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THE ROLE OF COMMERCIAL MORTGAGE BACKED SECURITIES IN A FIXED INCOME PORTFOLIO – 2003

EXECUTIVE SUMMARY

CMBS, based on its superior credit, fundamental and structural attributes remain an attractive alternative to traditional fixed income investments and should continue play a material role within a fixed income portfolio.

PERFORMANCE

- *CMBS have outperformed the Lehman Brothers U.S. Aggregate Index and other fixed income sectors.*
  - The CMBS sector was the top-performing sector of the Lehman Aggregate Index during 2002.
  - Investment grade CMBS outperformed the Lehman Brothers U.S. Aggregate Index by 520, 280, 160 basis points, respectively, during the last 1- , 3- and 5-year periods.
  - The High Yield CMBS Index outperformed high yield corporate bonds by over 900 bps during the last five years.
- *CMBS lack spread volatility relative to corporate bonds.* Based on the standard deviation of excess returns, the return per unit of risk for 'BBB' CMBS and 'BBB' corporate bonds during 2002 was 1.41 and –4.12 respectively.
- *CMBS offer a greater yield versus corporate bonds.* The advantage is clear when considering the volatility of spreads and credit attributes between the two sectors.

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CREDIT

•*Reduced event risk due to loan diversification.* CMBS typically contain between 100 and 200 individual commercial mortgage loans.

•*First mortgage liens secure the underlying loans.* CMBS investors benefit from having real estate collateral and the right to foreclose and sell the underlying property, in the event of default.

•*Credit enhancement through subordination of non-investment grade bonds.* Non-investment grade classes typically comprise the bottom 6% to 10% of the transaction.

•*CMBS possess greater subordination than residential mortgage backed securities.* 'AAA' subordination levels for CMBS are approximately 17% versus 4% for residential MBS.

•*The yield impact to CMBS stemming from defaults is minimal compared to corporate bonds.* Since its inception, the CMBS market has experienced a loss severity of only .14%.

•*CMBS upgrades outnumber downgrades. In 2002,* rating agencies upgraded 484 CMBS classes and downgraded 328, a 1.5 to 1 ratio. In contrast, corporate bond downgrades exceeded upgrades by a ratio of 4.4 to 1.

•*Prudent underwriting minimizes credit risk.* While commercial real estate vacancy rates have risen with the downturn in the economy, delinquency rates remain at historically low levels.

ADDITIONAL BENEFITS

- *CMBS lack the convexity risk found in residential MBS,* due to strong prepayment protection of the underlying loans.

- *CMBS can have material diversification benefits.* 'BBB' CMBS and 'BBB' corporate bonds have a correlation of .64. BBB CMBS and residential MBS bonds have a correlation of .72.

- *Investment grade CMBS possess same day liquidity,* with bid/ask spreads typically ranging from 2 to 5 basis points.

INTRODUCTION

Since the early 1990's, a dynamic market in commercial mortgage backed securities has evolved in the United States, providing fixed income characteristics that compare favorably to corporate bonds and other fixed income products. Substantial liquidity has been created in the market for this asset class. Global market capitalization approaches $400 billion with U.S. market capitalization expected to exceed $350 billion during 2003. U.S. CMBS issuance has averaged $65 billion per year since 1998.

Heretofore, CMBS, primarily rated 'AAA', have comprised a small portion of investor's fixed income portfolios. However, an excellent opportunity exists today to invest in CMBS at attractive spreads to U.S. Treasuries at a time when underlying real estate credit remains favorable relative to corporate bonds and alternative fixed income investments. In addition, CMBS credit and spreads have been relatively stable, while high- yield corporate bond default rates have reached a 10-year high. As a result, previously held spread relationships between secured CMBS and unsecured corporate bonds have vanished. Recent history reflects the superior risk adjusted return potential for CMBS.

CMBS should have a material role in a fixed income portfolio, due to the superior fundamental, structural and credit characteristics that exist between CMBS and alternative fixed income investments. CMBS can be put to work as both a hedge to other asset classes and to provide superior risk-adjusted returns in a fixed income portfolio.

