MSCI

Q3 2022

Capital Trends

US Office

6.8% YOY price change

$26.9b Transaction volume

-33% YOY volume change

Two forces dragged down sales in the office market for the third quarter. Financing acquisitions became difficult thanks to a rising interest rate environment. Concerns about the future of tenant demand continued to grow as well. Unless something new pops up to stop the interaction of these forces, one would be hard pressed to make a case for a rebound in deal volume through the fourth quarter.

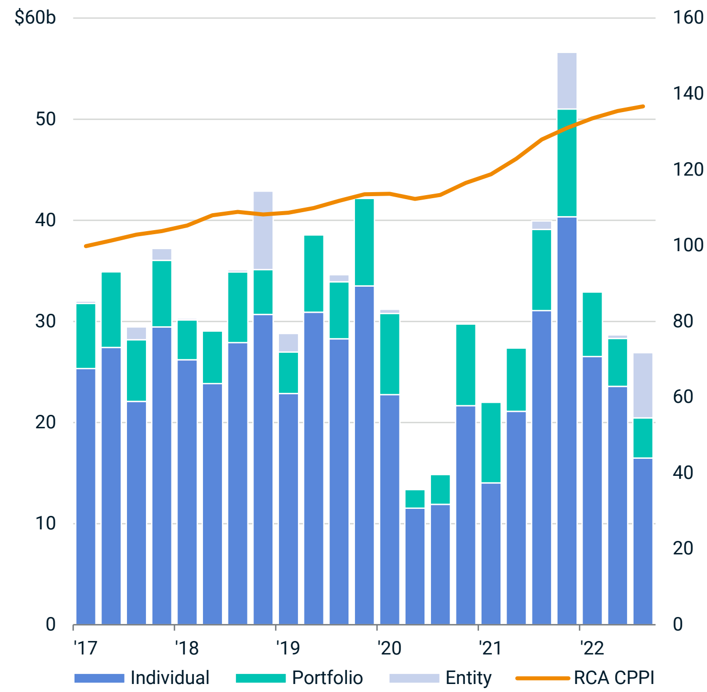
Deal volume is in many respects a lagging indicator. The 53% YOY decline for office deals that closed in September reflects deals that started weeks or months earlier under more favorable conditions for underwriting acquisitions. Events in September itself may act as a lingering restraint on deal volume in the months ahead.

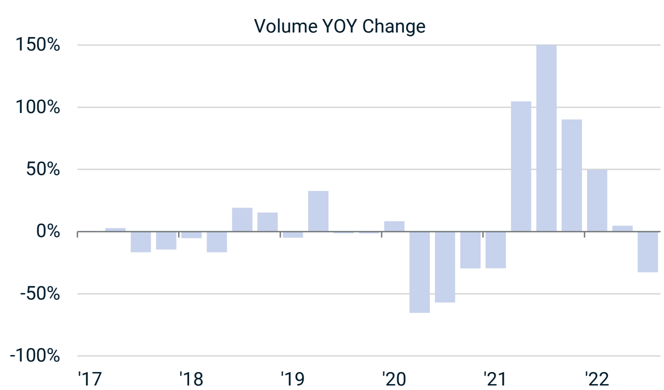
The Labor Day holiday in the U.S. was on Sept. 5 and marked an important milestone for investors trying to understand the future of tenant demand for the sector. This day was highlighted as a watershed moment when office workers would begin to return en masse. Indicators from groups like Kastle Systems and subway ridership figures did show an uptick in activity, but nowhere near pre-pandemic levels. The 33% YOY decline in deal volume for Q3'22 reflects none of this information given the lag on the timing of deals.

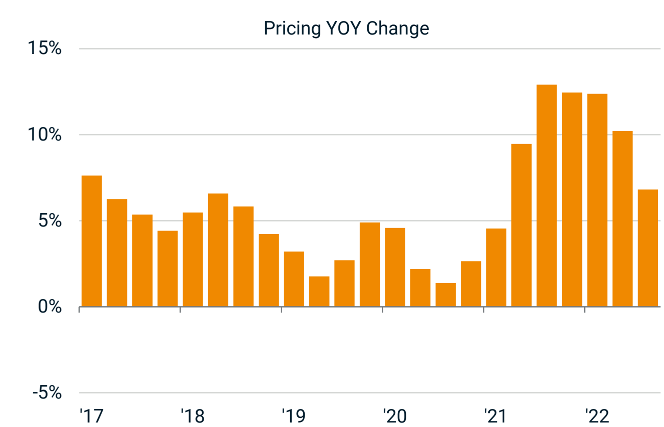
In our report for August, we noted that the coupon on 7/10yr fixed rate commercial mortgages stood at 5.4% in July, a figure that has continued to face upward pressure. The 10yr UST, for instance, jumped from an average 2.9% in July to 3.5% in September. As shown on the following page, cap rates have remained at low levels, limiting the investment benefits from leverage.

