

Markets Update

THIRD QUARTER 2019

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Economy – slower growth. Record budget deficits and trade deficits in a time of record low unemployment.

Feature – Outlet Centers – The value and the location...it matters.

Three trends we are watching

- Cyclical highs in property prices
- Slowing construction deliveries
- Economic Uncertainty

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In this issue of the CWC Capital Markets Update, we focus on the **fundamentals and trends affecting national commercial real estate debt markets**. Our feature reviews the value of location as it relates to retail outlet centers as an asset class. We synthesize and present information gathered from various industry research, public resources, and our own research.

ECONOMY

The September jobs report noted that the economy continues to grow but at the slower pace of 136,000 jobs created. Employment in the health care and professional and business services category again led in jobs creation as we may expect. Professional services showed a 25% reduction in the rate of growth year over year, however. Employment in the retail sector, specifically clothing and accessories, fell by 14,000.

The unemployment rate declined to 3.5%, among the lowest levels since 1969. The participation rate was 63.2%. Average hourly earnings showed some growth (2.9% year over year), but earnings growth is also slowing since our last report (3.5%). As of October 2019, El Centro CA, Yuma AZ continue to have reported the highest unemployment in the nation with both over 22%. Portland ME, Burlington VT, and Ames IA report the lowest with rates less than 2.0% each.

The 10-year US Treasury as of this writing, rate was 1.84%, declining approximately 84bps from last year end. Much of the decline reflects overall concerns and worry around global trade agreements, or the lack thereof, economic weakness abroad, and geopolitical issues. The 2/10 spread has now recovered to 20bp from inversion over the summer. In September 2019, the US budget deficit widened to almost \$1 trillion, with the US trade deficit also widening to \$884 billion. Other than 3 years around the financial crisis, **both the US budget deficit and the US trade deficit are now at the highest level in the last 50 years**. This as the rate of unemployment is at its lowest in 50 years. We remain cautious on prospects for the economy.

PROPERTY MARKETS

Effective rent growth - National average shows a 2.88% one-year growth rate, relatively flat to the rate at our last writing. Multifamily rents grew 4.6% for the year, while retail growth continues to lag at 1.85%, continuing to slow.

Vacancy rates - For the trailing 1-yr period, vacancy rates declined (improved) in multifamily and retail properties but increased in office and industrial properties. First half 2019 deliveries slowed by 25%-30% across multifamily, office, retail, and industrial properties. Absorption was positively impacted, but more related to slowing construction pipelines. We expect continued vacancy increases across all categories as heavy construction pipelines are completed.

National property prices for multifamily increased by 6.3% on a rolling 3-year basis, while hotel properties showed a 6 th consecutive month of declines year over year. Continuing its macro-decline, retail has lost value per unit (3yr basis) nearly every month for the past 2 years.

DEBT CAPITAL MARKETS

Credit spreads generally tighten in 2019 with CMBS BBB- coming in approximately 145bps year to date. YTD19 CMBS conduit issuance of \$29.6bn is leading last year's issuance by approximately 7% or \$1.9bn. Competing products such as SASB, FHLMC, and CRE-CLO have seen \$28bn, \$48bn, and \$14bn of issuance YTD, respectively.

CMBS risk retention pricing - Horizontal subordinates in the 14% area, L-shaped subordinates imply pricing of the Non-Rated conduit bonds in the 24% area.

Conduit delinquency rates dropped to 1.53% this month, reflecting continued improvement.

Three Trends we are watching...



CYCLICAL HIGHS IN PROPERTY PRICES

All property types experiencing price volatility at national level. Multifamily, hotel, and industrial building on a very robust pace. Over-building a concern. Over-levered properties finding their way into rated securitizations.



SLOWING CONSTRUCTION DELIVERIES

First half 2019 property deliveries across asset classes appeared to have finally started to slow relative to same period last year. Although this helps absorption figures, we remain concerned about the amount of inventory delivered across asset classes and in certain markets.



ECONOMIC UNCERTAINTY

Global trade uncertainty, the impact of tariffs, ballooning deficits, trade deficits, and the potential for negative real interest rates provides the basis for general concern over asset prices and performance across the CRE asset class.

FEATURE - OUTLET CENTERS

The Value and the Location

Following the great recession over 10 years ago, retail consumer preferences have shown a meaningful shift toward value, cost-conscious, and discount-based consumption. This shift coupled with the macro-trend of online shopping resulted in the well-publicized decline in retail sector, and in particular, the regional mall.

Wherever there is decline, however, there is also opportunity. Factory outlet centers are positioned as an alternative to both consumers and retailers and may just fit the bill. Value propositions for each of the interested parties:

Outlets present a chance to
RE-ENGAGE
with consumers...

CONSUMERS

Outlet centers create a value proposition ranging from the perception of discounted merchandise, a good value (i.e., designer goods at cheap prices), a day-trip destination, in some cases tax-free shopping, and a less stressful experience than going to the mall.

RETAILERS

Outlets present a chance to re-engage with consumers, to offer consumers a brand name experience with a more moderate quality and price, and to save on occupancy costs.

REAL ESTATE OWNERS

Outlet centers offer a cheaper physical structure relative to a mall (i.e., no large enclosed space which must be finished, furnished, climate controlled, etc.), no significant dependencies on large anchor boxes with weak tenants, and the ability to reconfigure spaces faster and more easily.

By way of comparison, developers in the US built over 1,500 shopping malls leading into 2005. Occupancy costs at malls for tenants with sales of \$300/ft could be 13%-14% according to Moody's with costs rising to 16% for sales over \$350/ft. Our research also indicates that there are around 215 outlet malls today or less than 20% of the number of malls. Occupancy costs at outlets appear to average 9%-12%. Over the past 8 years, an average of 5 centers are delivered each year, with that number falling to just 1 in 2018 according to materials from Tanger Outlets.

All of that sounds positive for the outlet center as an asset class. But what makes any particular outlet center successful? In short, we believe the "outlet" experience and value proposition is one of the key draws for consumers, with store selection an important additional driver, and we believe location perhaps the most important driver of success. Well located centers can naturally draw from traffic already in the area as opposed to the center being the sole "day trip" destination.

