CMBS Research

Delinquency Report

December 2017 Remittance

Executive Summary

- The delinquency rate for loans packaged in commercial mortgage-backed securities fell throughout the second half of 2017, reaching 2.41% by year-end, and Morningstar Credit Ratings, LLC expects the delinquency rate to continue its descent in 2018, as servicers continue to wind down their legacy portfolios, originations outpace new problem loans, and we see fewer concerns for maturity.
- There is only $10.27 billion in maturing CMBS debt in 2018, and, for the first time, maturing loans from CMBS 2.0 transactions (2010 and beyond) will exceed those from before the crisis. The $8.33 billion in maturing CMBS 2.0 issuance is unlikely to generate the same level of concern as the legacy loans because those transactions were underwritten with more conservative assumptions, low levels of pro forma underwriting, and lower leverage.
- The delinquency rate improved for the sixth consecutive month, receding 13 basis points to 2.41%, which is down 59 basis points from a year ago.
- The CMBS delinquent unpaid balance dipped 8.4% to $19.16 billion, a low level not seen since it registered $18.78 billion in May 2009. December's delinquent loan volume is down $1.75 billion million from the prior month, and down $4.70 billion, or 19.7%, from the year-earlier period.
- The volume of newly delinquent loans registered below $1.00 billion for only the second time since July 2014.
- While legacy CMBS now accounts for less than 5.3% of the CMBS universe, delinquencies from deals issued before 2010 represent 90.8% of all delinquencies by balance.
- The special-servicing rate fell for the fifth consecutive month, inching down to 2.97%, down four basis points from November. However, for 2017, the volume of specially serviced postcrisis loans has more than doubled to $3.64 billion, up from $1.53 billion at year-end for 2016.
- Liquidation volume and the weighted average loss severity both rose in December, as many office and retail loans took heavy losses.
- For 2017, $13.78 billion of loans were liquidated with a loss, generating a weighted average loss severity of 40.5%, down from a 42.5% severity in 2016 when $11.47 billion in loans were written off.

Table 1 – Trailing 12 Months Delinquency ($ UPB in billions)

Category	Dec-17	Nov-17	Oct-17	Sep-17	Aug-17	Jul-17	Jun-17	May-17	Apr-17	Mar-17	Feb-17	Jan-17
30-Day	0.95	2.02	1.66	2.50	2.72	2.24	3.22	3.07	4.03	3.41	3.47	3.08
60-Day	0.40	0.63	0.76	0.98	1.08	1.37	1.16	1.68	0.85	1.25	1.30	1.15
90-Day	2.99	2.95	3.19	3.26	3.6	3.95	4.22	3.52	3.47	3.61	3.55	3.86
Foreclosure	5.33	5.16	5.78	6.02	5.91	6.3	6.28	6.09	5.81	5.58	5.41	5.7
Real Estate Owned	9.49	10.15	10.26	9.89	9.55	9.05	9.69	9.49	9.72	9.51	9.9	9.79
Total CMBS Del.	19.16	20.90	21.64	22.65	22.86	22.89	24.57	23.84	23.88	23.35	23.63	23.57
Current	774.77	801.98	787.06	747.75	735.30	730.10	744.77	746.37	736.45	742.26	754.94	759.27
Total CMBS	793.93	822.88	808.71	770.40	758.16	753.00	769.34	770.20	760.33	765.62	778.57	782.84
Delinquency %	2.41	2.54	2.68	2.94	3.02	3.04	3.19	3.09	3.14	3.05	3.04	3.01

