



**CFRA**

# Industry Surveys

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## Real Estate Investment Trusts

MARCH 2023

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## NEW THEMES



**What's Changed:** As many employees are returning to work under a hybrid or work-from-home arrangement, we think the 2023 outlook for office REITs is challenging. See page 33.



**What's Changed:** Despite Covid-19's disruption on health care REITs, senior housing operating portfolio (SHOP) and medical office properties continue to exhibit positive growth. Read more on page 38.



**What's Changed:** In January 2023, the White House announced the "Blueprint for a Renters Bill of Rights". Check out page 44 for detailed analysis and expectations from Washington Analysis, a CFRA business.

# EXECUTIVE SUMMARY

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CFRA has a neutral outlook on the Real Estate Investment Trusts (REITs) industry, but our views on different sub-industry property types can vary. Here are the key themes and our outlook for the next 12 months.

## ***REITs Underperformed the Broader Market Index in 2022***

In 2022, the Dow Jones All Equity REIT Index fell 27.5%, underperforming the S&P Composite 1500 Index, which dropped 19.9%. Performance was weak across the industry, although diversified REITs (-5.7%), retail REITs (-17.9%), and hotel REITs (-17.0%) did outperform the broader index. The weakest sub-industries were office REITs (-38.4%), industrial REITs (-33.8%), residential REITs (-33.1%), specialized REITs (-26.1%), self-storage REITs (-25.9%), and health care REITs (-25.6%).

## ***We Favor Public REITs in 2023, After 2022 Saw Significant Outperformance From Private REIT Peers***

Private REITs returned 5.5% in 2022 (based on NCREIF Property Index), significantly outperforming public REIT counterparts (-27.5%); however, we see this trend reversing in 2023. We believe public REIT shares re-priced more quickly to new financial conditions (e.g., higher interest rates) than private REITs because of private REITs' reliance on transaction activity for price discovery and marking-to-market of their assets.

## ***Interest Rates and Inflation to Continue Driving Volatility in REIT Returns***

The Federal Reserve (Fed) hiked interest rates 425 bps in 2022 as it attempted to get inflation, which soared to multi-decade highs, under control. As a result, REIT share prices were beaten down. Higher interest rates are a major headwind for the REIT sector as they lead to increased borrowing costs and often lower property values. While additional interest rate hikes are expected in 2023, a Fed pause in the first half of 2023 seems likely. If this is coupled with a "soft-landing", it could allow REITs to benefit from both a resilient economy and above-trend inflation into 2024. REITs are generally viewed as an inflation hedge due to contractual rent increases built into leases and the concentration of "real assets" in their portfolios. REITs able to adjust rents quickly (i.e., self-storage, hotels) and those with limited need to raise debt would likely be the largest beneficiaries.

## ***We Expect REIT Fundamentals to Remain Healthy***

REITs' balance sheets remain well positioned after refinancing and extending maturities during the ultra-low-rate regime of 2020/2021, leaving REITs with limited variable rate debt exposed to rising interest rates. Meanwhile, funds from operations (FFO) and net operating income (NOI) growth has remained elevated due to the resilient U.S. economy. We forecast fundamentals to remain positive in 2023 despite economic headwinds as demand remains strong. Effects of higher interest rates are most likely to be felt by REITs with high leverage, more variable rate debt, or weak post-pandemic sub-industry recoveries (e.g., office REITs).

## ***Work From Home Trends Likely to Have Negative Impact on Office REITs Through 2023***

Our outlook on office REITs is negative as the shift towards remote and hybrid work has resulted in a weak post-Covid-19 recovery. Further, history suggests office REITs' share prices are sensitive to the economy and employment growth, both of which may end up as headwinds by year-end 2023 as Fed tightening continues. Nationally, employees coming back to the office remains low, near 50% as a national average, and some markets like Manhattan are near 40%, with less than 10% coming in five days a week.

## ***Health Care REITs Should Benefit from Continued Senior Housing Recovery***

Senior housing operating portfolio (SHOP) continued to exhibit growth through 2022, which we expect to continue into 2023. SHOP supply/demand conditions are very favorable while occupancy continues to rebound from Covid-19-induced lows, improving for the sixth consecutive quarter in Q4 2022. Further tailwinds are provided by long-term demographic trends such as an aging population and higher health care spending.

## ***Retail REITs Carry Momentum Into 2023, but Potential Recession Looms on the Horizon***

Positive industry dynamics such as a resilient consumer and higher tenant sales have helped return pricing power to the industry and enabled retail REITs to outperform the broader S&P Composite 1500 Index two years in a row. However, we remain concerned that a meaningfully economic slowdown in 2023 could force many retailers who expanded post-pandemic to reconsider plans or even close some recently opened locations. We continue to favor single-tenant retail and grocery anchored shopping centers due to their internet-resistant business models.

## REAL ESTATE INVESTMENT TRUSTS (REITs)

Outlook: Neutral

## MARKET CAP BREAKDOWN\*

RANK NO.	COMPANY NAME	MARKET CAP (\$ billion)
1	Prologis	113.5
2	American Tower	90.8
3	Equinix	64.3
4	Crown Castle	57.1
5	Public Storage	51.9
	Others†	748.5

Source: CFRA, S&amp;P Global Market Intelligence

\*Data as of February 28, 2023..

†Refer to the "Comparative Company Analysis" section of this survey for the list of companies.

## BY THE NUMBERS

**\$1.33 trillion**

FTSE Nareit All Equity REITs Index (Nareit) market capitalization

**+113 bps**

Y/Y growth in implied cap rate for the Nareit index as of Q3 2022 (latest)

**16.8%**

Discount of U.S. equity REITs from consensus S&amp;P Global NAV per share estimates

**+14.9% Y/Y**

FFO growth for the Nareit index as of Q3 2022 (latest)

**+8.1% Y/Y**

NOI growth for the Nareit index as of Q3 2022 (latest)

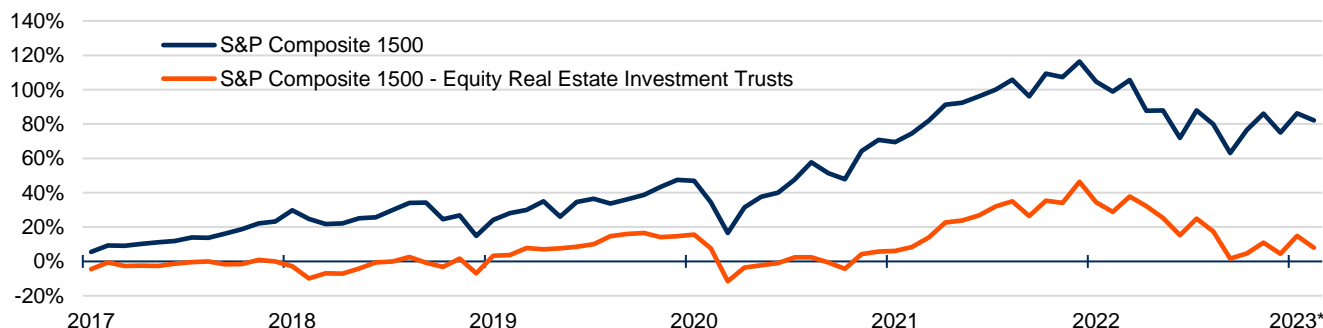
**+219 bps**

Spread in dividend yield for the Nareit index vs. the S&amp;P 500

## ETF FOCUS

<b>VNQ</b> Vanguard Real Estate	AUM (\$B) <b>34.7</b>	Expense Ratio <b>0.12</b>
<b>SCHH</b> Schwab U.S. REIT	AUM (\$B) <b>5.8</b>	Expense Ratio <b>0.07</b>
<b>REET</b> iShares Global REIT	AUM (\$B) <b>3.1</b>	Expense Ratio <b>0.14</b>
<b>ICF</b> iShares Cohen & Steers REIT	AUM (\$B) <b>2.3</b>	Expense Ratio <b>0.32</b>

## HISTORICAL INDEX PERFORMANCE

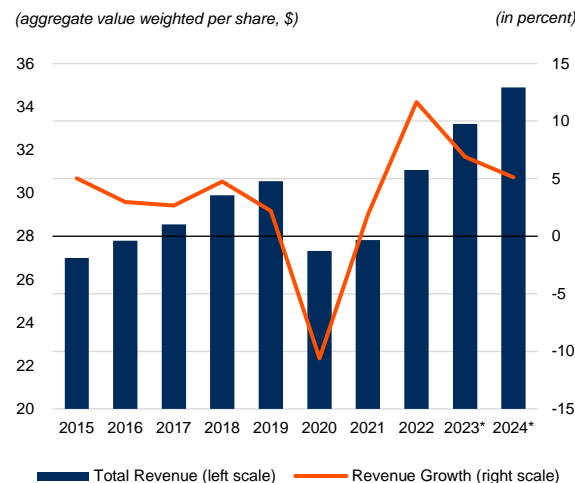


\*Data through February 28, 2023.

Source: CFRA, S&amp;P Global Market Intelligence.

# FINANCIAL METRICS

## Revenue Growth

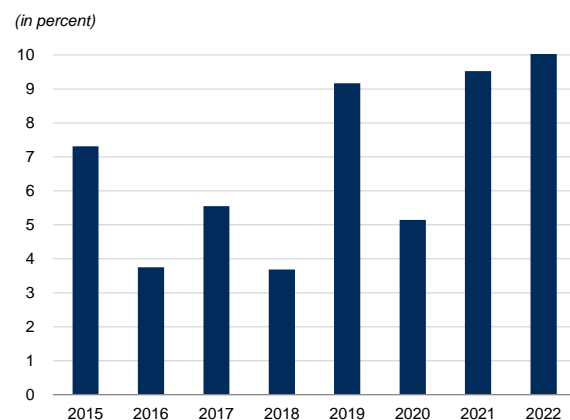


\*Estimated.

Source: CFRA, S&P Global Market Intelligence.

- ◆ We expect revenue growth to remain moderate moving forward, with growth of 6.9% this year and 5.1% in 2024, after an 11.6% growth in 2022.
- ◆ Due to the rather disparate nature of the property types within the REIT industry, it isn't easy to characterize revenue trends at the aggregate level. For most REITs, rental income is the largest source of revenue growth, which we see staying strong in 2023 as the economy recovers.
- ◆ The pandemic particularly hurt hotel and office REITs. While the former may see further upside as China drops its zero-Covid-19 policy, the latter may experience further uncertainty as many employees continue to adopt a hybrid working arrangement.

## Real Estate Investment Growth



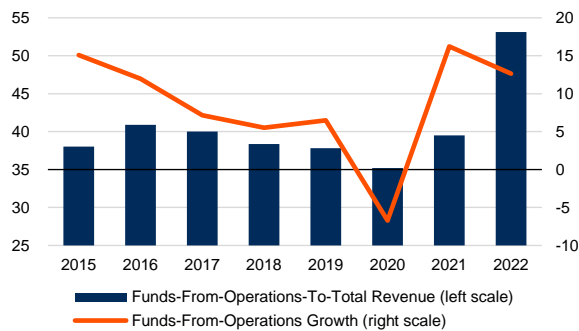
Note: Constituents include REITs in Dow Jones' coverage universe - i.e., companies listed in NYSE, NYSE MKT, NASDAQ, and OTC.  
Source: CFRA, S&P Global Market Intelligence.

- ◆ 2021 and 2022 saw higher real estate investment growth amid favorable financing conditions and a general recovery in the economy. We believe real estate investment will likely slow in 2023 as levered investors exit the market due to higher interest rates, partially offset by increased demand from those looking to real estate as a potential inflation hedge.
- ◆ In 2022, demand continued to absorb new warehouse capacity for industrials, which we think will continue. Supply chain issues have also slowed new supply growth in self-storage, potentially prolonging favorable supply/demand dynamics. Hotels and offices may experience oversupply in urban markets as demand changes structurally.



## Funds from Operations (FFO)

(in percent)

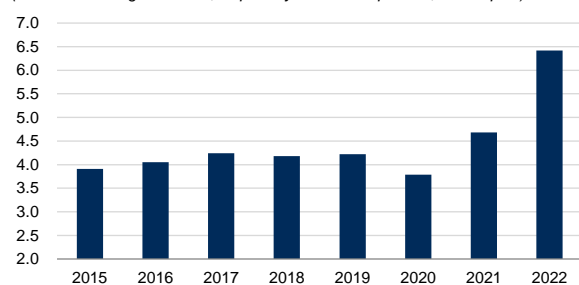


Note: Constituents include REITs in Dow Jones' coverage universe - i.e., companies listed in NYSE, NYSE MKT, NASDAQ, and OTC.  
Source: CFRA, S&P Global Market Intelligence.

- ◆ FFO, as a percentage of total revenue, recovered to 53.1% last year from the low of 35.2% in 2020, largely driven by hotel, retail, and industrial REITs.
- ◆ On the other hand, FFO growth slowed by 359 bps in 2022 from the previous year, largely due to the higher base and increased costs due to interest rate hikes.
- ◆ For 2023, CFRA sees FFO growth slowing from post-pandemic levels but remaining above the historical average as the economic recovery continues. Sustained real estate investment could also steady FFO growth over the coming years.

## Recurring EBITDA/Interest Expense

(in SNL's coverage universe, all publicly traded companies\*, in multiples)

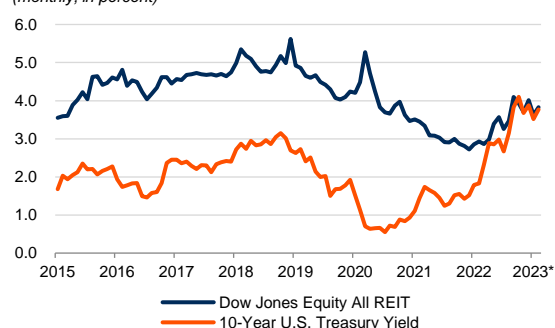


Note: Constituents include REITs in Dow Jones' coverage universe - i.e., companies listed in NYSE, NYSE MKT, NASDAQ, and OTC.  
Source: CFRA, S&P Global Market Intelligence.

- ◆ The Dow Jones Equity All REIT Index recurring EBITDA-to-interest expense ratio surged to 6.4x in 2022 from 4.7x in 2021 and a low of 3.8x in 2020.
- ◆ We attribute this to the increase in recurring EBITDA and a lower interest expense for most of the year. This was aided by debt refinances at lower interest rates and, to a lesser degree, debt retirements.
- ◆ In 2023, we foresee a decline in the ratio amid a tapered EBITDA recovery and an increase in interest expense due to the rising interest rates.

## REIT Dividend Yield vs. Treasury Yield

(monthly, in percent)

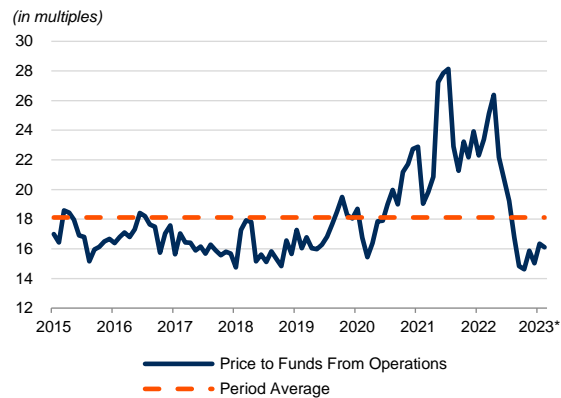


\*Data through February 15, 2023.

Note: Constituents include REITs in Dow Jones' coverage universe - i.e., companies listed in NYSE, NYSE MKT, NASDAQ, and OTC.  
Source: CFRA, S&P Global Market Intelligence, Federal Reserve.

- ◆ As of February 15, 2023, the Dow Jones Equity All REIT Index dividend yield was 3.83%, representing a positive spread of just 6 bps over the 10-year Treasury note yield of 3.77%.
- ◆ The two indices experienced the widest spread in March 2020 at 457 bps during the height of the pandemic. That all changed after the Federal Reserve (Fed) initiated its interest rate hikes. In October 2022, the spread inverted briefly, indicating that the lower-risk Treasury bonds yield better than the riskier REIT dividends.
- ◆ The average and median yield spreads between REITs and the 10-year Treasury since 2015 were 206 bps and 226 bps, respectively. This suggests that REITs may not be attractively priced as investors could yield a similar return with less-risky Treasury bonds.

## Price-to-FFO



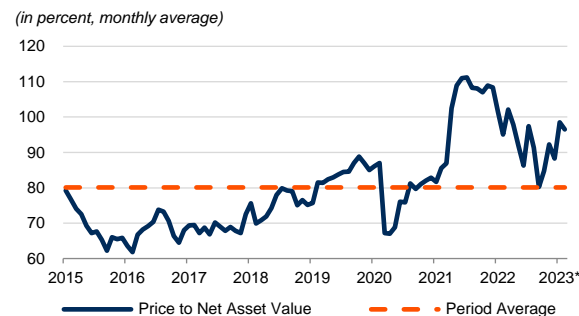
\*Data through February 15, 2023.

Note: Constituents include REITs in Dow Jones' coverage universe - i.e., companies listed in NYSE, NYSE MKT, NASDAQ, and OTC.  
Source: CFRA, S&P Global Market Intelligence.

◆ Price-to-FFO (P/FFO) multiple recovered rapidly from the global pandemic, reaching a historic high of 28.1x in July 2021. However, multiples have begun to compress since then as rising rates and recessionary fears have led to equity market turmoil. As of February 15, 2023, the P/FFO multiple retracted to 16.1x, below its long-run average of 18.1x, indicating that equity REITs as an investment class had recently gone out of favor.

◆ We think P/FFO ratios will largely remain at this level throughout 2023 as recessionary fears could push investors out of real estate. REITs offer a similar yield to the 10-year Treasury yield, potentially justifying this low P/FFO ratio.

## Price-to-NAV



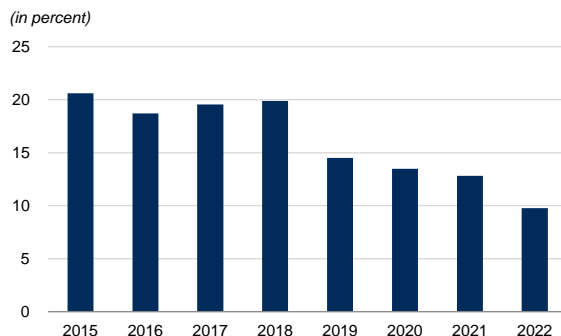
\*Data through February 15, 2023.

Note: Constituents include REITs in Dow Jones' coverage universe - i.e., companies listed in NYSE, NYSE MKT, NASDAQ, and OTC.  
Source: CFRA, S&P Global Market Intelligence.

◆ Prices recovered to a high of 111.2% NAV in July 2021 from the nadir of 67.0% in April 2020. The price/NAV figure stood at 96.5% as of February 15, 2023, amid a slight pullback toward the end of the year. Despite that, prices still stand above the average of 80.1% of NAV since 2019.

◆ We see price-to-NAV stabilizing as REITs that were liquidated during the March 2020 panic recover and as analysts adjust NAV estimates to reflect the new environment and cap rates.

## Variable-rate Debt/Total Debt



Note: Constituents include REITs in Dow Jones' coverage universe - i.e., companies listed in NYSE, NYSE MKT, NASDAQ, and OTC.  
Source: CFRA, S&P Global Market Intelligence.

◆ Variable-rate debt as a percentage of total debt declined to 9.8% in 2022 from 12.8% in 2021 and 13.5% in 2020 as REITs continue to unload/restructure their variable-rate debts amid a more restrictive monetary policy.

◆ As the Fed continues hiking interest rates and letting assets run off the balance sheet, it remains to be seen if REITs have sufficiently positioned themselves during this favorable time to weather a less accommodative environment.

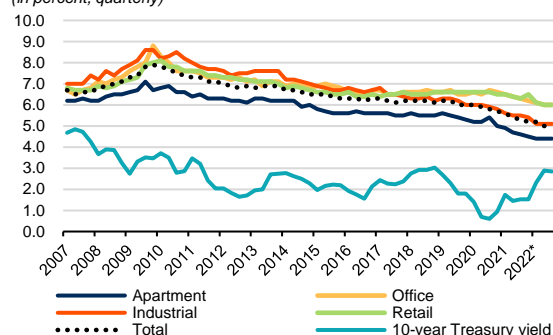
◆ That said, CFRA believes REITs are well positioned for the current operating environment, with many REITs having stronger balance sheets now than they did pre-pandemic.



