLO portfolios as they are in the greater European leveraged loan universe, but the large variety of cov-lite definitions in the market is leading CLOs to undercount cov-lite exposures when compared with Moody's own definition. Volta comments that it has a very clear view on the underlying loan portfolio (line by line) so that it knows in detail the cov-lite bucket. On a like-for-like loan, cov-lite means fewer defaults (you can't trigger a default because a covenant is breached) but also means lower recovery (in their portfolio analysis and projected returns, they have lowered by 10% the expected recovery to take that into account).

*Weaker recovery rates see  
increased loss in the event of  
default*

- ▶ The loss in the event of default has also changed due to weakening recovery rates. Since January 2016, both US and European CLOs' median WARR (weighted-average recovery rate) has declined by ca.80bps<sup>13</sup>. Bloomberg also reported that investors who historically recovered 77c in the \$ for first-lien loans could now only expect 60c in recoveries<sup>14</sup>. This not only has an impact on the credit performance but also gives CLO structures less flexibility in managing their portfolios as it reduces the ability to use the excess of one metric, such as WARR, to put toward another metric, such as weighted-average weighting factor (WARF), when buying and selling assets.

*Easing pricing and covenants  
reflects current market conditions  
of low default rates. These are  
expected to continue.*

While the trends have been adverse they have arisen because of favourable economic conditions and sustained low default rates. We note that Fitch reported on 21 May 2018 that it thought US senior CLO note ratings would remain broadly resilient to significant leveraged loan default and recovery rate shocks in a credit downturn, but that junior tranches could face significant impairment under all stress scenarios they tested.<sup>15</sup> Such an outturn is not surprising.

<sup>13</sup> [https://www.moody.com/research/Moodys-Falling-recovery-rates-are-the-latest-hit-to-CLOs--PR\\_382736](https://www.moody.com/research/Moodys-Falling-recovery-rates-are-the-latest-hit-to-CLOs--PR_382736)

<sup>14</sup> <https://www.bloomberg.com/news/articles/2018-05-25/clo-machine-is-approaching-full-tilt-and-credit-quality-suffers>

<sup>15</sup> <https://www.fitchratings.com/site/pr/10031328>

## Credit risk management

*Credit risk is managed through portfolio techniques and CLO manager selection. Track record is lower defaults than market.*

Volta may be considered as a specialist lender and, as such, credit risk assessment and management is fundamental to its performance. It is different from most lenders in that credit risk is initially assessed and then managed by third parties rather than directly and part of Volta's expertise is in identifying third parties who can do this well. Volta does choose on a long-term basis the type of risk (e.g. Europe/US) and the way the company is exposed (equity position/debt). It took, for example, some US CLO debt when the oil and gas crisis was at its peak (being comfortable the final losses would not dramatically change the subordination of these tranches), or reducing exposure to European CLO debt (to avoid the systemic risk that losses in Europe could be significantly higher than "expected losses"). As the saying goes, the proof of the pudding is in the eating and Volta reports its underlying loss ratio has been well below: (i) historical averages; (ii) those assumed by forecast modelling; and (iii) the market losses in similar loan tranches. It also reports there have been several CLO equity positions purchased a few years ago that still have not suffered any default at all.

Investors should bear in mind that:

*Rating agency default rates not directly comparable with those reported by CLOs*

- ▶ Given their own experiences in the past, rating agencies are likely to build in a cushion, hence the WARF might overestimate defaults. Additionally, the WARF is an average and so in good times is likely to be out-performed and in periods of stress it will be under-performed against. The issue is the frequency, height and duration of the default spikes and the WARF needs to be treated with a degree of caution.

*Small rise in defaults can help pricing*

- ▶ Market analysis tends to be on trailing 12-month default rates while CLOs report at a given point in time, the bucket of loans in default.

- ▶ When defaults are low, spreads can be narrow and tighten (per current market conditions section). A modest rise in the default rate from here can be positive for Volta as it might see some spread widening. The gains Volta can then make on re-investment at wider spreads might outweigh the impact of higher losses.

## Default risk management

*Individual and aggregated exposure limits in place but, given the nature of the investments, Volta manages default risk through portfolio techniques and is not real time*

Default risk is monitored and managed by the investment manager, who periodically provides granular impact analysis of credit exposure to the largest underlying obligors to the Volta board. In its monthly disclosure, these exposures are also reported to the market although cautions must to be exercised as the tranche of CLO paper will affect the ultimate loss. A 2% underlying exposure via an equity-type of tranche may see a 2% loss, while a AAA rated tranche of the same CLO may have zero loss. The portfolio remains broadly diversified and is managed by active portfolio management. By way of example, throughout 2017, exposures to US CLO structures were reduced with the manager being uncomfortable with the overall concentration risk they generated in shale exploitation.

Limits are set by Volta and reviewed regularly, but as most of the CLO investments are actively managed, and Volta is investing at various levels of the capital structure of CLOs, the aggregate net credit exposure across the portfolio to underlying names cannot be fully controlled on a real time basis. While many CLOs might simultaneously take the same default risk, the broad diversification of Volta's portfolio (including its BBST) means it is improbable that dramatic changes in the

underlying exposures are likely and we do not consider the fact that credit is not real time should be a major concern to investors.

*If defaults rise to 1.5x historical average (currently below average), fall in GAV likely to be less than one year's returns*

In its annual and interim reports, Volta gives a sensitivity analysis for differing levels of default. The base case scenario is for defaults of ca.2.8% p.a. and then ca.80% of the portfolio is stress tested to 1.5x and 2.0x this level. As can be seen in Figure 25, in January 2018 moving to the former would reduce the gross asset value by 7.5% and then up to 2x by nearly double this amount. A non-linear sensitivity to rising defaults is to be expected in the equity elements as CLOs are geared vehicles.

