

# CDO/CDS Update 02/21/06

## I. Commentary

**Commercial real estate CDOs show no sign of slow down**, as two deals priced last week and the pipeline mushroomed with CRE deals. The newest trend seems to be the inclusion of CDO tranches in the underlying portfolio. For example, one deal in the pipeline, CT CDO IV, is backed by a portfolio of 37 CMBS, two B-notes, one mezzanine loan, and nine tranches of CRE CDOs. While CMBS bonds make up over 60% of the deal's underlying portfolio, nine CDO tranches from five deals represent 30%. On the synthetic side, CRE CDOs are expanding to non-triple-A CMBS. Abacus 2006-10, currently in the pipeline, references a static portfolio of 70 single-A CMBS. Synthetic CMBS CDOs first appeared in the summer of 2005, but the earlier transactions used triple-A CMBS in reference portfolios. The deal uses just two credit events, failure to pay principal and writedown.

**U.S. CDS spreads tightened to the tightest level of the year**, . The 5-year DJ CDX.NA.IG finished the week 1.4 bps tighter at 44.0 bps, the tightest level since the beginning of the year. The high-volatility (HVOL) sub-index also moved tighter by 3.6 bps to 90.8 bps, while the CDX.XO index saw its spread move in by 7.5 bps to finish the week at 213.3 bps. The CDX.EM index opened somewhat wider from the historical tight level reached in the prior week, but managed to finish tighter on the week at 102.2 bps. The European indices finished flat to slightly tighter, while the iTraxx CJ Japan index actually widened by 1.6 bps to 26.8 bps, the widest level year to date. The Japanese CDS index spreads have been moving in sync with the rising yen Libor rates in the recent weeks.

In the single-name market, AMR Corp., parent of American Airlines, came under spotlight, as its CDS spreads tightened dramatically in the recent weeks. AMR's 5-year CDS spread tightened by 81 bps in one week, marking a 2-year low of 869 bps by Friday. The company reported a quarter loss of \$604 million, but the company's share price rose by 8%. Spreads in the auto sector also tightened significantly last week, as the fear of a strike at Delphi subsided, at least for now. The 5-year CDS of FMCC and GMAC tightened by 29 bps and 37 bps, respectively, to 476 bps and 404 bps.

**The 3%-6% tranches of the 7- and 10-year iTraxx Europe continued to widen**, amid talk of hedging activity related to a leveraged super senior tranche. In the 7-year sector, most tranches moved tighter last week, but the 3%-6% tranche of the iTraxx widened by 3 bps to 203 bps. This particular tranche has widened by 26 bps since the beginning of the year. Moreover, the same 3%-6% tranche in the 10-year index widened another 20 bps to 598 bps last week. This tranche has widened by 74 bps over the past two weeks and is now 92 bps wider year to date. Other tranches of the 10-year iTraxx index also finished the week 2-9 bps wider, except for the 0%-3% tranche, which tightened by 0.5%. In contrast, the 10-year tranches of the CDX.NA index tightened across the board.

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**S&P raised ratings on 26 European synthetic CDO tranches** while downgrading nine tranches and removing four tranches from creditwatch.<sup>1</sup> Three of the downgrades were related to the revision of S&P's CDO model from Evaluator 2.4.3 to Evaluator 3.0 in December 2006. Since the new model was introduced, S&P has downgraded 37 tranches and upgraded 33 tranches. The rating agency had been under attack from various market participants for its simplistic and less conservative assumptions about correlation. However, S&P also revised its assumptions about default probability, perhaps trying to lessen the impact on existing deals.