Well located centers can generate 1.5x the sales of an average and similarly tenanted center in a more remote location. Further, the better located centers can see valuations of more than 2.0x per foot than other centers. Our research indicates sales of \$500/ft at the higher end of all the centers currently available via CMBS conduit deals and ranging to \$286/ft at the lower end. Tanger Outlets, the second largest operator in the US, reports average sales of \$385/ft across their 44-center portfolio. Value Retail News reported in 2015 that the top 20 centers can average sales of over \$1,000/ft.

Well located centers can also afford to be less dependent on a single "anchor" type tenant and can offer a more diverse and specialty product selection. The better located centers can draw from more "destination" traffic, and from a more affluent traveling consumer.



FEATURE - OUTLET CENTERS

We reviewed approximately 40 outlet centers whose debt is securitized via CMBS conduit transactions to determine if our assumption about key factors was correct. In Table 1 (right), we present some key findings from a representative sample of four centers, Williamsburg Premium Outlets, Grove City Premium Outlets, Hagerstown Premium Outlets, and Carolina Premium Outlets.

All four centers are owned by the same sponsor (Simon Properties) and have a similar tenant base. For example:

Each has two “designer” outlet stores (Calvin Klein, Polo, Ralph Lauren, etc.)

Each has approximately 60% (by count) other clothing / shoe outlets

Each has approximately 10%-12% (by count) accessories outlets

Each has approximately 10%-12% (by count) food related stores

Looking deeper, note that from a physical space perspective, Grove City, Hagerstown, and Carolina are located between urban and rural areas with a manufacturing or military employment base. None of the three are surrounded by a “destination” area. The outlet center is the primary destination. Both Hagerstown and Carolina have relatively large exposures to a lead tenant, Wolf Furniture (14%) and Carolina Pottery (26%) respectively. Both appear to be additional “draws” for consumers to make the trip.

The Williamsburg center is surrounded by an area which is considered a stand-alone destination. The Williamsburg, Va area draws thousands of visitors annually to the Colonial Williamsburg, Jamestown, and Yorktown historical area. Additional draws are the College of William and Mary, proximity to the Greater Hampton Roads area, Virginia Beach, and coastal Virginia, the Busch Gardens theme park, and an Anheuser Busch brewery. The Williamsburg area is also in close proximity to the major military installations of Naval Station Norfolk, Langley Air Force Base, Naval Air Station Oceana, and Newport News ship building. In addition to the military population, the Williamsburg area also has a large retirement community.

Interestingly, the population base near the Williamsburg center is smaller than both Hagerstown and Carolina. The median income at Williamsburg is also lower than the Hagerstown center. The smaller population and second highest income combined with the comparability of the tenants, and the same sponsorship leads us to the conclusion that visitors and non-outlet “destination” travelers generate a significant amount of traffic at Williamsburg.

That difference is material, and this helps explain why such a wide variance can exist. Williamsburg delivers 1.5x the sales volume, reaching approximately \$500/ft at underwriting. That multiple of sales volume drives valuations to nearly \$650/ft (at UW appraisal) which is 35% higher than Grove City, 2.0x the valuation of Hagerstown, and 2.3x the value of Carolina.

Property	Williamsburg Premium Outlets	Grove City Premium Outlets	Hagerstown Premium Outlets	Carolina Premium Outlets
Location	Williamsburg, VA	Grove City, PA	Hagerstown, MD	Smithfield, NC
Size	522,133	531,204	484,994	439,009
Built	1987	1994	1988	1987
5 Largest Tenants	Food Lion Supermarket (6%) Nike (3%) Polo/Ralph Lauren Coach North Face	VF Factory Outlet (5%) Old Navy (4%) Nike Forever 21 (bankruptcy) Brooks Brothers	Wolf Furniture (14%) Nike (3%) Closed GAP Dress Barn - Closed Banana Republic	Carolina Pottery (23%) Nike (3%) American Eagle Reebok Tommy Hilfiger
UW Sales / ft	\$ 500	\$ 341	\$ 343	\$ 359
Occ Cost	10%	13%	11%	9%
Appraisal / ft	647	480	309	279
Appr / Sales Ratio	1.29	1.41	0.90	0.78
Loan Basis / ft	354	264	159	154
UW LTV	70.9%	77.3%	46.3%	42.9%
Rec Rent Rev / ft	52	44	29	30
Perform vs UW	1.01x	0.99x	0.85x	1.14x
Draw	Less than 60mi from Richmond, Norfolk, VA Beach Colonial Williamsburg, Busch Gardens Atlantic coast / tidewater area	Less than 100mi from Pittsburgh, Youngston, Cleveland No sales tax on clothing Regional - PA, OH, NY, Canada	70mi from both Washington, DC and Baltimore Intersection of 2 interstate highways Regional - MD, VA, DC, PA	Off I-95, 30mi East of Raleigh, NC 45mi North of Ft. Bragg 85mi to coastal NC
Population	109K	74K	210K	132K
Median Income	\$84K	\$57K	\$101K	\$52K

While many outlet centers may look and feel the same, they are not.
Location matters.

