

Loans: amend and extend

Originally published in the US Credit Alpha on July 31, 2009

Introduction

The frequency of loan amend-and-extends has surged as companies attempt to address their upcoming maturities ahead of time. Companies that are able to amend and extend generally improve their near-term credit profiles. Existing stubs of extended loans have jumped in price after the extension announcement. In addition, bonds that are leapfrogged by the extended loan tend to outperform upon announcement of the extension.

From an investor standpoint, we see the best trading opportunity as owning the loans and shorter dated discount bonds of loan extension candidates that are likely to be eclipsed by the extended loan maturity. We identify a number of specific issuers that could benefit from these themes. In the structured space, there is significant variation in CLO exposure to extension risk. CLO Aaa prices of deals with high extension risk should price 3-5pts lower than deals with low extension risk. Aa prices of deals with high extension risk should price 5-13pts lower.

As discussed in our June 19 focus piece, "The Future of the High Yield and Leveraged Loan Markets," the maturity wall in 2H09-2011 is not intimidating: it consists of \$107bn in bonds and \$36bn in institutional loans. However, further out, institutional loan maturities are concentrated, with \$431bn in the 2012-2014 timeframe, while their associated pro-rata revolvers mostly expire in 2011-2013. Although high yield bond takeouts, paydowns, loan issuance, and defaults are expected to digest a portion of the maturities, we believe loan extensions are an important tool whereby the market pushes out the loan refinancing cliff (Figure 1).

Year-to-date, of the 56 revolver and 24 term loan extensions that have been launched, 38 and 17 have been approved, respectively. The average revolver has been extended by 1.7 years for a spread increase of 220bp and associated amendment fee of 44bp. Meanwhile, the average term loan has been extended by 2 years for a spread increase of 204bp and an amendment fee of 29bp (Figure 1). Extensions have typically been associated with par paydowns of existing tranches, some form of covenant relief as well as Libor floor additions. In 2009 the term loan maturity cliff had been shifted forward by \$13.9bn (Figures 2 and 3).

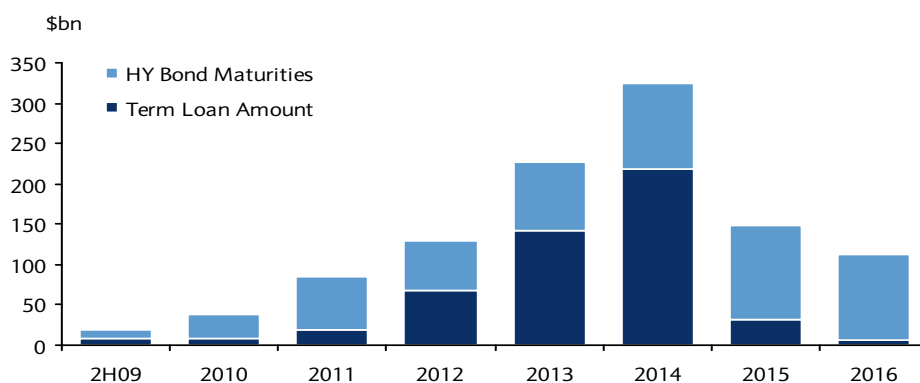
**High Yield &
Leveraged Loan Strategy**
Gautam Kakodkar
+1 212 412 7937
gautam.kakodkar@barcap.com

Bradley Rogoff, CFA
+1 212 412 7921
bradley.rogoff@barcap.com

**Structured Credit
& Volatility Products**
Madhur Duggar
+1 212 412 3693
madhur.duggar@barcap.com

Batur Bicer
+1 212 412 3697
batur.bicer@barcap.com

Figure 1: The Leverage Finance Maturity Cliff



Source: Barclays Capital, S&P LCD

Figure 2: YTD Summary of Loan Extensions Approved

	Launched	Approved	Including a Libor Floor	Average Extension (Years)	Average Spread Increase (bp)	Average Amendment Fee (bp)
Institutional	21	17	7	2.0	204	31
Revolvers	53	36	10	1.7	220	44

Source: Barclays Capital, S&P LCD

Figure 3: Recent Loan Extensions Launched

	Sensus	Georgia-Pacific	Rockwood	SunGard	Graham Packaging	Atlantic Broadband
Announce Date	6/23/09	6/16/09	5/28/09	5/28/09	5/13/09	5/21/09
Approval Date	7/10/09	6/26/09	6/9/09	6/9/09	5/21/09	6/5/09
Loan Rating	BB/Ba2	BB+/Ba2	BB-/Ba2	BB/Ba3	B+/B1	B+/B1
Original Spread (bp)	200	200	175	175	225	225
New Spread (bp)	450	325	425	363	425	475
Spread Increase (bp)	250	125	250	188	200	250
Original Maturity	12/17/10	1/27/13	7/1/12	2/1/14	10/1/11	9/1/11
New Maturity	6/17/13	12/27/14	7/30/14	2/28/16	6/1/13	6/1/13
Amendment Fee (bp)	50	5	50	25	-	-
Libor Floor	2.50%	n/a	2.00%	n/a	2.50%	2.00%

Source: Barclays Capital, S&P LCD

Extension Mechanics

Although each loan extension has case-specific nuances, generally issuers follow a similar process to complete the transaction: gather lender interest, garner the necessary approvals, and roll commitments into the new extended tranche.