THE YEAR 2002 IN REVIEW

Generally, CMBS market conditions are solid. Delinquencies are low in a historical context, and liquidity continues to increase, primarily due to a larger investor base. In both 2001 and 2002, the fixed income markets incurred significant volatility. CMBS investments again ran counter to this condition as investors increasingly viewed CMBS as a core, "safe haven," holding in their fixed income portfolios.

As shown in Figure 3, investment grade CMBS have outperformed the Lehman Aggregate Index, and high yield CMBS have outperformed high yield corporate bonds for five years running. This can be attributed to the excellent credit performance of CMBS, even during the recent economic downturn. Investors have recognized this and maintained a strong bid for CMBS, which has resulted in less spread volatility than corporate bonds. The out-performance can be attributed to the following:

•*Reduced Event Risk* – Pooling and diversification in the securitization process dilutes an investor's exposure to a particular credit event or any particular geographic region. A single CMBS transaction may be secured by 100 to 200 individual mortgages covering diverse property types such as; office, retail, industrial and multifamily properties. Furthermore, diversification of the tenant base in the underlying properties provides additional protection against event risk.

- *Security Enhancements:*

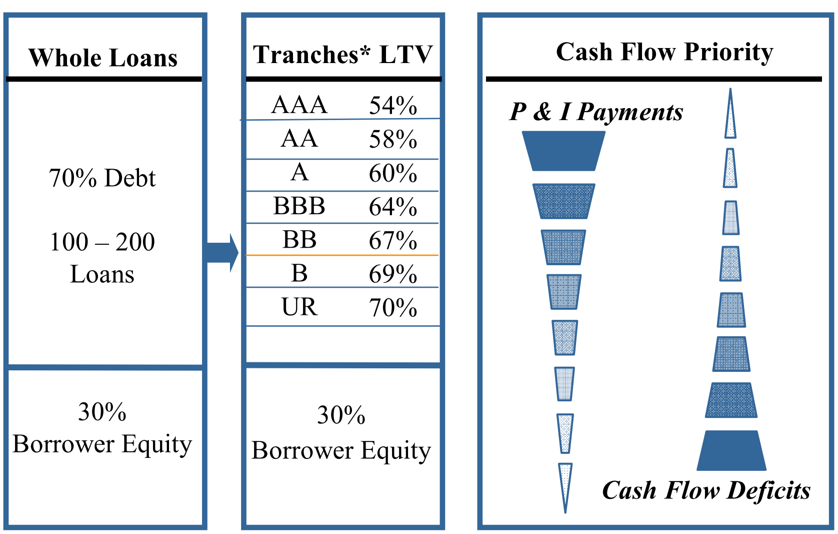
  - *First Mortgage Liens on the Underlying Properties* – In the event of a default on an underlying loan in a CMBS transaction, the servicer of the loan may foreclose on the loan or pursue other remedies typically available to commercial mortgage lenders to recover as much principal and interest as possible.

  - *Credit Support* – Subordination levels have further insulated CMBS from the changes in real estate fundamentals. Therefore, principal losses in investment-grade CMBS have been virtually non-existent due to the additional credit enhancement afforded by the subordination of below investment-grade classes. Below investment-grade classes typically comprise the bottom 6% to 10% of the transaction, meaning the 'BB', 'B' and unrated classes incur losses of principal and interest before the 'BBB' class incurs losses. Figures 1 and 2 below illustrate this additional credit enhancement.

  - *Borrower Equity* – The borrower on an underlying loan typically has cash equity invested in a property in addition to implied equity from any increases in the value of the property collateralizing the loan. In the event the property is temporarily performing poorly, the borrower is motivated to keep the loan current to protect this equity.

FIGURE 1 — CMBS SECURITY AND CASH FLOW PRIORITY

CMBS ($800 M - $1 B Transaction)



* As rated by Moody's, S&P and Fitch

FIGURE 2 — CREDIT SUBORDINATION LEVELS

CMBS vs. Residential MBS

Credit Subordination Levels												
Vintage	AAA		AA		A		BBB		BB		B	
	CMBS	RMBS	CMBS	RMBS	CMBS	RMBS	CMBS	RMBS	CMBS	RMBS	CMBS	RMBS
2002	17.5%	4.4%	14.2%	2.2%	10.7%	1.3%	7.3%	0.8%	3.7%	0.5%	1.8%	0.2%