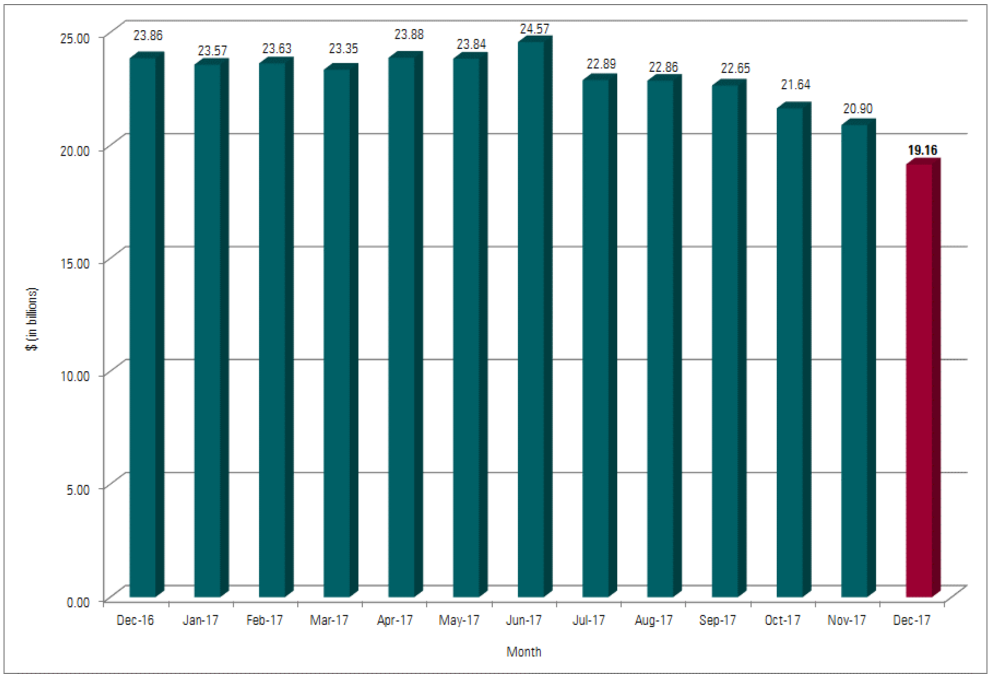
Source: Morningstar Credit Ratings, LLC

Our unpaid principal balance available for review includes the All Deals, Agency, and Canadian portfolios as identified on our website, www.morningstarcreditratings.com, a representation of all CMBS data collected by Morningstar monthly.

Newly delinquent loans include the $124.1 million Metropolitan Square loan, 39.6% of WBCMT 2005-C21, which was unable to pay off at its extended maturity date in August 2017. Since the modification in 2012, the property, a 987,300-square-foot office building in downtown St. Louis, has seen its cash flow continue to fall. At the end of 2016, the latest full-year data available, cash flow was 22.5% below the 2013 cash flow, and the chances that the loan would pay off were slim. The loan was transferred back to the special servicer in June and was reappraised for only $52.1 million, down 42% from the appraised value in 2012 and down 69% from the at-issuance appraisal. With the property's poor performance, another modification may be infeasible; therefore, we expect a loss of $78.6 million, once the loan is liquidated.

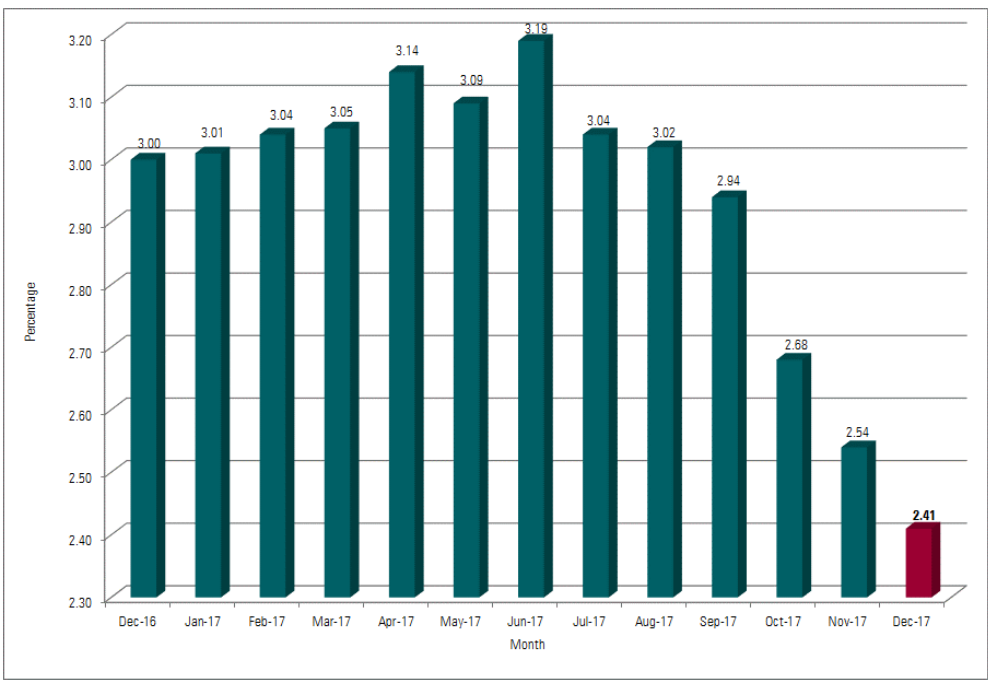
Separately, the $66.6 million Fashion Outlets of Las Vegas loan, 6.9% of COMM 2012-CR4, defaulted on its November 2017 maturity date and is the largest newly delinquent postcrisis loan. The servicer reported a March 2017 occupancy rate of only 69.0%, and year-end 2016 cash flow of $6.1 million in 2016, down 24.7% from issuance. The 375,722-square-foot outlet center in Primm, Nevada, lost Neiman Marcus' Last Call in 2016, and the *Las Vegas Review-Journal* reported that there were 30 vacant storefronts in December 2017. However, H&M leased the vacant Last Call space and opened in May 2017, which may restore some of the property's lost cash flow, but the year-end 2017 servicer data hasn't been released yet for the loan. Consequently, we consider a modification to be likely, as the borrower seeks time to backfill other spaces. We reduced our property value to $73.4 million, down from $125.0 million at issuance, which suggests a 90.8% loan-to-value ratio.

