US Real Estate, Liquidity and Capital Markets

Kurt L. Wright & Stephen O'Keeffe
Quadrant Real Estate Advisors

Executive Summary

The US commercial real estate markets have "come of age" primarily due to the securitization of real estate equity and debt through the global capital markets. This has changed the nature of real estate investment (large, lumpy assets with limited liquidity and infrequent pricing) to one where investors have access to multiple points within the commercial real estate capital stack in a manner that is continually priced, transparent, liquid and extremely divisible.

The trade-off for these benefits is that commercial real estate is now, more than ever, interconnected with other investment classes available globally. The contagion from the US sub-prime single family residential mortgage sector that has engulfed the capital markets around the world has had a material negative impact upon the commercial real estate markets at a time when market fundamentals are solid.

However, the current volatility in the broader capital markets is in some ways beneficial in that it comes at a time when, if continued unchecked, US commercial real estate market exuberance may have led us to an 80's style boom and bust.

Our views on the commercial real estate market conditions are that:

- **This is a timely (albeit severe) speed bump in the capital markets which has resulted in a slowdown for commercial real estate in the short term but will extend the current cycle in the long run.**

- **During this slowdown investors should seek to identify opportunities to obtain solid income returns in a more conservative position up the capital stack and position themselves to take advantage of the next upswing in the commercial real estate markets.**

- **The interconnectivity between the global capital markets and commercial real estate is here to stay. Going forward this is expected to result in more volatile, short, sharp cycles rather than the traditional long run boom and bust cycles of the past.**

Introduction

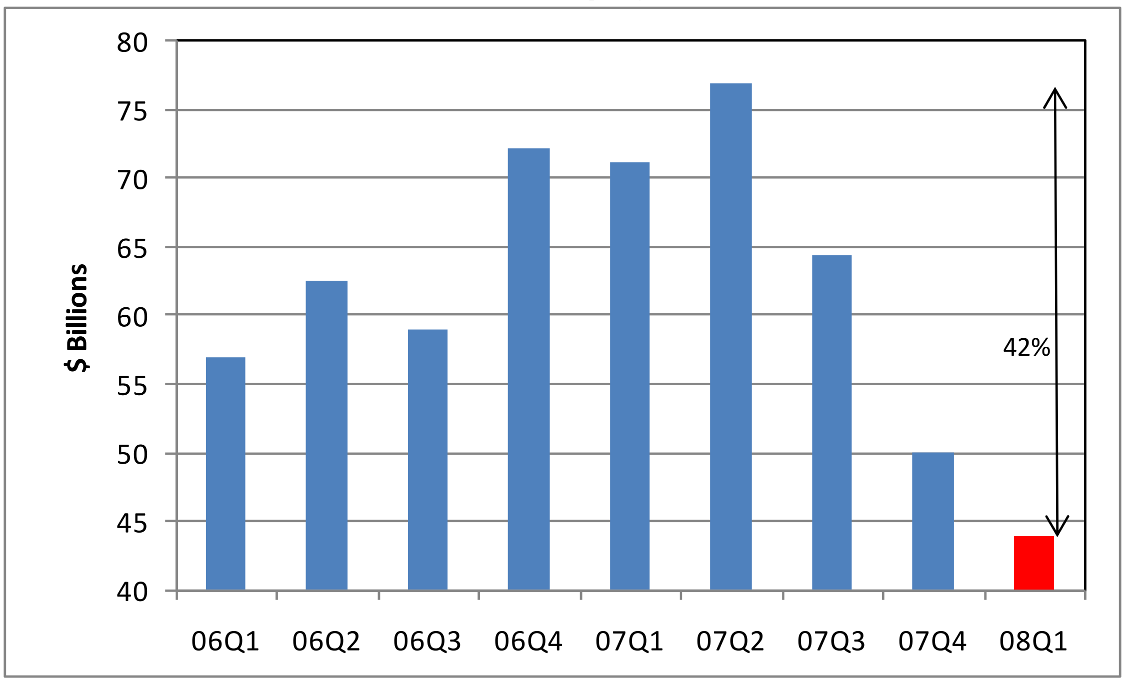
The US sub-prime single-family housing crisis has had profound impacts globally, but many are surprised at just how much impact the possible foreclosure on a three bedroom home in Las Vegas has had upon a 50 storey office building in midtown Manhattan.

The linkage between these two seeming unrelated asset classes is the global capital markets, more specifically the mortgage backed securities markets.