Source: GMAC Institutional Advisors

CMBS vs. Residential MBS

Delinquency Coverage Multiple (Credit Subordination / Delinquency Rate)												
Vintage	AAA		AA		A		BBB		BB		B	
	CMBS	RMBS	CMBS	RMBS	CMBS	RMBS	CMBS	RMBS	CMBS	RMBS	CMBS	RMBS
2002	10.6	5.9	8.6	2.9	6.5	1.7	4.4	.5	2.2	.66	1.09	.26

Source: GMAC Institutional Advisors

RETURNS

Last year, CMBS turned in an impressive performance relative to fixed income alternatives as shown in Figure 3, and have contributed significantly to enhance fixed income portfolio returns. This sort of performance points to the structural differences that provide CMBS more protection when credit conditions deteriorate.

FIGURE 3 — LEHMAN TOTAL RETURN INDEX FOR CMBS AND OTHER ASSET CLASSES FOR THE YEAR ENDED DECEMBER 2002

Index Components	Modified Duration	Total Return (%)		
		One Year	Three Years	Five Years
<u>High Quality</u>				
CMBS Investment Grade	**5.01**	**15.45**	**12.93**	**9.19**
CMBS BBB	**5.48**	**17.20**	**14.91**	**9.91**
Corporate BBB	4.63	8.11	8.30	8.53
Residential MBS	.94	8.75	9.37	7.34
Asset Backed	2.90	8.55	9.73	7.71
Lehman Aggregate	3.79	10.26	10.10	7.57
<u>High Yield</u>				
CMBS High Yield	**6.20**	**24.42**	**19.18**	**9.62**
CMBS BB	**6.37**	**25.71**	**19.33**	**9.64**
Corporate High Yield	4.74	-1.41	-.767	.381
US Treasuries 7-10 Yr.	6.58	14.50	11.96	8.34

Source: Lehman Brothers

RETURNS *(continued)*

CMBS spreads were for the most part unchanged during 2002. This stability of spreads in the wake of softening real estate markets continues to demonstrate the insulation provided by diversified CMBS transactions. In addition, corporate bonds display significantly higher return volatility, and therefore, CMBS should be expected to provide a much higher return per unit of risk.

FIGURE 4 — ADJUSTED RETURNS FOR VOLATILITY

	AAA		AA		A		BBB	
	CMBS	Corp	CMBS	Corp	CMBS	Corp	CMBS	Corp
Excess Returns	0.5	-3.52	2.68	-2.23	3.5	-3.91	2.7	-6.39
Standard Deviation	1.53	1.17	1.74	1.22	1.72	1.21	1.91	1.55
Return per Unit of Risk	0.3267	-3.01	1.54	-1.82	2.03	-3.23	1.41	-4.122

Source: GMAC Institutional Advisors

CORRELATIONS

Since the autumn of 1998, the CMBS market has become more closely linked to swaps and certain other fixed income sectors. However, as shown in Figure 5 below, BBB CMBS are not highly correlated with corporate bonds and residential mortgage backed securities.

Comparably, corporate bonds are suffering from corporate credit weakness and residential mortgage bonds are being affected by prepayments brought on by historically low interest rates. Current spreads and loss-adjusted yields in CMBS are higher than the aforementioned alternatives. As a result, investors can achieve increased diversification due to imperfect correlation, coupled with superior performance. The net effect is a positive impact to a fixed income portfolio.

FIGURE 5 – CMBS CAN HAVE SIGNIFICANT DIVERSIFICATION BENEFITS IN A FIXED INCOME CONTEXT

	BBB CMBS	BBB Corp.	Res. MBS	Asset Backed	Lehman Agg.	US 7-10 Yr.
BBB CMBS	1.00					
BBB Corp.	.64	1.00				
Res. MBS	.72	.70	1.00			
Asset Backed	.79	.70	.91	1.00		
Lehman Agg.	.78	.82	.92	.94	1.00	
US 7-10 Yr.	.69	.66	.81	.89	.94	1.00

Source: GMAC Institutional Advisors, Ibbotson, Lehman Brothers
Number of Periods:
Return Period: 1/97 – 12/02

CMBS VERSUS CORPORATE BONDS

CMBS transactions allow an investor to analyze and commit to a static pool of collateral. With corporate bonds, there is no guarantee that the collateral pool will be static, which partially explains why corporate bonds tend to have a higher incidence of ratings transitions that do CMBS.