The headline figures for all office activity in Q3'22 showed a shallower decline than a tally of activity in traditional offices alone would have shown. Two entity-level transactions made total activity look as good as it was. These deals were not generally a case of investors making a call on the return to the office. Instead, these were heavily weighted to activity in the medical office sector. Performance for medical offices is tied more towards demographic demand and medical spending, and not job growth as with traditional offices. Putting aside such megadeals, the sale of individual office assets fell 47% from a year earlier in the quarter.

Quarterly Transaction Volume and Pricing







Volume YOY change truncated at 150%

Transaction Volume Summary

	Q3 2022		YTD 2022	
	Vol ($b)	YOY	Vol ($b)	YOY
Office Total	26.9	-33%	88.5	-1%
CBD	5.4	-54%	24.8	-8%
Sub	21.5	-23%	63.7	2%
Portfolio & Entity	10.4	17%	21.9	-5%
Single Asset	16.5	-47%	66.6	1%

Recent Trends

Office deal volume has been limited as cap rates have simply not moved as much as the cost of financing. The coupon on 7/10yr fixed rate commercial mortgages climbed from a low of 3.5% in September of 2021 to 5.4% in July of this year. Cap rates, however, have fallen over the same time frame.

The RCA Hedonic Series cap rate for offices stood at 6.2% in Q3’21 and fell to 6.0% for Q3’22. The 270 bps spread a year ago provided a boost to returns for new office investments, but a mere 60 bps spread puts new investments out of the range of most investors. An investor using leverage for a deal must expect strong income growth in the near term to make a deal pencil out under these conditions.

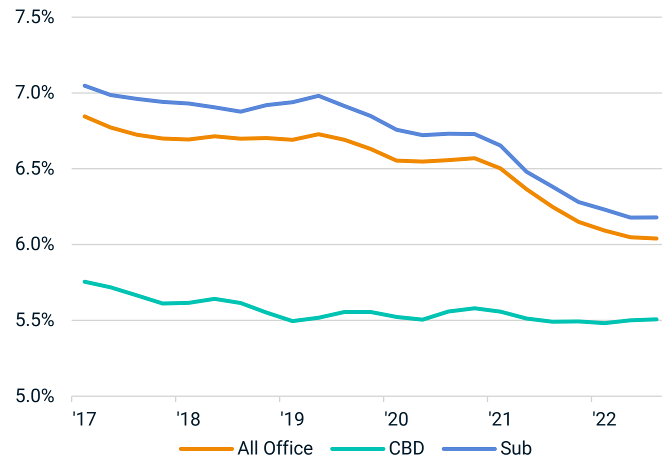
Deal volume then is lower for CBD office assets than suburban assets, in part because of different expectations around growth. The $5.4b in CBD office sales for Q3’22 was down 54% from a year earlier. Suburban office sales, by contrast, stood at $21.5b for the quarter, down only 23% from the pace a year ago. In times past, deal volume for CBD and suburban office sales were roughly equivalent each quarter.

Granted, suburban office deal volume was more influenced by entity-level transactions than were CBD sales. Looking at individual asset sales for both office subtypes, volume was down at a similar pace for each.

Despite negativity around deal activity, prices for assets that are trading have not yet declined. The right deal with the right asset and the right tenant income profile can still make sense to investors. The RCA CPPI for offices climbed 6.8% from a year earlier in Q3’22. Still, the pace of price increases is slowing, with the annualized rate of growth at only 3.7% from the levels seen in Q2’22.

