

# U.S. CREDIT ALPHA

# The Earnings Beat Goes On

Risky assets performed well this week in response to further signs of stabilization in the macroeconomy and corporate earnings. Earnings are likely to remain the key driver for markets in coming weeks. Given the extreme nature of the credit rally, it is natural to question if we have come too far, too fast. Although we see few catalysts for a near-term reversal of this trend, we are watchful of events here and abroad for signs of a turn.

#### Focus: Loans - Amend and Extend

4

Loan amend-and-extends have surged as companies attempt to address their upcoming maturities ahead of time. We see the best trading opportunity as owning the loans and shorter-dated 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. We also think that CLO Aaa prices of deals with high extension risk should price 3-5 pts lower than deals with low extension risk. Aa prices of deals with high extension risk should price 5-13pts lower.

#### Investment Grade: How Tight Can the CDX IG Go?

13

We analyze the spread composition of the CDX IG12 constituents to estimate a potential floor for traded index levels. Our analysis suggests the most likely floor for the IG12 index is in the low 90s.

#### High Yield: Rising Tide

21

High yield continued to produce strong returns this week, as positive earnings reports continue to outnumber the negative. With cash outperforming CDS for a long stretch – and funding costs coming down – we revisit basis trades, this time highlighting some attractive positive basis packages.

#### Leveraged Loans: Those Who Stay Will Be Champions?

24

26

Loans underperformed high yield with the LCDX index up almost \$1 to \$93. Loan amendments continue to proliferate, but issuers appear to be facing marginally more pushback. Recently more issuers are asking for consent to issue second-lien debt.

### **Structured Credit & Volatility Products:**

#### Sell 2x 90 Strike Dec Receiver; Buy 1x 160 Strike Dec Payer on IG.12

In the IG section, we argue that in the medium term, IG.12 index spreads are unlikely to rally past 90bp unless there is a substantial improvement in the macroeconomic environment. For investors looking to buy protection against a systemic widening in spreads into year-end, we recommend buying the Dec-09 160bp payer and funding it by selling 2x the Dec-09 90bp receiver.

Ashish Shah +1 212 412 7931 ashish.shah@barcap.com

Jeffrey Meli +1 212 412 2127 jeff.meli@barcap.com

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

Madhur Duggar +1 212 412 3693 madhur.duggar@barcap.com

Michael Anderson, CFA +1 212 412 7936 michael.anderson@barcap.com

Matthew Mish, CFA +1 212 412 2183 matthew.mish@barcap.com

www.barcap.com

## **OVERVIEW**

# The Earnings Beat Goes On

Ashish Shah +1 212 412 7931 ashish.shah@barcap.com Risky assets performed well this week in response to further signs of stabilization in the macroeconomy and corporate earnings. The S&P 500 ended Thursday 0.7% higher, at 987. Credit was generically tighter, with the IG CDX.12 tighter by 7bp, the US Credit Index tighter by 14bp, and the CDX HY.12 higher by 2 points. This is the fourth month in a row with tighter spreads, and the US Credit Index has now exceeded 14% excess returns for the year.

The economic news releases this week were mixed. On the negative side, consumer confidence was slightly weaker than expected, and initial jobless claims were slightly higher than expected. Personal consumption came in lower than expected and the prior quarter was revised downwards. However, these were trumped by more upbeat news furthering the consensus view that the economy, although not out of the woods, has shown real signs of stabilizing. Continuing claims fell, durables (ex-transportation) were up, and new home sales were higher than expectations. 2Q GDP was released on Friday morning, came is better than expected at -1%., although there was a negative revision in the prior quarter.

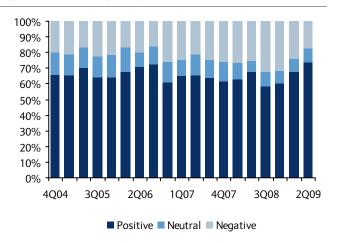
This more upbeat news flow was mirrored by corporate earnings results announced this week. Companies across sectors beat expectations. In financials, HIG, Mastercard, and Visa all posted significant beats and rallied sharply. Mastercard topped expectations by 11% and was up more than 6% on the week. In industrials, Goodyear, Dow Chemical, and International Paper also reported strong results. Motorola was also up, after reporting a smaller loss than expected on improved cost savings. Overall, 66% of the S&P500 has reported earnings, with 74% of those beating expectations and only 17% missing. Although this partially reflects the extent to which analysts reduced expectations, it also points to a less severe than feared downturn in the corporate sector.

Earnings are likely to remain the key driver for markets in coming weeks. Given the extreme nature of the rally, it is natural to question if we have come too far, too fast. Although we see few catalysts for a near-term reversal of this trend, we are watchful of events here and abroad for signs of a turn. The combination of recent gains, positioning, a seasonal decline in liquidity and increased expectations presents a small risk to continued strength, requiring

Weekly Index Changes

	Thursday Close	Last Week Close	4-week Average
Credit Index (bp)	231	245	259
CDX.IG.12 (bp)	113	118	130
High-Yield Index (\$ price)	84.59	83.02	81.52
CDX.HY.12 (\$ price)	89.63	87.88	85.53
Leveraged Loan Index (\$ price)	81.39	79.95	79.36
LCDX12 (\$ price)	93.20	92.25	89.36

Figure 1. 2Q Earnings Surprises



Note: CDX levels are mid-market and are not adjusted for defaults.

Source: Bloomberg

Source: Barclays Capital

participants to remain nimble. We continue to expect risky assets to rally over the coming weeks. In investment grade credit, the lack of new issue supply combined with increasing allocations to credit have created a positive technical that we expect will keep driving spreads tighter. We anticipate further compression across low beta and high beta credits as well as further tightening in financials.