Both residential mortgage backed securities (RMBS) and commercial mortgage backed securities (CMBS) had seen significant growth in the years leading up to 2006/07 as more and more bond investors looked to mortgage backed securities to boost returns in their bond portfolios. Unfortunately for the commercial real estate markets, as problems emerged in the RMBS sector, bond investors across the capital markets spectrum ran for the hills, irrespective of underlying fundamentals and relative value.

Accordingly, despite the relatively healthy US commercial real estate market (CRE) fundamentals we have seen a sharp reduction in the availability of leverage for US commercial real estate and a significant widening in lender's spreads. This has resulted in a substantial slow down in equity real estate transaction activity which has decreased 42% from a high in Q2 2007 to Q1 2008 (see Exhibit 1).

Exhibit 1
US Commercial Real Estate Equity Transaction Volumes



Source: REIS: US Domestic arms-length transactions of $2 million and greater

This huge reduction in demand for both equity and debt real estate assets has lead to a softening of capitalisation rates and real estate values at a time when vacancies are low, rent growth is stable and apart from select markets, there has been little (if any) oversupply via new construction.

This dislocation between the capital markets and commercial real estate fundamentals presents a challenging environment for investors, one where the risks of investing have no doubt increased and yet at the same time opportunities exist for astute investors to achieve outsized risk adjusted returns.

What happened in the sub-prime space?

Sub-prime mortgages (as the name suggests) are single family residential mortgages that are the lowest in credit rating and therefore have the highest level of risk. At the time of origination, these loans were either:

- high loan to value (sometimes greater than 100% of the value of the house);
- made to people whose incomes weren't sufficient to meet the mortgage repayments;
- provided without verification of borrowers income and assets (no-doc loans);
- provided to borrowers with poor credit histories;

or quite often a combination of the above.

Lenders and investors were attracted to sub-prime loans because of the high (promised) interest rates they were able to obtain (due to the high risk they were taking), however, as the US residential housing cycle headed towards its peak in 2006 it appears that the lenders and investors were so enamored with the potential high returns that they forgot about the risk side of the equation. Lenders across the country used new more aggressive loan products to ensure they got their share of these high yielding loans.

Of course there is nothing inherently wrong with making riskier loans for higher returns, however, in normal circumstances you would expect that the higher the risk of the loan, there would be a greater level of due diligence conducted and a higher standard of collateral would be demanded. This was clearly not the case. One such example was the introduction by a number of large residential lenders of NINJA loans (which stands for borrowers with "No Income, No Job or Assets") – ***what were investors thinking?***

US Federal Reserve Chairman Mr. Ben Bernanke has noted that "the accuracy of much of the information on which the underwriting was based is also open to question. Mortgage applications with little documentation were vulnerable to misrepresentation or overestimation of repayment capacity by both lenders and borrowers, perhaps with the expectation that rising house prices would come to the rescue of otherwise unsound loans. Some borrowers may have been misled about the feasibility of paying back their mortgages, and others may simply have not understood the sometimes complex terms of the contracts they signed."

Furthermore, a significant proportion of sub-prime loans were then securitized in the capital markets and on-sold to investors globally. In 2006, only 20% of all US home loans were categorized as "sub-prime", however, sub-prime mortgages made up over 60% of the collateral in 2006 RMBS (Inside Mortgage Finance). In all, 80% of sub-prime loans written since 2002 have been securitized.

Many lenders and investors have complained that they weren't aware of the risks they were taking on, however, if the name sub-prime wasn't enough to make investors wary, the fact that loans were being provided to people with no money and no job should have had the warning bells clanging loudly. It should be no surprise that over 17% of these loans are in default. How did mortgage underwriting become so lax?

There were several underlying flaws in the RMBS model that contributed to this:

1. **Adverse selection** - as lenders and investors chased higher and higher yields they were forced to take on even riskier loans.

2. **Inability to undertake due diligence** – due to the large numbers of small loans pooled together (4,000+ loans in a single issuance) bond investors are unable to undertake due diligence on every loan. Rather they relied upon asset diversification, quantitative analysis and rating agency ratings.

3. **No alignment of interest** – the RMBS securitisation model is one of outsourcing, with brokers originating the loans and passing them on to aggregators (usually the Wall Street investment banks), who then package and sell the rated securities to bond buyers. The <u>brokers, aggregators and rating agencies</u> get paid fees along the way and generally <u>do not end up owning the assets</u>, therefore they are more focused on fees, volumes and how far they can push the envelope than credit quality and the long term performance of the loans.