SELECTED MARKET DATA

Economic and Real Estate Fundamentals and Trends

	2009	2014	2016	2017	2018	Q3-19	1yr	5yr	10yr
Economic									
UNEMP	9.90	5.60	4.70	4.10	3.90	3.50	-0.20%	-2.40%	-6.30%
PART	64.60	62.70	62.70	62.70	63.10	63.20	0.50%	0.50%	-1.90%
GDP	14,567	17,616	18,869	19,831	20,898	21,339	4.54%	4.36%	4.84%
CPI-TTM	2.28%	-0.05%	1.91%	2.09%	1.40%	1.53%	-0.84%	-0.39%	1.81%
UST IMPL INF	2.37%	1.68%	1.95%	1.96%	1.71%	1.51%	-0.64%	-0.46%	-0.24%
Interest Rate									
1M LIBOR	0.32%	0.17%	0.77%	1.56%	2.50%	2.02%	-0.25%	1.86%	1.62%
Eff Fed Funds	0.12%	0.12%	0.50%	1.31%	2.40%	1.90%	-0.25%	1.81%	1.75%
Prime	3.25%	3.25%	3.75%	4.50%	5.50%	5.00%	-0.25%	1.75%	1.75%
UST2	1.14%	0.67%	1.20%	1.89%	2.49%	1.62%	-1.20%	1.04%	0.67%
UST10	3.85%	2.17%	2.45%	2.40%	2.69%	1.66%	-1.40%	-0.86%	-1.65%
2/10 Spread	2.71%	1.50%	1.25%	0.51%	0.20%	0.04%	-0.21%	-1.90%	-2.32%
Real10	1.48%	0.49%	0.50%	0.44%	0.98%	0.15%	-0.76%	-0.40%	-1.41%
Vacancy (REIS)									
Multi	8.00%	4.20%	4.20%	4.50%	4.80%	4.70%	-0.10%	0.50%	-3.30%
Retail	10.60%	10.20%	9.90%	10.00%	10.20%	10.10%	-0.20%	-0.20%	-0.50%
Office	17.00%	16.70%	15.80%	16.40%	16.70%	16.80%	0.20%	0.00%	-0.20%
Industrial	n/a	11.20%	10.30%	8.90%	10.20%	10.10%	0.80%	-1.20%	n/a
Hotel									
Rents (REIS Effective)									
Multi	964	1,124	1,252	1,305	1,356	1,400	4.63%	13.25%	4.52%
Retail	16.75	17.16	17.89	18.24	18.53	18.73	1.85%	1.94%	1.18%
Office	22.43	24.19	25.93	26.43	27.04	27.43	2.24%	2.92%	2.23%
Industrial	n/a	4.46	4.66	4.96	5.08	\$5.16	2.79%	3.35%	n/a
Hotel									
National \$PSF (RCA)									
Multi	81,953	132,159	152,206	153,656	168,075	174,015	12.82%	7.10%	13.58%
Retail	144	198	200	177	171	201	16.82%	-0.60%	3.59%
Office	152	223	235	241	268	315	22.66%	6.15%	8.00%
Industrial	47	69	78	79	88	110	16.97%	9.90%	9.40%
Hotel	59,012	134,398	153,841	143,596	146,341	140,068	-1.54%	0.04%	7.47%
National Cap Rate (RCA)									
Multi	6.84%	6.05%	5.70%	5.62%	5.53%	5.44%	-0.11%	-0.55%	-1.60%
Retail	7.96%	6.63%	6.52%	6.60%	6.51%	6.59%	0.08%	-0.23%	-1.31%
Office	8.75%	6.75%	6.59%	6.73%	6.57%	6.72%	0.06%	-0.15%	-1.25%
Industrial	8.37%	6.99%	6.80%	6.74%	6.48%	6.15%	-0.26%	-0.95%	-2.49%
Hotel	9.55%	8.14%	8.50%	8.51%	8.39%	8.66%	0.03%	0.46%	-1.06%
Risk Premium									
Multi	2.99%	3.88%	3.25%	3.22%	2.85%	3.78%	1.30%	0.31%	0.05%
Retail	4.11%	4.46%	4.07%	4.20%	3.83%	4.93%	1.48%	0.63%	0.34%
Office	4.90%	4.58%	4.14%	4.33%	3.89%	5.06%	1.46%	0.71%	0.40%
Industrial	4.52%	4.82%	4.35%	4.34%	3.80%	4.49%	1.14%	-0.09%	-0.84%
Hotel	5.70%	5.97%	6.05%	6.11%	5.71%	7.00%	1.43%	1.32%	0.59%

CRE FUNDAMENTALS

Property Price, Vacancy, and Rent Growth Trends

National Average \$price / unit					
Year End	MF	Retail	Hotel	Ofc	Ind
2005	107,027.7	158.3	133,060.5	197.5	62.1
2006	113,416.2	174.3	136,504.5	232.4	66.7
2007	95,251.4	168.9	117,311.2	255.0	68.6
2008	84,671.0	181.3	89,940.8	199.7	63.1
2009	81,953.2	144.0	59,012.2	151.5	47.3
2010	99,502.6	152.1	138,350.5	222.2	51.3
2011	103,329.8	174.8	112,827.7	213.3	60.1
2012	120,788.9	228.0	121,202.3	225.8	62.1
2013	115,918.7	178.3	129,720.0	230.7	64.8
2014	132,159.3	198.4	134,397.7	222.6	69.3
2015	148,228.2	212.7	138,162.4	239.0	72.7
2016	152,206.0	199.6	153,841.0	234.9	77.7
2017	153,656.0	177.4	143,596.4	241.0	79.5
2018	168,075.2	171.4	146,340.9	268.0	88.0
Q3-19	174,015.1	201.1	140,067.6	315.2	109.8

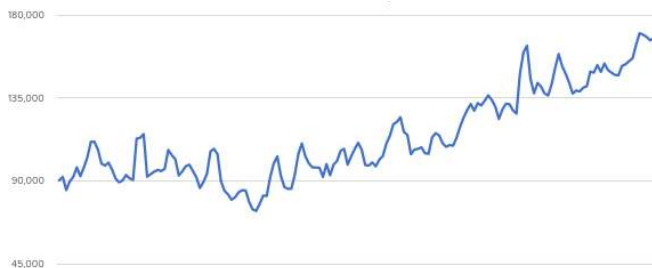
Peak	174,746.8	248.1	201,238.3	330.2	109.8
Trough	73,804.9	128.0	59,012.2	132.0	44.7
Fall fr '06	34.93%	26.55%	56.77%	43.20%	33.07%
Peak Date	Jul-19	Aug-16	Apr-15	Jul-19	Sep-19
Trough Date	Sep-09	Jun-10	Dec-09	Mar-10	Apr-10
Curr vs '06	53.4%	15.4%	2.6%	35.6%	64.6%
Curr vs Pk	-0.4%	-18.9%	-30.4%	-4.5%	0.0%

