

# CDO/CDS Update 08/30/05

## I. Commentary

**Global CDS spreads remained mostly flat in summer doldrums.** The 5-year DJ CDX.NA.IG dipped below the 50-bp mark for the first time since April, finishing the week at 49.6 bps. The 30-name high-volatility sub-index finished a bit wider at 109.21 bps. The DJ CDX.NA.HY index ended about 5 bps tighter at 351.7 bps. Elsewhere, the index spreads finished the week mostly unchanged, although the 5-year iTraxx Australia index moved 0.5 bp tighter to 28.75 bps. The October crude oil futures closed at the all time high of \$67.49 on Thursday, but the market reaction was mostly muted. In the new week, spreads opened a bit wider, but the 5-year CDX.NA.IG closed virtually unchanged.

The auto sector, which turned fairly stable over the last two weeks, was caught off guard on late Wednesday as Moody's finally cut the ratings of Ford and GM and their finance arms. The rating agency downgraded Ford and Ford Motor Credit by one notch to 'Ba1' and 'Baa2,' respectively. Meanwhile, GM and GMAC were downgraded by two notches to 'Ba2' and 'Ba1'. Moody's also left the outlook for the four entities at 'negative.' The move has left all three major rating agencies rating GM and GMAC at junk status.

Unlike the similar move by S&P in May, Moody's downgrades caused little market reaction. In fact, the 5-year CDS of GMAC finished the week 7 bp *tighter* at 410 bps, while Ford Motor Credit's 5-year CDS also closed 2 bps tighter at 391 bps. While the spread differential of the two finance arms is about 20 bps, for the operating companies the differential is nearly 80 bps. The 5-year CDS of GM and Ford tightened by 4-6 bps to 599 bps and 520 bps, respectively. GM and Ford's stocks finished the week little changed.

GMAC and FMCC's 5-year CDS *without restructuring* closed at 393 bps and 375 bps, respectively. The difference between the CDS spread with restructuring (annotated "MR" in the U.S.) and without restructuring ("XR") represents the price of protection for the restructuring credit event. High-yield names, given their higher risk, usually trade without restructuring. For GMAC, the spread differential became volatile in May and June but has stabilized since, as the expectation of it remaining below investment grade became clear. (See the graph on the following page.)

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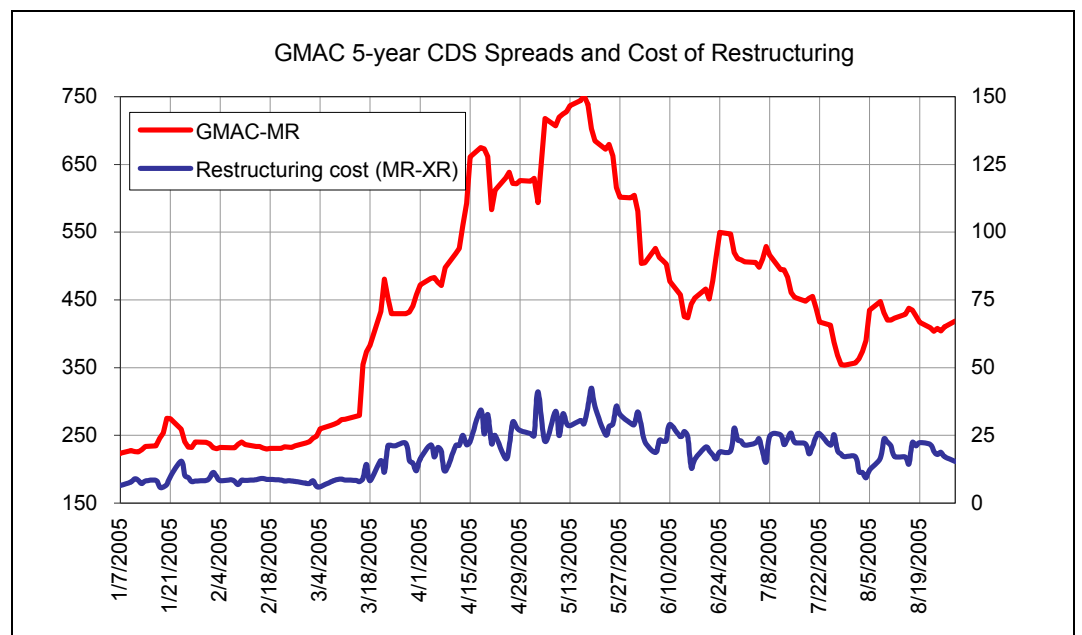
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Source: Markit