In the high yield universe, 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. We see the best trading opportunity as owning the loans and shorter-dated bonds of loan extension candidates that are likely to be eclipsed by the extended loan maturity. In our focus this week, we identify a number of specific issuers that could benefit from these themes. We also note that CLO Aaa prices of deals with high extension risk should price 3-5 pts lower than deals with low extension risk. Aa prices of deals with high extension risk should price 5-13pts lower.

#### **FOCUS**

# Loans: Amend and Extend

#### Introduction

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

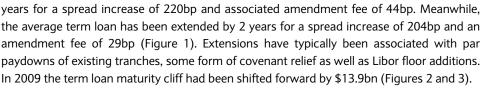
> **Batur Bicer** +1 212 412 3697 batur.bicer@barcap.com

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.



\$bn 350 HY Bond Maturities 300 Term Loan Amount 250 200 150 100 50 0 2H09 2010 2011 2012 2013 2014 2015 2016

Figure 1: The Leverage Finance Maturity Cliff

Source: Barclays Capital, S&P LCD

31 July 2009 4

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 nonconsenting 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 reinvest 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



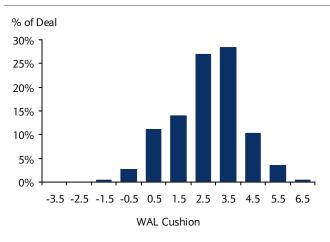
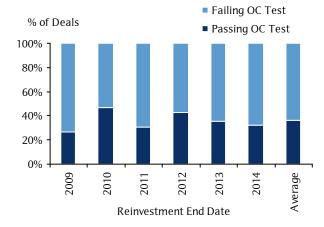


Figure 5: Percentage of Deals Passing/Failing OC Tests



Source: Barclays Capital

Source: Barclays Capital

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).

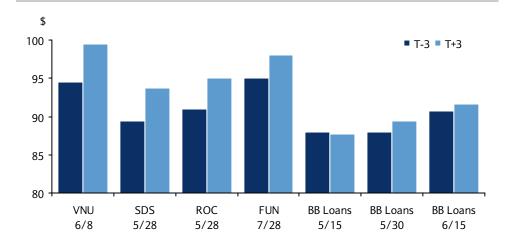


Figure 6: Stub Loan Performance Post Extensions Launch

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.

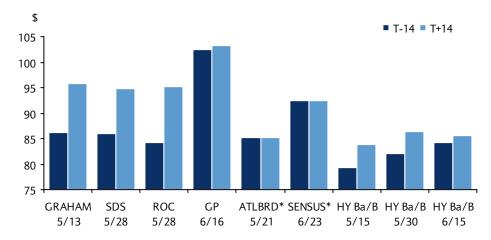


Figure 7: Bond Performance Post Extensions Launch

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 1<sup>st</sup> 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 at 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 amendand-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

	6 16 P I		
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
<b>Burlington Coat Factory</b>	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.

% of Deals 40% 30% 20% 10% 0% 0 - 5% 5 - 10% 10 -15 -20 -25 -30 -35 -40 -15% 20% 25% 30% 35% 40% 45% % 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				
	2-yr Ex	tension	5-yr Ex	tension		2-yr Ext	ension	5-yr Ex	tension
Extension	Price	WAL	Price	WAL	Extension	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 tests <sup>1</sup>.

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.

31 July 2009 12

\_

<sup>&</sup>lt;sup>1</sup> 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.

## **INVESTMENT GRADE**

# Jeff Meli Spreads contin

+1 212 412 2127 jeff.meli@barcap.com

Matthew Mish, CFA +1 212 412 2183 matthew.mish@barcap.com

Hari Manappattil +1 212 412 7922 hari.manappattil@barcap.com

Shobhit Gupta +1 212 412 2056 shobhit.gupta@barcap.com

# How Tight Can CDX IG Go?

Spreads continued to rally through the week as earnings and macroeconomic data continued to surprise positively. The Barclays Capital Credit Index was tighter by 14bp at 231bp. The recent rally in credit has spanned both cash and CDS. CDX IG spreads have rallied materially despite technicals, such as a negative cash-CDS basis, that exert widening pressure on CDS. CDX IG12 has rallied from 199bp on March 20 to 116bp on July 29, 2009 (Figure 1a).

Recent (wider-than-current) levels for the CDX IG12 provide a relevant benchmark for estimating downside risks. For instance, the index was wider by 47bp three months ago and by 81bp four months ago. The picture, however, is less clear when we try to estimate the potential for continued tightening. We attempt to determine a likely near-term floor for CDX IG12 through a combination of historical and forward-looking metrics.

The CDX IG12 currently trades about 11bp rich to intrinsic. The traded-intrinsic basis has significantly decreased from levels of late 2008, so that projected movements in intrinsic levels can be assumed to indicate future movements in traded CDX levels. With this assumption, we analyze the spread composition of the CDX IG12 constituents to estimate a potential floor for traded index levels.

Our analysis suggests that the most likely floor for the IG12 index is in the low 90s. We also approximate a bullish case within an exercise that inherently assumes a positive outcome. Put differently, this scenario is an overly bullish one that in essence assumes positive outcomes in three of the four widest, highly idiosyncratic names; significant tightening among the 25 higher-beta credits (despite our analysts rating eight names underweight versus two overweight); and a further notable reduction in systemic risk.

In our view, the most potential for tightening comes from mid-tier credits – based on the extent to which the tightest credits have already rallied and on our view of the potential for tightening out of the widest, most idiosyncratic credits. Using a screening process incorporating qualitative and quantitative factors, we believe some of the best short protection candidates in this cohort include Nordstrom, Macy's, Xerox, Southwest, Whirlpool, and Alcoa.