Chart 1 – Monthly CMBS Delinquency by Balance



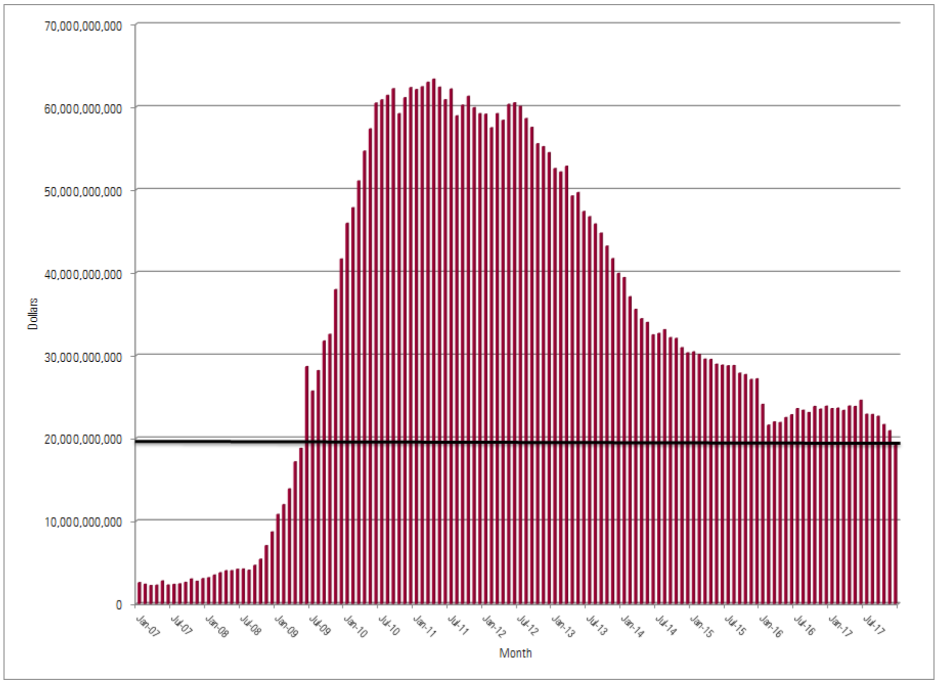
Source: Morningstar Credit Ratings, LLC

Chart 2 – Monthly CMBS Delinquency by Percentage



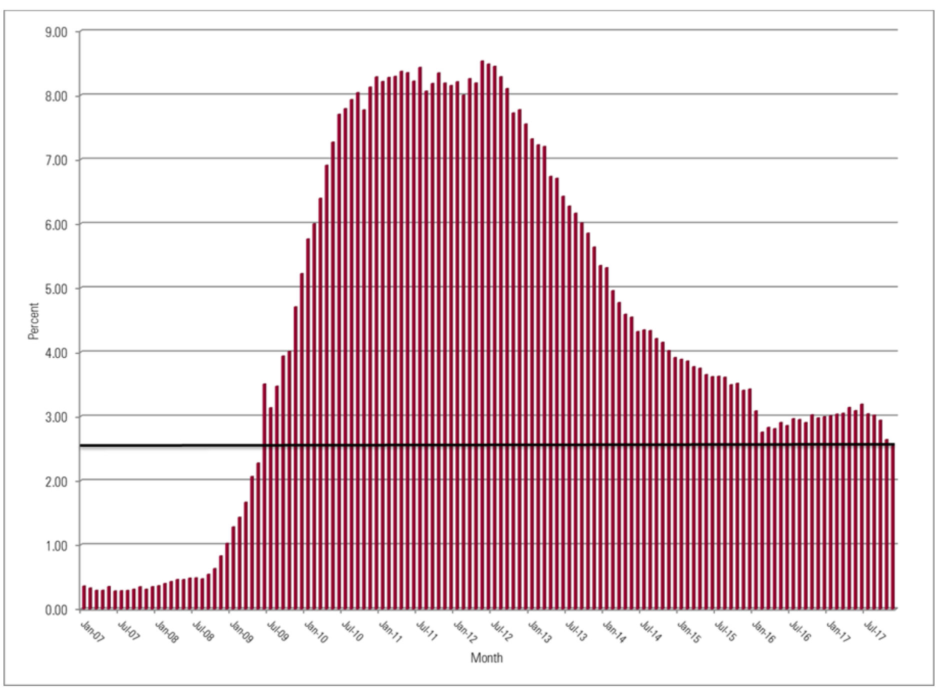
Source: Morningstar Credit Ratings, LLC

Chart 3 – Historical Monthly CMBS Delinquency by Unpaid Balance



Source: Morningstar Credit Ratings, LLC

Chart 4 – Historical Monthly CMBS Delinquency by Percentage



Source: Morningstar Credit Ratings, LLC

Property Type

Compared with year-ago levels, the office sector saw the largest decline in delinquent balance, tumbling $1.84 billion, or 21.5%, as liquidations have far outpaced newly delinquent loans. Separately, hotels saw the largest percentage decline in the balance of delinquent loans, dropping 24.5% from December 2016, primarily because of liquidations and payoffs exceeding newly delinquent loans. By dollar amount, the other three major property types exhibit the following activity year over year:

- Retail loan delinquency tumbled by $1.59 billion, or 18.2%, from $8.74 billion one year ago, because more loans were either liquidated or resolved than were replaced with newly delinquent loans.
- Industrial loan delinquency eased by $142.6 million, or 13.2%, from $1.08 billion one year ago.
- Multifamily loan delinquency is down by $269.1 million, or 17.7%, from $1.52 billion one year ago.

