

CDO Asset Manager
Europe
Special Report

**European CLO Asset Managers
Survival of the Fittest: The Return**

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Related Research

- [“European CLO Asset Managers - Survival of the Fittest”, 31 January 2007.](#)
- [“Global Criteria for Reviewing and Rating CDO Asset Managers”, 2 January 2008.](#)
- [“Biding Time European Leveraged Credit and the Credit Crisis”, 21 April 2008.](#)
- [“Overview of the CDO Manager Replacement Process”, 8 November 2007.](#)
- [“CDO Asset Management in a Time of Illiquidity”, 21 September 2007.](#)

Summary

- This report is a continuation of the previous report, “*European CLO Asset Managers - Survival of the Fittest*”, dated 31 January 2007, updating and expanding the agency’s analysis of the European CLO management industry.
- Changes in the European structured credit and leveraged loan market since January 2007 have created an unprecedented and challenging environment for CLO managers. The long awaited manager shake out has just begun.
- According to Fitch Ratings’ European leveraged finance group, defaults have yet to materialise in meaningful volumes in Europe. However, in future, while underperformance may not trigger defaults given the early life of most transactions and substantial covenant headroom, debt levels are nonetheless unlikely to prove sustainable on the basis of standalone performance. Fitch expects value to erode for all creditors (including senior secured creditors) along the way towards distant though eventual defaults in 2009 and beyond. Clearly, the timing of defaults will depend critically on economic conditions, which are likely to vary among countries.
- Greater divergence in CLO performance by manager is expected in future months and years while the forthcoming performance triage is expected to reveal differences between those managers which selected well balanced, defensive portfolios and those that “bought the market” under pressure to issue new deals.
- Managing a CLO in a turbulent market does not necessitate a fundamental change in investment strategy; rather, active portfolio management creates value through secondary trading and heightened surveillance.
- The characteristics and rapid changes observed in the European CLO manager industry reflect the attractiveness of an overheated market up to Q307. Out of over 60 European CLO managers:
 - 60% of managers entered the market in 06-07, 50% of which were US managers;
 - 50% have only one-two CLOs under management, 80% issued opportunistically at the peak of the market.
- The issue of the financial viability/vulnerability of the CLO manager becomes central in a deteriorating/closed market:
 - Two-three CLOs of average size under management result in a European CLO manager platform breaking even in benign market circumstances;
 - Four CLOs or more creates a sustainable, scalable business;
 - Subordinated fees typically contribute to two thirds of CLO manager compensation; if subordinated fee income was reduced by 25% the break-even point would move up to four CLOs under management.
- Key market success factors include critical mass, strong sponsor backing, (demonstrated) ability to manage through the cycle, and adequacy of corporate strategy or product range.

- The number of European CLO managers is expected to contract by about 20% in the next three years. Manager replacement or withdrawal, rather than mergers and acquisitions, will drive consolidation.

The European Leveraged Loan Market: Past, Present and Future

Almost a year into the global credit crisis, the principal casualties in the European leveraged credit market remain a handful of funds which have been forced to unwind highly leveraged portfolio positions at dramatic discounts into a thin market, coupled with the leading bank arrangers which, according to various market sources, still hold approximately EUR50bn of 2007 backlog loans. The exposure of banks to mark-to-market losses or the transfer of un-syndicated loan exposures to the loan book - which limits future underwriting capacity and requires more expensive capital charges under the Basel II capital adequacy regime - has curtailed new commitments of meaningful size and leaves only a trickle of small and medium-sized primary market deals, as evidenced so far in 2008.

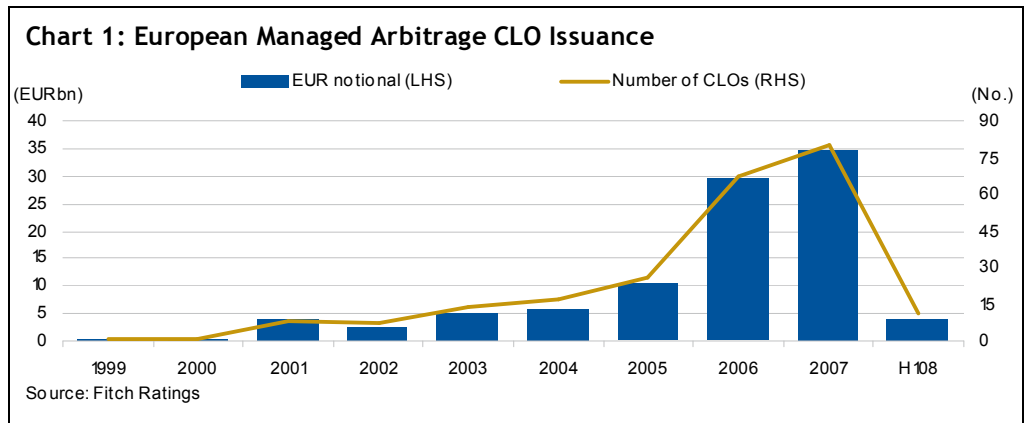
Notwithstanding the unprecedented and challenging market circumstances, defaults - the true manifestation of financial distress - have yet to materialise in meaningful volumes in Europe. As noted in Fitch's report "*Biding Time*", dated 21 April 2008 and available at www.fitchratings.com, the issue of credit performance now becomes central to the outlook for leveraged credit as medium-term refinancing risk remains pervasive throughout the market. Against this backdrop, market constituents have no choice other than to anxiously bide their time as financial system stresses continue to be worked out and the inevitable contagion to the broader European economy approaches.

Leveraged credit market constituents are left with little more than hope that outstanding credits continue to perform in time for an economic and credit market recovery that will provide the refinancing and exit options necessary to avoid widespread defaults. That hope may be justified as, ironically, the excess that accompanied the wind-up in financial system leverage, particularly in regard to loose covenants and back-ended debt maturity profiles, has insulated the leveraged credit market from the spike in defaults normally associated with a credit crisis.

The agency anticipates greater divergence in credit performance, including higher default rates over time, as the legacy of high leverage and lack of viable exit options leave sponsors owning companies for longer periods. Specifically, Fitch argues that it will take 18 to 24 months before outstanding leveraged credits generate sufficient operating cash flow to reduce leverage such that they are eligible to refinance in what has already become an environment with much more restrictive primary market conditions.

CLO Issuance Rewinds to Pre-2005 Levels

As leveraged credit participants have now learnt, the market risk they were assuming by 2005 was largely to the shadow financial system represented by SIVs, conduits and monolines. By H107, these vehicles represented by some estimates 55% of the market for CLO senior liabilities (70% of a CLO's funding on average), whereas CLOs came to account for a similar market share of leveraged loans. Chart 1 shows the obvious consequence; the demise of SIVs and conduits as business models, at least in the near term, and as sources of senior funding, together with the expressed abandonment of structured credit assets by the principal monoline insurers, translates into a significant reduction in new CLO issuance in 2008 and beyond.



To the extent that outstanding credits continue to perform and net de-leveraging occurs, then the resulting repayments via cash flow sweeps may free up capacity and allow existing CLOs to re-enter the primary market. However, the absolute amounts are limited in the near term. Fitch has no doubt that some CLO managers have the credit expertise, scale and credibility to launch new CLOs, should the economics of the deal work and investor demand return. Moreover, surviving CLO managers will be in no hurry to see a return to the stripped-down, high-risk-for-less-reward version of leveraged loans produced between 2005 and 2007. Unlike other structured credit products, CLOs invest in corporate credit where most market participants accept and share greater confidence in the transparency of default and recovery expectations through cycles.

Banks and Mezzanine Funds to Drive New Deals

Table 1: Typical Deal Structures: 2004 vs. 2007

	2004 Structure			2007 Structure		
	Amount (EURm)	Multiple (x EBITDA)	Capital structure (%)	Amount (EURm)	Multiple (x EBITDA)	Capital structure (%)
Senior debt	800	4.00	50.2	1,100	5.50	57.9
Thereof tranche A	350	-	-	150	-	-
Thereof tranche B	225	-	-	475	-	-
Thereof tranche C	225	-	-	475	-	-
Second lien	50	-	3.1	200	-	10.5
Senior + second lien debt	850	4.25	-	1,300	6.50	-
Mezzanine	200	-	12.6	100	-	5.3
Total cash-pay debt	1,050	5.25	-	1,400	7.00	-
PIK/junior mezzanine	-	-	0	80	-	4.2
Total debt	1,050	5.25	65.8	1,480	7.40	77.9
Equity	545	-	34.2	420	-	22.1
EV	1,595	7.98	100.0	1,900	9.50	100.0
EBITDA	200	-	-	200	-	-
Distressed EV estimate ^a	910	-	-	750	-	-