4. **Reliance upon ratings** – many bond holders simply relied upon a credit rating issued by the rating agencies and did little or no due diligence themselves. Whilst at the same time <u>rating agencies that are paid by the aggregators and not the bond investors</u> were being pushed to provide higher ratings to a greater proportion of the securitised pools. In addition the rating agency default models were based on historical averages which did not account for the new more aggressive loan structures being offered or possibly in some cases, the outright fraud being committed by brokers or borrowers. As investors have subsequently found out, not all AAA rated bonds are the same.

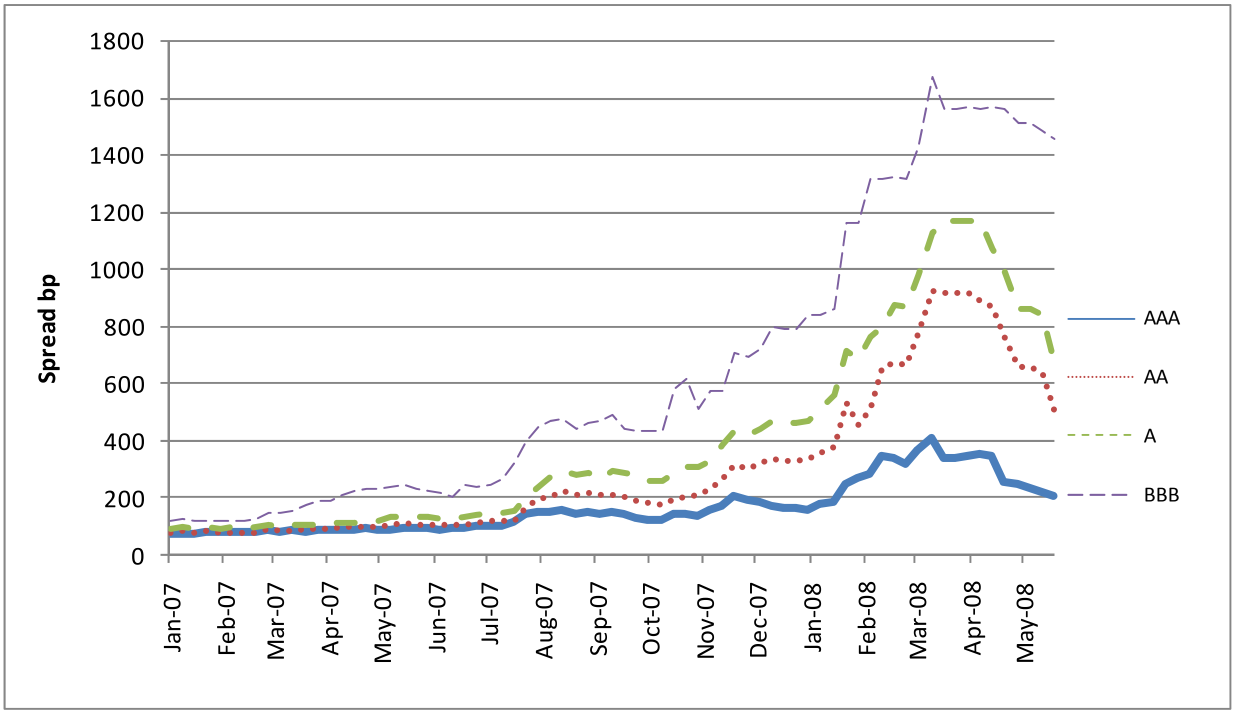
Exhibit 2
Sub-prime RMBS vs. CMBS

	Sub-prime RMBS	CMBS
Current delinquency rates	17.31%	0.40%
Asset composition	Large number of small loans	Small number of larger loans
Asset cashflow / income	Generally owner occupied with no lease income.	Generally all income producing assets with cashflow sufficient to service interest (at the date of origination).
Due diligence	Quantitative analysis based on asset diversification	Individual asset underwriting
Bond investor experience / sophistication	Generally limited experience in the single-family residential market with no ability to analyze individual loans.	Generally significant commercial real estate experience with the ability to undertake their own due diligence on individual loans within pools.
Borrower experience / sophistication	Generally limited real estate experience or knowledge of mortgage products	Generally significant real estate experience and knowledge of mortgage products

Impacts on the US market

In spite of the strong fundamentals in the US commercial real estate market, as the pricing contagion from the sub-prime RMBS crisis has extended through the capital markets, CMBS spreads have widened significantly (see Exhibit 3), particularly at the lower credit quality grades, as panicked bond investors have fled the mortgage backed securities markets.

