CMBS Research

Delinquency Report

October 2017 Remittance

Executive Summary

- The delinquency rate in October improved for the fourth consecutive month, tumbling 26 basis points to 2.68%, as the delinquent unpaid balance dropped 4.5%, while the balance of the universe of securitized commercial mortgages rose above $800.00 billion for the first time since 2009.
- The delinquency rate is down 35 basis points from a year ago, and it's down 33 basis points since the beginning of the year.
- With steady new issuance volume pushing the outstanding balance of CMBS loans higher and special servicers actively resolving or liquidating assets, Morningstar Credit Ratings, LLC believes the delinquency rate will hold below 3.0% after reaching an 18-month high of 3.19% in June.
- By year-end, an additional $2.37 billion of loans packaged in commercial mortgage-backed securities will mature. We believe that the year-to-date payoff rate, which stands at 72.4% for the year through October, will stay above 70% through year-end, as there are fewer CMBS loans left to pay off and we expect continued non-CMBS financing for loans with weaker metrics.
- The CMBS delinquent unpaid balance sunk to a 20-month low of $21.64 billion, down $1.01 billion from the prior month, and down $2.19 billion, or 9.2%, from the year-earlier period.
- The volume of newly delinquent loans fell below $1.00 billion for the first time since July 2014, registering $685.0 million, down from $1.49 billion the prior month.
- While legacy CMBS now accounts for less than 7.0% of the CMBS universe, delinquencies from deals issued before 2010 represent 91.6% of all delinquencies by balance.
- The special servicing rate fell for the third consecutive month, dropping to 3.08%, down 29 basis points from September. Since the beginning of the year, specially serviced postcrisis loans have more than doubled to $3.30 billion, up from $1.53 billion.
- Liquidation volume remained subdued, coming in below $700 million for the third consecutive month as the weighted average loss severity improved to 34.3% from 39.2% in September.

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

Category	Oct-17	Sep-17	Aug-17	Jul-17	Jun-17	May-17	Apr-17	Mar-17	Feb-17	Jan-17	Dec-16	Nov-16
30-Day	1.66	2.50	2.72	2.24	3.22	3.07	4.03	3.41	3.47	3.08	2.88	2.69
60-Day	0.76	0.98	1.08	1.37	1.16	1.68	0.85	1.25	1.30	1.15	0.80	1.54
90-Day	3.19	3.26	3.6	3.95	4.22	3.52	3.47	3.61	3.55	3.86	4.25	5.41
Foreclosure	5.78	6.02	5.91	6.3	6.28	6.09	5.81	5.58	5.41	5.7	5.56	3.41
Real Estate Owned	10.26	9.89	9.55	9.05	9.69	9.49	9.72	9.51	9.9	9.79	10.38	10.45
Total CMBS Del.	21.64	22.65	22.86	22.89	24.57	23.84	23.88	23.35	23.63	23.57	23.86	23.50
Current	787.06	747.75	735.30	730.10	744.77	746.37	736.45	742.26	754.94	759.27	772.52	766.06
Total CMBS	808.71	770.40	758.16	753.00	769.34	770.20	760.33	765.62	778.57	782.84	796.38	789.57
Delinquency %	2.68	2.94	3.02	3.04	3.19	3.09	3.14	3.05	3.04	3.01	3.00	2.98