**Figure 25: Impact of increase in default rate on prices of each asset class and gross asset value (GAV)**

	% of GAV	1.5x historical average		2x historical average	
		Price impact	Impact on GAV	Price impact	Impact on GAV
<b>At Jan 2018</b>					
\$/€ 1.0 Equity	1.7	-16.5	-0.3	-17.6	-0.3
\$/€ 2.0 Equity	20.6	-21.5	-4.4	-37.1	-7.6
\$/€ Euro 2.0 Debt	41.2	-2.7	-1.1	-3.0	-1.2
<b>All CLO tranches</b>	<b>63.5</b>		<b>-5.8</b>		<b>-9.1</b>
BBST	15.0	-11.1	-1.7	n/a	n/a
<b>At July 2017</b>					
\$/€ 1.0 Equity	3.7	-2.5	-0.1	-4.9	-2
\$/€ 2.0 Equity	19.7	-14.8	-2.9	-28.4	-5.6
\$ /€ 2.0 Debt	41.4	0.4	0.2	0.4	0.2
<b>All CLO tranches</b>	<b>64.8</b>		<b>-2.8</b>		<b>-5.6</b>
BBST	13.0	-12.6	-1.6	N/a	N/a

Source: Hardman & Co Research, Volta July 2017 R&A. Note CLO 1.0 tranches are ones issued post 2009, CLO 2.0 post 2010 (no CLO issued in 2009)

We note:

*Rising defaults may see early repayment of CLO debt at par*

- ▶ Investors will no doubt note that in July 2017 a higher default rate was estimated to be a positive for CLO debt. This is somewhat counter-intuitive as, while the equity bears the initial loss, the probability of loss on debt tranches increases and so their price/value might be expected to fall. The assumption which more than offset this factor was that there would be an acceleration of CLO Debts being repaid at par (as CLOs reduce re-investment and repay debt holders). Given that much of this debt at the time was being valued below par, any repayment at par sees an increase in the valuation. Rising CLO debt prices in 2H'CY17 meant this offset was reduced and so in January rising defaults have a negative effect on the debt portfolio.

*Accounting disclosure useful for directional view of potential loss, but can be sensitive over short time scales*

- ▶ In just a six-month period, the expected price impact on each asset class can vary significantly. For example, on the \$/€ 1.0 Equity elements in July 2018 moving to 1.5x historical averages was estimated to reduce prices of these assets by 2.5% while in January 2018 the impact was a 16.5% reduction. The investment manager advises that as these tranches move closer to maturity they will suffer from greater volatility than other books as the pool becomes more concentrated. Overall, the table gives a reasonable view to understand the long-term risk under a reasonably probable stress scenario.

*Lack of recent relevant defaults means recovery rates not certain, adding to the lack of transparency over loss rates for different tranches*

Recently, there have been few examples of defaults meaning there is less certainty on the expected recovery rates. The tranche structure of CLO vehicles creates different sensitivities (see Equity vs. debt section on pp19-21). A detailed knowledge of each position is necessary. For example, typically a BB tranche of CLO in the US is 4% of the CLO funding structure and only starts to incur losses when cumulative losses have burnt through all the higher risk elements of the structure (typically 13% cumulative loss). when taking into account all the mechanisms that are in place to



protect the CLO debt tranches). Historical annual average defaults on US CLOs are in the area of 2% to 3% (0.6% to 0.75% annual losses on average).

## Largest exposures

*Top 5 holdings just 2% of assets,  
top ten holding just 3.39%*

In each monthly report, Volta provides details of its largest underlying exposures. The fund manager's systems look through the CLO structures to identify the gross exposure to specific names (although as noted above not in real time). This does not take account of any collateral held and so are very conservative. The monthly reported numbers have been weighted to reflect the tranche of CLO security (so an underlying loan would be reflected at 100% for a CLO equity-type holding as it bears the first loss but at a much lower percentage for say BB-rated debt tranches). On the latest monthly, the top 10 names accounted for 3.39% of the estimated NAV, a proportion which has been broadly stable for some time. The largest five names on an underlying basis are given in Figure 26 below, although as we note above the tranche of CLO security that Volta holds means its real exposure may be zero or the whole amount in the table below.

**Figure 26: Top holdings**

Name	% Estimated NAV	Sector
Altice France SA/France	0.70%	Media
Ziggo Bond Co BV	0.36%	Media
TransDigm Inc	0.32%	Aerospace/Defence
Calpine Corp	0.32%	Electric
Asurion LLC	0.32%	Insurance

*Source: Hardman & Co Research, Volta July monthly Report*

Investors should recognise that there is gearing in specific investments made by Volta. Taking an example where: (i) the fund NAV is £100; (ii) if holds £5 in CLO 1 income notes (accounting for 25% of the total income notes), and £5 in CLO1 AAA tranche; and (iii) CLO 1 has its largest loan to borrower A at £2, which then goes into default on the day it was due to repay with a zero-recovery assumption. If a lender had made a direct loan it would have lost 100% of its exposure to borrower A. The loss on the CLO income notes would be £2 (40%) but the loss on the CLO AA tranche would be zero. Overall, the loss would be £2, 2% of fund.

In practice, loans do not usually go to default on the day principal repayment is due. As CLO equity valuation is derived from net present value of cashflows the value in the CLO for the principal element of this loan is likely to be significantly below its nominal value while there is a value attributable to interest payments due. The investment manager advises that a CLO equity (with ten times leveraged position) suffering a default (with no recovery) on a loan representing 2% of the underlying loan portfolio, will not suffer a market drop of 20%, but is much more likely to see a ca 10% fall in its market price.

## Financial crisis scenario

### Share price

*Share price fell 96% between January 2007 and November 2008*

The market collapsed for illiquid instruments in the 2008 financial crisis. Statistical modelling in sub-prime had failed and this led to concerns over all structured assets. The valuation of underlying instruments fell dramatically and this was compounded by sentiment. The share price thus fell from of €9.8 in January 2007 down to a trough of €0.38 in November 2008 (i.e. a fall of 96%). The shares then increased tenfold to ca.€4 by the start of 2011.

**Figure 27: Share price performance through the financial crisis (€)**



Source: Hardman & Co Research

*Large losses in 2008/2009 significantly reversed in 2010-12*

*Financial assets at fair value through P&L (i.e. same accounting basis as now) fell ca. 90% in 2009*

### Net asset value

In FY'08 and FY'09, Volta reported losses of €71m and €98m, respectively, nearly two-thirds of the shareholders' FY'18 opening equity position. Profits quickly recovered (FY'10 €40m, FY'11 €31m, FY'12 €51m, i.e. 72% of FY'08-09 losses) with the uneven reversal of many of the provisions/losses taken in the financial crisis. The accounting for much of the portfolio is now different (the majority of assets then were accounted for an available for sale basis). Taking the financial asset at fair value through the profit and loss (i.e. like-for-like accounting as adopted for the book now) in 2009, there was a €56m unrealised loss on an opening book of €62m (i.e. a 90% write down).