- **Lender interest**—Issuers determine the size of the stub versus extended tranche by gauging lender interest in the extension. We believe CLO managers looking to extend deal lives in general will be incentivized to participate in loan extensions and will be able to do so as long as they do not extend past the stated maturity date of the deal.

- Consents, Waivers, Covenants—extensions typically require 51% lender approval vote, but this could be higher in some instances. The percentage of votes necessary for consent is generally determined by the definition of “required lenders” or “affected lenders” in the particular credit agreement. “Required lenders” is typically defined to include lenders with a majority of credit exposure to the borrower, i.e., holders of >50% of the outstanding term loan and revolver. Issuers have also typically bundled some sort of covenant relief as a piggy-back to the extension process.
- Creating the Extended Tranche—the loan or revolver is split into two tranches or a new extended tranche is created through an accordion or incremental facility. Lenders that agree to extend have their commitments rolled into the extended tranche, and non-consenting lenders remain in the old tranche.
- Fees—Lenders are customarily offered an amendment fee and potentially a par paydown to provide the necessary consents. In addition, lenders that extend are typically offered a higher spread, a Libor floor, and an extension fee to roll their commitments.

CLO Participation in Extensions

Both indenture restrictions and managerial incentives matter when it comes to gauging CLO interest in extending loan maturities.

Indenture Language

CLOs are restricted from investing in more than a small amount (~2-5%) of securities that mature past the final maturity date of the CLO. This will restrict the ability of CLOs to participate in extensions for loan maturities that are close to the CLO maturity date. However, because most CLOs have maturity dates well past 2015, we think this restriction is not likely to be a major hindrance to loan extensions.

Past the reinvestment period, CLO indentures generally state that managers cannot re-invest principal proceeds from credit sales into loans that continue past the maturity date of the original loan. However, deal language is silent with regard to extensions which do not result in actual principal proceeds. In principle therefore, a CLO could extend loans even after its reinvestment period.

Within the reinvestment period, a manager has flexibility in extending loan maturities. One potential restriction is the Weighted Average Life (WAL) test, which states that in a given time period, the WAL of a portfolio must not exceed the WAL threshold applicable for that period. Failure of the test is subject to the “maintain or improve standard,” which means that if, prior to any investment, the test is not satisfied, the portfolio WAL will need to be improved or at least maintained following such investment. In the case of the WAL test, this condition can be satisfied by investing into new loans that have a WAL lower than that of the portfolio.

As we detail in Figure 4, we do not think WAL tests are likely to be a major hindrance to extensions. Most CLO transactions are in compliance of their WAL test and will continue to be that way through their reinvestment periods. There will always be exceptions however. For more on WAL tests please refer to the Appendix.

Managerial Incentives

Within the reinvestment period, managerial incentives will depend on the status of CLO over-collateralization (OC) tests. Managers of deals that are passing their OC-tests, and where the manager also owns the equity, will generally prefer to extend loan maturities, and earn the higher coupon on the loan via the equity payout. Their alternative is to not extend and then reinvest maturity proceeds into new loans. However, lack of adequate supply in the primary market makes this a difficult strategy to replicate in size.

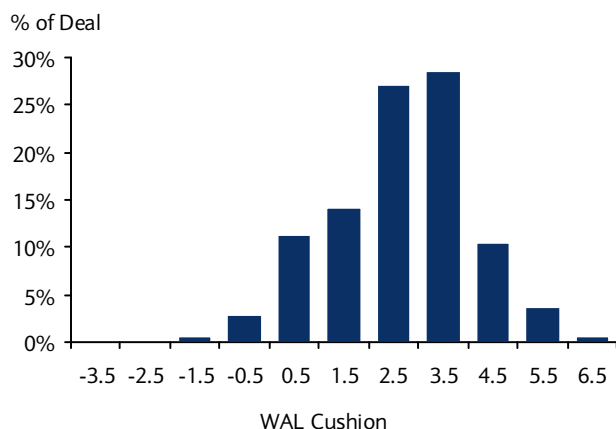
An alternative is to buy discounted loans in the secondary market. However, the 150-250bp spread pick-up from loan extension is more attractive than buying a low coupon loan at a discount.

Managers of deals that are failing their OC-tests could very well choose to approve the loan amendment but not participate in the extension. Their strategy would be to use loan maturities to pay down senior tranches and bring tests back into compliance. However, when the tests are back in compliance they would once again prefer to extend loan maturities.