Table 2 – Monthly Delinquency by Property Type

Property Type	$ Current Balance	# Loans	% of CMBS Universe	% of CMBS Delinq.	% of Property Type
Healthcare	71,500,880	5	0.01	0.37	1.77
Hotel	1,759,682,764	96	0.22	9.19	2.48
Industrial	934,087,128	58	0.12	4.88	4.44
Multifamily	1,253,975,145	261	0.16	6.55	0.32
Office	6,717,737,908	314	0.85	35.07	5.48
Other	1,274,219,845	71	0.16	6.65	2.15
Retail	7,145,686,932	554	0.90	37.30	5.67
Total	19,156,890,602	1,359	2.41	100.00	

Figures may not sum to totals because they are rounded.

Source: Morningstar Credit Ratings, LLC

Table 3 – Trailing 12-Month Delinquency by Property Type (as a Percentage of Property Type Balance)

Property Type	Dec-17	Nov-17	Oct-17	Sep-17	Aug-17	Jul-17	Jun-17	May-17	Apr-17	Mar-17	Feb-17	Jan-17
Healthcare	1.77	2.05	2.05	2.08	2.08	2.08	2.04	2.03	2.04	2.03	2.01	1.98
Hotel	2.48	2.71	3.01	3.50	3.27	3.61	3.30	3.31	3.17	3.49	2.99	3.00
Industrial	4.44	4.62	4.89	5.29	5.07	5.47	5.68	5.69	5.63	5.56	4.88	4.91
Multifamily	0.32	0.45	0.42	0.45	0.48	0.43	0.61	0.46	0.42	0.43	0.50	0.56
Office	5.48	5.49	6.18	6.42	6.78	6.71	6.75	6.60	7.20	6.61	6.71	6.33
Other	2.15	2.23	2.39	2.60	2.69	3.14	3.71	3.30	3.79	3.35	3.01	2.76
Retail	5.67	6.12	6.12	6.37	6.45	6.37	6.32	6.34	5.91	5.72	5.52	5.58

Source: Morningstar Credit Ratings, LLC

Geography

- The top three states ranked by delinquency exposure, Virginia, California, and Ohio, accounted for a combined 20.3% of CMBS delinquencies through December. Virginia has a high 9.7% delinquency rate primarily because of the weak office market near Washington, D.C.
- The 10 largest states by delinquent unpaid principal balance reflect 47.9% of CMBS delinquency, while the 10 largest states by active CMBS exposure reflect 55.5% of the CMBS universe.
- The 10 largest metropolitan statistical areas by delinquent unpaid principal balance reflect 32.3% of CMBS delinquency, while the 10 largest MSAs by active CMBS exposure reflect 35.3% of the CMBS universe. Washington, D.C. and Chicago have been among the weakest metropolitan statistical areas for the past two years, and we expect this trend to continue, as their suburban office markets underperform.

Table 4 - Delinquency by State

State	$ Current Balance	# Loans	% of CMBS Universe	% of CMBS Delinq.	% of State Exposure
Virginia	1,856,032,796	68	0.23	9.69	7.38
California	1,097,411,184	61	0.14	5.73	1.11
Ohio	941,919,089	80	0.12	4.92	5.13
New York	917,291,038	69	0.12	4.79	0.92
Texas	841,769,284	118	0.11	4.39	1.18
Illinois	822,276,749	87	0.10	4.29	3.34
Florida	791,332,998	73	0.10	4.13	1.76
Pennsylvania	740,216,366	48	0.09	3.86	3.80
Missouri	592,369,384	20	0.07	3.09	7.72
Arizona	568,401,957	40	0.07	2.97	3.69
Total	9,169,020,845	664	1.15	47.86	

Source: Morningstar Credit Ratings, LLC

Table 5 – Delinquency by MSA

MSA	$ Current Balance	# Loans	% of CMBS Universe	% of CMBS Delinq.	% of Total MSA
Washington, D.C.	2,179,873,017	43	0.27	11.38	7.11
Chicago	682,679,309	69	0.09	3.56	3.31
St Louis	585,634,455	16	0.07	3.06	12.44
Las Vegas	487,617,886	29	0.06	2.55	4.16
Philadelphia	446,888,136	32	0.06	2.33	3.22
New York City	413,514,264	27	0.05	2.16	0.48
Phoenix	394,655,040	29	0.05	2.06	3.30
Detroit	370,171,102	19	0.05	1.93	3.95
Cleveland	310,580,647	26	0.04	1.62	7.07
Atlanta	305,923,244	24	0.04	1.60	1.70
Total	6,177,537,100	314	0.78	32.25	

