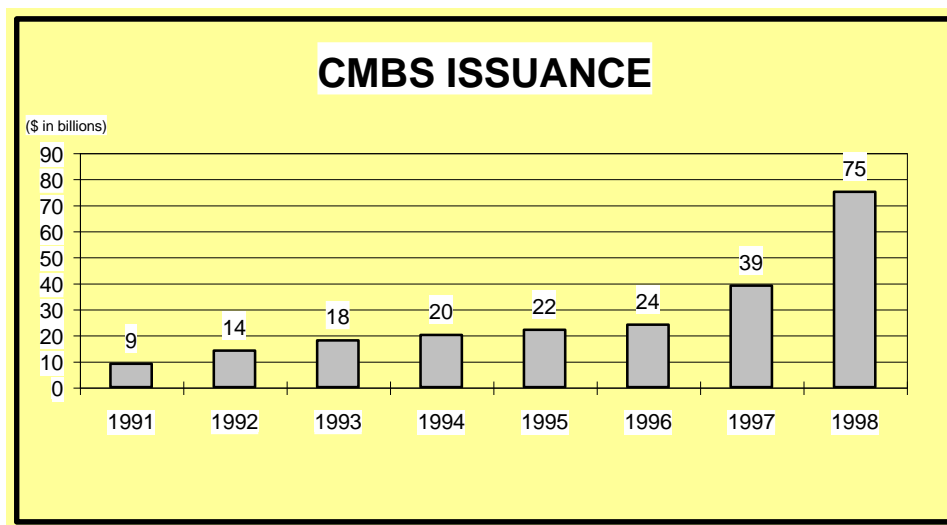


Commercial Mortgage Backed Securities

What Are They?

Commercial Mortgage Backed Securities (“CMBS”) are mortgage securities backed by commercial property loans. The CMBS market began in 1991 and CMBS issuance has been increasing steadily over the past eight years. The CMBS market today exceeds \$1.1 trillion dollars. In 1998, over 75 billion in new issues were underwritten, surpassing 1997 total origination by 92%.



Commercial Mortgage Backed Securities differ in terms of their underlying collateral, structure and call protection. The collateral may include multi-family, retail, office, hotel, hospital and industrial spaces. There are pros and cons to having an over or underweighting to any of these sectors under different market conditions (which include a variety of different loan types and sizes). CMBS structures can be created in a variety of ways, similar to the residential mortgage products. The most common deal structures are conduits, which have more collateral diversification than single borrower or single property deals. Conduits are entities formed for the sole purpose of originating commercial

loans to be repackaged into CMBS. Other deal structures include seasoned loan deals, large loan deals, multifamily deals, hospital deals, and franchise loans.

The underlying CMBS collateral is cut up to produce tranches with maturities ranging from 1 to 15 years. The credit risk associated with specific underlying collateral is tranching to produce various credit ratings with subordinated structures acting as support for the senior bonds.

CMBS Structural Advantages

Call Protection – CMBS are well protected from prepayment risk. This is one of the primary advantages of the CMBS structures relative to other mortgage products. Call protection comes in the form of one or more of the following:

1. **Hard lockout** period in which borrowers cannot prepay principal;
2. **Yield maintenance** requires borrowers to ensure a minimum loan yield level through defeasance. Defeasance is the replacement of any prepaid collateral with equal yielding treasuries;
3. **Prepayment penalties** are cash fees after the hard lockout period on any prepayment of principal.

These structural constraints severely restrict the borrower's ability to prepay regardless of the current level of mortgage rates. Therefore, the CMBS cash flows are highly predictable and often comparable to those of bulleted corporate structures.

Default Protection – Like residential whole loans, CMBS loans are divided into senior and subordinate tranches in which subordinate tranches provide credit support to the senior tranches. The credit support may be up to 10 times greater than that of a similar rated residential deal. Additional layers of protection from default include third party letters of credit and overcollateralization. These credit enhancements reduce investor exposure to loan delinquencies and defaults.

Greater Collateral Diversification – As the commercial mortgage market has grown and lenders have entered the securitization business, there has been a shift in the composition of the underlying collateral. Initially, commercial real estate owners and developers represented a majority of the issuers. CMBS pools were comprised of multiple properties from a single borrower. With the entrance of conduit originators, new issues contain smaller size loans from many borrowers, improving diversification.

Favorable Risk Based Capital Classifications – In 1996, the National Association of Insurance Companies (“NAIC”) eased risk-based capital restrictions on CMBS, allowing them to be classified as bonds rather than whole loans. This regulatory change has eliminated the need for insurance companies to adhere to restrictive loan-to-value ratios when adding investment grade CMBS to their portfolios.

Factors Affecting CMBS Performance

When looking at new CMBS deals considers several factors. We seek a diverse pool of property types with a preference toward those areas which we feel will perform well in the coming years. Currently, the property types that are good performers include office buildings and hotels in major cities. In addition, large high-end malls with significant barriers to entry that offer a "shopping experience" as well as anchored strip malls that are an integral part of suburbia are good investments. Multifamily collateral is a stable performer to have in any commercial deal. Some of the poor performing collateral include suburban office space and hotels, mid-level malls with low barriers to entry and unanchored retail centers.