### Differences now compared with then

We note the following material changes since the financial crisis, which might suggest that the extreme falls in share price and NAV seen since then should not recur:

*The financial system has been strengthened and the expectation of rapid action might reduce the blind panic seen in 2008-9*

*Forced selling less likely. In Volta's case, gearing kept low and structured specifically to avoid this.*

*Market participants have greater weight of long-term vs. speculative investments*

*Portfolio has different risk profile*

- ▶ The market, regulators, the investment manager and the board, having been through the crisis are much more aware of the risks and may be expected to take corrective action sooner. For example, the higher bank regulatory requirements (including reduced leverage) and expectations of QE relaxation might be enough to prevent the blind panic that characterised the structured finance markets in 2008-09
- ▶ The CLO and structured finance markets suffered a forced-sell situation that should not recur. This not only drove down the prices of underlying investments being sold but the sentiment was for further falls, creating a vicious cycle. In Volta's specific case, we note that gearing is kept low (repos debt financing ca.12% equity) and repayments have been structured to limit the risk of forced sale. In essence, when repos repayments are due, they should have been covered by anticipated interest, dividend and principal receipts so Volta is not forced to sell assets at distressed prices to meet these obligations.
- ▶ AXA IM advises that it believes that investors in CLO equity nowadays are much more aware of the potential volatility and much more "real" money players who understand the underlying values much better.
- ▶ In 2008, Volta's portfolio was much more concentrated than nowadays; AXA IM clearly changed the way managing Volta risk profile. The book was 42% corporate credit, 22% CLO equity, 9% CLO debt, 13% asset backed securities, and 14% cash. We understand there were ca.20 positions (compared with over 80 now) and the underlying leverage was higher (the book included, for example, six UK non-conforming residual positions where cashflows stopped, a loan total return swap and synthetic tranches). The exposure gives a very different risk profile from Volta today.
- ▶ CLOs may be considered as a sub-set of collateralised debt obligations (CDOS) but they performed very differently through the financial crisis. Since corporate defaults did not spike after the 2008 financial crisis and realised recoveries on first lien position secured loans by defaulting companies were higher than estimated, CLO securities fared much better than the rest of the CDO market, especially deals backed by subprime mortgages. We believe a key driver is that the underlying assets in a CLO are typically individually assessed by credit managers while in CDOs statistical portfolio techniques were more important. A change in customer behaviour meant the old models did not work and confidence in them collapsed. Looking forward, the sentiment drag of a collapsing CDO market should not contaminate the CLO market.
- ▶ Volta's mandate permits the use of credit derivatives and we understand the investment manager would use such instruments in times of distress. They are entirely discretionary (not been used in recent years) and are subject to controls and cash management limitations overseen by the Risk Committee. The cost and effectiveness of such instruments is unclear, but the mandate has this downside protection option.

Volta itself is likely to survive such a crisis given: (i) low gearing; (ii) discretion regarding dividend payments; and (iii) debt financing through the Repo transaction is structured in a way that should enable repayment in an orderly manner if required. There is still likely, though, to be sharp volatility in the NAV and share price.

## Counter-party risk

*Volta is exposed to financial counter-parties in its trading and cash management. Limits are in place to manage this risk.*

Volta incurs exposure to financial counter-parties in its trading and hedging activities and as well from having, at-times, large cash deposits with banks. As might be expected with regards the first two, deals are only allowed with highly-rated counter-parties and most of the exposures are both short term and modest in scale. With regards cash holdings, the board has limited the manager's ability to hold large cash balances directly in the banking system other than to match settlements. Larger cash balances are shifted into a diversified AXA short-term money market fund, short-term French government treasury bills or other cash equivalents to moderate counter-party risk. Exposures are managed pro-actively as market conditions change and we believe counter-party credit risk is unlikely to be material to the share price, except in the most extreme of scenarios.

## Valuation of assets

### Summary

*It is important to recognise that the valuation considerations below are not specific to either Volta or the CLO market, but are likely to be faced by investors in any potentially illiquid markets*

*Limited market prices for many assets; even more difficult in volatile conditions*

*Subjective modelling, which might not be uniform, and little transparency between providers*

*Some investments do not even have market-wide agreed approach*

Volta assets are carried at fair value (not cost/amortised cost). The nature of Volta's investments introduces several valuation factors which investors should bear in mind. We believe Volta's processes and controls in relation to these issues (detailed in section below) are appropriate and that the valuations of assets are likely to be fair for the current market conditions. In summary the key issues are:

- ▶ Volta acquires many investments for which there is not a readily available market, and so its ability to obtain reliable information about the resale value of such investments may be limited.
- ▶ We understand that for most of Volta's investments there are only one or two active market participants who can provide market prices. Even where there are more, there is a risk that less active players revert to the market leader for the price. In extreme market conditions, Volta could face further difficulties if some or all of the market participants were to experience significant business disruption or were to suspend their market activities (as happened in the 2008 financial crisis). However, the manager believes that market participants in the CLO market are able to form a (sensible) price on every CLO position given the transparent reporting adopted in the market. Each month, all details of loan book, tests, CLO manager activity, etc. are made public and easy to use under INTEX or other automated systems
- ▶ Where models are used by the market participants to establish a price, they generally involve subjective judgements on key inputs, particularly default and recovery rates, and these might not be uniform. We note there are the usual discussions between market participants, and AXA IMs significant market presence gives it a good understanding of what other players are doing, the potential lack of uniformity is likely to increase in volatile market conditions. It is also currently standard market practice to withhold key model inputs and discount rates that have been used to produce such valuations. As these valuations are somewhat theoretical, they might not correspond to the prices that could be obtained if Volta sought to liquidate its positions.
- ▶ We note there may not be a formally agreed industry standard methodology for valuing a small proportion of investments (e.g. in the case of residual income positions of asset-backed securitisations). Again, this introduces the potential that the valuation will not reflect a realisable value although the manager advises that most participants use the same system (INTEX) with most of the time the same assumptions, that's widely market standard

