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Citi Market Risk Management 2007 Annual Limits Book

Citigroup, Inc.

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Citi Markets & Banking

Market Risk Management

2007 Annual Limits Book

ANNUAL LIMIT REVIEW - GUIDANCE

Trading Desk: North American Structured Credit Trading: Correlation
Department: Structured Credit Trading

Head Trader: Mickey Bhatia/Yadin Rozov
Department Head: Michael Raynes

Date: 31-Dec-06

Business Initiatives/Trading Strategies

Desk primarily trades in synthetic CDO's, both in funded and unfunded form.

Revenues (\$MM)

Risk Limits/Justification and 2006 Changes

	Monthly High	Monthly Low	Monthly Average	Total Annual
Feb. 2005 Actual	10.5	(9.7)	3.2	27.3
2006 Actual	18.3	(4.2)	2.4	47.4
2007 Budget	0.0	0.0	5.8	70.0

The desk's exposure is primarily in the A and BBB rating buckets. Because of the historically high exposure to investment grade names, these limits are emphasized on the One-Pager sheet. A comprehensive list of limits may be found on the All Limits sheet. Three limit changes have been made in the past year. The first is the addition of net and tranche Corr01 limits. The second is the reduction of the Super AAA limit. The Super AAA limit was reduced to \$3.5bn because the limit was split between the NA Correlation, US Cash CDO, and TRS desks. Finally, net long risk single issuer exposures have limits against them, however, net short risk single issuer

Key Limits

2006 Limit Utilization

2006 % Limit Utilization

Stressed Revenue Impact at Limit

Limit Description	Unit	Limit as of 1/1/06	Limit as of 1/1/07	Limit Change	2006 Limit Utilization			2006 % Limit Utilization			Risk Horizon	Stress Market Move	P&L Impact (\$MM)	As Mths of '07 Budget
					Average absolute	Peak positive	Peak negative	Average absolute	Peak positive	Peak negative				
Rating Concentration AAA	\$K/bp	250	250	-	32	98	(30)	13%	39%	12%	10 days	15	4	0.6
Rating Concentration AA	\$K/bp	250	250	-	55	172	(98)	22%	69%	39%	10 days	15	4	0.6
Rating Concentration A	\$K/bp	500	500	-	(152)	377	(344)	30%	75%	69%	10 days	25	13	2.1
Rating Concentration BBB	\$K/bp	500	500	-	(374)	1,320	(813)	75%	264%	163%	10 days	40	20	3.4
Rating Concentration BB	\$MM	250	250	-	150	424	(741)	60%	170%	296%	20 days	175	44	7.5
Single Issuer Long Risk AAA	\$MM	100	100	-	(42)	-	(93)	42%	0%	93%	-	-	-	-
Single Issuer Long Risk AA	\$MM	100	100	-	47	68	-	47%	68%	0%	-	-	-	-
Single Issuer Long Risk A	\$MM	100	100	-	40	96	(53)	40%	96%	33%	-	-	-	-
Single Issuer Long Risk BBB	\$MM	100	100	-	40	81	(56)	40%	81%	56%	-	-	-	-
Single Issuer Long Risk BB	\$MM	50	50	-	33	57	(37)	65%	114%	74%	-	-	-	-
Net CDO Corr01	\$K/corr pt.	-	1,500	1,500	717	1,679	(1,289)	48%	112%	86%	30 days	10.2	15	2.6
Super AAA Tranche	\$MM	30,000	3,500	(26,500)	2,438	2,971	-	70%	85%	0%	5 days	2	1	0.1

Aggregation (Simple Sum)													147	25
Aggregation ("Sum of Squares" approach)													62	11
Aggregation (Maximum Realistic)													83	14

Permitted Products and Principal Entities

See Permitted Product List

Aggregation Approach for Stress Loss Estimate

- Maximum Realistic move assumes a 50% move for rating concentration limits, and full stress moves for all other stressed limits.
- Corr01 stress moves are based on a single dates the 99%, 30 business day, five-year CDX-IG equity tranche move. All other stress values are obtained for the dates the 99% equity tranche move. For example if the 99% equity tranche move is from April 15, 2006 to May 15, 2006 then all the other tranche moves are based on their respective moves between April 15, 2006 and May 15, 2006.
- Since tranche correlation moves are not readily obtainable base correlation moves were used to determine the Corr01 stress moves. The equity tranche move is identical to the base correlation move. The more senior tranche moves are based on the average of two base correlation tranche moves.
- Since it is not possible for all tranches to be at their Corr01 limit, the Net Corr01 limit stress is a function of the super senior tranche stress.

Other Risk Issues

See All Limits page for the entire set of limits for this desk. See All Thresholds for entire list of thresholds for this desk. Note Correlation 01 utilizations are from 7/11/2006, and Super AAA are from 4/28/2006.

