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M&G CLO Primer

An Introduction to CLO Equity

The Case for CLO Equity

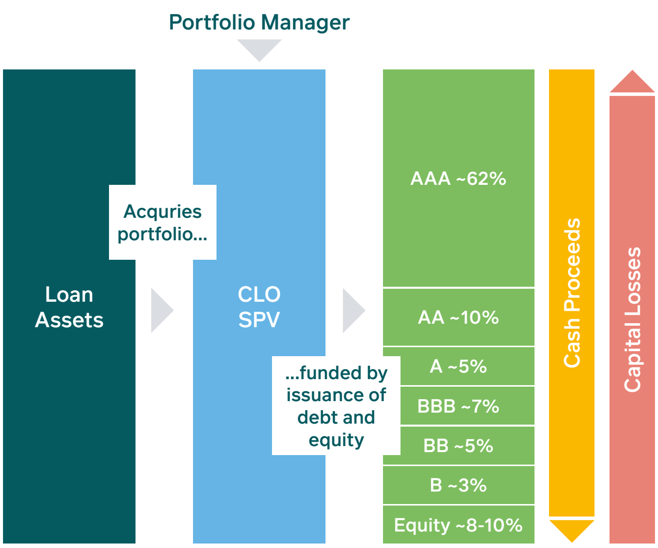
- CLOs underpin $1.2trn of the $1.8trn Broadly Syndicated Leveraged Loan market globally.[1]
- CLO equity outstanding is approximately $120bn and its appeal is growing thanks to reduced realisations from Private Equity and the historical delivery of 16.5% cash-on-cash returns.[2]
- CLO 'equity' is a hybrid – in form, a subordinated note but with the control features and upside participation normally associated with equity.
- At a high level, both Private Equity (PE) and CLO investment involves the application of leverage to the 'beta' of private companies' performance – PE value-creation comes from sponsors' operational turnaround and/or top-line growth while CLO returns are derived from manager selection and avoiding default loss of senior secured loans.
- CLO equity is not for everyone but, for those willing to bear the risk and partner with a manager skilled in credit selection and optimisation of the structural optionality available, we believe attractive returns prospect are available.

[1] Citi Velocity, PitchbookCS LLI, CS WELLI, February 2024
[2] Bank of America, Intex, M&G, August 2024

What is a CLO?

A CLO (Collateralised Loan Obligation) can best be thought of as a company in its own right. Legally structured as a special purpose vehicle, it is in the business of purchasing loans, funded by issuance of long-term, liability notes and equity.

Typical CLO structure



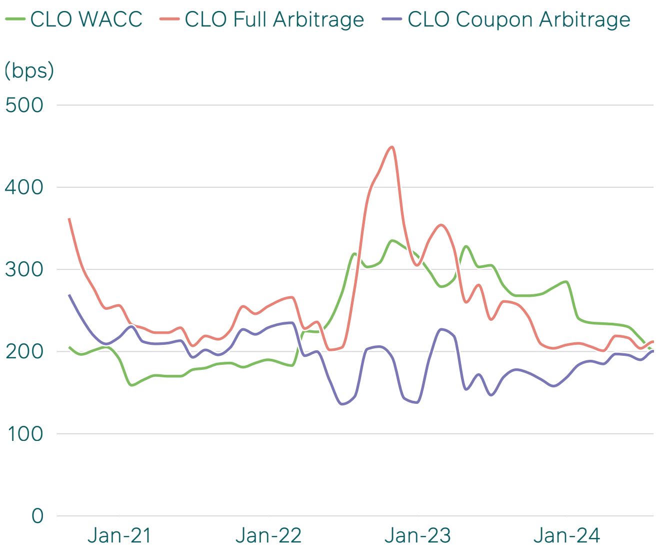
Source: M&G illustrative example

Typically, each European CLO has c.€400m in assets. These are largely (c.90%) senior secured, floating rate loans, made to a diverse pool of c.150-200 individual corporate borrowers ('obligors') and denominated in Euro. Loans are sourced in the primary and secondary market, typically carrying coupons of Euribor + 375-450bps per annum.[3]

The loan portfolio is financed by c.10% in 'equity' issuance (a subordinated debt note, legally-speaking) and c.90% via tranched, rated, floating-rate notes. Notes are rated from AAA to B by two of the three major rating agencies, Moody's, S&P and/or Fitch. The blended financing costs of these notes is c. Euribor +200-250 bps per annum.[3]

The structure dictates that interest and principal payments on the notes are distributed in a 'waterfall' – from the top of the structure and sequentially downwards in order – starting with the AAA tranche. With the same required respect for seniority ranking among noteholders, any default losses within the asset pool are absorbed by note investors from the bottom-up, starting with the equity.

