

Opportunities Going Forward – Debt Securities

Privately placed fixed interest assets, collateralised by US income property - private 'whole loans' - have been a staple of US institutional investor portfolios for over a century. Life insurance companies had long been the dominant investor in this sector and have achieved attractive risk-adjusted returns over the course of time. Over the past 15 years, structural changes have occurred in the US which brought significant additional benefits to investors in the form of improved liquidity, diversification, risk-return segmentation, divisibility and call protection. In addition these structural changes have vastly increased the size of the US debt investment universe. As a result, a broad range of investors including life insurance companies, pension funds, mutual funds, fixed interest generalist managers, hedge funds and offshore investors invest in US real estate debt products today.

This paper will discuss the history of institutional investment in US real estate debt products, returns and investor involvement in the market. Further, it will provide an overview of current products, yields, fundamental conditions and key participants. The discussion will touch upon how such products fit within broader real estate and mixed asset portfolios and techniques for accessing these opportunities including methods for prudently leveraging returns from such instruments.

Background

Beginning in the late-1800s and through the late-1980s the market for long-term, fixed rate financing of income properties in the US was dominated by life insurance company lenders (banks continue to monopolise short-term, floating-rate lending). Whole loans often comprised 20 per cent or more of a life insurer's entire general account mixed asset portfolio. Such whole loan investments were (and are) a good fit for life insurers for two reasons. Firstly, a 10-year, partially amortising private mortgage typically offers a higher coupon than comparable credit corporate bonds. And, secondly, the duration of such whole loans is a good match for life insurer's long-term liabilities.

This was a clubby, very private market in which insurers aggressively coddled their borrower customers and both credit underwriting practices and transaction documentation varied widely. Lack of transparency was preferred, indeed, proactively fostered at both the individual investment and portfolio levels. However, beginning in the early-1960s and continuing on to today, certain high level whole loan data has been gathered and published by the American Council of Life Insurers. This quarterly benchmark data on whole loan origination volumes and loan delinquencies has provided valuable, albeit lagging insights into life company lender behaviour and portfolio credit conditions.

During the early-1980s several factors contributed to a massive increase in equity and debt capital flowing into US income properties and a resultant over-building and over-valuation of the entire income-property sector. What followed was a prolonged real estate market depression. These contributing factors included:

- 1981 Economic Recovery Tax Act granted rapidly accelerated depreciation to US income property. This led to a massive surge of building and investment driven by tax sheltering, as opposed to fundamental market conditions, as the primary investment rationale.
- Deregulation of Savings and Loan Institutions (S&Ls) which relaxed investment standards and lifted the scrutiny of thousands of S&Ls throughout the US. This resulted in a moral hazard scenario in which S&L executives were free to bet depositors' capital on fundamentally unsound real estate investments.
- Weak US Dollar conditions during the first half of the 1980s led to an enormous quantity of foreign capital (most notably the Japanese, Dutch and Germans) wildly overpaying for US 'trophy' real estate.
- Employee Retirement Income Security Act of 1974 (ERISA) mandated that US pension funds governed by the Department of Labor must diversify their portfolios. By the early-1980s this led to a large and accelerating flow of US pension fund capital into income property.

The net effect of these factors was that by 1986 investors, including life insurance companies, had dug a hole so deep that it would take years, unprecedented losses and a virtual sea-change in the structure of the industry before the market malaise was cured. Indeed, data show that 1986 was the high-water mark for irresponsible behaviour by life insurance companies. Literally 32 percent of all life insurance company loans originating in 1986 ultimately defaulted; this is a record high and compares with a long-term industry average of approximately 20 percent (Esaki 2005).