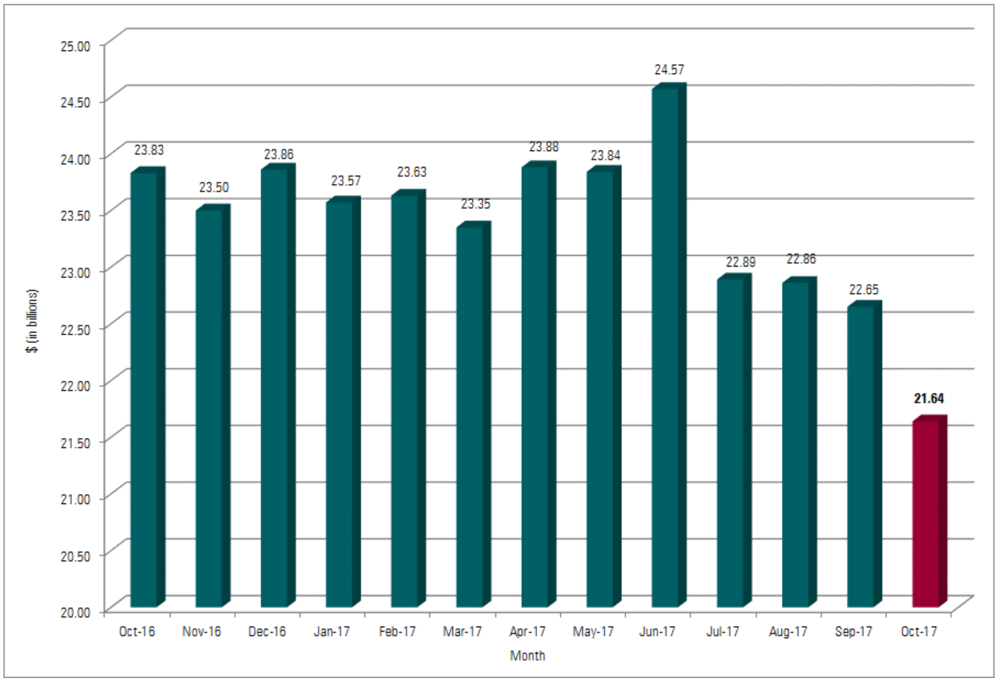
Source: Morningstar Credit Ratings, LLC

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 $80.0 million Bangor Mall loan, which is 26.6% of MSC 2007-IQ16. Backed by a 534,919-square-foot portion of a regional mall in Bangor, Maine, the loan was transferred to the special servicer for maturity default even though the cash flow remains relatively stable. The loss of the Macy's anchor and the lack of amortization over the loan term likely contributed to the default. The loan's sponsor, Simon Property Group, may seek to modify the loan; however, this could still result in a longer-term loss if there is an A/B note split or Simon writes down the mortgage. Our valuation of $66.6 million is less than the loan balance and results in a loan-to-value ratio, or LTV, of 120.1%. If the property is taken back in foreclosure, there will likely be a loss when the asset is liquidated. Our $66.6 million value is based on a discounted cash flow analysis, assuming the property has stabilized occupancy of 80% at the in-place rent. We included leasing costs assuming a renewal probability of 65%. We used a 10.0% capitalization rate on our terminal net cash flow of $8.8 million and a 13.0% discount rate on $166.0 million in net cash flow over a 10-year period.

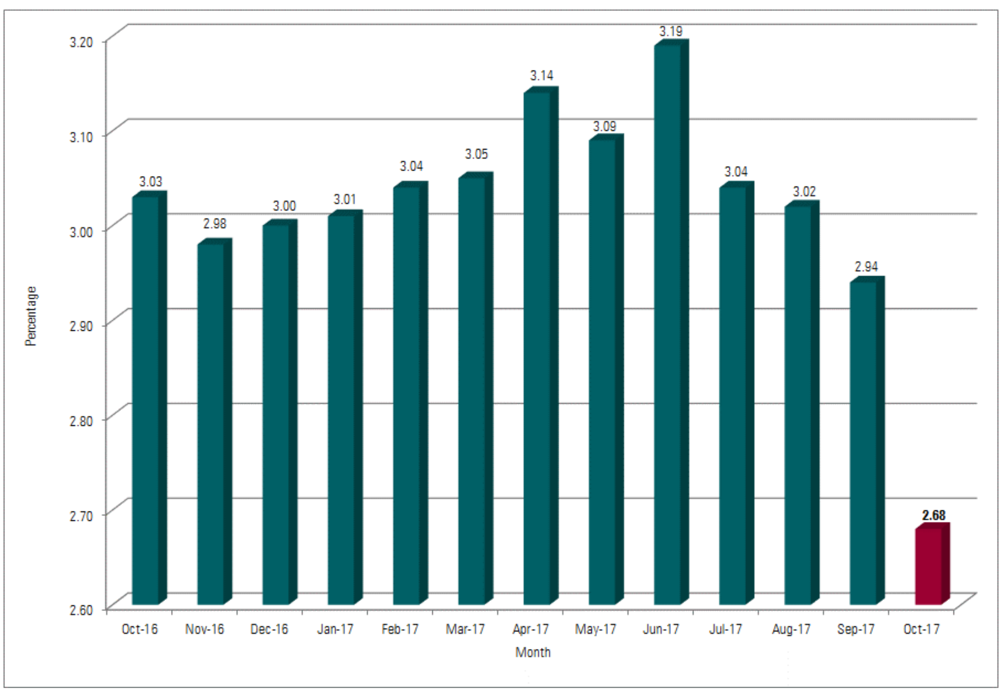
Other newly delinquent loans include 125 commercial mortgages totaling $311.7 million securitized in postcrisis deals. We reduced our value on the Square 95 retail property south of Washington, D.C., because Gander Mountain vacated after filing for Chapter 11 bankruptcy protection. Gander Mountain occupied 50.8% of the 155,309-square-foot, two-tenant property, which backs a $24.8 million loan in COMM 2015-CR25. Based on our discounted cash flow analysis, we value the Woodbridge, Virginia, property at $21.7 million, down 35.2% from $33.5 million at underwriting.