Figure 1a: CDX IG On-the-Run Traded Levels

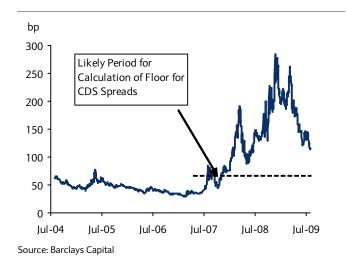
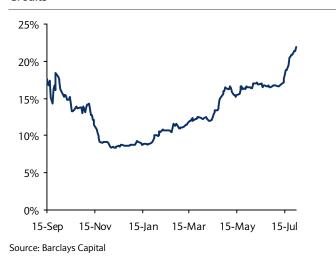


Figure 1b: CDX IG12: Percentage of Spread from Four Widest Credits



#### A First Shot at the Floor

We identify September 2007 as a period that represents a reasonable lower bound for overall CDS spreads. This is a period before the worst of the credit crisis took hold, but after spreads had come off of the tights they had reached during the height of the synthetic CDO boom. In addition, spreads of the lowest beta cash bonds have tightened to September 2007 levels.

As a simple first approach, we compute the intrinsic spread of the CDX IG12 constituents based on their single name spreads in September 2007 – a (very optimistic) 35bp. While this calculation is relatively straightforward, it does not take into account quality deterioration in the portfolio or incorporate any forward-looking views, necessitating a second, improved approach.

### A Second, Better Shot

We now examine the composition of the index in greater detail and incorporate forward-looking views to adjust for the credit quality of the constituents. At the outset, we note that the distribution of credit risk within the CDX IG12 portfolio has become more idiosyncratic in nature. The widest four credits contribute significantly more to the portfolio's intrinsic spread (in percentage terms) than at any point in the past ten months (Figure 1b). This has occurred through a combination of an increase in the absolute spread contribution from the widest four credits and a decrease in the spread contribution from the rest of the portfolio over the past few months (Figure 3a). Thus, to analyze potential movements in the intrinsic spread for the CDX IG12, we consider three buckets:

- 1. The widest four credits with significantly elevated idiosyncratic risk
- 2. Excluding the four widest credits, 25 credits trading widest relative to levels in September 2007 (ie, the highest ratio of current spread to September 2007 spread)
- 3. The remaining part of the portfolio, where the systemic risk concerns are more dominant

For the widest four credits (CIT, AIG, ILFC and TXT FIN as of June 29, Fig 3b), the current contribution to CDX IG12 intrinsic spread stands at 28bp. This is likely the most volatile component of the intrinsic spread for the portfolio, and spread movements in the near term will be driven by idiosyncratic factors (ie, the success of restructuring efforts, potential M&A/asset sales, and the degree of government support/intervention). Generally speaking, we are slightly constructive on the bucket, primarily due to our constructive view on ILFC (in anticipation of an eventual sale to private equity). We estimate the index contribution could fall to 25bp and 22bp in our base and bullish cases, translating into index tightening of 3bp and 6bp, respectively.

Figure 2: Estimated CDX IG12 Intrinsic Spread Contributions under Various Scenarios

bp	Current	Base	Bullish
Widest 4 (abs. levels)	28	25	22
25 Widest relative to Sep 07 levels (excl. widest 4 by abs. levels)	43	35	27
Rest of the Portfolio	57	43	28
Total Intrinsic	127	103	77
Est. Traded Level (11bp rich to intrinsic)	116	92	66

Source: Barclays Capital

Figure 3a: Spread Contribution, CDX IG12

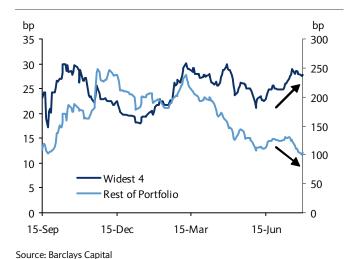
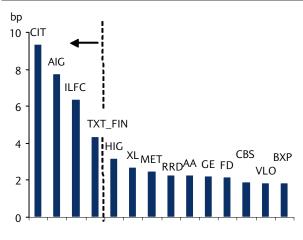


Figure 3b: Spread Contribution from Widest Credits, CDX IG12 (on 7/29/09)



Source: Barclays Capital

After excluding the four widest credits, we list the 25 credits trading widest relative to levels in September 2007 in Figure 3. These 25 credits currently trade at an average spread of 234bp, contributing 43bp to the CDX IG12 intrinsic spread. The average spread for these 25 credits in September 2007 was 39bp. However, this portfolio of 25 credits was rated

credits in September 2007 was 39bp. However, this portfolio of 25 credits was rated materially higher in September 2007 than now – more than 60% of this portfolio has been downgraded since – and we make a ratings-based adjustment to their average spread.

For the purpose of this analysis, we estimate the average spread in September 2007 corresponding to each rating category across financials and non-financials, using the universe of traded 5y senior unsecured CDS levels (we exclude 15% of the extremes on either side, so as to arrive at a more robust estimate of spreads in each rating category). We then apply this spread adjustment to all credits that have been upgraded/downgraded since September 2007.

With this adjustment, we estimate the spread level in September 2007 for the 25 credits to be close to 53bp, indicating a likely contribution of 11bp to the CDX IG12 intrinsic spread. However, from a fundamental perspective, this portfolio of 25 credits has greater downside risks, as highlighted by the number of credits rated Underweight by our fundamental analysts – our analysts are Underweight 8 of the 25 credits, compared to only 2 Overweights. We therefore assume that even in a bullish scenario, spread contribution will tighten about midway between 43bp (current contribution) and 11bp (September 2007, rating-adjusted contribution) to ~ 27bp. In a less bullish, base case scenario, we estimate the spread contribution to decrease to about 35bp.

