Real Estate Research

June 2023



U.S. Property Performance Monitor

First Quarter 2023

IN A NUTSHEL

- Private real estate continued to see an increase in yields as investors attempted to determine fair value in a high interest rate environment.
- —The first quarter of 2023 saw a negative quarterly total return of -1.8%. This was driven by a negative capital return of -2.8% that was cushioned by a 1.0% income return. Trailing four-quarter returns (-1.6%) turned negative for the first time since the Global Financial Crisis ("GFC").
- —Total returns for industrial (trailing four quarters) were the highest of any sector, followed by retail and apartment. Office total returns lagged the NPI significantly.
- Regional trends remained unchanged. Sun Belt and Mountain West markets generally outperformed while New York, Chicago,
 Washington, DC, and San Francisco struggled.

Private Real Estate Property Returns

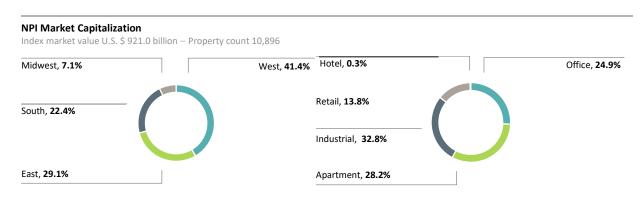
- —On a trailing four-quarter basis, core real estate total returns turned negative for the first time since the GFC. The -1.6% total return was a 720 bps decline from the prior quarter.
- —All property types saw negative appreciation returns as valuations adjusted to the high interest rate environment.
- —The industrial sector's total return decelerated but remained positive at 2.4%, a significant moderation compared to last quarter (14.5%). Retail was the only property type amongst the four to post a positive quarterly total return (0.5%). On a trailing four quarter basis, retail total returns stood at 1.0%. Apartment total returns turned negative (-0.4%) but continued to beat the NPI. Office was the biggest drag on benchmark performance, printing a negative total return of -8.7%.
- Even with the reversal in bonds and broad equities (large cap) over the last two quarters, private real estate continued to outperform the asset classes on an annual basis.
- Vacancy for the benchmark was near its historic low, largely driven by near record low industrial vacancy rates. The remaining property types hovered around their long term averages. Net Operating Income (NOI) increased 7.4% (trailing four quarters), a slight moderation from the previous quarter (7.5%) but healthy relative to historical norms, led by industrial (13.3%) and apartment (8.1%).
- Geographic trends were largely unchanged. Regional markets generally benefitting from lower costs and in-migration (e.g., Sun Belt and Mountain West) remained resilient. Gateway markets with comparatively higher costs (e.g., New York, Chicago, Washington, DC, and San Francisco) generally underperformed.

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Recent Performance Trends

	Quarter	12 months trailing		
	1Q 2023	1Q 2023	4Q 2022	
Private Real Estate (NPI)	-1.8%	-1.6%	5.5%	
Broad Equities (large cap)	7.5%	-7.7%	-18.1%	
Bonds	3.0%	-4.8%	-13.0%	
Listed Real Estate	1.7%	-19.4%	-25.0%	
10-Year Treasury ¹	3.5%	3.5%	3.9%	
12-Month LIBOR ²	5.3%	5.3%	5.5%	
CPI (SA)	0.9%	5.0%	6.5%	

Sources: NCREIF (NPI), S&P 500 (Broad Equities), Barclay's U.S. Aggregate Bond Index (Bonds), NAREIT (Listed Real Estate), BLS (CPI) and Federal Reserve (10 yr Treasury, LiBOR). As of May 31, 2023.