Revenues (\$MM)				
	Monthly High	Monthly Low	Monthly Average	Total Annual
Feb. 2005 Actual	10.5	(9.7)	3.2	27.3
2006 Actual	18.3	(4.2)	2.4	47.4
2007 Budget			5.8	70.0

Formulae (please don't change)

Key Limits					2006 Limit Utilization			2006 % Limit Utilization			Stressed Revenue Impact at Limit			
Limit Description	Unit	Limit as of 1/1/06	Limit as of 1/1/07	Limit Change	Average absolute	Peak positive	Peak negative	Average absolute	Peak positive	Peak negative	Risk Horizon	Stress Market Move	P&L Impact (\$MM)	As Mths of '07 Budget
Rating Concentration AAA	\$K/bp	250	250	-	32	98	(30)	13%	39%	12%	10 days	15	4	0.6
Rating Concentration AA	\$K/bp	250	250	-	55	172	(98)	2%	69%	30%	10 days	15	4	0.6
Rating Concentration A	\$K/bp	500	500	-	(152)	377	(344)	30%	75%	69%	10 days	25	13	2.1
Rating Concentration BBB	\$K/bp	500	500	-	(374)	1,320	(813)	75%	164%	163%	10 days	40	20	3.4
Rating Concentration BB	\$MM	250	250	-	150	424	(741)	60%	176%	196%	20 days	175	44	7.5
Rating Concentration B	\$MM	100	100	-	68	294	(266)	68%	294%	166%	30 days	250	25	4.3
Rating Concentration CCC or lower	\$MM	50	50	-	27	143	(127)	84%	288%	253%	65 days	450	23	3.9
Single Issuer Long Risk AAA	\$MM	100	100	-	(42)	-	(93)	42%	-	93%	-	-	-	-
Single Issuer Long Risk AA	\$MM	100	100	-	47	68	-	47%	68%	-	-	-	-	-
Single Issuer Long Risk A	\$MM	100	100	-	40	96	(53)	40%	96%	33%	-	-	-	-
Single Issuer Long Risk BBB	\$MM	100	100	-	40	81	(56)	40%	81%	36%	-	-	-	-
Single Issuer Long Risk BB	\$MM	50	50	-	33	57	(37)	67%	114%	74%	-	-	-	-
Single Issuer Long Risk B	\$MM	25	25	-	22	301	(63)	89%	1203%	281%	-	-	-	-
Single Issuer Long Risk CCC and Lower	\$MM	25	25	-	21	46	(27)	82%	186%	107%	-	-	-	-
Super Senior CDO Tranche Corr01	\$K/corr.pt.	-	2,000	2,000	662	1,564	65	33%	78%	3%	30 days	10.2	20	3.3
Senior CDO Tranche Equivalent Corr01	\$K/corr.pt.	-	2,000	2,000	(116)	270	(348)	0%	14%	17%	30 days	9.8	20	3.4
Senior Mezzanine CDO Tranche Equivalent Corr01	\$K/corr.pt.	-	2,000	2,000	782	1,352	131	39%	68%	7%	30 days	8.9	18	3.1
Junior Mezzanine CDO Tranche Equivalent Corr01	\$K/corr.pt.	-	3,000	3,000	491	1,605	(751)	16%	33%	23%	30 days	6.3	19	3.2
Equity CDO Tranche Equivalent Corr01	\$K/corr.pt.	-	3,000	3,000	(1,187)	(42)	(2,392)	40%	1%	30%	30 days	4.3	13	3.2
Net CDO Corr01	\$K/corr.pt.	-	1,500	1,500	717	1,679	(1,289)	48%	112%	86%	30 days	10.2	15	2.6
DV01	\$K/bp	100	100	-	30	79	(65)	30%	79%	65%	5 days	10	1	0.2
Foreign Exchange Delta	\$MM	15	15	-	9	33	(6)	61%	218%	40%	1 day	0.019	0	0.1
Super AAA Tranche	\$MM	30,000	3,500	(26,500)	2,438	2,971	-	7%	83%	-	5 days	2	0.7	0.1
RR01	TBD													
Aggregation (Simple Sum)													147	25
Aggregation ("Sum of Squares" approach)													62	11
Aggregation (Maximum Realistic)													83	14

Trading Desk: North America Structured Credit Products - Correlation

Trigger Description	Unit	Trigger
Single Issuer Short Risk AAA	\$MM	100
Single Issuer Short Risk AA	\$MM	100
Single Issuer Short Risk A	\$MM	100
Single Issuer Short Risk BBB	\$MM	100
Single Issuer Short Risk BB	\$MM	50
Single Issuer Short Risk B	\$MM	25
Single Issuer Short Risk CCC and Lower	\$MM	25
VaR Trigger	\$MM	17

Trading Desk: North America Structured Credit Products - Correlation

Bank Entity Thresholds		
	Rating	Threshhold
High Grade CR01 (\$k)	AAA	250
	AA	250
	A	500
	BBB	500
High Yield Notional (\$MM)	BB	250
	B	100
	CCC & Lower	50

Non-Bank Entity Thresholds		
	Rating	Threshhold
High Grade CR01 (\$k)	AAA	250
	AA	250
	A	500
	BBB	500
High Yield Notional (\$MM)	BB	250
	B	100
	CCC & Lower	50

ANNUAL LIMIT REVIEW - GUIDANCE

Trading Desk: North American Structured Credit Trading: Exotics/Structured
 Department: Structured Credit Trading

Head Trader: Kosrow Dehnad/Kevin Starrett
 Department Head: Michael Raynes

Date: 31-Dec-06

Business Initiatives/Trading Strategies

Desk primarily trades in illiquid structured credit derivatives such as CORTS.