Chart 1 – Monthly CMBS Delinquency by Balance



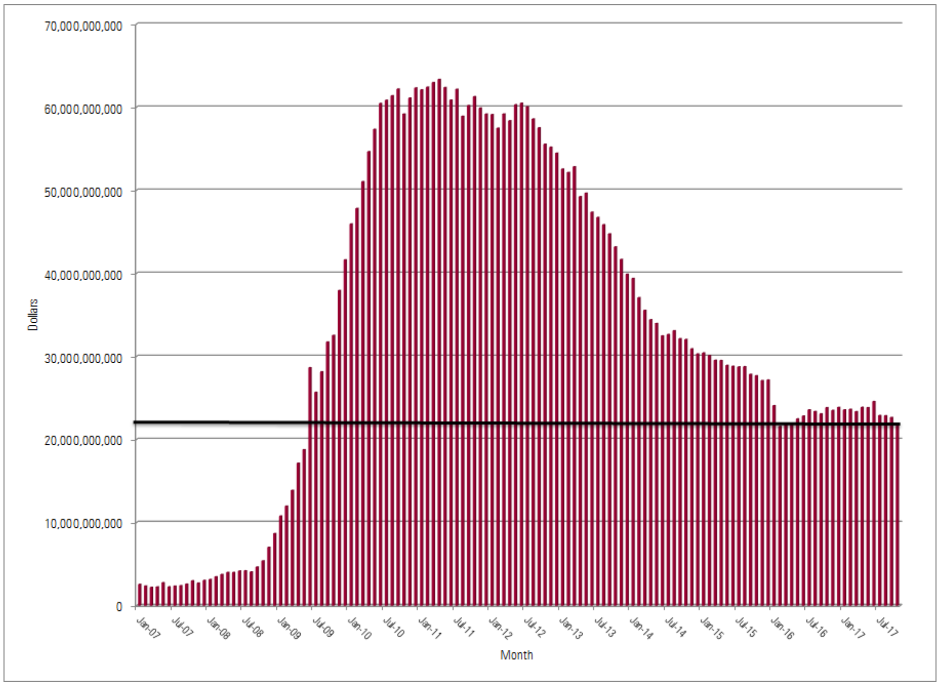
Source: Morningstar Credit Ratings, LLC

Chart 2 – Monthly CMBS Delinquency by Percentage



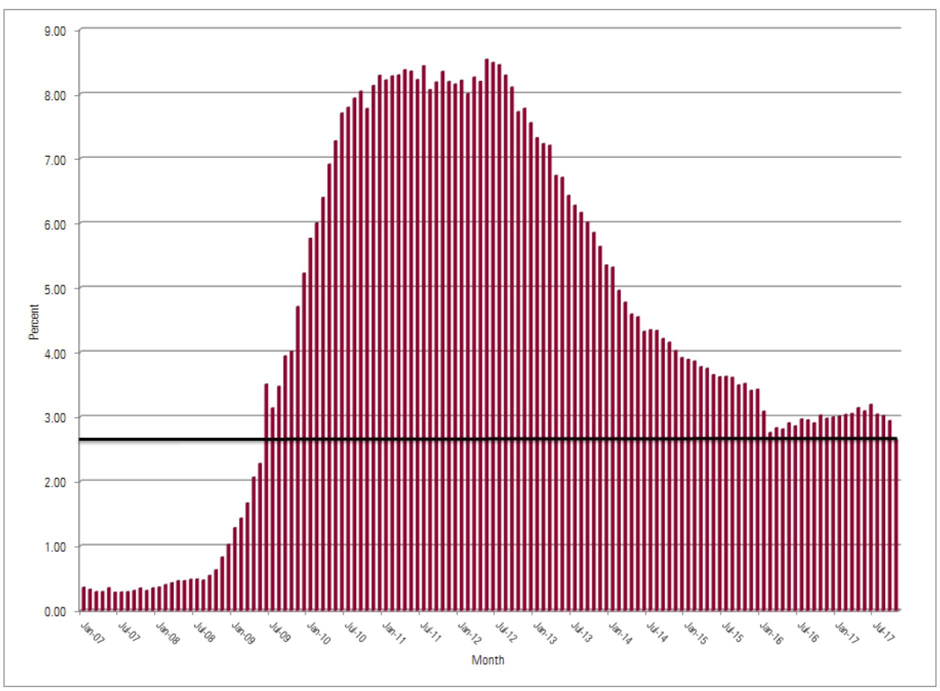
Source: Morningstar Credit Ratings, LLC

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, healthcare properties show the only deterioration, as the delinquent balance rose a scant 0.3%. Among the major property types, hotels showed the most improvement, with the delinquent unpaid balance dropping 12.6%, as the $242.9 million Hammons Hotel Portfolio loan in CGCMT 2015-GC33, GSMS 2015-GS1, CGCMT 2015-GC35, and GSMS 2015-GC34, returned to current status. Separately, retail registered the largest decline in delinquent balance, $831.2 million, as $3.67 billion in liquidations outpaced the balance of newly defaulted loans over the past 12 months.