*We take comfort from Volta's controls, which include:*

*External prices where possible*

*Internal checks on external prices*

*Regular third-party review of models and assumptions*

*Actual results consistent with MTM, not theoretical approach*

*Actual realisation prices consistent with accounting valuations*

All CLO debt is priced using an independent third party and this is soon to be introduced for all equity. We believe it is important to have verification of prices and the resource and culture to challenge and review all resulting valuations. In this regard, Volta has a competitive advantage in being part of AXA IM's large structured finance team and having access to their risk expertise. We understand AXA IM reviews, and where appropriate challenges, external valuations if the suggested valuations are inconsistent with AXA IM modelled results. This is backed up with a six-monthly external verification of AXA IM models and assumptions. We understand achieved prices have been, and are, reviewed against the accounting valuations and no material concerns have arisen in this process. The change in monthly NAV appears consistent with a marking-to-market approach and clearly differentiates Volta from one competitor, which appears to be mark-to-model driven. Ideally, some comparison between Volta's assumed valuation and that of quoted peers for the same asset would be available, but market disclosure makes such comparisons impossible.

## Volta's valuation approach

As these issues are faced by most illiquid markets, investors should focus on how Volta manages its exposure to valuation risk and, in particular, the external checks and balances put in place to ensure its valuations are reasonable.

*All Volta's CLO debt securities (about two-thirds of the portfolio) are valued using prices obtained from an independent pricing source, Pricing Direct; majority of rest use market participants.*

▶ The prices obtained from Pricing Direct are derived from observed traded prices where these are available but may be based upon non-binding quoted prices received by Pricing Direct from arranging banks/other market participants where observed traded prices are unavailable.

▶ The majority of the company's portfolio (excluding its CLO debt securities) is valued on the basis of non-binding quoted prices received on a monthly basis from the arranging bank or other market participants. Fund investments are valued using the NAV provided by the underlying fund administrator.

▶ On BBST, the price comes from AXA IM (valuing positions based on the market observed discount rate and the underlying positions, reviewed with AXA IM Risk department) in order to avoid using arranging banks' prices. At the moment, there is no significant difference (more than 5%) between the price AXA IM models and arranging bank prices.

*AXA IM reviews for reasonableness against its own valuation models. Pricing adjusted for ca.1% of portfolio.*

▶ AXA IM reviews for reasonableness and may adjust the prices where prices are not considered to represent a reliable estimation of fair value. We understand that ca.1% of the portfolio is subject to such "forced" pricing and it does not have a material effect on the NAV.

*Assumptions regularly reviewed*

▶ The initial model assumptions are reviewed on a regular basis with reference to both current and projected data. In the case of a material change in the actual key model inputs, the model assumptions will be adjusted accordingly. The discount rate used by the investment manager when reviewing the fair value of the company's portfolio is subject to similar review and adjustment in light of actual experience.

*Limited cases of mark-to-model  
where no market price available*

- ▶ In the absence of an active market for an investment and where a financial asset does not involve an arranging bank, or another market participant that is willing to provide valuations on a monthly basis, or if an arranging bank is unwilling to provide valuations, a mark-to-model approach has been adopted by the investment manager to determine the valuation. In addition to default and repayment assumptions, these include expected recovery rates; and the price of uncertainty or liquidity through the interest rate at which expected cashflows are discounted. We understand just 17% of the portfolio is valued this way.

*Independent third-party review  
semi-annually*

- ▶ An independent third party has been engaged by the board to review semi-annually (for the interim and full year financial statements) the valuations and/or valuation assumptions for CLO debt and CLO equity tranches, which, in aggregate, represent a majority of the company's investment portfolio as at 31 July 2017 (64.8% of the company's GAV) (2016: 72.0%). This is then in turn subject to further modelling and review by I-Radar (KPMG).
- ▶ The IRR projections that Volta provides with each set of annual results is done with AXA IM assumptions and then confirmed to be "fair and reasonable" by third-party external and independent parties.

*Realised prices consistent with the  
accounting valuations*

The best measure of valuation accuracy is to compare the price received for assets sold against their valuation mark (so long as the sale period is close to the valuation date). We understand that Volta has only rarely experienced any material discrepancy between its own valuations and assets which are sold shortly after the valuation. On its core asset classes, it advises that this "never" happens. The sole asset class on which there was a material upside discrepancy was a historical UK non-conforming residual position. A limited number of positions have sold at 10%-15% higher than the mark. The asset manager believes this was possibly because the purchaser was building a controlling position to restructure the deal and so valued it higher than a non-controlling interest would have. We take comfort from the fact that: (i) there are very limited occasions where actual sale prices have differed from the valuation; (ii) the fund manager is monitoring such variances; and (iii) the fund manager has a detailed explanation of major variances, which include factors that a normal valuation would not capture (such as a buyer taking a controlling stake).

*In practice, Volta unlikely to be a  
forced seller. If market price  
deviates materially from its own  
valuation, it has option to hold  
assets until price is more  
reasonable. Reported NAV would  
show the volatility but Volta not  
forced into losses.*

## Market price below valuation: Volta action

It remains uncertain whether Volta would always be able to obtain the same price as the valuation models and we believe investors should understand what the investment manager would do in such circumstances. We understand that if there was a significant discount to its own valuation approaches, Volta may retain the asset until such time as more reasonable price was achievable. The fact that debt represents just 12% of funding and the company is a closed ended structure with unlimited life gives Volta this flexibility. We consider part of the model is to identify when market valuations are inconsistent with likely cashflows. While it might not be positive for sentiment for Volta to increase its holding period, owning cheap assets in the expectation of capital gains is a normal course of business.

## Other issues

### Risks from gearing modest

*Embedded leverage in many investments. Gearing in Volta kept low – 12% of portfolio funded under Repos.*

Volta's investments have an embedded leverage. The underlying borrowers are by nature leveraged and the equity-type of investments generate further gearing. Accordingly, Volta keeps its own gearing very limited. At the end of July 2015, debt financed just 9% of positions, rising to 12% in July 2016 and July 2017 and the level reported in the latest monthly report.

*Cost 3m LIBOR + modest margin; contribution from gearing adds ca.1% p.a. to overall performance.*

Volta has chosen to raise this debt financing through a US \$ Repos arrangement with Société Générale utilising a portfolio of \$ CLO debt securities, which are subject to repurchase each quarter. Interest is payable on amounts drawn under the Repo at the relevant three-month \$ LIBOR rate plus a modest margin. This compares with the expected return of ca.10% from the portfolio and the positive spread earned under this structure adds ca.1% to Volta's overall performance.