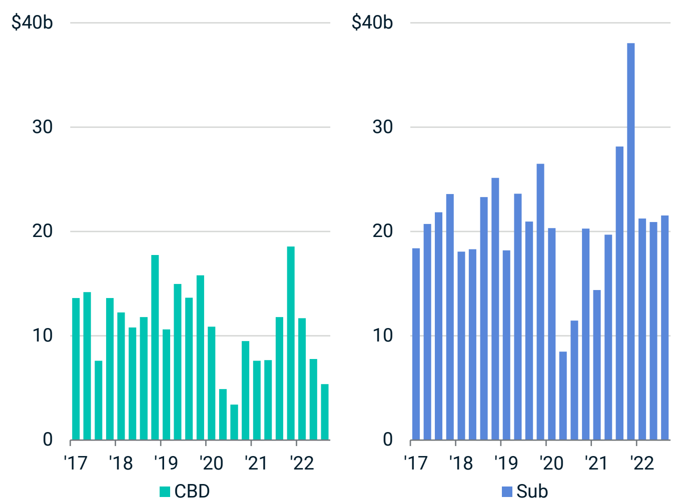
Prices started to fall for CBD office assets in the quarter, with the RCA CPPI down 2.0% at an annualized pace relative to Q2’22. Suburban office prices, by contrast, posted a 5.5% annualized pace of growth.

Cap Rates



RCA Hedonic Series

Quarterly Transaction Volume by Subtype



Q3 2022 Deal Volume and Pricing Summary

	Quarterly Volume				RCA CPPI		Price Averages		
	$b	YOY Chg	#Props	YOY Chg	1-qtr Chg	1-yr Chg	$/sf	Cap Rate	YOY Chg (bps)
Office	26.9	-33%	1,334	-23%	0.9%	6.8%	243	6.0%	-20
Office CBD	5.4	-54%	105	-35%	-0.5%	4.2%	352	5.5%	0
Office Sub	21.5	-23%	1,229	-22%	1.3%	6.6%	216	6.2%	-20
6 Major Metro	9.7	-45%	331	-28%	-0.4%	4.1%	316		
Non-Major Metro	17.2	-23%	1,003	-21%	2.2%	7.6%	207		
Single Tenant	4.5	-45%	237	-18%	-0.7%	3.4%	299	6.2%	-10
Medical Office	7.1	41%	483	-2%	1.3%	4.1%	341	5.9%	-20

RCA Hedonic Series cap rates

Distribution of Prices

The office market is just starting to show signs of price declines for CBD office assets when we examine deals on a same-store basis. The deals that are missing from the market point to challenges on pricing that simply have not yet been realized in sale activity. The distribution of office sale prices as measured on a price per square foot basis is simply skewed towards the best of the best.

The charts below break out the distribution of sale prices in price buckets on the x-axis and the percentage share of all deals on the y-axis. Prices are examined for existing CBD assets 100,000 square feet and greater and suburban assets 50,000 square feet and greater, and we exclude any value-add or opportunistic transactions. Given the higher average price levels for CBD office assets and for the 6 Major Metros (6MM) versus the Non- Major Metros (NMM), prices are examined for the combination of these two variables across four charts. Looking at activity in 2021 and the first nine months of 2022 versus the trends before the pandemic it is clear that there are fewer trades for the lower priced assets.

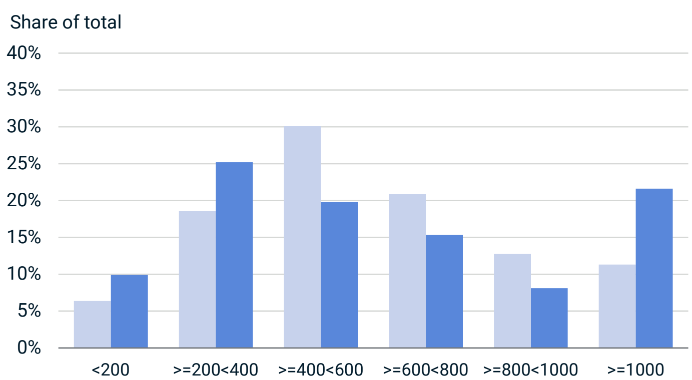
For CBD office activity in the 6MM, for instance, 22% of all deals in the latest period were priced at $1,000 per square foot (PSF) or greater. Before the pandemic, this share stood at 11% of the market. The breakdown of prices for CBD office assets in the non-major areas is topped out at $500 PSF or greater, given the lower average sale prices in these markets. Here too though, the distribution of deals in the top end of the market surged and has represented a 20% share in the latest period versus a 12% share before the pandemic.

This changing distribution suggests that only some types of deals are possible today. The assets that would have traded in the lower price ranges in the pre-pandemic world simply are not moving.