NCREIF Property Index (NPI) Performance by Sector and Region

- Despite significant moderation in total returns, Industrial continued its 29 quarter streak as the best performing property type in the benchmark. Total return slid from 14.5% (trailing four quarters) at year-end 2022 to 2.4% in the first quarter of 2023, a number significantly below its long term average (10.8%). NOI growth (13.3% year-over-year) remained strong after posting a record high in the third quarter of 2022 (13.6%) as vacancy (1.5%) continued to hover around record lows.
- —Total returns for retail were 1.0% in the first quarter of 2023 (trailing four quarters). Neighborhood (3.4%) and community (2.6%) centers outperformed while regional (-1.7%) and super regional malls (-0.5%), collectively making up more than half of all retail, underperformed the subindex. Neighborhood and community centers had vacancies (6.5%) just above local lows while malls saw vacancies (12.6%) moderate from COVID highs but remained above their long-term average (9.1%).
- —Apartment posted its first negative four quarter trailing return (-0.4%) since the GFC. Negative returns were primarily driven by highrise (-1.9%); the subtype makes up more than half of the subindex. On the other hand, Garden properties continued to reap the benefits of post-pandemic migration trends posting a total return of 2.2%. Vacancy fell 10 bps to 6.2%, staying below its long-term average of 6.5%. NOI growth continued to moderate to 8.0% but remained strong by historical standards.
- Office performance continued to deteriorate, delivering total returns of -8.7% (trailing four quarters). CBD office properties (-11.3%) fared worse than those in the suburbs (-5.5%), although both suffered. The sector as a whole printed a -12.7% capital return for the trailing four quarters, under pressure from hybrid work and macroeconomic uncertainty.
- Regional returns continued to reflect demographic trends. The South (1.2%), benefitting from in-migration and demographic tailwinds, remained resilient; It was the only region to print a positive total return. The West (-1.6%) followed with returns matching the benchmark. Midwest (-2.9%) and East (-3.5%) underperformed the index continuing the trend from last quarter.

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¹ These figures represent annual yields.

² These figures represent annual yields.

Detailed Prop	erty Type	NPI Performa	nce
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		Market value	Traili		
	No. of props.	U.S.\$ (Mil)	Total return	Income	Apprec.
Apartment					
Garden	924	87,545	2.2%	3.9%	-1.7%
High Rise	1151	143,832	-1.9%	3.6%	-5.4%
Low Rise	291	28,356	-0.2%	3.8%	-3.9%
Industrial					
R&D	37	2,323	2.6%	3.9%	-1.2%
Flex	166	5,798	3.8%	4.0%	-0.2%
Warehouse	4862	284,428	2.2%	3.1%	-0.9%
Office					
CBD	484	123,191	-11.3%	4.2%	-15.0%
Suburban	1324	105,810	-5.5%	4.6%	-9.8%
Retail					
Community	193	13,535	3.4%	5.3%	-1.9%
Neighborhood	587	24,017	2.6%	5.0%	-2.4%
Power	176	13,660	3.7%	5.8%	-2.0%
Regional	44	12,320	-1.7%	4.7%	-6.2%
Super Regional	71	46,556	-0.5%	5.0%	-5.3%

Returns by Property Type and Region

	Annual returns									Standard deviation	
	Total	Income	Apprec.	3 years	5 years	10 years	20 years	Since inception ³	20 years	Since inception ⁴	
Property type											
Apartment	-0.4%	3.7%	-4.0%	8.2%	7.1%	8.1%	8.2%	10.0%	9.1%	7.6%	
Industrial	2.4%	3.2%	-0.8%	21.1%	18.0%	15.6%	11.6%	10.7%	11.5%	9.0%	
Office	-8.7%	4.4%	-12.7%	-0.4%	2.3%	5.7%	6.8%	7.7%	9.2%	9.3%	
Retail	1.0%	5.1%	-4.0%	0.5%	0.6%	5.4%	8.0%	8.6%	8.9%	6.9%	
Total Index	-1.6%	3.9%	-5.4%	7.2%	6.7%	8.3%	8.4%	8.9%	8.7%	7.4%	
Region											
East	-3.5%	3.9%	-7.2%	4.5%	4.6%	6.3%	7.6%	9.4%	9.0%	8.9%	
Midwest	-2.9%	4.5%	-7.2%	3.7%	3.4%	6.2%	6.6%	7.6%	7.0%	5.9%	
South	1.2%	4.2%	-2.9%	9.1%	7.9%	9.2%	8.7%	8.3%	8.1%	6.9%	
West	-1.6%	3.6%	-5.1%	8.7%	8.4%	10.1%	9.6%	9.7%	9.5%	8.3%	
Total Index	-1.6%	3.9%	-5.4%	7.2%	6.7%	8.3%	8.4%	8.9%	8.7%	7.4%	

