

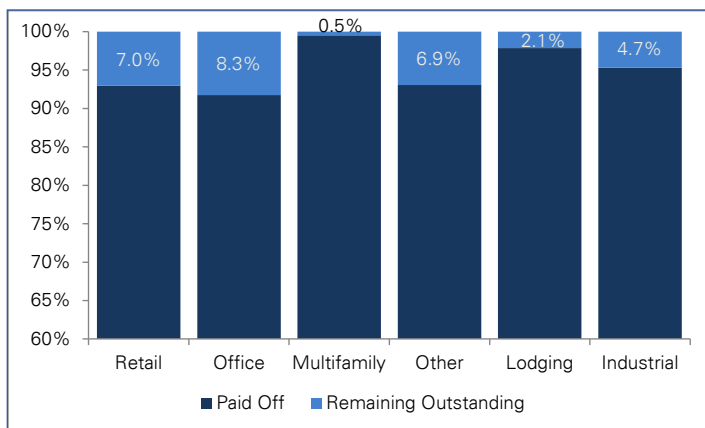


Debt Yield and LTV Hurdles Put Maturing CMBS Loans at Risk

As the first quarter of 2016 comes to a close, the CMBS and CRE markets are a quarter of the way through the 2015-2017 wall of maturities. Much was made of the almost \$300 billion in 2005-2007 vintage CMBS loans coming due, including their performance at maturity and their effect on the overall market.

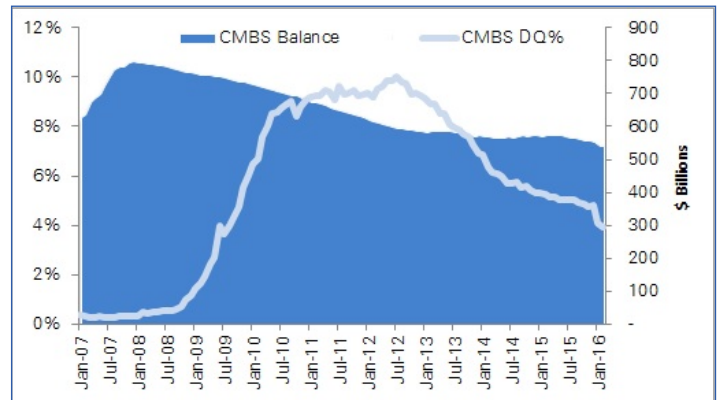
So far, the story is highly positive. Of the \$80.9 billion in non-defeased, non-delinquent loans that were outstanding at the end of 2014 and due to mature from January 2015 through February 2016, 94.02% by balance has paid off with 0.29% in losses. The remaining loans account for \$4.84 billion outstanding as of this February, and 68.74% of those are marked as delinquent (including those marked as "Performing Beyond Maturity").

Figure 1. Conduit, Non-Defeased, Non-Delinquent Loan Maturities: January 2015 through February



In 2012, maturing five-year loans from 2007 came due and caused some ripples in the market. The US CMBS delinquency rate hit its highest level ever in the summer of that year as the close-to- \$50 billion in 2007 loans came due in a still-recovering market.

Figure 2. CMBS Balance and Delinquency



After another two years of price appreciation and fundamental improvement including continued NOI growth in all major property types, the market digested the heavy maturing volume of 2015 better than anticipated. New 2015 issuance near \$100 billion was enough to take on the refinancing of the \$80 billion in 2015 maturities. Viewing the performance of 2015 maturities, solid aggregate NOI growth, and record CRE price levels in a vacuum would lead to a very positive outlook for 2016 and 2017 maturities.

Figure 3. CMBS YoY NOI Growth & Issuance Volume (\$Bn)

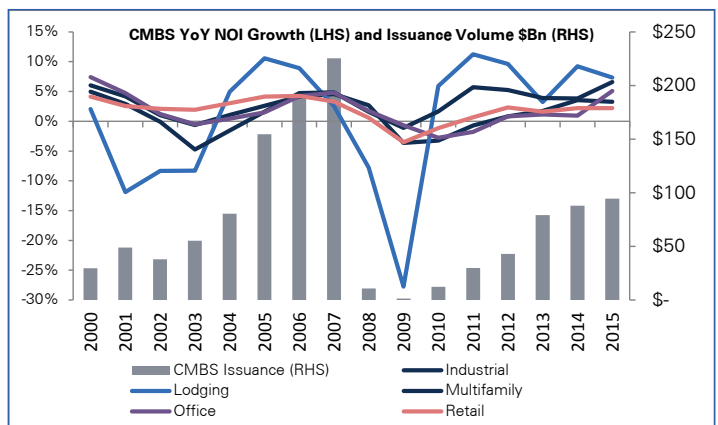


Figure 4. Maturing 2016-2017 (Conduit, Non-Defeased, Non-Delinquent)