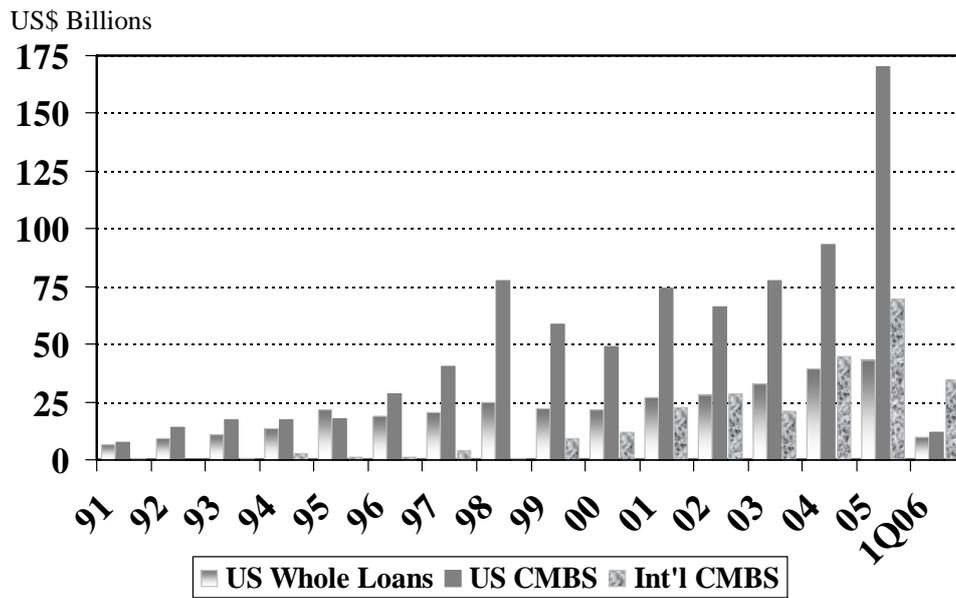
Real estate markets transition slowly; it was not until 1992 that life insurance company whole loan delinquency levels reached their peak at nearly eight percent of total industry outstanding principal balances (as compared with a long-term average of approximately 2%). Losses were staggering, driven by vacancy rates at all time high levels for each major property type and a complete lack of debt and equity capital liquidity in the market.

Wall Street bankers seized upon this lack of liquidity as an opportunity to apply tried-and-true securitisation technology to bring capital back to the market and break the log-jam. Since the early-1970s Wall Street had been securitising pools of single-family home mortgages and had created one of the largest and most liquid capital markets in the world. This same technology was perfectly suitable for mortgages backed by income properties, but until the late-1980s the private whole loan lenders had a stranglehold on the new loan origination market. Fortunately, the prolonged market depression provided the catalyst for enduring structural change.

Between 1991 and 1993 USD200 billion of non-performing loans from failed Savings and Loans were being sold by the US Resolution Trust Corporation at deep discounts and were ripe for pooling and securitisation. Wall Street issued approximately USD21 billion of Commercial Mortgage Backed Securities (CMBS) backed by these non-performing loans which effectively jump-started the CMBS industry. Parenthetically, these 'RTC' securitisations performed terrifically and rewarded pioneering investors with strong returns.

Thereafter, a large and growing number of Wall Street conduits began to originate new mortgage loans for securitisation. As shown in the chart below Wall Street CMBS issuers quickly supplanted life insurance companies (represented in the legend as 'US Whole Loans') as the dominant force in fixed rate, long-term loan originations. Since 2000, Wall Street has taken this technology offshore and originated and securitised a rapidly growing level of international mortgages (represented in the legend as 'Int'l'), which are primarily European and Japanese loans.