5yr GR	7.7%	-0.8%	2.4%	3.0%	6.3%
10yr GR	7.1%	-0.6%	5.0%	3.0%	3.4%
Volatility	11.6%	13.6%	29.6%	17.1%	10.8%

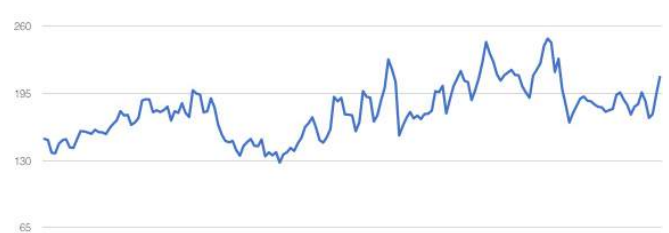
Vacancy Trend					
Year End	MF	Retail	Hotel	Ofc	Ind
2005	5.70	6.80	-	14.70	-
2006	5.80	7.10	-	13.40	-
2007	5.70	7.50	-	12.60	-
2008	6.70	8.90	-	14.50	-
2009	8.00	10.60	-	17.00	-
2010	6.60	11.00	-	17.60	14.00
2011	5.30	11.00	-	17.40	13.20
2012	4.60	10.70	-	17.10	12.10
2013	4.30	10.40	-	16.90	11.60
2014	4.20	10.20	-	16.70	11.20
2015	4.40	10.00	-	16.20	10.60
2016	4.20	9.90	-	15.80	10.30
2017	4.50	10.00	-	16.40	8.90
2018	4.80	10.20	-	16.70	9.40
Q3-19	4.70	10.10	-	16.80	9.70

Rent Growth Trend					
Year End	MF	Retail	Hotel	Ofc	Ind
2005	2.89	3.23	-	3.19	-
2006	4.38	3.37	-	8.93	-
2007	4.73	2.39	-	10.54	-
2008	1.95	(1.02)	-	0.24	-
2009	(2.92)	(3.68)	-	(8.86)	-
2010	2.39	(1.43)	-	(1.52)	-
2011	2.43	(0.06)	-	2.04	(0.48)
2012	3.86	0.48	-	1.95	1.91
2013	3.33	1.51	-	2.22	1.64
2014	3.69	1.96	-	3.02	2.76
2015	5.16	2.21	-	3.18	2.02
2016	5.83	2.00	-	3.84	2.42
2017	4.23	1.96	-	1.93	6.44
2018	5.21	1.81	-	2.65	4.03
Q3-19	4.63	1.85	-	2.24	2.79

Office



Retail



Multifamily



Hotel

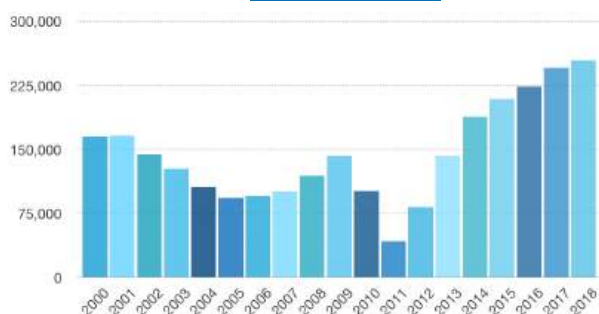


CRE FUNDAMENTALS

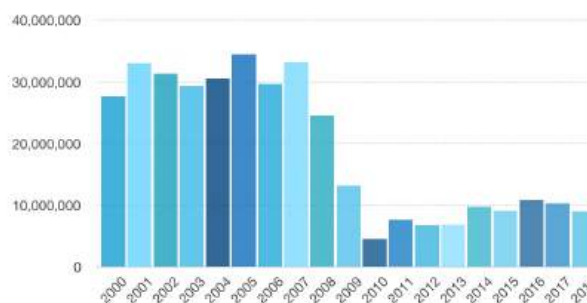
Commercial Property Deliveries and Absorption

Year	Deliveries				Net Absorption				Notes
	Multi	Retail	Office	Ind / Whse	Multi	Retail	Office	Ind / Whse	
1999	206,040	25,126,000	120,280,000	-	-	-	-	-	MULTIFAMILY - Mid-yr deliveries slowing. - Mid-year deliv 30% lower than 2018 - Net absorption approx 1.03x, first at or above 1.0x in 5yrs.
2000	164,674	27,727,000	111,061,000	-	1.34x	1.42x	(1.02)	-	
2001	166,124	33,013,000	134,904,000	-	0.12x	0.59x	(0.28)	-	
2002	143,957	31,369,000	81,422,000	-	(0.04)	0.87x	(0.15)	-	
2003	127,591	29,416,000	41,016,000	-	0.35x	0.97x	0.99x	-	
2004	106,144	30,596,000	35,475,000	-	0.48x	1.06x	1.91x	-	RETAIL - Deliveries continue to decline. - Mid-year deliv 25% lower than 2018 - Net absorption now positive
2005	93,699	34,438,000	39,792,000	-	0.35x	1.03x	1.43x	-	
2006	95,205	29,627,000	49,879,000	-	(0.03)	0.75x	1.08x	-	
2007	100,630	33,254,000	59,902,000	-	0.99x	0.71x	(0.69)	-	
2008	119,630	24,545,000	65,450,000	-	0.10x	(0.27)	(1.18)	-	
2009	143,130	13,142,000	50,548,000	-	0.02x	(1.64)	(0.42)	-	OFFICE - Deliveries fall by half vs 1H 2018 - Net absorption <1.0x for 4 years - Slow, steady ~2% rent growth
2010	101,268	4,499,000	23,375,000	10,017,000	2.27x	(0.71)	0.71x	(3.51)	
2011	42,606	7,625,000	15,440,000	13,388,000	4.03x	0.83x	1.01x	4.83x	
2012	82,679	6,778,000	12,443,000	22,585,000	1.67x	1.67x	1.86x	3.82x	
2013	143,227	6,883,000	25,959,000	38,740,000	1.14x	1.84x	1.08x	1.73x	
2014	188,125	9,776,000	28,287,000	76,678,000	0.95x	1.36x	1.36x	1.27x	INDUSTRIAL/WAREHOUSE - Deliveries slow by 30% vs 2018 - Trend of record high deliveries - Net absorption still below 1.0x
2015	209,409	9,088,000	36,642,000	78,848,000	0.96x	1.36x	0.79x	1.46x	
2016	223,840	10,815,000	36,659,000	95,459,000	0.96x	1.07x	0.63x	1.42x	
2017	246,140	10,318,000	39,048,000	137,428,000	0.76x	0.68x	0.74x	1.15x	
2018	254,733	8,986,000	47,426,000	140,190,000	0.87x	0.14x	0.53x	0.73x	
Q3-19	81,666	2,927,000	13,191,000	43,893,000	1.03x	1.25x	0.62x	0.43x	