PropType	Count	Balance	Meets DSCR Threshold					Meets LTV Threshold					Meets Debt Yield Threshold				
			0 bps	25 bps	50 bps	75 bps	100 bps	0 bps	25 bps	50 bps	75 bps	100 bps	0 bps	25 bps	50 bps	75 bps	100 bps
Retail	5,034	\$59.4 Bn	92.18%	88.70%	76.63%	71.88%	66.65%	56.44%	50.57%	45.68%	41.34%	37.42%	52.30%	48.26%	45.07%	42.38%	38.97%
Office	2,320	\$79.3 Bn	77.30%	71.70%	66.43%	63.81%	57.80%	48.68%	45.81%	41.29%	38.19%	35.32%	45.08%	42.56%	40.29%	38.31%	36.10%
Multifamily	2,073	\$20.7 Bn	91.88%	89.87%	88.68%	84.62%	81.76%	73.18%	68.32%	64.06%	58.97%	53.70%	69.50%	66.35%	63.20%	59.62%	52.73%
Industrial	1,012	\$10.2 Bn	90.41%	89.60%	87.93%	83.96%	81.33%	73.39%	70.11%	60.80%	58.98%	53.44%	70.59%	67.82%	65.77%	58.24%	56.85%
Lodging	1,000	\$17.4 Bn	93.45%	92.00%	91.20%	89.20%	87.41%	71.40%	66.65%	65.19%	62.52%	55.93%	70.74%	69.16%	65.52%	64.77%	62.53%
Other	1,779	\$24.0 Bn	82.34%	79.02%	77.62%	74.81%	72.62%	47.11%	42.76%	38.01%	34.47%	31.81%	41.76%	40.58%	37.33%	34.21%	31.17%
Total	13,218	\$211.0 Bn	85.46%	81.64%	75.84%	72.44%	67.91%	56.16%	51.90%	47.30%	43.70%	40.12%	52.48%	49.69%	46.86%	44.22%	41.16%

Unfortunately, the bottom-up view of the market is only half of the story and the negative macro factors coming from the top down could significantly hamper the CMBS market's ability to handle the next seven quarters of increasing maturing volumes. Oil's slide since last year has hammered high yield fixed income, bank balance sheets and energy company stocks. Pair that with the first Federal Reserve rate hike and growth concerns in China, and the result has been quickly widening new issue CMBS spreads. In the past few weeks, those spreads have recovered a decent portion of their losses but spreads remain well wide of last year's tightest levels. Smaller conduit shops have pulled back from the market and the big lenders are hesitant to price loans given the warehouse risk in a volatile spread environment. Due to increasingly stringent capital rules and heavy regulatory costs, banks are cutting staff on trading desks and reducing their exposure to CMBS, leading to evaporating secondary market liquidity (for more on regulatory issues, check out our blog on FRTB at info.trepp.com/TreppTalk).

Add a second potential Federal Reserve rate hike in 2016 to those macro and regulatory headwinds and the outlook becomes slightly dubious for the more-than-\$200 billion in non-defeased, non-delinquent loans coming due between now and the end of 2017. In order to get an idea of how the maturing loans may perform, we compared them to the most recent six months' worth of new conduit originations based on cap rate, LTV, DSCR, and debt yield. First, new DSCRs were calculated based on a simplified "new" interest only loan based on property type/MSA-level average loan rates on recently originated loans. Second, the maturing loans' appraised values were updated based on property type/MSA-level cap rates of recent originations. Third, current debt yields were calculated based on most recently available NOI data and current loan balances. Finally, new DSCRs and LTVs were calculated for

maturing loans based on several rate hike assumptions. For DSCR, the rate hike affects the loan rate directly, increasing debt service and decreasing DSCR. For LTV, the rate hike is assumed to inflate cap rates and, consequently, decrease appraised value and increase LTV. For debt yield, instead of changing the maturing loan debt yield, the threshold for qualifying for refinancing was raised by the assumed interest rate increase.

Those measures were then compared to the average property type/MSA levels of recent originations. The DSCR threshold was the easiest hurdle to jump. Based on current NOI levels of maturing loans, 85% of those loans (by balance) meet or exceed their respective DSCR thresholds. Current rates are around 100 to 200 basis points lower than they were back in 2006 and 2007; so maturing loans do have some breathing room on the DSCR front given the lower debt service burden of these new low rates. Given a 25-basis-point increase, 82% still meet the DSCR requirement and 68% pass the test given a 100-basis-point increase in rates. The story is a little bleaker when looking at the LTVs and debt yields of these maturing loans. Using current NOI levels and new loan cap rates (Cap Rate = NOI/Appraised Value so New Assumed Appraised Value = Current NOI/Cap Rate), the new loan LTV threshold was much more restrictive, eliminating about 43% of maturing loans from the "re-finance-able" bucket. Further, only 52% of maturing loans meet their respective Debt Yield thresholds assuming no change in rates. If debt yields jump 100 basis points, 59% of loans will fall below the minimum required Debt Yield.