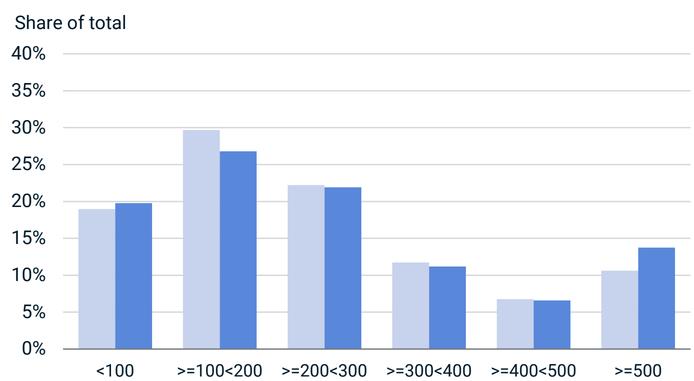
Price Distribution

Price per square foot 2017-19 2021-YTD'22

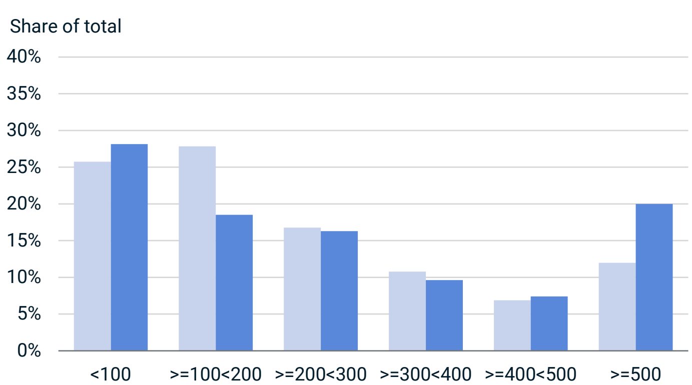
CBD Office — 6 Major Metros



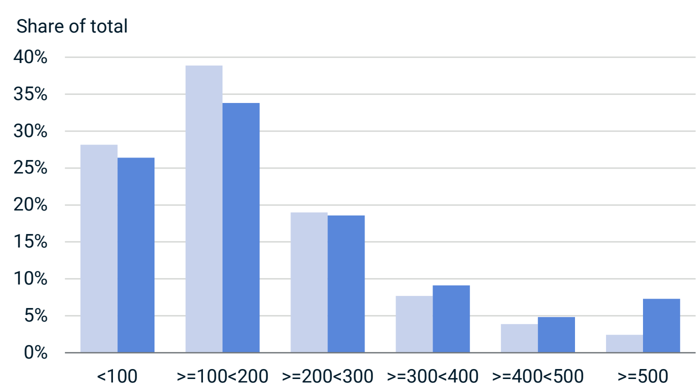
Suburban Office — 6 Major Metros



CBD Office — Non-Major Metros



Suburban Office — Non-Major Metros



CBD office properties sized 100k square feet and greater, suburban office properties sized 50k sqft and greater; properties purchased for redevelopment or condo conversion are excluded

Top Markets

Having been dethroned in 2020, year-to-date office investment in Manhattan was enough to earn it the crown as the top market once again. With $7.2b in investment, volume rose 39% YOY. It remains to be seen whether investment in Manhattan and the #2 market, Boston, is sustainable. In each market, the top three transactions account for the lion's share of activity — more than 60% of volume in Manhattan and nearly 50% in Boston. A ranking based on the number of closed office sales would show #3 Los Angeles as the top market.

A focus on life sciences and R&D continued to make Boston a hive for office investors. Boston office investment totaled $4.4b, 75% of which was tied to an asset with an R&D and, or, a life sciences component. The largest single asset sale in the third quarter was that of 125 Broadway; this Cambridge property, leased to Biogen through 2028, traded for $603m.

With $4.2b in office sales, #4 Dallas was the only market of the top five ranks to reach a record level of investment. In addition to Dallas, three other markets had year-to-date office purchases that exceeded their respective prior high-water marks. The DC MD Burbs at #19, #23 Nashville and the NYC Boroughs at #24 were also part of this record-breaking cohort.

Whereas Dallas relied on a steady flow of single asset sales, megadeals were behind the outsized investment in the DC MD Burbs and Nashville. For each market, portfolio sales accounted for at least 40% of office investment. Based on single asset sales alone, neither of these markets would have found themselves in the top 25 market rankings.