Revenues (\$MM)					Risk Limits/Justification and 2006 Changes
	Monthly High	Monthly Low	Monthly Average	Total Annual	
Feb. 2005 Actual	24.9	1.1	4.6	50.1	Historically the desk has had the most exposure to investment grade names, and corporate volatilities. As a result these are the limits displayed on the One-Pager sheet. For a complete set of limits see the All Limits sheet. There has been only one change to the limit structure. Single issuer limits are now for net long risk exposures. Net short risk single issuer exposures now have triggers.
2006 Actual	14.8	(4.6)	3.3	39.7	
2007 Budget	0.0	0.0	2.5	30.0	

Key Limits					2005 Limit Utilization			2006 % Limit Utilization			Stressed Revenue Impact at Limit			
Limit Description	Unit	Limit as of 1/1/06	Limit as of 1/1/07	Limit Change	Average absolute	Peak positive	Peak negative	Average absolute	Peak positive	Peak negative	Risk Horizon	Stress Market Move	P&L Impact (\$MM)	As Mths of '07 Budget
Rating Concentration AAA	\$K/bp	200	200	-	(79)	50	(139)	49%	25%	70%	10 days	15	3	1.2
Rating Concentration AA	\$K/bp	200	200	-	(6)	20	(14)	3%	10%	7%	10 days	15	3	1.2
Rating Concentration A	\$K/bp	200	200	-	47	247	(40)	24%	123%	20%	10 days	25	5	2.0
Rating Concentration BBB	\$K/bp	100	100	-	14	100	(30)	14%	100%	30%	10 days	40	4	1.6
Rating Concentration BB	\$MM	100	100	-	3	18	(9)	3%	18%	9%	20 days	175	18	7.0
Single Issuer Long Risk AAA	\$MM	100	100	-	(31)	84	(50)	31%	84%	50%	-	-	-	-
Single Issuer Long Risk AA	\$MM	100	100	-	(52)	101	(100)	32%	101%	100%	-	-	-	-
Single Issuer Long Risk A	\$MM	100	100	-	(15)	(15)	(15)	15%	15%	15%	-	-	-	-
Single Issuer Long Risk BBB	\$MM	100	100	-	7	25	(79)	7%	25%	79%	-	-	-	-
Single Issuer Long Risk BB	\$MM	50	50	-	4	10	-	7%	20%	0%	-	-	-	-
Corporate Yield Vol	\$K/volpt.	1,700	1,700	-	750	962	-	44%	57%	0%	30 days	8	14	5.4
Net Interest Rate Vol - USD	\$K/volpt.	650	650	-	449	650	(14)	69%	100%	2%	30 days	8	5	2.1
Aggregation (Simple Sum)													79	32
Aggregation ("Sum of Squares" approach)													29	12
Aggregation (Maximum Realistic)													44	18

Permitted Products and Principal Entities

See Permitted Product List

Aggregation Approach for Stress Loss Estimate

Maximum Realistic move assumes a 50% move for rating concentration limits and Corporate Yield Vol. All other stress moves use the full value to obtain the Maximum Realistic Impact.

Other Risk Issues

- In 2007 the desk plans to migrate off of GK to NOVA for all of its non-CDS positions
- P&L for 2005 does not adjust for \$25MM in Insurance Expense on LC's
- P&L for 2006 is adjusted to account for \$21.9MM in Insurance Expense on LC's
- Budget for 2007 does not include the LC business or its Expense

Revenues (\$MM)				
	Monthly High	Monthly Low	Monthly Average	Total Annual
Feb. 2005 Actual	24.9	1.1	4.6	50.1
2006 Actual	14.8	(4.6)	3.3	39.7
2007 Budget			2.5	30.0

Formulas (please don't change)

