MARKETBEAT
U.S. Capital Markets
Q3 2018

Executive Summary

- The third quarter of 2018 posted the strongest transaction activity of any quarter since the fourth quarter of 2015. Activity was up 25% quarter-over-quarter (QoQ) and 21% year-over-year (YoY). That brought 2018 year-to-date (YTD) transaction volume to $357 billion (B)—a 13% increase YoY and an even higher volume than in 2015.
- Single asset, megadeal and portfolio sales all increased YTD compared to the same time period in 2017. The real outliers were entity/M&A transactions, which more than doubled YTD.
- The strongest activity has been in the multifamily, hotel, warehouse, high street retail and mall (through M&A) sectors. In contrast, flex, strip center and office activity has been weaker YTD.
- Despite volatile and rising interest rates, cap rates show little impact with the exception of retail, where cap rates continue to inch upward, although that has less to do with interest rates than with sector-specific factors.
- NCREIF recorded a total return of 6.8% in the third quarter of 2018, down 60 basis points (bps) from the previous quarter but in line with recent performance. Industrial continues to outperform other segments, having posted a 14.1% annualized return in the third quarter, while office and retail returns are in line with those of the market overall.

2018 Transaction Activity on Pace to Exceed that in 2015

The third quarter of 2018 was the strongest quarter for transaction activity since the fourth quarter of 2015 and was the fourth strongest since 2000. Transaction activity totaled $139.1B in the third quarter, a 25% QoQ increase and a 21% increase YOY. Year-to-date transaction volume totaled $356.6B at the end of the quarter, up 13% from the same period in 2017 putting 2018 on pace to exceed the level of activity in 2015.

Entity/M&A activity significantly boosted deal volume in the third quarter of 2018 as previously announced acquisitions of GGP and DCT Industrial by Brookfield and Prologis, respectively, closed. These were not, however, the only sources of strength; single asset sales rose 13% QoQ and 11% YoY. Megadeal activity continued to recover—up 21% QoQ and 74% YoY.[1] In contrast, portfolio sales were somewhat weaker, down 5% QoQ and 7% YoY.

The emerging picture of 2018 is robust and in a sense a well-balanced one insofar as activity has not been dependent on any one market segment. Single asset, megadeal, portfolio and M&A deal volumes have all increased YTD compared to the same period in 2017. In particular, single asset sales volume has been the strongest on record.

Rising Tide Lifts All Market Tiers…

Transaction activity increased across major, secondary and tertiary markets in the third quarter of 2018. Major market volume continued its recovery since bottoming in the second quarter of 2017, although volume remains below 2015 and 2016 levels when CBD office and hotel transactions inflated activity. Secondary market volume was the highest on record following two softer quarters. Tertiary market volume, while still a fraction of major and secondary market volumes, also reached a new historical peak as activity spiked 38% QoQ and 42% YoY. Secondary and tertiary market performance provides further evidence that capital is migrating to new markets.

Across markets multifamily, industrial and retail activity offset softening office sales. Year-to-date, major market volume has risen 12% from the same period in 2017. A similar picture emerges of secondary markets where volume is up 10% overall YTD. Tertiary market volume has advanced 26% compared to a year ago, with similar sector trends.

At the metro level, New York City leads activity nationally in absolute dollar volume, both in the third quarter of 2018 and YTD. Sales are up 33% YTD at the close of the third quarter, and up 57% YOY. The San Francisco and Los Angeles metros rank second and third in total volume year-to-date. Transaction activity was up in these markets but to a lesser extent than in New York and the market as whole. Washington, DC and Boston metro volumes were down 5% and 28% YTD, respectively, although Boston exhibited positive momentum in the third quarter (+23% YoY). Chicago has also seen transactions surge in 2018—up 35% YTD, but

U.S. TRANSACTION ACTIVITY

	3Q18			YTD	
	Vol ($B)	QoQ	YoY	Vol ($B)	YoY
Single Asset	87.8	13%	11%	246.4	7%
Portfolio	23.3	-5%	-7%	70.0	6%
Entity	28.0	241%	152%	40.2	112%
Total	**139.1**	**25%**	**20.9%**	**356.6**	**13%**