The main changes in the new model include; (1) *higher* inter-industry correlation, (2) *lower* intra-industry correlation, (3) *lower* default probability for investment-grade ratings except for 'BBB-' and (4) *higher* default probability for ratings of 'BBB-' and below. S&P has set a transition period through the first quarter of 2006, where, instead of using the new model exclusively, a tranche's credit rating won't be altered as long as differences in analytical results of the old and new models fall within certain "tolerance levels." S&P published a handbook for the new model last week.<sup>2</sup>

**U.S. CDO issuance is likely to remain robust through the first half of 2006**, according to Moody's.<sup>3</sup> The rating agency reported that issuance volume surged by 73% from \$94 billion in 2004 to \$162 billion in 2005. The number of new deals also increased from 227 to 363 over the same period. By deal types, re-securitizations (*i.e.*, ABS CDO), synthetics and CLOs made up nearly 90% of new deals. While the current pipeline indicates that issuance is likely to remain brisk over the near term, the activity is unlikely to keep up with the record pace, as default rates gradually increase from cyclical low levels. A slow down in synthetic activity became evident in the fourth quarter of 2005, when the number of rated deals dropped by half from the previous quarter.

Moody's also noted that credit performance of CDOs improved last year with the downgrade-to-upgrade ratio of 2:1, compared to the ratio of 8:1 in 2004. Interestingly, the downgrade-to-upgrade ratio by Moody's is higher than that of S&P, which has reported a downgrade-to-upgrade ratio of 1.2:1 for the CDO sector in 2005.<sup>4</sup>

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<sup>1</sup> Sarnstedt, J., et al., *Various Rating Actions Taken on European Synthetic CDO Tranches - February 2006*, S&P press release (15 February 2006).

<sup>2</sup> The hand book is available from S&P's web site; [www.standardandpoors.com](http://www.standardandpoors.com).

<sup>3</sup> *US CDO issuance still on record pace; pipeline suggests 2006 should meet or exceed record-breaking 2005 issuance*, Moody's press release (7 February 2006).

<sup>4</sup> Erturk, E., et al., *Rating Transitions 2005: Credit Quality of Global CDOs Improved, Although Affected by High-Profile Credit Events*, S&P research (24 January 2006).

## II. Recent Pricing &amp; Pipeline:

Issue	Date	Size (mm)	Collateral Manager	Assets	Lead	Class	Rating	WAL	Spread
Preferred TSL -21	02/16	\$784.75	FTN Financial Capital Mkts	TruPS	FTN/KBW				
		413.50				A-1	Aaa/AAA/AAA		+35/3ML
		105.30				A-2	Aaa/AAA/AAA		+40/3ML
		46.00				B-1	Aa2/-/AA		+65/3ML
		35.80				B-2	Aa2/-/AA		+65/Swap
		48.50				C-1	A3/-/A-		+115/3ML
		28.35				C-2	A3/-/A-		+115/Swap
		56.30				D	-/-/BBB		+210/3ML
		51.0				IN			
LNR IV	2/16	\$1,600.00	LNR Partners	CRE	GS/DBS				
		474.385				A	Aaa/AAA/AAA	7.99	+35/1ML
		204.174				B-FL	Aa2/AA/AA	9.71	+55/1ML
		10.00				B-FX	Aa2/AA/AA	9.71	+55/Swap
		73.154				C-FL	A2/A/A	9.75	+85/1ML
		54.95				C-FX	A2/A/A	9.75	+85/Swap
		10.00				D-FL	A3/A-/A-	9.85	+100/1ML
		54.052				D-FX	A3/A-/A-	9.85	+100/Swap
		72.058				E	Baa1/BBB+/BBB+	9.92	+265/1ML
		56.046				F	Baa2/BBB+/BBB+	9.98	+300/1ML
		78.063				G	Baa3/BBB-/BBB-	10.40	+350/1ML
		514.419				Equity			
ZAIS-VIII*	2/16	\$450.00	Zais Group	Mezz ABS	DBS				
		258.9				A-1	Aaa/AAA/-	6.6	
		90.0				A-2	Aaa/AAA/-	7.8	+50/3ML
		33.8				B	Aa2/AA/-	7.0	+60/3ML
		21.0				C	A2/A/-	7.0	+165/3ML
		22.5				D	Baa2/BBB/-	7.0	+325/3ML
		23.8				Equity			
N-Star REL CDO VI	2/15	\$450.00	NS Advisors	CRE	WS				
		244.800				A-1	Aaa/AAA/AAA	6.1	+33/1ML
		27.225				A-2	Aaa/AAA/AAA	7	+38/1ML
		21.825				B	Aa2/AA/AA	7	+44/1ML
		12.825				C	A1/A+/A+	7	+74/1ML
		13.950				D	A3/A-/A-	7	+94/1ML
		10.125				E	Baa1/BBB+/BBB+	7	+165/1ML
		7.650				F	Baa2/BBB/BBB	7	+185/1ML
		9.900				G	Baa3/BBB-/BBB	7	+300/1ML
Stone Tower- 4	2/15	\$750.00	Stone Tower Debt Advisors	Loans	CS				
		567.00				A-1	Aaa/AAA/-	8.0	+27/3ML
		42.50				A-2	Aa2/AA/-	9.1	+47/3ML
		33.50				B	A2/A/-	9.1	+80/3ML
		29.00				C-1	Baa2/BBB/-	9.1	+187/3ML
		2.00				C-2	Baa2/BBB/-	9.1	Cpn6.947% Yld 7.001%
		16.00				D			+475/3ML
		60.00				Sub Notes			
Belhurst CLO	2/15	\$500.00	Invesco	Loans	UBS				
		310.0				A1	Aaa/AAA/-		+26/3ML
		30.00				A2	Aaa/AAA/-		+26/3ML
		45.00				A3	Aaa/AAA/-		+26/3ML
		15.00				B	Aa2/AA/-		+40/3ML
		35.00				C	A2/A/-		+70/3ML
		12.50				D	Baa2/BBB/-		+170/3ML
		12.50				E	Ba2/BB/-		+460/3ML
		40.00				IN			