	Ratings	Recoveries (%)	Ratings	Recoveries (%)
IDR	B ⁺ ^b		B ⁻ ^b	
Senior secured loan	BB ⁺ ^b /RR1 ^b	91-100	B ^b /RR3 ^b	51-70
Second lien	B ⁺ ^b /RR4 ^b	31-50	CCC ^b /RR6 ^b	0-10
Mezzanine	B ⁻ ^b /RR6 ^b	0-10	CCC ^b /RR6 ^b	0-10
PIK/junior mezzanine	-	-	CCC ^b /RR6 ^b	0

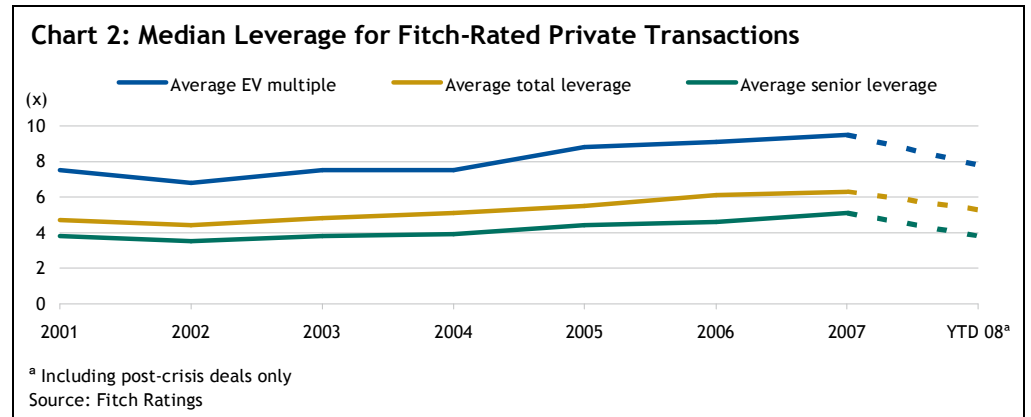
^a Before administrative claims. 2007 estimate reflects the covenant-light nature of senior debt

^b Denotes shadow rating

Source: Fitch Ratings

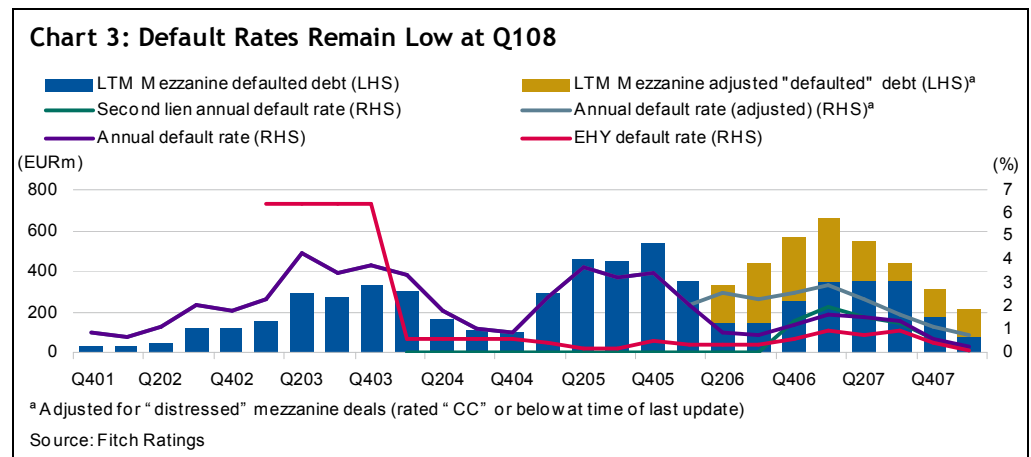
Given the reformation task ahead for new CLOs, any primary issuance in the leveraged credit market will depend largely on traditional syndicates of banks, notably deposit-funded regional commercial banks. Banks will however require more conservative

business plans and will protect recovery profiles by demanding tighter covenants, lower senior debt multiples, a higher portion (50%) senior debt as amortising tranche A, and more loss-absorbing junior capital. In general, as shown in Table 1, Fitch anticipates new structures will have to resemble the pre-2005 market when syndicates of regional banks and mezzanine funds last drove structure and volumes (see loan leverage in Fitch-rated transactions in Chart 2) as already seen in the handful of transactions which have undergone syndication so far in 2008.



Portfolio Performance Outlook: Defaults

The combination of strong economic growth and ample liquidity in the credit markets masked default rates in 2006 and 2007 as even underperforming credits were able to refinance on more favourable terms. The contraction in risk appetite from investors clearly does not allow this practice any longer. While the agency does not currently anticipate any European economies entering recession, as it does in the US, the high leverage on many cyclical borrowers and the already apparent pressure on revenue and cash flow on credits in vulnerable sectors, will most likely make default rates increase at a gradual but sustained pace in H208 (with greater pressure from 2009 as credit performance continues to diverge). Yet this process could be mitigated given the recent vintages that characterise the portfolio and the lack of default triggers. Moreover, financial sponsors who trust their portfolio companies may find incentives to support them by way of equity cures as already seen in a few instances, notably, ATU and Gala/Coral. Therefore, the main concerns remain in the longer term. This is because in Europe, the refinancing risk, and thereby heightened probability of default, will arise within the next five years, especially, from 2012 and beyond, when the majority of the back-ended pre-crisis leveraged debt structures will be due for refinancing. Until then there is time to recreate confidence in the CLO business model or find alternative sources of capital and new institutional investors to facilitate an orderly refinancing of leveraged loans.



Managing a CLO in a Turbulent Market

CLO Manager Flexibility in the New Operating Environment

While it may be argued that it has become somewhat easier to manage a CLO portfolio in the current market, portfolio managers' flexibility remains limited due to CLO structural constraints and a continuing lack of liquidity.

On one hand, portfolio managers benefit from current market conditions in that:

- Sourcing assets is easier: a big ticket is now EUR50m+, so managers tend to obtain requested allocations;
- Reduced prepayment rates have eased reinvestment pressure;
- Cheap valuations on leveraged loans provide numerous investment opportunities;
- Headroom on test limits are being maintained or improved. In particular, acquiring assets at a discount improves over collateralisation tests.

As a result of the above, and in the absence of defaults, it is easy to maintain the CLO fully invested and therefore to ensure cash continues to flow to the waterfall.

On the other hand, notwithstanding CLO structural constraints, portfolio managers' flexibility is limited by these very same factors: fewer primary issues, reduced refinancing, lower prices (likely to generate a loss when disposing of an asset), and lower cash balances (thus increasing the difficulty of improving the risk/return profile of an existing portfolio).

Therefore, CLO portfolio managers' room for manoeuvre remains constrained at a point in the credit cycle when increased flexibility could, arguably, be beneficial.

The Challenge of Actively Managing a CLO Under a Buy and Hold Strategy

In response to the volatile loan market and at this turning point of the credit cycle, CLO managers have started to manage CLOs more actively to exploit their limited room for manoeuvre.

Secondary Market Trading

CLO managers have increased their secondary market trading as a means to pursue portfolio optimisation. There are several rationales for trading on the leveraged loan secondary market in a CLO context.

A CLO which has the possibility to (re)invest cash greatly benefits from the numerous buy opportunities that come with good quality assets trading sub-par to pick up spread, provided sub-par assets and recovery parameters are preserved. However, despite attractive valuations, Fitch has observed that managers remain conservative; most would still not invest in credit on the secondary market which they had not previously analysed and bought on the primary market. Nonetheless, the agency notes that some managers have taken advantage of opportunities to purchase discounted assets on the secondary market to build credit enhancement.

Generally, managers make substitutions when the risk/reward proposition has shifted either positively or negatively. Credit defence trades are however more common in substitutions than relative value trades, because maintenance of the credit quality of the underlying pool is the primary objective of the manager; however, some managers, which have a more value-oriented style, successfully implement these strategies. However, such managers would typically have a loan trading background acquired at a hedge fund or total return credit fund platform, rather than a traditional bank loan underwriting background.

In the same vein, a popular trade rationale is to adjust the overall asset or sector allocation of the portfolio, which CLO managers recognise as a significant

contributor to performance. While a bottom-up approach is the core component of the investment process, tactical trade allocations are increasingly used to reflect revised macro-economic or sector views, targeted asset structure mix and diversification.

Another motive for secondary market trading is that managers want to participate in the new better priced and lower leveraged primary deals. Yet, due to the decline in prepayments they can only do so if they churn the portfolio via “discretionary sales”. There is currently no limit on this, as sales can almost all be classified as “credit impaired”.

Finally, managers have reinforced their sell discipline to dispose of deteriorating credit at an early stage. While a trading loss may result from current loan market price volatility, managers prefer to implement their credit views focusing on the long-term goal of avoiding defaults in the portfolio.

Active Risk Management

In response to unprecedented market volatility and weaker credit trends, portfolio managers have revisited and placed more focus on risk management practices.

Overall, Fitch has observed an increase in the formalisation and frequency of monitoring practices among CLO managers. For instance, among other positive developments, some managers have set up a committee process to review portfolios, reinforced and standardised credit risk reporting, and formalised early warning indicators, forcing a credit review.