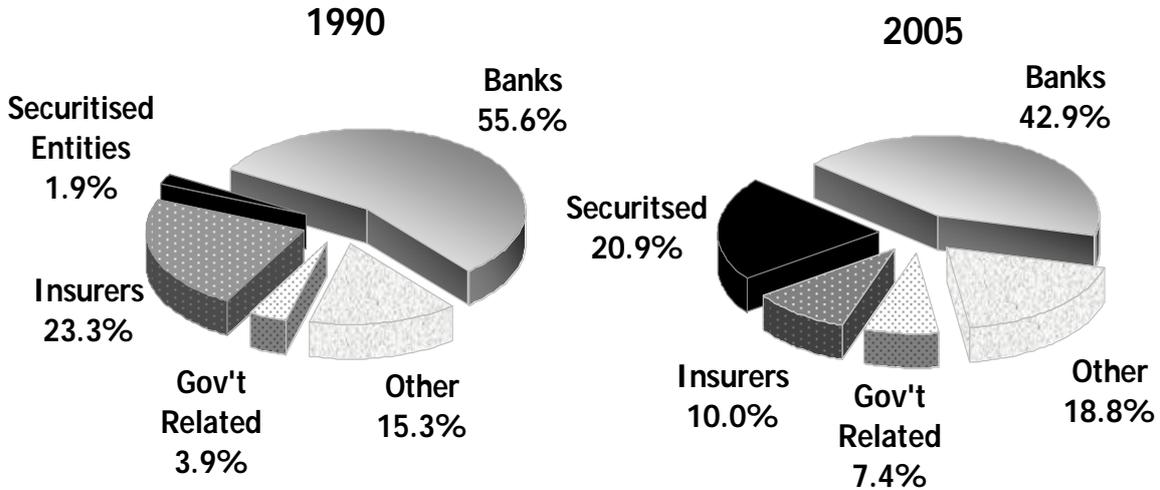
Figure 1: Historical Issuance by Type



Source: Morgan Stanley, Commercial Mortgage Alert

Since 1991 over USD700 billion of CMBS have been issued in the US with 2005 issuance exceeding USD160 billion. Today, estimates of US CMBS market capitalisation exceed USD600 billion (Emerging Trends, 2005). Overall capitalisation of the US property debt markets, including both the public and private markets, exceeds USD2.5 trillion. This USD2.5 trillion of debt instruments accounts for over 73 per cent of the overall US institutional income property market capitalisation of USD3.5 trillion (Emerging Trends, 2005).

Figure 2: Commercial and Multi-Family Mortgage Holdings



Source: The Federal Reserve Board

As the above charts indicate over the past 15 years life insurance company whole loan lenders steadily lost market share to new participants in the mortgage lending industry. The big winners have been Wall Street securitisers and US government agencies (also often securitised lenders). This has not been bad news for life insurance companies. In fact, life insurers are amongst the largest investors in CMBS. They have essentially substituted a portion of their whole loan allocations with CMBS, thereby increasing portfolio liquidity and diversification.

Given this expansion in lenders and lending formats, today US property owners enjoy a wealth of borrowing options. It is very much a borrower's market and any combination of financing features is available including fixed, floating, long-term, short-term, securitised, whole loans, flexible pre-payment terms, ability to increase borrowing levels at a later date, ability to substitute collateral and ability to substitute the borrower.

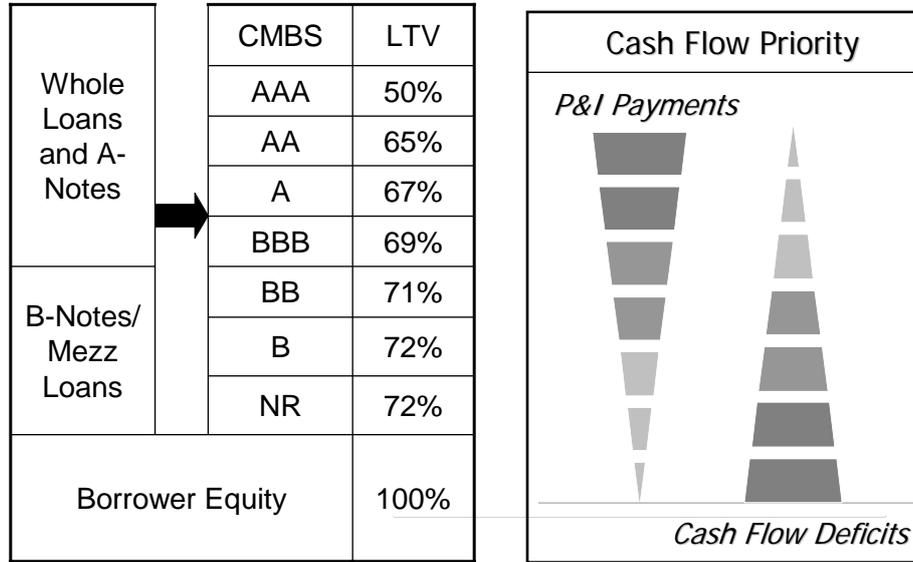
Generally borrowers seeking the maximum available leverage (gearing) and the quickest commitment will turn to securitisation lenders. Borrowers with more conservative borrowing needs or those who covet flexibility and a highly tailored borrowing solution migrate to whole loan lenders (typically life insurance companies and select pension funds). Historically securitisation lenders offered the lowest borrowing rates, however, today whole loan lenders often provide interest rates equal to or lower than the securitisers. Banks continue to dominate the market for floating-rate loans; however, both securitisers and whole loan lenders offer competitive floating rate lending products today.