CLO 'Arbitrage'



Source: Bloomberg, September 2024.
All figures reflect rolling 3-month averages.

In simple terms (more detailed explanation later in this paper), the equity return is driven by the excess spread (or 'arbitrage') between asset spreads of c.E+400bps and liability costs of c.E+200bps and then enhanced by the leverage in the structure (usually a 10 to 1 ratio). As per the above chart (purple line), the equity arbitrage is typically driven by the running difference in asset and liability costs, which is known as the 'Interest Only' arbitrage. However, there are times such as 2020 and 2022, when liability costs are high and the coupon arbitrage is compressed. The 'self-healing' nature of the arbitrage can however make these good moments to invest as they are often times when assets can be acquired at a discount to face value and so when a pull-to-par is achieved the all-in equity arbitrage (dark green line) is restored, or sometimes even substantially enhanced. This is known as a 'Principal Only' arbitrage, which has historically delivered some of the highest equity IRR's seen in the market, but requires impeccable timing in rare market conditions.

Debt-holders receive their potential returns via quarterly interest payments and final repayments of their notes, whilst the equity investor receives the (variable) excess cashflow each quarter. This broadly equates to the income earned from the portfolio of assets – liability note funding costs – fees and expenses. Equity IRR's have historically averaged mid-teens levels and are generally delivered by front-loaded cashflows, as opposed to the back-ended returns typical of Private Equity investments.

In terms of governance and transparency, the CLO market has very well established processes and customs, for providing investors with comprehensive and independently produced monthly Trustee reports. These reports include line-by-line asset detail, through to aggregated portfolio stats and the results and headroom to the many tests CLO Managers have to adhere to when managing the portfolios. Leaders in ESG and sustainability are also increasingly disclosing more sustainability related data in monthly Trustee reports and supplementary Manager reports, which can include, ESG scores, emissions data, board diversity and the extent of corporate climate ambitions – amongst other data points and examples of engagement activity.

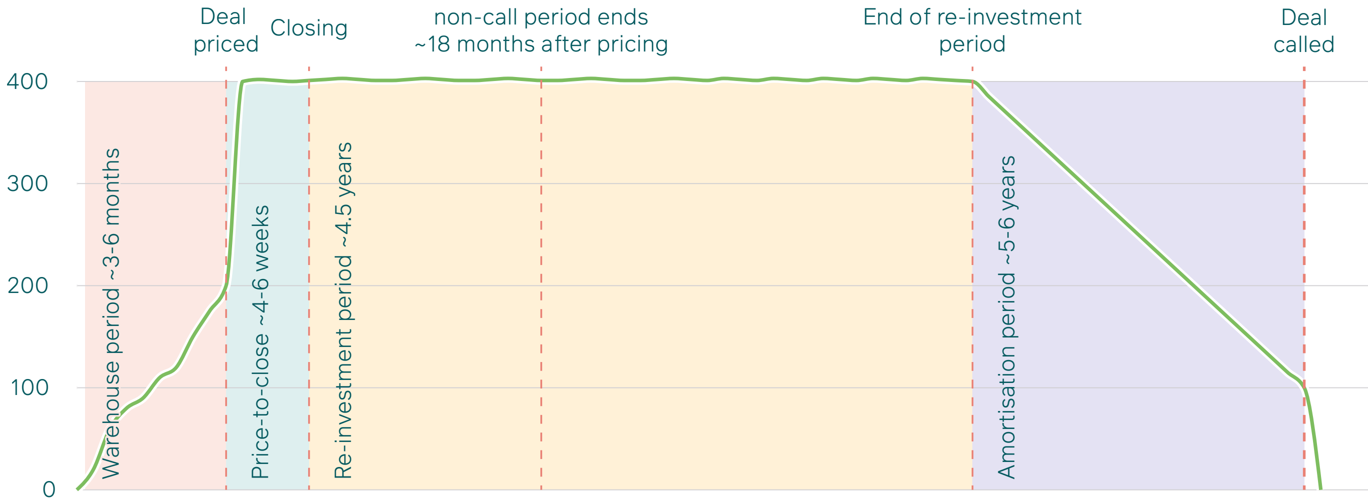
[3] M&G Investments, January 2024

Actively-managed CLOs are the predominant structure, which enable the CLO Manager to actively trade the portfolio and reinvest repayment proceeds for a pre-defined period (usually 4.5 years). In this case the liability notes generally have an 18 month non-call period and legal final maturity of ~13 years.