Source: Morningstar Credit Ratings, LLC

Delinquency by Vintage

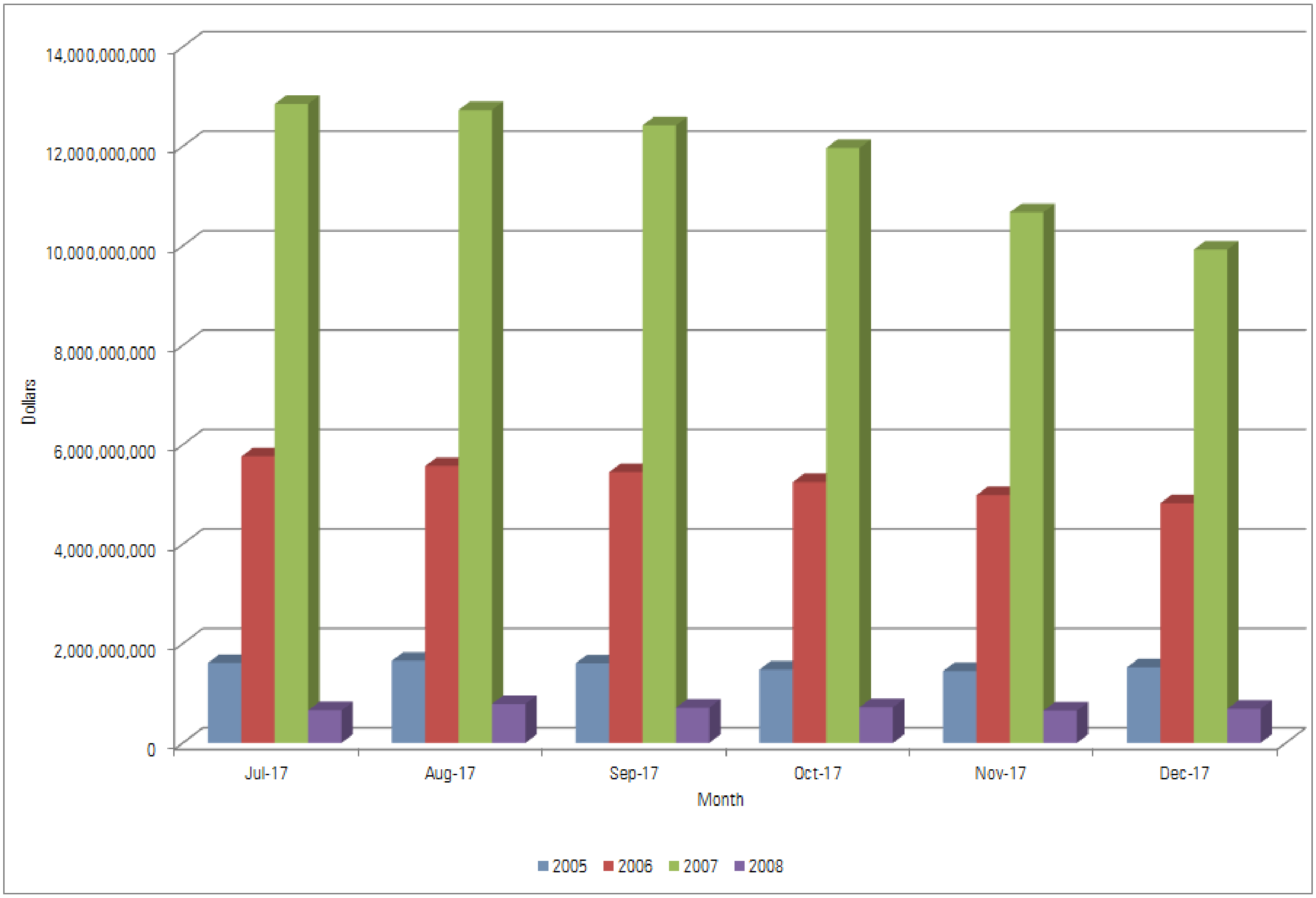
- While legacy CMBS now accounts for less than 5.3% of the overall universe, delinquencies from deals issued before 2010 represent 90.8% of all delinquencies by balance.
- Comparatively, delinquencies from deals issued from 2010 through 2017 contribute 9.2% of all delinquencies and represent 0.2% of the CMBS universe.

Table 6 - Delinquency by Year of Issuance: Top 10 Years

Year	$ Total Year	# Loans	% of CMBS Universe	% of CMBS Delinq.
2007 Total	9,923,078,030	613	1.25	51.80
2006 Total	4,821,486,788	265	0.61	25.17
2005 Total	1,519,259,916	79	0.19	7.93
2008 Total	685,640,531	45	0.09	3.58
2014 Total	522,854,232	63	0.07	2.73
2013 Total	358,695,374	42	0.05	1.87
2015 Total	288,208,940	45	0.04	1.50
2012 Total	275,007,522	18	0.03	1.44
2004 Total	236,952,534	23	0.03	1.24
2016 Total	108,536,583	61	0.01	0.57
Top 10 Totals	18,739,720,450	1,254	2.37	97.83

Source: Morningstar Credit Ratings, LLC

Chart 5 – Monthly Delinquent Unpaid Balance for 2005-08 Vintage Transactions



Source: Morningstar Credit Ratings, LLC

Special-Servicing Exposure

The special-servicing unpaid principal balance fell to $23.56 billion, down $932.0 million from November, and the percentage of loans in special servicing fell to 2.97%, the lowest since April 2009, when it registered 2.95%. More than half of the transferred loans in December, $218.5 million, were from postcrisis vintages, the largest of which is the $62.6 million MTP Hospitality Northeast Portfolio loan, 20.3% of JPMCC 2014-FL6. We believe the loan was transferred to the special servicer because cash flow did not support the required debt yield test to extend the floating-rate loan. The net cash flow for six of the eight limited-service hotels in the portfolio was less than underwritten. We do not forecast a loss, as we believe our $64.4 million valuation will cover the trust debt balance, but not the $32.1 mezzanine loan outside the trust. It is likely that the borrower will pay down the loan to meet the debt yield and negotiate a workout with the mezzanine lender.