In addition, risk management, which was primarily focused on the individual credit risk, has been expanded to include the overall portfolio credit risks and other areas of investment risk, such as liquidity and price volatility. In the future, when defaults materialise and headroom on CLO test parameters is reduced, it is anticipated that managers will reinforce their compliance monitoring, stress tests and scenario analysis to forecast CLO performance and test the resilience of structures.

Fitch views positively the fact that CLO risk management has become more active and embedded in the investment process, thereby forming the basis for timely trading decisions.

Active Management of Distressed Situations

Fitch expects the restructuring of leveraged companies to become a more contentious proposition than in past cycles; this is because of the larger and more complex deal structures and the fact that multiple investors with conflicting agendas will be involved upon distress. These issues have not materialised as yet due to the ample liquidity available in the leveraged credit markets pre-crisis. However, Fitch argues that distressed situations - in the sense of an actual enforcement of security upon default, as in previous cycles - may be avoided to a large extent. Going forward, new money for stressed borrowers is expected to come increasingly from the distressed debt investor community, who are actively raising funds in anticipation of rising default rates. Such funds could be willing to commit capital in the form of junior debt or preferred equity, with banks and CLO managers potentially willing to participate in a much smaller share of senior debt post restructuring. These structures would therefore combine the interests of creditors and financial sponsors, as the former group would keep an economic interest in the form of a debt claim (as opposed to receiving shares in the post restructured business) with the ownership remaining largely in the hands of equity sponsors and perhaps other strategic investors who are willing to contribute additional equity.

However, in the context of an expected increase in default rates, the management of distressed assets will become critical for those managers who elect to go through the work-out process and who believe they can achieve a recovery rate higher than the distressed loan market price during the period. Fitch notes that some managers have either added, or are considering adding, dedicated distressed or work-out personnel to their analytical teams in preparation for the expected increase in default rates.

Loan work-out is an intensive process, consisting, among other things, of analysing the fair value of the loans and maintaining active discussions with the trustee, loan agent, borrower, lenders and lawyers to monitor the development of the default or restructuring process. Some influential managers attend syndicate meetings to represent their own interests. In specific cases, potential conflicts of interest between mezzanine and senior secured loans need to be carefully managed, particularly when the manager has invested in different parts of the capital structure. In large organisations, a dedicated work-out group is responsible for conducting and documenting these actions. A manager with recognised work-out experience and expertise may be elected to the steering committee and will therefore have a direct influence on the restructuring proposal and its implementation. In Fitch's opinion, a manager's ability to direct the course of any restructuring will be a key differentiator, given the expectation of increasing distressed situations, the fact that CLO managers are mostly buy-and-hold investors and the fact that banks' market share has diminished in favour of institutional investors, which may have less work-out experience.

A Change in Mind-Set Rather than Skill-Set

Fitch has not observed a fundamental change in CLO managers' investment processes. Yet, there has been a change in the attitude to risk and the thought process which has seen portfolio managers factoring in weakening credit trends and increased volatility to create value for the CLO. The renewed focus placed on relative value and trading reflects an effort to opportunistically create value in a currently volatile market, rather than a structural change in investment philosophy dictated by a new market paradigm. Indeed, most European CLO managers reviewed by Fitch intend to remain, in the longer term, in the primary market, rather than transforming into total return leveraged loan credit managers. Furthermore, Fitch believes that the critical strengths required from a manager of cash flow CLOs remain the same in the long term, i.e. primarily sourcing capabilities and fundamental credit analysis skills.

Anticipating a Downturn Through Initial Credit Selectivity

Fitch stresses the critical importance of the manager's ability to anticipate and prepare for a downturn before the market peaks (as evidenced in 2007 through selectivity and strategic allocation during the CLO ramp up phase of the CLO). Indeed, focused credit selection, based on superior credit analysis, has been and will remain the most important determinant of the relative performance of CLOs under a buy and hold strategy.

In 2006-2007, analytical rigour clashed with the rapid expansion of the leveraged loan and CLO universe. Those managers that maintained their credit standards, and which had the required sourcing capabilities, were able to obtain the requested allocations on rarer credits that offered the best downside protection. These managers are now in a better position to weather the credit downturn than those more concerned with pumping volumes on the primary market to quickly ramp-up deals. In Fitch's opinion, forthcoming performance triage based on ability to avoid defaults will reveal the difference observed in 2006-2007 between those managers that selected well balanced, defensive portfolios and those that bought "the market", i.e. credits that exceeded their stated risk appetite under the pressure to issue new deals.

While the above is not yet empirically evident in Europe, an examination of the current positioning of the portfolio in terms of credit quality may highlight certain vulnerabilities which reflect a manager's investment decisions. Warning signs indicating a manager's portfolio credit is expected to erode include:

- Industry and sector concentrations (in particular in cyclical sectors such as retail, automobiles, and other sectors with a negative outlook);
- Obligor concentration;
- High proportion of loans underperforming versus management budget/manager base case;
- Low rated assets.

More details on Fitch's analysis of CLO portfolio positioning can be found in Appendix 1.

The extent to which the analysis presented in *Appendix 1* reflects positive credit/sector/structure selection across CLO managers will be empirically tested over the next few years. Fitch believes that the level of CLO portfolio losses relative to the market will ultimately depend on - and reflect - the overall skill of the manager and, in particular, investment decisions taken in 2006-2007. Indeed, extrapolating from Fitch's European leveraged loan shadow portfolio, 2006-2007 transactions account for about 90% of outstanding transactions.

State of the European CLO Manager Industry

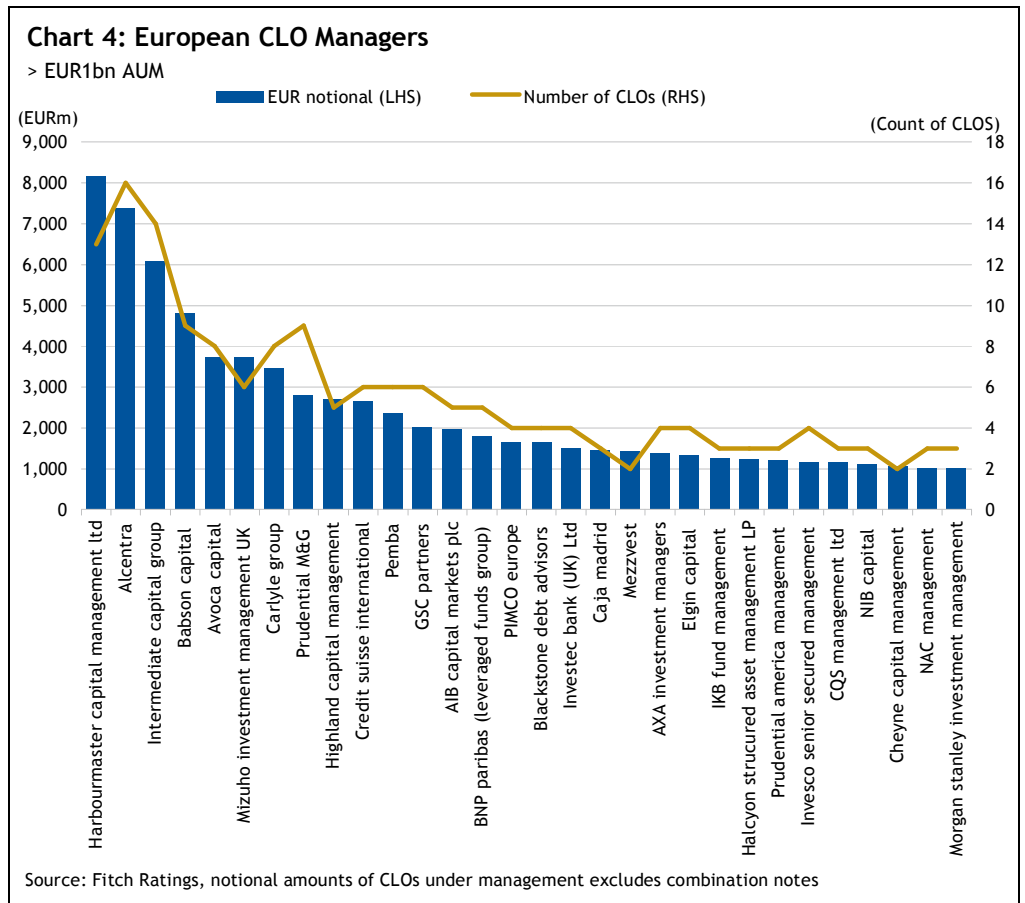
A Fragmented Industry

As of June 2008, Fitch counted 62 European CLO managers¹. The following chart (Chart 4) ranks the largest European CLO managers by assets under management as of June 2008.