Product Profiles

By the same token, today there is a wide range of products available to investors which allow for more rapid deployment of capital and a greater ability to tailor one's portfolio to meet very specific objectives. These products include:

- Traditional Privately Placed Whole Loans which are generally non-recourse, first mortgage lien positions collateralised exclusively by real estate. Most common are whole loans collateralised by individual properties; however, loans backed by multiple properties are very prevalent. Typical loan terms include a 7-to-10 year maturity, partial amortisation, 75 per cent maximum loan-to-value and 1.2 times minimum debt service coverage. Historically such loans have received coupons of 100-200 basis points above like term US Treasury bonds.
- B-Notes are derivatives of whole loans. Frequently a first mortgage whole loan will be divided into a senior instrument (low LTV, say 65 percent) and a subordinate instrument (higher LTV, say 75 percent). Often the lower risk senior position will be sold into a CMBS issue and the higher risk subordinate position will be sold on a private placement basis to a life insurance company or other portfolio investor. Such portfolio investors have always been comfortable with the marginal risk of the 75 percent LTV position of a whole loan. Therefore, the B-Note exposes them to no more risk on the margin. That said B-Notes are attractive because they typically earn a coupon of 250-400 basis points over like term US Treasury bonds.
- Mezzanine Loans occupy a sandwich position in the middle of the capital structure between the first mortgage lien and the borrower's equity. Mezzanine loans will often be 75%-90% LTV and thus are much closer to equity than a whole loan. As a result mezzanine investments typically earn a very high coupon, today ranging from 300-500 basis points over like term Treasury.
- Commercial Mortgage Backed Securities are bonds backed by diversified pools of whole loan mortgages. A typical new issue CMBS will often include at least 200 individual loans with an aggregate principal balance of USD2 billion or more. Individual monthly principal and interest cash flows from all such whole loans are combined to create a single 'cash waterfall'. This cash waterfall is then 'tranching' such that the most senior (highest rated) bond holders have a first call on cash flow (and are last to absorb loan losses), followed in turn by each successive subordinate tranche. As shown in the following diagram, CMBS are typically carved into tranches ranging in credit quality from AAA-to-Unrated.

Figure 3: CMBS Security/Cash Flow Priority



Source: Quadrant Real Estate Advisors

In addition to an instrument collateralised by a hard asset, such mortgage products provide investors a range of attractive attributes, including:

- Call protection is equal to or stronger than corporate bonds and materially better than most single-family residential bonds.
- Monthly payment of principal and interest matches well with many investors cash flow needs.
- Divisibility CMBS tend to be available in liquid lots of as little as USD1 million.
- Liquidity in the CMBS market is comparable to the corporate bond market in terms of time to market and cost (see below). Whole loan, mezzanine and B-Note liquidity has been reduced to 6 weeks at a 50 basis point or less cost.
- Transparency is strong in the CMBS market (given its public nature) for individual transactions and the market overall. Individual transaction data in the private debt market remain hard to access; however, market level data is more available.

Table 1: CMBS Liquidity

<u>Credit Quality</u>	<u>Bid/Ask Spread (BP)</u>	<u>Time to Market</u>
AAA	2-3	Hours
AA-to-A	3-5	Hours
BBB	5	Same day
BB	10-15	Two-to-three days
Unrated	50	One week

Investment Performance

Since 1991, investors in securitised and privately placed mortgage products have been rewarded with:

- Attractive cash-on-cash returns.
- Strong nominal and risk-adjusted returns.
 - Relative to similar credit fixed interest assets.
- Superior credit performance.
- High liquidity from securitised products.
- Growing liquidity from privately placed products.
- Superior call-protection.
- Material diversification benefits.

In large part strong performance has been driven by credit fundamentals.