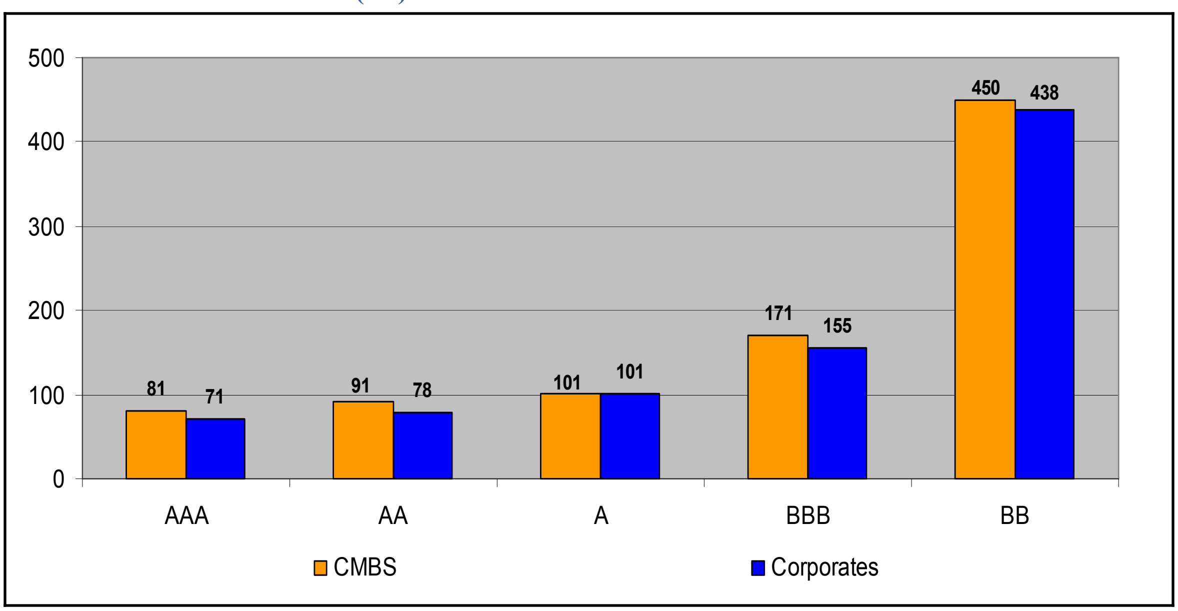
With 'BBB' rated corporates, spread dispersion is extremely wide, as much as 100 basis points. Better-regarded corporates, which trade at the low end of the spread range, will likely lag equivalent CMBS with regard to return. Those at the wider end of the spread range risk defaults and downgrades due to weaker credit conditions in the corporate market and event risk inherent in corporate bonds.

Because of greater homogeneity in CMBS transactions stemming from the diversification within the transaction, they lack the spread dispersion of corporate bonds and are increasingly used by investors as a means of diversifying credit exposure and mitigating the effects of event risk.

Because of the divergence between solid loan performance in CMBS and escalating corporate defaults, investors have witnessed narrowing margins between the two classes. Because of the structural and credit characteristics unique to CMBS, it is apparent that CMBS continue to have excellent relative value compared to corporate bonds.

The general course of corporate credit and corporate spread volatility will have more of an impact on CMBS spreads than real estate news, and therefore, CMBS should continue to outperform over the near term. Furthermore, in the wake of the Enron, Tyco, WorldCom and Health South corporate scandals, the CMBS market is a relative safe haven from the accounting related risk plaguing the corporate bond market.

FIGURE 6 - YIELD SPREAD (BP) VERSUS CORPORATES AS OF APRIL 2003



Source: Morgan Stanley

CMBS VERSUS CORPORATE BONDS *(continued)*

CMBS have been broadly priced as a risky credit instrument. For example, 'AAA' CMBS offer a spread advantage of about thirteen basis points to 'AA' industrial corporates. These concessions are substantial considering that corporate bond defaults are near their highest levels since 1991. While many investors have recognized the strong relative value, the overall market has erroneously viewed CMBS as a "high beta" credit sector.