Exhibit 3
CMBS Spreads to Treasuries



Source: Bloomberg

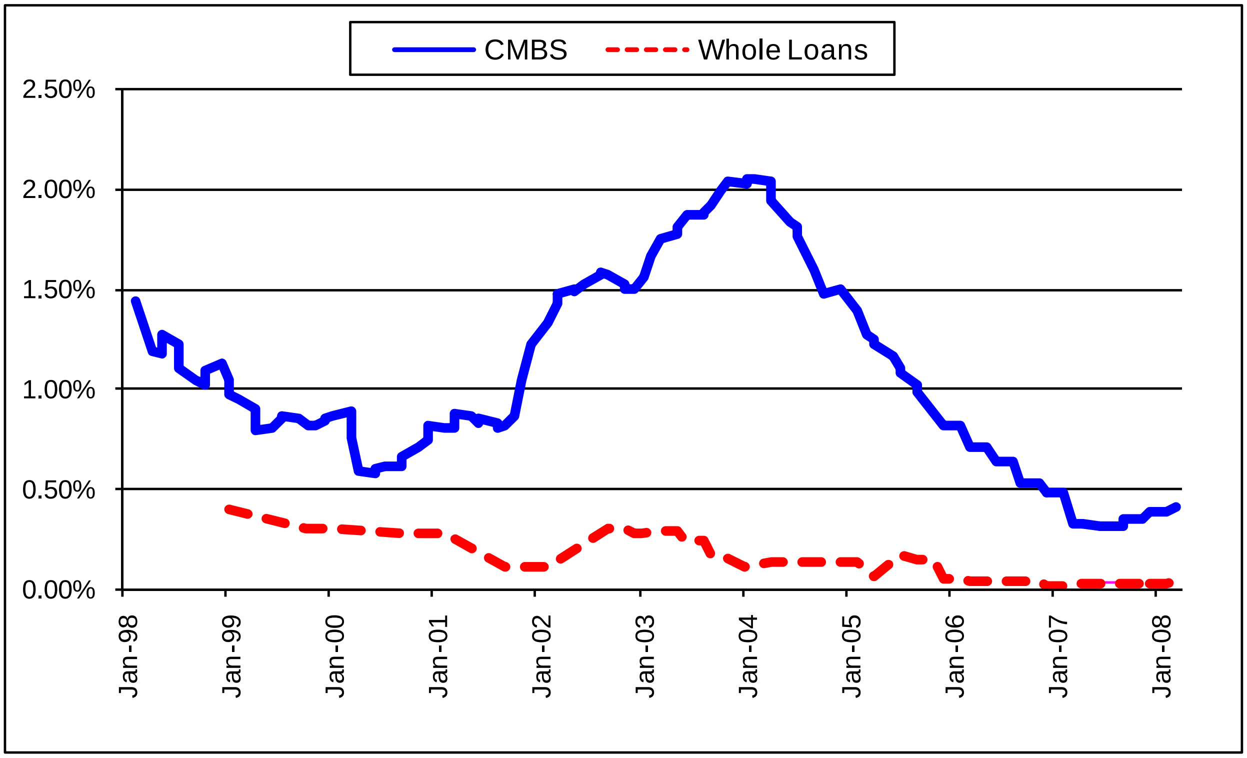
The sudden significant drop in demand for bonds and the resultant rapidly increasing spreads has seen many CMBS bankers and bond investors get hurt. Unlike RMBS bond investors, these financial losses are not because of increasing delinquencies (or greater losses) on the loans within their portfolios - there are comparatively few non-performing CMBS loans. Rather, the CMBS losses have come about because as spreads (and therefore yields) have increased, bond prices have fallen dramatically forcing many to account for mark-to-market valuation write-downs and in some cases forced selling of securities to cover margin loan positions.

In essence there has been a massive disconnect in the CMBS market between the technical issues and the fundamental performance of the underlying assets. This is largely due to the sub-prime contagion, however, some commentators are of the view that the short-selling of the CMBX index (a derivative index of the CMBS market) has also had an impact on pricing. Despite the lack of fundamental rationale behind the rapid increase in yield expectations and the corresponding drop in values, investors who have mark-to-market exposure or who had leveraged their portfolio via margin loans had no choice but to write down asset values or fire-sale bonds which further exacerbated the problem.