At #24, the NYC Boroughs appeared on the list of top markets after dropping out at the end of 2021. The Boroughs returned to the rankings without the influence of megadeals. Ranking by single asset activity alone, the market would have come in at #18.

Most Active Markets Year to Date 2022

Individual | Portfolio/Entity

2020	2021	YTD'22	Market	Sales Volume ($m)	YOY Change
2	2	1	Manhattan	7,219	39%
1	1	2	Boston	4,382	-50%
5	7	3	Los Angeles	4,203	36%
7	4	4	Dallas	4,165	6%
19	10	5	Atlanta	4,127	23%
4	5	6	Seattle	4,084	-14%
10	12	7	Chicago	2,683	91%
11	14	8	DC	2,652	46%
17	8	9	San Diego	2,476	-1%
6	3	10	San Jose	2,420	-49%
16	17	11	Denver	2,249	6%
9	9	12	DC VA burbs	2,176	-19%
18	15	13	Phoenix	2,163	12%
3	6	14	San Francisco	2,110	-37%
14	22	15	Houston	2,011	61%
8	13	16	No NJ	1,877	-4%
28	11	17	Austin	1,832	-30%
15	19	18	Orange Co	1,803	7%
26	42	19	DC MD burbs	1,603	276%
22	16	20	East Bay	1,442	-41%
29	20	21	Miami/Dade Co	1,420	-24%
20	18	22	Charlotte	1,350	-28%
21	28	23	Nashville	1,287	59%
31	27	24	NYC Boroughs	1,238	120%
12	23	25	Raleigh/Durham	1,122	31%

Markets in orange denote record high volume for the first nine months of the year; YOY change truncated at 150%.

Market Momentum

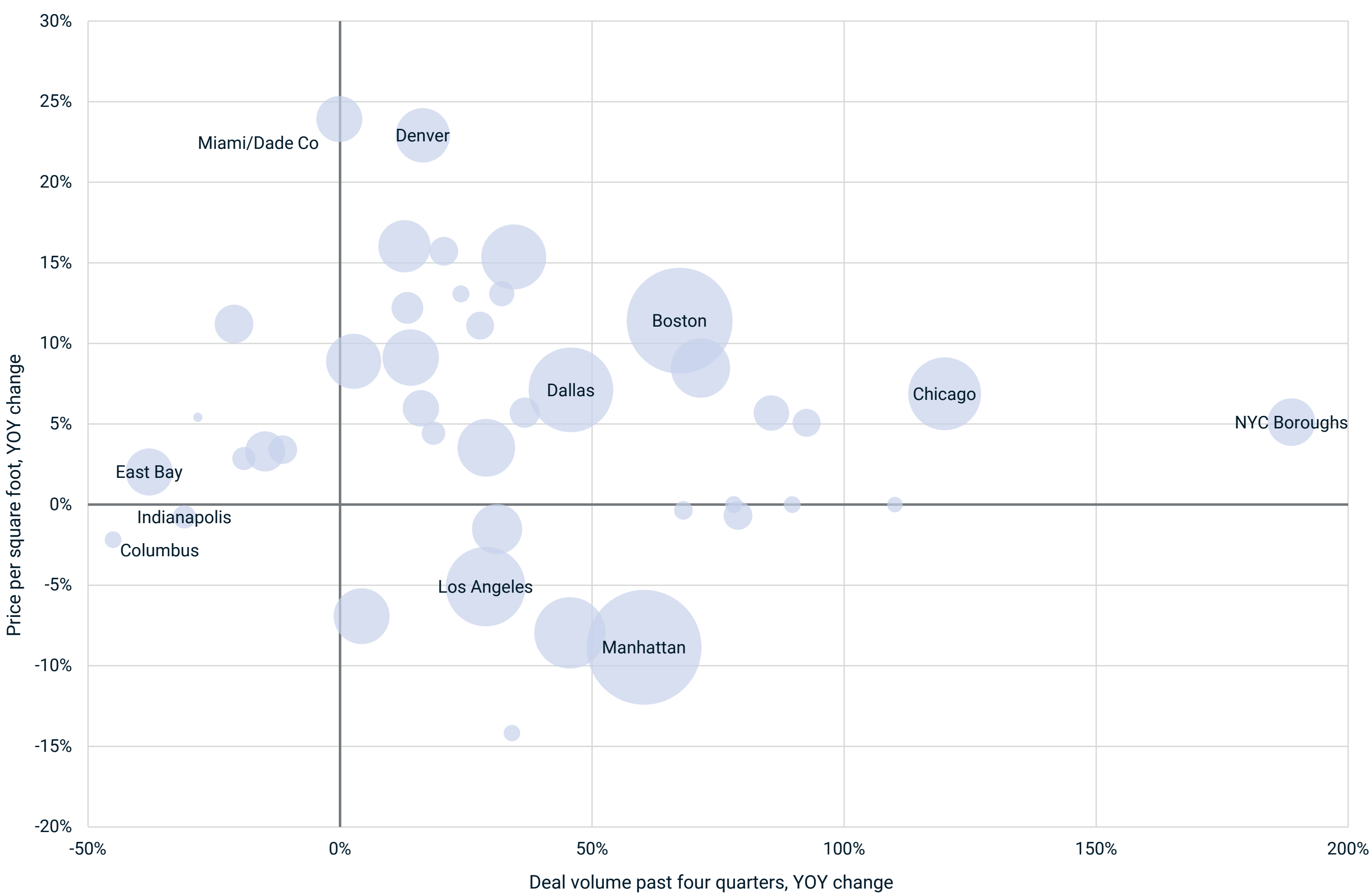
A clear relationship between deal volume and price growth did not emerge across office markets in the third quarter of 2022. Looking at just individual asset sales to clear away the distortions of one-time events, there is not a clear pattern of stronger growth in prices for markets with stronger deal volume.