Limit Description	Unit	2005 Limit Utilization			2006 % Limit Utilization			Stressed Revenue Impact at Limit						
		Limit as of 1/1/06	Limit as of 1/1/07	Limit Change	Average absolute	Peak positive	Peak negative	Average absolute	Peak positive	Peak negative	Risk Horizon	Stress Market Move	P&L Impact (\$MM)	As Mths of '07 Budget
Rating Concentration AAA	\$K/bp	200	200	-	(79)	50	(139)	39%	25%	70%	10 days	15	3	1.2
Rating Concentration AA	\$K/bp	200	200	-	(6)	20	(14)	3%	10%	7%	10 days	15	3	1.3
Rating Concentration A	\$K/bp	200	200	-	47	247	(40)	24%	123%	20%	10 days	25	5	3.0
Rating Concentration BBB	\$K/bp	100	100	-	14	100	(30)	14%	100%	30%	10 days	40	4	1.6
Rating Concentration BB	\$MM	100	100	-	3	18	(9)	3%	13%	9%	20 days	175	18	3.0
Rating Concentration B	\$MM	50	50	-	(7)	(2)	(18)	15%	1%	16%	30 days	250	13	5.0
Rating Concentration CCC or lower	\$MM	25	25	-	(2)	1	(5)	7%	3%	18%	65 days	450	11	4.5
Single Issuer Long Risk AAA	\$MM	100	100	-	(31)	84	(50)	31%	84%	50%				
Single Issuer Long Risk AA	\$MM	100	100	-	(52)	101	(100)	52%	101%	100%				
Single Issuer Long Risk A	\$MM	100	100	-	(15)	(15)	(15)	15%	15%	15%				
Single Issuer Long Risk BBB	\$MM	100	100	-	7	25	(79)	7%	25%	79%				
Single Issuer Long Risk BB	\$MM	50	50	-	4	10	-	7%	20%	-				
Single Issuer Long Risk B	\$MM	25	25	-	(4)	11	(20)	16%	41%	78%				
Single Issuer Long Risk CCC and Lower	\$MM	25	25	-	(1)	-	(2)	2%	-	0%				
Corporate Yield Vol	\$K/vol pt.	1,700	1,700	-	750	962	-	44%	57%	-	30 days	8	14	3.4
UST Yield Vol	\$K/vol pt.	1,700	1,700	-	-	-	-	-	-	-				
Swaption Vol	\$K/vol pt.	1,700	1,700	-	(303)	-	(341)	18%	-	20%				
Spread Volatility	\$K/vol pt.	250	250	-	3	39	-	1%	16%	-	1 day	10	3	1.0
Net Interest Rate Vol - USD	\$K/vol pt.	650	650	-	449	650	(14)	69%	100%	2%	30 days	8	5	2.1
DV01	\$K/bp	100	100	-	(32)	93	(60)	32%	93%	60%	5 days	10	1	0.4
Foreign Exchange Delta	\$MM	15	15	-	3	7	(4)	20%	45%	27%	1 day	2%	0.5	0.3
Aggregation (Simple Sum)												79	32	
Aggregation ("Sum of Squares" approach)												29	12	
Aggregation (Maximum Realistic)												44	18	

Trading Desk: North America Structured Credit Products - Exotics/Structured

Trigger Description	Unit	Trigger
Single Issuer Short Risk AAA	\$MM	100
Single Issuer Short Risk AA	\$MM	100
Single Issuer Short Risk A	\$MM	100
Single Issuer Short Risk BBB	\$MM	100
Single Issuer Short Risk BB	\$MM	50
Single Issuer Short Risk B	\$MM	25
Single Issuer Short Risk CCC and Lower	\$MM	25

Trading Desk: North America Structured Credit Products - Exotics/Structured

Bank Entity Thresholds		
	Rating	Threshhold
High Grade CR01 (\$k)	AAA	200
	AA	200
	A	200
	BBB	100
High Yield Notional (\$MM)	BB	100
	B	50
	CCC & Lower	25

Non-Bank Entity Thresholds		
	Rating	Threshhold
High Grade CR01 (\$k)	AAA	200
	AA	200
	A	200
	BBB	100
High Yield Notional (\$MM)	BB	100
	B	50
	CCC & Lower	25

ANNUAL LIMIT REVIEW

Trading Desk: US Cash CDOs
Department: Global Structured Credit Products

Head Trader: Nestor Dominguez/Donald Quintin
Department Head: Janet Warne/Nestor Dominguez

Date: 31-Dec-06

Business Initiatives/Trading Strategies

The Desk continues to grow its primary and secondary CDO business. ABS CDOs and CLOs dominate the new issuance pipeline.

Revenues (\$MM)

Risk Limits/Justification and 2006 Changes

	Monthly High	Monthly Low	Monthly Average	Total Annual
2005 Actual			30.8	365.8
2006 Actual	62.5	13.9	36.4	433.0
2007 Budget			35.8	430.0

The increased limits primarily reflect CDO business that has seen a significant increase in volumes, with increased demand for Collateralized Loan Obligations and asset backed CDOs. Warehouse assets are stressed at 50% of standard stress moves in recognition that the desk is rarely unable to recover its cost of acquiring the collateral when each deal prices. Corporate loan stress moves are used for the warehouse non-IG rating concentrations as that is bulk of the collateral in those rating buckets.