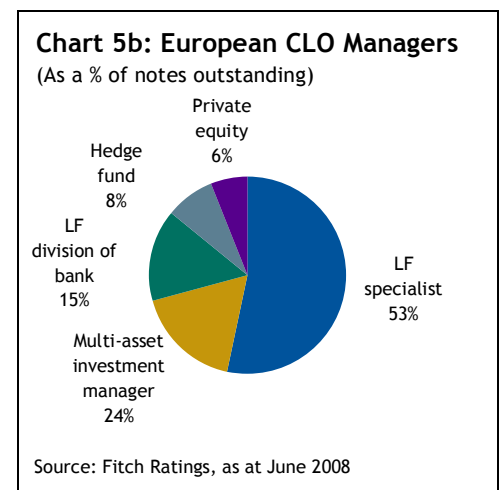
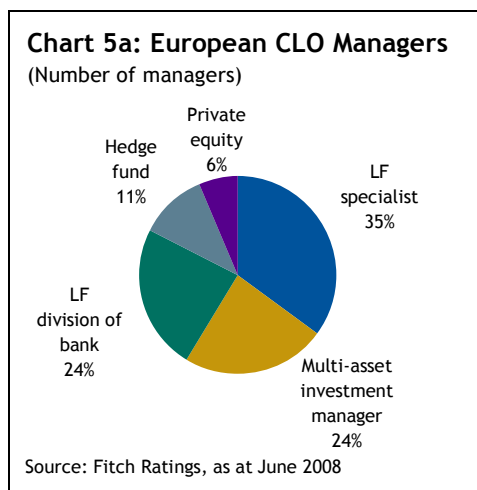
While it is highly fragmented, the industry remains dominated by a few large managers. For instance, the five largest players possess almost one third (27.6%) of total CLOs under management. By contrast, over half (51%) of all managers have less than EUR1bn CLOs under management, while 53% have only one or two CLOs under management (of the latter, 79% launched their first CLO in 2006 or 2007).

The characteristics of the CLO manager population continue to broadly mirror those of the European asset management industry, being polarised between small specialist and large diversified investment management companies. Leveraged finance specialists are either independent (Harbourmaster, Avoca) or owned by a large bank (Alcentra, Mizuho Investment Management (UK) Limited) or the leveraged finance division of a large financial institution (Allied Irish Bank Capital Markets). By contrast, diversified or "multi-asset" CDO managers that have a CLO business (Invesco, Prudential M&G or Babson Capital) are generally subsidiaries of large financial conglomerates. Other important players include hedge funds (Cheyne Capital) and private equity firms (Carlyle Group). In the majority of cases, regardless of the company they belong to, the teams in charge of CLO management tend to be small, empowered and flexible.

¹ European CLO managers are defined as companies which manage CLOs primarily backed by European leveraged loans, from an office based in Europe



The following charts (Charts 5a and 5b) give an overview of the current composition of the European CLO manager population, as of June-2008:

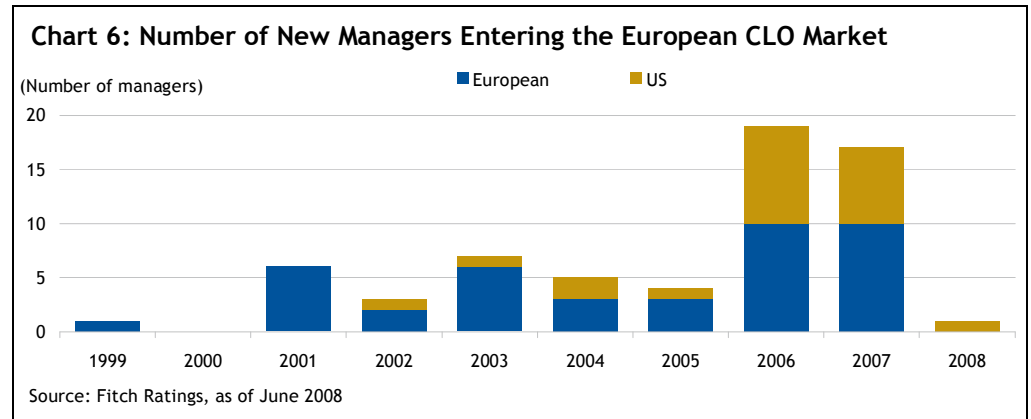


An Accelerated Industry Cycle

Since the beginning of 2006, the CLO manager industry in Europe has been characterised by a rapid influx of new entrants. According to Fitch's estimates, around 58% of the current population of managers entered the market during 2006 or 2007. The following chart (Chart 6) details the number of new entrants to the European CLO market by year.

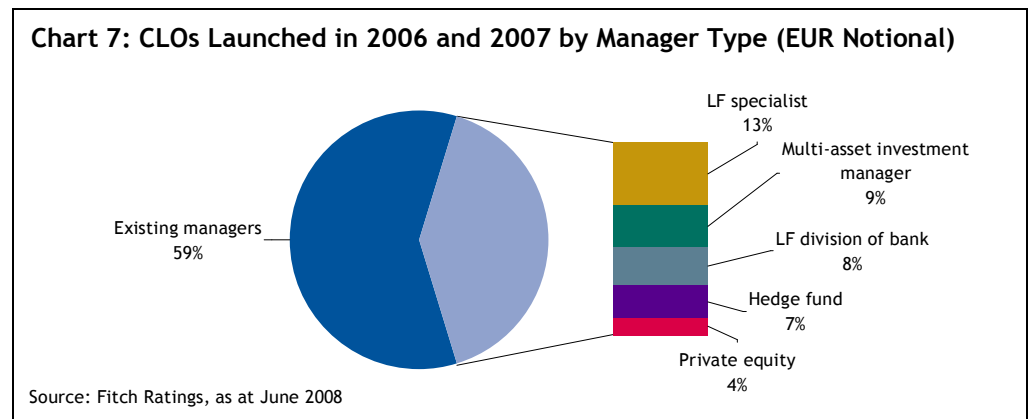
The growth in the number of European CLO managers in 2006 and 2007 was driven primarily by demand from a market awash with liquidity and low barriers to entry -

e.g. low capital requirements, favourable warehousing risk sharing agreements or lack of investor discrimination - as reflected in the minimal tiering in new CLO issues pricing between managers at the time.



As identified in Chart 6 above, one of the main drivers behind the growth of the European CLO management industry has been the influx of established US CLO managers². In 2006, almost half of the new managers entering the market were US managers, while around 40% of all new managers in 2007 were US managers.

The following chart (Chart 7) illustrates the classification of managers that launched CLOs during 2006 and 2007:



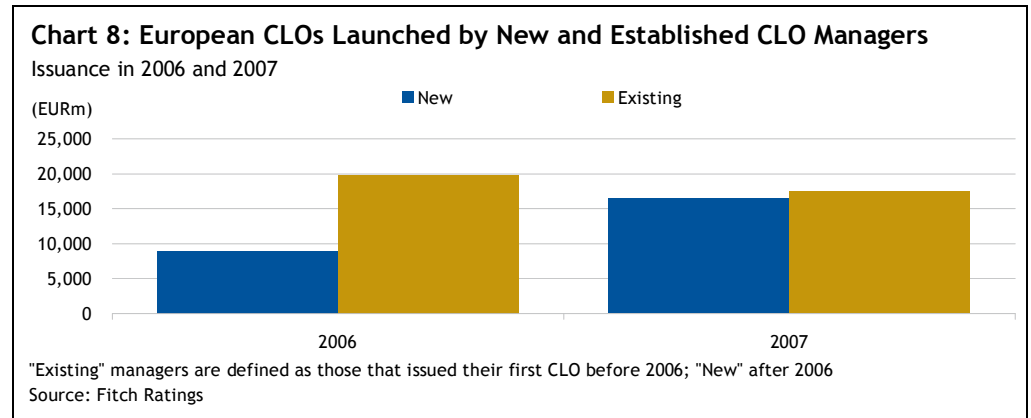
The majority of managers that launched European CLOs during 2006 and 2007 were existing CLO managers; however, new managers also launched a substantial amount of CLOs at 41% of the total CLO issuance in 2006 and 2007. Of these new managers, leveraged finance specialists contributed the most (13% of total issuance), followed by multi-asset managers and leveraged finance divisions of banks at (9% and 8% of total issuance, respectively).

