MARCH 2, 2015 COMMERCIAL MBS

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SPECIAL COMMENT

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Table of Contents:

| DEFEASANCE EXPLAINED | 2 |
|---------------------------------|---|
| DEFEASANCE IN 2014 | 2 |
| DEFEASANCE BY PROPERTY TYPE | 3 |
| DEFEASANCE BY LOAN SIZE | 3 |
| DEFEASANCE BY YEARS TO MATURITY | 6 |
| DEFEASANCE BY VINTAGE | 7 |
| IMPACT OF DEFEASANCE ON | |
| CMBS CREDIT | 8 |
| MOODY'S RELATED RESEARCH | ç |
| | |

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US CMBS: Defeasance Continues to Surge Fueled by Increased CRE Liquidity

CMBS defeasance activity increased substantially in 2014, rising to \$20.9 billion, a 58% increase over 2013. This figure also represents the highest level since the market's peak at \$32.4 billion in 2007. Defeasance activity increased significantly during the past two years and 2014 activity was in-line with the 2005 level of \$21.2 billion. The increase is due to several factors, including strong liquidity in the commercial real estate (CRE) debt and equity markets, continuing improvement in real estate fundamentals and borrower preference to complete their refinancing ahead of the upcoming refinancing wave of loans securitized in 2005 through 2007.

New commercial mortgage-backed securities (CMBS) issuance increased 78% in 2013 and 9% in 2014, increasing the availability of credit. Because of the current robust lending environment, many borrowers are able to trade in older loans for new loans, frequently with higher proceeds and lower interest rates.

We expect approximately \$110 billion of CMBS issuance in 2015, a 17% increase over 2014 issuance. A highly competitive CMBS loan origination market, a large number of outstanding loans nearing maturity (the sweet spot for defeasance) and improvement in commercial real estate markets provide favorable conditions for defeasance activity in 2015 to exceed 2014 levels. We forecast \$25 billion of defeasance activity in 2015 as owners capitalize on the low interest rate environment prior to the Federal Reserve raising rates.

Among the highlights in 2014:

- » Defeasance of CMBS loans increased 58% to \$20.9 billion from \$13.2 billion in 2013.
- » The largest shares of defeased loans, by property type, were office, 34%; retail, 23%; and multifamily, 22%; followed by hotel, 10%; other, 8%; and industrial, 2%.
- The 10 largest defeased loans accounted for \$4.1 billion, or 20% of defeasance activity. Seven of the largest defeased loans were secured by office properties, while the remaining three were secured by retail properties.
- » The 2005-07 vintages accounted for 86% of the aggregate loans defeased.
- » Defeasance of loans with five years or more to maturity increased to a 5% share of total 2014 defeasance compared to 1% in 2013. This increase suggests that financing and property markets have improved to such an extent that defeasance was an attractive option even for loans with an extended period of time before maturity.
- » In seasoned deals, CMBS bonds that are fully covered by defeased loans may not have a Aaa (sf) rating because of the timing of anticipated payoffs, credit concerns regarding other loans in the pool, or realized losses, including interest shortfalls, experienced by the bonds.

Defeasance Explained

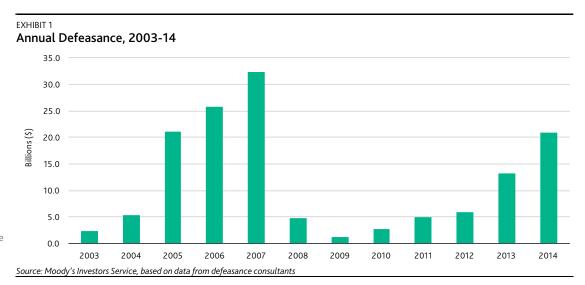
Fixed-rate loans originated for CMBS conduit / fusion transactions generally limit a borrower's ability to prepay a loan before maturity. Defeasance allows a borrower to substitute the real estate collateral securing a mortgage loan with a portfolio of US government securities sufficient to satisfy all debt service payments, including the balloon payment upon maturity. The mortgage loan remains in the trust and the certificate holders receive an uninterrupted Aaa payment stream from the defeased mortgage loan. The real estate that originally served as collateral for the loan is released, allowing the borrower to refinance or to sell a property unencumbered by debt.

Defeasance in 2014

In 2014, defeasance activity increased 58% to \$20.9 billion, from \$13.2 billion in 2013. By number of loans, defeasance increased 44% to 1,275 loans, from 888 in 2013. The average size of defeased loans in 2014 was \$16.4 million, the highest since 2005, and up from \$14.9 million in 2013.

