

CMBS Credit Protection and Underwriting Standards

Have they declined too far?

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Commercial mortgage-backed securities investors and rating agencies have been wrestling with whether the market has moved too far in relaxing many of the credit-enhancing features common in the early CMBS deals. It is clear that the credit performance of commercial mortgages in the last ten years has been very good. This positive performance combined with a lack of good investment alternatives and the continuing low interest rate environment has led to a boom in capital available for real estate. This in turn has encouraged lenders to become more flexible with regard to loan terms, enabling CMBS deals to be sold with reduced subordination levels.

CMBS are not exceptional in this trend. All the credit markets have experienced tightening spreads, and all the structured finance markets have seen a reduction in credit enhancement. Only time (and the next credit cycle) will tell whether standards have overshot the presumably correct levels. In the meantime, investors would be prudent to monitor this trend carefully. Moreover, it would benefit the market as a whole if the analytic services that keep track of loan-level data add more of the elements that are important in providing protection to lenders and investors.

We review how much loans and deals have changed in terms of credit protection features since the early days of CMBS. We have seen some movement away from the valuable cash flow stability (positive convexity) that has been a major selling point for CMBS. As this is not an area that generally gets rating agency attention, investors may not be focusing on it.¹

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EXHIBIT 1

Selected CMBS Spreads to Treasuries and CMBS versus Corporates—January 1994

Security	AAA	AA	A	BBB	BB	B
Multifamily	100	125	160	210	435	675
Hotel	140	175	220	325	N/A	N/A
CMBS (All) Spread to Corporates	+65	+84	+96	+117	+171	+248

Source: Nomura Securities International.

EXHIBIT 2

A Look Back at C/E Levels—NASC 1994-MD1 (WALTV = 54%, WADSCR = 2.04)

	Rating	Subordination
Class A-1A	AAA	40.0%
Class A-1B	AAA	40.0%
Class A-2	AA	30.5%
Class A-3	A	20.5%
Class B-1	BBB	14.0%
Class B-2	BB	8.0%

Source: Fitch (Duff & Phelps).

IN THE BEGINNING THE RTC CREATED CMBS

As the CMBS market began to evolve in the early 1990s from the Resolution Trust Company (RTC) deals backed by non-performing loans, to deals backed by newly originated loans, lenders who wanted to securitize the loans they were making needed to structure loans and CMBS deals extremely conservatively to make them palatable to rating agencies and investors. The market was very wary of commercial real estate, with the heavy commercial real estate losses suffered in the years 1990–1993.

It was tough going convincing the rating agencies to rate and investors to buy bonds backed by commercial real estate. Various credit enhancements were then designed to protect investors in severe real estate recessions. Besides the wide spreads relative to almost all other sectors, shown in Exhibit 1, dealer roadshows would highlight the relatively low leverage of the loans, high debt service coverage, and very significant subordination of the deals.

Exhibit 2 on the CMBS transaction NASC 1994-MD1 is a typical example. It shows at least 40% subordination to the AAA bonds. That is, even with a 50% recovery rate, defaults would have to exceed 80% for the bonds to suffer a loss. With initial loan-to-value (LTV) at around 70%, this was considered so remote that the bonds achieved AAA status. Even BBB bonds had at least 10% subordination.

Jacob and Gichon [1996] show that in the worst vintages, cumulative defaults reached a bit above 20%, and loss severities hit 50%, so these credit enhancement levels appeared more than adequate.

Rating agencies were even more conservative for loans on more risky types of real estate (some would not rate these deals at all). For example, in one of the earliest hotel CMBS deals, the Embassy Suites securitization in 1993, the LTV was 42%, and the debt service coverage ratio (DSCR) was 1.85. The loan was fully amortizing, so there was no balloon risk. No subordinated debt was permitted. There was a lockbox, and all loans were cross-collateralized. The deal was structured as a single-class deal, and received a AA rating from Fitch (originally Duff & Phelps).

Besides the modest leverage and strong debt service coverage (which is still considered more important than LTV), many other features gave the rating agencies and investors assurance on this emerging bond sector. Most loans did not permit secondary debt, either at origination or for the life of the loan. This as well as important structural features such as amortization assured deleveraging over time.

Balloon loans were understood to have greater risk than fully amortizing loans, but one could count on at least a 10% lower loan amount by the balloon date. There were then very few newly originated five-year balloon loans, and interest-only loans were unheard of.

Reserves for leasing commissions, tenant improvements, and property maintenance based on engineering reports had to be funded in order to help maintain the cash flow and property value throughout the life of the loan. Borrowers with multiple properties within the deal were strongly encouraged to cross-collateralize and cross-default their loans.