Manhattan was the leading market for deal volume in the past four quarters and it was also one of the strongest markets for volume growth — up 60% from pace set for the same period last year. And yet the RCA Hedonic Series (RCA HS) measure for office prices fell 8.9% from a year earlier. Some of the growth in deal volume for Manhattan was not likely a price-driven phenomenon, but more of a sense of clarity coming to underwriting, with the worst parts of the pandemic now more than two years in the rearview mirror.

Boston also posted a high rate of growth in sales — up 67% compared to the prior four quarters. And yet while volume increased at a pace like that of Manhattan, price growth was far stronger. The RCA HS measure of office prices was up 11.4% from a year earlier in the quarter. The office market in Boston is increasingly driven by expectations surrounding the life sciences sector, with less optimism around traditional offices.

There were few markets with the poisonous combination of falling deal volume and falling prices for the quarter. Indianapolis and Columbus were in this unenviable position. The East Bay of the San Francisco region was close to this sort of situation, with prices up only 2.0% from a year earlier, a pace well below the rate of inflation in the economy.

Investment Momentum of Markets Q3 2022



RCA Hedonic Series pricing; bubbles sized for volume in past four quarters.

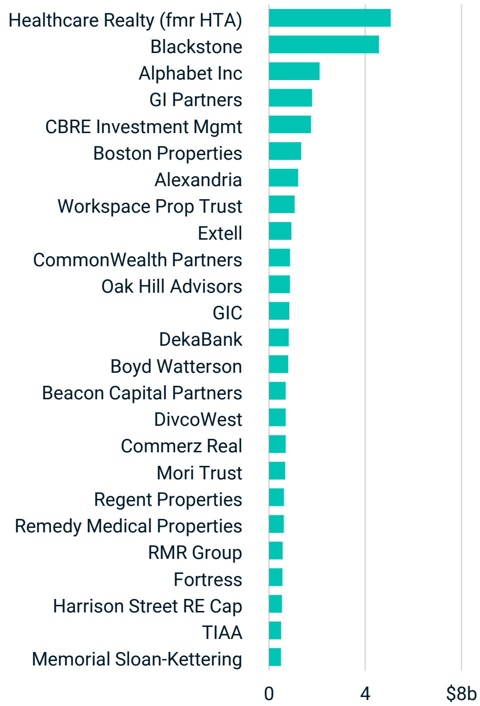
Top Players and Deals Year to Date 2022

Top Office Buyers and Sellers

Buyers by Region

Mid-Atlantic	Southeast
Blackstone	Healthcare Realty
Commerz Real	CBRE Invmt Mgmt
Mori Trust	Piedmont REIT
Fortress	KKR (KREF)
TIAA	HPS Invmt Partners
Midwest	**Southwest**
Healthcare Realty	Healthcare Realty
Oak Hill Advisors	Regent Properties
GIC	Blackstone
Workspace Prop Trust	Beacon Capital Ptnrs
Opal Holdings	Monarch Alt Cap
Northeast	**West**
Alphabet Inc	Healthcare Realty
Blackstone	Blackstone
Extell	CommonWealth Ptnrs
GI Partners	DekaBank
CBRE Invmt Mgmt	Boston Properties

Buyers



Sellers

Ranked by investment volume.