# KEY INDUSTRY DRIVERS

## Capitalization Rates

(in percent, quarterly)



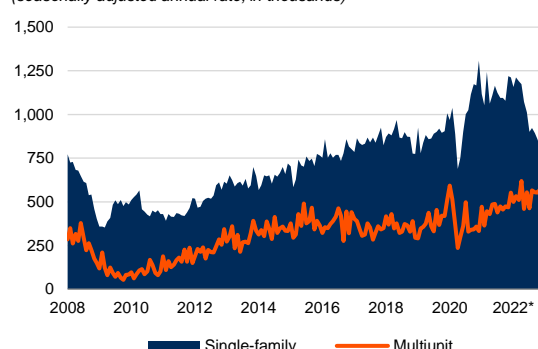
\*Data through Q3 (latest available).

Source: Mortgage Bankers Association, Federal Reserve.

- ◆ REIT cap rates have been on a downward trend since 2021. The 10-year Treasury yield, on the other hand, has been trending upwards due to the rate hike.
- ◆ This suggests that property valuations are relatively expensive and raises concerns about how prices might react as interest rates continue to rise.
- ◆ However, as Treasury yields have inched higher, we think cap rates could start rising to compensate investors adequately.

## Housing Starts

(seasonally adjusted annual rate, in thousands)



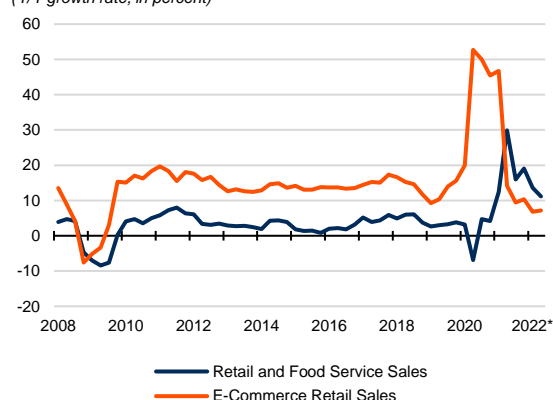
\*Data as of December.

Source: U.S. Department of Commerce.

- ◆ U.S. privately-owned housing starts were at a seasonally adjusted annual rate (SAAR) of 1.37 million units in December 2022, down 22.3% Y/Y.
- ◆ Total existing-home sales in January 2023 slipped 36.9% Y/Y to a SAAR of 4 million units, extending the sales decline for the 12th month. According to NAR, this reflects the impact of the peak mortgage rate of 6.32% in June.
- ◆ We attribute such a decline to soaring house prices and higher mortgage rates, which work to cool overheating demand. We forecast existing home sales to remain subdued in 2023, barring a significant retreat of mortgage rates to below 6%.

## Retail & Food Service Sales vs. E-commerce Retail Sales Growth

(Y/Y growth rate, in percent)



\*Data for Retail and Food Service sales through Q4; e-commerce through Q3.  
Source: U.S. Census Bureau.

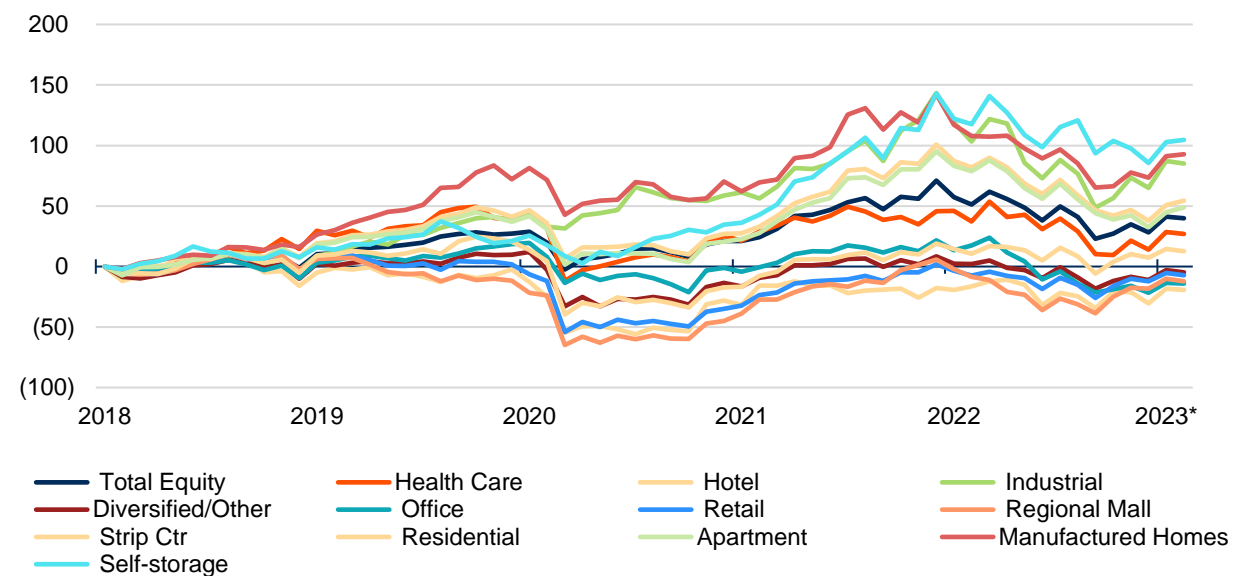
- ◆ Brick-and-mortar sales rebounded strongly immediately after lockdown relaxation. However, such increases were a result of pent-up demand and unsustainable. In Q4 2022, retail sales grew 7.6%, down from a high of 29.9% in Q2 2021.
- ◆ Conversely, e-commerce retail sales – a significant driver of industrial property demand – surged 52.7% Y/Y in Q2 2020. However, as more people are allowed out of their homes, its growth started to taper (just 10.8% Y/Y growth in Q3 2022).
- ◆ In the longer term, we see a continued secular shift to online shopping as both the ease and speed of online shopping continue to improve, likely hurting retailers for the years to come.

## INDUSTRY TRENDS

Year-to-date through February 23, 2023, stocks in the real estate sector were up 4.0%, slightly underperforming the S&P Composite 1500 Index's gain of 4.7%. This follows a 28.0% drop in 2022, a 43.0% surge in 2021, and a 6.3% decline in 2020 for real estate stocks.

### REITS INDEX PERFORMANCE BY TYPE

(percent)



\*Data through February 15, 2023.

Source: CFRA, S&P Global Market Intelligence.

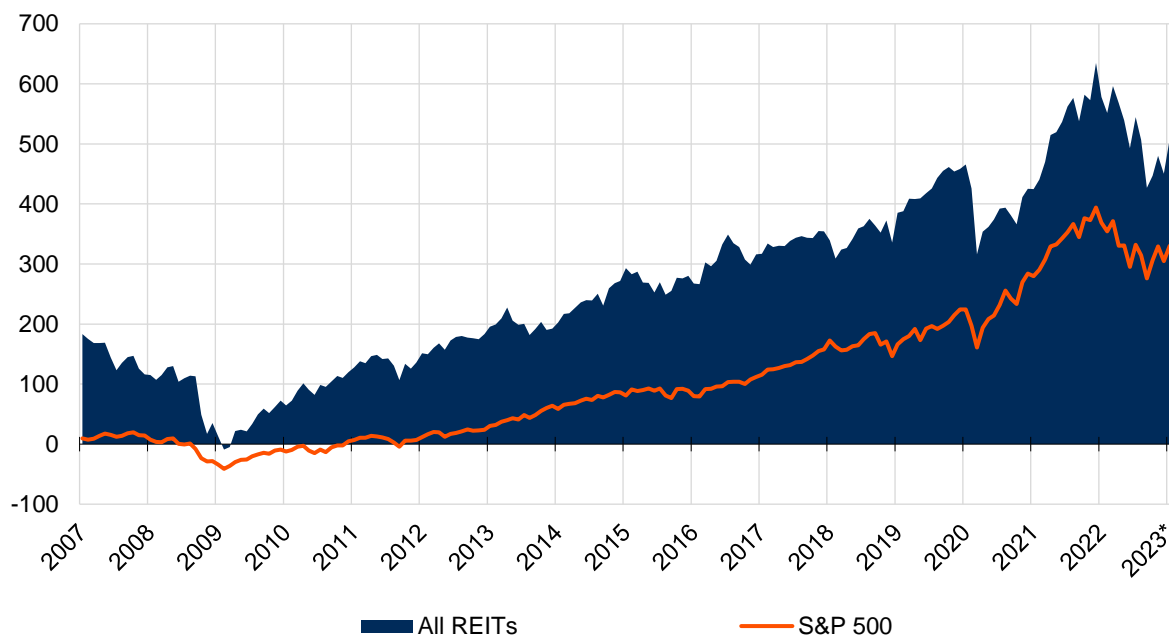
The REIT industry regained much of its footing in post-pandemic 2021 as economic activities resumed and stay-at-home restrictions were largely relaxed. However, REIT performance alongside the general economy took a turn for the worst in 2022 amid economic uncertainty brought on by 40-year high inflation due to substantial economic stimulus during the pandemic, supply chain issues, and the Russia-Ukraine war.

That said, we believe most negatives have been priced in at the current market valuation, enabling REIT share prices to recover in 2023, barring further escalation of the Russia-Ukraine conflict, a significant global recession, or other disruptions to the return of normal economic activities around the globe from Covid-19 lockdowns of previous years. Other major risk factors include the effects of increased interest rates and a potential recession.

While REIT fundamentals ultimately benefit from a strong economy, consumer spending, and job growth, we think this could be somewhat offset by the relative attractiveness of shares of REITs. While the increasing interest rates may make dividend-paying REITs more attractive, it also offers risk-averse investors a less risky alternative through more attractive bond yields. Unprecedented actions by the Treasury and money creation by the Federal Reserve (Fed) make ownership of "hard assets" like real estate more appealing to investors worried about inflationary pressures currently in play. REITs generally outperform on a relative basis in moderate inflation periods, given most rental contracts with REITs are automatically adjusted upward for inflation, and the underlying assets of land and buildings do not depreciate but appreciate along with inflation.

## REITS VS. S&P 500 INDEX

(cumulative total return from December 1999, in percent)



\*Data through February 15, 2023.

Sources: NAREIT, CFRA, S&P Global Market Intelligence.

Picking the correct REIT sub-industry is also crucial for outperformance. In fact, over the last three years (2022, 2021, 2020), the dispersion between the best and worst-performing REIT sub-industry has been 21.4%, 64.0%, and 51.2%, respectively. While all REITs generally benefit from a macroenvironment that supports strong economic growth and low unemployment, specific sub-industry performance often comes down to more nuanced industry-specific metrics. As a result, variation in sub-industry performance is often significant. For example, industrial REITs have experienced strong overall performance over the last decade as e-commerce has boosted demand for the industrial space. Conversely, this same trend has provided headwinds for retail REITs as consumers started shifting spending habits away from brick-and-mortar retail. However, in 2022, a slowdown in e-commerce growth coming out of the pandemic, combined with pent up-demand from consumers who missed shopping in physical retail locations, was a key driver for retail REITs' relative outperformance compared to industrial REITs (-17% vs. -38%).

## REIT Dividends May Not See Surge Despite Inflation

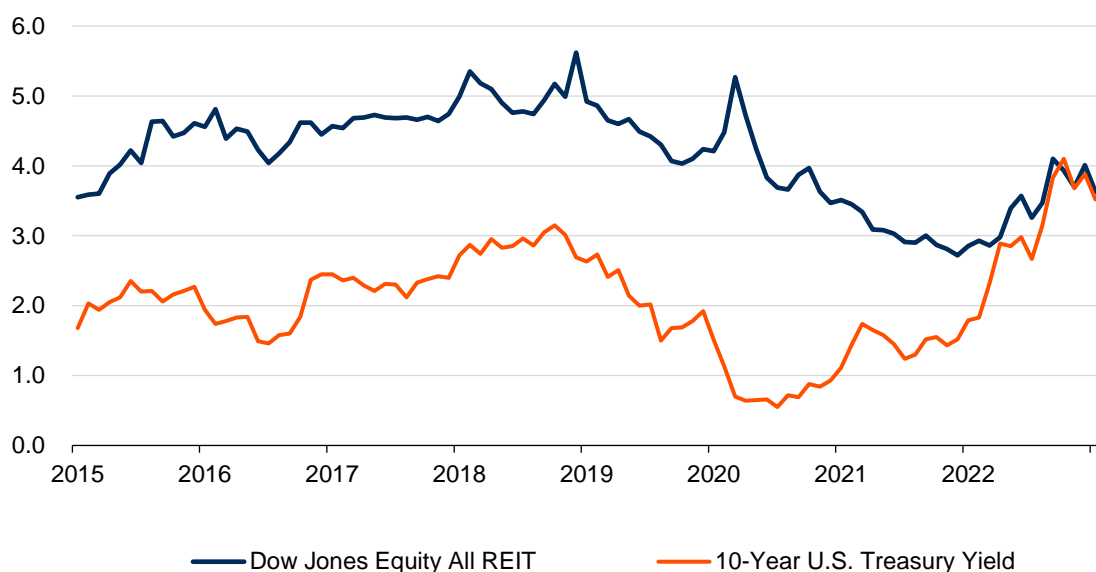
In 2022, 99 U.S. REITs – or approximately 61.5% of the total U.S. REIT industry – announced dividend increases. This is slightly better than the 88 dividend increases announced in 2021 but contrasts with the 44 companies forced to cut dividends during the pandemic year. However, the good news is not spread equally across all property types. Property types that constituted the largest increase in dividends include retail (with 25 hikes – or 80% of all retail REITs), residential (15 hikes), and specialty (15 hikes). On the other hand, office REITs were the lowest, with only five dividend increases. Office REITs are slow to recover as many employees continue to return to work under a hybrid arrangement rather than a full return to the office. Hotel REITs saw only 44% of their constituents increase dividends last year. In January 2023, STR reported that occupancy rates averaged 52.8% for hotels in the U.S., while the average daily rate and revenue per available room stood at \$142.14 and \$75.01, respectively.

As of February 15, 2023, the Dow Jones Equity All REIT Index dividend yield was 3.83%, representing a positive spread of only six basis points (bps) over the 10-year Treasury note yield of 3.77%. U.S. REIT

yields reached a post-pandemic high of 4.1% in September 2022 before falling back slightly as share prices improved before sliding amid economic concerns. This is compared to the 4.4% average yield in pre-pandemic 2019. The average yield spread between the Dow Jones U.S. REIT Index and the 10-year Treasury from 2015 to 2019 was approximately 230 bps (or 2.3 percentage points). Therefore, we see potential for REITs to increase their dividends through 2023 to compete more effectively with Treasury yields, making REITs rather undervalued on this measure.

#### DOW JONES EQUITY ALL REIT INDEX YIELD VS. 10-YEAR TREASURY YIELD

(monthly, in percent)



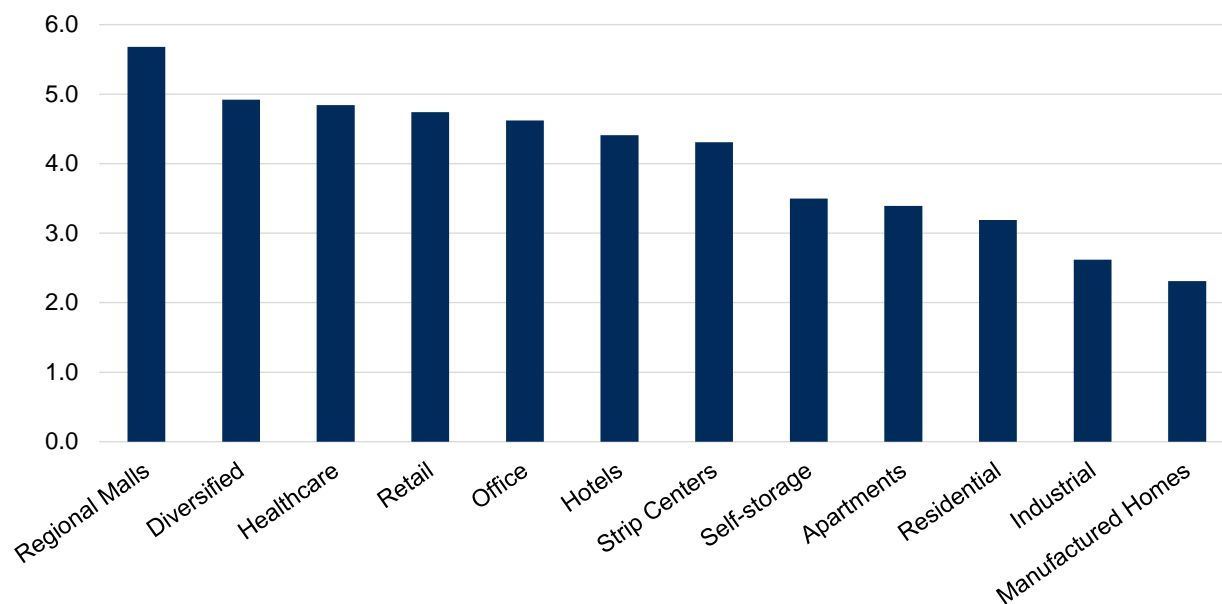
\*Data for All REIT index through June 30, 2022; 10-year Treasury through February 15, 2023.

Source: CFRA, S&P Global Market Intelligence, Federal Reserve.

To combat the wild inflation, the Fed raised interest rates for the first time since the onset of the pandemic in March 2022. Since then, there have been seven rate hikes, taking the latest benchmark rate to a range of 4.50%-4.75%. On February 14, 2023, the consumer prices index was up 6.4% on a year-over-year basis. While still high, the figure represents a significant drop from the 40-year high of 9.1% recorded in June 2022. Rising interest rates alone are viewed as a headwind for REITs, likely leading to increased borrowing costs. REITs are often considered more sensitive to higher borrowing costs than other industries, as they are heavily financed by debt, at-the-market (ATM) equity, property dispositions to fund new developments, and mergers and acquisitions (M&A). This is largely a result of REITs being required to distribute at least 90% of taxable income to shareholders annually in the form of dividends, prohibiting REITs from utilizing a significant portion of their retained earnings for business investment. Rising borrowing costs may further lead to depressed property values and even properties trading at a discount to net asset value (NAV).

## DOW JONES PROPERTY-FOCUSED INDICES DIVIDEND YIELD

(in percent, as of February 15, 2023)



Source: CFRA, S&P Global Market Intelligence.

According to the National Association of Real Estate Investment Trusts (NAREIT), higher interest rates driven by economic growth generally benefit REITs as they support revenue growth. A stronger economy typically leads to lower vacancy rates, higher rent growth, and increased funds from operation and net operating income. This, in turn, increases property prices and provides investors with higher dividend payments. However, the current inflationary environment – caused largely by a combination of easy money and an increase in material costs – may not be an impetus for real estate price hikes. The looming recession may also hamper rental growth as companies go into survival mode again.

Overall, REITs are still considered strong inflation hedges in the longer term because rents are not considered as “sticky” as other prices. Long-term leases generally have inflation protection built into the rental contract, and short-term leases will likely reflect current market prices. Additionally, REITs enjoy portfolio appreciation as the underlying real assets (buildings or land) usually appreciate along with inflation. This can make the sector increasingly attractive to some investors in the current high inflationary environment.

## Operating Environment

### U.S. Economic Forecast Update

Because the operating environment of the REIT industry is so closely aligned with the macroeconomic environment, a review of the macroeconomic environment is helpful in assessing the REIT operating environment. Despite the \$1 trillion stimulus package and passing of the Inflation Reduction Act (also known as the climate bill), the U.S. economy is still in a precarious position with increasing recessionary fears. As such, real GDP is expected to grow only 1.5% this year and 1.7% in 2024, according to Action Economics' forecast.

The national unemployment rate currently stands at 3.4% in January 2023, the lowest rate since May 1969, thus satisfying the Fed's "full employment" mandate. Despite higher interest rates and recessionary fears, job growth in January 2023 was significantly higher than estimates. There were 517,000 jobs created during the month, far higher than economists' expectation of only 187,000. Action Economics forecasts the rate to increase marginally to 3.8% in 2023 before increasing to 4.2% in 2024.