Loan and Bonds Performance Post Extension Launch

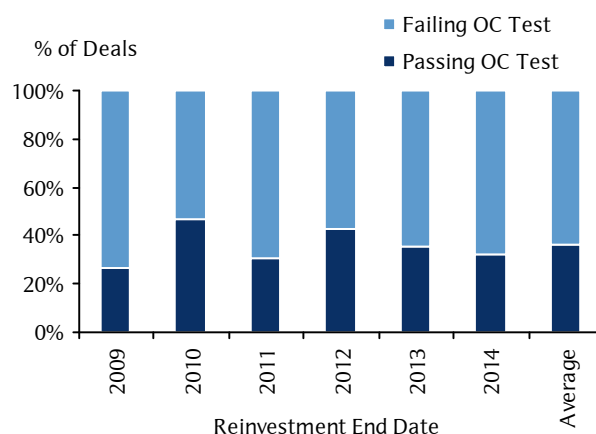
We analyzed performance within the capital structure of a sample of term loan extensions that have been launched this year. Existing stubs of extended loans have jumped in price after the extension announcement, and have sustained their performance two weeks after. However, we note that these extensions were transacted in a loan market that has soared over the same time period, making it difficult to isolate any causal outperformance. However, recent extension such as Cedar Fair that were initiated in the context of a more stable loan market, have shown a similar 2-3pt initial jump. Meanwhile, extended tranches have typically broken in the high 90s and have traded well post break (see Figure 6).

Figure 4: Distribution of WAL Cushions across U.S. CLOs



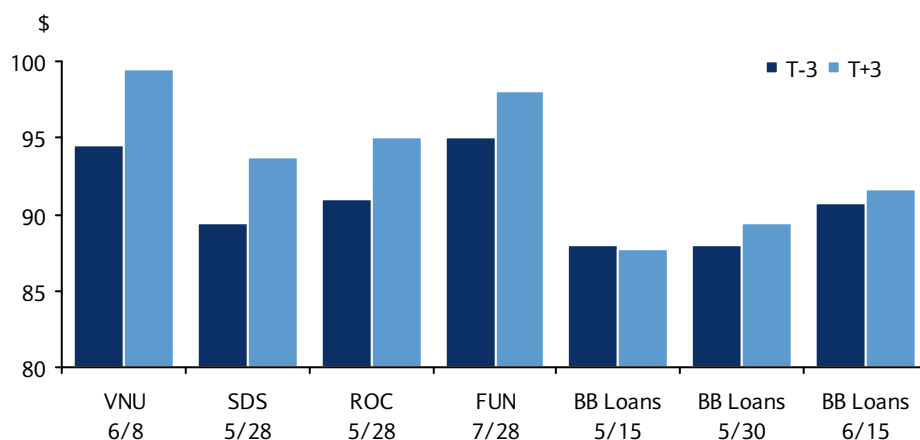
Source: Barclays Capital

Figure 5: Percentage of Deals Passing/Failing OC Tests



Source: Barclays Capital

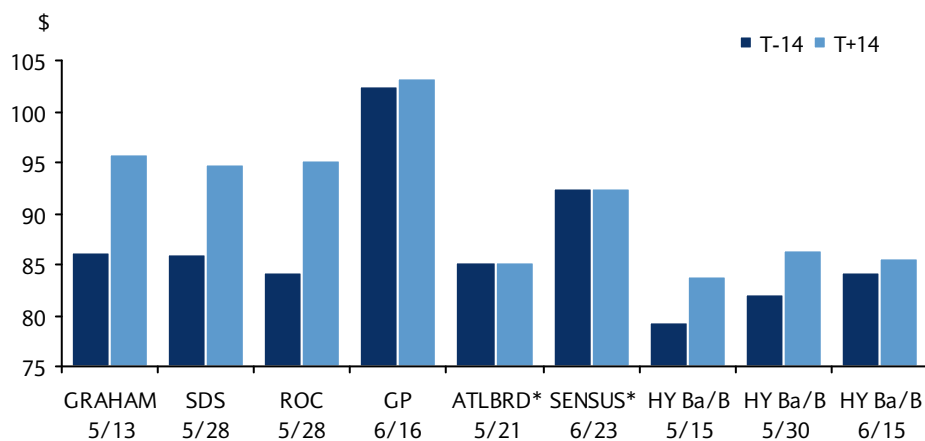
Figure 6: Stub Loan Performance Post Extensions Launch



Note: Loan extension launch date shown below ticker for each case. As a comparison, BB loan performance is anchored around 15 day intervals beginning 5/15. Source: Barclays Capital, S&P LCD

Lower down in the capital structure, bonds that are leapfrogged by the extended loan have tended to outperform upon the announcement. Our sample analysis shows that such bonds trading at a significant discount to par showed the significant outperformance in the two weeks straddling the loan extension launch, when compared with the U.S. Ba/B High Yield Index. Bonds closer to par had little upside potential while bonds maturing outside the extended loan maturity did not show any significant price appreciation (see Figure 7). Based on this performance analysis, we believe that from an investor standpoint, the best trading opportunity involves owning the loans and shorter dated bonds of likely loan extension candidates.