In the commercial real estate debt markets there is no distinct sub-prime sector; however, there are certainly some CRE loans that are riskier or more aggressively underwritten than others, particularly during the peak of the credit boom in late 2006 and early 2007.

Although to date commercial real estate fundamentals have remained sound and loan delinquencies remain at near all time historic lows, investors who have the misfortune (or lack of prudent credit evaluation skills) to have accumulated significant exposure to the high risk 2006/07 loans could be facing issues similar to that experienced in the sub-prime residential market today if the CRE market experienced a material downturn - although no one is expecting this.

Exhibit 4
Commercial Real Estate Loan Delinquencies

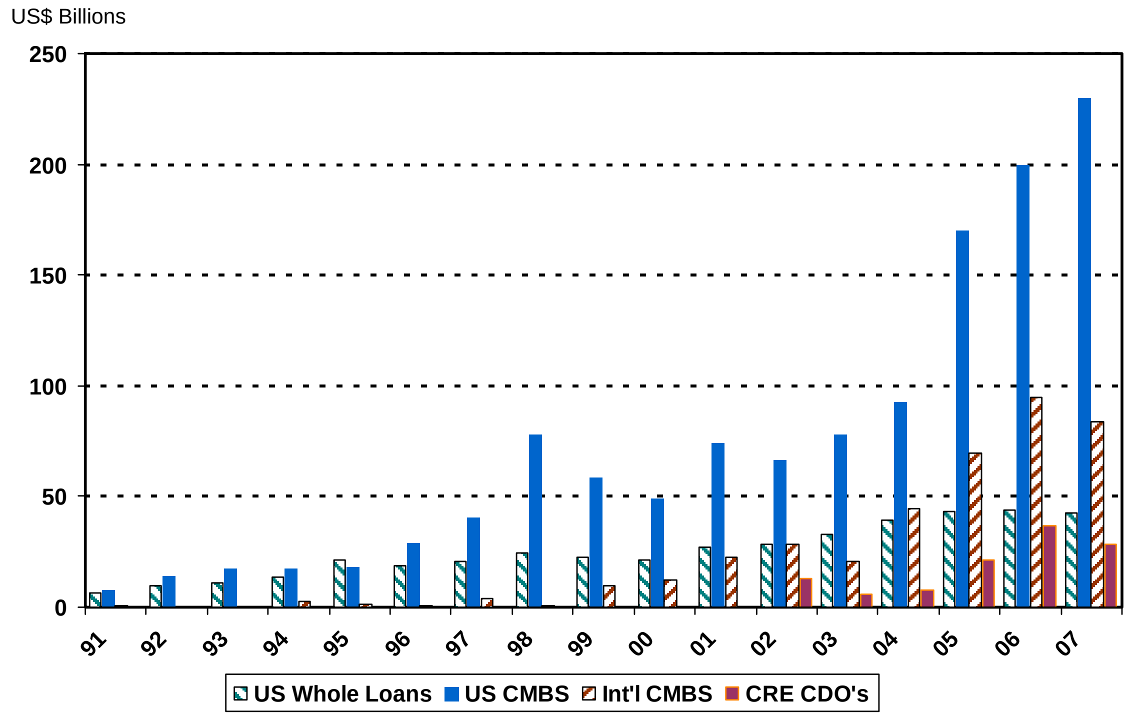


Source: ACLI, Lehman Brothers

The upside for US commercial real estate market participants is that the distress in the sub-prime market has acted as a timely reminder about prudent investing in an exuberant CRE market which despite currently historically low delinquency rates (see Exhibit 4) was unsustainable in the long term. This sanity check has caused significant market volatility in the short-term, however, it should lead to more prudent underwriting and investing as we continue through the commercial real estate cycle. This should enable the US commercial real estate market to avoid a sub-prime like delinquency spike.

New CMBS issuance volumes are expected to be significantly lower than previous years (see Exhibit 5). A record issuance of $230bn in 2007 is expected to drop to $80bn - $100bn in 2008. Importantly, however, the market has not gone away. New 2008 CMBS issuances that have completed to date are smaller, include higher credit quality assets and because of this are pricing at lower spreads than many late 2007 vintage CMBS bonds are priced in the secondary market.