**S&P introduced analytical model for the leveraged super senior (LSS) structure.<sup>1</sup>** The LSS transaction allows an investor to receive leveraged spreads on the super senior tranche, while the maximum loss is capped at a fraction of the tranche size. However, such a structure typically comes with additional triggers that cause the investor to suffer losses. Because a super senior tranche itself has extremely low risk, the key for analyzing leveraged super senior transactions is to assess the likelihood that the additional triggers will be breached. Analyzing a LSS deal with spread triggers is particularly difficult because it requires modeling of spread movements as well as default timings.

For LSS, S&P runs a two-stage simulation. In the first step, S&P simulates default timings using the standard Gaussian copula model as in its CDO Evaluator. This is similar to the approach S&P uses for regular CDOs. As an input, S&P estimates credit curves for individual credits based on their credit ratings, rather than using market-implied credit curves based on CDS spreads.

In the second step, the average portfolio spread is simulated at various levels of default loss. The average portfolio spread is assumed to follow a mean-reverting, lognormal process. Model parameters, such as the strength of mean reversion and spread volatility, are based on the rating distribution of the portfolio, the time to maturity, and historical bond index/CDS data. Simulating the dynamic spread process requires historical and current spread levels for the credits in the portfolio. In general, the deal sponsor updates the spread data periodically. The S&P methodology currently does not incorporate correlation between default risk and the spread process, as it has found only "moderate" effects of correlation in its analysis.

The S&P report also shows that spread volatility greatly affects the risk of a LSS tranche. For example, increasing spread volatility from 25% to 35% annually causes the probability of loss for the LSS tranche to rise from 0.002% to 0.2%. As expected, the report reveals that the risk of default risk for the regular super senior portion is minuscule, and that the additional triggers drive most of the risk. That means, correctly assessing the incremental risk stemming from the additional trigger becomes the key in determining the merit of an investment in a LSS. The amount of incremental risk should not exceed the value of the loss cap, or the investor should be better off with an ordinary super senior swap.

<sup>1</sup> Chandler, C., et al., *CDO Spotlight: Approach to Rating Leveraged Super Senior CDO Notes*, S&P structured finance criteria (22 August 2005).

**What is a LSS?**

A "leveraged super senior (LSS)" tranche is a variant of the single-tranche CDO structure where an investor sells protection on the super senior portion of the reference portfolio. While in an ordinary super senior structure the investor covers the full amount of the super senior portion (e.g., 30%-100%) of the reference portfolio, the maximum loss to the investor is capped at a fraction of the super senior portion (e.g. 10%) in a leveraged super senior structure. In essence, the investor receives spread for the entire super senior portion while his exposure is a fraction of it, thus giving the name "leveraged" super senior.

To compensate for the "capped" loss coverage from the standpoint of the protection buyer, a leveraged super senior structure typically includes additional loss triggers. One such trigger is a so-called loss trigger, where protection payment is called upon breaching of portfolio loss levels that are significantly lower than the attachment point of the super senior tranche. In particular, "stepped" loss triggers involve loss levels that are initially set relatively low but gradually raised because the risk decreases as maturity approaches. In such a case, the investor receives a "leveraged" spread for the 30%-100% portion of the portfolio, but his exposure starts much lower than the attachment point of 30%.

Another popular trigger is a spread trigger. The first such structure appeared in January 2005, according to S&P. The spread trigger is breached when the average market spreads for the underlying credits widen to a certain level. The trigger level is determined based on the amount of losses experienced and the remaining time to maturity. This additional trigger is supposed to compensate for the additional risk to the protection buyer because of the limited coverage the protection seller offers.

Finally, an additional trigger may be linked to the mark-to-market value of the super senior tranche. However, such a trigger is more difficult to implement because accurate pricings may not be available. Moreover, simulating mark-to-market changes is significantly more difficult than simulating default losses and spread changes. Many leveraged super senior transactions include a de-leveraging option, where the investor can avoid a breach of the triggers by injecting more cash into the transaction to lower the degree of leverage.