Denali Capital CLO-VI	02/15	\$500.00	DC Funding Partners	Loans	BS				
		277.00				A1L	Aaa/AAA/--	7.5	
		100.00				A1LR	Aaa/AAA/--		
		27.00				A2L	Aa2/AA/--	8.0	+45/3ML
		24.00				A3L	A2/A/--	8.0	+69/3ML
		19.00				B1L	Baa2/BBB/--	8.0	+170/3ML
		24.00				B2L	Ba/BB/--	8.0	+425/3ML
		29.00				P/S			
Ares VR CLO ltd	2/15	\$625.00	Ares CLO Mgmt	Loans	GS				
		468.7				A	Aaa/AAA/--	7.5	-
		22.1				B	Aa2/AA/--	10.1	+42/3ML
		23.4				C	A2/A/--	10.5	+75/3ML
		56.2				D	Baa2/BBB/--	11.3	+190/3ML
		54.6				Sub			

New Pipeline	Size (mm)	Collateral Man.	Assets	Lead
CBRE Reality Finance CDO 20006-1	\$600.00	CBRE Reality Finance Mgmt	CRE	DBS
Bernoulli High Grade CDO I	\$1,500.00	Babcock and Brown	HG ABS	ML
Vertical 2006-1	\$300.00	Vertical Capital Investment Advisors	CRE	BS
Sorin Real Estate CDO III	\$1,000.00	Sorin Capital Mgmt	CRE	BAS
Legg Mason RE CDO I	\$500.00	Legg Mason	CRE	CITG
CT CDO IV	\$490.00	Capital Trust	CRE	GS
Bernard CDO I	\$285.00	D.B Zwirn & Co	ABS	LB
Duke Funding X	\$1,000.00	Duke Funding Mgmt	ABS	UBS