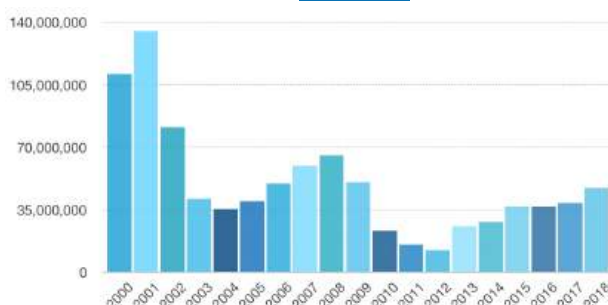
MULTIFAMILY



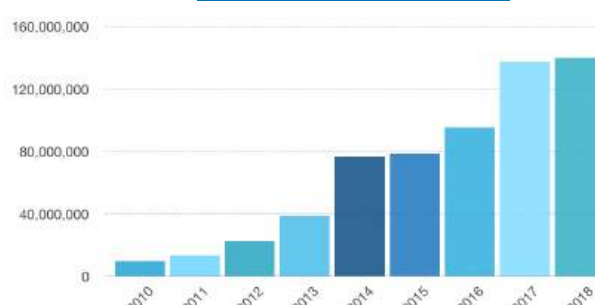
RETAIL



OFFICE



INDUSTRIAL/WAREHOUSE



SECURITIZED MARKETS

2019 CMBS Issuance, Conduit and SASB

Type		SERIES	Pricing	AMOUNT	SERVICER	SPSERV	B-PIECE	#PROP	#LOAN	RR Type	RR Yld
CMBS	Q1-19	Various	-	9,098.15	-	-	-	-	-	-	-
	Q2-19	Various	-	9,508.85	-	-	-	-	-	-	-
	Q3-19	MSC 2019-H7	07/15/19	746.99	Midland	LNR Partners	Argentica	81	53	HRZ	13.75
	Q3-19	BMARK 2019-B12	07/19/19	1,429.27	Midland	Midland	KKR	117	47	L	16.69
	Q3-19	BANK 2019-BNK19	07/23/19	1,302.47	Wells Fargo	LNR Partners	Seer / LNR	76	73	VERT	-
	Q3-19	CGCMT 2019-GC41	08/05/19	1,276.64	Midland	Rialto Capital	Rialto Capital	100	43	L	17.71
	Q3-19	WFCM 2019-C52	08/05/19	900.24	Wells Fargo	LNR Partners	Argentica	126	67	HRZ	14.07
	Q3-19	BBCMS 2019-C4	08/09/19	937.34	Wells Fargo	Rialto Capital	Rialto Capital	377	73	L	26.25
	Q3-19	CD 2019-CD8	08/09/19	811.12	Midland	Midland	Eightfold	58	33	L	18.05
	Q3-19	BANK 2019-BNK20	09/13/19	1,237.48	Wells Fargo	Midland	Eightfold	95	72	VERT	-
	Q3-19	GSMS 2019-GC42	09/16/19	1,060.43	Midland	Midland	KKR	94	36	L	15.60
	Q3-19	CSAIL 2019-C17	09/17/19	800.42	Midland	Midland	3650 REIT	81	37	HRZ	14.35
	Q3-19	BMARK 2019-B13	09/20/19	951.71	Midland	CWCAM	Eightfold	48	40	L	17.97
	Q3-19	UBSCM 2019-C17	09/26/19	807.34	Wells Fargo	Rialto Capital	Rialto Capital	97	70	L	23.02
	Q3-19	CF 2019-CF2	09/26/19	832.91	KeyBank	LNR Partners	LNR Partners	136	48	L	23.99
	Q3-19	BANK 2019-BNK21	09/27/19	1,181.00	Wells Fargo	Rialto Capital	Rialto Capital	87	49	VERT	-
	32,882.33										