'Static' CLOs are also offered by some platforms, which involve a one-off purchase of a portfolio of assets, which cannot then be traded by the manager (beyond credit sales). Cash proceeds from any credit related sales or repayments are immediately applied to sequentially amortise the liability notes (AAA through to B), which typically results in a shorter-duration vehicle, even if the legal final of the liabilities is still listed as ~13 years (typically with a one year non-call period). Static CLOs are usually slightly more levered and with cheaper senior financing costs and lower management fees than their reinvesting peers, although equity returns are sensitive to default loss (which cannot be repaired through active management) and the speed at which liabilities are amortised.

CLO Lifecycle

Amount outstanding (€mm)



Source: M&G Investments, September, 2024

As per the graphic above, CLOs are incorporated with a portfolio Manager then being appointed together with various other roles being assigned. An Arranger provides a warehouse facility to finance the purchase of up to €200m of assets (senior secured, floating rate corporate loans), whilst the deal is being marketed to liability investors (a joint effort between the Manager and Arranger). In this way, the vehicle is certain of having revenue-generating investments at the point of launching and pricing its liability notes. Depending on market conditions, the warehouse phase varies in length from a matter of weeks through to 24-36 months (average of ~six months). Upon Pricing of the transaction's note issues, investors are committed to the deal. At that point, the manager sources the remaining €200m of assets to complete the pool. Four to six weeks later, the transaction Closes and funds, with all equity and note investors fully committing their cash to the structure. The Manager will invest and trade the portfolio throughout their investment period (typically 4.5 years), before the amortisation phase is reached when the liabilities are naturally repaid as assets in the portfolio repay, from the AAA tranche and downwards, according to the waterfall. At a point in this natural wind-down, the deal is 'called' by the equity tranche (whereby the assets are sold, liabilities repaid and the structure collapsed). It is very rare for CLOs to reach their 13-year legal maturity, not least because the cost of capital increases as the cheaper notes are amortised first.

After a non-call period (12-18 months), the notes become callable at 100. At this point, the structure may be reset or amended (at the election of the majority equity holder) before the end of the reinvestment period is reached. This could be via refinancing all or some of the notes at lower spreads, or alternatively the deal could be 'reset' (ie the non-call and reinvestment periods start from day one again).

Who invests in CLOs?

The embedded protections and tranching of risk, result in a broad array of risk and reward opportunities that appeal to different investors. CLOs are a very efficient tool through which capital providers can be aligned with corporates needing to borrow, within a scalable, overseen and well-established framework. For this reason, the two-decade-old market has grown to become a $1.2trn market with associated primary and secondary trading infrastructure.

As per the graphic below, at the lowest-risk, AAA notes typically sit with major bank investors (including US, European and Japanese institutions) pension scheme and insurance companies or specialist funds (including UCITs); whilst hedge funds, endowments, family offices and asset managers dominate investments in the higher-yielding sub-IG notes and equity.

	Bank	Insurance company	Asset Manager	Pension fund	Hedge fund
AAA	✓	✓	✓	✓	
AA	✓	✓	✓		
A	✓	✓	✓		
BBB		✓	✓		
BB			✓		✓
B			✓		✓
Equity			✓	✓	✓

Access to all tranches, including equity, can be gained via the primary or secondary markets. However, large and strategic allocations are typically sourced in primary. This is especially true for equity investments, for which controlling majority stakes are rarely offered for sale and where investors reasonably expect to do full due diligence of a manager's philosophy, style and resources.