There were also very significant representations and warranties by the loan sellers. In the event of a material breach, the loan seller would have to repurchase the loan.

These reps and warranties covered such areas as mortgage loan information, lease schedules, insurance coverage, environmental issues, borrower information, and historical property information.

Beyond all the credit enhancements and the relatively wide yield spreads, a major attraction for CMBS investors was a stable cash flow and protection from the negative convexity of residential MBS. Almost all commercial mortgages offered some strong form of prepayment protection. While initially many loans had a percentage of principal-based penalty, the market evolved to require borrowers who wanted to prepay their mortgages to essentially make lenders whole through either defeasance or the payment of yield maintenance penalties. Thus, investors in CMBS would be protected from the type of massive prepayment wave that occurred in the mid-1980s and over the last several years in residential mortgages.

As this was clearly a lender's market, borrowers had very little power. The emerging conduit lender could demand all sorts of concessions from real estate owners whose loans were coming due with no refinancing alternative. The banks were not lending, as they were still licking their wounds from the real estate recession. The insurance companies were avoiding certain property types altogether, and had very stringent lending guidelines, in part due to the default experience of 1990-1993.

The issue of how to mitigate balloon risk was clearly on the minds of rating agencies, conduit lenders, and investors. As a result, the early hotel loans were mostly fully amortizing. With fully amortizing loans, there is no extension risk. Balloon loans were sized using a constant that would attempt to capture the refinancing risk if interest rates were higher at the balloon date. Structural features such as lockboxes were standard as a means of protecting the cash flow, particularly as the balloon date approached.² Servicers could extend a loan under certain circumstances. Of course, nearly all loans were amortizing up until the balloon date, so that the LTV at the balloon date was lower, assuming no drop in the property value.³

In the mid-1990s, a variation of the balloon loan was developed, known as an *anticipated repayment date* (ARD) loan. Under the terms of this loan, the principal would amortize up until the ARD like a standard balloon date. In a balloon loan, non-payment of the balloon was an event of default; the borrower in an ARD loan, however, would not be in default. It could keep on paying scheduled principal and interest. To discourage non-payment of the balloon, the interest rate would be sharply increased, and all excess cash flow (above the debt service, insurance,

taxes, or funding of reserves) would be used to pay down principal.

This structure was created for a variety of reasons, but from a credit perspective it alleviated the pressure caused by the required balloon payment, with some protection against interest-related balloon extension. This feature has recently come under pressure.

As the market evolved and the rating agencies and market participants understood more of the risks and structural issues involved in CMBS, other safety features were added. Deals became more diversified, and large pools of loans were aggregated. Defeasance almost completely replaced percent penalties and yield maintenance. The concepts of appraisal reduction, controlling classes, non-advancing by the servicer to the most junior class, and the like became standard. The emergence of analytic and data services and servicer reporting all contributed to the available information, which in the days of the RTC just did not exist.

By the time the benchmark conduit deal NASC 1998-D6 was priced, a typical deal had the features shown in Exhibit 3. Spread levels were as shown in Exhibit 4.

WHAT HAS HAPPENED TO CREDIT STANDARDS AND STRUCTURAL ENHANCEMENTS?

Exhibits 5 and 6 show historical data on stressed LTV and subordination levels in the CMBS market. As they say in law, *res ipsa loquitur*, or *the thing speaks for itself*. In this case, the graphs show leverage is at the highest levels ever observed in the market, and subordination levels are at or near their lows.

In a senior-subordinated structure, the LTV of the underlying loans impacts the probability of default. The subordination, which is set by the rating agencies, is the level of protection for each class of risk. Normally, one would expect required subordination to increase as LTV increases, but as we can see by comparing Exhibits 5 and 6, the opposite has occurred.

Of course, there are arguments that the previous credit enhancement levels were set too conservatively, and that will likely be proven correct—29% subordination to the AAA classes does look excessive, given historical CMBS credit performance.⁴ A case can also be made for the capability to increase leverage and reduce coverage ratios from the more conservative levels of the past, again given the fact that CMBS default/delinquency/loss performance has been very good in comparison to other fixed-income products.