Type	SERIES		Pricing	AMOUNT	SELLER	SPSERV	Risk Retention	Asset	RR Type	RR Yld
SASB	Q1-19	Various	-	7,438.30	-	-	-	-	-	-
	Q2-19	Various	-	12,713.28	-	-	-	-	-	-
	Q3-19	CGCMT 2019-PRM	07/11/19	278.00	Prime Group Holdings	Midland	Citi	2 Self Storage Facilities	VERT	-
	Q3-19	JPMCC 2019-BOLT	07/16/19	202.39	Occidental Mgt	KeyBank	JPMorgan	Sprint HQ Bldg - Kansas Cty	VERT	-
	Q3-19	OBP 2019-OBP	08/07/19	950.00	Durst, BOA	Wells Fargo	NYState Teachers	One Bryant Park - BOA	HRZ	~L+233
	Q3-19	CF 2019-MF1	08/08/19	167.35	Arbor Realty	CWCAM	-	34 Multifamily props	HRZ	-
	Q3-19	BX 2019-MMP	08/15/19	271.70	Blackstone, Fairstead	Trimont	Morgan Stanley	11 NYC apt bldgs	VERT	-
	Q3-19	BHPT 2019-BXHP	08/16/19	415.00	Blackstone	Midland	-	Pentagon City Marriott	HRZ	L+432
	Q3-19	GSCG 2019-600C	08/20/19	240.00	We Co., Rhone Group	Midland	Goldman	600 California, San Francisco	VERT	-
	Q3-19	NCMS 2019-FAME	08/29/19	211.30	GAW, DJM Capital	KeyBank	Natixis	Hollywood and Highland	VERT	-
	Q3-19	GSMS 2019-SMP	09/10/19	218.85	Starwood Capital	KeyBank	Goldman	4 Mariott Hotels, AZ, GA	VERT	-
	Q3-19	WFCM 2019-JWDR	09/19/19	403.00	Elliott Mgt, Trinity	CWCAM	Wells Fargo	JWMarriott Phoenix Desrt Rig	VERT	-
	Q3-19	JPMCC 2019-BROOK	09/24/19	382.50	Brookwood Financial	KeyBank	Waterfall	27 Office - Brookwood	HRZ	L+725
	Q3-19	SGCMS 2019-PREZ	09/27/19	157.60	Post Brothers, Ackman	Aegon	SocGen	Presidential City - Phila	VERT	-
	Q3-19	AFHT 2019-FAIR	09/27/19	300.00	Manchester, Colony	Berkadia	BOA	Fairmont Austin	VERT	-
	24,349.27									

Subordinate Buyer	Conduit	SASB	Total	Special Servicers	Conduit	SASB	Total	Type	Balance	Deals
Rialto Capital	8,210.98	-	8,210.98	Midland	13,345.97	4,496.58	17,842.55	Conduit		
KKR	6,326.53	1,380.00	7,706.53	LNR Partners	7,467.60	1,150.00	8,617.60			
Prime Finance	2,319.53	-	2,319.53	Keybank	2,176.60	5,618.56	7,795.16			
Prime / LNR	883.52	-	883.52	Rialto Capital	8,210.98	390.00	8,600.98			
Prime / Ellington	974.84	-	974.84	Situs	-	5,881.58	5,881.58			
Ellington / Prime	833.03	-	833.03	Trimont	-	3,174.90	3,174.90	SASB		
Eightfold	5,291.74	-	5,291.74	CWCAM	951.71	1,812.55	2,764.26			
Argentica	1,647.23	-	1,647.23	CBRE	-	-	-			
LoanCore	1,472.73	-	1,472.73	Wells Fargo	-	950.00	950.00			
LNR Partners	1,590.87	-	1,590.87	C-III	729.48	-	729.48			
Seer / LNR	1,302.47	-	1,302.47	Aegon	-	575.10	575.10	VERT	11,062.14	27
3650 REIT	1,629.67	-	1,629.67	Berkadia	-	300.00	300.00	HRZ	13,287.13	21
Ready Capital	399.21	-	399.21					L	-	-
RR Holders>	-	22,969.27	22,969.27						24,349.27	48
Total	32,882.33	24,349.27	57,231.60		32,882.33	24,349.27	57,231.60		57,231.60	