Source: Real Capital Analytics, Cushman & Wakefield Research
Deals over $5 million

MARKET TIER TRANSACTION ACTIVITY

	3Q18			YTD	
	Vol ($B)	QoQ	YoY	Vol ($B)	YoY
Major Metros	53.8	13%	12%	149.3	12%
Secondary Markets	60.7	34%	22%	148.2	10%
Tertiary Markets	24.0	38%	42%	57.7	26%
Total	**139.1**	**25%**	**20.9%**	**356.6**	**13%**

Source: Real Capital Analytics, Cushman & Wakefield Research
Deals over $5 million

[1]Defined as single asset sales over $250 million.

MARKETBEAT

U.S. Capital Markets

Q3 2018

NUANCE IN INDIVIDUAL MARKETS

Top 25 Markets by YTD 2018 Volume

		Year-Over-Year Percent Change						
Metro Area	**YTD Volume ($M)**	**Apartment**	**Hotel**	**Industrial**	**CBD Office**	**SUB Office**	**Retail**	**Total**
NYC Metro	43,903	32%	126%	-13%	41%	-25%	54%	33%
LA Metro	31,898	21%	-46%	6%	-61%	-25%	69%	3%
SF Metro	22,439	33%	17%	12%	-30%	0%	-4%	4%
DC Metro	16,089	18%	31%	-63%	-8%	-7%	32%	-5%
Chicago	15,677	-1%	-17%	49%	105%	49%	31%	35%
Dallas	15,397	-15%	-3%	52%	2582%	-23%	87%	5%
Atlanta	11,751	-5%	-38%	37%	-72%	27%	13%	2%
Phoenix	11,627	44%	329%	150%	162%	47%	20%	64%
Houston	11,549	67%	-1%	57%	-63%	-41%	72%	20%
Seattle	11,243	12%	23%	99%	91%	36%	100%	46%
Miami/So Fla	10,047	-21%	51%	12%	-25%	26%	-27%	-9%
Boston Metro	8,606	-27%	41%	54%	-59%	34%	-23%	-28%
Denver	8,298	-17%	216%	72%	2327%	59%	63%	22%
Las Vegas	5,726	-18%	34%	-48%	489%	0%	35%	1%
San Diego	5,401	-35%	17%	-12%	-92%	24%	168%	3%
Philly Metro	4,985	43%	3%	3%	-29%	-28%	-49%	-7%
Austin	4,978	8%	49%	131%	-93%	14%	-50%	-2%
Orlando	4,897	5%	-25%	92%	75%	-30%	-4%	1%
Raleigh/Durham	4,322	43%	18%	-67%		107%	10%	45%
Tampa	4,050	9%	26%	11%	-77%	-11%	51%	10%
Charlotte	4,003	33%	-77%	-4%	46%	-66%	31%	-18%
Minneapolis	3,892	-11%	4%	87%	404%	14%	32%	41%
Baltimore	3,880	-14%	-30%	36%	-36%	5%	357%	16%
San Antonio	3,555	11%	630%	-35%	-86%	28%	201%	31%
Sacramento	3,295	28%	183%	-23%	40%	22%	42%	19%

Source: Real Capital Analytics, Cushman & Wakefield Research
Deals over $5 million

with momentum moderating in the third quarter of 2018 to 10% YoY.

Among secondary markets, Dallas and Atlanta lead overall volume year-to-date; however, transaction activity has increased less in these markets than in the market as a whole. The secondary markets with the greatest gains in activity were in the southwest (Phoenix, San Antonio and Houston), secondary tech markets (Seattle, Minneapolis and Salt Lake City) and recovering Midwest markets (Cincinnati and Columbus).