Figure 7: Bond Performance Post Extensions Launch



Source: Barclays Capital, S&P LCD

Note: The next closest bond maturities for Atlantic Broadband and Sensus were not leapfrogged by the extended loan and hence did not show any jump in price. As a comparison, HY Ba/B performance is anchored at about 15-day intervals beginning 5/15.

Potential Candidates for Loan Extensions

Given the favorable stub loan and certain short-dated bond performance, we highlight factors for evaluating potential loan extension candidates in order to identify opportunities. Individual credits need to be evaluated on a case-by-case basis but, in general, investors should consider the following factors when evaluating potential candidates for loan extensions:

- **Price**—Companies with loans trading at about 80 and above. This criterion is a filter for healthier companies that can generally print extended tranches at reasonable yields.
- **Size**—Companies with total loans tranche size above \$750mn. Such candidates will potentially have to employ loan-for-bond takeout as well as an extension to address the large maturity. In addition, larger tranches potentially offer more liquid trading opportunities.
- **Maturity**—Companies with loans or revolvers maturing before 2014. These loans are likely to fall well within the legal-final maturity dates of most CLOs making them suitable extension candidates for CLOs.
- **CLO Exposure**—Companies with a high percentage of loans held by CLOs are more likely to get extension approval.
- **Other considerations**—Companies with top heavy 1st lien to unsecured leverage and that have sponsor support are more likely to be proactive in this process.

Screening the loan universe (see Figure 8), we identified the following names that meet the criteria above and could potentially attempt a loan extension:

Figure 8: Potential Candidates for Loan Extensions

Issuer Name	1st Term Loan Maturity Date	Size of all Tranches (\$ mn)	Price (\$)	% CLO Exposure
Regal Cinemas	11/10/10	1,748	99	60%
Del Monte	5/30/11	1,308	99	6%
Supervalu	6/2/11	3,591	95	13%
Ball Corp	10/13/11	1,079	98	4%
Jarden	12/31/11	1,563	97	48%
Avis	4/19/12	1,935	84	33%
Mediacom	9/30/12	3,044	96	23%
Penn National Gaming	10/3/12	2,535	96	35%
Hertz	12/21/12	3,793	94	30%
Burlington Coat Factory	4/10/13	1,670	81	24%
Dole Food	4/12/13	1,393	100	14%
Sensata	4/27/13	1,603	81	32%
Rite Aid Corp	6/1/13	3,200	80	3%
Constellation Brands	6/30/13	2,249	97	16%
Toys R Us	7/19/12	5,487	95	10%
Travelport	8/23/13	2,346	85	60%
HanesBrands	9/5/13	2,495	100	29%
Cinemark USA	9/30/13	1,239	95	44%
West Corp	10/24/13	2,778	93	46%
Michael's Stores	10/31/13	3,291	80	27%
MetroPCS	11/3/13	1,656	95	37%
Sally Beauty	11/16/13	1,418	94	38%
Oshkosh	12/6/13	3,039	98	38%

Source: Barclays Capital

In addition to the candidates that met the qualifications of our screen, we believe some of the jumbo loans will look to extend their loans in the near future. Even though their loans mature outside and/or trade lower than our criteria above, we expect Univision, FDC and Freescale to look at extensions or secured bond deals in the near future. This follows TXU launching a term loan extension amendment this week, while its term loan was trading in the 77 context. Also certain other jumbo's such as Georgia Pacific have already extended a piece of their original loans and might revisit lenders for another extension down the road.

Trading Opportunities in Loans and Bonds

From an investor standpoint, the trading opportunity with the most upside potential is owning shorter dated discount bonds of loan extension candidates that are likely to be eclipsed by the loan extension while avoiding springing maturity issues. We identified bonds that fit this criterion for our loan extension candidates and categorized them based on the relative upside potential:

- Speculative bonds with large upside potential—Rite-Aid, Burlington Coat Factory, Avis, and Travelport have bonds trading between \$70 and \$85. The companies are all overleveraged, yet have rallied back from distressed levels. Short-term liquidity is sufficient, but investors are concerned about the ability to refinance in the future. Sensata is a more stressed example that could be addressed soon because of possible covenant issues. Because most of these names have material downside, we would highlight the bonds in Figure 9 as potential outperformers for those comfortable with the credit story.
- Modest upside, but investors focused on other factors—Hertz, SuperValu, and West Corp bonds trade in the 90s, implying a few points of upside potential on an amend-and-extend transaction. However, spread performance in these credits will likely be determined by other factors. Hertz has ABS debt to refinance, West Corp already failed on an amendment designed to issue secured bonds to repay bank debt, and SuperValu is focused on debt repayment as it seeks an investment grade rating.
- Bonds near par, limited upside potential—Constellation Brands has limited upside as they are constrained by absolute yields and call prices. We are comfortable in each of the names as core holdings, but see limited upside from these levels regardless of positive news.