Credit Performance

The US income property depression of the late-1980s had a long lasting positive impact on investor behaviour and brought certain checks and balances into the system. Most notably:

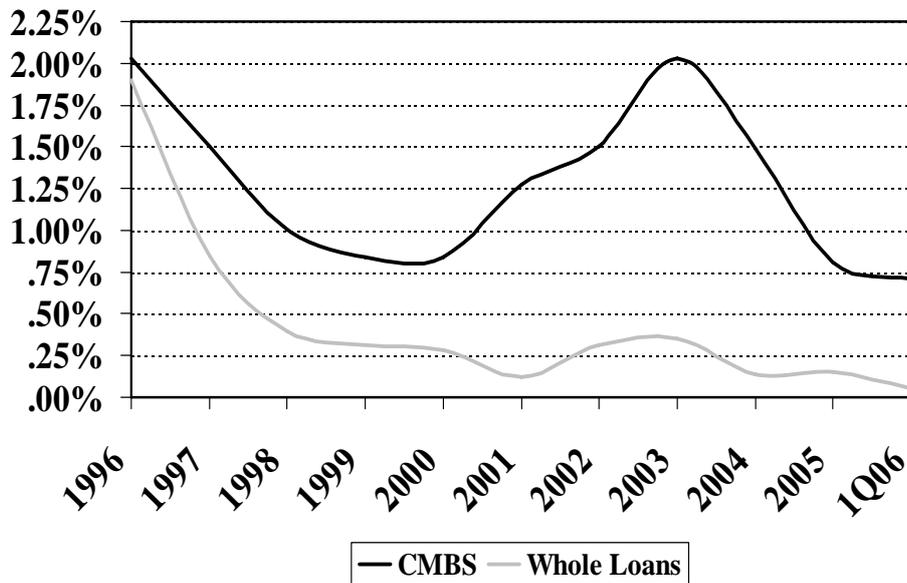
- The Major Rating Agencies have imposed standardisation and transparency on the new issue CMBS market which has voluntarily been adopted in large part by many whole loan lenders (who benefit from increased liquidity in their portfolios of privately-placed investments).
- Chief Investment Officers at life insurance companies and fixed interest managers now demand fundamental research and evaluation of investment opportunities on an unbiased, relative value basis.
- Life Insurance Company Stock Analysts were not a factor back when most life companies were held in mutual format. Over the past 15 years a large number of life companies have gone public, greatly increasing market scrutiny (especially since the adoption of Sarbannes-Oxley).
- Below-Investment Grade CMBS Investors are the invisible hand in the marketplace. These are a small cartel of well capitalised, highly sophisticated

investors who purchase the riskiest, 'first loss' tranches of CMBS issues. Wall Street cannot make a profit on a securitisation unless it sells the first loss bonds. First loss investors have the clout to require Wall Street to re-price over-leveraged loans before the CMBS issue is floated, which directly impact securitisation profitability.

- Bank Construction Lenders have perhaps the most significant role in driving credit cycles. Since the early-1990s bank construction lending practices have been fairly disciplined requiring true cash equity in transactions, economic substance supporting personal recourse provisions, partial pre-leasing and fundamental justification of projects.

Mortgage market discipline dating back to the early-1990s is best demonstrated via delinquency trends. As a context for evaluating the following graph, consider that the long-term (45-year) life insurance average for delinquencies is approximately two per cent. In terms of severity of default at the market level, whole loans have typically realized approximately 30 basis points in losses per year from these two per cent delinquencies. This is roughly equivalent to the long-term experience of BBB-rated corporate bonds (Snyderman, 1991).

Figure 4: Historical Delinquency Rates



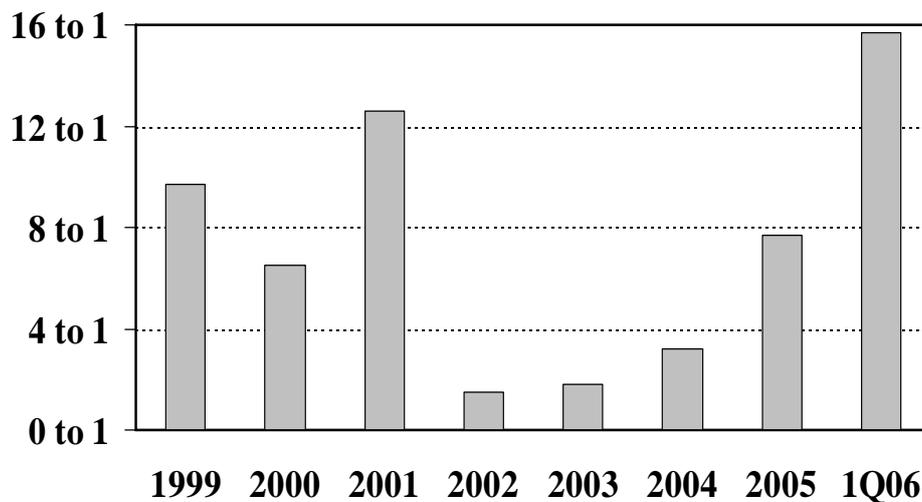
Source: Morgan Stanley, American Council of Life Insurers