**Structured finance rating volatility declined significantly for the second quarter 2005**, according to Moody's.<sup>2</sup> The number of rating changes declined by 30% from the first quarter, and there were *no* downgrades in the manufactured housing (MH) ABS and aircraft lease ABS sectors. CDOs and home equity ABS dominated downgrades, together accounting for 75% of all downgrades. However, the number of CDO downgrades itself fell about 45% from the first quarter, while the number of CDO upgrades were the highest ever for a quarter at 19. This is roughly the same as the number of CDO upgrades taken in 2004 as a whole. (See the table below.) Most of the upgrades were caused by increased credit enhancement and decreased leverage.

The improving credit performance of the MH ABS and aircraft lease ABS sectors bodes well for older ABS CDOs that have experienced a surge in downgrades over the recent quarters. However, the up-tick in downgrades of home equity ABS (with 69 in 2005 to date vs. 78 for the full-year 2004) may be a worrisome development for recently issued ABS CDOs, as many of these deals are predominantly comprised of home equity ABS.

<sup>2</sup> Wang, Z., et al., *Rating Changes in the U.S. Asset-Backed Securities Market: 2005 Second Quarter Update*, Moody's special report (15 August 2005).

Selected ABS/CDO Rating Changes (# of tranches)				
Downgrades	Aircraft	MH	Home equity	CDO
2001	18	4	27	159
2002	44	198	11	751
2003	56	327	82	538
2004	62	425	78	209
H1 2005	4	5	69	113
Upgrades	Aircraft	MH	Home equity	CDO
2001	0	4	0	4
2002	0	1	21	12
2003	0	5	52	27
2004	0	1	61	20
H1 2005	0	62	110	25

Source: Moody's

## II. Recent Pricing & Pipeline:

Issue	Date	Size (mm)	Collateral Manager	Assets	Lead	Class	Rating	WAL	Spread
Cumberland CLO II	8/26	\$400.00	Deerfield Capital Management	Loans	JPM				
		302.00				A	Aaa/AAA/--	7.80	+25/3ML
		32.00				B	A2/A/--	10.10	+75/3ML
		16.00				C	Baa2/BBB/--	10.10	+180/3ML
		50.00				Equity			
MMCaps	8/25	\$312.45	Sandler O'Neill	Bank TruPs	RBSGC/SONL				
		162.00				A-1	Aaa/AAA/AAA		+35/3ML
		19.50				A-2	Aaa/AAA/AAA		+45/3ML
		33.00				B	Aa2/AA/AA		+60/3ML
		35.48				C-1	A2/--/A		+120/3ML
		35.48				C-2	A2/--/A		+145/Swap
		27.00				P/S			
Inman Square Funding II	8/24	\$300.00	TCW	Mezzanine ABS	MS				
		170.00				I	Aaa/AAA/--	3.70	+45/3ML
		41.00				II	Aa2/AA/--	6.10	+80/3ML
		10.00				IIIa	A2/A/--	6.90	+165/3ML
		13.00				IIIb	A2/A/--	6.90	+165/Swap
		18.00				IV	Baa2/BBB/--	6.30	+395/3ML
		4.00				V	Ba1/BB+	6.30	+575/3ML
		44.00				Equity			
Endeavor Funding	8/22	\$550.00	Silvermine Capital Management	Loans	CITG				
		409.40				Super Sr.	Aaa/AAA/--		+35/3ML
		25.00				A-1	Aaa/AAA/--		+45/3ML
		20.00				A-2	Aa2/AA/--		+75/3ML
		26.00				B	A2/A/--		+180/3ML
		27.00				C	Baa2/BBB/--		
		42.60				Equity			
Gallatin CLO II	8/19	\$500.00	Bear Sterns AM	Loans	BS				
						A1L	Aaa/AAA/--	7.40	+25/3ML
						A2L	Aa2/AA/--	8.20	+40/3ML
						A3L	A2/A/--	8.20	Not offered
						B1L	Baa3/BBB/--	8.20	+185/3ML
						B2L	Ba2/BB/--	8.10	+450/3ML
						X	Aaa/AAA/--	2.90	Not offered
						PS			Not offered