Key Limits

2006 Limit Utilization

2006 % Limit Utilization

Stressed Revenue Impact at Limit

Limit Description	Unit	Limit as of 1/1/06	Current limit	Limit Change	2006 Limit Utilization			2006 % Limit Utilization			Stressed Revenue Impact at Limit			
					Average absolute	Peak positive	Peak negative	Average absolute	Peak positive	Peak negative	Risk Horizon	Stress Market Move	P&L Impact (\$MM)	As Mths of '07 Budget
DV01	SK/bp	300	300	-	238	(116)	(422)	79%	39%	141%	5-days	35	11	0.3
Warehouse Rating Concentration AAA/AA	\$MM	5,000	7,500	2,500	2,790	3,980	1,893	37%	53%	25%	10-days	7.5	23	0.6
Warehouse Rating Concentration A	\$MM	3,000	2,000	(1,000)	1,279	1,655	856	64%	83%	43%	10-days	12.5	10	0.3
Warehouse Rating Concentration BBB	\$MM	2,000	2,000	-	1,309	1,682	992	65%	84%	50%	10-days	20.0	16	0.4
Warehouse Rating Concentration NIG Cap - All	\$MM	2,250	4,000	1,750	3,395	4,951	1,381	85%	124%	35%	65-days	50.0	80	2.2
Ex-Warehouse Rating Concentration AAA P+S	SK/bp	1,000	1,000	-	271	(29)	(878)	27%	3%	88%	10-days	15.0	15	0.4
Ex Warehouse Rating Concentration AA P+S	SK/bp	500	500	-	12	20	(37)	2%	4%	7%	10-days	15.0	8	0.2
Ex-Warehouse Rating Concentration A P+S	SK/bp	400	400	-	42	1	(73)	11%	0%	18%	10-days	25.0	10	0.3
Ex-Warehouse Rating Concentration BBB P+S	SK/bp	250	250	-	25	5	(50)	10%	2%	29%	10-days	40.0	10	0.3
Ex-Warehouse Rating Concentration NIG Cap - All P+S	\$MM	400	600	200	349	805	242	58%	134%	49%	30-days	225.0	54	1.5
Super Senior Limit Gross	\$MM	NA	40,000											
Super Senior Limit Net	\$MM	(Incl. in	30,000		29,762	31,000	28,915	99%	103%	96%		3.5	42	1.2
Aggregation (Simple Sum)													267	7
Aggregation ("Sum of Squares" approach)													111	3
Aggregation (Maximum Realistic)													235	7

Permitted Products and Principal Entities

Permitted Products	Principal Entities
Corporate Loans	CFPI for Warehouse
Corporate Bonds	CGMI for Ex-Warehouse
Asset Backed Securities	CBNA for derivatives
Mortgage Backed Securities	
Trust Preferreds	
Default Swaps	Total Return Swaps
Leveraged Super Senior Swaps	
CDOs	
Interest Rate Swaps	
Treasury Bonds	

Aggregation Approach for Stress Loss Estimate

The desk has been pursuing and executing different methods to reduce the risk of the warehouse facilities. These are often customized to the deal and as such have been difficult to measure systematically against risk exposures up to this point. The warehouse assets are stressed at 50% of the normal stress moves, however this is primarily because the CDO buys these assets at cost, taking the mark-to-market risk during the warehouse period. Recognizing that there are other risk mitigants for the warehouse, and that it is unlikely the desk will be at 100% of all limits simultaneously, the simple sum of the warehouse will be reduced by 1/3 to estimate the maximum realistic stress loss. Loan stress moves are used for the NIG warehouse assets since these have mostly been loans over the past year.

Other Risk Issues

Formulae (please don't change)

ANNUAL LIMIT REVIEW

Trading Desk: US Cash CDOs
Department: Global Structured Credit Products

Head Trader: Nestor Dominguez/Donald Quintan
Department Head: Janet Warne/Nestor Dominguez

Date: 31-Dec-06

Business Initiatives/Trading Strategies

The Desk continues to grow its primary and secondary CDO business. ABS CDOs and CLOs dominate the new issuance pipeline.