While established CLO managers dominated CLO issuance in 2006, newly established managers almost equalled the rate of issuance by established managers in 2007³. The new managers issued CLOs aggressively to rapidly expand AUM. The agency notes that the total CLO issuance by established managers in 2007 (around EUR17.4bn) was lower than the total issuance by established managers in 2006 (around EUR19.8bn). While this was largely driven by market dynamics, CLO

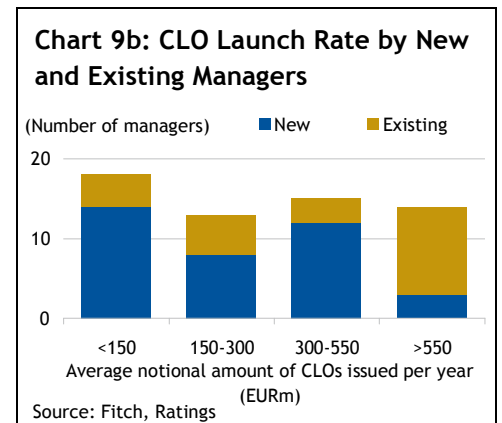
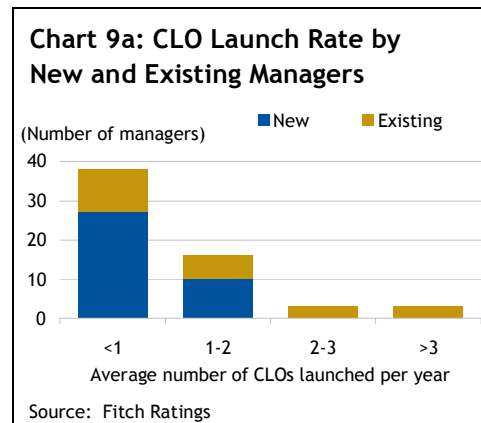
² US (CLO) managers are defined in this report as companies which manage CLOs primarily backed by European leveraged loans, from an office based in Europe but whose parent is headquartered in the US

³ In charts 7, 8 and 9, "New" managers refer to those CLO managers that issued their first transaction after 1 January 2006

issuance by new managers almost doubled, from EUR8.9bn in 2006, to EUR16.4bn in 2007, as demonstrated in Chart 8 below:



Nonetheless, among individual managers, the agency notes that the rate of issuance of CLOs per year since January 2006 has been strongest among the most established managers. Alcentra, Harbourmaster and ICG have all launched more than three CLOs each per year since January 2006, whereas their nearest rivals, Avoca, Babson and Carlyle have launched between two and three CLOs per year, on average since that time. In fact generally only the most established managers have successfully launched CLOs in 2008 to date. In terms of size of CLO, established managers have also dominated issuance, whereas the average annual issuance of new CLO managers has tended to be smaller, as illustrated in the following two charts (Charts 9a and 9b):



In terms of numbers of CLOs issued, the mean and median rate was 0.98 CLOs per year; in terms of notional, the mean rate was EUR420m per year and the median rate was EUR290m per year. Not only have the largest CLO managers launched the most CLOs, they have also issued the largest CLOs. By comparison, smaller managers have issued fewer and smaller CLOs, which will clearly impact the fee revenue stream of those managers.

The abrupt disappearance in late 2007 of the drivers behind CLO manager population growth (see above) have precipitated industry decline. Indeed, the slowdown in CLO issuance - due to a sizable contraction in the number of investors (in particular AAA investors), heightened investor discrimination as regards managers and increased capital intensity of the business (because managers now have to put first loss capital into warehouses) - has made the industry significantly less attractive for managers. The consequences for European CLO managers are examined in the sections below.

CLO Manager Viability

The financial resilience of CLO management platforms is of vital importance in the context of weaker credit market trends and a significant slowdown in CLO issuance. Fitch has therefore constructed a hypothetical CLO management platform, based on observed practices, to stress the financial viability of that platform.

CLO Management Fee Structures

A CLO manager's revenues are primarily driven by management fees, complemented by investment returns where the manager holds a piece of the equity in its own CLOs. Costs are primarily staff driven (roughly 75% of total costs).

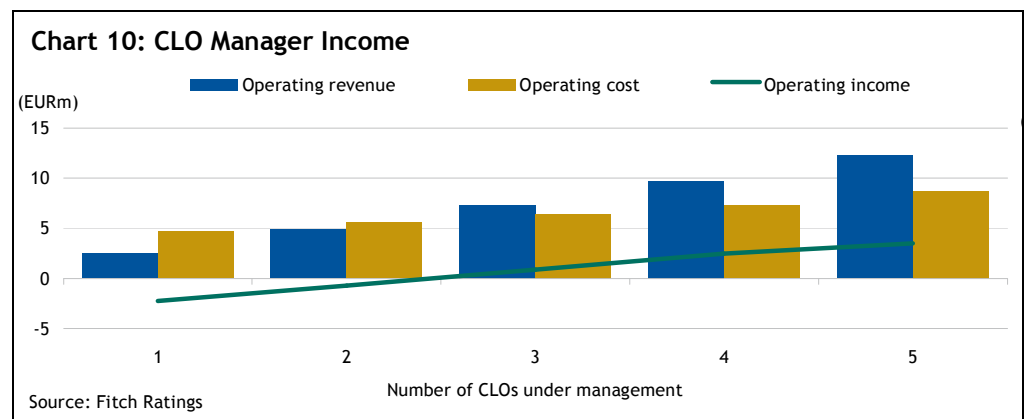
CLO manager fees are typically broken down to include a senior fee, a subordinated fee and an incentive fee.

The average senior fee, based on Fitch's representative sample of European CLOs (see *Appendix 2*) was 0.19% per annum (median: 0.15%), while the average subordinated fee was 0.42% per annum (median: 0.45%). The incentive collateral management fee takes a number of forms and is dependant on the manager achieving a defined internal rate of return (IRR) hurdle.

In addition to fee income, many CLO managers typically invest in the equity of their CLOs to demonstrate alignment of interest with investors. In these cases, managers can benefit from both the incentive fee (if the incentive fee hurdle is reached), and from the returns generated by the equity note.

CLO Manager Profitability in a Benign Credit Environment

A European CLO manager typically requires at least three, average-size performing CLOs under management before the business becomes profitable. This relationship is detailed in the following chart (Chart 10), based on assumptions made by Fitch as regards constructing its hypothetical CLO manager profile (see *Appendix 3*):



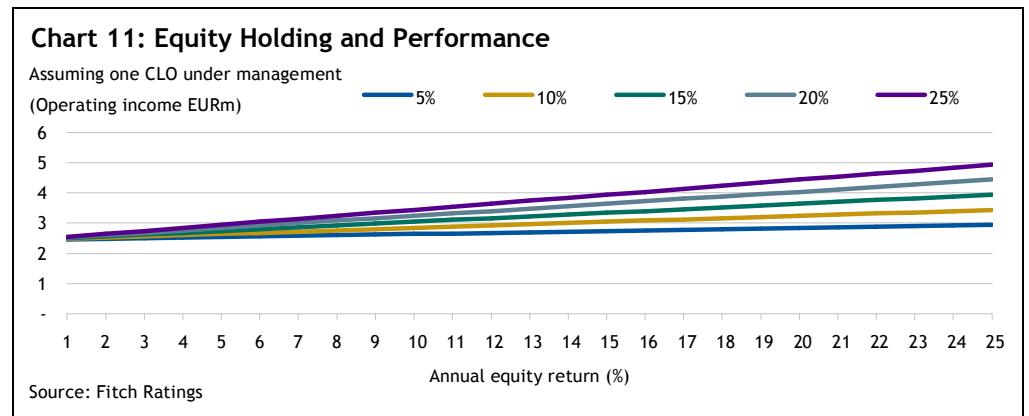
Of the CLO managers counted by Fitch in Europe, 51% had only one or two CLOs under management as of May 2008. According to Fitch's hypothetical scenario presented above, and based on revenues only from CLO management fees, these CLO platforms are loss making. However, managers improve their profitability by investing in the equity of their CLOs, assuming that the CLO is performing (see below), and Fitch notes that many managers also manage leveraged loan funds or other structures in addition to the CLOs, which will contribute to revenues and, potentially, overall profitability.

The manager becomes marginally profitable with three CLOs under management (assuming no other businesses and no equity investment), but return on invested capital remains mediocre.

With more than four CLOs under management Fitch believes that the business starts generating economies of scale and becomes sustainable.

Strong Equity Returns in European CLOs Boost Manager Profitability

It is common for CLO managers to invest in the equity of their CLOs under management to demonstrate alignment of interest with investors. Managers reviewed by Fitch typically hold 5%-10% of the equity tranche, thus benefiting from returns to the equity note, but also exposing themselves to first loss should the portfolio suffer any defaults. The agency notes that managers are often forced to take larger equity positions in their first CLOs.



Equity returns on European CLOs average 16.1% (median return of 15.0%) on a cash-on-cash basis over a sample of 41 CLOs reviewed by Fitch (see *Appendix 4* for full details). Chart 11 above illustrates the relationship between equity performance and equity holding on revenues.

Based on Fitch’s assumptions, if the manager invests in the equity of its own CLOs (assuming a 12% annual equity return), the breakeven point moves to two CLOs under management. Conversely, should the manager’s CLOs suffer defaults, the equity note will be written down first, resulting in the manager taking losses on its invested capital.

CLO Manager Income is Highly Dependant on Subordinated Fees

Should CLO performance begin to deteriorate, coverage test triggers may breach (primarily due to defaults, although downgrades to ‘CCC’ or below can also impact over collateralisation levels), which will result in the diversion of interest and principal to pay down senior liabilities until that breach is cured. This diverts interest and principal away from junior liabilities - including the subordinated management fee - and equity note.

The potential loss of revenues from the subordinated management fee is significant, because it represents two thirds of a manager’s total fee income. If a manager’s subordinated fee income was reduced by 25% (and, by default, no equity revenues) the break-even point would move up to four CLOs under management, with marginal profitability from five or more CLOs under management, as illustrated in the following chart (Chart 12).