Exhibit 5
Historical Issuance by Type



Source: ACLI, Morgan Stanley, CSFB, Citigroup

It is important to note that despite the significant fall in new CMBS issuance there is still a substantial quantum of real estate debt available to borrowers for traditional financing of quality commercial real estate. CMBS issuance comprises less than 25% of the total commercial real estate debt market. US life insurance companies and US commercial banks are expected to lend in the order of $40 billion and $200 billion respectively during 2008, however, these lenders have traditionally been more conservative on their terms and underwriting than the CMBS lenders.

Interestingly, although lending spreads have widened significantly from around 100bp to 300bp, the lower benchmark rates facilitated by the US Federal Reserve lowering US Treasury interest rates have meant that total borrower interest costs have not increased significantly. Total interest rates in the order of 6.5% - 7.0% are still cheap compared to historic averages.

Despite this positive, lender LTV ratios have reduced and terms are more restrictive meaning more equity is required in commercial real estate transactions. In addition to requiring a greater quantum of equity in transactions, the overall cost of capital in the real estate markets has increased as REIT stock values are 20% below their 2007 highs and private equity investors are demanding higher equity returns.

The follow-on effects of the single family sub-prime fallout on other real estate sectors includes:

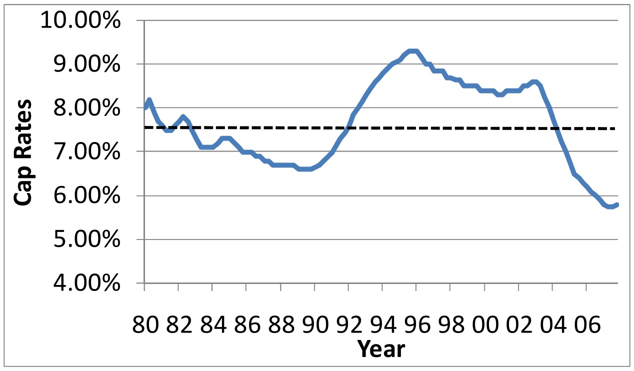
- Negative drag on the US economy of a falling housing market exacerbated by foreclosure auctions, fire sales and the inevitable newspaper headlines that follow.
- Closing of sub-prime origination business and lay-offs in Wall Street Investment Banks has a localized impact on commercial office markets such as Manhattan and Irvine, CA.
- Demand for housing related retail and industrial space is falling. Tenants are not committing to new space at the same rate as 2006 and 2007 and some major retailers are announcing store closures or even filing for Chapter 11 Bankruptcy protection.
- Overall conditions in the for-rent multifamily market should improve as first time home buyers are finding it more difficult and less compelling to enter the single family residential market although the oversupply of condos in some markets needs to be absorbed.

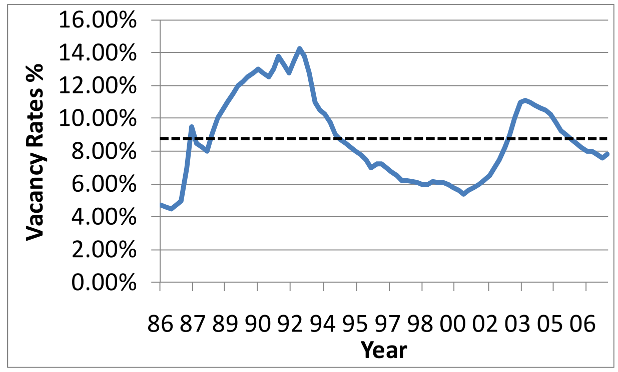
Despite all this noise in the capital markets, US commercial real estate fundamentals remain generally sound. There has been limited overbuilding; rent growth and occupancy are strong in most markets; there are historically low loan delinquencies; and there is limited supply of investment opportunities with a wall of capital chasing them.

Outlook for the US Markets

All of this means that commercial real estate values have softened and are expected to soften further, despite continued rent growth and low vacancy rates. The limited amount of sizable transactions so far in 2008 has not provided a very clear picture, so although the NCRIEF cap rate index has only widened by 15bp year to date, most commentators expect cap rates to soften by between 75bp to 100bp by the end of 2008. Given that average cap rates dipped below 6.0% in 2007, an increase of 100bp to around 7.0% is still well below the long term average of 7.7% (see Exhibit 6).

Exhibit 6
Commercial Real Estate Cap Rates and Vacancies





Source: NCREIF

The recent market exuberance that resulted in significant capitalization rate compression and record prices being paid for properties on the back of very aggressive underwriting assumptions threatened to derail the commercial real estate market if it had continued unchecked. Accordingly the volatility currently being seen in the capital markets is acting as a timely pause which in the longer term should help prolong the upswing in the commercial real estate cycle.