- Hotel loan delinquency declined by $297.6 million, or 12.6%, from $2.36 billion one year ago.
- Industrial loan delinquency eased by $76.0 million, or 6.7%, from $1.14 billion one year ago.
- Multifamily loan delinquency improved by $142.1 million, or 7.7%, from $1.86 billion one year ago.
- Office loan delinquency fell by $586.1 million, or 7.4%, from $7.97 billion one year ago.
- Retail loan delinquency shrunk by $831.2 million, or 9.5%, from $8.74 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	87,600,236	6	0.01	0.40	2.05
Hotel	2,064,463,246	107	0.26	9.54	3.01
Industrial	1,062,584,421	68	0.13	4.91	4.89
Multifamily	1,715,138,769	276	0.21	7.92	0.42
Office	7,385,666,639	358	0.91	34.12	6.18
Other	1,420,446,255	87	0.18	6.56	2.39
Retail	7,907,906,210	625	0.98	36.54	6.12
Total	21,643,805,776	1,527	2.68	100.00	

Source: Morningstar Credit Ratings, LLC

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

Property Type	Oct-17	Sep-17	Aug-17	Jul-17	Jun-17	May-17	Apr-17	Mar-17	Feb-17	Jan-17	Dec-16	Nov-16
Healthcare	2.05	2.08	2.08	2.08	2.04	2.03	2.04	2.03	2.01	1.98	1.96	2.19
Hotel	3.01	3.50	3.27	3.61	3.30	3.31	3.17	3.49	2.99	3.00	2.99	3.23
Industrial	4.89	5.29	5.07	5.47	5.68	5.69	5.63	5.56	4.88	4.91	4.64	4.55
Multifamily	0.42	0.45	0.48	0.43	0.61	0.46	0.42	0.43	0.50	0.56	0.44	0.45
Office	6.18	6.42	6.78	6.71	6.75	6.60	7.20	6.61	6.71	6.33	6.24	6.02
Other	2.39	2.60	2.69	3.14	3.71	3.30	3.79	3.35	3.01	2.76	2.68	2.76
Retail	6.12	6.37	6.45	6.37	6.32	6.34	5.91	5.72	5.52	5.58	5.78	5.68

Source: Morningstar Credit Ratings, LLC

Geography

- The top three states ranked by delinquency exposure, Virginia, California, and Illinois, accounted for a combined 19.7% of CMBS delinquencies through October. Virginia has a high 7.6% delinquency rate primarily because of the weak office market near Washington, D.C.
- The 10 largest states by delinquent unpaid principal balance reflect 47.6% of CMBS delinquency, while the 10 largest states by active CMBS exposure reflect 55.9% of the CMBS universe.
- The 10 largest metropolitan statistical areas by delinquent unpaid principal balance reflect 30.3% of CMBS delinquency, while the 10 largest MSAs by active CMBS exposure reflect 35.0% of the CMBS universe. Across the 10 largest MSAs, Washington, D.C., Chicago, and Philadelphia report the highest delinquency rates as a percentage of all CMBS.

Table 4 - Delinquency by State

State	$ Current Balance	# Loans	% of CMBS Universe	% of CMBS Delinq.	% of State Exposure
Virginia	1,950,443,632	81	0.24	9.01	7.62
California	1,288,274,665	70	0.16	5.95	1.34
Illinois	1,024,587,298	88	0.13	4.73	4.25
Texas	1,006,563,081	145	0.12	4.65	1.38
New York	960,472,329	68	0.12	4.44	1.00
Ohio	919,452,057	83	0.11	4.25	5.19
Pennsylvania	890,739,367	56	0.11	4.12	4.54
Florida	873,210,982	81	0.11	4.03	1.89
New Jersey	718,237,606	36	0.09	3.32	4.04
Connecticut	670,740,834	29	0.08	3.10	8.77
Total	10,302,721,851	737	1.27	47.60	

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.	2,217,704,224	51	0.27	10.25	6.92
Chicago	851,399,472	68	0.11	3.93	4.20
Philadelphia	539,637,925	40	0.07	2.49	3.85
Las Vegas	485,270,040	32	0.06	2.24	4.53
St. Louis	461,985,268	15	0.06	2.13	10.24
Phoenix	439,186,332	42	0.05	2.03	3.45
Southwestern Connecticut	432,806,954	10	0.05	2.00	11.38
New York City	397,569,908	20	0.05	1.84	0.49
Dallas-Fort Worth	368,004,032	58	0.05	1.70	1.40
Detroit	353,948,999	23	0.04	1.64	3.91
Total	6,547,513,154	359	0.81	30.25	