Methodology: Rankings are based on the pro-rated share of the total property or portfolio value. In the case of joint ventures, full credit is assigned to each investor.
For more information please visit the MSCI Real Capital Analytics website.

Top Office Single Asset Property Sales

	Property	Location	Size	Type	Volume($m)$^{\Delta}$	$/unit	Buyer	Seller
1	Google Hudson Sq (Condo)	New York, NY	631,721 sq ft	OFF	2,100.0	3,324	Alphabet Inc	OMERS JV CPP Investment Board
2	One Manhattan West	New York, NY	2,081,035 sq ft	OFF	1,396.5*	1,370	Blackstone	Brookfield AM JV QIA
3	Lakefront Blocks (Condo)	Seattle, WA	656,009 sq ft	OFF	819.0	1,248	DekaBank	Vulcan Inc
4	110 North Wacker Drive	Chicago, IL	1,400,000 sq ft	OFF	-*	-	Oak Hill Advisors	Howard Hughes JV USAA RE
5	Madison Centre	Seattle, WA	761,000 sq ft	OFF	729.9	959	Boston Properties	MMGL Corp JV Barings
6	Alexandria Center at Kendall Sq	Cambridge, MA	432,931 sq ft	OFF	714.0*	2,356	CBRE Investment Mgmt	Alexandria
7	Seaport Center	Boston, MA	479,294 sq ft	OFF	693.8*	1,477	GI Partners	Related Companies
8	Trammell Crow Center	Dallas, TX	1,128,331 sq ft	OFF	615.0	545	Regent Properties	JP Morgan JV State Street
9	125 Broadway	Cambridge, MA	271,000 sq ft	OFF	602.8	2,225	Boston Properties	Biogen
10	601 Massachusetts Ave NW	Washington, DC	478,883 sq ft	OFF	531.0	1,109	Mori Trust	Boston Properties
11	1180 Peachtree	Atlanta, GA	669,711 sq ft	OFF	472.0	705	Piedmont REIT	State Street
12	Sony Pictures Plaza	Culver City, CA	328,847 sq ft	OFF	459.0*	1,551	Blackstone	LBA Realty
13	Palo Alto Research & Tech	Palo Alto, CA	292,000 sq ft	OFF	446.0	1,527	Alexandria	Morgan Stanley
14	Rancho Vista Corporate Cntr	San Diego, CA	817,000 sq ft	OFF	445.0	545	Apple	Swift Realty Partners
15	450 Park	New York, NY	321,462 sq ft	OFF	445.0	1,384	SL Green	OMERS JV Crown Acquisitions

$^{\Delta}$ When prices are not known, estimated prices are used in the ranking but are not shown. Volume is adjusted pro-rata for partial interests although $/unit reflects 100% valuation.
* Partial interest ** Forward sale Excludes development site sales
The number of buyers or sellers shown on a deal is truncated to two. For full deal and player information go to the MSCI Real Capital Analytics website.

Top Brokers Year to Date 2022

By Region

Mid-Atlantic
Eastdil Secured
CBRE
JLL
Cushman & Wakefield
Newmark

Midwest
Eastdil Secured
Cushman & Wakefield
CBRE
JLL
Colliers International

Northeast
CBRE
Cushman & Wakefield
Newmark
Eastdil Secured
JLL

Southeast
CBRE
Cushman & Wakefield
Eastdil Secured
JLL
Colliers International

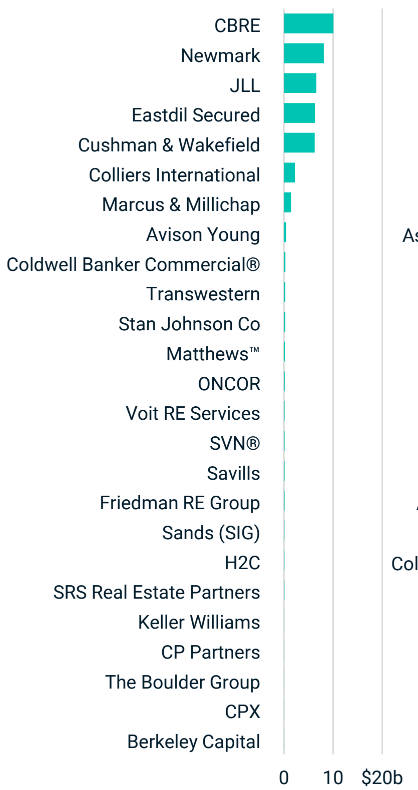
Southwest
JLL
CBRE
Cushman & Wakefield
Newmark
Eastdil Secured