As noted, in 1992 life insurance company delinquency rates reached nearly eight per cent. Since then they have moved on a generally downward path. Indeed, whereas in all previous economic recessions whole loan mortgage delinquency rates spiked upward, during the deep economic recession during the early part of this decade whole loan delinquencies fell to a record low (2001). Today whole loan delinquencies remain at a historically low level despite double digit property vacancy rates in most markets.

Commercial Mortgage Backed Securities are generally backed by smaller, lower quality properties than life insurance company whole loans. As a result delinquencies in the CMBS market are higher than the whole loan market, but still remarkably low. At approximately 2.00 per cent at their peak during the recent economic recession, they only reached as high as the life insurance company long-term average level.

This strong CMBS credit performance is well in excess of rating agency expectations and has resulted in a wave of credit upgrades of CMBS issues, as shown below.

Figure 5: Historical CMBS Rating Actions Upgrade to Downgrade Ratio



Source: Morgan Stanley Fixed Income Research

The above chart demonstrates a strong credit experience for CMBS. For example, during 2005, 2,435 CMBS rating upgrades were offset by only 318 downgrades, a 7.7-to-1 ratio. During the same period corporate bonds rated by Moody's experienced an upgrade/downgrade ratio of 0.8-to-1. Two thousand and two was the low point for CMBS upgrades versus downgrades with a ratio of 1.5-to-1. However, this compares very favourably to corporate bonds which experienced a ratio of 0.22-to-1 (Mattinson, 2003).

During a severe economic recession and at a point in time when the corporate bond market was devastated by massive corporate failures such as WorldCom, Enron, Global Crossing, HealthSouth, Tyco, Adelphia and K-Mart, the CMBS markets and whole loan markets experienced excellent credit performance. Again, this is evidence of disciplined market wide lending practices which effectively margined loans to allow for severe reductions in property-level net operating income.

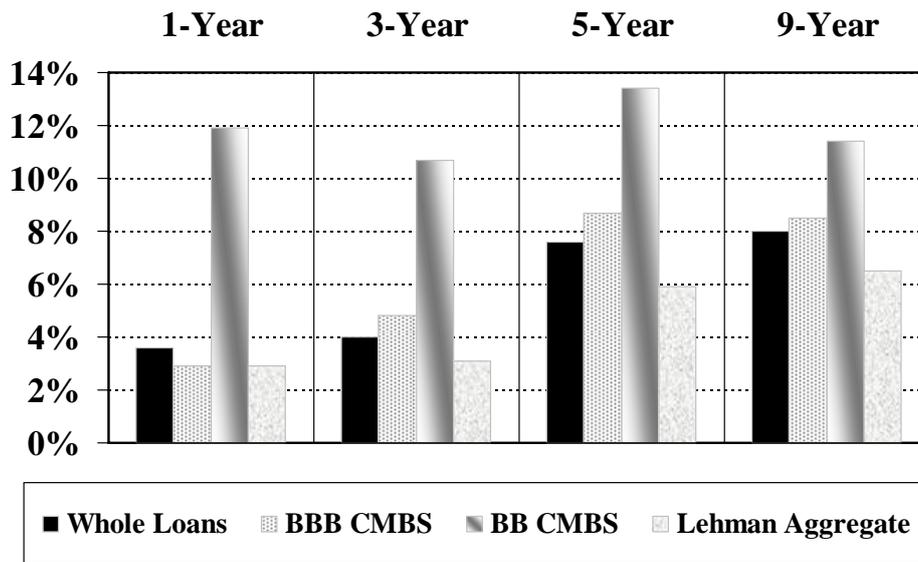
Looking forward, neither the CMBS nor whole loan markets can expect this level of near perfect credit performance. That said, based upon current economic conditions and construction levels, good credit performance should persist for at least the next 3-5 years. More importantly, the prospective incidence and severity of default for mortgages should improve over historical averages. This would support the

argument that whole loan mortgages should be viewed as superior to BBB-rated corporate bonds from a credit perspective.