Source: Morningstar Credit Ratings, LLC

Delinquency by Vintage

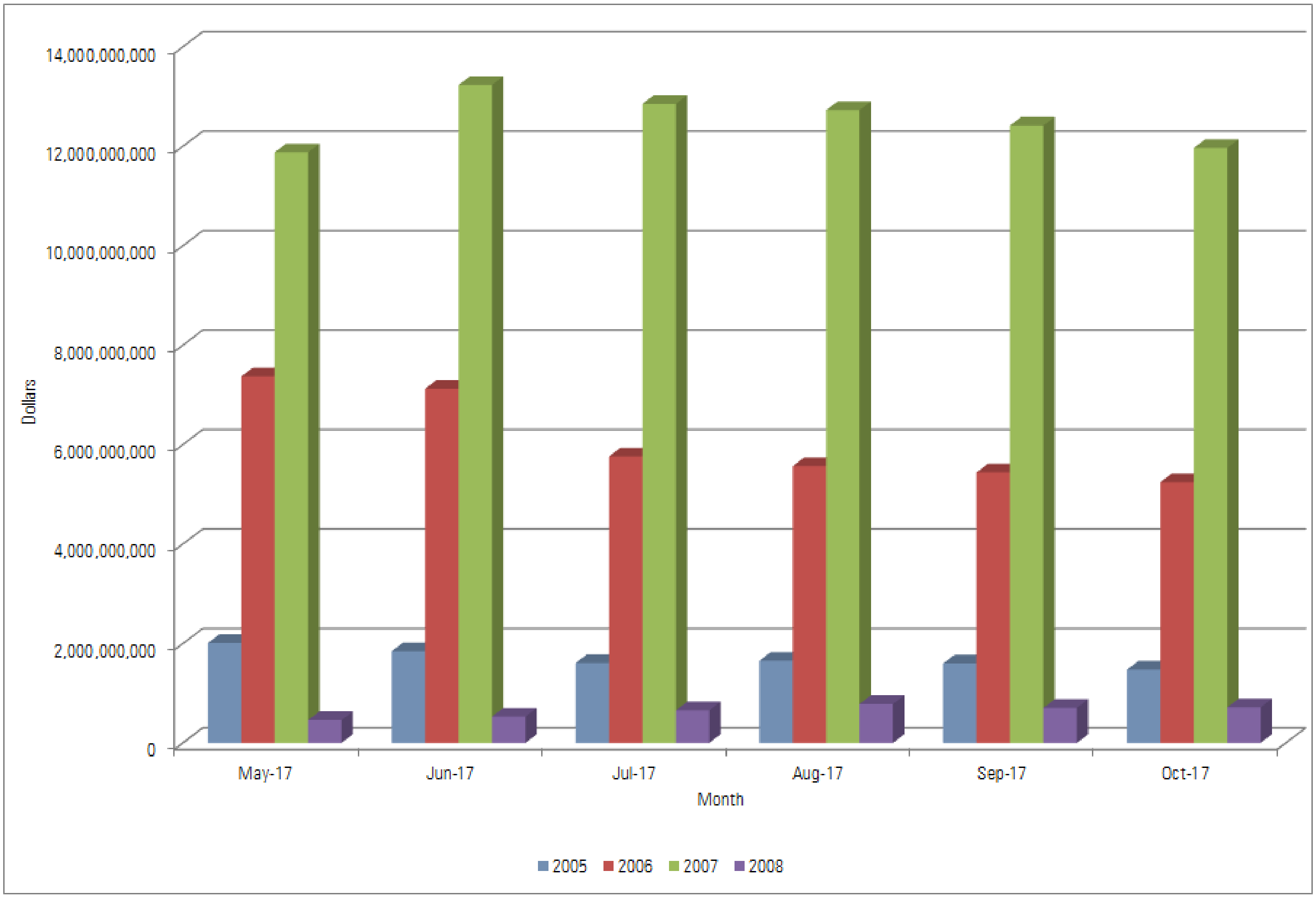
- While legacy CMBS now accounts for less than 7.0% of the overall universe, delinquencies from deals issued from 2005 through 2008 represent 89.7% of all delinquencies by balance.
- Comparatively, delinquencies from deals issued from 2012 through 2015 contribute 6.3% of all delinquencies and represent 0.2% of the CMBS universe.