Even with the increase in defeasance in recent years, it is still below the peak of \$32.4 billion in 2007 (see Exhibit 1). Activity in 2014 was in-line with the 2005 level of \$20.2 billion. The increase is due to several factors, including strong liquidity in the CRE debt and equity markets, continuing improvement in real estate fundamentals, borrower desire to lock in historically low interest rates prior to any Federal Reserve rate increases, and borrower preference to complete their refinancing ahead of the upcoming refinancing wave of loans securitized in 2005 through 2007.

According to Trepp LLC (Trepp), \$283 billion of loans are due to mature in 2016-17. Because of the current robust lending environment, many borrowers are able to defease older loans and take out new loans, frequently with higher proceeds and lower interest rates.



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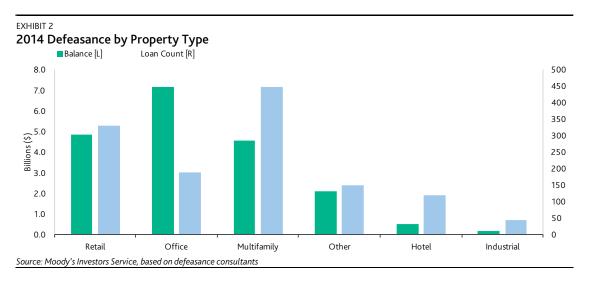
Data for this study was provided by defeasance consultants, including AST Defeasance, Chatham Financial, Defeasance Holding Company, Trimont Real Estate Advisors, Waterstone Defeasance and Wells Fargo Commercial Mortgage Servicing.

A highly competitive CMBS loan origination market, a large number of outstanding loans nearing maturity (the sweet spot for defeasance) and continuing improvement in commercial real estate markets provide favorable conditions for defeasance. We expect that 2015 activity will exceed 2014 levels by 20%, however, potential increases in interest and/or capitalization rates, which are at historic lows, as well as any deterioration in general macroeconomic conditions, would dampen its growth.

Defeasance by Property Type

By balance, the largest shares of defeased loans were backed by office, 34%; retail, 23%; and multifamily, 22%, followed by hotel, 10%; other, 8%; and industrial, 2%. Six of the top 10 largest defeased loans in 2014 were office properties in major markets (New York, Boston and Chicago).

Defeasance in 2014 by property type differs somewhat from 2013, when retail represented the largest share, at 33%, followed by office, at 25% and multifamily, at 24%. The increase in defeasance of loans backed by office properties, especially those in major central business district (CBD) markets, reflects significant improvement of the office sector. Based on the most recent Moody's/RCA commercial property price (CPPI) report, prices in the office market overall appreciated 13.9% during 2014, with CBD prices up 13.2% over that same period. Acquisitions in major markets by global investors were a significant contributing factor. During that same period, retail prices appreciated 6.5%, the lowest growth of any commercial property type.



While there has been improvement in real estate fundamentals in major markets, individual property performance varies depending on the specific market and quality of the real estate. According to the Moody's/RCA CPPI report, major-market prices exceed the November 2007 pre-crisis peak level by approximately 17%, while non-major market prices are approximately 9% below peak level.

Defeasance by Loan Size

By number, approximately 39% of loans that defeased in 2014 had balances of less than \$5 million, but they constituted only 7% of aggregate defeasance volume. Loans of \$50 million or greater constituted 47% of aggregate defeasance volume, but were just 6% by number. This follows a similar pattern to 2013 defeasance activity. Exhibit 3 shows the dispersion of defeased loans by balance and number of loans.

The average balance of defeased loans in 2014 was \$16.5 million, which is slightly larger than the average loan balance of the CMBS universe – \$12.1 million according to Trepp – and up from 2013, where the average loan balance of defeased loans was \$14.9 million.

EXHIBIT 3 2014 Defeasance by Loan Balance and Loan Count ■ Balance ■ Loan Count 50% 45% 40% 35% 30% 25% 20% 15% 10% 5% 0% \$10 mil - \$24.9 mil < \$2 mil \$2 mil - \$4.9 mil \$5 mil - \$9.9 mil \$25 mil - \$49.9 mil

Source: Moody's Investors Service, based on data from defeasance consultants

Exhibit 4 shows the 10 largest loans that defeased in 2014. These loans constituted approximately 20% of overall defeasance volume in 2014, compared to 23% in 2013. Despite representing a similar share of defeasance, the top 10 featured much larger loans in 2014 than 2013, with the average loan size increasing to \$409 million from \$298 million in 2013. The aggregate balance of the 10 largest loans increased by \$1 billion to \$4 billion in 2014, from \$3 billion in 2013.