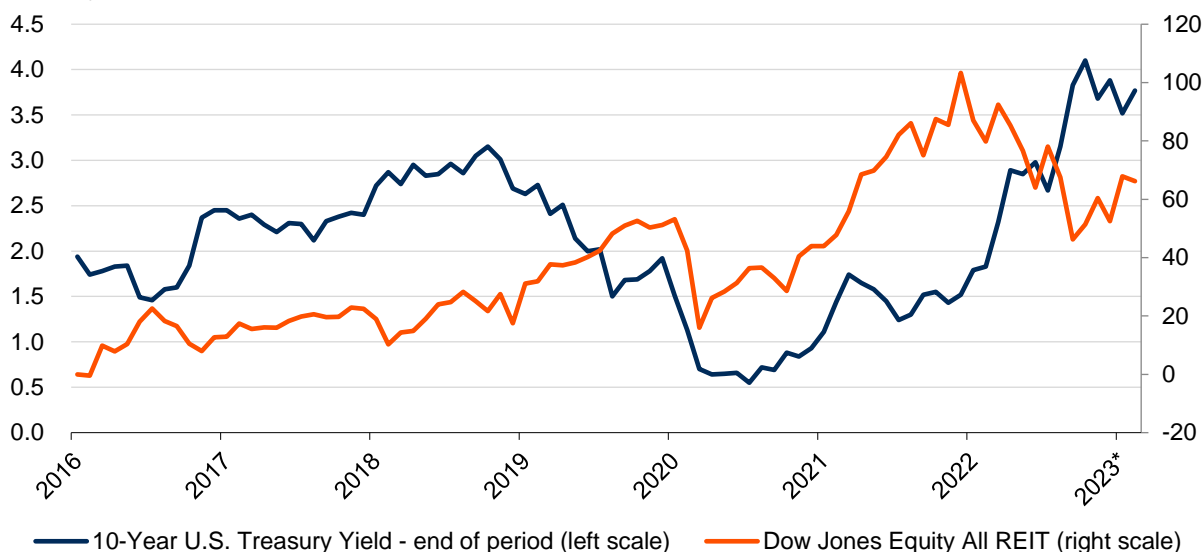
Despite so, we note unemployment tends to be a lagging indicator and can be a contrary indicator at extreme lows and highs. Conversely, initial unemployment claims tend to be a leading indicator of unemployment. Fortunately, this figure has also shown steady improvements since the pandemic. In the week ending February 11, 2023, only 194,000 people filed new claims for unemployment benefits. The figure contrasts the 17 million new filings for the three weeks ending April 4, 2020, but remained slightly above the four-week moving average of 189,500. Continuing unemployment claims also came off a record peak, standing at 1.7 million as of February 4, 2023 (versus 24.9 million at the peak in May 2020).

In response to the Covid-19 outbreak, the Fed brought interest rates down to a range of 0.0% to 0.25%. While most analysts (ourselves included) saw "lower for longer" as the default scenario for interest rates, this all changed when the Consumer Price Index (CPI) figure came in much higher than expected. CPI figures climbed to a 40-year high of 9.1% Y/Y in June 2022 before inching lower to 6.4% Y/Y in mid-February. To combat such unruly inflation, the Fed initiated a multi-stage interest rate hike starting March 2022. To-date, the Fed has raised the fed fund rates on eight occasions to the current 4.50%-4.75% range.

REIT shares typically trade inversely to the 10-year Treasury yield, but the correlation appeared to have broken during the height of the pandemic amid significant market fluctuations (see chart below). It wasn't until April 2021 that the two resumed their inverse relationship. As of February 15, 2023, the 10-year yield gained 194 bps, while shares in the Dow Jones Equity All REIT Index declined by 1,360 bps.



### 10-YEAR TREASURY YIELD VS. DOW JONES EQUITY ALL REIT PERFORMANCE (monthly, in percent)



\*Data as of February 15, 2023.

Source: CFRA, S&P Global Market Intelligence, Federal Reserve.

As shown in the table below, most U.S. REITs are moderately levered and have reduced leverage along with the previous rising rate environment. This somewhat reversed in 2020, with REITs issuing more debt to secure liquidity while experiencing declining EBITDA. However, debt issuance was reversed again in 2021 and 2022 amid improving economic conditions and revenue performance.

#### DOW JONES EQUITY ALL REIT\* INDEX FINANCIALS

	FOR THE YEAR ENDED				
	2018	2019	2020	2021	2022
EBITDA/ Interest Expense (x)	4.50	4.64	3.99	5.27	7.13
Recurring EBITDA/ Interest Expense (x)	4.18	4.22	3.79	4.68	6.42
Short-term Debt/ Debt (%)	6.51	6.89	5.86	6.55	4.46
Variable-rate Debt/ Debt (%)	19.87	14.51	13.48	12.83	9.78

\*Includes all publicly traded (NYSE, NYSE American, NASDAQ, OTC) Equity REITs in Dow Jones' coverage universe.

Source: CFRA, S&P Global Market Intelligence.

#### Review of Capitalization Rates' History and Outlook

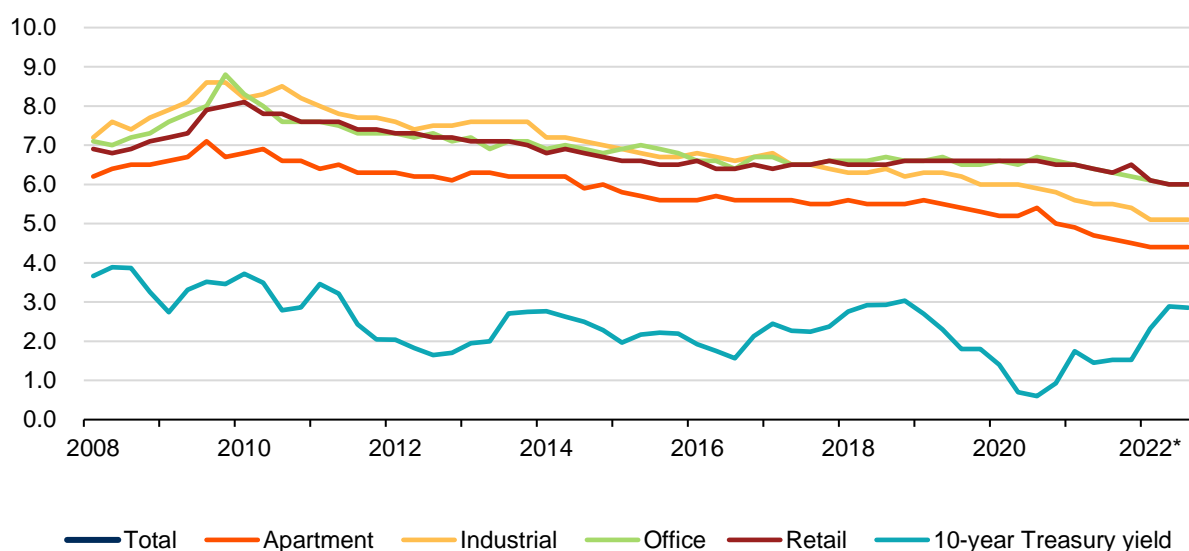
Historically, the investment performance of publicly traded REITs followed a pattern that mirrors the economy, the underlying job market, and the prevailing credit market conditions. The combination of low interest rates and dynamic economic growth pumped investor dollars into U.S. REITs from 2004 to early 2007. The steady flow of capital bred strong competition to buy a limited supply of commercial property, pushing prices considerably higher. With property fundamentals lagging behind price increases, capitalization rates (cap rates) – which measure a property's initial yield or the return it generates in the first year – were low. Cap rates then climbed in 2009 and 2010 as property prices deflated but have since stabilized and trended downward in the subsequent years as property prices increased, ending 2018 near or even below their lows a decade ago.

Cap rates today are low, but interest rates are even lower despite recent hikes. The cap rate spread to the 10-year Treasury yield – which measures the return above risk-free rates to property investors – has widened from 3.1 percentage points (ppts) in the fourth quarter of 2018 to 5.2 ppts in the second quarter of 2020. Since then, we saw the narrowing of the cap rate spread to 2.2 ppts as of the third quarter of 2022 (latest available) due to an increasing Treasury yield and decreasing cap rates.

We project capitalization rates for REITs will remain relatively low. We think institutional investors have taken a greater interest in public REITs as a proxy for the commercial real estate market. REITs offer investors a liquid investment vehicle to increase exposure to the real estate market, as well as the ability to rotate between individual property groups quickly. Additionally, during periods of economic uncertainty, REITs offer a consistent dividend component for investors who seek total return. We see cap rates rising in the year ahead as investors demand higher compensation in a rising rate environment.

### CAPITALIZATION RATES

(in percent, quarterly)



\*Data through Q3 2022.

Source: Mortgage Bankers Association, Federal Reserve.

We also believe public REITs can offer advantages to investors versus private REITs in the form of increased investor transparency and liquidity. We believe these advantages have been overlooked by many investors in recent years due to the consistent strong performance of privately traded REITs, lulling many investors into the belief that liquidity would be easy to come by if needed. However, entering 2023, investors were reminded of some of the risks of private REITs when the largest and most well-known privately traded REIT, Blackstone Real Estate Income Trust (BREIT), unexpectedly limited investor withdrawals after receiving redemption requests in excess of BREIT's quarterly repurchase limit. Other private REITs are likely to follow as elevated withdrawals continue into 2023, taking advantage of what was significant outperformance of private REITs in 2022.

We believe this outperformance was largely due to public REIT shares re-pricing more quickly to new financial conditions (e.g., higher interest rates, slower GDP growth) than private REITs. Private REIT returns may lag actual market conditions as they are slower to adjust to new market conditions due to the reliance on transaction activity for price discovery and marking-to-market of their assets. Transaction activity usually slows significantly during economic uncertainty and market volatility, like what was experienced in 2022.

Generally, a REIT's planned growth through acquisitions is tied to raising new capital and asset dispositions. The table below shows the capital raised by REITs in recent years.

#### CAPITAL RAISED BY U.S. REITS

(\$, in millions)

PERIOD	IPO	SECONDARY EQUITY			SECONDARY DEBT	
		COMMON SHARES	PREFERRED SHARES	ATM ISSUANCE†	(UNSECURED)	TOTAL
2015	1,423	23,433	2,236	3,534	32,201	62,827
2016	1,690	26,158	4,655	7,707	37,261	77,471
2017	2,950	27,875	10,970	8,379	50,767	100,941
2018	3,264	16,654	1,580	8,913	25,222	55,633
2019	220	31,995	4,454	13,134	63,146	112,949
2020	899	17,793	3,190	11,123	73,099	106,104
2021	837	32,708	5,626	21,800	72,620	133,591
2022	1	20,604	895	11,422	12,861	45,783

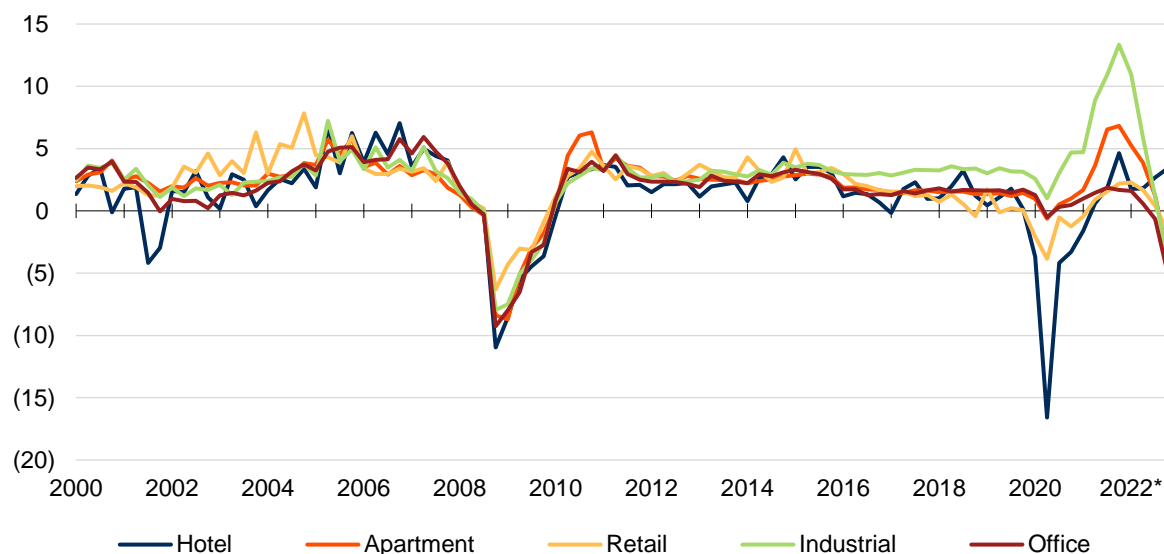
†ATM issuance data available on a quarterly basis.

Source: NAREIT, CFRA, S&P Global Market Intelligence.

Risks to increased real estate transactions are tied to buyers and sellers not agreeing on the fair value, REITs' hesitancy to dispose of key properties, reduced fundraising by private equity firms, a slow-growth economy that ends in recession, less access to the credit markets, and reduced investor confidence. A capital-market slowdown and uncertainty over property-level cash flow will likely mean fewer interested buyers. In addition, lenders may increasingly get nervous, which will add to the transaction freeze. That said, we do not foresee such an event happening in the short term.

#### NCREIF PROPERTY INDEX RETURNS

(quarter-to-quarter total return on investment, in percent)



\*Data through Q4 2022.

Source: National Council of Real Estate Investment Fiduciaries.

# Competitive Environment

## Porter's Five Forces Analysis

The competitive forces within the REIT industry can vary significantly by property type. We analyze Porter's five forces by property type in the table below:

PORTER'S FIVE FORCES ANALYSIS BY REIT PROPERTY TYPE					
PROPERTY TYPE	THREAT OF ENTRY	POWER OF SUPPLIERS	POWER OF BUYERS	THREAT OF SUBSTITUTES	RIVALRY AMONG EXISTING COMPETITORS
OFFICE	MEDIUM - Very location dependent as the threat of entry to suburban office locations is high while more barriers to entry exist in central business districts (CBD) due to land scarcity as well as zoning and entitlement issues.	LOW - Most suppliers are fragmented, including suppliers of land, labor, and raw materials. However, suppliers are beholden to economic cycles where they can demand higher prices during boom phases but must accept lower prices in cyclical downturns. Scarcity of skilled labor is a risk to office REITs.	HIGH - Tenants usually have ample options when choosing office space, even within the same geographic area. Further, office properties have one of the highest capital expenditure rates among property types due to both the high capex needed to maintain the buildings as well as the capex for tenant improvements (TI) and build-out. In today's knowledge economy, many companies are asset-lite or intellectual-heavy, meaning moving offices has low switching costs.	HIGH - While the demand for quality office space remains, various substitutes (e.g., work from home) have curtailed the total demand for office space. We think this could accelerate an already established trend as businesses change processes to hire the best talent at the best price, regardless of geography and need for a centralized office or any office at all.	HIGH - Rivalry among many competitors remains intense as most office space tends to be commoditized and since the landlord usually provides a tenant improvement allowance, tenants can customize the space to fit their needs. Most office developers desire to pre-lease a significant percentage of occupancy during development, to qualify for better terms on construction loans.
MULTI-FAMILY	MEDIUM - Competitors can enter the market as long as they can acquire land and access capital markets. However, some operators may have moderate barriers to entry in dense urban areas where land is scarce and zoning or entitlements can prevent new development, as in the Seattle and California markets. Further, specialized multi-family, like student housing or manufactured housing communities, may have higher barriers to entry and are more recession-resistant properties.	LOW - Most suppliers are fragmented, including suppliers of land, labor, and raw materials. However, suppliers are beholden to economic cycles where they can demand higher prices during boom phases but must accept lower prices in cyclical downturns.	HIGH - Tenants usually have ample options when choosing an apartment, even within the same small area for large cities. Price comparison is easy and potential tenants can play landlords against each other. Leases are usually short term at one year. However, due to higher switching costs and inconvenience of moving, buyer power is somewhat diminished and higher prices can be passed to current tenants more easily. Power of buyers may vary between Class A and Class B properties, or at different stages of the economic cycle.	HIGH - Potential multi-family tenants have options of renting single-family homes, buying a residential unit or house, or even moving in with friends or family or finding a sub-lease. Affordability of home ownership is a threat, even with low mortgage rates average home selling prices have continued to increase.	HIGH - Not only are there a wide variety of well-capitalized multi-family operators, but there is also a large amount of "mom-and-pop" landlords that rent out individual condo units, homes, rooms, etc. Although multi-family has benefited from a shift to more renters after the housing crisis, competition remains high and large operators may find they need to lower rents dramatically to keep their preferred 95% occupancy levels. Multi-family REITs are either concentrated in coastal markets, often in urban markets, or have a large footprint in Sun Belt markets.

PROPERTY TYPE	THREAT OF ENTRY	POWER OF SUPPLIERS	POWER OF BUYERS	THREAT OF SUBSTITUTES	RIVALRY AMONG EXISTING COMPETITORS
RETAIL	HIGH - Competitors can easily enter the market as long as they can acquire land and access capital markets. Some operators may have moderate barriers to entry in dense urban areas where land is scarce, and zoning or entitlements can prevent new development.	LOW - Most suppliers are fragmented, including suppliers of land, labor, and raw materials. However, suppliers are beholden to economic cycles where they can demand higher prices during boom phases but must accept lower prices in cyclical downturns.	HIGH - Tenants of retail spaces usually have a myriad of options when deciding where to rent as retail spaces are standardized/not differentiated and tenants can play landlords against each other. Tenants acting as a large group (such as a large retail chain) can have even more bargaining power.	HIGH - Previously, many retailers needed physical locations to showcase and sell their products. However, many brands have now demonstrated they can be "digitally native" and ship direct to the consumer, removing the need for physical stores. Covid-19 has demonstrated even more retail shopping can be done online than previously estimated.	HIGH - Retail REIT operators not only compete against other well-capitalized publicly traded REITs but also against a myriad of small operators that may be owned by individuals, families, private equity firms, etc. Price signals are readily visible to all competitors and high exit costs keep operators in the market as well as capacity high, leading to low or even negative returns.
HEALTH CARE	MEDIUM - Competitors can enter the market with relative ease, although some specialized buildouts and zoning may impede entry. Health care facilities will often require more expertise to own and operate than traditional real estate.	MEDIUM - Suppliers of land and material are fragmented and commoditized, but labor needed to operate various medical facilities can be specialized.	MEDIUM - When choosing a location, some geographic constraints may include proximity to hospitals and areas where demographics are favorable (i.e., an ageing population). Further, most medical tenants are under a triple-net lease, whereby they are responsible for all property operating expenses, and switching costs can be high for specialized facilities.	LOW - Senior housing facilities, skilled nursing facilities, life science companies, and especially hospitals need specialized properties and the correct zoning. However, medical office buildings can require a more commoditized product.	MEDIUM - Medical REITs compete against a variety of publicly traded REITs as well as other smaller and independent operators. However, average lease length of 10-15 years gives some stability and relieves competitor pressure.
LODGING	MEDIUM - This is very location dependent as the threat of entry to suburban and middle-tier lodging is high but first-tier and "trophy" property locations in major cities or prime waterfront locations are in very short supply.	LOW - Most suppliers are fragmented, including suppliers of land, labor, and raw materials. However, suppliers are beholden to economic cycles where they can demand higher prices during boom phases but must accept lower prices in cyclical downturns.	HIGH - Tenants of hotel rooms have incredible choices with multiple hotels often in the same geographic area. Technology, such as travel search engines, makes price comparison easy, and given the lease term is essentially one-day/night, operators are subject to pricing and occupancy risks.	MEDIUM - Business travelers or large groups must usually use or contract with large hotel chains for their needs. However, individuals and leisure travelers have an increasingly expanding choice given the rise of services such as Airbnb and vacation rentals. Covid-19 has demonstrated to many companies that some of their previous business travel and conferences were unnecessary or not a good return on investment.	HIGH - Hotel operators face intense competition against other efficient and well-capitalized peers. Prices are readily visible to all participants and can be changed daily, forcing competitors to react instantaneously so as to not lose share. Given consolidation, the large hotel operators are roughly equal in terms of power and must fight for market share.