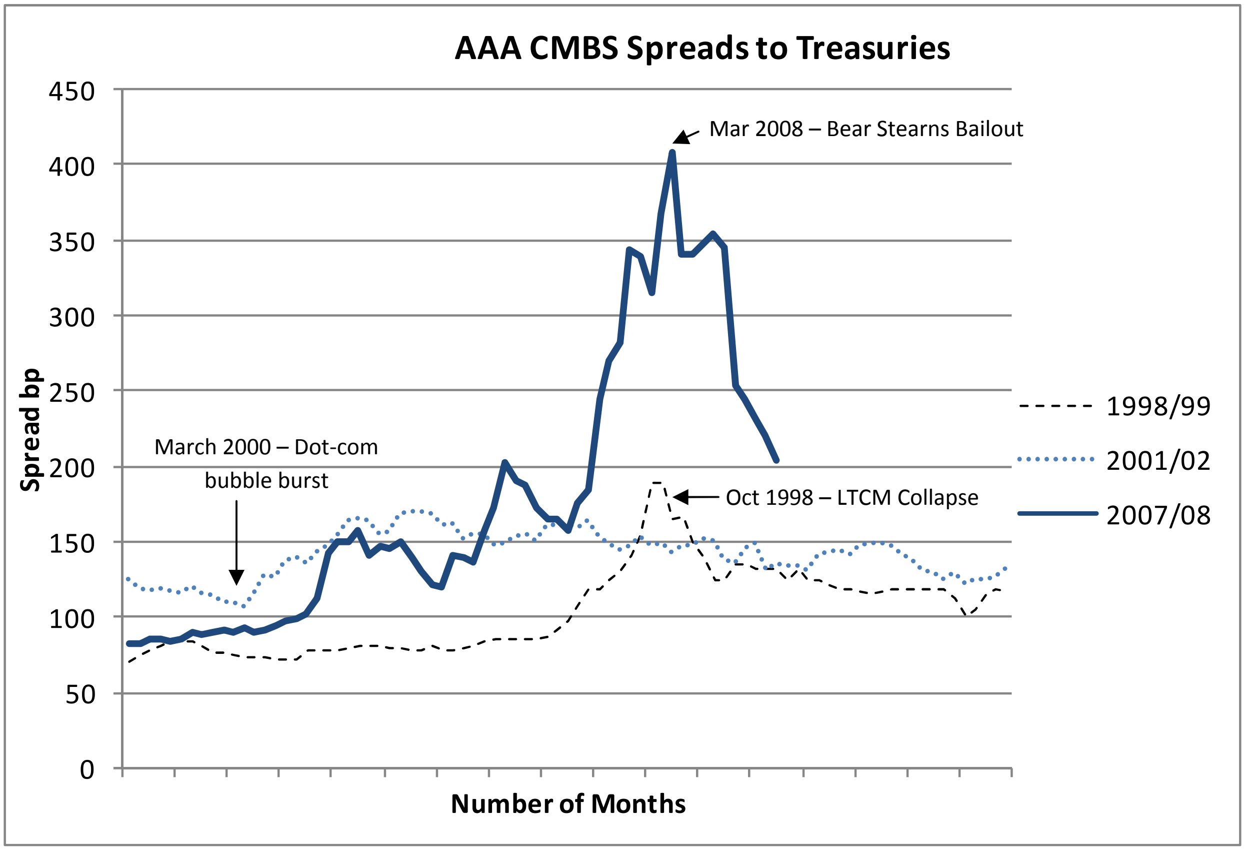
In terms of the commercial real estate capital markets:

- CMBS issuance volumes are expected to drop over the next 9-12 months before returning to historical average levels of approximately $100 billion per annum (albeit at higher spreads and with better quality underwriting). This will lead to increased costs for borrowers and tighter loan terms;

- Spreads have already widened significantly, however, they are already starting to trend back to historical levels. It is expected that this process should occur over the next 12-18 months as was the case in the last two major exogenous credit events in 1998 and 2001 (see Exhibit 7);

- CRE delinquency levels will increase somewhat in the short term as the aggressive underwriting of late 2006 and early 2007 works its way through the system, however, the recent market sub-prime volatility has helped to put the brakes on aggressive CRE loan underwriting which should lead to a relatively benign delinquency environment in the medium to longer term.