Other important criteria affecting CMBS include debt-service-coverage-ratios (DSCR) and, to a lesser degree, loan-to-value ratios (LTV). DSCR is a ratio of the income that a property generates divided by the costs associated with running it. For more favorable property types lower DSCR (around 1.3 - 1.5) are acceptable, whereas for the less favorable property types we require DSCRs closer to 2.0. When we look at these ratios we consider, not only the attractiveness of the property type, but in addition we examine the economic viability of the property. Below is an example of some different CMBS deals with their accompanying loan concentrations, geographic distributions and risk considerations. These are the types of criteria we consider when examining CMBS.

Factor	CSFB 98 C1 D	ASC 95 C1 B2	NASC 94 MD2
Loan Concentration			
# of Loans	324	78	6
Top 10 as a % of Deal	27%	34%	100%
Loan Type			
Multi Family	17%	49%	6%
Office	15%	6%	
Retail	25%	42%	37%
Hotel	17%	1%	
Industrial	3%	2%	41%
Cooperatives	5%		
Credit Leases	15%		
Adult Living/Healthcare	2%		16%
Mobile Homes	2%		
Total	100%	100%	100%

	CSFB 98 C1 D	ASC 95 C1 B2	NASC 94 MD2
Geographic Distribution			
CA	15%	9%	
FL		15%	10%
GA			5%
MI			14%
MN			7%
NJ	6%		
NY	11%	13%	
PA			6%
TX	7%	25%	26%
VA	5%		
	44%	61%	68%

Credit/Default Risk Considerations			
WALTV	68%	68%	60%
Orig. Credit Support	11.5%	12.0%	13.0%
Curr. Credit Support	11.5%	12.7%	49.3%
WADSCR	1.51%	1.45%	2.40%
Fitch Rating	BBB	BBB-	BBB

Relative Value

Commercial mortgage backed securities offer excellent prepayment protection as discussed above. The restrictions on borrowers make it very difficult and/or expensive to prepay their balloon mortgages. As a result investors can generally expect to receive a bullet payment similar to that in corporate bonds. CMBS offer investors a yield premium of 20 BP to 60 BP over corporates, yet they have experienced significantly lower default rates and are more frequently upgraded by rating agencies.

Since CMBS is a relatively newer asset class the nominal and option adjusted (OAS) spreads are wider in CMBS than in competing classes including corporates and asset-backed securities. We would argue that while corporate credit is in the final stages of its current cycle, the commercial mortgage credit cycle is still in the middle stage.

In 1998, Wall Street firms cut back on inventories, and hedge funds sold off large positions, resulting in unilateral spread widening across all MBS products. This recent market turmoil was set off by the threat of a slowdown in the U.S. economy. The market feared an increase in loan defaults on properties whose prices rose sharply during the eight-year expansion and consequently the bid had dropped out of the market, causing a major widening of spread levels across the quality spectrum. This seems to be an overreaction given that in the first half of 1998, already low loan delinquencies fell even further. In fact, ratings agencies continue to hugely favor CMBS upgrades over downgrades and property market fundamentals remain in balance.

AAA CMBS spreads have tightened significantly since their peak of 205 BP in October 1998. While this is certainly an improvement, CMBS spreads carry a hefty liquidity premium and are still wide versus their one year and three year averages. Furthermore, the subordinate tranches have yet to benefit from the trickle down effect of AAA tightening, which has caused the quality curve to steepen. There is a distinct yield advantage as you move down the CMBS credit ladder particularly in the BBB and BBB- pieces.

10 YEAR CMBS Spreads						
	AAA	AA	A	BBB	BBB-	BB
1/19/99	130	155	180	260	350	575
1 Year Average	104	120	137	184	232	353
3 Year Average	85	97	110	141	180	316

Source: Lehman Brothers, January 19, 1999.

Summary

The subordination levels on CMBS are significantly higher than those on residential mortgage backed securities because it is a newer sector and because there is a sentiment that people are less likely to default on a home than they are on a commercial loan. A BBB-rated CMBS may have subordination of 10 - 15% on average while a residential BBB MBS has about 1% subordination. As CMBS continues to grow in terms of liquidity and widespread investor participation, subordination levels will decrease and spreads should tighten, allowing current structures to further improve in credit quality.

In addition, due to the enormous spread widening that occurred in the latter half of 1998, banks underwrote fewer commercial deals. This has resulted in less CMBS issuance in the third quarter of 1998 as well as an expectation of a truncated list of CMBS deals for the first quarter of 1999. Part of the spread tightening that has occurred in the last two months was due in part to this sudden drop in supply. More importantly, as supply continues to remain at bay in 1999, spreads should come in further, especially in the lower rated tranches which have lagged the spread tightening witnessed by the AAA securities.

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Previously, Emad was Chairman of Institutional Business at Pioneer Investments. Pioneer investments has more than \$300 Billion in assets under management. The parent of Pioneer, UniCredit S.p.A., is the largest bank in Italy and the second largest bank in Europe. Pioneer had purchased Vanderbilt Capital Advisors, of which Emad was the founder and Chief Executive Officer.

Emad has had numerous articles published in professional and academic journals such as The Journal of Forecasting, The American Economist and The Journal of Fixed Income. He is a Board member of The National Investment Company. Emad was a member of the Board of Advisors of the Pacific Institute, The Advisory Committee of Fulcrum Global Partners, The Chief Executive Officers Club and formerly a board member of The Foreign Policy Association. He also served on the Board of Directors of the University of Albany Foundation, NextGen Healthcare Inc., The Park Avenue Bank, AA Bank and The New Providence Fund and Associates LP.

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