PROPERTY TYPE	THREAT OF ENTRY	POWER OF SUPPLIERS	POWER OF BUYERS	THREAT OF SUBSTITUTES	RIVALRY AMONG EXISTING COMPETITORS
SELF-STORAGE	HIGH - Self-storage units can usually be built cheaply and quickly with a much lower capital investment compared to other property types. As such, the industry can quickly swing from balanced economics to situations of a supply glut leading to pricing pressures and margin compression.	LOW - Most suppliers are fragmented including suppliers of land, labor, and raw materials. However, many self-storage operators have noted pricing increases in labor (both construction and operations).	MEDIUM - Self-storage tenants have relatively high bargaining power when looking to rent a unit as the product is commoditized and tenants can play operators off each other. However, individuals are very fragmented and once they rent a unit, they face a higher switching cost of having to take the time and energy to move their contents. Therefore, price increases to existing tenants are much easier for operators to pass along.	HIGH - Tenants can choose to store more of their contents in their homes or businesses or reduce the number of items they have to lower or eliminate the need for self-storage. However, for most consumers, this is easier said than done.	HIGH - Self-storage REIT operators compete against other publicly traded, well-capitalized, and sophisticated operators as well as a very large market of "mom-and-pop" operators given the low barriers to entry in the market. These smaller operators can sometimes cause excess inventory and a supply glut, forcing operators to cut prices. Price signals are readily visible to all competitors and high exit costs lead to regularly recurring supply/demand imbalances.
INDUSTRIAL	MEDIUM - Previously, this force was high as industrial and logistics facilities could be built quickly and easily as land outside of cities was plentiful. However, demand has shifted to logistics facilities in city centers and near very land constrained areas close to ports and logistics hubs to get products to consumers in less time. Zoning restrictions in and around city centers further restrict availability of industrial space in prime markets.	MEDIUM - Logistics providers have noted labor costs are rising, both for construction and operating facilities. Specifically, it is becoming harder to find qualified labor to operate logistics machinery like forklifts, etc. We also note that the recent pandemic has increased supplier bargaining power as e-commerce has accelerated, increasing industrial REIT demand.	LOW - Buyers are currently very price insensitive as the logistics/warehouse rental cost is typically a very small portion of their total logistics costs (usually around 5%) and have therefore readily been absorbing 10%+ rent increases. It is more important for e-commerce companies to have prime locations than slightly lower costs.	LOW - Tenants have few other options when it comes to warehousing and logistics centers. Small operators sometimes turn to self-storage units (of which some specialize in this area) or third-party logistics providers. A large retailer (i.e., Amazon) could integrate logistics and warehousing into its own value chain, but they would still face the same market supply constraints.	MEDIUM - Industrial REIT operators compete against other publicly traded REITs as well as against a myriad of small operators that may be owned by individuals, families, private equity firms, etc. Price signals are readily visible to all competitors and high exit costs keep operators in the market and capacity high, leading to low or even negative returns. However, as the market is still currently expanding, rivalry pressures are subdued.

Sources: CFRA, company reports.



We look at the competitive environment of REITs by property type in the next section:

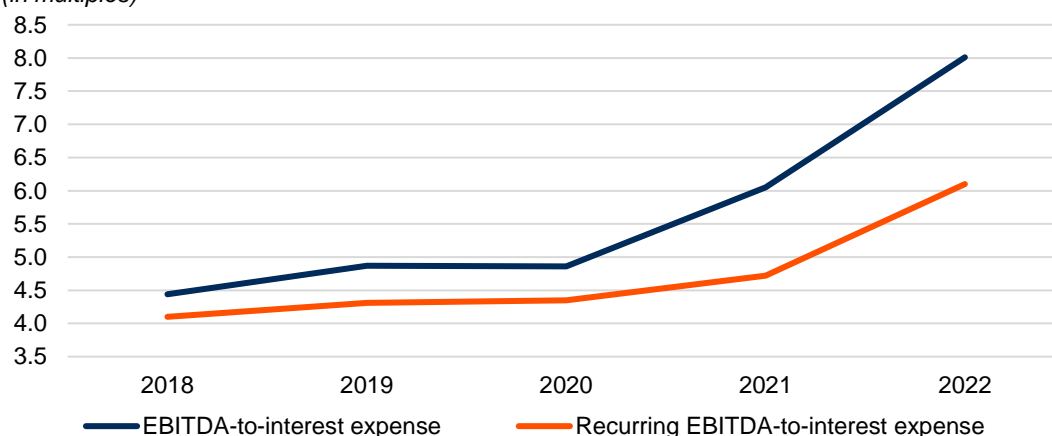
## Residential REITs

Residential REITs own and manage various forms of residences and rent space in those properties to tenants. Residential REITs include REITs specializing in apartment buildings, student housing, manufactured homes, and single-family homes. Within those market segments, some residential REITs also focus on specific geographical markets or classes of properties.

Year-to-date (YTD) through February 15, 2023, the Dow Jones U.S. Real Estate Residential Index was up 12.8% versus S&P Composite 1500 Index's 8.7% increase. In comparison, the price performance for residential REITs was down 32.9% in 2022 versus the S&P Composite 1500 Index's decline of 19.6%. As of February 15, 2023, S&P Global Market Intelligence indicated residential REITs traded at 2.5x P/B and have a TEV/Unlevered FCF of 26.6x compared to U.S. equity REITs trading at a 2.5x P/B and 25.7x TEV/Unlevered FCF multiple.

### U.S. RESIDENTIAL REIT EBITDA-TO-INTEREST EXPENSE

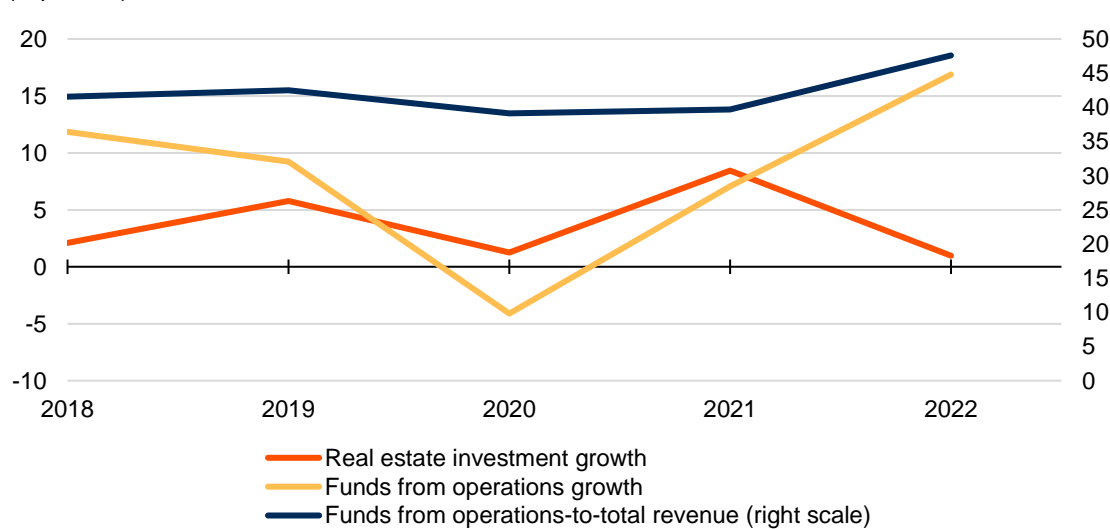
(in multiples)



Source: CFRA, S&P Global Market Intelligence.

### U.S. RESIDENTIAL REIT FUNDS FROM OPERATIONS & REAL ESTATE INVESTMENT

(in percent)

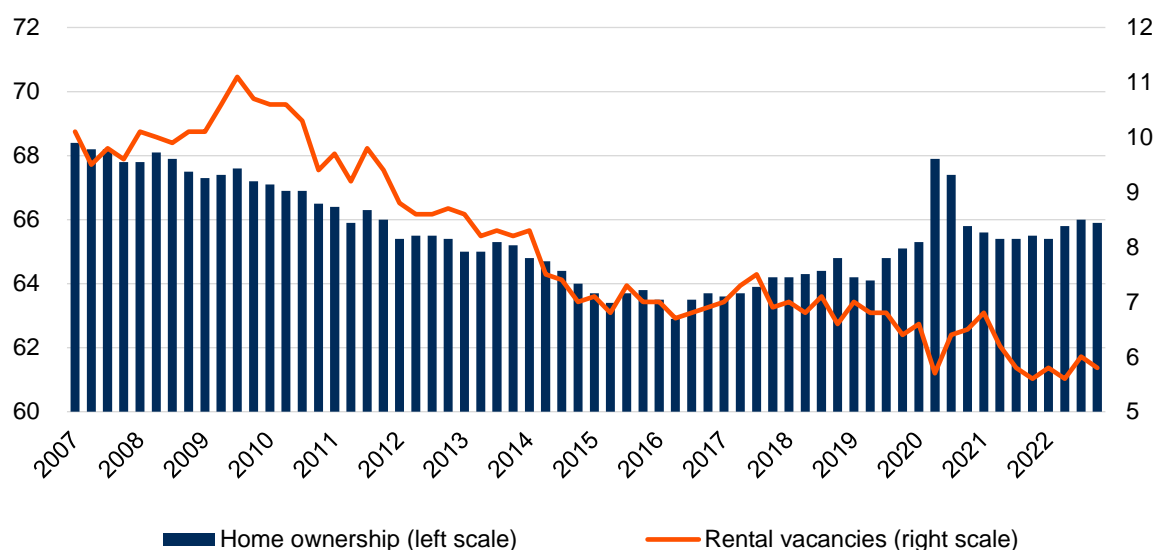


Source: CFRA, S&P Global Market Intelligence.

We have a neutral fundamental outlook for the S&P Residential REITs index, as we think multi-family properties are seeing a moderation in rental rate increases compared to the second half of 2021 and the first half of 2022. We see Covid-19 as a rear-mirror risk to further disruptions in monthly rent collections, especially as most tenants are back at work, albeit mostly remote. We think rental rates will trend low-single-digit year-over-year in most markets, with coastal markets and high-demand Sun Belt markets experiencing mid-single-digit rate increases for new leases. The total new supply coming into the residential real estate market will likely decline in 2023, especially in dense urban markets. This bodes well for stable rental rates during a recession.

#### RENTAL VACANCIES VS. HOME OWNERSHIP RATES

(in percent)



Source: U.S. Census Bureau.

Top of mind is the housing shortage and affordability for home ownership that makes multi-family rental properties attractive, in our view. Most parts of the country are seeing 5%-7% (previously 10%-15%) year-over-year increases in new lease rates, while renewal rates have been 3%-5% (previously 7%-10%) higher from our observations of the largest metro markets. Residential REITs are likely to be constructive to 2023, as higher mortgage rates have kept more households to rent versus buy. We think residential REITs may launch select property developments and will complete developments in progress, even with the expected recession in 2023.

We think the demand for rental units may remain stable to active in 2023, given the U.S. housing shortage and affordability with record average home selling prices. The pendulum for rent versus buy looks to still be in favor of rental properties, as affordability and availability make owning a home extremely expensive.

In 2023, rental renewal and new lease rates are moderating, and we think property owners will focus on the redevelopment of older properties to realize higher rents for more appealing rental units. New leases may go back to incentives, and rental rates are easing from aggressive price hikes seen in many metro markets. We note that urban and suburban apartments may see different market conditions.

Affordability may be an issue with select Class A properties in coastal markets that ask for high rental rates. In the Sun Belt markets, we see more stability in Class B properties that are older apartment complexes, and high-priced Class A new apartments may have higher vacancies. We think residential

REITs with high concentrations of properties in Los Angeles, New York, San Francisco, and Seattle may be weaker with technology and bank industry layoffs in 2023.

We are positive on leisure rentals of manufactured mobile homes in Sun Belt markets that benefit from baby boomers retiring in large numbers. These homesite communities target retirees from middle-class households, who are a more stable category and are not dependent on job employment. Recession may have some impact on leisure property development.

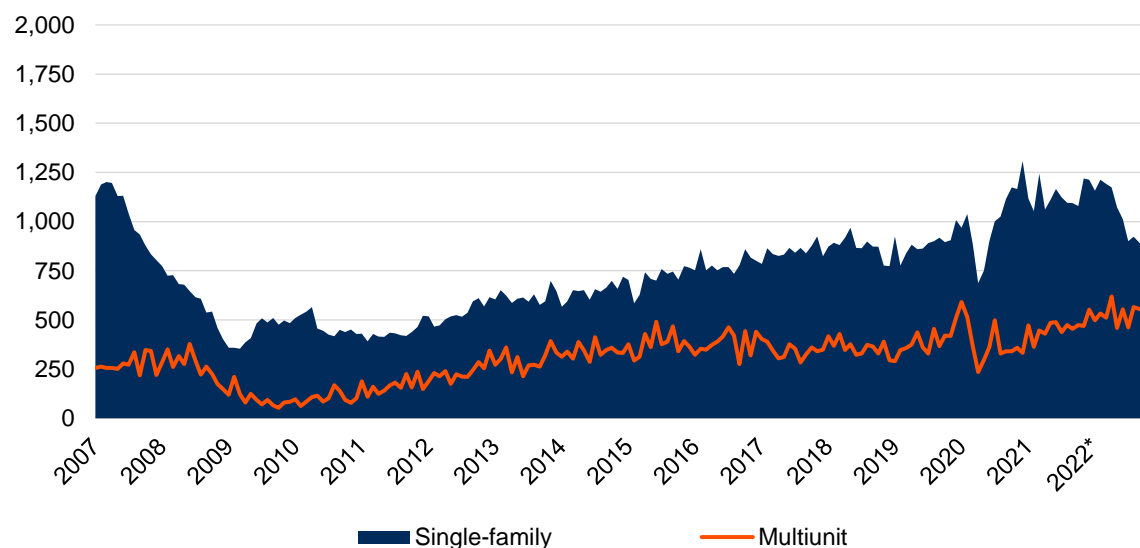
Another growth area is single-family rental homes that take advantage of families seeking a new lifestyle in the suburbs. Private equity firms and other institutions increased their investments in single-family home rentals. The property developers target attractive areas at in-fill locations with demand attributes, such as proximity to desirable schools.

### Apartment Supply Rebounding from Covid-19 Setback

After several years of depressed construction activity and an acute decline in 2020 due to Covid-19, data from the U.S. Census Bureau suggests that construction starts and newly issued permits on new multi-family units have returned to more “normal” levels. In January 2023, new multi-family construction starts stood at 457,000 units, down 23.6% from the recent high of November 2022 but still up more than 94.4% from its low in April 2020. The new multi-family units under construction stood at 932,000 as of January 2023, up 0.6% from the previous month and 41.8% from April 2020 lows.

#### SINGLE-FAMILY VS. MULTIUNIT HOUSING STARTS

(seasonally adjusted annual rate, in thousands)



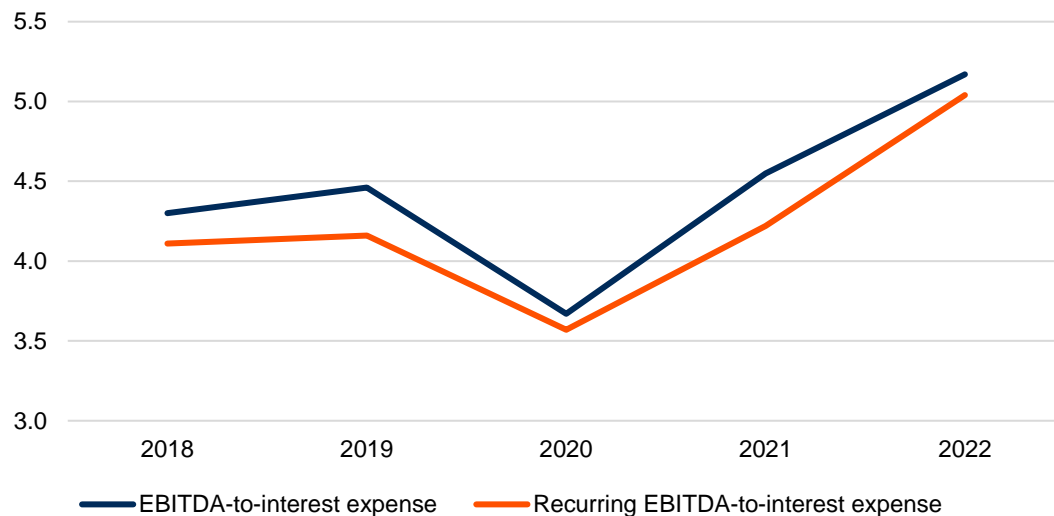
\*Data through December 2022.

Source: U.S. Department of Commerce.

## Retail REITs

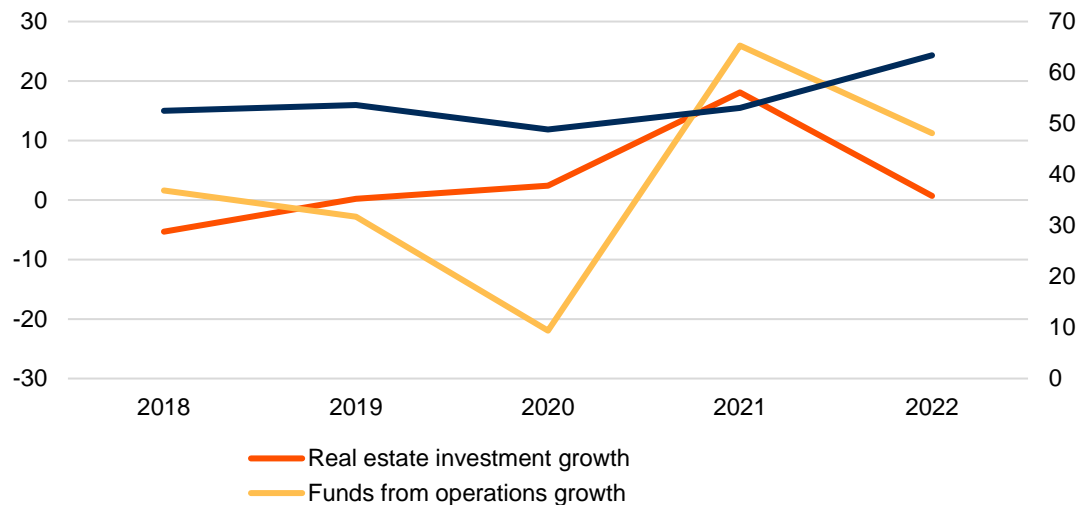
Retail REITs own and manage retail real estate and rent space in those properties to tenants. Retail REITs include REITs that focus on large regional malls, outlet centers, grocery-anchored shopping centers, mixed-use centers (office, retail, residential), and power centers that feature big-box retailers. Net lease REITs own freestanding properties and structure their leases so that tenants pay rent and most operating expenses.

### U.S. RETAIL REIT EBITDA-TO-INTEREST EXPENSE (in multiples)



Source: CFRA, S&P Global Market Intelligence.

### U.S. RETAIL REIT FUNDS FROM OPERATIONS & REAL ESTATE INVESTMENT (in percent)



Source: CFRA, S&P Global Market Intelligence.

### **Store Openings Outpace Closures, but Clouds Form on the Horizon**

Retail REITs outperformed the broad equity markets for two years in a row. The S&P 1500 Retail REIT Index fell 17.8% in 2022 after rising 55.9% in 2021, representing better performance than the S&P Composite 1500 Index, which returned -19.1% and 28.5%, respectively. Retail REITs' recent strength has been driven by a resilient consumer and return to brick-and-mortar stores post-pandemic, boosting tenant sales and helping return some pricing power to the industry. YTD through January 16, 2023, the S&P 1500 Retail REIT sub-industry was up 6.8% compared to the S&P Composite 1500 Index's 4.3% increase.

In 2021, store openings outpaced closures for the first time since 2016. Data published by Coresight Research showed that 5,083 store openings were announced by major retailers in 2021, compared to 5,079 closures during the same period. This trend continued through 2022, with a net positive 1,400 store openings, according to Coresight Research, while retail vacancy fell to just 5.9% in the third quarter of 2022, and net absorption achieved its sixth consecutive quarterly increase, according to Cushman and Wakefield. However, signs of a retail slowdown may be beginning to emerge. After retail sales rose a staggering 75.0% in 2021 off of April 2020 lows, according to the U.S. Census Bureau, retail sales have now declined two months, falling -1.0% in November and -1.1% in December 2022. This slowdown in spending is likely a result of high inflation and recession fears that are beginning to eat away at consumers' spending power; at the same time, excess pandemic-related savings are being spent down. If the U.S. economy begins to meaningfully slow in 2023, we expect that many retailers who have been focused on expanding their retail presence coming out of the pandemic may be forced to reconsider plans or even close some recently opened locations.