The $33.2 million Crown Ridge at Fair Oaks loan in MSC 2005-HQ7 was the largest legacy-era loan transferred. Backed by a 191,237-square-foot Class A office building in Fairfax, Virginia, the loan was transferred to the special servicer in November for imminent default on its extended December 2017 maturity date. Although the servicer reported an occupancy rate of 86.0% in June 2017, the latest available, with improved cash flow, CoStar Group, Inc. reported that about 29.0% of the space was available for lease as of January 2018. The availability and costs involved in backfilling the space likely made a refinance of the loan more challenging. The borrower informed the servicer that it will cooperate with foreclosure, which increases the risk of a realized loss. Morningstar valued the property at $29.4 million, or $154 per square foot, using a discounted cash flow approach, assuming the average in-place rent of $26.00 per square foot, stabilized occupancy of 75.0%, a reversion capitalization rate of 6.6%, and a discount rate of 9.6%. Our value suggests a loss of roughly $3.9 million.

In Table 7, we summarize newly transferred specially serviced loans over the past three months. Most of the transferred loans were securitized in 2007, reflecting the difficulty that many borrowers face in refinancing.

Table 7 - Monthly Special-Servicing Transfers by Vintage Over the Past Three Months

October-17			November-17			December-17		
Year Issued	# of Loans	Current Balance ($)	Year Issued	# of Loans	Current Balance ($)	Year Issued	# of Loans	Current Balance ($)
2016	2	511,697,224	2016	4	27,516,108	2017	1	1,935,272
2015	3	15,572,116	2015	2	18,820,321	2015	3	14,961,637
2014	2	26,625,832	2014	5	127,377,294	2014	3	95,683,497
2013	1	6,427,193	2013	3	62,423,916	2013	3	69,642,911
2008	7	70,172,721	2012	1	35,199,855	2011	1	36,255,449
2007	17	142,781,546	2008	4	127,276,421	2008	2	5,245,617
2006	2	41,535,028	2007	15	163,261,549	2007	7	33,608,664
Total	34	814,811,660	2006	1	157,542,842	2006	1	9,152,797
			Total	35	719,418,306	2005	2	50,053,189
						2004	1	2,163,594
						1998	6	9631567
						Total	30	328,334,195

Source: Morningstar Credit Ratings, LLC

Table 8 – Trailing 12-Month Special-Servicing Exposure

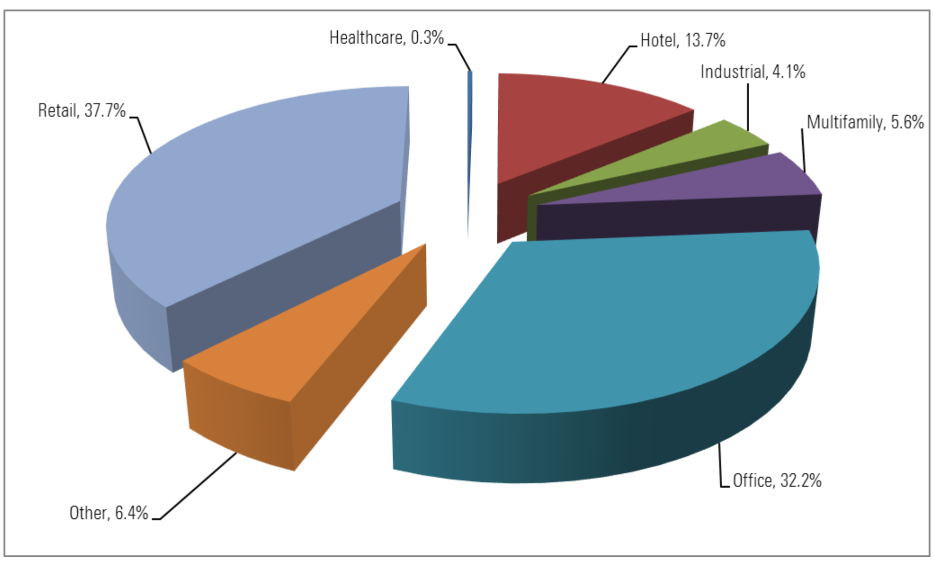
	All Specially Serviced		Loans Current but with the Special Servicer		Delinquent and Specially Serviced	
Month	$ UPB*	% of CMBS	$ UPB*	% of CMBS	$ UPB*	% of CMBS
Dec-17	23.56	2.97	4.99	0.63	18.56	2.34
Nov-17	24.49	3.01	4.74	0.58	19.75	2.42
Oct-17	24.70	3.08	3.86	0.51	21.81	2.86
Sep-17	25.67	3.37	3.86	0.51	21.81	2.86
Aug-17	25.54	3.40	3.63	0.48	21.91	2.92
Jul-17	26.22	3.51	4.03	0.54	22.19	2.97
Jun-17	26.74	3.51	3.07	0.40	23.67	3.10
May-17	26.95	3.53	4.09	0.54	22.86	2.99
Apr-17	27.30	3.62	4.83	0.64	22.48	2.98
Mar-17	27.72	3.65	5.23	0.69	22.49	2.96
Feb-17	28.07	3.64	5.56	0.72	22.51	2.92
Jan-17	27.76	3.58	5.43	0.70	22.33	2.88
Dec-16	28.49	3.61	5.71	0.72	22.78	2.89

*Figures in billions.