Revenues (\$MM)					Risk Limits/Justification and 2006 Changes										
	Monthly High	Monthly Low	Monthly Average	Total Annual	The increased limits primarily reflect CDO business that has seen a significant increase in volumes, with increased demand for Collateralized Loan Obligations and asset backed CDOs. Warehouse assets are stressed at 50% of standard stress moves in recognition that the desk is rarely unable to recover its cost of acquiring the collateral when each deal prices. Corporate loan stress moves are used for the warehouse non-IG rating concentrations as that is bulk of the collateral in those rating buckets.										
2005 Actual	30.3		30.3	365.8											
2006 Actual	62.5	13.9	36.1	433.0											
2007 Budget			35.8	430.0											
Key Limits					2005 Limit Utilization			2006 % Limit Utilization			Stressed Revenue Impact at Limit				
Limit Description	Unit	Limit as of 1/1/06	Current limit	Limit Change	Average absolute	Peak positive	Peak negative	Average absolute	Peak positive	Peak negative	Risk Horizon	Stress Market Move	P&L Impact (\$MM)	As Mths of '07 Budget	
Warehouse															
DV01	\$K/bp	300	300	-	238	(116)	(422)	79%	39%	141%	5-days	35	11	0.3	
Rating Concentration AAA/AA	\$MM	5,000	7,500	2,500	2,790	3,980	1,893	37%	53%	25%	10-days	7.5	23	0.6	
Rating Concentration A	\$MM	3,000	2,000	(1,000)	1,279	1,655	856	64%	83%	43%	10-days	12.5	10	0.3	
Rating Concentration BBB	\$MM	2,000	2,000	-	1,309	1,682	992	63%	84%	50%	10-days	20.0	16	0.4	
Rating Concentration BB	\$MM		4,000	4,000							42-days	32.5	52	1.5	
Rating Concentration B	\$MM		3,000	3,000							65-days	55.0	66	1.8	
Rating Concentration CCC or lower	\$MM		1,000	1,000							65-days	100.0	40	1.1	
Rating Concentration NIG Cap - All	\$MM	2,250	4,000	1,750	3,395	4,951	1,381	85%	124%	35%	30-days	50.0	80		
Rating Concentration NIG Cap - Unsecured (Bonds)	\$MM		1,000	1,000											
Primary+Secondary															
DV01	\$K/bp	100	100	-	91	(64)	(148)	91%	64%	148%	5-days	35	4	0.1	
Rating Concentration AAA	\$K/bp	1,000	1,000	-	271	(29)	(878)	27%	3%	88%	10-days	15.0	15	0.4	
Rating Concentration AA	\$K/bp	500	500	-	12	20	(37)	2%	4%	7%	10-days	15.0	8	0.2	
Rating Concentration A	\$K/bp	400	400	-	42	1	(73)	11%	0%	18%	10-days	25.0	10	0.3	
Rating Concentration BBB	\$K/bp	250	250	-	25	5	(50)	10%	2%	20%	10-days	40.0	10	0.3	
Rating Concentration BB	\$MM	250	350	100	75	102	31	21%	29%	9%	30-days	175.0	25	0.7	
Rating Concentration B	\$MM	250	450	200	21	25	20	5%	3%	4%	30-days	250.0	45	1.3	
Rating Concentration CCC or lower	\$MM	300	500	200	252	454	184	50%	91%	37%	65-days	450.0	90	2.5	
Non Investment Grade Cap	\$MM	400	600	200	349	805	242	38%	134%	40%	30-days	225.0	54		
Secondary															
Rating Concentration AAA	\$K/bp	450	450	-	210	83	(477)	47%	18%	166%	10-days	15.0	7	0.2	
Rating Concentration AA	\$K/bp	300	300	-	7	21	(10)	2%	2%	3%	10-days	15.0	5	0.1	
Rating Concentration A	\$K/bp	250	250	-	32	6	(50)	13%	2%	20%	10-days	25.0	6	0.2	
Rating Concentration BBB	\$K/bp	200	200	-	17	6	(34)	8%	3%	17%	10-days	40.0	8	0.2	
Rating Concentration BB	\$MM	175	275	100	65	90	39	24%	33%	14%	30-days	175.0	19	0.5	
Rating Concentration B	\$MM	175	275	100	21	25	20	8%	9%	7%	30-days	250.0	28	0.6	
Rating Concentration CCC or lower	\$MM	200	300	100	191	335	145	64%	112%	48%	65-days	450.0	54	1.5	
Super Senior Limit Gross	\$MM	NA	40,000												
Super Senior Limit Net	\$MM	(incl. in	30,000		29,762	31,000	28,915	99%	105%	96%		3.5	42	1.2	
Par Put Notional Limit (on AAA collateral only)	\$MM		2,000												
Aggregation (Simple Sum)												281	8		
Aggregation ("Sum of Squares" approach)												190	5		
Aggregation (Maximum Realistic)												239	7		

Single Issuer Limits

Desk / Rating	Limit as of 1/1/06	Current Limit	Limit Change
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Warehouse (Asset Concentration)

AC AAA	300	300	0
AC AA	200	200	0
AC A	175	175	0
AC BBB+	150	150	0
AC BBB	125	125	0
AC BBB-	100	100	0
AC BB	75	75	0
AC B	75	75	0
AC CCC&Lower/Unrated	75	75	0

Primary+Secondary (Tranche Concentration)

TC AAA	600	600	0
TC AA	300	300	0
TC A	250	250	0
TC BBB+	150	150	0
TC BBB	125	125	0
TC BBB-	100	100	0
TC BB	100	100	0
TC B	100	100	0
TC CCC&Lower/Unrated	75	75	0

ANNUAL LIMIT REVIEW

Trading Desk: Global ABS Portfolio Trading
Department: Structured Credit

Head Trader: Chris Carman
Department Head: Michael Raynes

Date: 31-Dec-06

Business Initiatives/Trading Strategies

This desk constructs and trades synthetic CDOs and CDO tranches where the underlying collateral consists of asset-backed securities.