Figure 9: Potential Bond Trades

Issuer Name	Specific Bond	Price	Upside
Sensata	8s of 2014	60	Significant
Rite-Aid	6.875s of 2013	70	Significant
Avis	7.625s of 2014	77	Significant
Burlington Coat Factory	11.125s of 2104	81	Significant
Travelport	9.875s of 2014	83	Significant
Toys R Us	7.875s of 2013	83	Significant
West Corp	9.5s of 2014	93	Modest
Hertz	8.875s of 2014	96	Modest
SuperValu	7.25s of 2013	97	Modest
Constellation Brands	8.375s of 2014	103	Limited

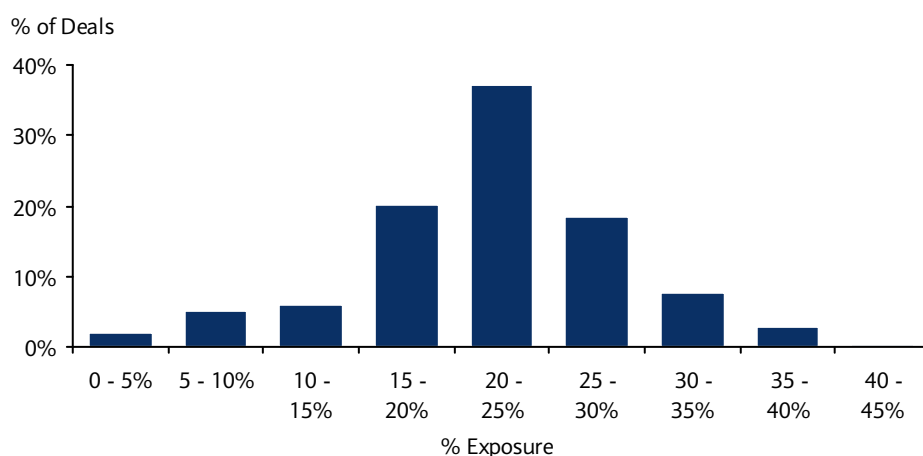
Source: Barclays Capital

Pricing Effect on Senior CLO Tranches

Loan extensions will have a meaningful effect on senior tranche prices, although the sensitivity of prices to extension will depend on the percentage of the portfolio that extends and the number of years by which each loan extends.

Pricing effect on CLO tranches will vary across CLOs as there is variation in exposure to loan extension candidates. In Figure 10 we show the variation across CLOs in their exposure to loans that are extension candidates (trade above \$80 and have more than \$750mn in term loan maturities). CLO exposures vary between 0-45% and the average CLO has 20-25% exposure. Approximately 10% of the deals have greater than 30% exposure and 13% of the deals have less than 15% exposure.

Figure 10: CLO Exposure to Extension Candidates



Source: Barclays Capital. Note: Extension candidates are loans that are currently trading above \$80 and have at least \$750mn in term loan maturities

In Figure 11 we show the sensitivity of straight Aaa and Aa tranche prices under different extension assumptions. For our analysis we assume the deal has a 3-year reinvestment period and 7-year life after the reinvestment period ends. We also assume the collateral amortization schedule is representative of the loan maturity schedule of the overall market. Other collateral assumptions are detailed below Figure 11. Our base case scenario assumes that 25% of the portfolio is extended. Our bearish scenario for the senior part of the CLO capital structure assumes that 50% of the portfolio extends. We also show the effect of a 100% extension, although we believe such a scenario is unrealistic based on current CLO exposures.

Under our base case assumptions, Aaa tranche prices would be 1.5-2.5 pts lower than if there were no extensions. This is mainly due to a longer WAL for the tranche, which results in a slower pull-to-par. Under our bearish scenario, Aaa prices are 3-5pts lower than what they would be in the absence of extensions.

Aa tranche prices are only moderately more sensitive to extension risk on an absolute basis. However, sensitivity is significantly higher as a percentage of the price of the tranche. Aa tranche prices drop about 5-7pts in our base case scenario and 5-13pts in our bearish scenario. The drop in tranche prices is only due to its longer WAL as there is no loss of principal to the Aa tranche in any of our scenarios.