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

### III. CDS Spreads

Index Constituent	Feb. 17	Week Ago	Moody's Rating	S&P's Rating	5Y CDS Index	Feb. 17	Week Ago	Change
Fannie Mae	9	9	Aaa	AAA	CDX.NA.IG 5	44.00	45.35	-1.35
Boeing	16	16	A3 /*+	A	CDX.NA.IG 5 HVOL	90.82	94.46	-3.64
IBM	15	16	A1	A+	CDX.NA.IG XOVER	213.25	220.78	-7.53
Deere & Co	18	18	A3	A-	CDX.NA.HY 5	323.58	332.50	-8.92
GE Capital	17	18	Aaa	AAA	CDX.EM 4	102.24	104.13	-1.89
AIG	17	17	Aa2	AA	iTraxx Europe 4	36.44	36.51	-0.07
Dow Chemical	22	22	A3	A-	iTraxx Europe HVOL	74.91	76.20	-1.29
Alcoa	18	19	A2	A-	iTraxx Europe X-over	266.11	270.03	-3.92
CIT Group	24	25	A2	A	iTraxx CJ Japan 4	26.76	25.16	+1.60
Duke Energy	32	34	Baa1	BBB	iTraxx Asia ex-Japan	38.19	38.45	-0.26
McDonalds	19	20	A2	A	iTraxx Australia	28.58	28.84	-0.26
Walt Disney	26	28	Baa1 /*+	A-	iTraxx SDI-75	42.20	42.35	-0.15
Viacom	50	53	Baa3	BBB	<b>CDX Widest Feb. 17</b>			
Time Warner	48	59	Baa1 /*-	BBB+ /*-	Amern Axle & Mfg Inc	556		
Computer Associates	67	66	Ba1	BBB-	Knight Ridder Inc	227		
Altria Group	55	58	Baa2	BBB	Albertsons Inc	190		
Albertsons	190	197	Baa3 /*-	BBB- /*-	SUPERVALU INC	165		
Ford Motor Credit	449	484	Ba3	BB-	Cendant Corp	116		
GMAC	384	422	Ba1 /*	BB /*	<b>CDX Tightest Feb. 17</b>			
Carrefour	19	19	A1	A+	Fed Home Ln Mtg Corp	8		
AXA	18	19	A2	A	Fed Natl Mtg Assn	9		
AKZO Nobel N V	44	45	A3	A-	Wal Mart Stores Inc	10		
Suez	23	24	A2	A-	Target Corp	11		
GUS PLC	51	51	Baa1	BBB+	Wells Fargo & Co	12		
Cadbury Schweppes PLC	34	29	Baa2	BBB	<b>iTraxx Widest Feb. 17</b>			
Renault	36	38	Baa1	BBB+	TDC A/S	297		
Brit Telecom PLC	48	51	Baa1	A-	VNU NV	214		
Lafarge	49	50	Baa2 /*-	BBB /*-	Hilton Gp PLC	164		
Deutsche Telekom AG	49	51	A3	A-	Casino Guichard Perrar	135		
METRO AG	41	41	Baa2	BBB	Glencore Intl AG	118		
France Telecom	51	52	A3	A-	<b>iTraxx Tightest Feb. 17</b>			
Telecom Italia SpA	57	58	Baa2	BBB+	BP P.L.C.	7		
Volkswagen AG	36	38	A3	A-	ABN AMRO Bk N V	8		
DaimlerChrysler AG	63	65	A3	BBB	Gov & Co Bk Scotland	8		
Alcatel	18	19	Ba1	BB	Royal Bk Scotland plc	8		
Koninklijke Ahold N V	18	19	Ba1	BB	Barclays Bk plc	8		

Single-name CDS spreads are on a "XR" basis (without restructuring).

Source: Markit and Bloomberg

ABX.HE Index (as of February 17, 2005)			
Index	Price	Weekly change	Coupon (bps)
ABX.HE.AAA.06-1	100.29	+ 0.04	18
ABX.HE.AA.06-1	100.24	+ 0.07	32
ABX.HE.A.06-1	100.20	+ 0.08	54
ABX.HE.BBB.06-1	100.33	+ 0.02	154
ABX.HE.BBB-.06-1	100.25	+ 0.17	267