EXHIBIT 3

Typical Deal Characteristics—Then and Now

Characteristic	Then (1998)	Now (2004)
Moody's Stressed LTV ^a	83-89%	93-95%
DSCR	~1.5	~1.5
Percentage of IO Loans	~0%	~40%
BBB-Subordination:	11.0%	3.9%
Herfindahl Index ^b	90	50
Top Ten	31.3%	48.5%
5 Year Balloon Loans/total originations	13.0%	34.5%
Lockboxes ^c	~ 60% (2002)	~ 60%
Secondary Debt	Typically not allowed	Rarely allowed, but more often than in 1998
Cross-Collateralized Loans	Common	Still common
Reserves	Higher	Lower
Prepayment Protection	Lockout/Defeasance/YM/Penalty Points	Almost all Lockout/Defeasance
Subordination Levels (AAA)	~29%	~14%

^aThere are two parts to Moody's stressed LTV. First is Moody's definition of cash flow, which it deems "sustainable." Moody's tend to mark down above-market rents, as well as make sure there are minimum levels for reserves and vacancy. It also uses a consistent set of cap rates. The result is the stressed value. Moody's finds these adjustments help for two reasons. Cap rates change from year to year, so while loans always appear to be 75% LTV, one can see the changes. Also it helps distinguish between issuers with aggressive and conservative underwriting as everything is restated to the basis.

^bThe Herfindahl index is a statistical measure of concentration used to capture the effects of diversification by the number of loans within a portfolio, depending on the dispersion of loan sizes. The higher the score, the more diverse a pool of loans is considered.

^cLockbox information according to Moody's 3rd quarter 2004 CMBS update.

Source: Moody's Investors Service, Trepp, Nomura Securities International, Commercial Mortgage Alert.

Yet these enhancement levels and leverage ratios (including DSCRs) seem to be reaching a point where the market is hoping for best-case scenarios, so these vintages are likely not positioned to handle stress as well as seasoned vintages. The conclusion to draw is that now, more than ever, we must scrutinize the loans in a deal before investing, especially if the investment is to be at the lower end of the capital structure.

Most investors recognize the increasing leverage and reduced subordination levels. Any changes in the two are very obvious to investors and rating agencies, and, like coverage ratios, they are extremely easy to find in pre-sale reports. Market participants have accepted these changes because of the favorable performance of commercial mortgages.

Another trend in the market of late is the practice of granting borrowers an interest-only period on loan payments, sometimes for the entire length of the loan. Before 2002, it was unlikely that interest-only loans would appear in a deal, but this has changed; roughly 40% of conduit loans now had an interest-only period during 2004, according to Moody's data (see Exhibit 7).

Obviously, the greater the share of IO loans, the greater the balloon risk, since one can no longer count on about 10%-12% of the balance of the loan amortizing down by the balloon date. Also, a greater share of IO loans can inhibit

the typical build-up of credit support from the amortization of loans that commonly occurs in older deals.

Large and Diversified Deals

Exhibits 8 and 9 show two measures of loan concentration in CMBS securitizations. After the terrorist

EXHIBIT 4

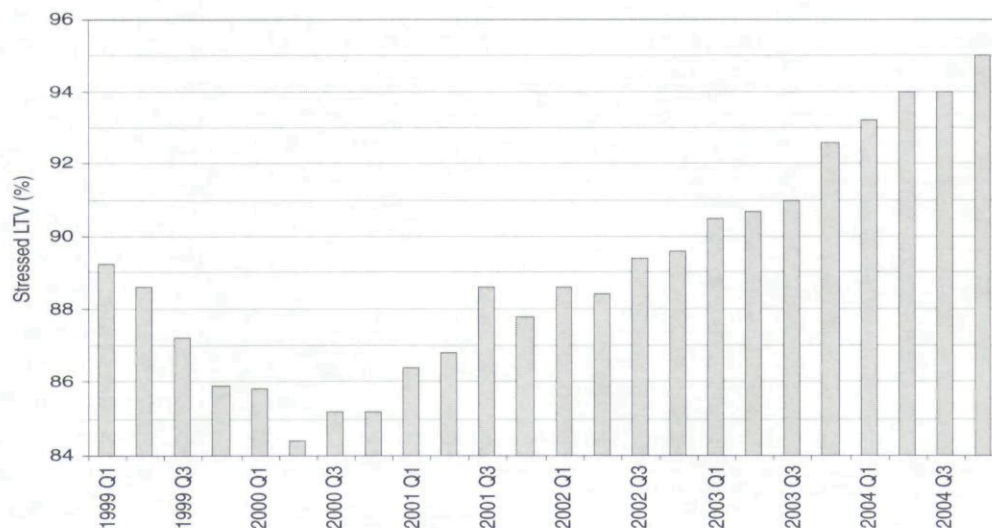
CMBS and Corporate Spreads to Treasuries—Then and Now

Class	CMBS Spreads to Treasuries (3/27/1998)	CMBS Spread to Corporates (3/98)	CMBS Spreads to Treasuries (3/11/2005)	CMBS Spread to Corporates (3/05)
10-Year AAA	81	+40	64	+30
AA	92	+46	72	+34
A	105	+44	81	+20
BBB	140	+46	127	+22
BB	250	+43	309	+124
B	450	+70	749	~ +400

Source: Bloomberg, Nomura Securities International.