Exhibit 7
Comparison of previous Credit Crises – 10 Year AAA CMBS



Source: Bloomberg

There is no doubt that the current credit crisis has had a more profound impact upon CMBS pricing than either of the two previous external shocks to the system which occurred in 1998 (Russian Bond crisis and collapse of Long-term Capital Management) and 2001 (Dot-com bubble and corporate bond collapse due to Enron, WorldCom, etc). Similarly to these previous exogenous shocks, the 2007 credit crisis saw CMBS spread widening occur quickly due to the liquidity of the capital markets.

This same liquidity has also allowed CMBS spreads to "snap-back" quickly once the risks have been quantified and relative value investors re-enter the market. As was the case in previous shocks, it is expected that spreads will relatively quickly return to a level that will make larger volume CMBS issuance feasible again (average AAA spreads approximately 125 bp) and will then more slowly trend towards the long term average 10 year AAA spread of 110 bp.

In some ways the CRE markets have "come of age" over the last 15 - 20 years due to the CMBS debt securitization process and the securitization of real estate equity through the REIT market. In previous real estate cycles there have been significant booms and busts with extended recessionary periods due to the nature of real estate investment (large, lumpy assets with limited liquidity, minimal transparency and delayed and infrequent pricing).

Today the CMBS and REIT markets allow investors to have access to commercial real estate in a manner that is continually priced, transparent, liquid and extremely divisible. It is these features as well as the increasing sophistication of the investors that should ensure the longevity of the real estate capital markets.

It is reassuring to see that due to the introduction of these characteristics to the CRE markets, corrective steps are able to be taken to avoid the large boom and bust cycles of equity real estate in the past. Cycles will still occur – after all the markets are still driven by fear and greed – however, the peaks and troughs will be smaller and the recovery will be swifter than was previously the case.

A correction, however, is still part of the efficient workings of an effective market in response to perceived or actual changes to risk. Accordingly, while a drop in demand for CMBS and a consequential widening of spreads and decrease in issuance will occur while the market is undergoing its self adjustment, once the new goalposts are established the market volume is expected to rebound quickly to historical norms.

Conclusion

Despite the recent capital market volatility (or perhaps because of it) there are still some excellent investment opportunities within the commercial real estate market. Going forward we expect to see a return to fundamentals driven investment techniques in order to achieve real estate asset returns rather than the reliance upon market movements that was prevalent from 2002 - 2007. The outlook and opportunities for investing in US commercial real estate are as follows:

US commercial real-estate market fundamentals sound: The current flight from risk in the securitized real estate debt markets reflects economic concerns in the capital market and the downturn in the US single family housing sector (including the sub-prime issues). It has little to do with underlying US commercial real-estate market fundamentals which are still very sound. There has been limited overbuilding; rent growth and occupancy are strong in most markets; there are historically low loan delinquencies; and there is limited supply of investment opportunities with a wall of capital chasing them.

Capital availability: More importantly, as the inevitable slowdown in the US commercial real estate market unfolds, there is already in excess of $60 billion (Commercial Mortgage Alert March 21, 2008) of investment funds (opportunity and private equity) being raised to seize upon any distressed or non-performing properties. These factors should help ensure that we do not see a return to a late 1980's style commercial real estate market shut-down.

Increased interconnectivity: The interconnectivity of the global capital markets that has emerged over the last two decades is here to stay. Going forward, we expect to see a continually increasing level of connectivity between investment asset classes which will result in many more external exogenous shocks having an impact upon the commercial real estate market. This is expected to result in more volatile, short, sharp cycles rather than the traditional long run boom and bust cycles of the past.

Limited "easy wins": The significant flow of distressed real estate and asset sales at deep discounts that was expected by many has not materialized. Accordingly, investors and their advisors must be patient, highly selective and undertake a significant amount market research and due diligence in order to unearth the quality investment opportunities that will provide outsized risk-adjusted returns going forward. This is something we should be doing all along.

Focus on income and position for growth: During this slowdown investors should seek to identify opportunities to obtain solid income returns in a more conservative position up the capital stack and position themselves to take advantage of the next upswing in the commercial real estate markets.

The opportunity: Today there are currently attractive risk adjusted returns to be found in high quality vintage CMBS and selective privately placed mezzanine debt. The private equity opportunity is yet to emerge as seller price expectations are not yet reflecting softening cap rates. Historically the multi-family sector has proven to be the most recession resistant asset class and is most likely to benefit from the fall-out in the single family residential sector.