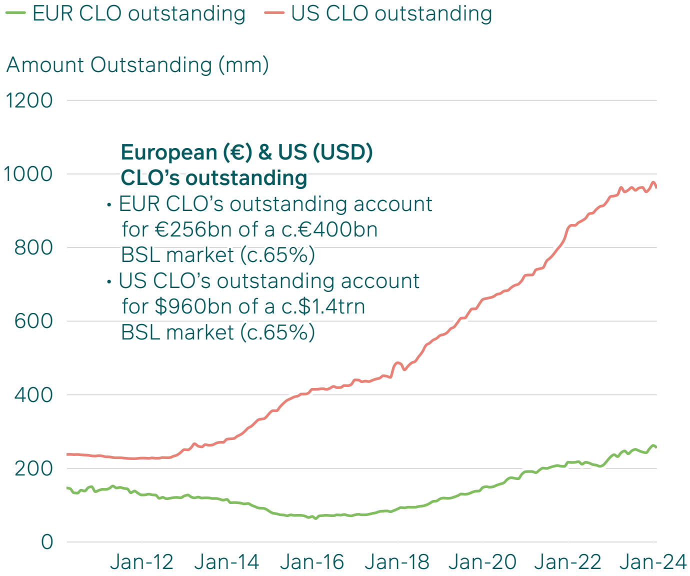
For European CLOs, it is especially important to ensure the Manager has structured the deal to comply with EU Risk Retention rules (simplistically requiring the Manager to invest 5% of capital in the structure). Without this (often burdensome and complex) structure in place, liability investors based in Europe will typically be unable to purchase the notes, which will likely lead to an elevated cost of capital.

Equity investments are generally accessed via three main channels and are typically, but not always, buy and hold investments;

1. Minority equity stakes (typically €2-10m) can be accessed on a deal-by-deal basis, typically via Arranging Banks or secondary trading desks.
2. Majority equity in individual CLOs (>€20m) are usually individually negotiated, directly with the CLO Manager.
3. Investors looking to strategically allocate to CLO equity across a particular CLO Manager's vintages can also invest in Captive Equity Funds, which are generally closed-ended vehicles, raised directly by the CLO Manager. These vehicles not only diversify exposure across multiple vintages of CLOs, but usually also come with added commercial advantages, preferential allocations and professional GP oversight to further enhance returns.

It is important to note that during the warehouse phase Arranging Banks typically offer very attractive financing costs and so the 'arbitrage' earned during this phase can result in IRRs of c.20-40%. Early participation in the warehouse phase, and its returns, usually comes via participation as a majority equity buyer or in a Manager's captive equity fund.

Underlying collateral market



Source: Citi Velocity, PitchbookCS LLI, CS WELLI, February 2024.
Past performance is not a guide to future performance.

Similar to the market for CLO notes, the market for the underlying loans in which a CLO invests ('collateral') is deep, long-standing and has an active secondary market. The Global Broadly Syndicated Loan market consists of more than $1.8trn in outstanding debt, of which the European portion is c.€400bn. Therefore, bids for approximately two-thirds of the loan market is driven indirectly by the CLO buying-base. The predominantly floating-rate, senior secured, corporate loans in a CLO are issued by large, sub-investment-grade companies, typically to help fund Private Equity buyouts. The leveraged nature of buyouts means that the loans carry sub-investment grade ratings (most commonly single-B). They are usually senior secured in a company's capital structure, ranking ahead of any bonds in issue and equity. Furthermore, loans trade on an active secondary market (albeit not via an exchange).

The importance of a skilled manager

Given a secondary market exists for the underlying collateral, the manager can regularly refresh the quality of its loan portfolio and actively respond to macro or credit-specific events. Manager skill in navigating the portfolio through an economic cycle, primarily to avoid default loss, whilst remaining true to their philosophy and style, is an important determinant of long-term equity investor returns. A conservatively-selected portfolio, into which additional buffer (or 'par') has been built through profitable trading activity, will create additional over-collateralisation and debt investor protection (especially important to mezzanine and junior investors) and contribute to the maintenance of liability note credit ratings (important to senior investors). Excess par ultimately also accrues – and can be distributed to – equity investors.

The distribution of such gains usually occurs during the first two payment dates and at subsequent 'event' moments, such as the final calling of the deal or an interim refinancing/reset of the structure, thereby further enhancing the front-ended nature of the cashflows to equity.

It is important to note that, as distinct from pre-Global Financial Crisis 1.0 structures, the 2.0 era CLOs are deliberately designed with higher inherent buffers, meaning that through-cycle assumptions for default loss that encompass the most testing period known to markets have been factored into rating agency tolerances and accommodated within their structural assumptions.