For the remaining 96 credits, the current average spread is about 75bp, contributing about 57bp to the CDX IG12 intrinsic spread. The average spread for these credits in September 2007 was about 37bp, contributing about 28bp to the intrinsic spread. The quality deterioration for these credits is comparatively less, with only about 20% of names in the portfolio downgraded since September 2007. Thus, we estimate a spread contribution of about 28bp in a bullish case. In a less bullish base case, we estimate the spread contribution to be about 43bp.

In total, we estimate that 66bp is a floor for CDX IG12 levels, even in a bullish scenario (assuming that the index trades about 11bp rich to intrinsic) (Figure 2). A more realistic scenario, however, is a tightening to a 92bp context, and we would expect any further tightening from this level to be accompanied by significant and tangible improvement in the macroeconomic environment.

Figure 4: List of 25 Credits (Excluding Four Widest) Trading Widest to September 2007 Levels

	Spr	eads	Index	Rating	
Name	Sep-07	Current	Sep-07	Current	Credit View
Hartford Finl Svcs Gp Inc	28	456	Α	BBB-	Marketweight
MetLife Inc	29	341	Α	Α	Marketweight
Gen Elec Cap Corp	31	299	AAA	AA	Underweight
Wells Fargo & Co	27	252	AA+	AA-	Marketweight
Nordstrom Inc	21	172	A-	BBB+	Overweight
XL Cap Ltd	46	333	A-	BBB	Marketweight
Dow Chem Co	23	207	A-	BBB-	Marketweight
Alcoa Inc.	40	311	A-	BBB-	Underweight
R R Donnelley & Sons Co	45	306	BBB	BBB	Underweight
Natl Rural Utils Coop Fin Corp	39	227	Α	Α	Marketweight
Whirlpool Corp	39	225	BBB	BBB-	Not Rated
Caterpillar Inc	23	120	Α	Α	Not Rated
Valero Energy Corp	39	253	BBB	BBB	Underweight
Ryder Sys Inc	31	157	BBB+	BBB+	Underweight
Newell Rubbermaid Inc	26	150	BBB	BBB-	Underweight
CBS Corp	52	240	BBB	BBB-	Underweight
Motorola Inc	38	201	BBB+	BBB-	Underweight
Southwest Airls Co	41	202	A-	BBB	Not Rated
Cigna Corp	31	140	BBB+	BBB	Not Rated
Marriott Intl Inc	37	175	BBB	BBB-	Not Rated
Intl Paper Co	44	184	BBB-	BBB-	Marketweight
Boston Properties LP	62	256	BBB	BBB	Marketweight
American Express Co	40	156	A+	A-	Marketweight
Xerox Corp	62	195	BBB-	BBB	Marketweight
Macy's	80	304	BBB	BB	Overweight

Source: Barclays Capital

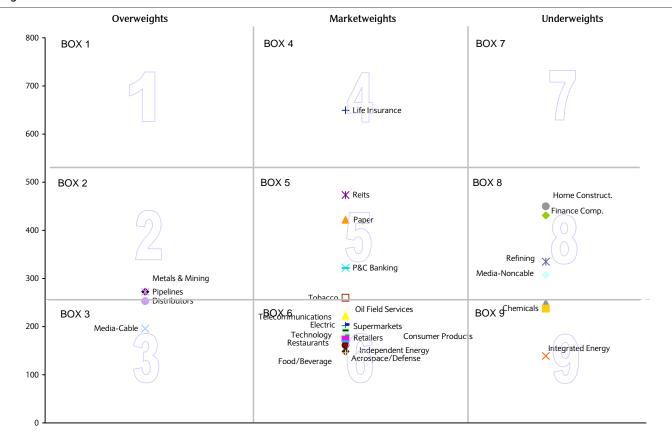
#### Conclusion

We have estimated that the 66-92bp range represents a likely floor for the CDX IG12, given current constituent ratings and spreads. This implies an upside potential of about 24-50bp from current levels, assuming that the index continues to trade about 11bp rich to intrinsic.

When compared to the downside risk from potential spread widening to historical levels, risks appear balanced when a three month window is used (IG12 wider by about 47bp on April 30, 2009). However, in the context of the past four months (IG12 wider by about 81bp on March 31, 2009), downside risks appear dominant.

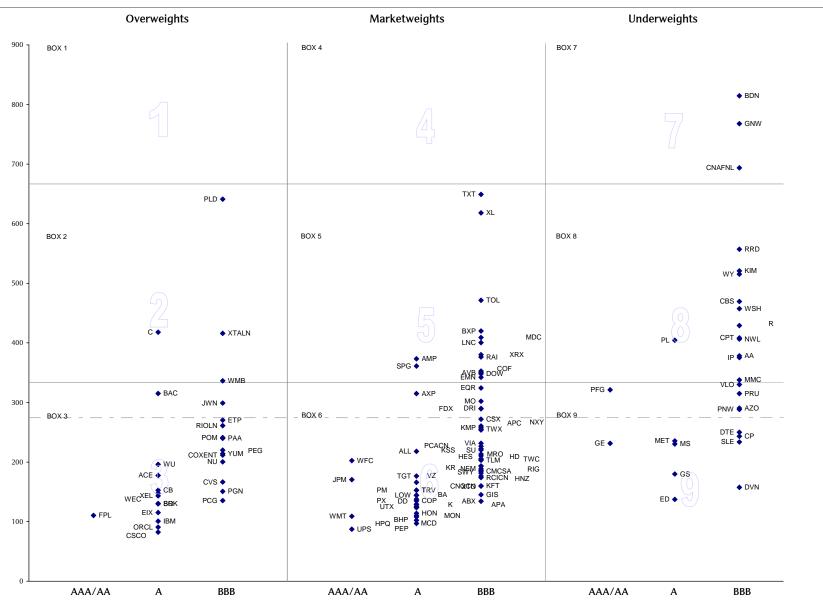
Overall, our results suggest the most upside potential in the mid-tier spread bucket. We screened the universe of credits in Figure 3 for the more attractive long opportunities based on several metrics, including our credit and equity analyst ratings, historical richness/cheapness (adjusted for ratings migration), rating downgrade (fallen angel) risk, and the relative value of CDS versus equity implied volatility and share prices. In summary, we prefer selling protection on Nordstrom, Macy's, Xerox, Southwest, Whirlpool, and Alcoa among the higher-beta names.