*Over-collateralised by ca.50%*

The current drawdown is \$50m (ca €45m) and it has typically been over-collateralised by ca.50%. The total pot of US CLO debt securities is ca.€140m, around twice the level of collateral posted under the Repos. If Volta was to reduce its US\$ CLO debt investments, we understand it would reduce the drawdown on this facility.

*Liquidity risk modest: committed line to March 2020 (although we believe extension would be likely if requested by Volta). Termination notice means Volta unlikely to be a forced seller of assets in period of distress, as it can meet its obligations from ongoing cash generation.*

The scheduled final repurchase date is 18 March 2020, although either Volta or SG can give notice to terminate the Repo. We believe it is probable that the facility would be extended if requested. The Repo is likely to be stopped by Volta if it asset allocates away from US CLO debt or if there were to be a financial crisis resulting in Volta wanting to reduce risk. In such event, the collateral is repurchased in three stages: one-third after six calendar months; one-third after nine calendar months; and the final third after 12 calendar months. The timing of repayments means the \$50m facility should be repaid from cash Volta expects to generate in interest, dividend and principal repayments over this timescale. It can thus meet its obligations without being forced to sell assets in a crisis scenario.

One risk is that a sharp correction in the market price of the securities means Volta is required to post significantly more securities as collateral but the scale of the Repos relative to Volta's holdings has been kept modest to minimise this risk affecting the business. Additionally, Volta may, at any time, submit a request to SG to substitute any pledged securities with other securities, provided that: (i) such proposed securities are acceptable by SG in its sole discretion; and (ii) the parties agree on the relevant base individual haircut applicable to such proposed securities.

### Interest rate risk

*Several dynamic effects from a rising interest rate environment. From here, current expected rises would not have a material net effect on performance.*

The company believes the risk arising from interest rate volatility is modest. We detailed several effects on pp20-21 above. It is, however, a little complicated with a number of moving parts. Additionally, we note:

- ▶ Most of Volta's CLO debt investments have floating interest rate characteristics and so should see higher income in a higher rate environment.
- ▶ If there is accelerated re-structuring/re-setting of CLO debt, this could see existing positions re-paid at par when they were bought at a discount.



- ▶ Nearly 90% of Volta's investments are financed by zero-cost, fixed rate equity and so Volta's own cost of funding is unlikely to increase materially.
- ▶ Changes in interest rates could affect market sentiment and prices, which in turn has an impact on Volta's value of investments, acquisition opportunities and ability to trade positions.
- ▶ Volta's mandate allows it to use bond derivatives to place a duration overlay. With these instruments it can actively manage the duration of the portfolio to reflect yield curve opportunities and risks. The risk committee sets limits for its use and we understand to date it has not been a major feature of performance. However, the flexible mandate gives Volta the option to manage this risk.

*Rate rises, like any other market changes, favour those with resources to be able to have deepest understanding of their market*

With so many moving parts, there are increased opportunities for investors that have a deep understanding of the market. For example, detailed analysis might show CLOs who will benefit more from restructuring their own debt than they would potentially lose by restructuring of the underlying loans. The investment manager emphasises that the underlying cashflows from the portfolio should remain strong and it is these that should drive positive NAV returns in the medium-to-long term. Bearing that in mind along with the factors above, we concur that with the board's conclusion that interest rate sensitivity is likely to be modest.

## Foreign exchange rate risk

*20%-40% of fund usually net long \$. Can lead to short-term NAV volatility.*

Forex exposure results from the group reporting in € but having \$ assets (July 2018 67% gross assets). This is partially mitigated by the repo facility being in dollars (July 2018 12% gross assets). The usual range of net US dollar exposure is between 20% and 40% of NAV. If the US dollar strengthens against the Euro, there is a positive impact on NAV.

There are several factors at play in the Volta board choosing what level to hedge:

*Level of hedge affected by expectation of long-term mean reversion, cash cost of hedge, impact on liquidity buffer and effectiveness in extreme conditions*

- ▶ Analysis by the company shows that variability in returns from exchange rates in the short term has simply come out in the wash over the longer term.
- ▶ Hedging incurs a direct cash cost.
- ▶ Additionally, it incurs as a drag on earnings as it is necessary to hold cash to provide liquidity to meet potential hedge margin calls. With cash rates negative and underlying investments generating 10%+ per annum, the impact of holding significant cash balances can be a material detractor to long-term returns.
- ▶ Hedging is unlikely to be effective in extreme markets as sharp movements in exchange rates can see counter-parties forcibly close out positions, as the market, as a whole, faces a liquidity crunch. Ineffective hedges were a feature of the 2008-09 financial crisis and, while unlikely, need to be borne in mind.

A partial hedge is put in place, though, using swaps and options. The Risk Committee has set foreign exchange exposure tolerances and derivative margin tolerances.

## Fee structure (from 1 August 2017)

**Management fee 1.5% of NAV up to €300m and 1% above**

The management fee is equal to the aggregate of: (i) an amount equal to 1.5% of the lower of NAV and €300m; and (ii) if the NAV is greater than €300m, an amount equal to 1.0% of the amount by which the NAV of the company exceeds €300m. The fee is calculated for each six-month period ending on 31 July and 31 January on the basis of the company's NAV as of the end of the preceding period and payable semi-annually in arrears.

**Performance fee 20% annual NAV growth over 8% (with high water mark); capped at 5% NAV**

AXA IM will be entitled to receive a performance fee of 20% of any NAV outperformance over an 8% hurdle on an annualised basis, subject to a high-water mark and adjustments for dividends paid, share issuances, redemptions and buybacks. The performance fee will be calculated and paid annually in respect of each 12-month period ending on 31 July. Performance fees are capped at 4.99% of NAV.