Source: Morningstar Credit Ratings, LLC

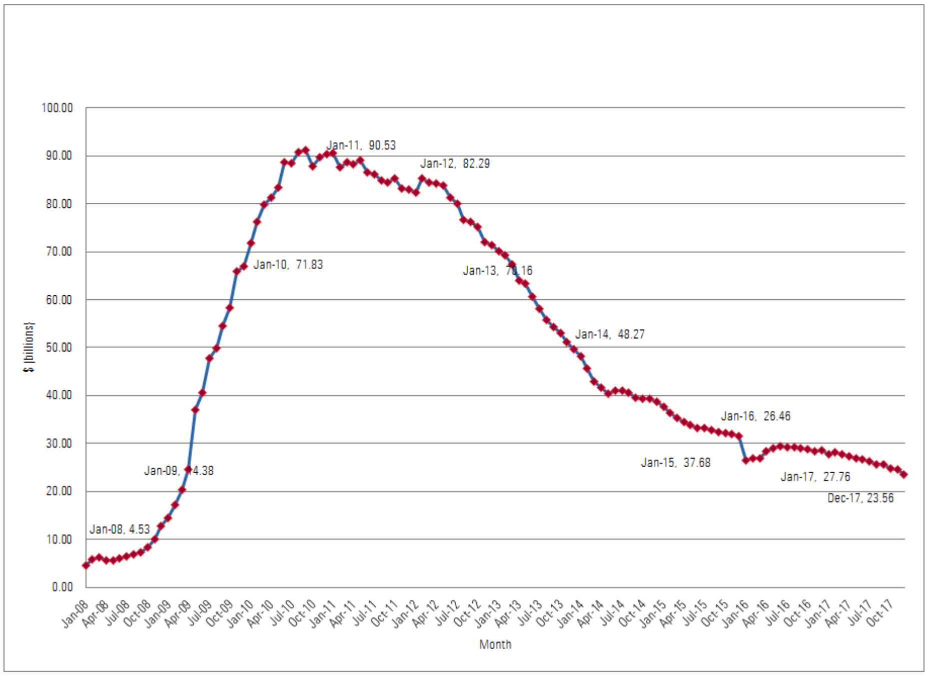
Special-servicing exposure by property type has been consistently weighted to office and retail collateral, at a combined 70.0% of all specially serviced loans, relatively unchanged from 69.8% in November. Property-type exposure for specially serviced loans is reflected in Chart 6 below. Special-servicing exposure by unpaid principal balance and percentage are shown in Charts 7 and 8.

Chart 6 – Special-Servicing Exposure by Property Type



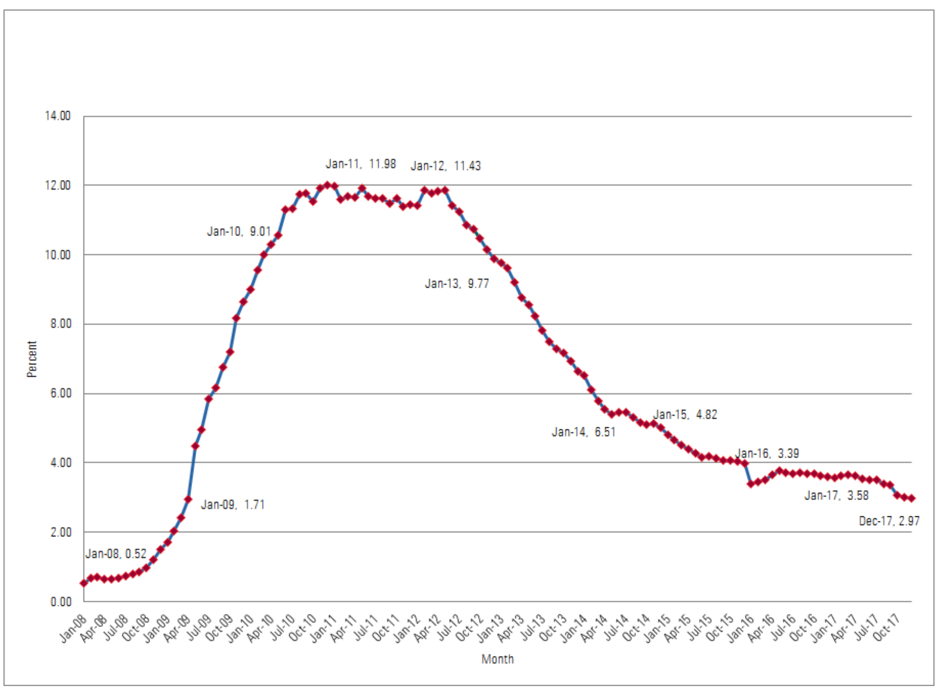
Source: Morningstar Credit Ratings, LLC

Chart 7 – Special-Servicing Exposure by Unpaid Principal Balance ($ Billions): January 2007 Through December 2017



Source: Morningstar Credit Ratings, LLC

Chart 8 – Special-Servicing Exposure as a Percentage of Outstanding CMBS: January 2007 Through December 2017



Source: Morningstar Credit Ratings, LLC

Monthly CMBS Liquidations

December's weighted average loss severity climbed to 56.2%, up 680 basis points percentage points from November, and is the highest severity rate since March 2016 when it reached 59.0%. In 2017, $13.78 billion of loans were liquidated with a loss, with a weighted average loss severity of 40.5%, compared with a 42.5% severity on $11.47 billion in loans that were written off in 2016.