Figure 5: Sector Relative Value Monitor



Note: Dashed line represents the average OAS for the Barclays Capital US Corporate Index. Levels as of July 30, 2009. Source: Barclays Capital

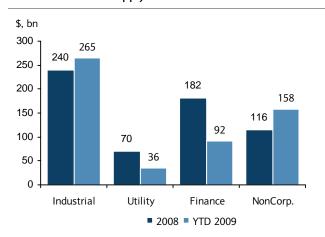
Figure 6: Issuer Relative Value Monitor



Note: Dashed line represents the average OAS for the senior unsecured bonds in the Barclays Capital U.S. Corporate Index. Levels as of July 30, 2009. This table does not represent our full coverage universe. A full list of ratings can be found on our research website. Source: Barclays Capital

31 July 2009

#### YTD2009 Fixed IG Supply



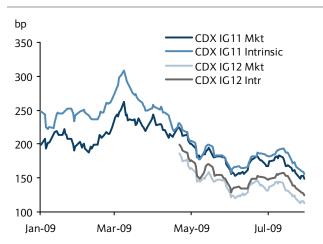
Source: Barclays Capital

#### CDX.IG versus VIX



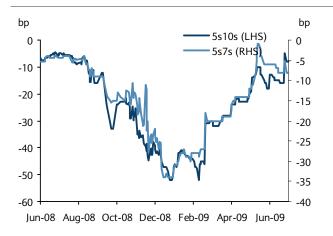
Note: A portion of the significant tightening in CDX.IG on March 20, 2009, is attributable to the roll from Series 11 to Series 12. Source: Markit, Barclays Capital

#### CDX.IG Mkt vs. Intrinsic



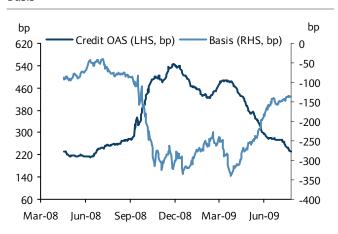
Source: Barclays Capital

#### CDX.IG Curve



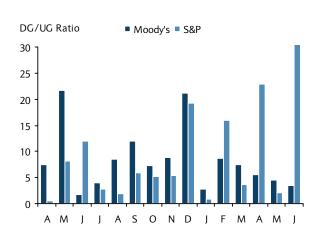
Note: A portion of the significant steepening in CDX.IG curve levels on March 20, 2009, is attributable to the roll from Series 11 to Series 12. Source: Barclays Capital

#### **Basis**



Basis defined as CDX.IG OTR spread - corporate Libor OAS. Source: Barclays Capital  $\,$ 

#### Par Downgrade/Upgrade Ratio



Source: Moody's, S&P, Barclays Capital. Note: The S&P ratio for June 2009 was 9.35.

#### **HIGH YIELD**

Bradley Rogoff, CFA +1 212 412 7921

bradley.rogoff@barcap.com

Michael Anderson, CFA +1 212 412 7936 michael.anderson@barcap.com

> Matthew Mish, CFA +1 212 412 2183 matthew.mish@barcap.com

Gautam Kakodkar +1 212 412 7937 gautam.kakodkar@barcap.com

> Eric Gross +1 212 412 7997 eric.gross@barcap.com

# **Rising Tide**

High yield continued to produce strong returns this week, with the cash index moving 1pt higher to \$85, putting it within striking distance of "pre-Lehman" levels. Nonetheless, HYCDX still managed to outperform cash, making up some slack in year-to-date returns with a  $1\frac{3}{4}$  pts gain. These strong returns came on the back of a flurry of earnings releases, with the positive reports continuing to outnumber the negative.

Second-quarter earnings streamed in across multiple sectors. In healthcare, most companies came in broadly in-line on revenues, with some names such as HMA, UHS, Tenet, and Psychiatric Solutions posting stronger-than-expected EBITDA on improved margins. Results were more mixed on the retail side, with solid numbers out of Jones Apparel and Sally Beauty, counterbalanced by a sharp miss from Office Depot. In technology, Amkor led the pack with performance that beat guidance, while Unisys, Sensata and Alcatel-Lucent also bested expectations. Media names such as Regal Cinemas and AMC were helped by strong box-office revenues but still fell short of our analyst's estimates. We caution that most of the positive surprises remain cost-driven, and we have yet to see the meaningful growth in revenues that would accompany a recovery in fundamentals.

Late last Friday, Ericsson announced that it had won the bid for Nortel's CDMA assets, acquiring the North American wireless business for \$1.13bn in cash. In other distressed news, Station Casinos filed for bankruptcy in Reno, Nevada on Tuesday, though the filing does not include the company's casino properties. Station CDS had already triggered in February of this year, after the company failed to make an interest payment on its bonds.