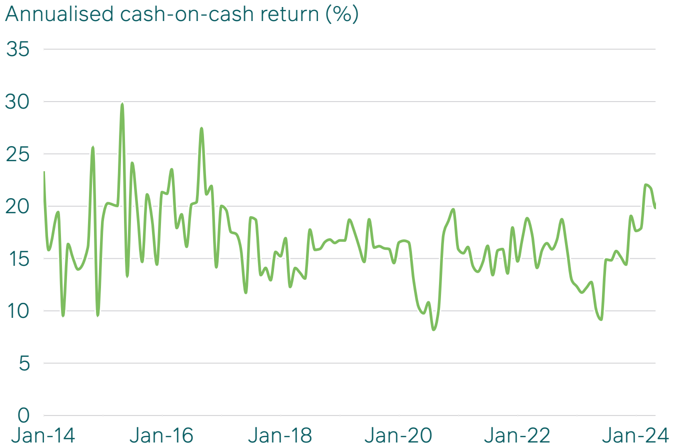
As part of these assumptions and to maintain the agency credit ratings of the notes, a number of strict, Eligibility Criteria (eg minimum size of obligor total indebtedness, the presence of a minimum agency rating, etc) and Portfolio Profile Tests and minimum levels of structural enhancement, must be adhered to by CLO Managers. These include:

- Credit quality tests
- Diversification tests
- Minimum spread tests
- Maximum single issuer exposure limits
- Maximum CCC exposure limits
- Over-collateralization ('OC') tests
- Interest coverage ('IC') tests
- Interest diversion tests ('IDTs')

The results of these tests, along with detailed line-by-line asset reporting, are disclosed to investors (via the independent Trustee), each month. Failure to meet certain test parameters will result in cash-flows being diverted in accordance with a pre-defined waterfall (cashflows from equity up are diverted to repay senior debt down), until the structure is brought back into compliance.

Equity risk and returns

16.5% average annualised cash-on-cash return



Source: Bank of America, Intex, M&G, August 2024.
Past performance is not a guide to future performance.

Historically delivering 16.5% average, annualised cash-on-cash returns, as per the above chart, a CLOs equity return is principally a function of 1) the 'arbitrage'; 2) default-loss avoidance; 3) the purchase price of the assets and the prevailing prepayment or exit price and; 4) how well the special rights available to controlling equity investors are exercised.

1. The running arbitrage (asset income – liability funding costs and fees and expenses), can best be thought of as the bank-like principle of lending money at a higher rate than that at which it is it borrowed and garnering that excess spread. And, prudently, assets and liability borrowing terms are matched and locked in, meaning it is not possible to cause a 'run' on a CLO. Typically, the excess spread of a CLO equates to around 200bps, which is levered through the structure by 10-12x, to form the main driver of equity returns. Distributing this excess spread to equity creates a front-loaded cashflow profile (particularly compared to other investments, such as Private Equity). This cashflow can be further enhanced by 'flushing' any par gains (simplistically, trading profits) to equity investors too. Minimising liability costs is important in determining the size of the arbitrage, which itself depends on investing with a well-regarded Manager and having the deal syndicated by a respected Arranging Bank.

2. Default loss avoidance is another key determinant of long-term returns. Whilst the underlying assets are sub-Investment Grade (modest historical, annual, market default rates being 2.8%), their priority ranking as senior secured has resulted in historical recovery rates averaging 70-80%. Given the first loss and levered nature of CLO equity investment, it is important to invest with a manager with a proven investment capability and low default-loss track record over the long-term. Managers with an ability dynamically to trade the portfolio are also capable of repairing losses with trading gains

3. In most 'normal' market circumstances, performing loans typically trade close to par and, given their floating rate and freely pre-payable characteristics, it is rare for substantial sell-offs to be long-lived. The purchase price of the underlying collateral is therefore usually not much more than a modest supplement to returns. However, in occasional periods of market dislocation, buying significantly discounted loans can result in significant IRR enhancement. Such a scenario is known as a 'Principal Only' (PO) return, and contrasts with the more common excess spread driven 'Interest Only' (IO) IRR profile. The running excess spread is typically low, as liability costs are also likely to be high, but the pull-to-par and subsequent sale of the portfolio can potentially generate very attractive returns.

4. Equity investors are the foundation of all CLOs, which brings with it influential rights and responsibilities, the use of which impacts the ultimate equity return. Typically, there will be a majority (>51%) investor in the equity tranche, whose voting rights will ultimately carry a number of important decisions. Once a warehouse has been opened, collateral purchased and deal priced (the timing of which majority equity investors typically have significant influence over), the key decisions are when to refinance, reset and call the deal.

After the ~18 month non-call period expires on the liability notes the majority investor could chose to refinance some, or all, of the liabilities, if current market rates are cheaper that at the time of the original issue. This would enhance the excess spread going forwards. Resetting the deal goes a step further and not only refinances the notes, but can also amend documentation terms, reset the reinvestment period back to day one and amend the capital structure. This is a powerful tool to enhance the running spread and potentially re-lever the structure to de-risk equity capital. The most absolute and final lever majority equity can pull is to 'call' the deal, at which point the assets are sold, liabilities are repaid and the equity investor receives the residual proceeds. The timing of the call can have a substantial impact of returns and it is important professional oversight works in collaboration with the CLO Manager to optimise the realised value of the underlying assets.