Source: Markit

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

iTraxx Europe Series 4 (5 years)						
	17-Feb		10-Feb		Change	
Overall index spread	36.25		36.5 bps		- .3 bps	
	Spread	Correlation	Spread	Correlation	Spread	Correlation
0%-3%	27%	10.0%	28%	9.6%	- .5%	+ .4%
3%-6%	78 bps	21.0%	80 bps	20.2%	- 2.0 bps	+ .9%
6%-9%	25 bps	28.6%	26 bps	27.4%	- .5 bps	+ 1.3%
9%-12%	11 bps	35.1%	12 bps	33.4%	- 1.0 bps	+ 1.8%
12%-22%	5 bps	51.9%	5 bps	49.3%	+ 0.0 bps	+ 2.6%
CDX.NA.IG Series 5 (5 years)						
	17-Feb		10-Feb		Change	
Overall index spread	44.0 bps		45.25		- 1.3 bps	
	Spread	Correlation	Spread	Correlation	Spread	Correlation
0%-3%	36%	9.0%	36%	8.8%	- .3%	+ .2%
3%-7%	109 bps	22.8%	110 bps	22.4%	- 1.0 bps	+ .4%
7%-10%	26 bps	30.5%	25 bps	30.2%	+ 1.0 bps	+ .3%
10%-15%	12 bps	40.7%	13 bps	40.2%	- .3 bps	+ .5%
15%-30%	5 bps	62.9%	5 bps	62.2%	+ 0.0 bps	+ .7%
iTraxx Europe Series 4 (7 years)						
	17-Feb		10-Feb		Change	
Overall index spread	47.75		47.75		+ 0.0 bps	
	Spread	Correlation	Spread	Correlation	Spread	Correlation
0%-3%	48%	6.2%	49%	5.9%	- .6%	+ .3%
3%-6%	203 bps	18.4%	200 bps	18.2%	+ 2.5 bps	+ .2%
6%-9%	49 bps	28.3%	50 bps	27.9%	- 1.0 bps	+ .4%
9%-12%	28 bps	36.0%	27 bps	35.6%	+ 1.0 bps	+ .3%
12%-22%	12 bps	56.2%	12 bps	55.7%	+ 0.0 bps	+ .5%
CDX.NA.IG Series 5 (7 years)						
	17-Feb		10-Feb		Change	
Overall index spread	53.8 bps		54.75		- 1.0 bps	
	Spread	Correlation	Spread	Correlation	Spread	Correlation
0%-3%	53%	4.7%	54%	4.3%	- .6%	+ .4%
3%-7%	243 bps	17.7%	245 bps	17.0%	- 2.0 bps	+ .7%
7%-10%	43 bps	26.5%	44 bps	25.5%	- .3 bps	+ .9%
10%-15%	23 bps	37.6%	24 bps	36.2%	- .5 bps	+ 1.3%
15%-30%	7 bps	63.7%	8 bps	61.7%	- .1 bps	+ 2.0%
iTraxx Europe Series 4 (10 years)						
	17-Feb		10-Feb		Change	
Overall index spread	59.5 bps		59.75		- .3 bps	
	Spread	Correlation	Spread	Correlation	Spread	Correlation
0%-3%	59%	6.5%	59%	5.9%	- .5%	+ .6%
3%-6%	598 bps	11.0%	578 bps	11.0%	+ 20.0 bps	+ .1%
6%-9%	129 bps	20.7%	120 bps	20.8%	+ 8.5 bps	- .1%
9%-12%	56 bps	29.0%	52 bps	29.2%	+ 4.0 bps	- .2%
12%-22%	24 bps	50.6%	22 bps	51.2%	+ 2.0 bps	- .7%
CDX.NA.IG Series 5 (10 years)						
	17-Feb		10-Feb		Change	
Overall index spread	66.0 bps		67.0 bps		- 1.0 bps	
	Spread	Correlation	Spread	Correlation	Spread	Correlation
0%-3%	61%	4.7%	61%	4.6%	- .1%	+ .1%
3%-7%	624 bps	10.1%	632 bps	9.6%	- 8.0 bps	+ .4%
7%-10%	117 bps	18.6%	120 bps	17.8%	- 3.0 bps	+ .7%
10%-15%	58 bps	28.9%	60 bps	27.6%	- 2.0 bps	+ 1.3%
15%-30%	15 bps	56.3%	15 bps	54.0%	- .3 bps	+ 2.3%

Source: Nomura

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