Source: NCREIF Property Index as of May 31, 2023. Past performance is not indicative of future returns.

 $^{^3}$ Index returns start in 1978, equivalent to a 45 year calculation. 4 Index returns start in 1978, equivalent to a 45 year calculation.

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Market Analysis – Benchmark Insights and Portfolio Implications

The NCREIF Property Index is a value-weighted index of property returns and as such, a large portion of the index is located in just 20 markets. Local economic growth will affect properties located in the same market similarly, so we can estimate the effect of property geographical location on the overall index. Large metros, by value, will likely have the largest impact on the index, although small metros with particularly strong or weak performance may boost or weigh on returns from time to time. The tables on the following page list out which markets had the strongest positive and negative effect on returns during the past four quarters.

Apartments

Markets that benefited from post-pandemic demographic trends remained resilient. Over the past 12 month, markets in the Sun Belt (e.g., Dallas, Austin, Fort Lauderdale, Miami) were the largest positive contributors to total return. Major tech markets on the West Coast (e.g., Seattle, San Jose, San Francisco) were some of the biggest laggards, potentially reflecting the impact of the recent waves of tech layoffs in these high-cost markets. San Diego (3.8%) was an exception as it joined some of the leading sunbelt markets in having a large positive impact on total return. Several other gateway markets, including Chicago (-2.4%), Washington DC (-1.0%), Los Angeles (-5.7%), and Boston (-0.6%) underperformed the subindex.

Industrial

Overall performance remained healthy, with most markets delivering low to mid single-digit total returns over the trailing four quarters. Major port markets, including Riverside (6.9%), Los Angeles (6.0%), and Miami (7.6%) outperformed all markets, having an outsized impact on overall returns. Two of the biggest laggards were large inland distribution hubs, Dallas (-1.1%) and Chicago (-0.4%). New York (0.4%), Seattle (-0.5%), Denver (-4.8%), and Oakland (0.0%) were some of the other major markets that underperformed the subindex.

Office

While all markets recorded negative returns amidst uncertainty shrouding the future of the property type, some fared better than others. Sun-Belt markets benefiting from corporate relocations and demographic tailwinds (e.g., Dallas, Miami and Charlotte) continued to outperform the subindex. Tech concentrated West Coast markets (e.g., Seattle, San Francisco) and gateway markets remained at the bottom of the pack (e.g., New York, Washington DC, Chicago).

Retail

Markets with significant mall constituents and gateway markets experiencing out-migration (e.g., San Francisco, Washington, DC, New York, Chicago) generally underperformed the subindex. Those with more neighborhood and community centers, benefitting from demographic tailwinds (e.g., Las Vegas, Atlanta, and Dallas), fared better. West Coast markets (e.g., San Jose, Seattle, San Diego), with the exception of San Francisco (-2.9%) and Orange County (0.3%), outperformed the subindex.