Revenues (\$MM)

Risk Limits/Justification and 2006 Changes

	Monthly High	Monthly Low	Monthly Average	Total Annual
2005 Actual	12.5	(1.8)	3.8	46.0
2006 Actual	27.0	(3.6)	4.4	53.0
2007 Budget			5.3	70.0

The business grew rapidly in volume in 2006, largely driven by hedge fund flow. Significant limit increases were approved in 2006 and these incorporated a migration from "waterfall" limits to simple ratings-band limits. BBB limits are larger than A or AA as this is where the bulk of the collateral is rated; AAA limits are high as the desk takes "par put" risk on its repackaged notes. Because of this, a sublimit for paper at the perceived low end of the AAA spectrum is proposed.

Key Limits

2006 Limit Utilization

2006 % Limit Utilization

Stressed Revenue Impact at Limit

Limit Description	Unit	Limit as of 1/1/06	Current limit	Limit Change	2006 Limit Utilization			2006 % Limit Utilization			Risk Horizon	Stress Market Move	P&L Impact (\$MM)	As Mths of '07 Budget
					Average absolute	Peak positive	Peak negative	Average absolute	Peak positive	Peak negative				
Net spread exposure - AAA total	\$k/bp		3000		430	26	(1,324)	14%	1%	44%	10 days	15	45	7.7
Net spread exposure - AAA >15bp	\$k/bp	544	1500	957							10 days	15	23	3.9
Net spread exposure - AA	\$k/bp	91	400	309	53	(22)	(178)	13%	6%	45%	10 days	15	6	1.0
Net spread exposure - A	\$k/bp	91	400	309	96	333	(271)	24%	83%	68%	10 days	25	10	1.7
Net spread exposure - BBB	\$k/bp	127	1000	873	369	168	(1,291)	37%	17%	129%	10 days	40	40	6.9
Net spread exposure - BB and below	\$k/bp	54	150	96	10	3	(57)	7%	2%	38%	20 days	175	26	4.5
Total Correlation	\$k/%	400	800	400	380	485	(1,041)	48%	61%	130%	10 days	5	4	0.7

Aggregation (Simple Sum)

Aggregation ("Sum of Squares" approach)

Aggregation (Maximum Realistic)

131 23
 67 11
 71 12

Permitted Products and Principal Entities

ABS bonds and to-maturity default swaps referencing ABS bonds
 Tranching protection on ABS portfolios; Both CGML and Citibank N.A. (London and New York) legal entities are used

Aggregation Approach for Stress Loss Estimate

Estimate assumes 100% utilisation of the AAA limit and that the stress for low-spread AAA is half the standard AAA spread. Simultaneous limit usage of 50% for BBB and below, and 25% in the remaining investment-grade bands, is assumed. Alternatively this can be viewed as 100% BBB usage with a 50% discount given that the first-loss piece will normally be pre-sold or at least circled. HY bucket (BB and lower) would normally include mainly BB-rated ref obligations which have been downgraded from Baa 1/2/3. Hence this bucket is stressed as such.

Other Risk Issues

The desk is still heavily reliant on an EUC system - Graphite - for revenue and risk management information. Technology plans are under way to move to a more robust, scalable infrastructure.

Single Issuer Limits

Desk / Rating	Limit as of 1/1/06	Current Limit	Limit Change
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Warehouse (Asset Concentration)

AC AAA	300	300	0
AC AA	200	200	0
AC A	175	175	0
AC BBB+	150	150	0
AC BBB	125	125	0
AC BBB-	100	100	0
AC BB	75	75	0
AC B	75	75	0
AC CCC&Lower/Unrated	75	75	0

Primary+Secondary (Tranche Concentration)

TC AAA	600	600	0
TC AA	300	300	0
TC A	250	250	0
TC BBB+	150	150	0
TC BBB	125	125	0
TC BBB-	100	100	0
TC BB	100	100	0
TC B	100	100	0
TC CCC&Lower/Unrated	75	75	0