### **Digitally Native Brands See Importance of Physical Footprint**

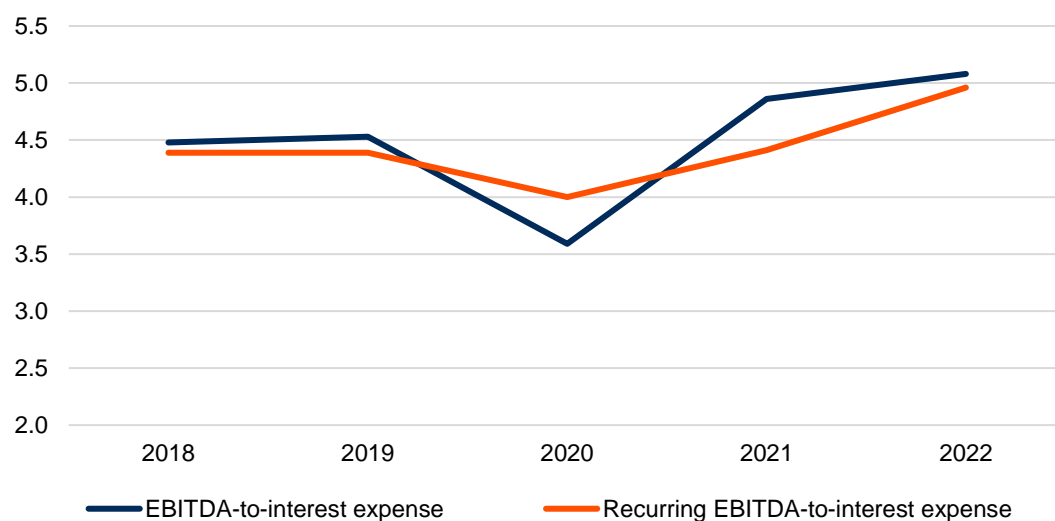
While we acknowledge the secular shift to online shopping continues to hurt retailers, we also think changing consumer tastes and shopping habits are just as strong of a driver as various brands and stores go out of style. Nevertheless, we have observed retailers beginning to pivot back toward brick-and-mortar stores to improve their brand. Some realized that a good retail location could attract customers at a lower acquisition cost than online channels amid a saturated online ad environment.

We note that various brands that started as "native online" or online-only are now beginning to expand with brick-and-mortar retail locations in shopping malls and strip centers. Amazon is one such example. In 2022, the online retailer announced its plan to set up a 30,000 square foot clothing store at the Americana at Brand mall in yet another brick-and-mortar entry for the company. Doing so would not only allow Amazon to enhance its physical presence but also allow the company to gain more data and insight into real-time shoppers.

## Retail REITs – Enclosed Shopping Malls:

### U.S. REGIONAL MALL REIT EBITDA-TO-INTEREST EXPENSE

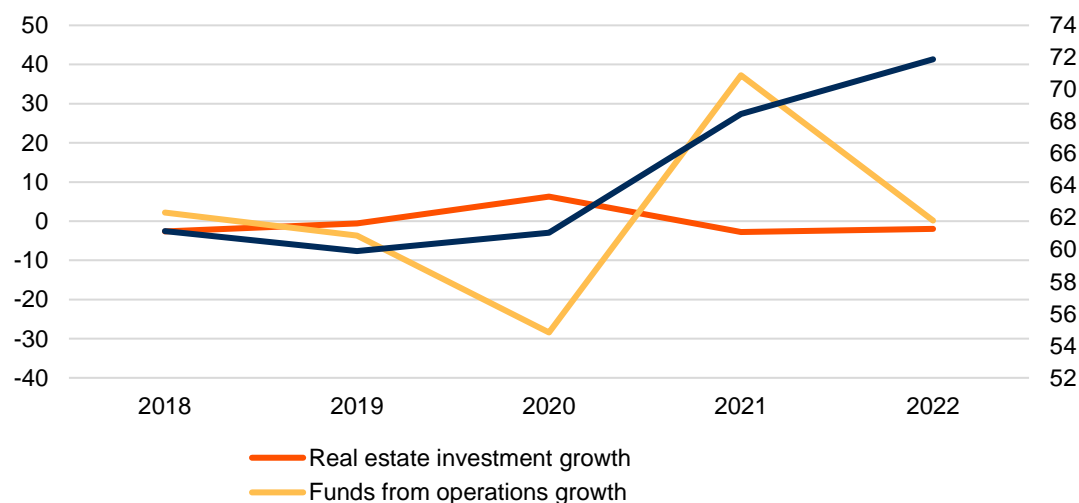
(in multiples)



Source: CFRA, S&P Global Market Intelligence.

### U.S. REGIONAL MALL REIT FUNDS FROM OPERATIONS & REAL ESTATE INVESTMENT

(in percent)



Source: CFRA, S&P Global Market Intelligence.



### Mall Occupancy Gap Widens as Uneven Recovery Continues

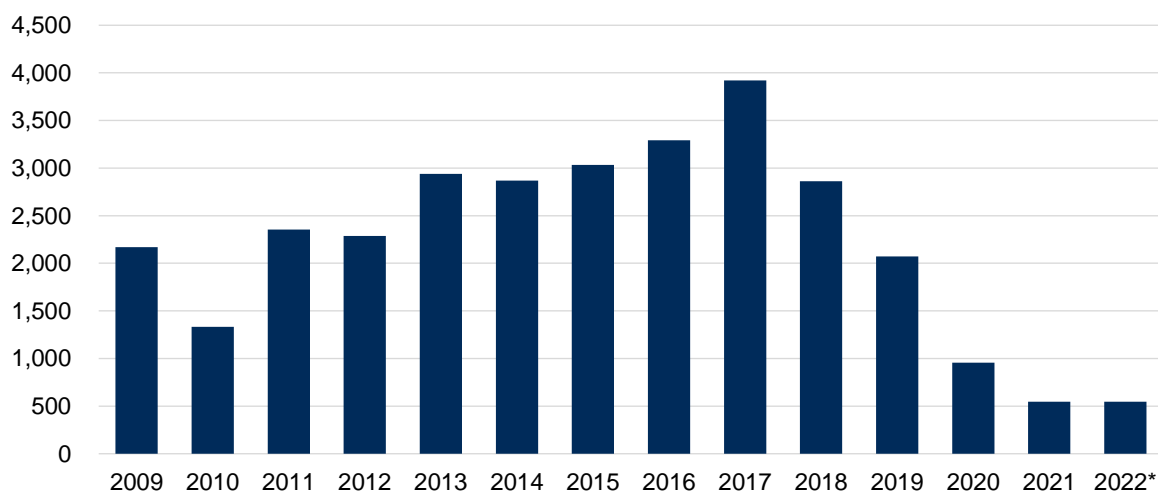
We previously viewed Class A mall REITs as more insulated against the string of retail bankruptcies and store closures, given their prime real estate locations with better foot traffic and a more affluent population in metropolitan areas. While we still believe higher-class malls will fare better relative to lower-class peers, we have not seen additional mall bankruptcies in lower-class malls. However, B and C malls that were already faltering before the pandemic saw a decline in performance at an accelerated pace.

While most restrictions on retail businesses were lifted months prior, it wasn't until the fourth quarter of 2021 that a greater sense of normalcy was felt as increased vaccination rates boosted the return of in-person shopping. However, we think retailers will not benefit equally from the increased footfall. For example, open-air centers, especially those with grocery stores as anchors, have outperformed since 2020 amid greater demand for space than their indoor counterparts due to fears of virus spread.

We still see malls facing increasing challenges as most of their tenants are still apparel retailers grappling with the rise of online shopping and changing consumer tastes. Additionally, many major anchor tenants, such as J.C. Penney, Sears, and Macy's, had been shutting down stores. Mall operators like to point out this is a good thing as anchors typically pay rent multiple times lower than their other tenants, allowing mall operators to recapture this space and lease it to higher-paying tenants. However, we note it is increasingly hard to find replacement tenants that desire as much space as a large anchor. Further, for mall REITs to subdivide or reposition the space will require increasing capital expenditures, putting pressure on cash flows.

#### VALUE OF SHOPPING MALL CONSTRUCTION

(in \$, millions)

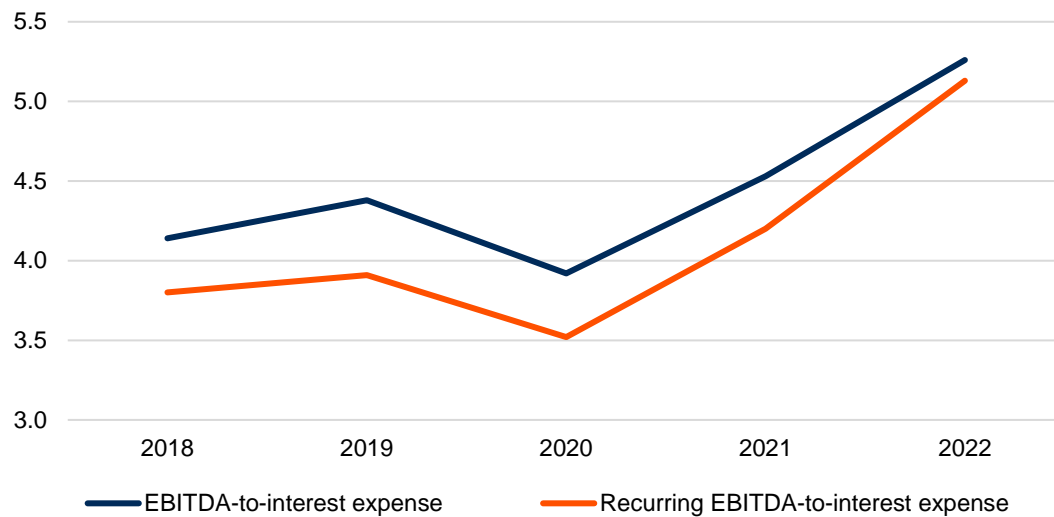


\*Preliminary data as of December 2022.

Source: U.S. Census Bureau.

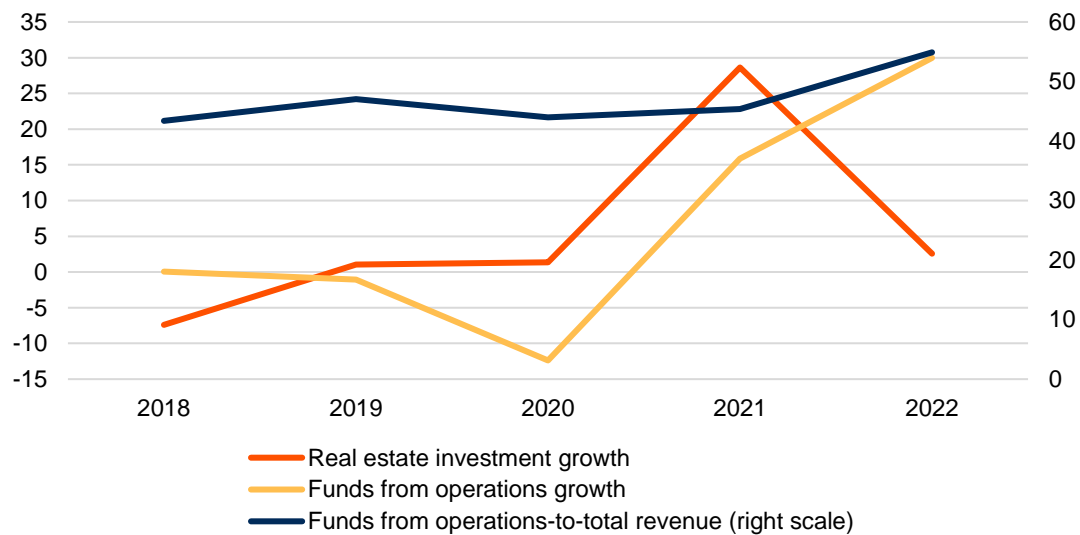
## Retail REITs - Shopping Centers:

**U.S. STRIP CENTER REIT EBITDA-TO-INTEREST EXPENSE**  
(in multiples)



Source: CFRA, S&P Global Market Intelligence.

**U.S. STRIP CENTER REIT FUNDS FROM OPERATIONS & REAL ESTATE INVESTMENT**  
(in percent)



Source: CFRA, S&P Global Market Intelligence.

### Single Tenant and Grocery Anchored Momentum Continues

We expect grocery-anchored shopping centers and single-tenant REITs to perform better due to the internet-resistant business model and focus on selling daily essentials. The post-pandemic recovery will provide a springboard for retailers in this segment amid increasing consumer spending, limited segment development, and overall economic recovery. Foot traffic at grocery stores is now above 2019 levels, while investment within the sector remains strong. Grocery-anchored retail also realized record levels of transaction activity in 2022 (\$14.7 billion), according to JLL, and is the most popular sub-sector for retail investors heading into 2023, according to CBRE's U.S. Investor Intentions Survey.

Most single-tenant REITs have a triple net lease structure in which the tenant is solely responsible for all the costs relating to the property being leased (e.g., real estate taxes, building insurance, maintenance) in addition to the rent. We see REITs with value-oriented tenants, such as off-price and discount retailers, as faring better due to these tenants' ability to compete on price more effectively against online retailers.

We also expect retail REITs with properties located in dense urban areas to perform relatively better due to constraints in supply and a relatively more affluent customer base. However, even with prime real estate locations, these REITs will need to increase capital expenditures to redevelop and reposition properties to adapt to the shifting retailer trends. We see smaller store formats and a move to mixed-use properties, including hotels, residential units, or offices, key to long-term success amid changing consumer tastes.

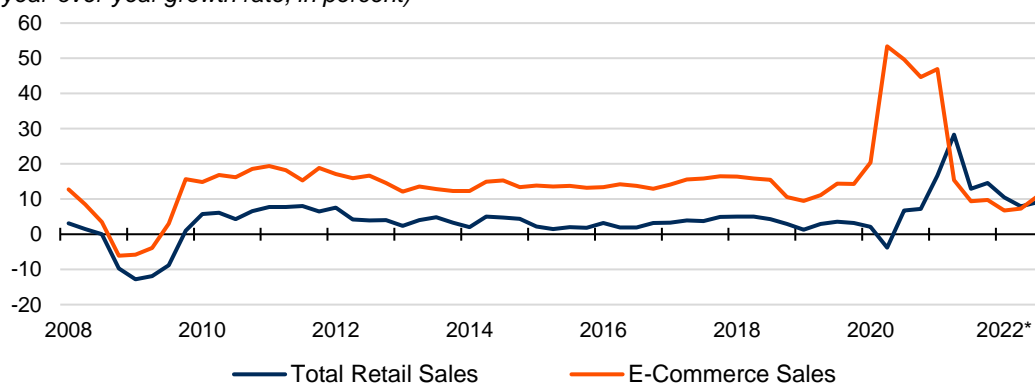
### E-commerce Will Not Impact All Retail Tenants Equally

E-commerce continues to disrupt retail, but CFRA thinks the pace and risks are still underappreciated. While it may appear from headlines that nearly all shopping is being done online today, only 14.8% of total U.S. retail sales were conducted online in the third quarter of 2022, according to the U.S. Census Bureau. In our view, this gives online retail sales an enormous opportunity to continue to capture retail dollars, with commercial real estate company Colliers estimating e-commerce will account for up to 23% of total retail sales by 2025.

E-commerce activity surged in 2020 when most of the world was confined to their own homes. This led to a lower growth rate in 2021 (and a surge in conventional retail as stores reopen). Despite so, we still think that e-commerce retail sales growth will continue to outpace total retail sales growth for the next five years. However, different types of retailers (and therefore REIT tenants) will be affected by the shift to e-commerce differently (see table on next page). Book retailers, for example, are the most vulnerable to e-commerce threats as Amazon dominates the retail market for both print books and e-books. Retail REITs, therefore, vary greatly in their exposure to tenants at risk of e-commerce disruption.

#### RETAIL & FOOD SERVICE SALES VS. E-COMMERCE RETAIL SALES GROWTH

(year-over-year growth rate, in percent)



\*Preliminary data through Q3 2022.

Source: U.S. Census Bureau.

## Retailer Categories Listed from Low to High Vulnerability to E-Commerce Threat

	Type of Retailer	Online Sales (%)	Outlook / Rationale
LOW	Gas Stations / Convenience Stores	0%	One of the few types of stores immune to online sales; longer-term could be affected by fleets of driverless cars.
	Restaurants (Quick & Full Service)	0%	Restaurants have been one of the bright spots for retailers as consumers increasingly favor experiences and eating out over groceries. Restaurants may make more sales through online food delivery apps, but will still require a physical location.
	Recreation / Fitness / Entertainment	0%	We think gyms, family entertainment centers, and movie theaters will fare well as they tap into consumers' desire for more experiences and socialization outside of the home.
	Services	ND	Most services by their nature (such as auto repairs, etc.) will still require physical stores.
	Grocery / Supermarkets	2%	We think online grocery sales have the potential for large growth, but over the next few years, e-commerce penetration will likely remain low. Further, hybrid models (such as "click-and-collect") will still require physical locations.
	Discount Apparel	ND	Discount apparel is another bright spot, opening more stores as traditional department stores close. We think brick-and-mortar discounters will stay as consumers enjoy the "thrill of the hunt," while some stores such as Marshalls do not even offer online shopping.
	Medical	ND	Similar to services, by its nature will require consumers to come to a physical medical office.
	General Merchandise / Misc.	4%-10%	Includes auto parts, RV dealers, and equipment rentals, which we view as low risk.
	Discount Retailers	ND	We think dollar stores and other discount retailers will continue to do well as many of these shoppers purchase food or necessity-based items on a regular basis at these stores.
	Liquor / Tobacco	2%	Consumers generally prefer to get these items on-demand and the need to sign for shipments (due to age restrictions) makes online shopping less convenient.
	Other Low Risk	0%	Some retail REITs have a small portion of non-retail properties such as offices or logistics centers, which are immune to or actually benefit from e-commerce trends.
MEDIUM	Banking / Finance	ND	Some banks continue to open physical branches, but younger generations increasingly prefer to do all banking online or through mobile apps.
	Home Décor / Home Improvement	33% / 2%	Furniture and home furnishing sales are already over 30% online, but home improvement has low-single-digit penetration as DIY'ers prefer store assistance and expertise, while contractors need parts on demand with ability to return excess supplies.
	Beauty Supplies	7%	We think some health and beauty sales will continue to move online but believe consumers still prefer to sample products in-store.
	Drugstores	6%	Amazon's purchase of PillPack has spurred renewed interest in online pharmacy sales, which we think will continue to grow but at a slower pace than other categories.
	Optical	ND	Native-online brands such as Warby Parker are now opening physical stores, which we think demonstrates the value of brick-and-mortar for this category.
	Mass Merchandiser	7%	Mass merchandisers like Walmart and Target will look to integrate e-commerce with their current store footprint, while we think discount clubs like Costco will continue to fare well.

	Party Supplies	ND	Moderate risk, in our view, as products are commoditized, but consumers may want to view products in person or need to make multiple trips.
	Apparel and Accessories (including Footwear)	25%	Previously a category viewed as safe from online sales, we think apparel is actually medium-to-high risk. While we don't see clothing stores disappearing overnight, we think current online pressures will force major reconfiguration of stores and supply chains and how brands interact with consumers.
HIGH	Pet Stores & Services	18%	E-commerce penetration has doubled from 2010, which we see as continuing due to convenience and savings. However, vet and grooming services will provide some insulation.
	Sporting Goods	21%	We think the bankruptcy of Sports Authority highlights another big-box category at risk to e-commerce.
	Office Supplies	31%	Many products are commoditized and do not require expert assistance. The merger of Office Depot and OfficeMax highlights another big-box store category at risk to e-commerce.
	Electronics	34%	We think nearly all consumer electronics sales will move online due to better pricing and extensive customer reviews/recommendations.
	Hobbies, Toys, Games	25%	The bankruptcy of Toys 'R' U.S. (while precipitated by high leverage) is indicative of another big-box retailer that will likely not be able to compete with lower prices and more selection online.
	Books	70%	The first casualty of Amazon, which still dominates as 40%-55% of all print books are purchased through Amazon.com, plus Amazon's near-monopoly of e-books.

Source: U.S. Bureau of the Census, Packaged Facts, JLL, CFRA calculations; ND = No Data.