By way of comparison:

Figure 28: Reduction in yield due to costs						
%	Volta	Fair Oaks	Blackstone	Carador	TFIF	MPLF
Entry costs	0	0	0	0	0	0
Exit costs	0	0	0	0	0	0
Portfolio transaction costs	0.148	0	0	0	0.53	0
Other ongoing costs	1.58	1.52	1.87	1.73	0.97	2.69
Performance fees	0.44 *	0	0	.05	0	0
Carried interests	0	1.03	0	0	0	0
Total	2.16	2.55	2.02**	2.08 **	1.63 **	3.12%

Source: Volta Finance Key Information Document \* Based on average of past 5 years \*\* discrepancy as disclosed in KIDs

The fund specific fees are:

- ▶ Carador charges a management fee of 1.5% p.a. of NAV. The performance fee is 13% of the amount by which the value of the financial year-end growth in net asset value over the level at the end of the most recent previous completed accounting period in respect of which a Share performance fee was paid, is over 2% above the hurdle rate (the higher of the 12-month \$ LIBOR, or 4%).
- ▶ Fair Oaks charges a management fee of 1% of NAV with a performance fee 15% of Fund I/Fund II return once Limited Partners have received, in cash, their original investment plus a 7% annualised return. There is no catch-up requirement.
- ▶ Some of the funds (Blackstone /GSO Loan Financing Limited & Marble Point) do not charge fees themselves but the underlying manager which is a related party takes the fee instead. There are no management fees payable by MPLF on assets that are invested in other entities managed by Marble Point or its affiliates. The underlying manager is entitled to a management fee, equal to 0.40p% of MPLF's consolidated total assets. Performance fee is up to 20% above a 12% internal rate of return hurdle.
- ▶ TwentyFour Income Fund has an ongoing charges figure of 0.97%, reflecting the lower target returns in this fund.

## Financials

We assume an 11.4% gross return on financial assets valued through the P/L and that cash holdings are reduced from their current high levels and deployed at this rate (noting that substantial cash reserves are retained to facilitate FX hedging, dividends and general expenses, see Figure 31). We assume realised gains on sale of ca.1% of the portfolio but no other market movement gains or losses.

**Figure 29: Profit and loss account (€m)**

Year-end July	2013	2014	2015	2016	2017	2018E	2019E	2020E
<b>Coupons and dividend recd.</b>	0.0	31.4	33.7	34.7	33.2	36.6	39.4	40.3
Net gains on sales	0.0	6.1	12.6	2.7	3.1	3.0	3.0	3.0
Unrealised gains and losses	0.0	12.2	21.0	-18.5	4.7	-14.6	0.0	0.0
<b>Net gain on fin assets at FV through P/L</b>	79.2	49.7	67.2	18.9	40.9	25.0	42.4	43.3
Net FX	-0.5	1.6	-8.2	0.3	5.6	5.5	0.0	0.0
Net gain on IR derivatives	2.3	-0.3	0.0	0.0	0.4	-0.8	0.0	0.0
Interest expense on repo	0.0	0.0	-0.2	-0.9	-1.1	-1.1	-1.1	-1.1
Net bank int. & charges	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.1
<b>Operating income</b>	81.0	50.9	58.8	18.2	45.7	28.5	41.1	42.1
Inv. managers' fees	-2.6	-3.6	-3.9	-4.1	-4.1	-4.6	-4.7	-4.8
Inv. managers' performance fees	-7.7	-1.9	-5.0	0.0	-1.5	0.0	-2.1	-2.1
Directors' remuneration & expenses	-0.4	-0.4	-0.5	-0.6	-0.5	-0.5	-0.5	-0.5
Other expenses	-1.1	-1.0	-1.8	-0.9	-0.8	-0.9	-0.9	-0.9
<b>Total expenses</b>	-11.8	-6.9	-11.2	-5.6	-6.9	-5.9	-8.2	-8.2
Profit and total comp. income	69.2	44.0	47.6	12.6	38.7	22.5	33.0	33.8
Avg. no shares for EPS calculation (m)	32.8	36.1	36.5	36.5	36.5	36.6	36.6	36.6
Statutory EPS (p)	2.11	1.22	1.31	0.34	1.06	0.62	0.90	0.92
Total dividend (p)	0.62	0.60	0.62	0.62	0.62	0.62	0.62	0.62

Source: Volta, Hardman & Co Research

To derive our adjusted profit and loss., we strip out the capital movements, including: (i) unrealised gains/losses; (ii) FX movements; and (iii) net gain of IR derivatives. We have left in realised gains which, although volatile, have been converted in to cash and some capital gains might be expected to form part of the normal course of business. We have also backdated the current management fee structure and adjusted it to the new level of profitability.

**Figure 30: Hardman adjusted profit and loss account (€m)**

Year-end July	2014	2015	2016	2017	2018E	2019E	2020E
Coupons and dividend recd.	31.4	33.7	34.7	33.2	36.6	39.4	40.3
Net gains on sales	6.1	12.6	2.7	3.1	3.0	3.0	3.0
<b>Net gain on fin. assets at FV through P/L</b>	37.5	46.2	37.4	36.2	39.6	42.4	43.3
Interest expense on repo	0.0	-0.2	-0.9	-1.1	-1.1	-1.1	-1.1
Net bank int. & charges	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.1
<b>Operating income</b>	37.5	46.0	36.5	35.0	38.4	41.1	42.1
Inv. managers' fees	-4.1	-4.5	-4.3	-4.6	-4.6	-4.7	-4.8
Inv. managers' performance fees	-2.5	-3.5	-1.3	-1.2	-1.6	-2.1	-2.1
Directors' remuneration & expenses	-0.4	-0.5	-0.6	-0.5	-0.5	-0.5	-0.5
Other expenses	-1.0	-1.8	-0.9	-0.8	-0.9	-0.9	-0.9
<b>Total expenses</b>	-7.9	-10.3	-7.2	-7.0	-7.5	-8.2	-8.3
Profit and total comp. income	29.5	35.7	29.3	28.0	30.9	33.0	33.8
<b>Adjusted EPS (€)</b>	0.82	0.98	0.80	0.77	0.84	0.90	0.92
<b>Dividend cover (x)</b>	1.36	1.58	1.29	1.24	1.36	1.45	1.49