Trading Desk: Global Portfolio ABS Trading

			ABS CDO Trading	
CR01 Rating Concentration			Long Risk	Short Risk
Rating Concentration AAA	CR01 (\$ per -1 bp)	LIMIT	\$ 3,000,000	\$ (3,000,000)
Rating Concentration AAA (>15bp) Sub-Limit	CR01 (\$ per -1 bp)	LIMIT	\$ 1,500,000	\$ (1,500,000)
Rating Concentration AA	CR01 (\$ per -1 bp)	LIMIT	\$ 400,000	\$ (400,000)
Rating Concentration A	CR01 (\$ per -1 bp)	LIMIT	\$ 400,000	\$ (400,000)
Rating Concentration BBB	CR01 (\$ per -1 bp)	LIMIT	\$ 1,000,000	\$ (1,000,000)
Rating Concentration BB and lower (inc. NR)	CR01 (\$ per -1 bp)	LIMIT	\$ 150,000	\$ (150,000)
Single issuer credit exposure				
Single Name AAA	Net Long MV (\$MM)	LIMIT	\$ 450	
Single Name AAA	CR01 (\$ per -1 bp)	Trigger	\$ 180,000	\$ (400,000)
Single Name AA	Net Long MV (\$MM)	LIMIT	\$ 180	
Single Name AA	CR01 (\$ per -1 bp)	Trigger	\$ 72,000	\$ (160,000)
Single Name A	Net Long MV (\$MM)	LIMIT	\$ 130	
Single Name A	CR01 (\$ per -1 bp)	Trigger	\$ 52,000	\$ (157,576)
Single Name BBB	Net Long MV (\$MM)	LIMIT	\$ 75	
Single Name BBB	CR01 (\$ per -1 bp)	Trigger	\$ 30,000	\$ (90,909)
Single Name BB or lower (inc. NR)	Net Long MV (\$MM)	LIMIT	\$ 45	
Single Name BB or lower	CR01 (\$ per -1 bp)	Trigger	\$ 18,000	\$ (60,000)
Credit Correlation Total and by capital structure (see individual risk reports for bucket definitions)				
Credit Correlation (Total)	Corr01 (\$ per 1% shift)	LIMIT	\$ 800,000	\$ (800,000) (a)
Super-Senior	Corr01 (\$ per 1% shift)	LIMIT	\$ 2,000,000	\$ (2,000,000)
Senior	Corr01 (\$ per 1% shift)	LIMIT	\$ 1,200,000	\$ (1,200,000)
Sr Mezzanine	Corr01 (\$ per 1% shift)	LIMIT	\$ 1,200,000	\$ (1,200,000)
Jr Mezzanine	Corr01 (\$ per 1% shift)	LIMIT	\$ 1,200,000	\$ (1,200,000)
Equity	Corr01 (\$ per 1% shift)	LIMIT	\$ 1,200,000	\$ (1,200,000)

- All desks are required to have a loss trigger; this is set at two months' budgeted revenue (against two months' actual revenue).
- Where an issuer or issuer has split ratings, the lower or lowest will be used unless agreed with Market Risk in advance.
- Where an issuer is unrated by choice, Market Risk will assign a proxy rating after discussion with the appropriate trading desk.

Note

(a) - Measured over a +/- 10% range - taking the worst of the two for limit monitoring purposes

ANNUAL LIMIT REVIEW

Trading Desk: European CDO Warehouse
 Department: Structured Credit

Head Trader: Tim Beaulac
 Department Head: Michael Raynes

Date: 31-Dec-06

Business Initiatives/Trading Strategies

The desk's main activity is construction of traditional full capital structure cash CBOs, where the underlying collateral consists of bonds and loans (including leveraged loans)

Revenues (\$MM)					Risk Limits/Justification and 2006 Changes
	Monthly High	Monthly Low	Monthly Average	Total Annual	The high yield inventory limit was upsized in 2006 to accommodate a growth in cash CLO business and allow an increased capacity in a ramp-up/warehousing of leveraged loan portfolios.
2005 Actual	2.4	(0.8)	1.0	12.0	
2006 Actual	9.4	(0.5)	2.7	32.0	
2007 Budget			3.8	45.0	

Limit Description	Key Limits				2006 Limit Utilization			2006 % Limit Utilization			Stressed Revenue Impact at Limit			
	Unit	Limit as of 1/1/06	Current limit	Limit Change	Average absolute	Peak positive	Peak negative	Average absolute	Peak positive	Peak negative	Risk Horizon	Stress Market Move	P&L Impact (\$MM)	As Mths of '07 Budget
Net inventory - AA/AAA	\$mm	1,700	1,700	-							10 days	15	13	3.4
Net inventory - A	\$mm	500	500	-							10 days	25	6	1.7
Net inventory - BBB	\$mm	500	500	-							10 days	40	10	2.7
Net inventory - BB and below	\$mm	500	750	250	282	656	-	38%	88%		65 days	110	41	11.0
Aggregation (Simple Sum)												70	19	
Aggregation ("Sum of Squares" approach)												45	12	
Aggregation (Maximum Realistic)												31	8	

Permitted Products and Principal Entities

Leveraged Loans, High Yield Bonds, cash CDO tranches. The desk uses Citibank N.A. (London branch) and CPPI for warehousing collateral. Unsold (residual) portion of CLO tranche risk is normally held on CGML

Aggregation Approach for Stress Loss Estimate

The bulk of the risk comes from deals in the warehousing period where our normal stress estimates do not apply for various reasons including the typical nature of the collateral, the securitisation exit and, to an extent, the ability to absorb collateral losses while still successfully syndicating the notes. For a realistic maximum stress loss estimate, we have assumed a 100% usage in B-rated loan collateral in the warehouse, with a 25% (reduced) discount given that the first-loss will normally be pre-sold per loss sharing agreement with manager. We use five-year duration to quantify the stress impact

Other Risk Issues

Continued growth of the business necessitates a risk capture of warehouse positions in the corporate VaR system GMR. Plans are under way to produce a feed to GMR