## Office REITs

Office REITs own office buildings usually classified between urban or suburban geographies. These REITs benefit when employment rises, forcing companies to find more space for their workers, and suffer when companies lay off staff or move operations elsewhere. Office space generally is leased for several years; therefore, the impact of changes in supply and demand can take time to flow through earnings and funds from operations.

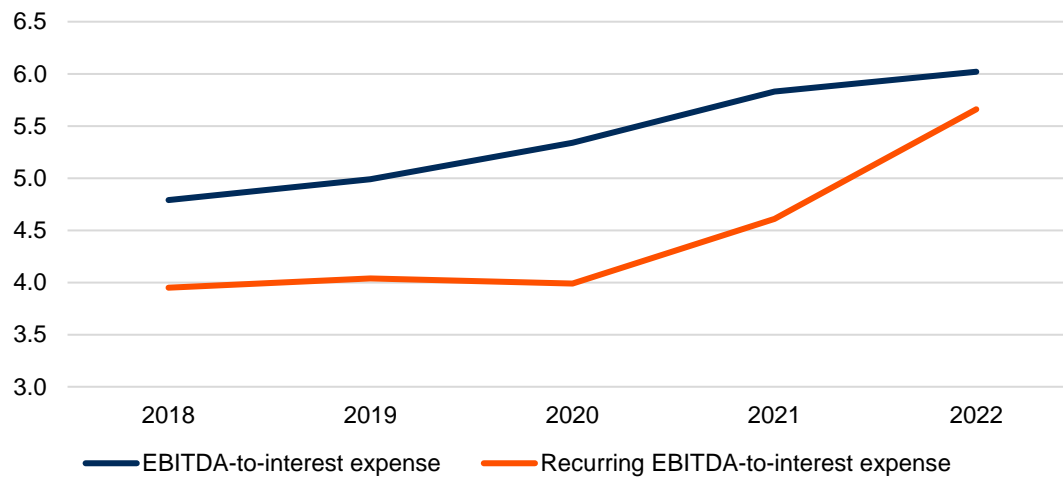
CFRA has a negative fundamental outlook on the office REIT sub-industry, given our fundamental expectation that a recovery will be below 2019 pre-pandemic lease occupancies. We moved from a vibrant office market with full employment to economic slack in office real estate. Most offices across the U.S. are open, but when will most employees follow? More employees are going back to office under a hybrid model, not full-time.

History suggests office REITs' share prices are sensitive to the economy and employment growth. While both metrics declined sharply during Covid-19 variant resurgences, we may be entering a new normal as to how companies and their employees use office space. Looking ahead to 2023, office real estate is seeing signs of weakness with lower leasing activity and higher subleasing. Recession may shift some employers to enforce hybrid work rules, but unemployment is low. Top producers are able to find work quickly, even in the technology market. Employees back to the office remain near 50% as a national average, and some markets like Manhattan near 40%, with less than 10% coming in five days a week.

YTD through February 15, 2023, the Dow Jones U.S. Real Estate Office Index was up 10.3% versus the S&P Composite 1500 Index's 8.7% increase. In comparison, the price performance for office REITs was down 39.2% in 2022 versus the S&P Composite 1500 Index's decline of 19.6%. As of February 15, 2023, S&P Global Market Intelligence indicated office REITs traded at 1.1x P/B and have a TEV/Unlevered FCF of 18.4x compared to U.S. equity REITs trading at a 2.5x P/B and 25.7x TEV/Unlevered FCF multiple.

### U.S. OFFICE REIT EBITDA-TO-INTEREST EXPENSE

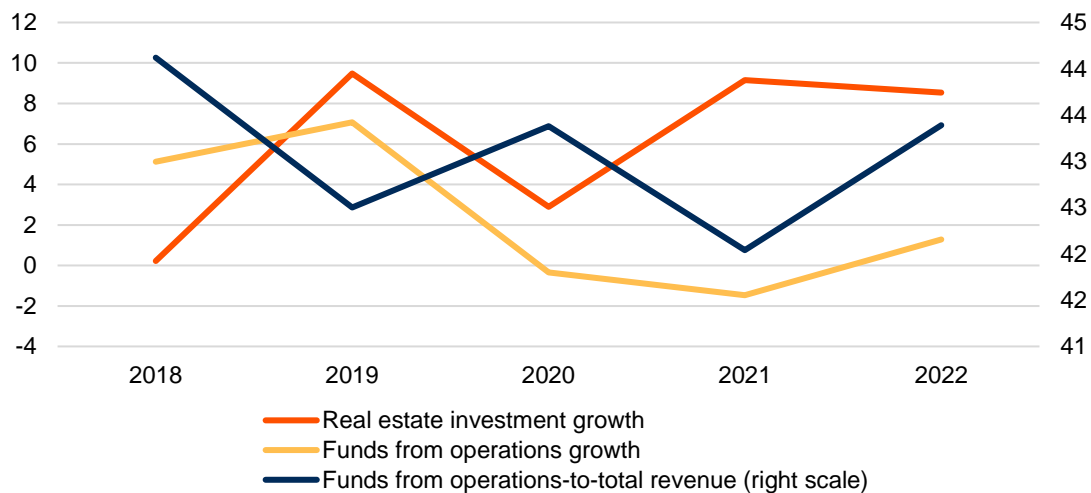
(in multiples)



Source: CFRA, S&P Global Market Intelligence.

### U.S. OFFICE REIT FUNDS FROM OPERATIONS & REAL ESTATE INVESTMENT

(in percent)



Source: CFRA, S&P Global Market Intelligence.



### **Challenging Outlook for Offices Amid New Normal**

Employers may fear the “Big Resignation” less. However, we see employees seeking to work full-time remotely or in a hybrid model (in the office one to three days a week). In 2023, we view these work scenarios as negative for office leasing activity (new and renewals contracts), real estate cash flows, and office market values with higher mortgage rates.

It will be challenging to get back to pre-pandemic occupancy levels. The pace of employees returning to offices remains a risk affecting office real estate transactions. For older Class B office buildings, real estate owners are considering redevelopment to residential condos or rentals.

Large urban markets that depend on public trains, subways, and buses may lag behind the rest of the country where you can drive to the office. Office REITs’ portfolios have high concentrations of properties in dense, urban markets. Office REITs also bear higher operating costs to comply with new Covid-19 safeguards.

We think the 2023 narrative for office REITs is challenging. Currently, there are free rent concessions to renew or sign new leases. All tenants have the pricing power to negotiate lower rental rates, take less office space, and receive other incentives. Tenants are rethinking how much office space is required, especially with announced layoffs from large technology companies like Alphabet, Microsoft, Meta, and Salesforce or large banks like Goldman Sachs and Morgan Stanley.

According to CoStar, a leading real estate service firm, about 211.8 million square feet of sublease space is now on the market compared to 108.8 million at the end of 2019, representing the highest level since the 2008 financial crisis. VTS, a data platform that tracks tenant demand, shows new business searches for new office space fell to 44% compared to activity in 2018 and 2019. Besides the effects of the pandemic, potential recession, and job cutbacks mean less office space is needed.

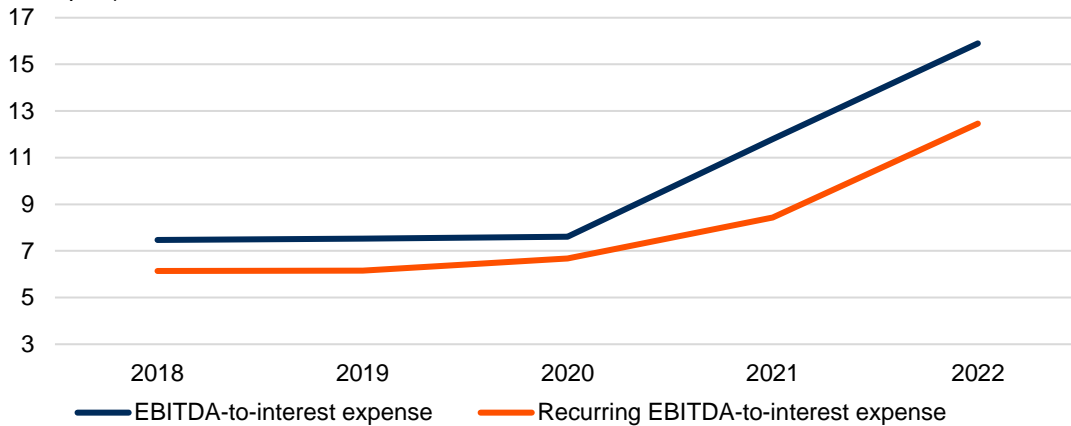
### **Industrial REITs**

Industrial REITs own and manage industrial facilities and rent space in those properties to tenants. Some industrial REITs focus on specific types of properties, such as warehouses and distribution centers. They play a critical role in the supply chain and are key to helping e-commerce retailers meet their rapid delivery demands.

YTD through February 15, 2023, Industrial REITs were up 11.6% versus the S&P 1500 Composite Index’s 8.7% increase. In comparison, the S&P Industrial REIT Index was down 32.9% in 2022 versus the S&P Composite 1500 Index’s decline of 19.6%. As of February 15, 2023, S&P Global Market Intelligence indicated industrial REITs traded at 2.6x P/B and have a TEV/Unlevered FCF of 29.8x compared to U.S. equity REITs trading at a 2.5x P/B and 25.7x TEV/Unlevered FCF multiple.

### U.S. INDUSTRIAL REIT EBITDA-TO-INTEREST EXPENSE

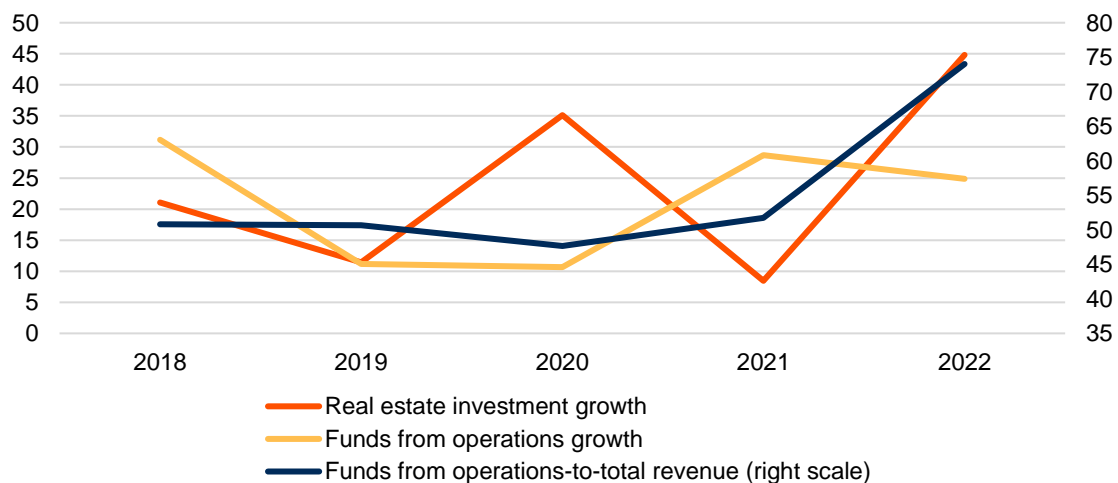
(in multiples)



Source: CFRA, S&P Global Market Intelligence.

### U.S. INDUSTRIAL REIT FUNDS FROM OPERATIONS & REAL ESTATE INVESTMENT

(in percent)



Source: CFRA, S&P Global Market Intelligence.

### Global Trade, E-commerce Drive Demand for Distribution Facilities

Robust e-commerce growth over the last decade has been the key driver for industrial REITs due to the e-commerce ecosystem requiring three times the logistics space relative to traditional brick-and-mortar retail. One of the main drivers of this need for additional space is the requirement for companies to bring the supply chain closer to the consumer through “last-mile” delivery and distribution centers. These facilities enable retailers to meet consumer demands, and often retailer promises, for same-day (or faster) shipping of e-commerce orders. This has required retailers to find new industrial facilities closer to city centers, a major change from historical trends where warehouses were more confined to sea or intermodal port markets, airports, and other transportation hubs. Other key e-commerce-related drivers of increased logistics space include the higher selection of goods offered to consumers (increased SKUs) and an increase in return processing needed for items shipped back to retailers, with e-commerce resulting in up to 30% more returns on average versus brick-and-mortar retail, according to CBRE.

Online sales have grown at steady compounded annual growth rates in the U.S., averaging over 17% since 2010. Online spending in the third quarter of 2022 increased sequentially, up 3.0% from the previous quarter and 10.0% year-over-year. While e-commerce spending as a percent of retail sales

peaked over the pandemic (16.4% in second-quarter 2020 vs. 14.8% in third-quarter 2022), we believe online retail still has ample room for further growth, with Collier's research estimating it will account for up to 23% of total retail sales by 2025.

For 2023, we forecast the market will remain tight for available warehouse space. We expect occupancy in the 96% to 98% range, with sustained high demand helping to offset significant new supply. We see average rent growth of 7% to 9% in 2023 after rental rate growth reached a record 18.6% in 2022, according to Cushman and Wakefield. More supply is coming online with new deliveries well above historical averages, although rapidly rising rates are already starting to cool the new construction pipeline, which fell during the fourth quarter of 2022. Further, supply chain issues are resulting in delivery delays, with construction projects estimated to take five months longer than they did in 2019, according to Newmark Group. We expect the new supply to outpace net absorption through the first half of 2023 before moving toward an equilibrium in the second half.

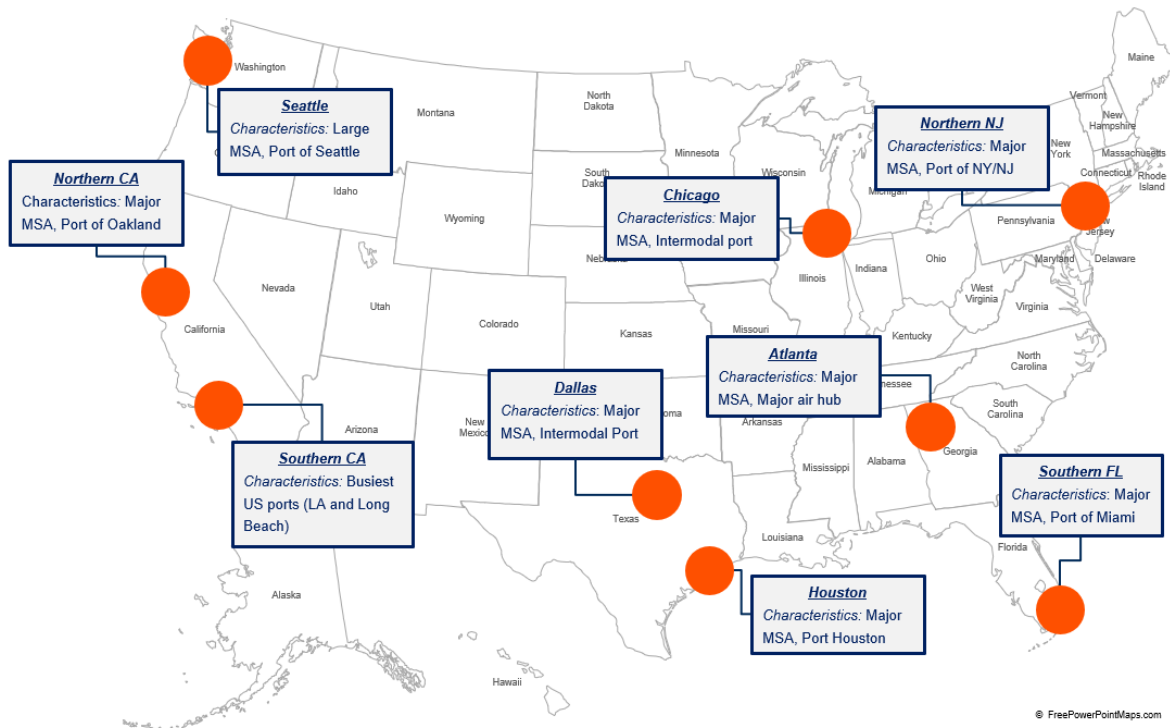
Potential risks to our forecast include a significant decline in consumer spending, logistic operations moving outside city centers in response to rising rents, and a reversal in current supply/demand dynamics resulting in lower rents and/or occupancy rates.

### **Tier 1 Market Concentration to be Key for Long-term Outperformance**

Over the last few years, industrial assets have seen record occupancy levels while pushing significant rental rate increases across nearly all U.S. markets. However, as new warehouse supply closes the gap in demand, industrial market concentration will become a crucial factor in REITs' ability to maintain high occupancy and pricing power. Specifically, we believe concentration within Tier 1 markets will be essential to industrial REIT outperformance moving forward. CFRA defines a Tier 1 industrial market as a market with access to a top-10 U.S. seaport (or major intermodal port/airport) and as part of one of the top-15 metropolitan statistical areas (MSAs) in the U.S. What makes Tier 1 markets important is that they are located near the busiest logistics hubs/MSAs, providing quick access to the consumer and generally having limited available space for new construction due to significant zoning restrictions.

Retailers are willing to pay top dollar to ensure their inventories can be moved quickly through the supply chain. As a result, retailers are willing to pay premium rents in Tier 1 markets to ensure their inventories reach their final destinations in time to fulfill promises of same-day delivery to consumers. However, elevated demand from retailers to be located within these core markets has resulted in limited warehouse inventory, with vacancy reaching record lows of less than 1% in certain Tier 1 markets, such as Northern and Southern California. While the obvious solution seems to be building more inventory, these MSAs often have significant zoning restrictions that make it difficult to start new construction projects. Moreover, residents living around these areas often oppose changes in zoning requirements that would allow for additional industrial space, as industrial facilities often bring increased traffic and noise. As a result, we believe these Tier 1 markets are more protected from new supply growth, allowing REITs to keep occupancy rates high while pushing rental rates higher moving forward. Furthermore, we think retailers will continue to pay premium rental prices for Tier 1 markets despite rising recession risks in 2023 as they look to set up their supply chains and logistics operations for the next decade.

## TIER 1 INDUSTRIAL MARKETS BASED ON CFRA ANALYSIS



### Expect Continued M&A Activity Moving Forward

Further industry consolidation is another key theme to watch for over the next 12 months, although pricing uncertainty could slow activity slightly. Industrial REIT M&A activity has been significant over the last year, with multiple significant deals announced. Most recently, on June 6, 2022, Prologis Inc. agreed to acquire Duke Realty Corporation in an all-stock transaction that valued the company at \$26 billion. This acquisition combined the two largest publicly traded industrial REITs. Only a few months prior, Blackstone Real Estate Partners, part of Blackstone Inc., agreed to acquire diversified Industrial REIT PS Business Parks for \$7.6 billion. We view these acquisitions as clear evidence that large private equity firms and global real estate firms remain active within the industry and that further consolidation may be likely if firms believe they can use the recent market pullback to get better deals on industrial assets.

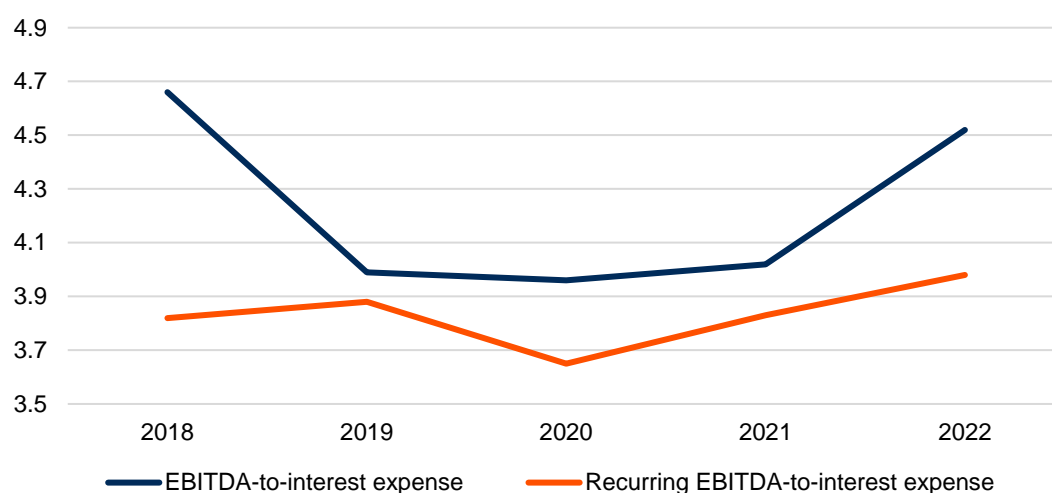
## Health Care REITs

Health care REITs own and manage a variety of health care-related real estate and collect rent from tenants. Health care REITs' property types include senior living facilities, hospitals, medical office buildings, and skilled nursing facilities. One of the emerging subsets of health care REITs is life science REITs. Life science REITs' properties include medical offices and labs focusing on developing life and organismic technologies (e.g., biotech, genomic, and metabolomic technologies).