EXHIBIT 4

10 Largest Defeased Loans in 2014

| Property Name | Location | Property Type | Vintage | Years to Maturity | Balance at Defeasance |
|-----------------------------|------------------------|---------------|---------|----------------------|--------------------------|
| Mall of America | Bloomington, MN | Retail | 2006 | 2 | \$755,000,000 |
| 277 Park Avenue | New York, NY | Office | 2005 | 1 | \$700,000,000 |
| ShopKo Portfolio | West and Midwest US | Retail | 2006 | 2 | \$488,025,799 |
| 520 Madison Avenue | New York, NY | Office | 2006 | 2 | \$475,000,000 |
| 1301 Avenue of the Americas | New York, NY | Office | 2006 | 1 | \$420,783,734 |
| Brookdale Office Portfolio | South and Southeast US | Office | 2005 | <1 | \$313,873,777 |
| 1500 Broadway | New York, NY | Office | 2005 | <1 | \$287,000,000 |
| 225 Franklin Street | Boston, MA | Office | 2006 | 2 | \$225,000,000 |
| Northlake Mall | Charlotte, NC | Retail | 2006 | 1 | \$215,500,000 |
| 353 North Clark Street | Chicago, IL | Office | 2011 | 1 | \$214,178,782 |
| Total | | | | : | \$4,094,362,093 |

Source: Moody's Investors Service, based on data from defeasance consultants

Mall of America

The largest loan to defease in 2014, representing 4% of total defeasance, was backed by the Mall of America in Bloomington, MN approximately 12 miles south of Minneapolis. Opened in 1992, this 2.8 million sq. ft enclosed super-regional shopping mall and entertainment complex is anchored by Macy's, Nordstrom, Sears and a variety of entertainment venues and is owned by affiliates of Triple Five Investment, Ltd. (Triple Five).

Mall of America is the largest mall in the United States and second largest in North America behind the West Edmonton Mall in Alberta, Canada which is also owned by affiliates of Triple Five.

This interest-only loan had a balance of \$755 million at defeasance and was split among three *pari-passu* notes securitized in COMM 2006-C8, CD 2007-CD4, and GECMC 2007-1. The loan was structured with a 10-year term maturing in December 2016 and a 5.8% coupon. The loan was defeased in August 2014.

Following defeasance, the property was refinanced with a \$1.5 billion mortgage in August 2014, which was then securitized in the single-asset CSMC 2014-USA transaction. The new mortgage is interest-only for the first 66 months of its 11-year term and then amortizes on a 30-year schedule with a 4.4% coupon.

277 Park Avenue

The second-largest loan to defease in 2014, representing 3% of total defeasance, was backed by 277 Park Avenue in New York, NY. Stahl Organization owns this 1.8 million sq. ft. 50-story Class A office building.

This interest-only loan had a balance of \$700 million at defeasance and was split among three *pari-passu* notes securitized in BACM 2005-6, GECMC 2006-C1, and BACM 2006-2. The loan was structured with a 10-year term maturing in October 2015 and a 4.5% coupon. The loan was defeased in July 2014.

Following defeasance, the property was refinanced with a \$750 million mortgage in July 2014, which was then securitized in the single-asset COMM 2014-277P transaction. The new mortgage is interest-only for the entire 10-year term with a 3.6% coupon.

ShopKo Portfolio

The third-largest loan to defease in 2014, representing 2% of total defeasance, was backed by the ShopKo Portfolio, a 112 property, 11.0 million sq. ft cross-collateralized and cross-defaulted portfolio comprised of retail (85%), industrial (13%) and office (2%) properties leased to ShopKo (general merchandise and pharmacy retailer), across 12 states mostly in the Western and Midwestern US. The retail stores are all operated under 15-year triple net leases. The sole office property is located in Green Bay, WI and serves as ShopKo's headquarters. Spirit Realty Capital (Spirit) owns the portfolio.

The loan had a balance of \$488 million at defeasance, amortizing approximately 11% from \$546. million at origination and was split among three *pari-passu* notes securitized in CD 2006-CD3, CGCMT 2006-C4, and CWCI 2006-C1. The loan was structured with a 10-year term maturing in June 2016 and a 6.6% coupon. The loan defeased in June 2014.