Issue	Date	Size (mm)	Collateral Manager	Assets	Lead	Class	Rating	WAL	Spread
Logan 2005-1*	8/19	\$2,010.00	RBC Principal Finance	CDO	RBC				
		1,800.00				Super Sr.	Aaa/AAA/--	7.60	
		121.40				A1	Aaa/AAA/--	7.90	+50/Libor
		19.20				A2	Aaa/AA+/-	8.00	+60/Libor
		17.20				B	Aa1/AA/--	8.00	+75/Libor
		21.20				C	Aa3/--/--	8.00	+110/Libor
		15.00				D	Baa2/--/--	8.00	+350/Libor
		6.00				FI		8.00	+750/Libor
		10.10				C/D combo	A3/--/--	8.00	fx. 6.15%

New Pipeline	Size (mm)	Collateral Man.	Assets	Lead
Park Avenue Synthetic HY CDO*	\$2,000.00	Static	HY corp	CSFB
Babson CLO 2005 III	\$513.00	Babson	Loans	WS
GEM Synthetic Select I	TBA	TCW	EM	GS
Indiana*	TBA	Fortis Investment Management	Global corp.	DBS
Zing VII	\$405.00	ZAIS	CDO	CITG
Gleneagles	\$750.00	Highland Capital Management	Loans	BAS
N-Star CDO 5	\$500.00	NS Advisors	CRE	BAS
Cent CDO 10	\$350.50	RiverSource Investments	Loans	MS
Davis Square Funding V	\$2,000.00	TCW	ABS	GS/CAL
Duane Street	\$350.00	D/A Capital	Loans	MS
Dryden IX	\$500.00	Prudential Investment Management	Loans	UBS
Taberna Preferred Funding III	\$779.00	Taberna Capital Management	REIT TruPs	ML
Gleneagles CLO	\$750.00	Highland Capital	Loans	BAS
Altius CDO II	\$1,500.00	Aladdin Capital	Home equity, CMBS, CDO	CSFB

\* denotes synthetic. Source: MCM, IFR, Bloomberg

### III. CDS Spreads

Name	5Y CDS (8/26)	Week Ago (8/19)	Credit Rating (M/S/F)	5Y CDS Index	Mid (8/26)	Week Ago (8/19)	Change
Fannie Mae	15	15	Aaa/AAA/AAA	CDX.NA.IG 4	49.57	50.33	-0.76
Boeing	16	18	A3/A/A+	CDX.NA.IG 4 HVOL	109.21	108.95	+0.26
IBM	21	21	A1/A+/AA-	CDX.NA.HY 4	351.68	356.27	-4.59
Deere & Co	22	23	A3/A-/A	iTraxx Europe	35.88	36.25	-0.37
GE Capital	23	23	Aaa/AAA/--	iTraxx CJ Japan	22.06	21.92	+0.14
AIG	24	25	Aa2/AA/AA	iTraxx Asia ex-Japan	45.75	45.50	+0.25
Alcoa	27	28	A2/A-/A	iTraxx Australia	28.75	29.25	-0.50
Dow Chemical	28	29	A3/A-/A-				
SBC Communications	31	32	A2/A/A+				
Walt Disney	32	32	Baa1/A-/BBB+				
Duke Energy	34	34	Baa1/BBB/BBB+				
CIT Group	35	35	A2/A/A				
McDonalds	36	37	A2/A/A				
AT&T	39	39	Ba1/BB+/BB+				
Time Warner	49	52	Baa1/BBB+/BBB+				
Viacom	50	55	A3/BBB+/BBB+				
Computer Associates	66	68	Ba1/BBB-/BBB-				
Albertsons	85	79	Baa2/BBB-/BBB				
Altria Group	108	112	Baa2/BBB+/BBB				
Ford Motor Credit	391	393	Baa3/BB+/BBB-				
GMAC	410	417	Ba1/BB/BB+				

Source: Markit and Bloomberg

### IV. CDS Index Tranche Indicative Spreads & Base Correlation

[Due to holidays, the base correlation levels were not available. We apologize for the inconvenience.]

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