Figure 11: Aaa/Aa Tranche Price Sensitivity to Extensions

Aaa Prices					Aa Prices				
Extension	2-yr Extension		5-yr Extension		Extension	2-yr Extension		5-yr Extension	
	Price	WAL	Price	WAL		Price	WAL	Price	WAL
0% Extension	75.0	4.0	75.0	4.0	0% Extension	50.0	6.7	50.0	6.7
25% Extension	73.5	4.3	72.5	4.4	25% Extension	45.0	7.7	43.0	8.3
50% Extension	72.0	4.5	70.0	5.1	50% Extension	45.0	8.0	37.0	10.0
100% Extension	69.0	5.1	63.0	6.6	100% Extension	44.0	8.1	36.0	10.2

Source: Barclays Capital

Notes: Analysis for a deal with 3y reinvestment period and 7y life after reinvestment. We assume CDRs of 8%; 10%, 12%, 10%; 8% and 6% during 2009-2014 and a 50% recovery.

Appendix

Can WAL Tests Prevent CLOs from Extending?

Recently, there has been some opinion from market participants that weighted average life (WAL) tests in CLOs will restrict the ability of CLOs to extend loan maturities. In theory, the failure of the WAL test can place restrictions on the maturity of the loan that a CLO can buy or extend into during its reinvestment period. However, we believe the vast majority of CLOs are currently passing their WAL tests, and this status is not likely to change much as they approach the end of their reinvestment periods. In addition, putting other deal considerations aside, those CLOs that are failing their WAL tests should still be able to extend into loans with 3-4 years until maturity at the reinvestment period end date. As a result, generally speaking, WAL test issues are unlikely to restrict CLOs from extending loans at the end of the reinvestment period.

Typically, WAL tests in CLOs apply during the reinvestment period and are deemed to be satisfied if the WAL of the portfolio is less than or equal to X years minus the number of years that have elapsed since the effective date. In most CLOs, X generally exceeds the length of the reinvestment period by 3-4 years. This type of language implies that at the reinvestment period end date, the WAL test for the CLO will stand at 3-4 years. Deal WALs will be tested at this level to determine whether they are passing their WAL tests.

Failing the test is subject to the “maintain or improve standard,” which means that if, prior to any investment, the test is not satisfied, the WAL value will need to be improved or at least maintained following such investment. In the case of the WAL test, this condition can be satisfied simply by investing into new loans that have a WAL that is lower than that of the portfolio.

Currently, only 4% of deals are currently failing their WAL tests so WAL tests are not an immediate concern. Can they be a concern later?

One concern might be that if prepayment rates increase and portfolios churn over at a faster pace, a higher fraction of deals will begin to fail their WAL tests, as the WAL of the portfolio will increase. We think such fears are exaggerated. First, CLO prepayment rates are at historically low levels. This is driven by low levels of loan issuance and the significant discount levels at which loans are trading, which have subdued opportunistic refinancing rates. Second, breakeven prepayment rates would have to rise significantly for deals to fail their WAL tests¹.

Finally, even if a deal fails a WAL test, all a deal has to do is to invest or extend in new loans that have maturity dates only marginally lower than the current WAL levels for the portfolio. Because WAL test levels are always likely to be greater than 3-4 years, failing of the WAL test implies that the portfolio WAL must be greater than 3-4 years, which in turn means that deals can meet test requirements by investing in loans with 3- to 4-year maturities.

¹ We define breakeven prepayment rates as the annualized rate at which the portfolio would have to churn for it to fail the WAL test at the end of the reinvestment period.

Explanation of the High Grade Sector Weighting System

Overweight: Expected six-month excess return of the sector exceeds the six-month expected excess return of the Barclays Capital U.S. Credit Index or Pan-European Credit Index, as applicable.

Market Weight: Expected six-month excess return of the sector is in line with the six-month expected excess return of the Barclays Capital U.S. Credit Index or Pan-European Credit Index, as applicable.

Underweight: Expected six-month excess return of the sector is below the six-month expected excess return of the Barclays Capital U.S. Credit Index or Pan-European Credit Index, as applicable.

Explanation of the High Grade Research Rating System

The High Grade Research rating system is based on the analyst's view of the expected excess returns over a six-month period of the issuer's index-eligible corporate debt securities relative to the Barclays Capital U.S. Credit Index or Pan-European Credit Index, as applicable.

Overweight: The analyst expects the issuer's index-eligible corporate bonds to provide positive excess returns relative to the Barclays Capital U.S. Credit Index or the Pan-European Credit Index over the next six months.

Market Weight: The analyst expects the issuer's index-eligible corporate bonds to provide excess returns in line with the Barclays Capital U.S. Credit Index or the Pan-European Credit Index over the next six months.

Underweight: The analyst expects the issuer's index-eligible corporate bonds to provide negative excess returns relative to the Barclays Capital U.S. Credit Index or the Pan-European Credit Index over the next six months.

Not Rated (NR): An issuer which has not been assigned a formal rating.