Looking across the entire CLO manager industry (around EUR85bn CLO AUM), a 25% reduction in subordinated fee income would cause the industry to lose around EUR90m (-17.2%) in revenue per year, based on Fitch’s sample.

While the above example represents a systemic shock, in reality a manager may only experience a loss of revenue in one or two of its CLOs, due to structural differences. Chart 13 illustrates the impact on manager operating income if one or more of its CLOs under management suffer a revenue loss.

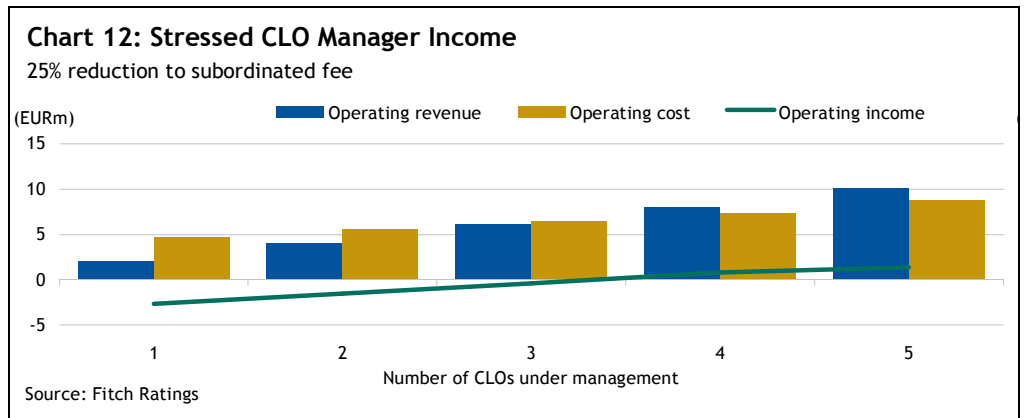
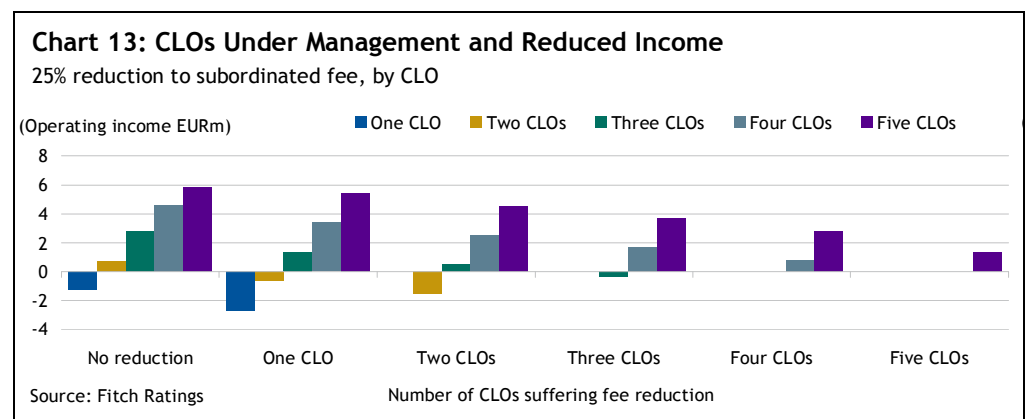


Chart 13 below details the relationship between revenue reduction in a manager’s individual CLOs under management and operating income. Even if a manager has a substantial number of CLOs under management, should subordinated fees in any of the CLOs be reduced, this will substantially reduce the manager’s operating income. In the above chart, for example, where a manager has three CLOs under management, the business is marginally profitable where all fees are normal. However, as soon as one CLO suffers reduced fee income, that marginal profitability is almost completely wiped out. Interestingly, in this analysis, scale counts: where a manager has five CLOs under management, even if all of those CLOs suffer a fee reduction, the manager still just about breaks even. Larger managers are therefore better placed to resist both systemic and idiosyncratic performance reductions.



Outlook on the CLO Manager Landscape

The Features of the Survivors

The Critical Competitive Advantage

Whether or not a European CLO manager has a critical competitive advantage can be a key factor in its survival fortunes. This competitive advantage can be a combination of factors, largely driven by increased investor discrimination between managers. Such factors include:

- Established CLO market presence, size and financial strength;
- Proven track record in European leveraged loan and CLO management, across the cycle;
- Solid, recurrent investor base.

The above characteristics, which are perceived by investors as signs of stability in a turbulent market, are necessary conditions for managers to be able to raise assets at all levels of the CLO capital structure in the next couple of years. Other factors include:

- An ability and willingness of the sponsor, if any, to support the CLO activity should it become unprofitable;
- An ability to retain key people. The risk of staff departure is largely a function of the above factors.

The Winning Corporate Strategy (If Any)

To the extent that observed market changes reflect medium- or long-term trends, asset management companies need to revise their core strategy, to reach their growth and profitability objectives.

Fitch observes that, as of June 2008, most CLO managers had not changed and did not plan on changing their fundamental strategy.

Large established managers, for which the European CLO business is of strategic importance, expect to continue to grow as investors will clearly favour this type of manager in new issues. In the absence of new CLO issuances, their critical mass allows this type of manager to remain profitable in the absence of new CDO issuance.

On the other side of the spectrum, smaller, less established managers will have more pressure to develop new business initiatives to diversify their sources of revenues. In particular, pure-play CLO managers with no critical size will have to diversify or exit the market in the event of long-term CLO market closure. These managers will have to carefully manage the risks involved in deviating from their original expertise.

CLO platforms which are either an extension of the leveraged loan business or part of a larger organisation are better positioned, even if they have not reached the critical size in terms of AUM. It is worth pointing out that in this category, managers which are not serial issuers but issued CLOs opportunistically, may not all be threatened; this is assuming that cash flow CLOs are just one investment vehicle among others, all of which support their core credit expertise.

In all cases, managers focus their product development efforts on low levered funds (or flexible leverage), possibly using short-term financing. Only the largest and longest established managers have either priced a CLO or have a CLO pipeline at the time of writing.

Commitment to the CLO Business

The considerations above enable Fitch to classify the European CLO manager population according to its level of commitment to the European CLO and leveraged loan market. Fitch analysts have exercised expert judgement in characterising this level of commitment for each European manager, depending on the strategic importance of the CLO business, ability and willingness of the sponsor to support the CLO platform, profitability and sustainability of the CLO business.

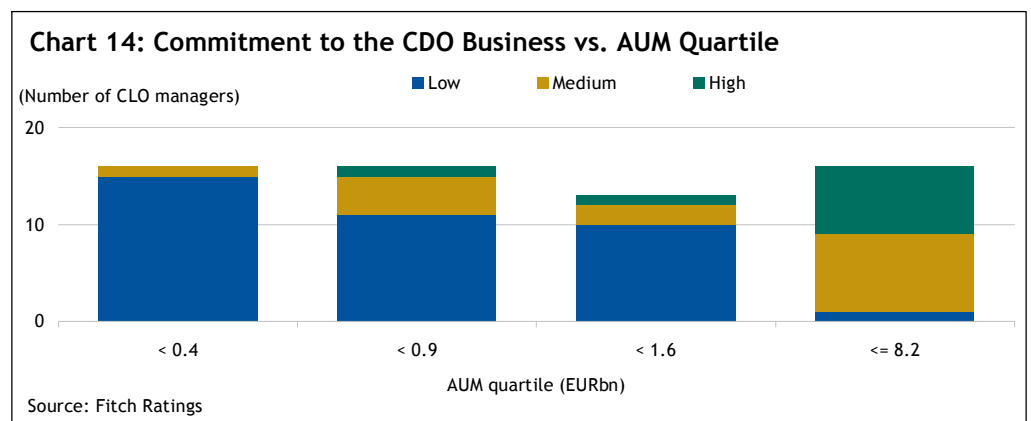


Chart 14 above shows that, ultimately, the larger the CLO manager, the stronger its commitment to the business. Exceptions are small independent managers, whose business model is heavily reliant on CLO management. The fact that smaller managers show the least commitment to the CLO business opens the door to consolidation in the industry.

CLO Manager Consolidation

The Scope of Consolidation

Fitch estimates that around 20% of European CLO managers may exit the market in the next three years. The main reasons for this are poor profitability of the CLO platform relative to the manager's commitment to the business, poor growth prospects or company-wide financial stress. Furthermore, even if a CLO platform breaks even, management may find the return on invested capital too low and the operations funding required too high to maintain the business. Likely candidates for consolidation are those managers which have not reached critical mass in terms of AUM and thereby have not demonstrated sustained profitability. Ultimately, the main driver behind CLO manager industry contraction is that investors (and bankers) are increasingly discriminating between managers based on their track record and financial strength; they are thus clearly favouring established managers.