At present, Spirit has not refinanced the ShopKo Portfolio. Spirit has reported that it signed a definitive agreement to modify the master lease agreement with ShopKo. This was done to provide greater flexibility in refinancing or selling the portfolio.

520 Madison Avenue

The fourth-largest loan to defease in 2014, representing 2% of total defeasance, was backed by 520 Madison Avenue in New York, NY. Tishman Speyer owns this 995,000 sq. ft. 43-story Class A office building.

This interest-only loan had a balance of \$475 million at defeasance and was securitized in LB-UBS 2006-C7. The loan was structured with a 10-year term maturing in October 2016 and a 5.9% coupon. The loan was defeased in July 2014.

Following defeasance, the property was refinanced with a \$675 million mortgage in July 2014, which was then securitized in the single-asset BAMLL 2014-520M transaction. The new mortgage is interest-only for the entire 20-year term with a 4.2% coupon.

1301 Avenue of the Americas

The fifth-largest loan to defease in 2014, representing 2% of total defeasance, was backed by 1301 Avenue of the Americas in New York, NY. Paramount Group Inc. owns this 1.7 million sq. ft. 45-story Class A office building.

This interest-only loan had a balance of \$420.8 million at defeasance and was securitized in LB-UBS 2006-C1. The loan was structured with a 10-year term maturing in January 2016 and a 5.4% coupon. The loan was defeased in November 2014. At present, this loan has not been refinanced.

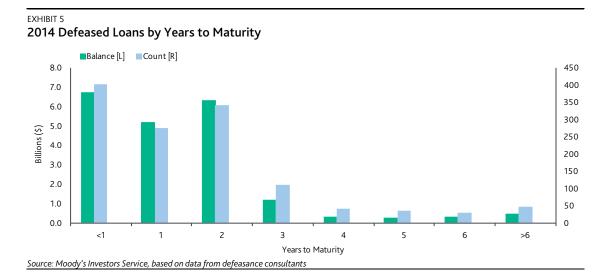
In November 2014, Paramount completed a \$2.6 billion IPO. According to the company, they plan on using proceeds from the offering to repay outstanding indebtedness, including defeasance costs, general corporate purposes, and potential future acquisitions.

Defeasance by Years to Maturity

In 2014, the largest share of defeasance, at 32%, was represented by loans having a remaining term of one year or less (see Exhibit 5). This was expected given the large number of loans with near-term maturities, the relative low cost of short-term defeasance, and borrowers' desire to take advantage of current favorable financing and sales markets. A number of loans were defeased even though they were within a few months of their open or prepayment period because borrowers wanted to lock-in favorable refinancing or to accommodate property sales or portfolio repositioning.

What is surprising, however, is the increase in defeasance of loans with longer terms to maturity. Defeasance of loans with five years or more to maturity increased to 5% of 2014 defeasance compared to 1% in 2013. This increase suggests that financing and property markets had improved to such an extent that defeasance was still an attractive option from a cost perspective even if the loan had an extended period of time before maturity.

The primary factor affecting the cost of defeasance is the remaining term to maturity. The cost of government securities for loans with one year or less of remaining term represented an average of 3.2% of the respective loan balances while the cost of government securities for loans with five or more years of remaining term averaged 11.2% of the respective loan balances.



Defeasance by Vintage

Because of REMIC rules, defeasance cannot occur until after the second anniversary of the closing date of a CMBS transaction. Thus, there has been no defeasance in any of the deals from 2013 and 2014.

Most of the loans that defeased in 2014 were originated between 2005 and 2007, accounting for approximately 86% of total defeasance for the year, as Exhibit 6 shows. These loans had shorter periods to maturity, and in many cases in-place interest rates that were higher than current interest rates. In addition, many of the properties backing these loans had experienced price appreciation since securitization.

One of the highlights in 2014 was the increase in the share of defeasance in deals with loans that were newly eligible for defeasance. In 2014, loans in deals that were securitized in 2011-2012 (newly eligible vintages) totaled 9%, compared to 3% of loans in deals that were securitized in 2010-2011 in 2013.

Nearly 50% of loans that defeased in 2014 from 2011 and 2012 vintage deals were backed by multifamily properties, showing the health of the multifamily market. According to the most recent Moody's RCA/CPPI report, prices in the multifamily market appreciated 14.8% in 2014, exceeding its pre-crisis peak by 21.3%. In addition, multifamily benefits from the prevalence of government sponsored enterprise (GSE) debt. Loans from Freddie Mac securitizations accounted for 82% of the multifamily loans that were defeased in 2014; all of these loans came from the 2011 and 2012 vintages.