Source: Volta, Hardman & Co Research

**Figure 31: Balance sheet (€m)**

@ 31 July	2013	2014	2015	2016	2017	2018E	2019E	2020E
Financial assets at FV through P/L	238.7	256.3	307.3	324.1	321.3	345.5	353.5	361.5
Derivatives	1.6	0.0	0.0	1.2	0.7	0.7	0.7	0.7
Trade and other receivables	0.0	0.0	38.1	5.0	0.3	0.3	0.3	0.3
Cash and cash equivalents	9.7	19.5	0.4	10.9	37.1	13.0	15.4	18.7
Total assets	250.1	275.8	345.8	341.3	359.4	359.4	369.9	381.2
Loan financing under repos	0.0	0.0	27.3	40.3	38.1	38.1	38.1	38.1
Interest payable on loan financing	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
Derivatives	0.0	0.2	0.3	0.0	0.0	0.0	0.0	0.0
Trade and other payables	3.8	2.0	19.0	11.6	15.6	15.6	15.6	15.6
Total liabilities	3.8	2.1	46.6	52.0	53.8	53.8	53.8	53.8
Net assets	246.3	273.6	299.2	289.3	305.5	305.5	316.0	327.3
Period-end no. shares (m)	35.3	36.5	36.5	36.5	36.5	36.6	36.6	36.6
NAV per share (€)	6.97	7.50	8.20	7.92	8.36	8.36	8.64	8.94
Total debt to NAV	0%	0%	9%	12%	12%	12%	12%	11%

Source: Volta, Hardman &amp; Co Research

**Figure 32: Cashflow (€m)**

Year-end July	2013	2014	2015	2016	2017	2018E	2019E	2020E
Total comprehensive income	69.2	44.0	47.6	12.6	38.7	22.5	33.0	33.8
Net gain on financial assets at FV in P/L	-79.2	-49.7	-67.2	-18.9	-40.9	-25.0	-42.4	-43.3
Net movement in unrealised gain on revln. derivatives	-2.3	0.3	0.1	-1.5	0.5	0.0	0.0	0.0
Interest expense on repos	0.5	-1.6	0.2	0.9	1.1	1.1	1.1	1.1
FX losses on re-translation repos	0.0	0.0	-0.9	-0.3	-2.2	0.0	0.0	0.0
(Increase)/decrease in trade receivables	-1.3	-1.8	0.0	0.0	-0.1	0.0	0.0	0.0
Increase/(decrease) in trade payables	0.1	0.1	2.0	-1.5	1.6	0.0	0.0	0.0
Directors/other fees paid in cash	5.4	0.0	0.2	0.1	0.1	0.1	0.1	0.1
Net cash inflow/(outflow) from operating activities	-7.6	-8.6	-18.0	-8.5	-1.0	-1.3	-8.1	-8.2
Cashflow from investing activities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Coupons and dividends recd.	32.7	31.4	33.3	33.6	34.4	36.6	39.4	40.3
Change in margin/deriv. sett.	1.7	1.5	0.0	0.0	0.0	0.0	0.0	0.0
Purchase of financial assets	-46.5	-71.5	-99.3	-127.0	-109.0	-120.0	-120.0	-120.0
Proceeds from sales of financial assets	24.2	72.2	96.9	84.9	125.5	80.0	115.0	115.0
Net cash outflow from investing activities	12.1	33.6	30.9	-8.5	50.9	-3.4	34.4	35.3
Cashflows from financing activities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dividends paid	-15.3	-17.0	-22.3	-22.6	-22.7	-22.7	-22.7	-22.7
Net sales of shares	15.8	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Proceeds from repos	0.0	0.0	28.2	13.3	0.0	4.2	0.0	0.0
Interest paid on repos	0.0	0.0	-0.1	-0.8	-1.1	-1.1	-1.1	-1.1
Net cash inflow from financing activities	0.6	-16.8	5.8	-10.2	-23.7	-19.5	-23.8	-23.8
Net increase in cash and cash equivalents	5.1	8.2	18.7	-27.2	26.2	-24.1	2.5	3.3
Opening cash and cash equivalents	5.2	9.7	19.5	38.1	10.9	37.1	13.0	15.4
Effect of FX	-0.5	1.6	0.0	0.0	0.0	0.0	0.0	0.0
Closing cash and cash equivalents	9.7	19.5	38.1	10.9	37.1	13.0	15.4	18.7

Source: Volta, Hardman &amp; Co Research

## Company matters

### Registration

Volta Finance Limited is a closed-ended limited liability company registered in Guernsey under the Companies (Guernsey) Law, 2008 (as amended) with registered number 45747. The registered office of the Company is Third Floor, La Plaiderie Chambers, La Plaiderie, St Peter Port, Guernsey GY1 1WG, Channel Islands.

The company is an authorised collective investment scheme in Guernsey, under The Protection of Investors (Bailiwick of Guernsey) Law, 1987, as amended. The company's ordinary shares are listed on the Euronext Amsterdam Stock Exchange and on the premium segment of the Official List of the UK Listing Authority trading on the Main Market of the London Stock Exchange ("LSE"). The ISIN number of the company's listed shares is GG00B1GHHH78 and the ticker for both markets is VTA.

Volta's home member state for the purposes of the EU Transparency Directive is the Netherlands. As such, Volta is subject to regulation and supervision by the Netherlands Authority for the Financial Markets (the "Autoriteit Financiële Markten" or "AFM"), being the financial markets supervisor in the Netherlands.

### Board of Directors

#### *Paul Meader – Chairman and Independent Director*

Mr Meader is an independent director of investment companies, insurers and investment funds. Until the autumn of 2012, he was Head of Portfolio Management for Canaccord Genuity, based in Guernsey, prior to which he was Chief Executive of Corazon Capital, Guernsey. He has over 30 years' experience in financial markets in London, Dublin and Guernsey, holding senior positions in portfolio management and trading. Prior to joining Corazon Capital, he was Managing Director of Rothschild's Swiss private banking subsidiary in Guernsey. Mr Meader is a Chartered Fellow of the Chartered Institute of Securities & Investments, a past Commissioner of the Guernsey Financial Services Commission and past Chairman of the Guernsey International Business Association. He is a graduate of Hertford College, Oxford.