...and Most Product Types

Transaction activity increased both in the third quarter of 2018 and on a YTD basis for most product types and subtypes compared to the same time periods in 2017. The strongest overall activity was in the retail sector where volumes are up 36% YTD. But these figures are heavily biased by the Unibail-Westfield merger that occurred in the second quarter of the year and the Brookfield-GGP buyout in the third quarter. Excluding M&A activity, retail sales are down 7% YTD as sales of shops and strip centers have moderated, although it is worth mentioning that strip center sales bounced back in the third quarter but not enough to counteract weakness in the first half of the year. Urban/high street retail is a bright point: after several years of decline activity has strengthened and is up 17% YTD.

Multifamily remains the largest investment sector, accounting for $115B YTD. Volume is up 13% YTD due to recovering CBD mid-/high-rise sales and suburban high-rise sales reaching new records. Garden apartment sales rose more modestly while still reaching historic highs.

Industrial continues to be attractive for investors as deal volume has advanced 17% YTD. Some of this strength is attributable to continued high entity/M&A deal volume, most recently the Prologis acquisition of DCT Industrial for $8.5B. This reflects consolidation in the 3PL sector and the desire of investors to rapidly expand their exposure to the sector. The strongest activity remains in the warehouse space while sales of flex product have been moderating.

Volumes are increasing in the hospitality sector for both full- and limited-service product. Full-service sales in particular are recovering after a lackluster 2017. A benign economic outlook, as well as rising leisure and business travel resulting in historically high occupancy, are all potential factors in driving sales.

Suburban office sales continue to exceed CBD office as has been the case since late 2016. However, suburban office sales have begun to moderate (down 7% YTD) while CBD office sales are slightly up for the year so far (3%). Suburban office sales were weakest in the major metros (down 10% YTD) while CBD office sales were strongest in secondary markets (up 9% YTD). There was significant market-to-market variation. Suburban office sales rose strongly in Chicago (49% YTD), Phoenix (47%), Seattle (36%), Denver

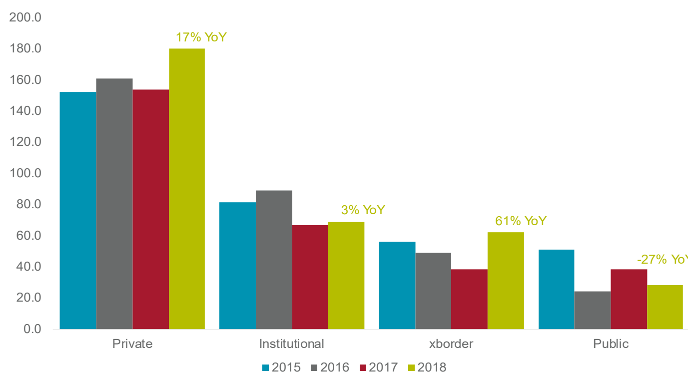
CUSHMAN & WAKEFIELD

U.S. TRANSACTION ACTIVITY BY PRODUCT TYPE

	3Q18			YTD	
	Vol ($B)	QoQ	YoY	Vol ($B)	YoY
Apartment	46.2	35%	14%	114.6	13%
Office	33.1	22%	17%	88.5	-3%
Suburban	20.7	28%	0%	53.0	-7%
CBD	12.4	13%	62%	35.5	3%
Retail	26.3	39%	107%	57.0	36%
Industrial	21.4	27%	-2%	56.8	17%
Hotel	7.3	-21%	-1%	26.5	28%
Dev Site	4.8	10%	14%	13.1	16%
Total	**139.1**	**25%**	**20.9%**	**356.6**	**13%**

Source: Real Capital Analytics, Cushman & Wakefield Research
Deals over $5 million

YTD ACQUISITION VOLUME BY INVESTOR TYPE
(2015-2018), $ Billions



Source: Real Capital Analytics, Cushman & Wakefield Research
Deals over $5 million

(59%) and Raleigh-Durham (107%), but declined in Charlotte (-66%), Orlando (-30%), Philadelphia (-28%), Houston (-41%) and New York (-25%). CBD office sales advanced most quickly in New York (41%), Phoenix (162%), Denver (2,327%), Seattle (91%) and Minneapolis (404%).