Rating Suspended (RS): The rating has been suspended temporarily due to market events that make coverage impracticable or to comply with applicable regulations and/or firm policies in certain circumstances including where Barclays Capital is acting in an advisory capacity in a merger or strategic transaction involving the company.

Explanation of the High Yield Sector Weighting System

Overweight: Expected six-month total return of the sector exceeds the six-month expected total return of the Barclays Capital U.S. High Yield 2% Issuer Capped Credit Index, or the Pan-European High Yield 3% Issuer Capped Credit Index excluding Financials, as applicable.

Market Weight: Expected six-month total return of the sector is in line with the six-month expected total return of the Barclays Capital U.S. High Yield 2% Issuer Capped Credit Index or the Pan-European High Yield 3% Issuer Capped Credit Index excluding Financials, as applicable.

Underweight: Expected six-month total return of the sector is below the six-month expected total return of the Barclays Capital U.S. High Yield 2% Issuer Capped Credit Index or the Pan-European High Yield 3% Issuer Capped Credit Index excluding Financials, as applicable.

Explanation of the High Yield Research Rating System

The High Yield Research team employs a relative return based rating system that, depending on the company under analysis, may be applied to either some or all of the company's debt securities, bank loans, or other instruments. Please review the latest report on a company to ascertain the application of the rating system to that company.

Overweight: The analyst expects the six-month total return of the rated debt security or instrument to exceed the six-month expected total return of the Barclays Capital U.S. 2% Issuer Capped High Yield Credit Index or the Pan-European High Yield 3% Issuer Capped Credit Index excluding Financials, as applicable.

Market Weight: The analyst expects the six-month total return of the rated debt security or instrument to be in line with the six-month expected total return of the Barclays Capital U.S. 2% Issuer Capped High Yield Credit Index or the Pan-European High Yield 3% Issuer Capped Credit Index excluding Financials, as applicable.

Underweight: The analyst expects the six-month total return of the rated debt security or instrument to be below the six-month expected total return of the Barclays Capital U.S. 2% Issuer Capped High Yield Credit Index or the Pan-European High Yield 3% Issuer Capped Credit Index excluding Financials, as applicable.

Not Rated (NR): An issuer which has not been assigned a formal rating.

Rating Suspended (RS): The rating has been suspended temporarily due to market events that make coverage impracticable or to comply with applicable regulations and/or firm policies in certain circumstances including where Barclays Capital is acting in an advisory capacity in a merger or strategic transaction involving the company.

Analyst Certification(s)

We, Ashish Shah, Jeffrey Meli, Bradley Rogoff, Madhur Duggar, Gautam Kakodkar, Hari Manappattil, Shobhit Gupta, Michael H Anderson, Batur Bicer, Matthew Mish and Eric Gross, hereby certify (1) that the views expressed in this research report accurately reflect our personal views about any or all of the subject securities or issuers referred to in this research report and (2) no part of our compensation was, is or will be directly or indirectly related to the specific recommendations or views expressed in this research report.

Important Disclosures

On September 20, 2008, Barclays Capital Inc. acquired Lehman Brothers' North American investment banking, capital markets, and private investment management businesses. Historical and current disclosure information is provided via the two sources listed below.

<https://ecommerce.barcap.com/research/cgi-bin/all/disclosuresSearch.pl> or call 1-212-526-1072; <http://www.lehman.com/USFIdisclosures/>

Clients can access Barclays Capital research produced after the acquisition date either through Barclays Capital's research website or through LehmanLive. Barclays Capital does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that Barclays Capital may have a conflict of interest that could affect the objectivity of this report. Any reference to Barclays Capital includes its affiliates. Barclays Capital and/or an affiliate thereof (the "firm") regularly trades, generally deals as principal and generally provides liquidity (as market maker or otherwise) in the debt securities that are the subject of this research report (and related derivatives thereof). The firm's proprietary trading accounts may have either a long and / or short position in such securities and / or derivative instruments, which may pose a conflict with the interests of investing customers. Where permitted and subject to appropriate information barrier restrictions, the firm's fixed income research analysts regularly interact with its trading desk personnel to determine current prices of fixed income securities. The firm's fixed income research analyst(s) receive compensation based on various factors including, but not limited to, the quality of their work, the overall performance of the firm (including the profitability of the investment banking department), the profitability and revenues of the Fixed Income Division and the outstanding principal amount and trading value of, the profitability of, and the potential interest of the firms investing clients in research with respect to, the asset class covered by the analyst. To the extent that any historical pricing information was obtained from Barclays Capital trading desks, the firm makes no representation that it is accurate or complete. All levels, prices and spreads are historical and do not represent current market levels, prices or spreads, some or all of which may have changed since the publication of this document. Barclays Capital produces a variety of different types of fixed income research, including fundamental credit analysis, quantitative credit analysis and trade ideas. Recommendations contained in one type of research may differ from recommendations contained in other types, whether as a result of differing time horizons, methodologies, or otherwise.