Table 6 - Delinquency by Year of Issuance

Year	$ Total Year	# Loans	% of CMBS Universe	% of CMBS Delinq.
2007 Total	11,966,746,523	731	1.48	55.29
2006 Total	5,245,781,306	296	0.65	24.24
2005 Total	1,474,636,960	85	0.18	6.81
2008 Total	718,552,883	57	0.09	3.32
2014 Total	542,754,673	68	0.07	2.51
2013 Total	331,623,079	41	0.04	1.53
2015 Total	317,846,214	47	0.04	1.47
2004 Total	268,365,431	25	0.03	1.24
2012 Total	163,220,576	15	0.02	0.75
2001 Total	147,760,928	5	0.02	0.68
Total	21,177,288,573	1,370	2.62	97.84

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 $24.70 billion, down $973.0 million from September, and the percentage of loans in special servicing fell to 3.08%, the lowest since April 2009, when it registered 2.95%. Special-servicing transfers include eight postcrisis loans totaling $560.3 million, including the $506.1 million Toys 'R' Us loan, in the single-loan TRU 2016-TOYS deal. The loan was transferred to special servicing after Toys 'R' Us, Inc. filed for Chapter 11 bankruptcy protection in September. Toys 'R' Us indicated it will remain fully operational during the bankruptcy process, which we view positively, but we do not rule out the possibility of future asset sales or lease rejections. As online competition continues to threaten brick-and-mortar retailers, we are concerned with the company's negative sales trend over the last few years. However, we remain positive about the portfolio's geographic diversification and the long-term master lease with Toys 'R' Us, which extends well beyond the loan's maturity. In addition, the loan also has a low LTV of 58.3% based on the appraised value of $878.8 million at issuance, and the appraiser's dark value was $617.9 million, which suggests an 81.9% LTV. The loan will also continue to amortize, which will lower the leverage.

The $25.5 million 8585 South Yosemite Street loan in MLCFC 2007-9 was the largest legacy-era loan transferred. Backed by a 184,205-square-foot single-tenant retail property about 20 miles south of Denver, the loan was transferred to the special servicer in October for imminent maturity default. Sears' lease expires in February 2018, one month after the loan matures, and the space has been vacant since Sears closed its Great Indoors store in 2012. We value the property at $11.9 million, based on a go-dark analysis assuming two years to find a new tenant. Accordingly, we project a loss of about $13.6 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

August-17			**September-17**			**October-17**		
Year Issued	# of Loans	Current Balance ($)	Year Issued	# of Loans	Current Balance ($)	Year Issued	# of Loans	Current Balance ($)
2016	2	13,459,703	2016	1	6,776,121	2016	2	511,697,224
2014	5	200,704,193	2015	3	47,165,394	2015	3	15,572,116
2013	2	27,209,415	2014	3	39,621,018	2014	2	26,625,832
2012	5	58,843,072	2013	3	26,552,878	2013	1	6,427,193
2008	6	64,579,371	2012	5	255,181,153	2008	7	70,172,721
2007	37	356,569,555	2008	3	21,829,979	2007	17	142,781,546
2006	2	30,582,530	2007	27	411,242,104	2006	2	41,535,028
2005	1	11,095,328	2006	3	41,382,641	Total	34	814,811,660
Total	60	763,043,167	2005	1	8,437,773			
			Total	49	858,189,061			

Source: Morningstar Credit Ratings, LLC

Table 8 – Trailing 12-Month Special-Servicing Exposure

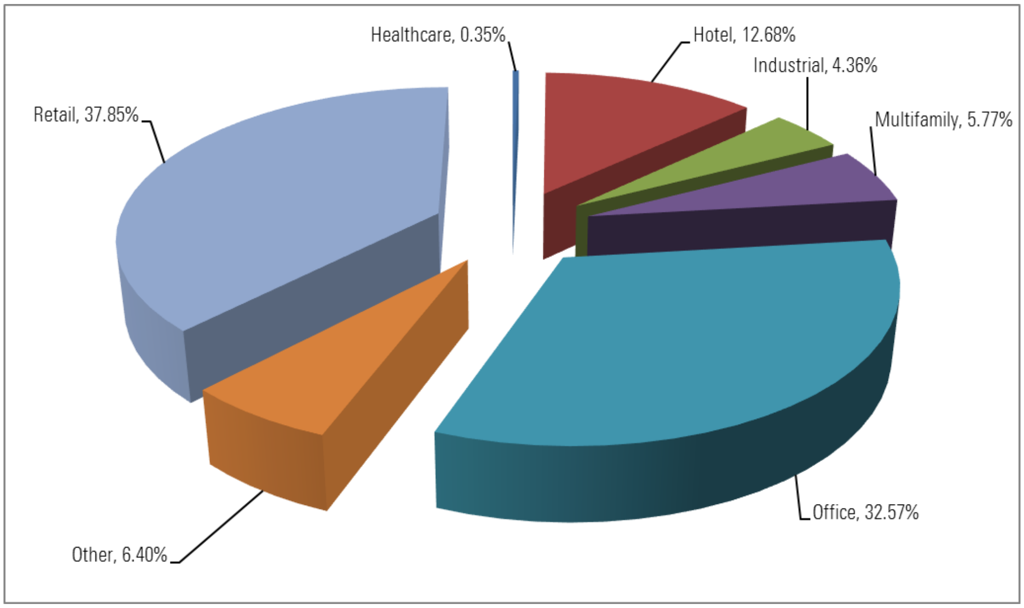
	All Specially Serviced		Loans Current but with the Special Servicer		Delinquent and Specially Serviced	
Month	$ UPB*	% of CMBS	$ UPB*	% of CMBS	$ UPB*	% of CMBS
Oct-17	24.70	3.08	3.86	0.51	21.81	2.86
Sep-17	25.67	3.37	3.86	0.51	21.81	2.86
Aug-17	25.54	3.40	3.63	0.48	21.91	2.92
Jul-17	26.22	3.51	4.03	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
Nov-16	28.34	3.62	5.84	0.75	22.50	2.87
Oct-16	28.75	3.68	5.93	0.76	22.82	2.92