Return Performance

Historically, mortgage products have carried coupons, or promised yields, that were higher than alternative fixed interest instruments. This fact, coupled with the superior credit performance of mortgage products has resulted in attractive performance on a total return basis.

Figure 6: Returns as of December 31, 2005



Source: Morgan Stanley Fixed Income Research; Lehman Brothers

Shown above are one, three, five and nine year returns for private whole loans, BBB CMBS, BB CMBS and the Lehman Aggregate Index. These returns are on a mark-to-market (i.e. total return basis). As shown, these key mortgage products have outperformed the Lehman Aggregate Index over each measurement period.

Note that the relatively low returns for whole loans, BBB CMBS and the Lehman Aggregate Index over the past one and three years were driven by unrealised, mark-to-market devaluations resulting from an increase in market risk-free interest rates, (and not credit deterioration). As noted below, investors in such products tend to invest either on a relative performance basis or on a hold-to-maturity basis (in which case short-term mark-to-market value changes are not meaningful). Thus, the mortgage products are deemed to have performed very well over each of these periods.

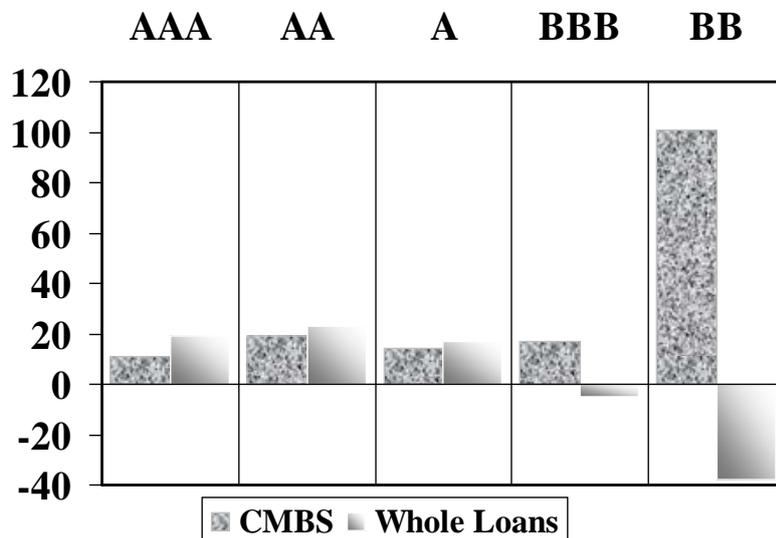
Current Product Yields

Investors in mortgage products generally can be characterised as:

- Traditional fixed interest investors who are seeking to diversify and improve returns versus alternative investments, e.g. corporate bonds and the other components of the Lehman Aggregate Index.
- Investors seeking to match asset and liability duration, such as life insurance companies tend to hold investments to maturity and look to current yield (as shown in the next set of exhibits) and not to mark-to-market returns (as shown above). Absent negative credit events, current mortgage yields equal IRR at the maturity of the instrument.
- Real estate investors seeking cash-flow. Such investors focus on mezzanine, B-Note and BB (or lesser credit) CMBS and invest on a hold to maturity basis.

The below exhibit indicates that most mortgage investments today offer superior current yields to corporate bonds. That said, BBB and BB-rated whole loan yields are lower than corporate bonds despite the relative illiquidity of whole loans. This is demonstrative of the persistent inefficiency that exists in the mortgage market which frequently results in pricing anomalies. These anomalies can be material and allow the investment manager to create excess returns via active management.