А	partment		lr	dustrial			Office			Retail	
Metro	Metro returns⁵	Impact on sector returns	Metro	Metro returns ⁶	Impact on sector returns	Metro	Metro returns ⁷	Impact on sector returns	Metro	Metro returns ⁸	Impact on sector returns
Dallas	3.8%	26	Riverside	6.9%	69	Boston	-6.8%	24	Dallas	7.2%	26
Miami	8.0%	19	Los Angeles	6.0%	38	Austin	-4.8%	10	Las Vegas	5.1%	26
Fort Lauder- dale	7.4%	16	Miami	7.6%	17	Oakland	-3.6%	9	Los Angeles	3.0%	11
Austin	2.6%	12	Baltimore	5.2%	6	San Jose	-6.2%	8	Atlanta	5.0%	9
San Diego	3.8%	12	Orange County	3.8%	6	Dallas	-5.1%	8	San Diego	2.7%	8
Houston	0.7%	3	Washington, DC	5.1%	3	Miami	-1.7%	8	Baltimore	3.6%	5
Raleigh	0.5%	2	Phoenix	4.0%	3	San Diego	-5.4%	7	Seattle	2.4%	5
Atlanta	-0.1%	2	San Diego	4.1%	3	Charlotte	-2.5%	5	Houston	1.6%	4
New York	-0.2%	2	Portland	3.5%	2	Nashville	-3.4%	3	Riverside	2.8%	4
Orange County	-0.4%	0	Atlanta	2.6%	1	Atlanta	-9.0%	-1	San Jose	1.6%	2
Charlotte	-0.5%	0	Philadelphia	2.6%	0	Denver	-9.2%	-1	Boston	1.6%	1
Boston	-0.6%	-1	Boston	2.2%	0	Houston	-9.6%	-2	Orlando	1.2%	1
Washington, DC	-1.0%	-4	Charlotte	1.5%	-1	Orange County	-11.0%	-3	Orange County	0.3%	-2
Phoenix	-2.7%	-7	Houston	-1.6%	-7	Chicago	-10.8%	-9	Oakland	-1.6%	-8
Denver	-2.1%	-10	Oakland	0.0%	-9	Portland	-18.1%	-10	San Francisco	-2.9%	-9
Chicago	-2.4%	-10	Denver	-4.8%	-10	San Francisco	-9.7%	-11	Phoenix	-1.8%	-9
San Jose	-6.1%	-13	Seattle	-0.5%	-16	Washington, DC	-9.7%	-11	Miami	-3.8%	-13
Seattle	-4.5%	-20	New York	0.4%	-17	Los Angeles	-10.4%	-14	New York	-2.9%	-16
San Francisco	-8.6%	-26	Chicago	-0.4%	-18	Seattle	-11.8%	-18	Chicago	-5.6%	-40
Los Angeles	-5.7%	-35	Dallas	-1.1%	-22	New York	-10.9%	-38	Washington, DC	-4.5%	-42

Source: NCREIF Property Index as of May 31, 2023.

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Four-quarter cumulative returns ending fourth quarter 2022.
 Four-quarter cumulative returns ending fourth quarter 2022.
 Four-quarter cumulative returns ending fourth quarter 2022.
 Four-quarter cumulative returns ending fourth quarter 2022.

Appendix – Historical Performance

	12 months trailing								
	3/31/2023	3/31/2022	3/31/2021	3/31/2020	3/31/2019				
Private Real Estate (NPI)	-1.6%	21.9%	2.6%	5.3%	6.8%				
Broad Equities (large cap)	-7.7%	15.6%	56.4%	-7.0%	9.5%				
Bonds	-4.8%	-4.2%	0.7%	8.9%	4.5%				
Listed Real Estate	-19.4%	23.6%	34.2%	-15.9%	20.5%				
10-Year Treasury ⁹	3.5%	2.3%	1.7%	0.7%	2.4%				
12-Month LIBOR ¹⁰	5.3%	2.1%	0.3%	1.0%	2.7%				
CPI (SA)	5.0%	8.5%	2.6%	1.5%	1.9%				
- \- /									

Sources: NCREIF (NPI), S&P 500 (Broad Equities), Barclay's U.S. Aggregate Bond Index (Bonds), NAREIT (Listed Real Estate), BLS (CPI) and Federal Reserve (10 yr Treasury, LIBOR). As of May 31, 2023.

⁹ These figures represent annual yields. ¹⁰ These figures represent annual yields.

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