*Figures in billions.

Source: Morningstar Credit Ratings, LLC

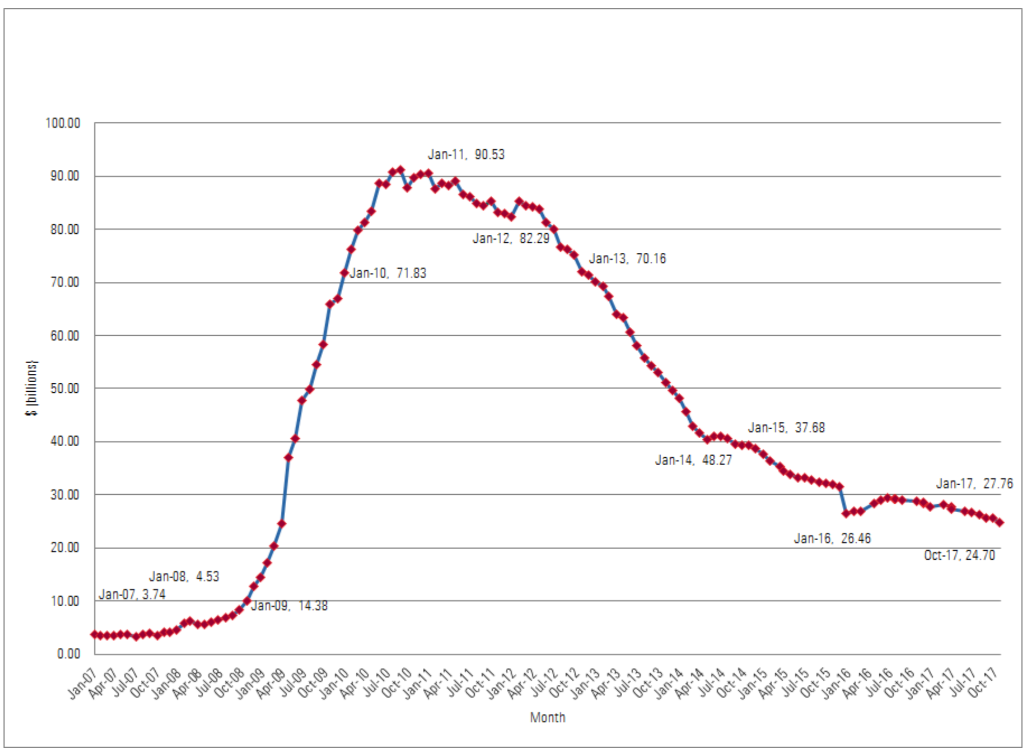
Special-servicing exposure by property type is heavily weighted to office and retail collateral at a combined 70.4% of all specially serviced loans. Property-type exposure for specially serviced loans is reflected in Chart 6 below. Special-servicing exposure by unpaid principal balance and percentage are shown in Charts 7 and 8.