US CLO managers that opened an office in Europe to manage European CLOs represent a particular case for CLO manager consolidation. Almost 80% of such practices established a European presence after 2006 and almost 60% have two CLOs or less under management. According to Fitch, about half of all US CLO managers are likely to close their European operations in the next three years, either managing the CLO from their US headquarters to save cost or simply resigning as manager.

CLO Manager Replacement

The CLO managers surveyed by Fitch generally show an interest in picking up existing mandates as a way of increasing their AUM.

There are several reasons why a CLO manager replacement event has not yet occurred in Europe. First and foremost, replacing a manager is a cumbersome process, as explained in Fitch's research "*Overview of the CDO manager replacement process*", dated 8 November 2007. Furthermore, a manager replacement event is currently more likely to originate from a manager decision (e.g. manager resignation) than an investor initiative (i.e. a manager termination and replacement voting process). To date, CLO equity investors have shown no interest in changing their managers because overall returns continue to be in line with expectations. That said, few managers are currently willing to be removed as they continue to receive fees on their CLO mandates and are seemingly keen to wait and see if conditions improve before taking any decision. Furthermore, to preserve their reputation, managers may not wish to acquire existing CLO mandates as such portfolios or structures may be inconsistent with their own standards.

Other Forms of Consolidation

Fitch expects only a handful of merger and acquisition (M&A) activity among CLO managers in the next three years. The agency believes managers can more efficiently achieve their objective to reach critical mass in AUM through the acquisition of replacement mandates. For instance, M&A is generally defined in a CLO Collateral Manager Agreement (CMA) as a "cause" under which the manager can be removed. Therefore, managers have no guarantee that they would achieve their goal of increasing AUM through M&A.

The outright buy-out of a small manager by a larger player is unlikely also, owing to fear of reputation loss (see above) or an inability to amortise acquisition costs. A further complication involves the difficulties involved in valuing a CLO manager business, particularly with regards to the incorporation of high goodwill and

discounts for key man risk. Finally, the M&A pool is limited by the fact that less than five European CLO managers⁴ are fully independent, with only a couple being considered as pure-leveraged loan players.

However, consolidation may stem from small managers (managing all types of CDOs) clubbing together to increase AUM, to save costs through resource or cost sharing, and to improve sourcing capabilities while demonstrating deeper collective staffing experience. This type of consolidation can be achieved through forms other than straight mergers.

⁴ Excluding European based-subsiidiaries of US managers

Appendix 1: A Closer Look at CLO Portfolios

Leveraged Loan Portfolio Performance

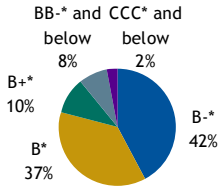
This appendix reviews the credit quality profile of leveraged borrowers. First of all, Fitch focuses on the IDR profile of its outstanding live portfolio of shadow rated European leveraged credits, which numbered 303 at end-Q208 (this universe excludes typically larger and higher rated public high-yield borrowers by the agency). Given the trend towards recapitalisations and sales to other financial sponsors seen between 2004 and H107, it is no surprise that Fitch’s portfolio principally comprises 2006/2007 vintage transactions. The most significant result of this distribution is that the vast majority of Fitch’s live portfolio dates from a period of aggressive structuring and leverage. As shown in Chart 15, this has had an inevitable impact on the distribution of ratings within the portfolio, as the IDRs assigned between 2005 and 2007 were overwhelmingly (83%) in the ‘B-*/‘B**’ range, in comparison to 2003-2005 when ratings were in the ‘B*/‘B+**’ range. However, the agency notes that only around 20% of the portfolio of a typical CLO rated by Fitch is rated ‘B-*/‘B**’ (around 40% ‘B**’).

As Chart 16 illustrates, Fitch case assumptions are largely holding and the majority of sectors exhibit Stable Outlooks and ratings stability. However, there is a visible trend towards Negative Outlooks given the greater downward performance deviation from the original forecasts across a number of sectors and therefore the lower rating headroom available.

The agency has also compiled a summary of the performance of the highest risk credits, i.e. those rated ‘B-*/‘B**’ or below (42% of Fitch’s portfolio shadow ratings as of Q208), against both management and Fitch expectations. The analysis is limited in scope to 80 credits (approximately 70% of the 115 credits in that rating category at Q108).

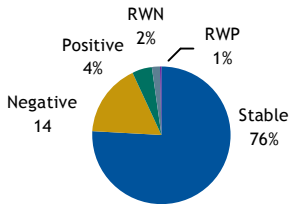
Against the aggressive management projections, these deals are underperforming by just over 6% on average in terms of EBITDA, as illustrated in Chart 17 below. This is not an insignificant underperformance given the relatively recent composition of the majority of these management plans. If such a performance were to continue over the life of the credit, even though some issuers may remain current in terms of their debt service, the level of refinancing risk would nonetheless remain high. This increased refinancing risk is often factored in the current rating level.

Chart 15: Fitch Portfolio Ratings



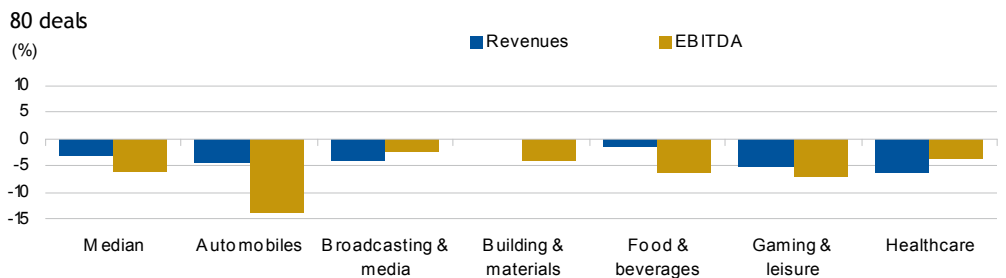
Source: Fitch Ratings

Chart 16: Fitch Portfolio Outlook



Source: Fitch Ratings

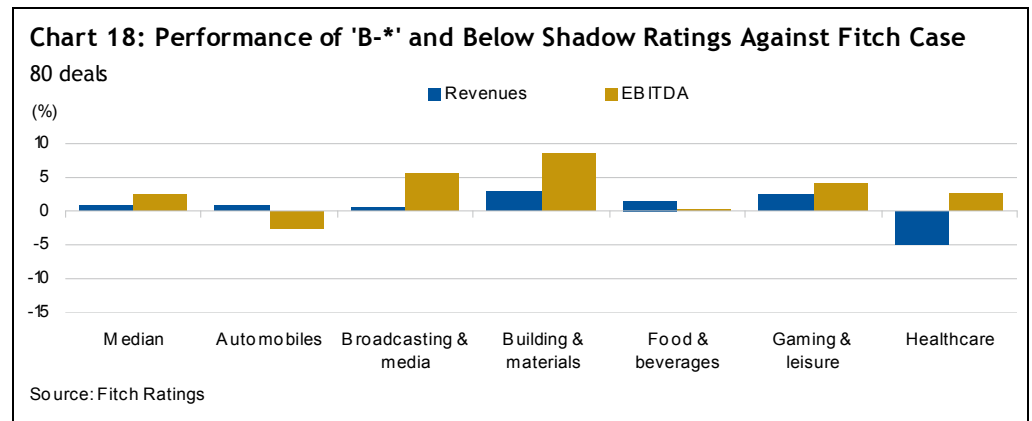
Chart 17: Performance of ‘B-*/‘B’ and Below Shadow Ratings Against Management Case**



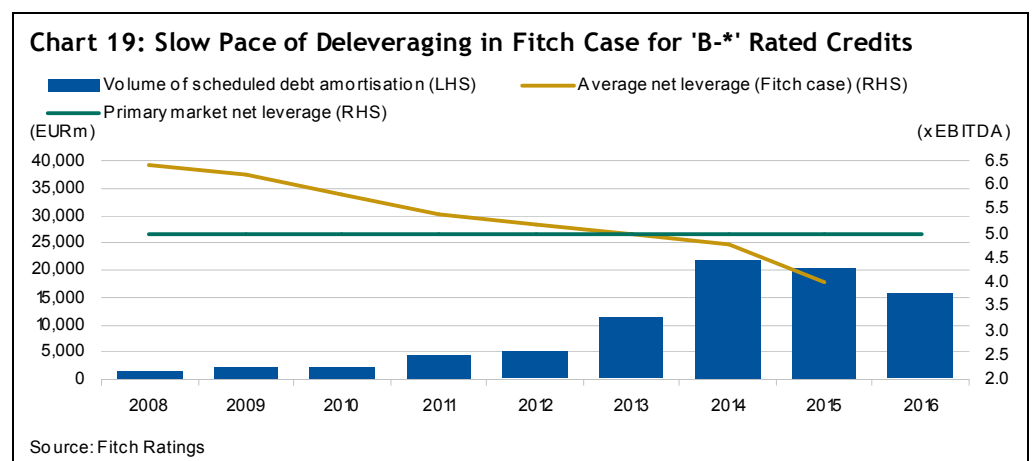
Source: Fitch Ratings

* The ‘*’ suffix indicates a shadow rating prepared using limited information, which is not fully comparable in all regards with published ratings at that level. Please see the agency’s public website (www.fitchratings.com) under “Resource Library” - “Ratings Definitions” for a formal description of Shadow Ratings.