High yield issuers sold a healthy \$4.7bn through Thursday, with most notes breaking higher and trading well in the secondary market. Of note, Ford Motor Credit priced a \$1.75bn 3y senior note. It was one of two deals to top 1 billion dollars. Other companies to tap the market this week included Arch Coal, Pinnacle Entertainment, USG, and Peninsula Gaming.

Figure 1: Cash and CDS Movers

High Yield Cash					
Best	Px	Chg	Worst	Px	Chg
TPORT 11.875 '16	71.5	+11.0	CNB 7.114 '12	1.0	-9.0
MOMENT 11.5 '16	46.0	+10.0	ABK 6.15 '37	8.0	-7.0
LIBMUT 7.8 '37	67.0	+9.0	SFI 5.65 '11	54.0	-5.4
High Yield CDS					
Best	5у	Chg	Worst	5у	Chg
POL	9.8	-9.3	AMR	62.0	+3.0
F	20.0	-8.0	RESCAP	39.5	+2.5
AMD	29.0	-8.0			

Figure 2: Relative Performance HY Cash and CDS



Source: Barclays Capital. Note: Returns normalized to 1 at September 2, 2008

Source: Barclays Capital

#### Think Positive on Basis

The relative outperformance of high yield CDS versus cash late last year produced many attractive negative basis trades, which we highlighted on a few occasions during that period. However, the tide has clearly turned since then, and bonds have made up their lag in performance this year. In fact, cash has performed so well – and funding costs have come down sufficiently – that some positive basis trades have become interesting, in our view.

A pure positive basis trade allows the investor to receive income without assuming default risk by selling the bond and selling default protection simultaneously, and therefore requires a relatively liquid repo market. As funding costs have come down, selling bonds has once again become a possibility. However, shorting bonds can still be difficult and the more interesting opportunity may be to rotate out of bonds and into CDS for investors positive on the credit. For investors looking to enter a positive basis package the coupon on the bond is an important consideration as higher coupon bonds have less attractive carry.

Figure 3: Attractive Positive Basis Packages for Names Trading in Points Upfront

Ticker	Coupon (%)	Maturity	Bond Price (\$)	CDS Upfront (pts)	Basis (pts)	JTD Gain (pts)
URI	10.875	2016	101.5	11.0	112.5	12.5
SDSINC	10.625	2015	107.5	4.5	112.0	12.0
BYD	6.750	2014	87.0	24.0	111.0	11.0
SANM	6.750	2013	90.0	17.0	107.0	7.0
MCCC	9.500	2013	99.8	5.5	105.3	5.3

Source: Barclays Capital

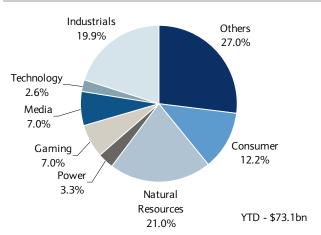
In credits trading in spread, there are a few opportunities where CDS is in fact wider than the bond, allowing for a positive basis trade that has positive carry. In these lower-yielding energy names, we believe it makes sense to move longs into CDS to pickup additional yield.

Figure 4: Attractive Positive Basis Packages for Names Trading in Spread Running

Ticker	Coupon	Maturity	Z-Spread	CDS Spread (bp)	CDS- ZSPR	Basis (bp)	Carry (bp)
CHK	7.250	2018	483	560	77	100	165
MIR	7.375	2013	480	614	134	166	124
EP	5.950	2017	295	560	266	279	35

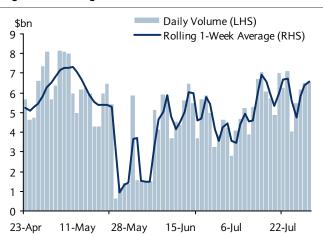
Source: Barclays Capital

High Yield 2009—Supply by Sector



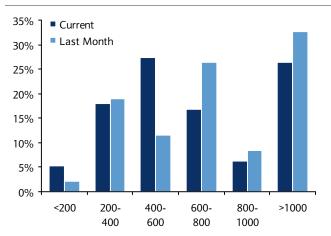
Source: Barclays Capital

High Yield Average Institutional Trade Volume



Source: Trace, Barclays Capital

#### On-the-Run HYCDX Spread Distribution



Note: Excludes defaults. Source: Barclays Capital

Top CDX Index Names by Net CDS Outstanding

	Notic Outstandi		Char Week   7/24/0	
	Gross	Net	Gross	Net
Limited Brands	32.8	2.7	239.3	52.5
Lennar	39.2	2.5	150.8	(5.4)
Radian	37.2	2.5	98.5	10.5
Clear Channel	32.9	2.3	119.3	(12.3)
Sprint Nextel	33.6	2.2	19.8	(45.9)
Temple-Inland	26.9	2.2	113.1	12.6
Radioshack	20.6	2.1	155.5	5.3
Gannett	27.2	2.1	247.4	(73.1)
Tyson Foods	23.3	2.1	123.4	9.2
Ford Motor Co	37.9	1.9	502.1	(1.7)

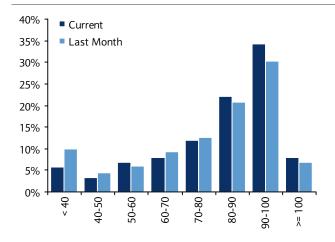
Source: DTCC

#### OTR HYCDX versus U.S. High Yield Index



Source: Barclays Capital

High Yield Index Price Distribution by Par Value (%)



Source: Barclays Capital

### **LEVERAGED LOANS**

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

Michael Anderson, CFA +1 212 412 7936 michael.anderson@barcap.com

Matthew Mish, CFA +1 212 412 2183 matthew.mish@barcap.com

Gautam Kakodkar +1 212 412 7937 gautam.kakodkar@barcap.com

> Eric Gross +1 212 412 7997 Eric.Gross@barcap.com

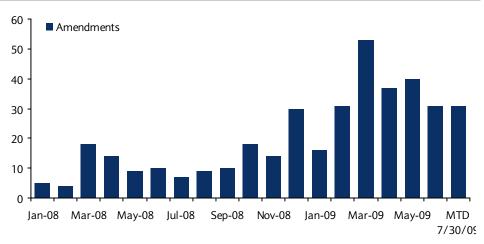
# Those Who Stay Will Be Champions?