Chart 6 – Special-Servicing Exposure by Property Type



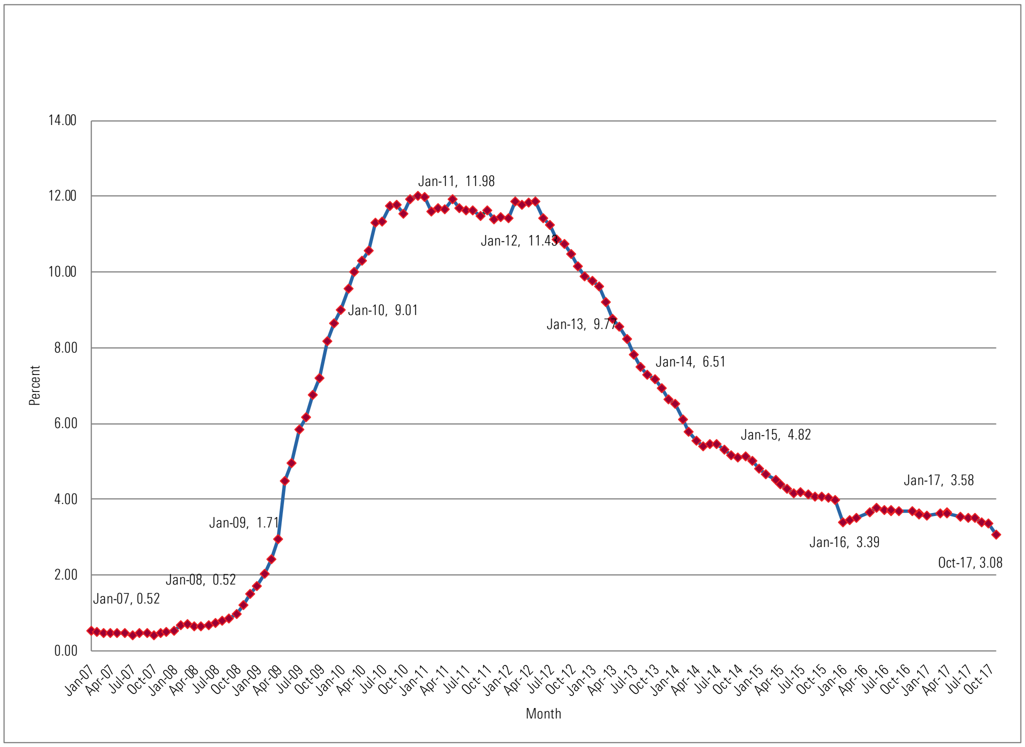
Source: Morningstar Credit Ratings, LLC

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



Source: Morningstar Credit Ratings, LLC

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



Source: Morningstar Credit Ratings, LLC

Monthly CMBS Liquidations

Liquidation volume remained below $700 million for the third consecutive month, as 39 loans totaling $677.9 million were disposed in October. The overall loss severity remained below 40% for the third straight month as well, dropping to 34.3% from 39.2% in September, and it also dipped below the 12-month moving average of 38.1%. This year's liquidated balance through October of $11.86 billion is about 21% higher than the same period last year, while the average severity is nearly six percentage points lower over the same period.

By property type, office loans incurred the largest disposed balance, resulting in $184.4 million in realized losses, which includes the $60.7 million Scudders Mill Road - Unit 3 loan in BSCMS 2007-PW15, which incurred a 76.1% loss and represented about 19.9% of October's losses. The Plainsboro, New Jersey, office building's performance deteriorated when the property's single tenant vacated in 2016. The $17.7 million sales price was a 78.4% discount to the original $82.0 million appraised value.

Table 9 – Monthly CMBS Liquidations and Average Loss Severity, January 2016 to October 2017

Month	$ Balance Before Loss	$ Loss Amount	% Average Loss
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

Source: Morningstar Credit Ratings, LLC

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

Property Type	$ Balance Before Loss	$ Loss Amount	% Loss	# of Loans
Hotel	7,979,967	1,530,062	19.2	2
Industrial	-	-	-	-
Multifamily	30,828,804	512,922	1.7	3
Office	416,719,370	184,411,528	44.3	19
Other	29,750,000	311,603	1.1	1
Retail	192,611,374	45,742,254	23.8	14
Total	677,889,515	232,508,369	34.3	39

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	939,276,690	446,851,430	47.6	48
Industrial	295,045,085	160,022,951	54.2	30
Multifamily	754,224,181	145,135,376	19.2	71
Office	5,639,724,190	1,803,930,647	32.0	207
Other	921,760,302	161,275,738	17.5	40
Retail	3,310,736,763	1,763,714,426	53.3	244
Total	11,860,767,211	4,480,930,568	37.8	640

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

Source: Morningstar Credit Ratings, LLC

Retail and office loans continue to represent the bulk of losses, accounting for 99.0% of October losses and 79.6% of year-to-date losses. Multifamily loans, with 6.4% of the year-to-date liquidated unpaid principal balance, accounted for just 3.2% of year-to-date losses. Multifamily also has the lowest average year-to-date loss severity among the five major property types at 19.2%, as shown in Table 11.

Morningstar Credit Ratings, LLC

Steve Jellinek

Vice President – CMBS Research

+1 267 960-6009

Edward Dittmer, CFA

Senior Vice President – CMBS Credit Risk Services

+1 267 960-6043

Lea Overby

Managing Director – Head of CMBS Research and Analytics

+1 646 560-4583

DISCLAIMER