West
Newmark
CBRE
Eastdil Secured
JLL
Cushman & Wakefield

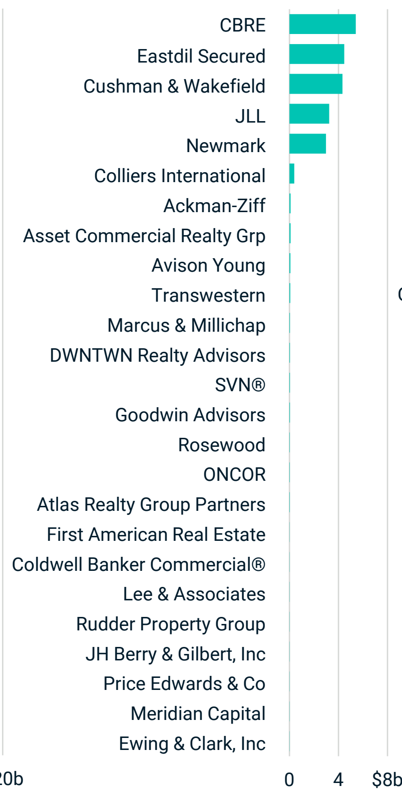
Ranked by investment volume

By Office Investment Volume

Suburban



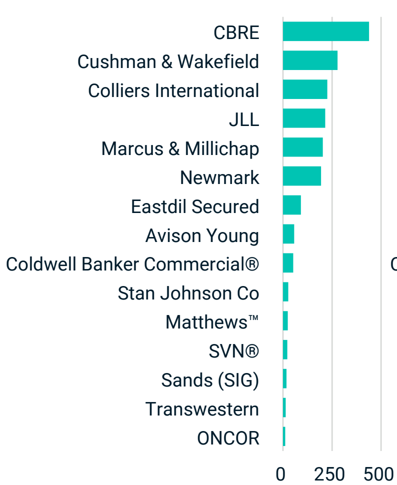
CBD



All Office

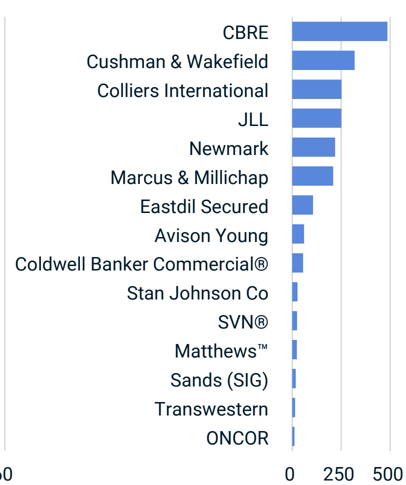
By Number of Office Properties

Suburban



CBD

All Office



Methodology: Full credit assigned to each broker when multiple brokers involved. For partial-interest, volume is based on the pro-rated share of the total property or portfolio value. Based on sell-side representation. The transaction volume of brokerage firms that have merged are left unconsolidated before the merger date and are attributed to the surviving or newly formed company after the merger date. For more information on rankings please visit the MSCI Real Capital Analytics website.

Jim Costello
Chief Economist, Real Assets Research

Alexis Maltin
Head of Americas, Real Assets Research

Haley Crimmins
Vice President, Real Assets Research

Wyatt Avery
Senior Associate, Real Assets Research

Michael Savino
Senior Associate, Real Assets Research

Cole Barker
Analyst, Real Assets Research

Methodology

Data based on properties and portfolios $2.5m and greater unless otherwise stated. Data as of Oct. 18, 2022 unless otherwise stated.

About Capital Trends

Capital Trends reports analyze and interpret trends in the global real estate market. US Capital Trends is a monthly edition comprising an overview of the U.S. market and separate reports on the five main property types. Asia Pacific, Australia, Europe and Global Capital Trends are published quarterly.

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