Loans underperformed the broader rally in high yield and equities, with the LCDX index up almost 1 point to \$93 and the LCDX/HY12 relationship compressing about <sup>3</sup>/<sub>4</sub> of a point to 3.5 points. Loan amendments continue to proliferate in the marketplace as companies pursue various initiatives to increase financial flexibility. In recent weeks, issuers appear to be facing marginally more pushback from investors attempting to extract larger concessions, particularly for more aggressive offers.

In general, however, most offers have been approved with greater concessions that have been incrementally positive. Vought needed to sweeten its offer from 5bp to 25bp to the first 50% of investors who consented to its asset-sale amendment; Georgia Gulf offered a 50bp fee and L+700 pricing, and agreed to downsize its revolver from \$375m to \$300m in order to change leverage and interest-coverage covenants through Q4 2011. The latter was part of Georgia Gulf's successful debt-for-equity swap that allowed the company to restructure outside of bankruptcy and significantly reduce debt. Dynegy offered lenders a 225bp coupon increase to loosen financial covenants and allow new second-lien debt issuance to fund buybacks of bonds, pushing up DYN TL into the high 90s.

Among amendment offers, more issuers have started asking for consent to issue second-lien debt. This week, Ford's lenders approved an amendment to increase the company's second-lien debt basket from \$4bn to \$14.4bn, while TXU launched an amendment that would allow for expansion of the second-lien basket to \$5bn from \$1bn in exchange for a reduction in the first-lien accordion from \$2bn to \$750mn as well as any extension of 2014 maturities.. With most secured lenders unwilling to accept paydowns below par, issuing second-lien debt to paydown unsecured or subordinated debt is one possible option for companies to delever (assuming bond covenants do not prevent this issuance and there is significant collateral behind the issue). For example, Momentive's recent 12.5% second-lien note is trading in the low 90s compared with its unsecured and subordinated bonds in the low 60s and low 40s, respectively.

Figure 1: Count of Negative Amendments



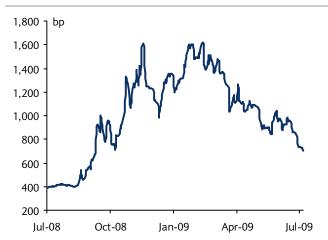
Source: Barclays Capital, S&P.

#### Weekly Leveraged Loan New Issue Volume

Leveraged Loan	# of Deals	Amt (\$mn)
Institutional Launched Volume	6	1,930
Forward Calendar of Institutional T/Ls	8	4,070
Year-to-Date Institutional Loans*	40	13,310

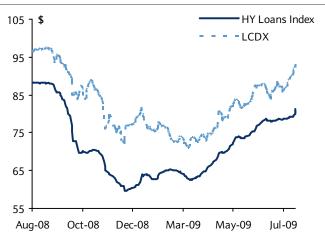
Source: S&P LCD and S&P/LSTA Leveraged Loan Index, Barclays Capital

#### **OTR LCDX Historical Spreads**



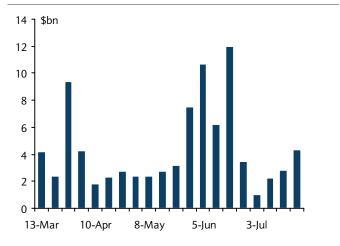
Current market assumes 55% recovery on LCDX. Source: Barclays Capital

# OTR LCDX versus Loan Index Price History



Source: Barclays Capital

#### **New Trade Volume in LCDX Indices**



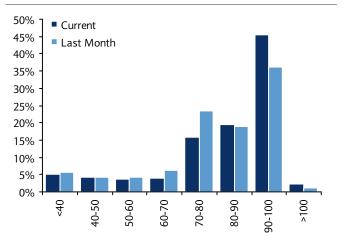
Source: DTCC

#### **OTR HYCDX vs. LCDX**



Source: Barclays Capital

# Loan Index Price Distribution by Par



Source: Barclays Capital

#### STRUCTURED CREDIT & VOLATILITY PRODUCTS

Madhur Duggar +1 212 412 3693 madhur.duggar@barcap.com

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

# Sell 2x 90 Strike Dec Receiver; Buy 1x 160 Strike Dec Payer on IG.12

In the IG section, we argue that in the medium term, IG.12 index spreads are unlikely to rally past 90bp unless there is a substantial improvement in the macroeconomic environment. The analysis is based on looking at where the index would have traded at an intrinsic level in September 2007 after adjusting for the migration in credits that has taken place since then. We then adjust this intrinsic level of 103bp by 11bp to account for the index-intrinsic basis.

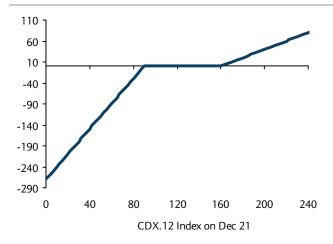
For investors looking to buy protection against a systemic widening in spreads into yearend, we recommend buying the Dec-09 160bp payer and fund it by selling 2x the Dec-09 90bp receiver.