Swashbuckling Private Capital

Private capital continues to drive the market. Acquisitions by private investors increased 20% QoQ and YoY to $67B. Year-to-date, private capital investment has risen 17% to $180B—significantly higher than in any previous period since 2000. This capital has been largely directed to multifamily investment, which increased 32% YoY in the third quarter of 2018 to $33B. Acquisitions of other sectors have also increased year-to-date.

Institutional investment activity has been more restrained in comparison. Acquisitions increased 2% YoY in the third quarter of 2018 and 3% YTD. CBD Office (+31% YTD) and hotel (79%) investment drove this increase following weakening purchase activity in 2017, while acquisitions declined for multifamily (-1%), Industrial (-2%) and retail (-42%) product. This is despite dry powder at North American-focused close-end funds sitting at a record $192B, up from the previous record of $176B in December 2017.

Year-to-date, cross-border investment increased 61% YoY to $62B, a higher level than in the same period in 2015. Cross-border investment accounted for 17.4% of overall transaction activity YTD, well-above the 12.4% average since the first quarter of 2010. Activity during 2018 to date is largely attributable to cross-border M&A, notably the GLP management buyout in the first quarter of the year, the Unibail-Westfield merger in the second quarter and the Brookfield-GGP buyout in the third. Excluding these transactions, cross-border investment is up 6.1% YTD as acquisitions of industrial (65%), hotel (47%), multifamily (21%) and retail assets counteracted falling CBD office investment (-31%). In addition, while nearly half of cross-border investment has continued to flow into the major gateway markets, secondary and even tertiary markets have been gaining importance, particularly as these investors shift toward multifamily and industrial assets. Year-to-date, the top sources of cross-border investment have been Canada, France (Unibail-Westfield), Singapore, China (GLP buyout) and Germany.

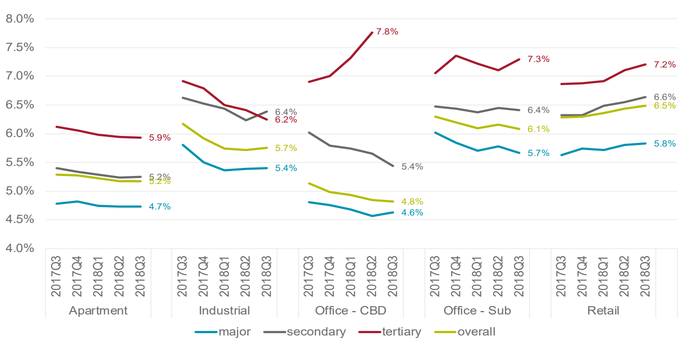
Investment appetite from public vehicle investors remains weak. Acquisitions declined 8% YoY in the third quarter of 2018 and 27% YTD. Investment by public investors has decreased across most product types. The only exceptions are development sites (up 56% YTD) and industrial product (up 21%), the latter entirely due to the Prologis-DCT Industrial deal that closed in the third quarter of the year.

Cap Rates Steady in the Interest Rate Storm

U.S. interest rates have risen significantly in 2018. Movement in short-term rates are most relevant to the floating rate debt market while long-term rates have the greatest impact on fixed-rate debt markets and on cap rates. From the beginning of the year through November 2, the 3-month USD LIBOR has increased 83 basis points (bps) to 252 bps while the 10-year Treasury has risen 82 bps to 3.22%. Yet, in both cases, the debt and equity markets have absorbed the increases by compressing spreads. There are three reasons for this: 1) while overall financing and cap rates were low, spreads were not historically compressed 2) there are record levels of capital backstopping the debt and equity markets and 3) rising rates have, for the most part, reflected an improving macroeconomic outlook.