Where does CLO equity fit in a portfolio?

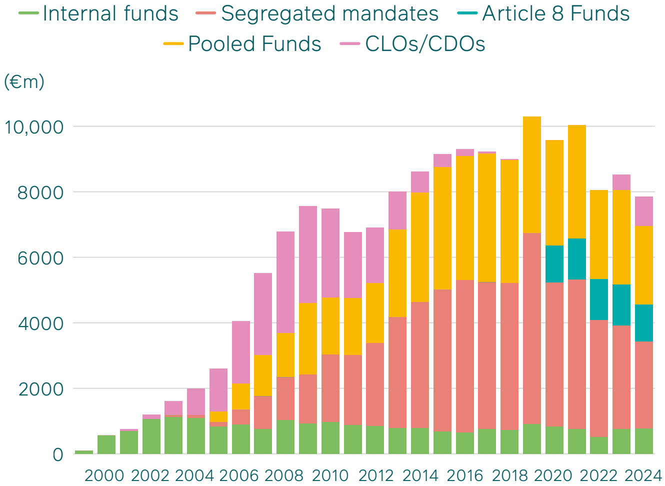
CLO equity is genuinely a hybrid investment with a case to be made to sit alongside; fixed income investments (excess cashflows paid as a quarterly coupon on a subordinated debt note); private equity (first loss in the capital structure and beneficiary of capital upside); or other alternative strategies (diversifying, term-levered investment in underlying senior secured loans). Given the buyer base for CLO equity being broad across investor type (eg asset managers, endowments, pension funds, family offices, etc), but currently lacks depth in any one pocket, portfolio placement is varied and idiosyncratic. Increasingly however, we observe that CLO equity is being thought of by investors as a compliment to Private Equity allocations. This is notably driven by several years of suppressed M&A activity, which has lengthened PE holding periods and left a gap in investor portfolios for a high returning, but cash generative, smoothing investment.

Over the long-term the returns of both CLO and Private Equity have ended up in a similar (mid-teens) place, but have taken two very separate, potentially complimentary, paths to get there. CLO equity returns are very much front-loaded, with cash returned to de-risk investors in the early years of the investment. In contrast, Private Equity returns typically follow a 'J-curve', with investor capital and investment return delivered towards the end of the investment, without much in the way of ongoing cash returns. A summary of the similarities and differences with Private Equity are shown in the table below;

CLO Equity	Private Equity
CLO portfolio is highly diversified	PE fund is concentrated
Front-loaded returns are driven by quarterly net payments of interest on senior loans in underlying portfolio plus total return enhancement of that portfolio that is flushed to equity at various points (overcollateralization)	Back-ended returns are driven by equity valuation expansion and realisation via sale/exit of a company
Loans in CLO portfolio are liquid and can be sold into active secondary market, permitting portfolio repositioning in response to market conditions	PE investments are illiquid and require favourable market conditions to permit realisation of value via exit
Term, non M2M leverage of the portfolio magnifies returns (and potential loss) for CLO equity-holder	Inherent leverage of investee company magnifies returns for private equity-holder. Use of NAV financing can increase investor risk and reduce IRRs
Management fees are clear and simple	Fees are higher, multi-layered and opaque

M&G's history in the Loan Market

M&G Leveraged Finance Assets Under Management *



Source: M&G Investments, January 2024
* as at January 2024

M&G was one of the first institutional investors to enter the Bank Loan Market all the way back in 1999, which combined with c.€8bn AUM today, makes M&G one of the largest and most established participants in the market. We have a large team dedicated to the product, including three Fund Managers, an Assistant Fund Manager, CLO Structurer, secondary market Dealer and 13 Credit Analysts. Our extensive relationships enable us to actively manage portfolios with strong access to both primary and secondary markets, which has resulted in a strong risk adjusted returns with low default loss over the long-term.

“To borrow a phrase from Howard Marks, CLO Equity can be described as an “uncomfortably idiosyncratic” investment. It is certainly not suitable for all investors. However, in part because of that, it can provide a relatively untapped and attractive source of value and diversification, for those willing and able to do the work and bear the risk.”

Thomas Lane, Fund Manager

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