EXHIBIT 5

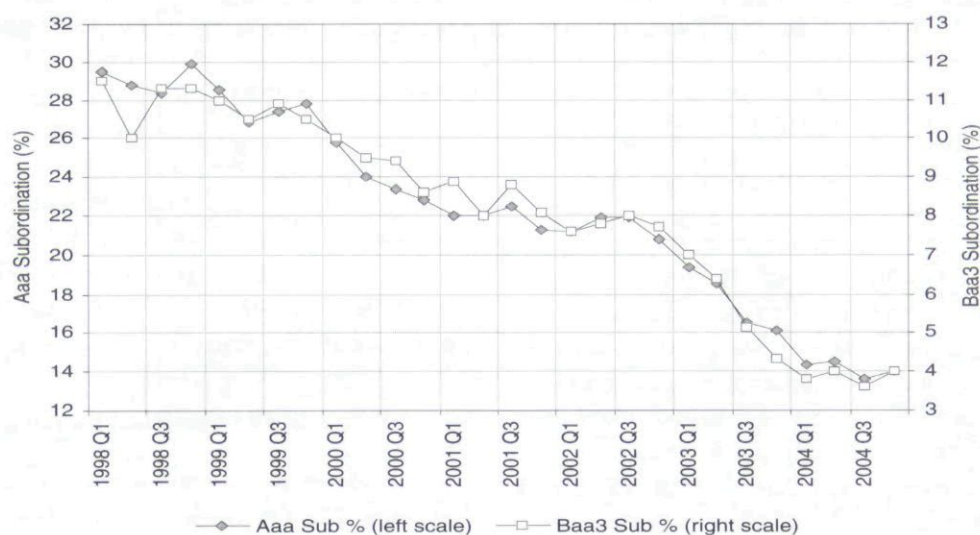
Moody's Stressed LTV for Conduit Portion of Rated Deals



Source: Moody's Investor's Service.

EXHIBIT 6

Trends in Conduit and Fusion Subordination Levels



Sources: Moody's, S&P, Commercial Mortgage Alert, Nomura Securities International.

attacks of 2001, large loan and single-asset deals began to disappear, but obviously large loans were still being originated, and dealers began to search for new ways to securitize them. First, in order to get loans of \$50-\$100 million and higher in deals, loans were split into equal payment-priority participations called *pari passu* notes.

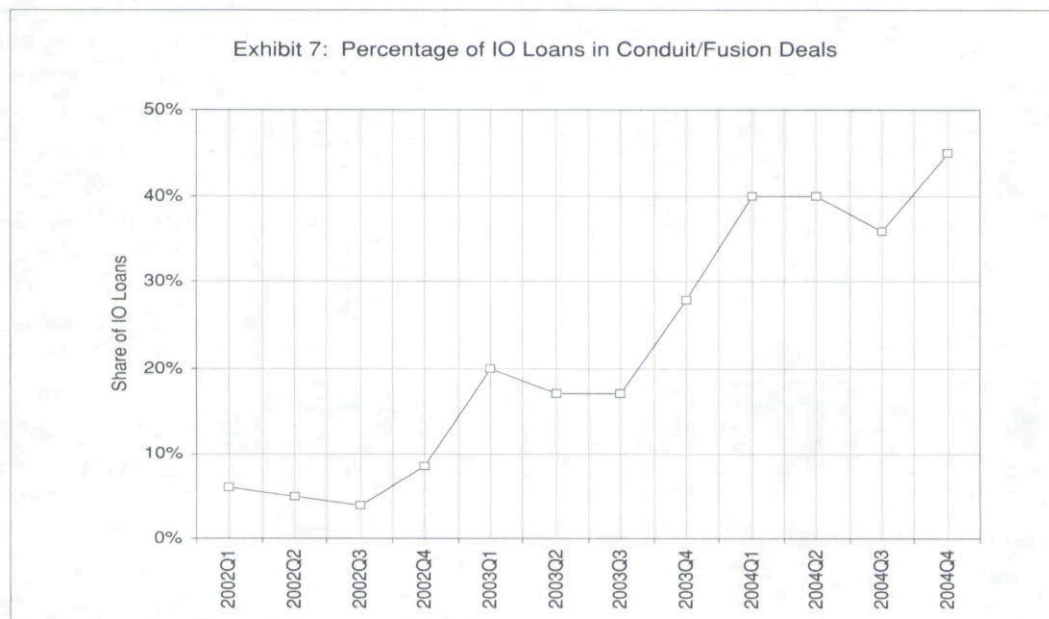
While this practice had the advantage of preserving the diversity of the deals, it also introduced the prospect of future legal complications. For instance, the question

of rights in the case of a loan workout becomes complex when there are multiple A and B notes associated with a single loan.