Prior to 2001, CMBS had never experienced a recession. Absent this stress test, many investors have retained substantial skepticism about CMBS credit strength, which has continued to be evidenced in wide spreads. In light of this misconception, attention should be directed to current CMBS delinquency. Delinquencies in CMBS transactions stand at approximately 14% of the level reached during the real estate and economic recession of the early 90's.

Since CMBS trade at spreads generally equal to or greater than corporate bonds, we believe CMBS investors are well compensated for the underlying risk.

LIQUIDITY

The global issuance of CMBS is approaching $400 billion as of year-end 2002. With the expanded number of outstanding securities and broader acceptance of CMBS by investors, liquidity has improved significantly. In fact, investment grade CMBS can typically be sold within the same day.

The robust liquidity of the secondary markets will facilitate new investment in CMBS. The volume of secondary CMBS trading on average is $1 billion a week and growing.

Furthermore, the ease with which CMBS rebounded from the events of 9/11, the Long Term Capital meltdown, the Russian debt crisis of 1998, and corporate accounting scandals has not been lost on investors.

Today the investor base is robust, as there exists a wide array of investors to facilitate liquidity, such as life insurance companies, CDO buyers, fixed income managers, banks, money managers and hedge funds. This broad base of investors should further ensure that liquidity will stay in place through future market cycles.

PREPAYMENT RISK

CMBS enjoy significant call protection due to defeasance and prepayment penalties in commercial mortgages. Defeasance allows the borrower to release the collateral property by substituting Treasuries that will mimic the income stream of the released property. As a result, CMBS lack the convexity risk of residential MBS, and with recent declines in residential mortgage loan rates, that market will likely experience faster prepayments.

For example, a 10-year mortgage loan in a CMBS transaction is typically call protected via lockout, yield maintenance or defeasance for the first nine and-a-half years.

FIGURE 7 - CMBS SPREADS/LIQUIDITY*

	Bid/Ask Spread (BP)	Time to Market*
CMBS		
AAA	2-3	Same day
AA - to - A	3-5	Same day
BBB	5	Same day
BB	15-20	Two weeks
B/Unrated	50	Six weeks

*Actual liquidity will vary based on transaction characteristics
Source: GMAC Institutional Advisors, Morgan Stanley

Furthermore, the mezzanine CMBS classes (AA through BBB rated) have additional protection against prepayment risk as the senior classes ('AAA' or higher) typically incur prepayment events first, as is illustrated in Figure 1 on page 4.

Since 1997, defeasance has supplanted other forms of call protection. In 2002, an average of 94% of the loans collateralizing CMBS transactions required defeasance. Strong call protection on securitized commercial mortgage loans assures stable cash flows, irrespective of interest rates fluctuations. Weighted-average lives do not change and modified durations shorten when yields rise. This positive convexity benefits the performance and longevity of CMBS.

2002 RATING ACTIONS

Fitch Ratings reports that of the transactions it rates, CMBS experienced 352 upgrades in 111 deals, and 126 downgrades in 51 deals last year. The ratings actions are a result of seasoned transactions continuing to benefit from increased subordination levels via prepayment and amortization. Downgrade activity was primarily driven by poorly-performing hotels, and by retail bankruptcies.

It is anticipated that upgrades for seasoned conduit deals will outpace downgrades, however, not at the pace witnessed through the previous years. Generic conduit deals benefiting from the CMBS deal structure, floating-rate deals that repay quickly and the single-asset transactions that have exhibited strong performance and have long-term leases in place will lead the upgrades in 2003.

The structural and diversification benefits in CMBS are evident in the ratings transitions of the various classes of CMBS. For example, the table below illustrates that of the 201 rating actions taken on 'BBB' CMBS last year, 73 bonds were affirmed, 74 bonds were upgraded to single-A or higher, and 54 bonds were downgraded to 'BB' or lower.

Higher on the credit scale, 'AA' bonds experienced 169 rating actions in 2002. Actions taken included 57 affirmations, 95 upgrades and 17 downgrades. No downgrade went further than BBB, or two full rating categories.