YTD through February 15, 2023, the Dow Jones U.S. Real Estate Health Care Index was up 9.3% versus the S&P Composite 1500 Index's 8.7% increase. In 2022, the Health Care Index was down 25.8% in 2022 versus the S&P Composite 1500 Index's decline of 19.6%. As of February 15, 2023, S&P Global Market Intelligence indicated health care REITs traded at 1.6x P/B and have a TEV/Unlevered FCF of 17.2x compared to U.S. equity REITs trading at a 2.5x P/B and 25.7x TEV/Unlevered FCF multiple.

### U.S. HEALTH CARE REIT EBITDA-TO-INTEREST EXPENSE

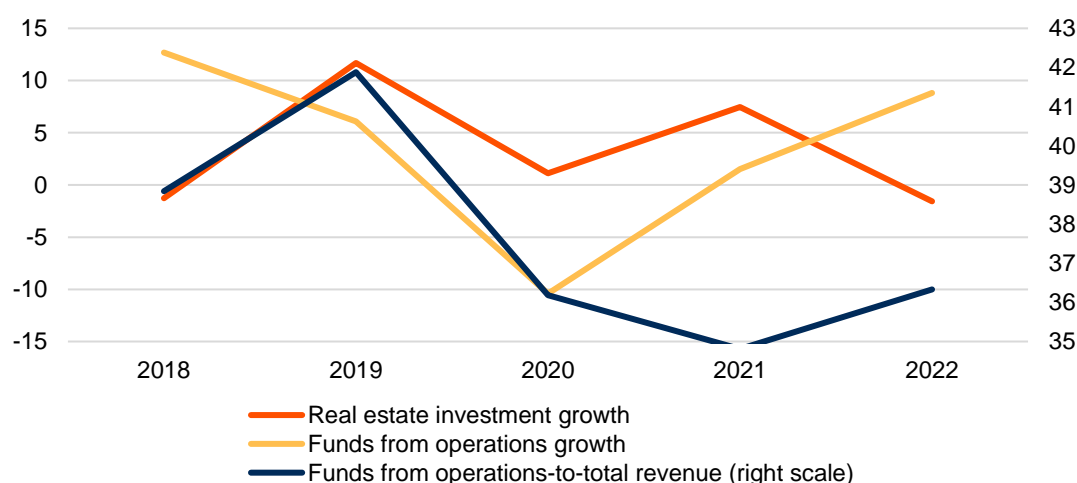
(in multiples)



Source: CFRA, S&P Global Market Intelligence.

### U.S. HEALTHCARE REIT FUNDS FROM OPERATIONS & REAL ESTATE INVESTMENT

(in percent)



Source: CFRA, S&P Global Market Intelligence.

### **CFRA Maintains Positive Outlook on Health Care REITs Sub-industry**

The health care REIT profile has high barriers to entry and low risk exposures to changes in the addressable markets. The sub-industry could be characterized as the most defensive property type for investors – with rental revenue less exposed to cyclical swings of the U.S. economy. In the past, the most challenging period was when we experienced a growth-oriented investment market.

### **Despite the Disruptive Nature of Covid-19 on Health Care REITs, Recovery Has Since Ensued**

Senior housing operating portfolio (SHOP) and medical office properties continue to exhibit positive growth, while life science properties are facing some headwinds due to a more difficult funding environment. Our analysis of each sub-segment follows:

- **Senior Housing Benefitting from Higher Vaccination Rates and Positive Demographic Trends**

Health care REITs concentrated within senior housing are likely to continue benefitting from easing Covid-19 concerns. However, even with high vaccination rates and better treatments, some restrictions will remain in place as facilities operate with the utmost caution to prevent the outbreaks that hampered the industry in 2021-2022. Industry expenses are likely to remain elevated due to increased operating costs associated with Covid-19 safety precautions as well as continued industry-wide labor shortages. While we expect labor pressures to continue easing in 2023, elevated labor costs are likely to remain.

SHOP occupancy is rebounding well from pandemic lows set in first-quarter 2021, with occupancy improving for the sixth consecutive quarter in the fourth quarter of 2022. Favorable supply/demand dynamics are also emerging. There has been a decrease in new SHOP supply, with 35,340 units under construction in the fourth quarter of 2021 just above the weakest new supply pace since 2015, according to NIC MAP Data Service. Further, inventory growth in first-quarter 2022 was the weakest since 2013. This trend is likely to contribute to both higher occupancy and rent growth in the long term.

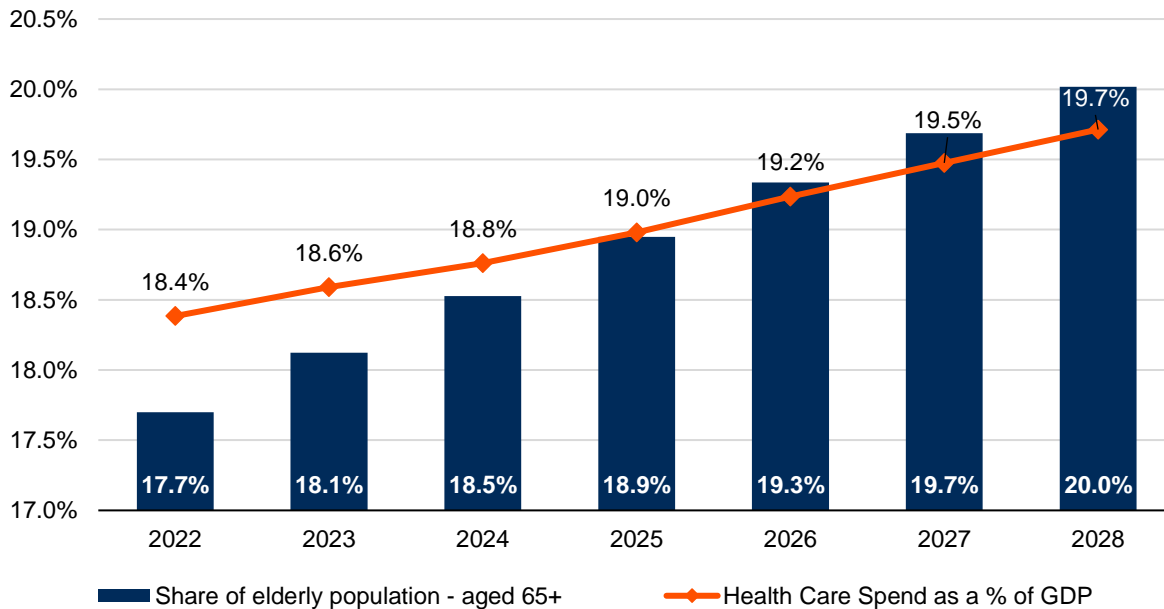
- **Medical and Life Science Properties Show Strength Through Covid-19**

Medical office properties proved to be resilient over the pandemic with rent collections near 100% and occupancy remaining around pre-Covid-19 levels. Asking rents have continued to increase and high demand is likely to offset new supply into 2023, contributing to our positive outlook for medical office properties. Our outlook on life science properties is neutral. We expect a slowdown in VC funding due to higher rates to result in more challenges for life science ventures. However, long-term tailwinds remain in place as interest in drug development, vaccines, and biotechnology remains elevated. Funding reached \$78 billion in 2021, up from \$70 billion in 2020 and more than double the \$36 billion in 2018, according to Cushman & Wakefield. Funding reached \$45 billion in the first half of 2022 according to Cushman and Wakefield, showing continued industry strength despite macro headwinds. We believe tenant quality is key when evaluating REITs specializing in life sciences, as rising recession risks could put some tenants at increased risk of bankruptcy or missed payments.

- **Long-term Demographic Trends Remain Favorable**

Beyond 2023, demographics (an aging population, rising health care spending) are likely to be a positive trend for this REIT category. Many of the leading health care REITs are actively investing in attractive areas like life sciences, high-quality managed care operators, and medical office campuses. Others are concentrated in senior housing – approaching with new strategies to drive higher property values. We think a closer look at individual companies' profiles with health care property types remains crucial when evaluating this industry.

### FORECASTED TREND OF U.S. HEALTHCARE SPEND VS SHARE OF ELDERLY POPULATION



Source: U.S. Census Bureau, Centers for Medicare & Medicaid Services..

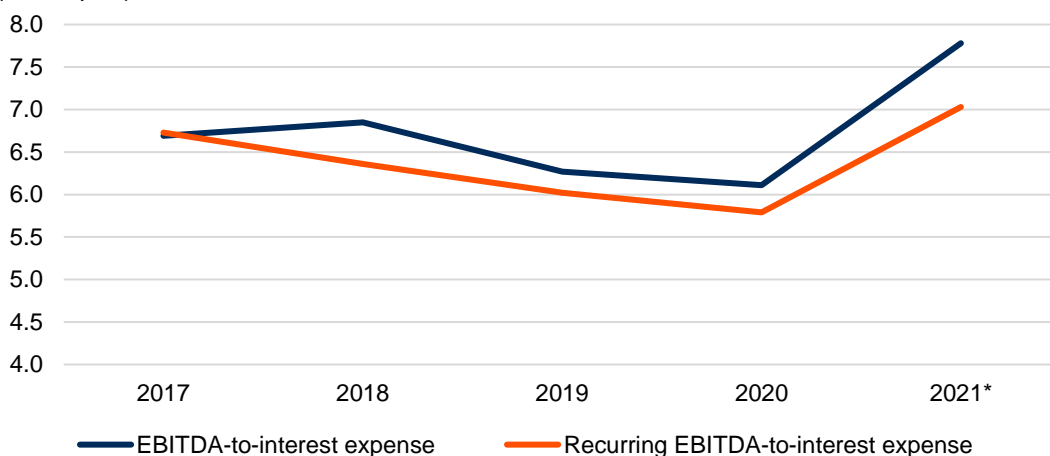
### Self-Storage REITs

Self-storage REITs own and manage storage facilities and collect rent from customers. Self-storage REITs rent space to both individuals and businesses.

YTD through February 15, 2023, the Dow Jones U.S. Real Estate Self-Storage Index was up 12.4% versus S&P Composite 1500 Index's 8.7% increase. In comparison, the price performance for self-storage REITs was down 23.9% in 2022 versus the S&P Composite 1500 Index's decline of 19.6%. As of February 15, 2023, S&P Global Market Intelligence indicated self-storage REITs traded at 6.5x P/B and have a TEV/Unlevered FCF of 32.5x compared to U.S. equity REITs trading at a 2.5x P/B and 25.7x TEV/Unlevered FCF multiple.

### U.S. SELF-STORAGE REIT EBITDA-TO-INTEREST EXPENSE

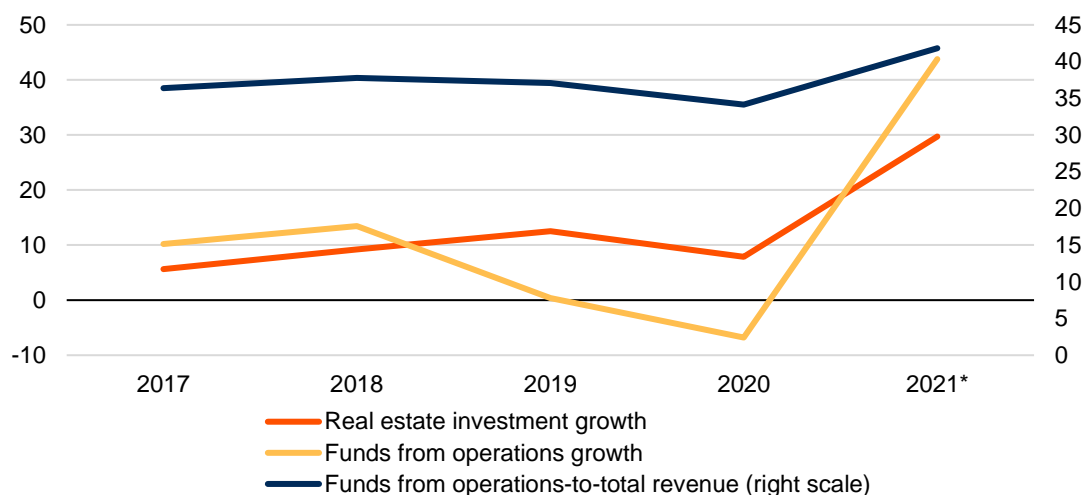
(in multiples)



\*Latest available

Source: CFRA, S&P Global Market Intelligence.

### U.S. SELF-STORAGE REIT FUNDS FROM OPERATIONS & REAL ESTATE INVESTMENT (in percent)



\*Latest available

Source: CFRA, S&P Global Market Intelligence.

### Self-storage Remains in a “Boom” Cycle as Supply Fears Remain Tempered

The self-storage industry is fragmented, with the top five publicly traded REITs only owning approximately 25% of the self-storage square footage in the U.S., according to the 2022 Self Storage Almanac. This makes the industry highly susceptible to periods of over-expansion and a supply glut, followed by busts. Non-institutional builders (such as individuals or small companies) can quickly build additional supply to take advantage of the increase in demand. The fact that self-storage facilities could be built almost anywhere within zoning rules at a relatively low cost also fueled the boom-and-bust cycle.

Shares of self-storage REITs have performed better on a relative basis through the pandemic, as self-storage is typically viewed as a more defensive sector during recessions. In 2021, the Dow Jones U.S. Real Estate Self-Storage Index was up 74.9%, outperforming the broad Dow Jones Equity All REIT Index's 37.2%. However, self-storage REITs struggled along with the broader equity REIT industry in 2022 amid high inflation and rising interest rates, with the Dow Jones U.S. Real Estate Self-Storage Index down 25.9%, slightly outperforming the S&P Real Estate Index's drop of 28.8%.

2021 saw exceptional rent growth due to people moving and adapting to changing pandemic lifestyles. A generally strong housing market and increased adoption of flexible working arrangements have all increased demand for storage. 2022 saw the self-storage market remain very strong, although rental rate growth has started decelerating from the rapid growth pace set in 2021. Industry fundamentals remain healthy as properties under construction or in the planning stages of development represent just over 11% of existing inventory, while street rental rates remain near all-time highs, according to Yardi Matrix. We expect construction activity to remain muted as higher borrowing costs deter potential builders. We also expect new hybrid working arrangements to be a long-term tailwind for the industry as many workers will need to set up and maintain home offices long-term, driving increased demand for self-storage units. In our view, high e-commerce demand and retailers' push to offer “last-mile” delivery solutions should also continue providing tailwinds. In addition, as inflation stays elevated, self-storages should benefit from its ability to adjust rents quickly, many of which are on a month-to-month basis.

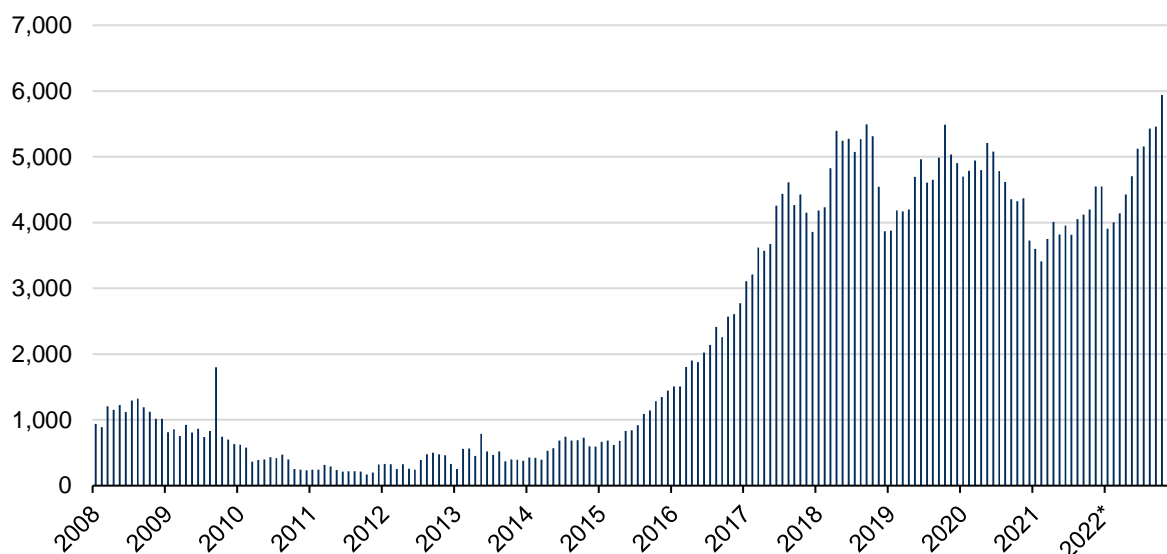
We were previously concerned about increasing supply given the favorable demand combined with easy financing and low interest rates, which allowed operators to expand quickly. We admit our concerns of increasing supply did not come to fruition as anticipated, or at least not to the extent where self-storage



REITs found themselves with too much supply and insufficient demand. Instead, many customers rented units longer than anticipated while demand increased from others who found themselves working at home and needed to free up space. While self-storage supply is increasing, current supply chain issues have raised the development cost and slowed the construction pipeline, while higher interest rates may make financing more difficult to come by for many investors. We will continue monitoring supply/demand trends moving forward for signs of a reversal that could lead to lower occupancy, higher marketing expenditures, and/or lower rental rates.

#### VALUE OF PRIVATE CONSTRUCTION PUT IN PLACE FOR SELF-STORAGE

(in millions of dollars, seasonally adjusted annual rate, monthly)



\*Data through December 2022.

Source: United States Census Bureau.

## Data Center REITs

Through February 15, 2023, the FTSE Nareit Equity Data Center Index was up 5.8%, underperforming the S&P Composite 1500 Index, which had increased by 8.7% during the same period. Price performance for Data Center REITs was down 22.7% in 2022 versus the S&P Composite 1500 Index's loss of 19.6%.

### Covid-19 Accelerates Data Center REIT Demand Drivers

We are positive on data centers, which will benefit from continuing growth in global internet traffic, e-commerce, connected devices, high-definition video, and cloud-based storage and services. We have recently seen a wave of industry consolidation as private equity firms look to enter the market due to its attractive ROI. We expect to see additional M&A activity due to the benefits of economies of scale in the industry.

There was a large spike in data center usage and traffic as many people were forced to work remotely during the pandemic. The constant data usage throughout the day also fuels the strain as people reorganize their work and home life around their personal schedules. We believe data traffic growth will remain in the 30% to 50% range annually through 2030 as internet access increases globally while demand drivers such as video streaming, e-commerce, and others continue growing at very high rates.

Demand is starting to outstrip supply in major markets, benefiting data centers. As of year-end 2021, the global data center construction pipeline was at record levels, while the U.S. pipeline grew 19% Y/Y, reaching 727 MW, according to JLL. Demand reached record levels in 2021, with 886 MW of absorption

in the U.S. Demand remained strong through the first half of 2022, with preleasing activity historically high in U.S. markets, reaching 1,087 MW, according to JLL, or more than 95% of 2021's full-year demand. The construction pipeline through the first half of 2022 was 1,913 MW, above 2021's total and up 3x year-over-year. As a result of the significant increase in construction activity, we expect record-low industry vacancy rates, which reached 4.4% in North America at the end of the first half of 2022, to begin ticking up slightly in the next 12 to 24 months.

Data center customers remained very healthy throughout the pandemic, and we do not expect many requests for payment relief through 2023.

### **How Data Center REITs are Putting the “E” in “ESG”**

Data center power consumption is expected to increase as data traffic expands exponentially. Across the top markets in North America, data center capacity has increased at a healthy rate over the past five years with no signs of slowing. Data centers are capable of consuming incredible amounts of power. Based on current estimates, data centers in the U.S. alone consumed approximately 71,500 MW in 2021. To put this in perspective, one MW is enough to power 700 households. The largest data center in the U.S. will consume 650 MW of power when fully operational.