Figure 7: Yield Spreads to Corporate Bonds in Basis Points



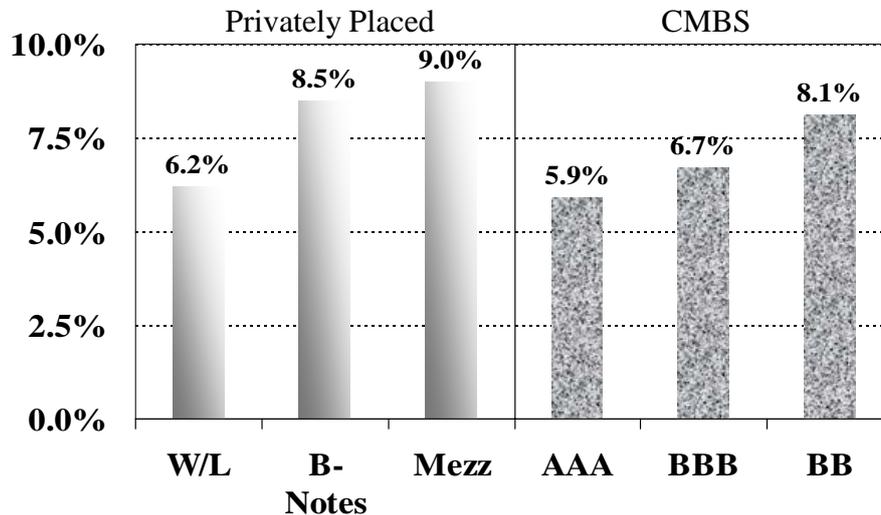
Data as of 3/31/06

Source: Morgan Stanley; Quadrant Real Estate Advisors

As shown below, on an absolute yield basis certain mortgage products are attractive today. For fixed interest investors, AAA and BBB-rated CMBS offer excellent relative

value in a mixed asset context. Equity real estate investors today are faced with historically low capitalisation rates and little upside potential. For many such investors, 8.5%-9.0% current yields on B-Notes and mezzanine, respectively, are difficult to ignore.

Figure 8: Current Cash-on-Cash Yields



Data as of 5/15/06

Source: Morgan Stanley; Quadrant Real Estate Advisors

A Note on High-Yield Investing

Sophisticated US investors commonly create high, predictable yields (12% and higher cash-on-cash returns) by assembling large, highly diversified portfolios of moderate return-risk mortgage assets and then applying prudent leverage. Often such portfolios will be composed of some combination of whole loans, B-Notes, mezzanine investments, investment grade CMBS and non-investment grade CMBS. The ultimate asset mixture is very much a function of product availability and relative value during the portfolio assemblage phase.

Inasmuch as the goal is to create high returns by making real estate credit bets, as opposed to interest rate bets, portfolio leverage generally is fixed-rate and duration-matched to the portfolio assets. Leverage levels of 4:1-to-7:1 are common. However, this leverage is margined to ensure that portfolio income will cover debt service comfortably on a stressed basis. For example, credit underwriting assumes that at maturity these mortgage assets must be refinanced at normalised market interest and capitalisation rates.

By building the portfolio one asset at a time utilising disciplined credit analysis, controlling asset quality is straightforward. Given the USD2.5 trillion size of the US income property debt market (with over USD200 billion of annual new private originations and CMBS issuance) the opportunity set is maximised. Increasingly, this strategy is viewed as more sensible than purchasing low-credit CMBS from a Wall Street issuer or chasing ever more elusive 'value added' and 'opportunistic' equity real estate.

Conclusion

Given their superior position in the capital structure of a property, debt investments are inherently less risky than equity investments. Today, given persistent market inefficiencies, it is quite feasible to find investments, particularly mezzanine investments and B-Notes, with better current cash yields than the underlying equity real estate. Finally, given the sheer size, diversity, and segmentation of the debt markets, it is straightforward to assemble portfolios that are finely tailored to an investor's objectives.

Whereas 10 years ago US institutional investment in such products was limited to a fairly narrow group of investors, today such investor participation is quite common place. Countless large investors participate in segments of the market on a separate account basis. In addition, literally dozens of highly successful commingled strategies exist today that have attracted institutional investors of all shapes and sizes. Given current market conditions including credit underwriting, current yields, product flow and market fundamentals, these investors will not be disappointed.

The proliferation of real estate debt, securitisation and market segmentation that has occurred in the US over the past 15 years is not a phenomenon, but instead merely the natural progression of markets. We are now seeing a similar trend, albeit on an accelerated path in Europe and Asia. Given current stabilised technology and an educated investor base, migration to other geographies such as Australia is predictable. Done prudently, everyone benefits including investors, borrowers and third party service providers.

References

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