This publication has been prepared by Barclays Capital, the investment banking division of Barclays Bank PLC, and/or one or more of its affiliates as provided below. This publication is provided to you for information purposes only. Prices shown in this publication are indicative and Barclays Capital is not offering to buy or sell or soliciting offers to buy or sell any financial instrument. Other than disclosures relating to Barclays Capital, the information contained in this publication has been obtained from sources that Barclays Capital believes to be reliable, but Barclays Capital does not represent or warrant that it is accurate or complete. The views in this publication are those of Barclays Capital and are subject to change, and Barclays Capital has no obligation to update its opinions or the information in this publication. Barclays Capital and its affiliates and their respective officers, directors, partners and employees, including persons involved in the preparation or issuance of this document, may from time to time act as manager, co-manager or underwriter of a public offering or otherwise, in the capacity of principal or agent, deal in, hold or act as market-makers or advisors, brokers or commercial and/or investment bankers in relation to the securities or related derivatives which are the subject of this publication.

The analyst recommendations in this report reflect solely and exclusively those of the author(s), and such opinions were prepared independently of any other interests, including those of Barclays Capital and/or its affiliates.

Neither Barclays Capital, nor any affiliate, nor any of their respective officers, directors, partners, or employees accepts any liability whatsoever for any direct or consequential loss arising from any use of this publication or its contents. The securities discussed in this publication may not be suitable for all investors. Barclays Capital recommends that investors independently evaluate each issuer, security or instrument discussed in this publication and consult any independent advisors they believe necessary. The value of and income from any investment may fluctuate from day to day as a result of changes in relevant economic markets (including changes in market liquidity). The information in this publication is not intended to predict actual results, which may differ substantially from those reflected. Past performance is not necessarily indicative of future results.

This communication is being made available in the UK and Europe to persons who are investment professionals as that term is defined in Article 19 of the Financial Services and Markets Act 2000 (Financial Promotion Order) 2005. It is directed at, and therefore should only be relied upon by, persons who have professional experience in matters relating to investments. The investments to which it relates are available only to such persons and will be entered into only with such persons. Barclays Capital is authorized and regulated by the Financial Services Authority ('FSA') and member of the London Stock Exchange.

Barclays Capital Inc., US registered broker/dealer and member of FINRA (www.finra.org), is distributing this material in the United States and, in connection therewith accepts responsibility for its contents. Any U.S. person wishing to effect a transaction in any security discussed herein should do so only by contacting a representative of Barclays Capital Inc. in the U.S. at 745 Seventh Avenue, New York, New York 10019.

Subject to the conditions of this publication as set out above, ABSA CAPITAL, the Investment Banking Division of ABSA Bank Limited, an authorised financial services provider (Registration No.: 1986/004794/06), is distributing this material in South Africa. Any South African person or entity wishing to effect a transaction in any security discussed herein should do so only by contacting a representative of ABSA Capital in South Africa, 15 ALICE LANE, SANDTON, JOHANNESBURG, GAUTENG, 2196. ABSA CAPITAL IS AN AFFILIATE OF BARCLAYS CAPITAL.

Non-U.S. persons should contact and execute transactions through a Barclays Bank PLC branch or affiliate in their home jurisdiction unless local regulations permit otherwise.

In Japan, this report is being distributed by Barclays Capital Japan Limited to institutional investors only. Barclays Capital Japan Limited is a joint-stock company incorporated in Japan with registered office of 2-2-2, Otemachi, Chiyoda-ku, Tokyo 100-0004, Japan. It is a subsidiary of Barclays Bank PLC and a registered financial instruments firm regulated by the Financial Services Agency of Japan. Registered Number: Kanto Zaimukyokucho (kinsho) No. 143. Barclays Bank PLC Frankfurt Branch is distributing this material in Germany under the supervision of Bundesanstalt fuer Finanzdienstleistungsaufsicht (BaFin).

IRS Circular 230 Prepared Materials Disclaimer: Barclays Capital and its affiliates do not provide tax advice and nothing contained herein should be construed to be tax advice. Please be advised that any discussion of U.S. tax matters contained herein (including any attachments) (i) is not intended or written to be used, and cannot be used, by you for the purpose of avoiding U.S. tax-related penalties; and (ii) was written to support the promotion or marketing of the transactions or other matters addressed herein. Accordingly, you should seek advice based on your particular circumstances from an independent tax advisor.

© Copyright Barclays Bank PLC (2009). All rights reserved. No part of this publication may be reproduced in any manner without the prior written permission of Barclays Capital or any of its affiliates. Barclays Bank PLC is registered in England No. 1026167. Registered office 1 Churchill Place, London, E14 5HP. Additional information regarding this publication will be furnished upon request.