More recently, conduit/fusion deals have been increasing in size, so that dealers can put large loans into deals without splitting them up, while still keeping geographic and property type concentrations within reason. Examples are GCCFC 2005-GG3 and JPMCC 2005-LDP1, a \$3.6 billion deal and a \$2.9 billion deal recently

EXHIBIT 7

Percentage of IO Loans in Conduit/Fusion Deals



Source: Moody's Investors Service

priced in the market. As a point of reference, the average deal size during 2002–2003 was about \$1.1 billion.

The upshot is that the traditional conduit deal is all but extinct in the market today, giving way to fusion deals, with top ten percentages in the mid-40% range. The increase in large loans appearing in deals has also served to increase the concentration (by loan sizes) in current deals, as measured by the Herfindahl index.

Prohibition Against Secondary Debt

A common feature of older loans is a prohibition against adding any extra debt once a loan is made. Obviously this is important because adding extra debt can immediately raise the LTV and reduce the debt service coverage ratio once additional interest payments must be made. Although this practice is still relatively rare today, it has appeared in a few loans, and the increasingly competitive market for loans may lead to a relaxing of this standard in 2005.

Cross-Collateralization

When a loan is made up of several properties with the same borrower, a common practice has been to cross-collateralize the properties. A useful example is a hotel portfolio whose collateral is spread across the U.S. In this case,

if one property is underperforming (such as if one region of the country sees a fall in tourism), income from an outperforming property could be used to counterbalance the underperforming property. This helps to prevent a borrower from simply letting the bad loan deteriorate and focusing solely on keeping the good loan performing well.

From what we have observed recently, cross-collateralization is still standard practice in the market. The hope is that the competition for loans doesn't encourage lenders to allow borrowers to weaken this standard (and not cross-collateralize loans backed by multiple properties).

Loan Reserves and Escrows

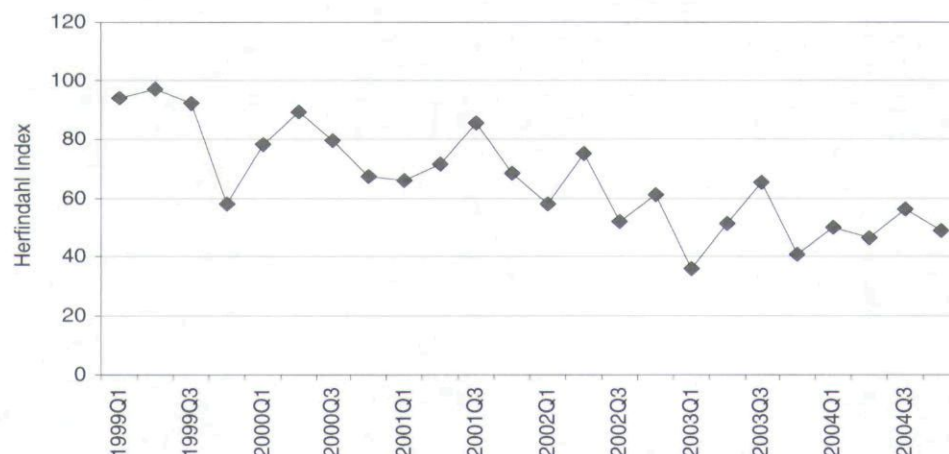
An area where changes in standards may take a little longer to notice is in loan reserves and escrows. Because it is hard to assemble the data, analysis of trends in loan reserves is challenging. Trepp, LLC, a leading provider of CMBS information to the investment management community, provided us with a database of loans that allowed us to observe the overall percentage of loans with loan reserves and escrows, by balance and property type. These results are displayed in Exhibits 10–13.

Whether or not a loan has reserves or escrows, the actual amounts of the reserves are unavailable. We found amounts in the prospectus supplements of several deals.

The data show that certain property types appear to

EXHIBIT 8

Herfindahl Index



Source: Moody's Investors Service.

EXHIBIT 9

Top Ten Loan Percentage



Source: Nomura.

be holding up better than others in terms of requiring reserve and escrow funds. Apartments and lodging loans are at or above their year 2000 levels in both cases. Industrial, office, and retail properties show a downward trend over the period.

For loans requiring reserves, there is a similar fall in the percentage of loans over 2000–2004 for the three property types, about 12%–14%. Required escrows show a slightly different pattern. Retail especially appears to have seen significant deterioration in loan underwriting, with only 57% of loans flagged for requiring escrow funds in

2004, down from 86% in 2000. Industrial and office properties also show a drop in required escrow funds, although not as drastic a decline as for retail properties.