When current performance is compared against Fitch case projections, one can conclude performance is broadly on target, with revenues and EBITDA marginally ahead of the Fitch case (as illustrated in Chart 18 below). Performance in line with the Fitch case essentially supports ratings stability. In the future, superior performance would likely result in positive rating actions and a revision of the Fitch case in the event of a rating upgrade. Likewise, underperformance against the Fitch case may result in a negative rating action, towards the 'CCC*'-'C*' category, as it becomes increasingly clear that the credit in question is becoming stressed.



Fitch notes a slow process of de-leveraging according to its Fitch case projections, after factoring in many of the challenges impacting management performance. Indeed, the analysis in Chart 18 demonstrates that, should the 'B-*' shadow rating portfolio continue to perform to the Fitch case, de-leveraging will be slow, as a lack of scheduled debt amortisation is not offset by expanding EBITDA levels (as in the management case). Chart 19 further demonstrates that debt repayments do not become material until 2013 (year six/seven), at which point the average Fitch case net leverage level for these deals is still 4.9x, a reduction of just 2.5x in six/seven years on average.



Another warning signal refers to the liquidity constraints that some leveraged borrowers could face against tight credit conditions. This poses the question of how well funded certain leveraged business models are, considering the tendency in pre-crisis transactions to fund growth plans (in relation to capex/acquisitions/restructuring) with committed debt facilities.

Fitch believes that, in so far as the debt markets remain difficult to access, certain borrowers will be more reliant on the equity sponsors' ability and willingness to inject additional capital into the business to withstand an economic/industry cycle or, alternatively, participate in a consolidating industry looking for a higher return

on an exit event. Furthermore, other borrowers could be left tapping alternative, and less traditional, funding options to finance growth and working capital. These options would point towards asset-based lending practices, including asset securitisation or sale-and-lease back-type structures. Unfortunately, the trend towards “asset light” leveraged buy-outs (LBOs) in sectors such as Business Services and, to a lesser extent, Broadcasting & Media (where the asset base mainly comprises intangibles and goodwill), would make this route a lot more difficult to pursue if any significant liquidity needs materialise.

CLO Portfolio Composition

An examination of a representative sample of European CLOs gives an overview of overall portfolio concentration.

The table below (Table 2) shows an overview of industry concentration across 45 Fitch rated and non-Fitch rated European CLOs.

Table 2: CLO Industry Concentration

Fitch industry	Percentage (%)
Broadcasting & media	14.24
Business services	9.14
Telecommunications	7.41
Chemicals	5.85
Cable	5.49
Gaming, leisure & entertainment	5.47
Health care	5.21
Building & materials	4.02
Retail (general)	3.96
Food, beverage & tobacco	3.82

Source: Fitch Ratings

Similarly, the table below (Table 3) shows the most widely referenced credits across the same CLO sample.

Table 3: CLO Obligor Overlap

Obligor	Percentage of CLOs where referenced (%)
Ineos group	84.4
Smurfit kappa acquisitions	77.8
Springer	77.8
Gala group	68.9
ISS	68.9
Kabel	68.9
Wind	68.9
HCA inc.	66.7
Vivarte	66.7
Yell group plc	64.4

Source: Fitch Ratings

Appendix 2: CLO Fee Structures

In constructing its hypothetical CLO manager case study, Fitch based its analysis on information obtained during reviews of managers, and through a detailed review of CLO offering documents. Fitch rates seven managers of European leveraged loan CDOs and has reviewed substantially more. The agency reviewed the offering documentation of 140 CLOs (Fitch-rated and non-Fitch-rated) issued between January 2003 and December 2007 to better understand common practices in terms of manager compensation and to act as a basis for its stress test on manager revenues. These documents were all sourced from public sources, notably the Prospective Directive of the Irish Financial Regulator (www.ifsra.ie/).

Management fees are paid to the manager in accordance with the interest and principal priorities of payment, as detailed in the offering documentation. Fees are typically calculated either as a percentage of the aggregate collateral balance at the calculation date or the average collateral balance over the calculation period, and are paid in arrears with the payment of interest to the notes. The senior fee typically ranks fourth in the interest (and principal) waterfall(s), after taxes, trustee fees and administrative expenses (both to a senior cap). The average senior fee in Fitch's sample was 0.19% per annum, and ranged from 0.70% to 0.05%. The median senior fee was 0.15%.

The subordinated fee is also calculated in the same way as the senior fee, but typically ranks junior in the interest (and principal) waterfall(s), after all interest payments to the rated notes, and payment of trustee and administrative expenses in excess of the senior cap. Where there is insufficient interest available to pay the subordinated collateral management fee, the management fee will be deferred and will accrue. The average subordinated fee, based on Fitch's sample, was 0.42% per annum, ranging from 0.55% to 0.08%. The median subordinated fee was 0.45%.

The incentive collateral management fee takes a number of forms. It is typically related to an incentive fee threshold, that is, an IRR target (calculated according to defined terms) for the junior or equity note. Once this threshold has been met or exceeded, the collateral manager is then entitled to either:

- A share of the excess interest flows to the equity or junior note; or
- An additional payment calculated as a percentage of the aggregate collateral balance as of the calculation date.

In Fitch's sample, the average junior (or equity) note IRR threshold was around 12%, after which typical payments were:

- A 20% share of the excess interest flows to the equity or junior note; or
- An additional payment of, in general, 0.10% of the aggregate collateral balance as of the calculation date.

Additionally, Fitch encountered numerous other structures in its review. These included, but were not limited to, upfront management fees expressed in cash terms, mezzanine management fees, tiered incentive management fees, incentive management fees driven by or including a component related to the portfolio weighted average spread at the calculation date, and other complex structures.

Appendix 3: CLO Manager Assumptions

In constructing its CLO manager base case, Fitch made a number of assumptions. These assumptions were based on observed practices at managers reviewed by Fitch, and on its review of CLO offering documentation; they are summarised as follows:

Table 4: CLO Manager Assumptions

CLO assumption	Detail
Average CLO size	EUR400m
Average number of obligors per CLO	60
Manager assumption	Detail
Basic staff detail	2 senior managers; 1 portfolio manager; 3 research analysts (20 names/analyst); 1 back-office; 1 support.
Incremental staff detail	+1 portfolio manager per additional 2 CLOs; +1 research analyst per additional 20 names (70% overlap between CLOs); +1 back-office per CLO; +0.5 support person per CLO.
Cost base	75% staff (market rate including bonus, pension, social security etc); 25% other.
Start-up costs	EUR3m Loaded into CLO cost base from CLO1 and decreasing until CLO4.
Equity assumptions	Detail
Average equity notional	EUR40m
Average equity return (cash-on-cash) (%)	12
Equity investment per CLO	(%)
	CLO 1 20
	CLO 2 10
	CLO 3 10
	CLO 4 5
	CLO 5 5

Source: Fitch Ratings

Appendix 4: CLO Equity Performance

CLO equity holders receive all interest and principal amounts remaining once all of the senior liabilities have been satisfied. To calculate its equity performance metrics, Fitch reviewed the equity performance of 41 CLOs (both Fitch-rated and non-Fitch-rated) that closed between 2002 and 2007 and which had made at least one distribution. In total, Fitch's sample covered 218 individual equity distributions.

Based on this sample, the average, annualised equity return (on a cash-on-cash basis) was 16.1% (median 15.0%). The average distribution (both quarterly and semi-annually) was 6.4% (median of 6.7%). On average, each CLO in Fitch's sample had made five distributions (median of four) and as a result had returned an average of 31.3% of equity principal to investors (median of 22.5%).

Certain Caveats to Fitch's Equity Performance Data

Leverage

Fitch did not adjust equity data collected for the effects of leverage. All else being equal, more levered CLOs will generate superior returns for the equity holder. In Fitch's sample, the average size of the equity note was 9.0% of the capital structure (median of 9.6%), for an effective leverage of 12.8X on average.

Asset Type, Quality and Spread

Fitch did not adjust equity performance for asset type, quality or spread. Investors expect to receive a better return from, for example, mezzanine assets, as compared to senior assets, due to the increased risk inherent in investing lower down in the capital structure. These assets will typically be lower rated, while paying a greater spread. Fitch did not review the composition of the CLOs in its sample in terms of asset quality, type or spread.

Number of Distributions

The first coupon period is typically longer than the following distribution periods. Should the manager complete the ramp-up quickly this can result in a larger than average first coupon, due to it being fully invested over a longer period of time. Conversely, if the manager fails to ramp the CLO up quickly, negative carry will reduce the first coupon. Six of the CLOs in Fitch's sample had only made one distribution; excluding these CLOs, the average equity return was 16.3% (median 15.5%). The average variance of distributions in Fitch's sample was 0.06% (median 0.02%).

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