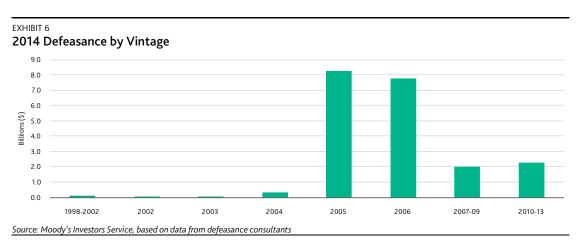
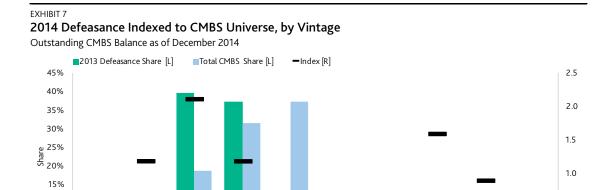


Exhibit 7 indexes 2014 defeasance by comparing the share of defeasance from a particular vintage to that same vintage's share of the entire CMBS universe. For example, loans originated in 2005 constituted the largest share of 2014 defeasance, 40%, even though the 2005 vintage constituted only 19% of the CMBS universe as of year-end 2014. Thus, the index for 2005 vintage contributions to 2014 defeasance is 2.1 (40% / 19%). The 2000, 2004-06 and 2010 vintages had index values well above one; the 2007-08 and 2011-12 vintages had index values of less than one.

COMMERCIAL MBS MOODY'S INVESTORS SERVICE



0.5

0.0

2012

Source: Moody's Investors Service, based on data from defeasance consultants and Trepp LLC

2006

Impact of Defeasance on CMBS Credit

10%

5% 0%

Defeasance remains an important factor in CMBS credit because substituting Aaa-rated US government securities for real estate collateral of lower credit quality dramatically reduces the risk of loss. However, the amount of defeasance, and hence the benefit to CMBS credit, varies significantly by deal.

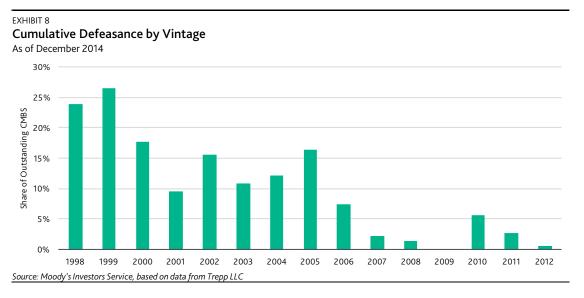
2007

2009

2010

2011

On a cumulative basis, defeasance represents a minimal share of the 2007 through 2012 vintages. Exhibit 8 shows cumulative defeasance by vintage. The vintages with the largest shares are 1998, 1999, 2000, 2002 and 2005.



Although early vintage deals may contain a significant share of defeased loans, the positive impact of defeasance can be offset by the poor credit quality of other loans in the pool. In seasoned deals, CMBS bonds that are fully covered by defeased loans may not be rated Aaa (sf) because of the timing of anticipated loan payoffs, credit concerns regarding other loans in the pool or realized losses, including interest shortfalls², experienced by the bonds.

Interest shortfalls occur when the interest available is insufficient to pay 100% of the interest due on all the certificates. Interest shortfalls are due to special servicing fees, including workout and liquidation fees, appraisal subordinate entitlement reductions (ASERs), loan modifications, extraordinary trust expenses and non-advancing by the master servicer based on a determination of non-recoverability.

Moody's Related Research

Below are links to publications from Moody's related to commercial real estate and credit trend research:

Special Reports:

- » Moody's/RCA CPPI: Industrial Prices Were Hot During 2014, Retail Prices Were Not, February 2015 (SF396218)
- » CMBS: Red Yellow -Green® Update Third-Quarter 2014 Assessment of US Property Markets, January 2015 (SF394197)
- » 2015 Outlook -US CMBS CRE Recovery Takes Root As Loan Quality Continues to Slip, December 2014 (SF389309)
- » US CMBS: Improved Liquidity and Rising Property Values Spur Defeasance, April 2014 (SF360401)
- » Q4 2014: US CMBS and CRE CDO Surveillance Review, February 2015 (SF395770)

To access any of these reports, click on the entry above. Note that these references are current as of the date of publication of this report and that more recent reports may be available. All research may not be available to all clients.

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