By loan size, only the reserves of the largest size loans have held up compared with year 2000 levels. Although this is not necessarily the expected result, it makes sense, as loans in excess of \$50 million tend to come in for scrutiny by investors and rating agencies when they are securitized.

Loans flagged for escrow accounts show the opposite results for large loans, where the drop in the percentage of loans over 2000–2004 is the most severe of the five categories studied. The other four loan categories show the same results as for reserves, a small decline over the past few years (single-digit, or low double-digit).

The final piece of information required for this analysis is the actual amount of reserves required in recent loans. Collection of this information is extremely labor-intensive, so we chose only a sample of loans (approximately 4,500 or \$42.7 billion in cutoff balance) to look at for reserve amounts. The results are summarized, for

annual deposits to the main reserve account, in Exhibit 14.⁵ 2000 is taken as the base year, and the rest of the information is given as cumulative percentage declines in reserves compared with reserve requirements at that time.⁶

The results show that not only are fewer loans requiring reserves, but that the amount of required reserves is also dropping. Lower ongoing reserves can result in increased loss severity, should a loan get into trouble. This is a fact to be wary of in the 2003–2005 vintages, especially with a large number of interest-only loans originated in what will likely be a rising rate environment,

EXHIBIT 10

Loans with Reserves by Property Type

	Retail	Office	Lodging	Apartment	Industrial
2004	71%	82%	89%	91%	76%
2003	69%	86%	89%	91%	80%
2002	84%	88%	59%	88%	79%
2001	88%	89%	81%	92%	89%
2000	85%	94%	78%	92%	88%

Source: Trepp, Nomura Securities International.

EXHIBIT 11

Loans with Escrows by Property Type

	Retail	Office	Lodging	Apartment	Industrial
2004	57%	82%	90%	91%	70%
2003	69%	81%	90%	91%	68%
2002	84%	81%	75%	90%	72%
2001	88%	87%	89%	95%	76%
2000	86%	87%	86%	92%	85%

Source: Trepp, Nomura Securities International.

EXHIBIT 12

Loans with Reserves by Original Loan Size

	< 5 mil	5 – 10 mil	10 – 25 mil	25 – 50 mil	> 50 mil
2004	82%	87%	86%	87%	71%
2003	80%	87%	89%	87%	67%
2002	86%	88%	87%	89%	73%
2001	89%	91%	91%	91%	74%
2000	91%	91%	93%	91%	66%

Source: Trepp, Nomura Securities International.

EXHIBIT 13

Loans with Escrows by Original Loan Size

	< 5 mil	5 - 10 mil	10 — 25 mil	25 — 50 mil	> 50 mil
2004	78%	83%	83%	76%	66%
2003	76%	85%	87%	83%	67%
2002	85%	90%	88%	91%	63%
2001	85%	89%	90%	92%	74%
2000	88%	88%	89%	87%	89%

Source: Trepp, Nomura Securities International.

which increases balloon risk at the anticipated repayment (or balloon) date.

Prepayment Protection

Older deals tended to feature some combination of lockout, yield maintenance, penalty points, and defeasance for prepayment protection, where lockout and

yield maintenance seem the most common types. Defeasance has become the most popular form of prepayment protection in the market, because of the virtual elimination of credit risk that it affords. Under a defeasance approach, the borrower is required to purchase U.S. Treasury securities whose cash flows equal or exceed every remaining principal and interest payments of the mortgage, making the cash flow to all the bonds remain the same as what it would have been without the defeasance.

Extension Protection

Another loan feature that has experienced some weakening from the lender/investor perspective concerns the anticipated repayment date loan, an alternative to the typical balloon loan. Under the typical balloon loan, the borrower must pay the remaining principal at the balloon date. If the borrower fails to pay, it is in default.⁷

The ARD loan, while legally fully amortizing, is designed with strong borrower disincentives to not pay the loan off at the anticipated repayment date. Typical disincentives involve a step-up in the interest rate and the trapping and application of excess cash flow to pay down principal.

When this type of loan was first created, the disincentives were very powerful. The rate would step up to the higher of the original mortgage rate plus 5% or the then current Treasury rate plus 5%. Moreover, the trapping of excess cash flow to pay down principal (known as hyperamortization) usually means *all* excess cash flow.

The precise language, of course, is in the loan document, but it is also generally disclosed in general terms in the prospectus.

One problem is that there is no accepted standard for an ARD loan, so there can be variations.