FIGURE 8 - 2002 RATING ACTIONS

		TO...							
	Class	**AAA**	**AA**	**A**	**BBB**	**BB**	**B**	**CCC**	**Total**
	AAA		46						**46**
	AA	95	57	16	1				**169**
	A	21	59	46	21				**150**
FROM...	**BBB**	10	11	53	73	45	8	1	**201**
	BB	5	4	7	26	33	24	6	**105**
	B	3		1	3	18	26	49	**100**
	CCC					1	2	38	**41**
	Total	**134**	**177**	**123**	**124**	**100**	**60**	**94**	**812**

Source: Morgan Stanley Dean Witter

REAL ESTATE MARKETS

The national economic recovery is taking longer than expected, which is taking its toll on the real estate property markets. Property markets continued to soften through the fourth quarter of 2002, and are expected to continue through 2003.

In general, we are expecting:

•**Industrial** *There was a small increase in demand during the latter part of 2002, which should continue to rise in 2003. Recent trade flow trends and increasing inventory levels favor the industrial markets near major ports, and we expect these areas to improve during 2003. These ports-of-entry include Jacksonville, Los Angeles, and Northern New Jersey*

• **Multifamily** *Despite recent increases in vacancy rates and declines in rents, we are predicting that multifamily properties in general should continue performing better than other property types over the near term. That is not to say that there are not pockets of weakened market conditions.*

•**Retail** *The combination of strengthening retail demand and limited supply of new property space will definitely help retail properties in locations such as Boston, Northern and Central New Jersey, San Diego, and Washington, D.C.*

•**Lodging** *This sector remains weak and may be slow to recover due to the war in Iraq. Minimizing exposure to this sector is possible as it represents a very small component of most CMBS issuance.*

•**Office** *Nationally the vacancy rate will continue rising, yet there are a handful of local markets remaining fairly stable. We expect the Washington, D.C. market to be the least hard-hit. Other relatively stable markets are Baltimore, Miami, and San Diego.*

DELINQUENCY

Underwriting standards have held firm due to the discipline imposed and enforced by non-investment grade CMBS buyers. Delinquency on all CMBS transactions stands at 1.67% as a percentage of unpaid principal balance at year end 2002. Average monthly delinquency as of March 2003 was a steady 1.37%. Delinquency remains well below the historical high water mark of over 12% for the commercial mortgage market during the recession of the early 1990's.

Delinquencies will likely trend up in the neighborhood of 2% to 3% over the next 12 months, as delinquencies typically lag overall economic conditions. At this level, however the majority of below investment grade bonds should not be at risk for a rating downgrade.

Current CMBS credit performance remains impressive versus the performance registered in certain sectors of competing structured-securities markets and the corporate bond market. For example, according to Standard & Poor's, corporate bonds set a new global record for defaults during 2002. For the fourth consecutive year as a result of a weak economy, declining credit quality and corporate scandals, the corporate sector was left reeling.

In February 2003, Morgan Stanley reported a study of historical loss severity of CMBS since its inception and found it to be .14%.

CONCLUSION

Improving market transparency, historical collateral performance, superior returns and liquidity reinforce the argument for the inclusion of CMBS in fixed income portfolios relative to other asset classes that will enable the CMBS market to continue to outperform over the long haul.

CMBS should have a material role in the institutional investor's fixed income portfolio because of:

•*Size of Market* – With cumulative outstanding CMBS issuance in excess of $400 billion, the CMBS market is a viable component of the capital markets.

•*Superior Credit Performance* – The superior credit and structural characteristics should enable CMBS to outperform corporate bonds in a recovering economy.

•*Superior Spreads and Risk Adjusted Returns* – CMBS continue to enjoy a spread advantage to corporate bonds.

•*Strong Pre-payment Protection* – Due to strong underlying call protection at the loan level, combined with structural features that provide additional protection to mezzanine CMBS classes, CMBS are resilient to interest rate movements relative to residential mortgage backed securities.

•*Liquidity* – CMBS demonstrated during the capital market turmoil in 1998, and again in 2002, that it could remain liquid in an unstable market environment.

•*Increasing Market Transparency* – Market transparency has come of age through the use of technology and standardization of documentation and reporting procedures made possible by the Commercial Mortgage Securities Association.