All of these calculations come after removing maturing loans with negative NOIs and adjusting the refinancing thresholds to take MSA level values into account. Further, the MSA level values were only used when they were less restrictive (lower DSCR, LTV, and debt yield)

Figure 5. Cap Rate Distribution

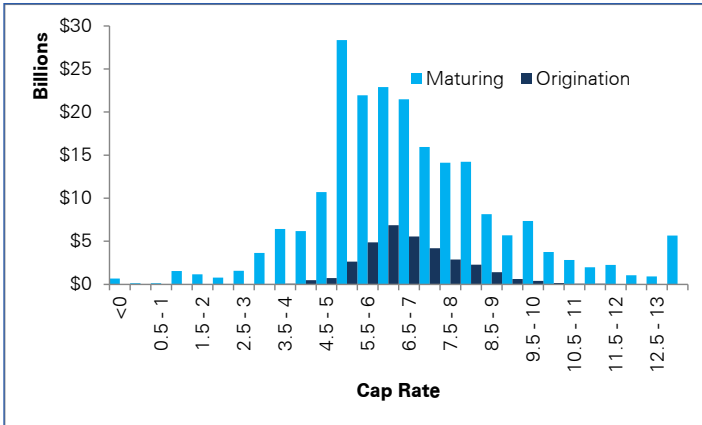


Figure 7. DSCR Distribution

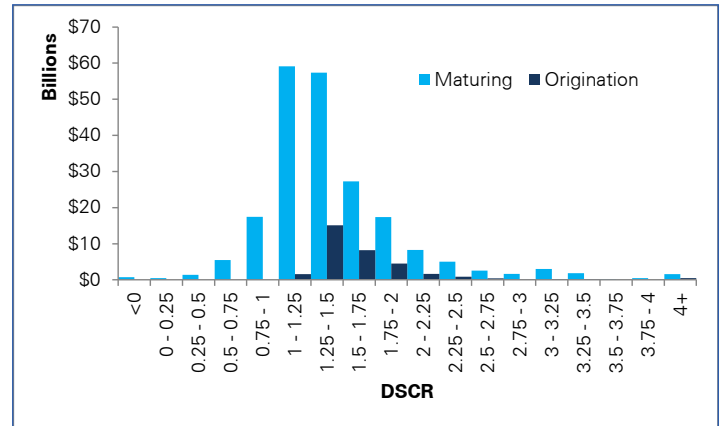
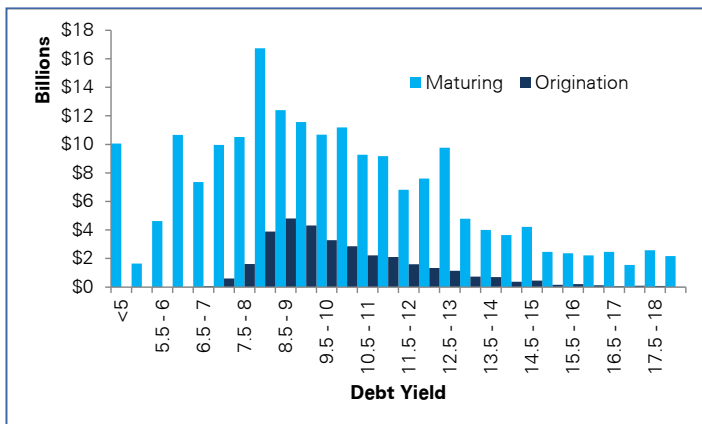


Figure 6. Debt Yield Distribution



to lower the bar for maturing loans.

On a DSCR basis, almost \$31 billion in maturing loans will not be able to refinance their entire balance. On an LTV basis, almost \$93 billion would need additional equity in order to refinance at current income and cap rate levels. The number goes up to \$100 billion if we apply the Debt Yield parameter.

This is not to say that all these loans outside of the recent CMBS origination parameters will default. There are many on the margin that will either need non-CMBS lenders to provide higher leverage or sponsors willing to invest more equity. Bridge, mezz, and non-bank lenders are in a position to issue some serious volume in the next two years working on loans in that marginal area between totally refinance-able and those in need of some wiggle room. CRE prices have just plateaued and if they do begin to decline, the CMBS market will see maturity defaults rise and more loans go from CMBS to the bridge, mezz, and non-bank lending space.

For inquiries about the data analysis conducted in this research, contact press@trepp.com or call 212-754-1010. For more information about Trepp’s commercial real estate data, contact info@trepp.com.

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