The typical language in the early ARD loans as described in a prospectus reads as follows:

Commencing on the respective Anticipated Repayment Date each such Mortgage Loan gen-

EXHIBIT 14

Amount of Reserves for Two Issuers—2004 versus 2000

	Issuer One	Issuer Two
	Annual Deposit to Reserve Account (\$) / Appraised Value	Annual Deposit to Reserve Account (\$) / Appraised Value
2004 versus 2000	-37.7%	-30.5%

Sources: Nomura Securities International, prospectus supplements.

erally will bear interest at a fixed rate per annum equal to the greater of (a) the Mortgage Rate plus 5% and (b) the Treasury Rate (as defined) plus 5%; the Revised Rate.

Early on, the rating agencies requested some modifications, because they were concerned about the tremendous additional stress this would place on the already stretched borrower. First, the stepped-up rate would not be due currently, but would accrue against the borrower and need to be paid off by the final loan maturity date. Second, the spread was modified to 2% instead of 5% as long as the loan remained in the trust.⁸

Under this construction, the borrower would not extend the loan unless it really could not refinance it. The negative convexity of interest rate-related extension was removed or greatly reduced, because even if Treasury rates were substantially higher by the balloon (ARD) date, the borrower's rate, if it were to extend, would also be much higher.

The language describing these loans has changed recently in certain cases. In the prospectus supplement, the language is sometimes quite vague. In actual loan documents, sometimes the step-up rate is no longer linked to market rates. Instead, it is just set at 2 percentage points over the initial mortgage rate.

The problem with this structure should be obvious. If rates were to rise by more than 2 percentage points by the ARD date, the borrower would have a greater incentive to extend at the stepped-up rate than to pay off the loan. In effect, if the yield curve were flat, the borrower would have a 2% out-of-the money option to extend. If the yield curve were steeply upward-sloping, the option could be at the money or even in the money. For a 10-year balloon loan with an option to extend for another 20 years (i.e., fully amortize), the option (in a relatively flat yield curve environment) would be worth 23 basis points in yield.

Most of the loans that have removed the interest rate-related coupon step-up fortunately have allowed only up to a three-year extension. The value of this option in

today's market is roughly 15 bp in yield. While lower than for the full extension option, this is still significant in today's extremely competitive marketplace. Also, many lenders and investors feel that the hammer of a 100% cash trap is sufficient to dissuade the borrower from extending.

While there is nothing inherently wrong with such a loan, it is extremely unlikely that the borrower paid for the option. Thus, it is unlikely that the investor is getting extra yield for the negative convexity of such a loan. More problematical is that the investor is most likely unaware of the loan's features, because it assumes that the ARD structure is the traditional one. Moreover, this is not something that the rating agencies would focus on or even care about, since it is not really a credit issue.

In the context of a CMBS transaction, if there are only a few small loans with this feature, there will not be much impact on the bonds. But if this feature shows up on a large loan, and the loan is a five-year or a seven-year loan backing a five- or seven-year bond, the bond will be subject to significant extension risk.

Fortunately, to date there seem to have been relatively few of these loans. Yet, with increasing market competitiveness, there is every incentive to give away these options to borrowers if investors are not demanding compensation.

There has been evidence of loans originated with relatively weaker amortization features than older CMBS transactions. The typical language prospectus language is as follows:

After the Anticipated Repayment Date, these ARD Loans further require that all cash flow available from the related Mortgaged Property after payment of the Periodic Payments required under the terms of the related loan documents and all escrows and property expenses required under the related loan documents be used to accelerate amortization of principal on the respective ARD Loan.

There are two ideas behind the hyperamortization feature. First, the diversion of all excess cash flow from the

property owner to the lender or trust until the loan is paid off is really an unpleasant experience for the real estate owner. The property owner will try to do its utmost to avoid this. Second, the feature does mitigate the amount of extension, by paying down the principal.

Recently, there have been a few loans that trapped less than 100% of the cash flow to use for hyper-am. While an examination of a sample of loan documents in 2005 finds no such loans, as competition continues, there may be lenders that will give in on this point to borrowers in order to originate the loan.

Once again, as with the step-up rate, as this is not a rating agency issue, it will not affect credit enhancement. Therefore, investors have to be aware of this possible variation.

WHY DID THE STANDARDS EASE?

We are in today's circumstances as the result of several concurrent trends. First, credit spreads in all markets have compressed across all products. Investors have become complacent about credit risk. There is no doubt that this is the result of a significant drop in defaults across the credit markets.

This environment and the positive credit performance have caused the rating agencies to reduce the required subordination for CMBS deals. This enables CMBS conduits to either reduce spread on the loans or to weaken some loan features and still maintain the same profitability.

In addition, because there remains a positive arbitrage between commercial mortgage whole loans and CMBS, new entrants have continued to come to the market. To capture market share, these new entrants have to either accept a lower profit by improving pricing (by charging less for the loans or paying more on the bonds) or weaken standards as long as the market does not penalize them too much for this. The increasing competition from new entrants leads all players to also weaken their standards in the fight for market share.