#### *Paul Varotsis – Senior Independent Director*

Mr Varotsis was a partner at Reoch Credit Partners LLP until March 2011 where he worked as a consultant for financial institutions and advised investors, asset managers, intermediaries and software vendors on structured credit solutions. Mr Varotsis was Director of CDOs at Barclays Capital from 2002 to 2004. Prior to that, he was Executive Director, Structured Credit Trading, at Lehman Brothers from 2000 to 2002 and spent approximately 10 years (1991 to 2000) at Chase Manhattan Bank and its predecessors; his last position at Chase was head of Credit and Capital Management (Europe Africa Middle East). He was European Chairman of the ISDA committee that participated in the drafting of the 2003 Credit Derivatives Definitions and advised the Bank of England and other regulators on the appropriate framework for the market's development. Mr Varotsis holds an MBA from the Stanford Graduate School of Business, a diplôme from the Institut d'Études Politiques de Paris and a diplôme from the Institut Supérieur de Gestion.

*Graham Harrison – Independent Director & Chairman of the Risk Committee*

Mr Harrison is co-founder and Group Managing Director of ARC Group Limited, a specialist investment advisory and research company. ARC was established in 2002 and provides investment advice to ultra-high net worth families, complex trust structures, charities and similar institutions. Mr Harrison has fund board experience spanning a wide range of asset classes including hedge funds, commodities, property, structured finance, equities, bonds and money market funds. Prior to setting up ARC, he worked for HSBC in its corporate finance division, specialising in financial engineering. Mr Harrison is a Chartered Wealth Manager and a Chartered Fellow of the Chartered Institute of Securities and Investment. He holds a BA in Economics from Exeter University and an MSc in Economics from the London School of Economics.

*Atosa Moini – Independent Director*

Ms Moini (48) retired from Goldman Sachs International in September 2016 where she was Head of Origination and Distribution of Asset Backed Products and Loans in EMEA and previous to that she was Co-Head of EMEA Credit Sales. Ms Moini was also a member of the Securities Division Client and Business Standards Committee. Ms Moini has extensive product origination and distribution experience across a wide range of asset classes, including corporate and leverage loans, corporate bonds, CLOs and asset backed products in real estate, transportation and renewable energies sectors. Ms Moini has an MBA from the London Business School and a BA Honours Degree in Industrial Engineering from the University of Surrey.

*Stephen Le Page – Independent Director & Chairman of the Audit Committee*

Mr Le Page was a partner with PricewaterhouseCoopers in the Channel Islands from 1994 until September 2013. During his career with that firm he worked with many different types of financial organisation as both auditor and advisor, and he also served as the senior partner of the firm, effectively carrying out the role of chief executive and leading considerable growth in the business. Mr Le Page is a Fellow of the Institute of Chartered Accountants in England and Wales and a Chartered Tax Advisor. He is a past president of the Guernsey Society of Chartered and Certified Accountants and a past Chairman of the Guernsey International Business Association. Mr Le Page holds a number of other non-executive roles, including a role advising the States of Guernsey, and is also Chair of the Multiple Sclerosis Society Guernsey branch.

The Nomination, Remuneration and Risk committees have all the directors as members. The Audit committee has all the directors, except for Mr Meader.

## Appendix: investment guidelines

The Investment Manager's remit is to invest the company's portfolio in assets in the Target Asset Classes. The percentage limits on investment are determined by the company's Gross Asset Value ("GAV"), which the company expects to publish on its website on a monthly basis.

GAV is an expression of the company's value that only takes into account the fair value of the company's investment portfolio together with any cash in custodian bank accounts and the value of any derivative positions. Investments outside the Target Asset Classes and that are not cash or cash equivalents are limited to 30% of the latest published GAV. However, it is possible that the company will acquire assets that do not fall within the Target Asset Classes as a result of the exercise of creditor's rights and remedies. Assets so acquired will not be subject to the 30% gross asset limitation on the acquisition of non-Target Asset Classes, but the company's investment guidelines require the Investment Manager to seek to dispose of such assets in excess of such limitation in a manner that preserves value for the company but causes them not to be held as long-term investments of the company.

The following restrictions apply to the company's investment strategy:

- ▶ The company will not invest in instruments which derive their income or capital performance from changes in value of real property to the extent that effecting any such investment would cause the company's exposure to such instruments to exceed 20% of the GAV.
- ▶ No more than 20% of the GAV may be invested in, either directly or indirectly, or lent to any single underlying issuer (including the underlying issuer's subsidiaries or affiliates) or collective investment undertaking.
- ▶ The company will not enter into a transaction that exposes more than 20% of the GAV to the creditworthiness or solvency of any one counter-party (including its subsidiaries or affiliates).
- ▶ Subject to the other restrictions in the investment guidelines, purchases or sales in excess of 7.5% of the GAV for a single investment transaction require the prior approval of the board, provided that if the delay of a divestment transaction could, in the opinion of the Investment Manager, reasonably be expected to be detrimental to the company, the Investment Manager will have the authority to proceed with such divestment (and any consequent reinvestment of the proceeds in accordance with the company's investment guidelines) without prior approval of the board provided that the Investment Manager promptly reports such transaction to the board (and, in any event, within 10 Paris business days).
- ▶ The company will not make concurrent co-investments with the Investment Manager, any of its affiliates (to the extent that the Investment Manager is aware of the co-investment by an affiliate) or other funds managed by the Investment Manager (other than wholly owned subsidiaries of the company) unless: (i) the co-investment is otherwise in accordance with the company's investment guidelines; and (ii) the terms of such co-investment are at least as favourable to the company as to the Investment Manager or such affiliate or other managed fund (as applicable) making such co-investment (the investment guidelines do not, however, require that the rights of the co-investors thereafter

be exercised in a lockstep manner, or that co-investors thereafter dispose of their investments on a lockstep basis).

- ▶ The company will not engage in portfolio transactions (e.g. the purchase or sale of securities) with the Investment Manager acting on a principal basis or with accounts or funds for which the Investment Manager acts as discretionary investment manager (although this restriction does not prohibit investments by the company in AXA IM Managed Products).
- ▶ Subject to the other restrictions in the investment guidelines, the company will not make investments in Restricted AXA IM Managed Products (as defined below) unless: (i) the prior approval of the board is obtained; and (ii) the Investment Manager credits to the company the portion of the company-level management fee allocable to that product; and the company will not make investments in Restricted AXA IM Managed Products unless, after giving effect to any such investment, no more than 10% of the GAV would be represented by Restricted AXA IM Managed Products. Any material amendments to the investment objectives and investment guidelines shall require the prior approval by a majority of votes cast at a shareholders' general meeting.



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

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