SECURITIZED MARKETS

2019 FHLMC Issuance

Type		SERIES	PRICING	AMOUNT	SERVICER	SPSERV	B-PIECE	#PROP	#LOAN
FREMF	7-Year	FREMF 2019-K734	04/11/19	1,600.43	Wells Fargo	Wells Fargo	Bridge	52	52
		FREMF 2019-K735	07/17/19	1,410.94	Wells Fargo	Wells Fargo	Bridge	49	49
		FREMF 2019-K736	09/04/19	1,479.50	Midland Loan Services	Wells Fargo	Berkshire Group	43	43
FREMF	10-Year	FREMF 2019-K87	01/23/19	1,298.34	Wells Fargo	Wells Fargo	Bridge	65	65
		FREMF 2019-K88	03/01/19	1,444.26	Midland	CWCAM	Morgan Prop	64	64
		FREMF 2019-K89	03/12/19	1,488.68	Wells Fargo	Wells Fargo	NYMT	61	61
		FREMF 2019-K90	04/03/19	1,393.56	KeyBank	Wells Fargo	Berkshire Group	57	57
		FREMF 2019-K91	04/17/19	1,384.76	KeyBank	KeyBank	RREEF America	79	80
		FREMF 2019-K92	05/21/19	1,463.35	Wells Fargo	Wells Fargo	Bridge	63	63
		FREMF 2019-K93	06/13/19	1,439.48	Midland Loan Services	KeyBank	Berkshire Group	59	59
		FREMF 2019-K94	07/09/19	1,330.28	Wells Fargo	Wells Fargo	Morgan Prop	69	65
		FREMF 2019-K95	08/01/19	1,266.54	Wells Fargo	Wells Fargo	NYMT	53	53
		FREMF 2019-K96	08/13/19	1,376.21	Wells Fargo	Wells Fargo	Bridge	59	59
		FREMF 2019-K97	09/10/19	1,469.23	KeyBank	KeyBank	NexPoint Advisors	57	57
	15-Year	FREMF 2019-K1510	02/20/19	814.10	Wells Fargo	Wells Fargo	NYMT	45	45
		FREMF 2019-K1511	05/08/19	871.02	Midland Loan Services	Midland	Related Cos.	41	41
		FREMF 2019-K1512	07/22/19	754.69	KeyBank	KeyBank	Priderock	24	24
Floater		FREMF 2019-KF57	02/06/19	1,122.64	KeyBank	CWCAM	Kayne Anderson	42	42
		FREMF 2019-KF58	02/20/19	1,088.32	Midland	CWCAM	Kayne Anderson	41	41
		FREMF 2019-KF59	03/06/19	930.56	KeyBank	CWCAM	Blackstone	40	40
		FREMF 2019-KF60	03/19/19	1,009.24	Midland Loan Services	Wells Fargo	NexPoint Advisors	45	45
		FREMF 2019-KF61	05/09/19	999.32	Wells Fargo	KeyBank	Priderock	33	33
		FREMF 2019-KF62	05/21/19	890.57	KeyBank	KeyBank	Harbor	38	38
		FREMF 2019-KF63	06/18/19	856.78	Wells Fargo	CWCAM	Kayne Anderson	36	36
		FREMF 2019-KF64	07/23/19	770.86	KeyBank	CWCAM	Blackstone	26	26
		FREMF 2019-KF65	08/07/19	831.93	KeyBank	CWCAM	Related Cos.	26	26
		FREMF 2019-KF66	08/14/19	853.62	Midland Loan Services	CWCAM	Kayne Anderson	30	30
		FREMF 2019-KF67	09/11/19	798.37	KeyBank	KeyBank	Harbor	21	21
Jr Lien		FREMF 2019-KJ24	06/24/19	300.90	Freddie Mac	KeyBank	Harbor	69	70
		FREMF 2019-KJ25	09/18/19	454.82	Freddie Mac	Midland	Related Cos.	79	79
Small Bal		FRESB 2019-SB58	01/10/19	622.47	Freddie Mac	KeyBank	Tilden Park	238	238
		FRESB 2019-SB59	02/13/19	625.27	Freddie Mac	LNR Partners	Axonic Capital	244	244
		FRESB 2019-SB60	03/14/19	624.67	Freddie Mac	Situs	Sabal Financial	226	226
		FRESB 2019-SB61	04/11/19	614.63	Freddie Mac	KeyBank	Axonic Capital	223	223
		FRESB 2019-SB62	05/16/19	623.42	Freddie Mac	KeyBank	Tolis Advisors	210	210
		FRESB 2019-SB63	06/12/19	530.37	Freddie Mac	Newmark	Sabal Financial	187	187
		FRESB 2019-SB64	07/11/19	442.62	Freddie Mac	KeyBank	Tilden Park	163	163
		FRESB 2019-SB65	08/15/19	617.22	Freddie Mac	KeyBank	Axonic Capital	219	219
		FRESB 2019-SB66	09/11/19	574.37	Freddie Mac	CWCAM	Bayview	219	219
Wkforce		FREMF 2019-KW08	03/20/19	652.77	Midland	Wells Fargo	Bridge	27	27
		FREMF 2019-KW09	07/26/19	626.81	Midland	CWCAM	Morgan Prop	43	43
SASB		FREMF 2019-KBF3	01/23/19	745.86	Wells Fargo	Wells Fargo	Bridge	23	23
Large		FREMF 2019-KL04	01/17/19	702.38	Wells Fargo	KeyBank	Connor / Ares	22	22
		FREMF 2019-KL05	08/06/19	1,073.98	Midland	KeyBank	Axonic / Harbor	22	22
Prepay		FREMF 2019-KC03	01/24/19	774.50	KeyBank	KeyBank	RREEF America	24	24
		FREMF 2019-KC04	06/05/19	560.32	Midland	CWCAM	Blackstone	17	17
Misc		BOC 2019-Q010	07/25/19	573.34	Freddie Mac	Situs	Not Identified	168	168
		FREMF 2019-KG01	06/18/19	483.70	Midland Loan Services	KeyBank	Bayview	19	19
		FREMF 2019-KI04	08/08/19	532.69	Freddie Mac	CWCAM	Kayne Anderson	18	18
		FREMF 2019-KLU1	06/05/19	716.93	Freddie Mac	CWCAM	Greystar	16	16
		FREMF 2019-KS11	08/09/19	438.11	Wells Fargo	Wells Fargo	Bridge	42	2
		MF1 2019-Q009	07/09/19	562.92	Freddie Mac	KeyBank	MF1 REIT	24	22
		FREMF 2019-KS12	09/19/19	1,300.00	Wells Fargo	CWCAM	Harbor	49	3
		53	48,212.61						

Subordinate Buyer	Deals	Deal Balance			
Bridge	8	8,986.00	Connor / Ares	1	702.38
Kayne Anderson	5	4,454.05	Tolis Advisors	1	623.42
NYMT	3	3,569.32	Not Identified	1	573.34
Morgan Prop	3	3,401.36	MF1 REIT	1	562.92
Berkshire Group	3	4,312.54	Bayview	2	1,058.07
Blackstone	3	2,261.73			
RREEF America	2	2,159.26	Total	53	48,212.61
Axonic Capital	3	1,857.12			
Priderock	2	1,754.00	Spec Svc	Deals	Deal Balance
Related Cos.	3	2,157.76	Wells Fargo	15	17,767.90
Harbor	4	3,289.83	KeyBank	18	14,555.16
Sabal Financial	2	1,155.03	CWCAM	14	12,210.07
Axonic / Harbor	1	1,073.98	Situs	2	1,198.00
Tilden Park	2	1,065.10	Midland	2	1,325.84
NexPoint Advisors	2	2,478.48	LNR Partners	1	625.27
Greystar	1	716.93	Newmark	1	530.37
			53	48,212.61	