WHERE DO WE GO FROM HERE?

Given the fiercely competitive lending environment and a relatively benign credit outlook, the trend toward weaker lending standards may not reverse itself any time soon. Indeed, lenders, especially new entrants, may continue to cut corners in an attempt to gain market share. If lenders are unable to push the limit further on the

obvious protections such as loan LTV and DSCR, where the rating agencies already have indicated that they have gone as far as they will go, given the current subordination levels, investors should expect further pressure on features such as more mezzanine debt, possibly shifting interest structures (where junior bonds are paid down simultaneously with senior bonds), allowing increasing debt as property values increase, and possibly a subtle cutting back in prepayment/extension protection.

FINAL OBSERVATIONS AND SUGGESTIONS

In our view, there is nothing inherently wrong with changing standards as long as investors and lenders receive compensation for assuming additional risk. From a broad market perspective, the phenomenon of eroding risk-adjusted spreads is not unique to CMBS. All sectors are under pressure at the present time. The best an investor who has to be in the bond markets can do (short of moving into Treasuries) is to compare spreads across sectors and adjust for credit enhancement and expected credit experience.

CMBS investors can also benefit from carefully choosing among vintages and originators. There will surely be differences in performance based on the environment a loan was originated in and who originated it. Also, most newly originated loans will not experience credit problems early in their lives. If investors try to keep portfolios invested in newer deals (trade out of bad vintages), they can avoid some of the problems that poorly originated loans will eventually experience.

The market faces a risk that at some point the rating agencies will decide to move back in the other direction and begin requiring more credit enhancement. This would cause spreads on current deals to widen, especially newer ones that have not had a chance to deleverage.

Finally, it would be a great service to the market if data vendors began to collect information on the important features we discuss so that investors can easily compare these features across deals. We need to know about not only credit features, but also cash flow stability protection measures, such as ARD terms. This will lead to a better tiering and more appropriate risk pricing in the market.

ENDNOTES

The authors thank Li Chang and colleagues at Trepp, LLC, for providing data.

¹The strong prepayment protection provided by lockout features of typical CMBS loans means that the price of CMBS bonds tends to rise more for a downward move in yield than it declines for an equal upward move in yield. Compare this with residential MBS, which, due to their relative callability, tend to exhibit the opposite behavior, or negative convexity.

²Some loans had lockbox requirements from the beginning of the loan term; others had "springing" lockboxes as the loan approached its balloon date.

³The servicer is responsible for supervising the regular cash flow aspects of the loan. It keeps track of the reserves, the insurance payments, and the tax payments. The servicer is also responsible for advancing principal and interest through foreclosure. A loan is moved to a special servicer only when the borrower is in default, in imminent default, or in violation of covenants. The special servicer is responsible for working the loan out. If the special servicer can return the loan to performing status, this would be best. It has the authority to take a loan through the foreclosure process, and is supposed to be guided by the principle of maximizing the present value proceeds from the property. Sometimes conflicts of interest can arise, since the special servicer is often the owner of the junior classes.

⁴Better flow of information, more data sources, and maturation of the CMBS market are some examples of other positive arguments we have heard justifying more aggressive underwriting.

⁵We consider the replacement reserve account or the amount set aside for capital expenditure/improvement as the main account.

⁶Names of issuers are not disclosed. Also, the figures represent only loans for which we find a reserve requirement; loans that required no reserves are not included. We also do not account for loans with a third-party guarantee (e.g., a letter of credit) or some kind of trigger (e.g., the DSCR falls below 1.2) in place of a traditional reserve account. These are limited in number, and consistency is maintained year-over-year.

⁷Investors understand that a default leads to extension, but it is not a free option to the borrower. From a CMBS perspective, an investor in a conduit deal benefits from the number and diversity of loans. While some loans may extend and need to be worked out, it is unlikely that many of them extend at the same time.

⁸Actually, the spread was modified at first to 2%. Then senior bondholders complained that a 2% rate over Treasuries was not sufficient to dissuade a borrower to pay off the loan. This was particularly true for a troubled property or in times of a real estate credit crunch. A compromise was struck; as long as the loan remained in the trust, the step-up spread was 2%. The depositor or lender or a certain class holder retained the right to buy the loan out of the trust at par following the AR date. Once the loan was out of the trust, the step-up spread would be set at 5%. In this way, if the loan were performing, it would likely be bought out, thus assuring payoff to the bondholders and avoidance of the extension event.

REFERENCE

Jacob, D., and G. Gichon. "An Analysis of Delinquencies, Foreclosures, and Losses in Commercial Mortgage-Backed Securities." Nomura Securities International, July 19, 1996.

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