This is not to suggest there has been no movement in cap rates. Rather, the movement has more to do with market and product specific factors rather than with interest rates. Multifamily yields have been stable in recent quarters amid strong capital demand. Industrial yields continue to compress in the tertiary markets but have risen slightly in the major and secondary industrial markets, likely due to a shift in transaction activity towards Class B product. CBD office yields are declining in secondary markets amid strong capital demand and have stabilized in the major metros. Suburban office yields are fairly stable with the exception of tertiary markets which now offer among the highest yield premia on record. Finally, retail yields continue to increase across market tiers as investors demand higher yields in this evolutionary period for the sector.

ROLLING 4 QTR VOLUME-WEIGHTED CAP RATES
By Market Tier Across Product Types



Source: Real Capital Analytics, Cushman & Wakefield Research
Deals over $5 million

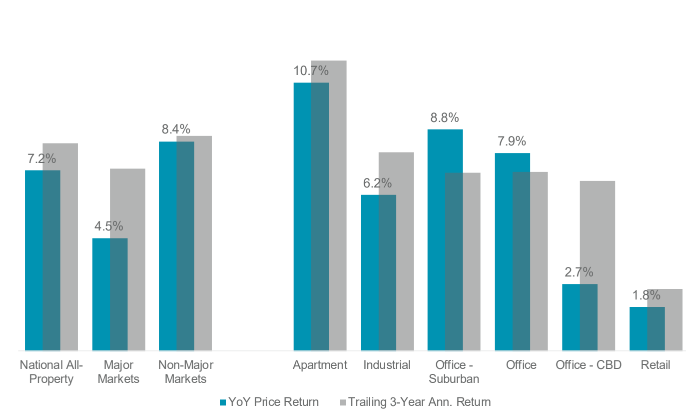
Which Product Type Returns the Most of All

According to the RCA commercial property price index (CPPI), overall prices have risen 7.2% YoY compared to the 3-year average increase of 8.3%. Price growth in the non-major metros significantly outpaced that in the major markets, reversing previous trends.

Multifamily continues to be the best performer in terms of price. In contrast, suburban office is currently outpacing CBD office, but the price gap between the two remains near historic highs. Retail prices are rising but at an anemic pace. The CPPI indicates that industrial price growth has slowed modestly to 6.2% YoY, lagging price growth for multifamily and suburban office.

NCREIF All-property total returns have been broadly stable since early 2016, coming in at 6.8% in the third quarter of 2018. Suburban office (7.3% in the third quarter 2018) outperformed CBD office (6.6%). NCREIF industrial returns significantly outpaced those for any other product type, and rather than slowing, they have been increasing across product subtypes. NCREIF multifamily returns have been stable in recent quarters. Garden product boasts the highest total returns (8.7%) of any subtype outside industrial.

RCA COMMERICAL PROPERTY PRICE INDEX RETURNS



Source: Real Capital Analytics, Cushman & Wakefield Research

Outlook

- Investment sales activity is running at a pace well above Cushman & Wakefield's forecast of a 2.6% increase in 2018. This was apparent earlier in the year, but has been greatly enhanced by the third quarter performance. The market enters the fourth quarter of the year with strong momentum. The fourth quarter is typically the strongest period of any year for deals; however, equity market and rate volatility—along with uncertainty arising from the U.S. midterm elections—could counteract some of this momentum, delaying closes until after the election or potentially the beginning of 2019. Nonetheless, the strong U.S. economy and the outperformance of the private CRE market compared to public equities and bonds combined with the continued weight of capital should continue to drive robust activity in the final quarter of the year and into 2019.
- NCREIF returns are thus far in line with Cushman & Wakefield's mid-year forecast. Returns are projected to remain largely stable moving into 2019. This outlook should remain intact as industrial rent growth remains at high levels.
- Fundraising for close-end funds has been the strongest on record over the last 12 months while net cash flows have turned positive at open-ended core funds for the first time since 2016. The continued weight of capital is focused on the secondary markets and value-add product as well as multifamily, industrial and defensive niche strategies.

David Bitner
Americas Head of Capital Markets Research
Phone: +1 408 761 9328
david.bitner@cushwake.com

Revathi Greenwood
Americas Head of Research
Phone: +1 202 463.2100
revathi.greenwood@cushwake.com