Retail loans incurred the heaviest total loss among major property types in December with $261.6 million in losses, resulting in a 62.2% severity, and include the $92.4 million Rockvale Square loan, which matured in May 2017. Cash flow at the 539,661-square-foot outlet center in Lancaster, Pennsylvania, never achieved underwritten levels, as nearby competition and lack of capital investment led to declining sales and occupancy. Tanger Outlets, less than two miles from the property, expanded in 2017 and has become the dominant outlet shopping destination in the area. Further, unfavorable metrics at issuance, including an 80.0% LTV and a 7.9% debt yield, as well as no amortization hindered the loan's ability to pay off by its May 2017 maturity date. The property was sold for $35.9 million, a 68.9% decline from the original appraised value of $115.5 million. The loan, which represented 23.1% of the balance behind WBCMT 2007-C32 before disposal, took a $62.6 million loss.

Table 9 – Monthly CMBS Liquidations and Average Loss Severity, January 2015 to December 2017

Month	$ Balance Before Loss	$ Loss Amount	% Average Loss
Dec-17	1,122,360,172	631,101,228	56.23
Nov-17	998,919,284	493,702,244	49.42
Oct-17	677,889,515	232,508,369	34.30
Sep-17	533,527,436	209,368,904	39.24
Aug-17	610,858,538	228,491,708	37.41
Jul-17	1,560,763,756	823,178,893	52.74
Jun-17	1,450,209,480	522,821,516	36.05
May-17	1,259,755,193	282,252,323	22.41
Apr-17	1,018,377,414	323,886,693	31.80
Mar-17	1,991,883,471	518,983,136	26.05
Feb-17	1,189,337,215	506,872,321	42.62
Jan-17	1,568,165,195	854,266,015	54.48
Dec-16	743,282,289	280,605,800	37.75
Nov-16	1,020,756,182	402,143,292	39.40
Oct-16	945,404,049	360,450,297	38.13
Sep-16	767,162,029	346,084,968	45.11
Aug-16	792,898,116	407,117,999	51.35
Jul-16	1,028,830,036	286,623,469	27.86
Jun-16	886,380,677	445,845,542	50.30
May-16	1,049,586,866	301,750,088	28.75
Apr-16	726,273,080	172,920,252	23.81
Mar-16	548,936,624	323,666,454	58.96
Feb-16	716,846,065	253,359,492	35.34
Jan-16	2,502,793,546	1,504,021,982	60.09
Dec-15	1,460,536,291	664,357,203	45.49
Nov-15	1,004,942,109	434,835,770	43.27
Oct-15	976,545,641	393,711,503	40.32
Sep-15	1,152,974,804	467,773,814	40.57
Aug-15	1,596,809,715	439,504,449	27.52
Jul-15	821,144,366	278,092,571	33.87
Jun-15	1,083,651,758	411,484,121	37.97
May-15	1,678,736,600	607,412,827	36.18
Apr-15	1,163,309,460	190,895,206	16.41
Mar-15	863,123,853	257,602,979	29.85
Feb-15	642,263,554	197,938,633	30.82
Jan-15	1,290,649,825	487,544,313	37.78

Source: Morningstar Credit Ratings, LLC

Table 10 – Average Loss Severities by Property Type for December: All Liquidated Loans

Property Type	$ Balance Before Loss	$ Loss Amount	% Loss	# of Loans
Hotel	113,235,590	88,120,811	77.8	6
Industrial	87,795,006	39,075,482	44.5	6
Multifamily	71,187,844	37,436,946	52.6	6
Office	368,492,273	191,310,371	51.9	27
Other	61,187,374	13,569,256	22.2	4
Retail	420,462,085	261,588,363	62.2	28
Total	1,122,360,172	631,101,228	56.2	77

Source: Morningstar Credit Ratings, LLC

Table 11 – Average Loss Severities by Property Type for 2017: All Liquidated Loans

Property Type	$ Balance Before Loss	$ Loss Amount	% Loss	# of Loans
Hotel	1,059,396,997	534,225,030	50.4	54
Industrial	418,326,240	221,410,182	52.9	40
Multifamily	836,818,162	191,778,239	22.9	76
Office	6,466,947,407	2,286,074,190	35.4	247
Other	997,438,061	189,586,321	19.0	47
Retail	3,999,976,929	2,154,491,724	53.9	291
Total	13,778,903,796	5,577,565,687	40.5	755

Note: Totals may not add up to Table 9 year-to-date 2017 totals because of prior-month adjustments.

Source: Morningstar Credit Ratings, LLC

Morningstar Credit Ratings, LLC

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