- The trade is costless at inception and outperforms in a systemic widening scenario if spreads widen past 160bp (Figure 1). In Figure 2, we show a time series of intrinsic spreads on the CDX.12 index. CDX.12 spreads would have widened past 160bp in previous periods of systemic stress such as November 2008-April 2009. If they widen to their peak levels of about 220bp, the trade outperforms by about 2.7 pts.
- The risk to the trade is a systemic tightening in IG.12 spreads past 90bp and/or a collapse in the index-intrinsic basis. We believe such a scenario to be unlikely in the medium term unless there is substantial improvement in the macroeconomic environment. In this bullish scenario, we expect the index to rally to about 66 bp and the trade to underperform by about 2.2 pts.

# Market Recap in Synthetic Tranches and Credit Options

The IG.9 index tightened during the past week, with ref levels decreasing 15bp, 14bp, and 9bp in the 5y, 7y, and 10y tenors, respectively. The delta-adjusted moves within the capital structure were uniform across all tenors, as the 0-10% part of the capital structure tightened and the 15-30% part of the capital structure widened delta-adjusted. The best performer was the 3-7% tranche, which ended the week with a 4-5% delta-adjusted P&L.

Figure 1: Payoff Profile of the Trade at Expiry (bp)



Source: Barclays Capital

Figure 2: Trade versus Historical IG.12 Spreads

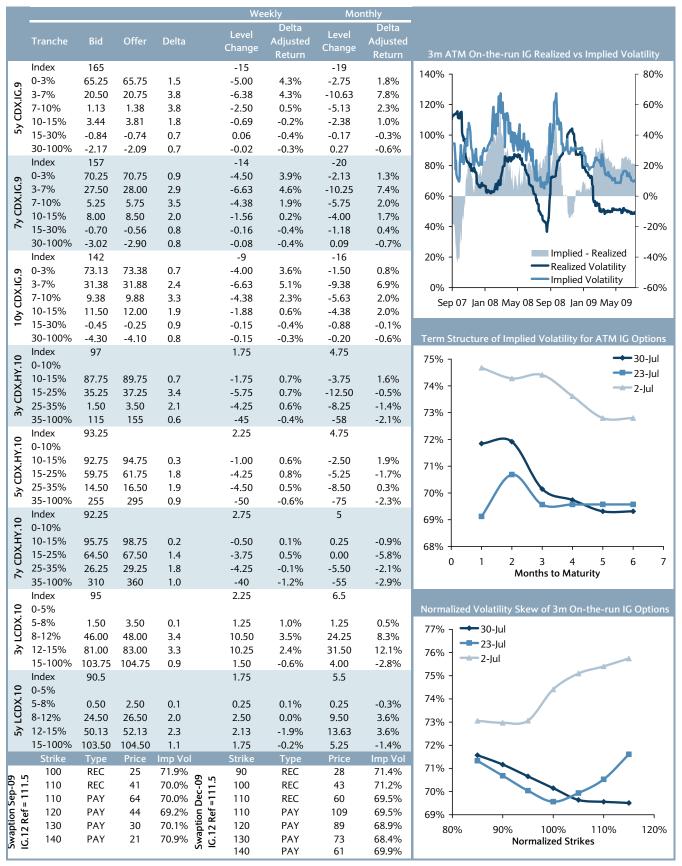


Source: Barclays Capital

The HY.10 index ref levels decreased 1.75pts, 2.25pts, and 2.75pts in the 3y, 5y, and 7y tenors, respectively. Junior tranches tightened, with the 15-25% part of the capital structure tightening 3.75-5.75% w/w on a delta-adjusted basis. The super senior tranche was wider delta-adjusted across all tenors.

The LCDX.10 index ref levels increased 2.25pts and 1.75pts in the 3y and 5y tenors, respectively. The 3y 8-12% tranche outperformed the most, with a w/w P&L of 3.5%. On the other hand, the 5y 12-15% tranche underperformed by 1.9%.

In IG index options, implied volatility increased during the past week. 3m implied volatility increased 0.6%, to 70.1%, while 3m realized volatility decreased 0.5%, to 49.6%. The risk premium, which we define as the basis between the implied and realized volatility levels, increased 1.1%, to 20.6%. The term structure of implied volatility inverted, with the 3m-1m implied volatility basis decreasing to -1.7% from 0.4%. The implied volatility skew flattened. The implied volatility basis between 115% and 85% normalized strikes (assuming that the ATM strike is 100%) decreased to -2.1% from 0.3%.



Note: W/w changes constitute the difference in market closing levels between July 30, 2009, and July 23, 2009. M/m changes constitute the difference in levels between June 30, 2009, and July 2, 2009. Source: Barclays Capital

#### **CONTACTS**

#### **U.S Credit Strategy**

Ashish Shah ashish.shah@barcap.com 212-412-7931 Krishna Hegde krishna.hegde@barcap.com 212-412-7942

#### **Investment Grade**

Jeff Meli jeff.meli@barcap.com 212-412-2127 Shobhit Gupta shobhit.gupta@barcap.com 212-412-2056 Hari Manappattil hari.manappattil@barcap.com 212-412-7922

#### High Yield & Leveraged Loans

**Bradley Rogoff, CFA** bradley.rogoff@barcap.com 212-412-7921

Eric Gross eric.gross@barcap.com 212-412-7997 Michael Anderson, CFA michael.anderson@barcap.com 212-412-7936

Matthew Mish, CFA matthew.mish@barcap.com 212-412-2183

Gautam Kakodkar gautam.kakodkar@barcap.com 212-412-7937

#### **Structured Credit & Volatility Products**

Madhur Duggar madhur.duggar@barcap.com 212-412-3693 Batur Bicer batur.bicer@barcap.com 212-412-3697

#### 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.