SECURITIZED MARKETS

2018 / 2019 CLO Issuance

Year	ISSUER	SERIES	DATE	AMOUNT	SELLER	SERVICER	COLMGR
2018	VMC Finance LLC	2018-FL1	01/26/18	368.09	Varde Partners	Trimont	Varde Partners
2018	TPG Real Estate Finance	2018-FL1	02/05/18	932.38	TPG	Wells Fargo	TPG
2018	Bridge Debt Strategies	2018-FL1	02/13/18	510.23	Bridge	Wells Fargo	Bridge
2018	AREIT Trust	2018-CRE1	02/14/18	480.38	Silverpeak	Wells Fargo	Silverpeak
2018	Bancorp Commercial Mortgage Trust	2018-CRE3	03/13/18	304.27	Bancorp Bank	Wells Fargo	Bancorp Bank
2018	BSPRT Ltd.	2018-FL3	03/23/18	610.00	Benefit Street	Situs	Benefit Street
2018	GPMT Ltd.	2018-FL1	04/26/18	826.57	Granite Point	Wells Fargo	Granite Point Mtg
2018	LoanCore Ltd.	2018-CRE1	05/18/18	1,052.91	LoanCore Capital	Situs	LoanCore Capital
2018	Arbor Realty Commercial Ltd.	2018-FL1	05/23/18	560.00	Arbor Realty	Arbor	Arbor Realty
2018	Exantas Capital Corp.	2018-RSO6	06/07/18	514.23	RCC Real Estate	C-III	Exantas Capital
2018	Ready Capital Mortgage Financing LLC	2018-FL2	06/15/18	278.28	ReadyCap	KeyBank	ReadyCap
2018	Marathon CRE Ltd	2018-FL1	06/22/18	470.00	Marathon Asset Mgt	KeyBank	Marathon Asset Mgt
2018	M360 Ltd.	2018-CRE1	07/18/18	329.74	M360 Advisors	Wells Fargo	M360 Advisors
2018	Shelter Growth CRE Ltd.	2018-FL1	07/20/18	415.13	Shelter Growth Cap	Wells Fargo	Shelter Growth
2018	BDS Ltd.	2018-FL2	07/25/18	420.02	Bridge Investment	Wells Fargo	Bridge Investment
2018	Hunt CRE Ltd.	2018-FL2	08/03/18	285.00	Hunt Mortgage	KeyBank	Hunt Mortgage
2018	Greystone Commercial Ltd	2018-HC1	09/11/18	300.00	Greystone	Greystone	Greystone
2018	Bancorp Commercial Mortgage Trust	2018-CRE4	09/17/18	341.00	Bancorp Bank	Wells Fargo	Bancorp Bank
2018	BSPRT Ltd.	2018-FL4	09/27/18	868.40	Benefit Street	Situs	Benefit Street
2018	VMC Finance LLC	2018-FL2	10/19/18	462.30	VMC Lender	Trimont	Varde Partners
2018	AREIT Trust	2018-CRE2	10/30/18	596.31	Silverpeak	Wells Fargo	Silverpeak
2018	KREF Ltd.	2018-FL1	11/07/18	1,000.00	KKR	Midland	KKR
2018	TRTX Ltd.	2018-FL2	11/15/18	1,000.17	TPG Real Estate	Situs	TPG Real Estate
2018	OREC Ltd.	2018-CRE1	11/20/18	350.00	ORIX	RED Mtg Capital	ORIX
2018	FORT CRE LLC	2018-1	11/28/18	600.00	Fortress	Wells Fargo	Fortress

2018 - Year to Date

13,875.40

2019	BDS Ltd.	2019-FL3	01/28/19	600.00	Bridge Investment	Wells Fargo	Bridge Investment
2019	GPMT Ltd.	2019-FL2	02/14/19	825.00	Granite Point	Wells Fargo	Granite Point
2019	NLY Ltd.	2019-FL2	02/15/19	857.30	Annaly	Trimont	Annaly
2019	Bancorp Commercial Mortgage Trust	2019-CRE5	03/08/19	518.30	Bancorp Bank	KeyBank	Bancorp Bank
2019	LMREC LLC	2019-CRE3	03/26/19	500.00	LaSalle Mtg Real Est	Northmarq	LaSalle Mtg Real Est
2019	Ready Capital Mortgage Financing LLC	2019-FL3	03/29/19	320.80	ReadyCap	KeyBank	ReadyCap
2019	Exantas Capital Corp.	2019-RSO7	04/04/19	687.20	Exantas	C-III	Exantas
2019	PFP Ltd.	2019-5	04/11/19	764.20	Prime Finance	Wells Fargo	Prime Finance
2019	LoanCore Ltd.	2019-CRE2	05/07/19	1,057.23	LoanCore Capital	Situs	LoanCore Capital
2019	Arbor Realty Commercial Real Estate Notes Ltd.	2019-FL1	05/14/19	650.00	Arbor Realty	Arbor Multifamily	Arbor Realty
2019	Grand Avenue CRE Ltd.	2019-FL1	05/16/19	625.00	DoubleLine Capital	Wells Fargo	DoubleLine Capital
2019	BSPRT Ltd.	2019-FL5	05/20/19	810.00	Benefit Street	Situs	Benefit Street
2019	Shelter Growth CRE Ltd.	2019-FL2	05/21/19	453.70	Shelter Growth	Situs	Shelter Growth
2019	LoanCore Ltd.	2019-CRE3	05/23/19	415.85	LoanCore Capital	Situs	LoanCore Capital
2019	BDS Ltd.	2019-FL4	07/17/19	525.00	Bridge Investment	Wells Fargo	Bridge Investment
2019	STWD Ltd.	2019-FL1	07/26/19	1,100.00	Starwood Property	Wells Fargo	Starwood Property
2019	A10 Bridge Asset Financing LLC	2019-B	07/29/19	320.00	A10 Capital	A10 Capital	A10 Capital
2019	AREIT Trust	2019-CRE3	08/09/19	717.92	Argentic	Wells Fargo	Argentic
2019	M360 Ltd.	2019-CRE2	08/14/19	360.00	M360 Advisors	Wells Fargo	M360 Advisors
2019	Greystone CRE Notes Ltd.	2019-FL2	08/14/19	600.00	Greystone	Greystone	Greystone
2019	Bancorp Commercial Mortgage Trust	2019-CRE6	09/13/19	778.24	Bancorp Bank	Midland	Bancorp Bank
2019	VMC Finance LLC	2019-FL3	09/18/19	627.54	VMC Lender	Trimont	Varde Partners

2019 - Year to Date

14,113.27

SOURCES

The third-party Information set forth herein may be derived from any of the following sources:

Bloomberg	National Real Estate Investor
CBRE Capital Markets	Real Capital Analytics
Citibank Research	REIS
Commercial Mortgage Alert	Trepp Information Systems
CoStar	US Bureau of Economic Analysis
CRE Direct	US Bureau of Labor Statistics
FHLMC	US Census Bureau
International Council of Shopping Centers	US Federal Reserve
Intex Solutions	US Treasury
Morningstar Research	Wells Fargo Research
Moody's / RCA CPPI	

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