Reducing power consumption is a win for both customers and data center operators. Lowering power consumption can significantly reduce utility bills, which is important to every company. More recently, with the rise in investor focus on environmental, social, and governance (ESG) metrics, lowering power consumption also shows a commitment to environmental sustainability. While there are many ways to improve the performance of the server, networking, and storage hardware, this is generally in the hands of the customer who owns the equipment. The cooling system is provided by the data center operator. Efficient cooling options can be a strong competitive differentiator in a given market.

Data center operators are deploying innovative cooling and software monitoring to reduce cooling costs. Digital Realty, Equinix, and QTS are racing to build data centers that take advantage of the unique features of the local climate to cut cooling costs. For example, Equinix's AM3 data center features its Aquifer Thermal Energy Storage system, which employs cold groundwater in the winter months, eliminating the need for traditional mechanical cooling and using excess heat to warm nearby buildings. QTS has deployed smart airflow technology to monitor the temperature at the rack level and adjust the amount of cold air delivered based on exactly what is needed. Digital Realty also utilizes cold groundwater when possible while also using more non-potable water for its evaporative cooling systems rather than pulling from local potable water sources. These features are very attractive to customers, as they can then advertise them to their customers. We believe Digital Realty, Equinix, and QTS have a lead over the competition in terms of the number and efficiency of their data centers, which will help them win new customers and expand relationships with existing customers.

### **Infrastructure REITs**

Infrastructure REITs are primarily comprised of wireless tower (cell phone) operators. A long-term demand exists for these infrastructure REITs as wireless companies are not interested in owning and maintaining cell phone towers. These companies would prefer to lease from an infrastructure REIT specializing in these solutions. An infrastructure REIT company would buy or lease the land on which the tower would be erected. They also seek the right to erect equipment on buildings and other structures. These operators also benefit from being independent operators as they can have multiple tenants or cell phone companies on the same tower or site. Y/Y through February 15, 2023, the FTSE Nareit Infrastructure REITs Index was down 5.7%, compared to the S&P Composite 1500 Index's increase of 8.7%. Price performance for Infrastructure REITs was down 28.6% in 2022 versus the S&P Composite 1500 Index's gain of 19.6%.

### **Higher-frequency Spectrum Bands and 5G Expected to Drive Growth**

We maintain a positive fundamental outlook on the tower and broadcast REITs. We see steady growth prospects in the intermediate term reflecting tenant renewals by leading wireless providers, including customers integrating past acquisitions. Tower REITs will continue to benefit from higher demand due to robust mobile data traffic and the need for carriers to continually improve their network quality and coverage, likely leading to increasing tower ROI.

Here's why we see growth for wireless towers: 5G will continue accelerating in 2023 by deploying small cells and new macro antennas to support the network. In addition, 5G networks will require further densification than 4G/3G to maintain ultra-low latency despite the increase in internet of things (IoT) devices. Operators will also likely deploy edge computing, which could present a new revenue stream for these companies, which will be able to lease space next to the towers.

We are seeing the first wave of C-Band deployments now that the A Block spectrum has been cleared. However, we note there have been some limited delays due to concerns voiced by the aviation industry, which is worried that C-band towers will interfere with radio altimeters. While the 5G C-band rollout ramps up nationally, the target date for the spectrum deployed around airports has been consistently pushed back. The network is now expected to be gradually rolled out around airports in July 2023. The higher-frequency spectrum bands are valuable to wireless companies due to the ability to significantly increase network capacity given how much more spectrum is available in those higher frequencies. However, the signal travels over shorter distances, requiring more cell sites. As a result, we expect the deployment of additional spectrum and this densification trend to drive significant demand for tower and small cell assets in the future.

## **Regulatory Updates**

### **1031 Exchange Could Be Eliminated in a Biden Administration**

The 1031 exchange – a rule regulating a like-kind exchange – has existed in the tax code for many decades. It enables a property investor to avoid capital gains taxes on sales in certain circumstances; if an investor rolls the proceeds of a real estate sale into a future property purchase of equal or greater value, the profits are exempt from taxation. Until recently, the exemption applied to an array of assets, including industrial equipment and rental cars. The provision for most industries was eliminated in the Tax Reform Act of 2017, but it was left open for real estate.

However, President Biden said he wants to use proceeds from “rolling back unproductive and unequal tax breaks for real estate investors with incomes over \$400,000” on childcare and elderly services, leading experts to believe the 1031 exchange program could be eliminated, which could reduce the number of transactions that generate tax revenue and reduce liquidity. The proposed elimination would place a \$500,000 limit for individual gains and \$1 million for joint returns. This encourages owners to hold on to properties longer by disincentivizing property sales. It is projected to save property investors \$41.4 billion between 2020 and 2024, according to Congress's Joint Committee on Taxation. Real estate developers can also claim write-offs for losses on borrowed money and claim depreciation on buildings.

However, given the overall economic impact of abolishing the 1031 exchange, we think the likelihood of the rule being eliminated is low. According to a May 2021 study by Ernst & Young, tax income from ancillary businesses associated with the exchange came to approximately \$7.8 billion. In addition, 1031-related businesses would produce 568,000 jobs, including real estate investors, attorneys, lenders, escrow specialists, etc., which brings in \$27.5 billion in labor income.

## White House Pushes Tenant Protection

One reason many people believe homeownership in the U.S. has been made harder to achieve is because of the increased presence of institutional buyers. These businesses tend to snap up large quantities of foreclosed properties, or even entire new developments, and subsequently rent them out. Due to the sheer size of their property portfolios and how they conduct business, institutional buyers tend to drive up property prices and cause an increase in home rentals rates. Many are infuriated by this practice and have called upon governmental intervention to regulate affordable housing supply and restrict large Single-Family Rental (SFR) Operators.

The legislation, introduced in July 2022, plans to clamp down specifically on SFR Operators such as Invitation Homes, American Homes 4 Rent, Tricon Residential, Progress Residential, and FirstKey Homes. In January 2023, the White House announced the “Blueprint for a Renters Bill of Rights.” However, according to Washington Analysis (WA), a CFRA business, the plan is unlikely to yield a significant shift in power away from multi-family property owners and toward renters. WA also doubts this would result in a new federal rent cap regime or other similarly impactful policy.

The Blueprint sets out five principles, each accompanied by a set of actions – more than 20 in total. Several federal regulators, including the Federal Trade Commission (FTC), Consumer Financial Protection Bureau (CFPB), Federal Housing Finance Agency (FHFA), Department of Housing and Urban Development (HUD), Department of Agriculture (USDA), and Department of Defense (DOD), among others, will now work to carry out these actions. While some are new, others have been in the works for months (or longer). WA read the four initiatives below as the most interesting and/or potentially significant:

### SIGNIFICANT INITIATIVES IN THE BLUEPRINT FOR A RENTERS BILL OF RIGHTS

ACTION SUMMARY	ANALYSIS AND EXPECTATIONS
<b>FTC</b> to explore targeting practices that negatively impact renters' ability to obtain and retain housing.  <b>FTC</b> and <b>CFPB</b> will issue a Request for Information (RFI) to gather data and inputs on such practices.	Progressives are pushing the FTC to issue rules defining “excessive rent increases” and to take enforcement against rent gouging practices. We are skeptical the FTC will take such an aggressive approach and believe such efforts would be on thin legal ice. There is no federal law that deals directly with price gouging, and the agency has limited ability to impose meaningful penalties and restitution. We think the focus will be more on competition issues, tenant screening, and other matters. That said, risk remains, especially given FTC Chair Lina Khan has close ties to Senator Elizabeth Warren (D-MA), who has been a leading voice for aggressive FTC action.
<b>DOJ</b> to host a workshop on the impact of information-sharing in consumer-facing markets to inform potential guidance updates on related anticompetitive business practices.	We expect the DOJ to crack down on rental price optimization software providers that utilize data from competing property owners in making pricing recommendations to those same parties. <b>RealPage</b> (private) has been the subject of public and congressional criticism, and DOJ has already opened an investigation into the company. Separately, DOJ also recently filed a statement of interest supporting claims that <b>SafeRent's</b> (private) algorithm-based scoring system to screen tenants is discriminatory.
<b>FHFA</b> and the GSEs to identify opportunities and challenges of adopting and enforcing tenant protections, including policies that limit “egregious” rent increases at properties with GSE-backed mortgages.	The Biden administration is focused on leveraging the GSEs to drive its housing agenda, and FHFA has already tasked Fannie and Freddie with exploring new tenant protections in financed properties. We believe that FHFA has room to operate here, and we could see longer required notification periods ahead of rent increases, grace periods for missed payments, stronger eviction protections, and potentially even limits on rent increases. However, note that new requirements are expected to only apply to future financings by the GSEs. Expect some progress update by mid-year.

**CFPB** to adopt rules/guidance, and work with the FTC on enforcement, to ensure tenant background screening companies have accurate reporting.

**CFPB** to work with HUD, FHFA, FTC, and USDA on best practices for use of tenant screening reports.

**HUD** to release guidance on use of tenant screening algorithms in ways that may violate the Fair Housing Act.

The CFPB has already issued reports highlighting concerns about the accuracy and predictive value of tenant background checks, as well as the difficulties tenants face in correcting errors and industry compliance with the Fair Credit Reporting Act. The CFPB's examination included a review of **AppFolio** (APPF), **First Advantage** (FA), and **Transunion** (TRU), **RealPage**, **Yardi Systems**, **MRI Software**, and **Entrata** are other firms in this space. While the CFPB and other agencies could issue rules, we expect guidance and enforcement of existing laws and regulations to be the most likely path in the near term. Note that New York City, the city of Los Angeles, and other major jurisdictions have explored banning certain tenant background checks and we expect more to do the same. Last year, Alameda County become the first in the nation to prohibit criminal background checks on applicants.

Source: CFRA, Washington Analysis.

## M&A Environment

In 2022, there were 11 completed merger and acquisition (M&A) deals announced involving U.S. REITs with transaction sizes over \$500 million totaling \$87.5 billion, representing an 11.7% decrease from the \$99.0 billion deal value announced in the previous year and a 183% increase from those announced in 2020, according to S&P Global Market Intelligence. The decline in deal value and deal count (11 in 2022 vs. 13 in 2021) were mainly the result of increased financing costs amid the multistage interest rate hike and near-term recessionary fears. YTD through February 15, 2023, only one deal worth \$14.4 billion was announced, and there were no completed transactions during the same period.

In 2023, the largest announced bid (as of February 15) was Public Storage's bid to acquire Life Storage, Inc. Life Storage is a specialized REIT with a portfolio of over 1,100 storage properties. On February 5, 2023, Public Storage proposed to acquire all of the outstanding shares and units of Life Storage in an all-stock deal worth \$14.4 billion. In its letter to Life Storage, Public Storage believes the two would benefit from this synergistic combination due to cost savings, enhanced ancillary operations, and expanded growth opportunities. However, on February 17, Life Storage rejected the bid claiming that the offer significantly undervalues the company and is a well-timed effort to give Public Storage's shareholders a piece of Life Storage's future growth. The transaction's outcome remains unclear as the two parties continue their negotiation.

The largest completed deal in 2022 was the \$22.7 billion acquisition of Duke Realty Corporation by Prologis, Inc. Duke is a leading owner, developer, and manager of logistics and industrial properties. The company owns and runs about 167 million rentable square feet of industrial properties in 19 of the biggest logistics markets in the U.S. and has an outstanding development pipeline of 7 million square feet of buildings in addition to the 17 million square feet of developable land as of the third quarter of 2022. Prologis will acquire Duke's stock in this all-stock transaction, expanding its presence in major U.S. regions and adding Savannah, Georgia, the fourth-largest U.S. port for container imports.

In 2021, the largest completed deal was the \$17.5 billion merger between VEREIT, Inc. and Realty Income Corp., where Realty Income became the surviving corporation. Based in Phoenix, Arizona, VEREIT is a full-service real estate operating company that owns offices, restaurants, single-tenant retail, and industrial properties. The equity swap deal was completed in November 2021. With the merger, Realty Income can leverage its expertise, size, and scale to accelerate its investment activities, thus

enhancing shareholder returns. Following the acquisition, Realty Income spun off almost all office assets in the combined company into a new NYSE-listed REIT named Orion Office REIT Inc.

**U.S. REIT M&A DEALS ANNOUNCED FROM 2022 THROUGH FEBRUARY 15, 2023\***

*(arranged by status, followed by completion date)*

DEAL STATUS	ANNOUNCE- MENT DATE	ACQUIRER	TARGET	PROPERTY FOCUS	TRANSACTION VALUE (\$, in millions)
Announced	2/5/23	Public Storage	Life Storage	Specialized REITs	14,425
Announced	11/28/22	GIC; Centerbridge PartnersI; CPREF II; CCP SBS	INDUS Realty Trust	Industrial REITs	690
Announced	8/11/22	Safehold	iStar	Diversified REITs	1,776
Completed	9/15/22	GIC; Oak Street Real Estate Capital	STORE Capital Corporation	Diversified REITs	14,008
Completed	5/31/22	PotlatchDeltic Corporation	CatchMark Timber Trust	Specialized REITs	789
Completed	5/10/22	Prologis	Duke Realty Corporation	Industrial REITs	22,746
Completed	5/6/22	Brookfield Corporation	Watermark Lodging Trust	Hotel and Resort REITs	3,577
Completed	4/25/22	Blackstone	PS Business Parks	Diversified REITs	7,452
Completed	4/19/22	Blackstone	American Campus Communities	Residential REITs	13,294
Completed	2/28/22	W. P. Carey	Corporate Property Associates 18 - Global	Diversified REITs	2,947
Completed	2/28/22	Healthcare Trust of America	Healthcare Realty Trust Incorporated	Health Care REITs	10,059
Completed	2/17/22	Ares Management Corporation	Capital Automotive	Retail REITs	3,800
Completed	2/16/22	Blackstone	Preferred Apartment Communities	Residential REITs	5,331
Completed	1/24/22	Blackstone	Resource REIT	Residential REITs	3,541

\*Transaction size over \$500 million.

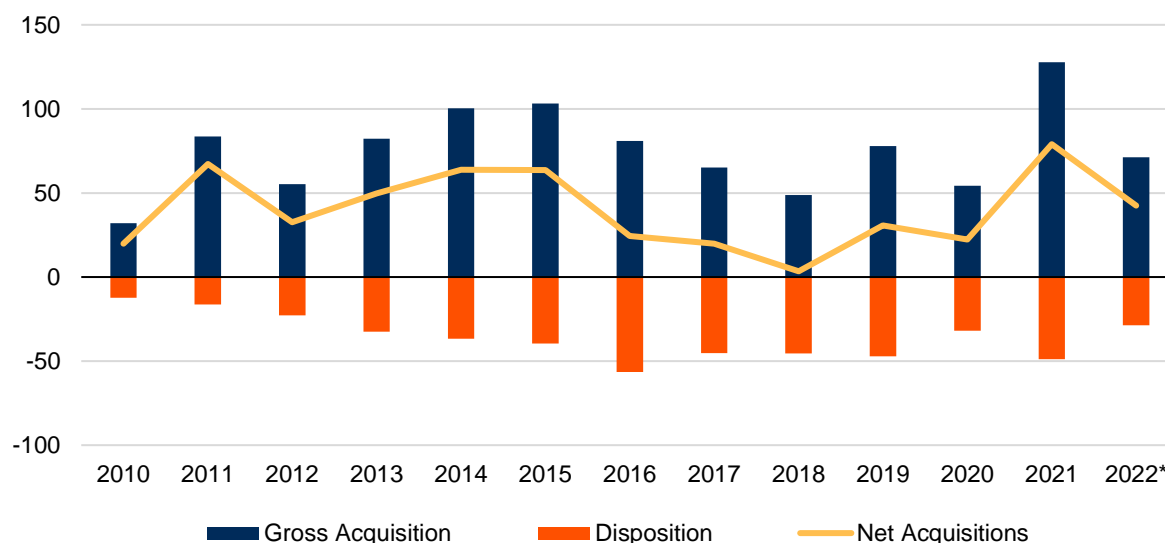
Sources: CFRA, S&P Global Market Intelligence, company reports.

## Real Estate Acquisition and Disposition Outlook

In 2021, net acquisitions rose by more than two-fold, mainly due to a low base and a surge in gross acquisitions. Despite significant headwinds from rising interest rates (and cap rates) in 2022, we believe acquisitions will continue to outpace dispositions as investors remain well-capitalized. However, we believe acquisitions will likely moderate slightly into 2023 as higher borrowing costs push out some highly leveraged buyers from the market. We also anticipate M&A to remain elevated, especially if some troubled REITs get acquired.

### U.S. REITS ACQUISITIONS AND DISPOSITIONS

(\$, in billions)



\*Data through Q3 2022 (latest).

Source: Nareit, S&P Global Market Intelligence.

Asset dispositions have been a key source of capital for REITs, particularly for office REITs, which have been more likely to sell than buy due to significant challenges that lie ahead for the industry due to new work from home trends. Other REIT subsectors have utilized the robust transaction market to take advantage of elevated pricing, but we expect that to change in 2023. An increasing number of private equity firms and even big asset managers (Blackrock, etc.) are focusing more on acquiring real estate. These firms have the advantage of retaining much higher levels of capital, which enables these firms to raise significantly more debt than the REITs industry.

# HOW THE INDUSTRY OPERATES

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## Types of REITs

REITs are classified according to whether they invest directly or indirectly, by their ownership structure, and by the segments of the real estate market that they serve.

## Direct Versus Indirect Investment

- *Equity REITs* invest directly, by owning and operating real estate. These companies develop real estate, operate buildings, and provide tenant services.
- *Mortgage REITs* invest indirectly, by lending to real estate owners or operators, or by buying loans or mortgage-backed securities. Mortgage REITs now invest largely in completed properties, avoiding the construction and development loans that created problems for the industry in the early 1970s.

## REITs Ownership Structures

REITs may be structured in one of three ways: traditional, Umbrella Partnership REITs (UPREITs), or downREITs, according to information provided by NAREIT.

- *Traditional REITs* own their assets directly, rather than through an operating partnership.
- *UPREITs* consist of operating partnerships between a limited real estate partnership and a newly formed REIT, and are a tax-efficient way for investors in a limited real estate partnership to obtain liquidity. The REIT contributes cash from a stock offering to the operating partnership; the real estate partnership contributes a real estate portfolio. Both the REIT and the real estate partnership obtain ownership units in the operating partnership.

After a set period (generally a year), owners of the real estate partnership can exchange their operating-partnership units for cash or for stock in the REIT. Making this exchange generates a tax liability for the real estate partnership – just as selling the original portfolio would – but partners can spread out their tax payments by turning in their units over several years.

UPREITs became popular in the early 1990s, after the Tax Reform Act of 1986 had eliminated many of the benefits of real estate partnerships. At the time, many banks were hesitant to make real estate loans, which forced owners of partnerships to try to raise equity capital. Raising capital by going public directly (through IPOs) would have triggered huge tax liabilities.

- *DownREITs* differ from UPREITs in that they own some property directly, whereas UPREITs hold most of their property in operating partnerships. DownREITs can be formed by a property owner contributing its properties to a REIT in exchange for shares. The REIT's contribution may include putting cash into the downREIT to pay off some of the debt on the contributed properties.

## REITs Regulation Today

Although REITs are required to pay 90% of taxable income as dividends, rules in effect as of mid-2004 create an incentive to do more. REITs are allowed to deduct dividends paid to shareholders from their taxable income, so paying out 100% of taxable earnings allows REITs to avoid corporate taxes entirely. As might be expected, REITs' taxable subsidiaries – companies that provide services to tenants in REIT buildings – are required to pay taxes on their earnings, but REITs can avoid this requirement to a degree by structuring their business relationships with their subsidiaries in order to minimize profits at the subsidiary level.

Other key requirements for REIT status, according to information provided by NAREIT, include having a minimum of 100 shareholders, investing at least 75% of assets in real estate, and receiving at least 75%



of gross income from rents or interest on mortgages. The Housing and Economic Recovery Act of 2008 increased the ceiling for taxable REITs subsidiaries from 20% to 25% of total assets. In addition, health care REITs are now able to establish taxable REITs subsidiaries (something not previously allowed under the RMA), provided an independent contractor is hired to manage the health care facilities. Still, REITs must continue to focus on owning and financing real estate as their main businesses, and income from taxable subsidiaries does not count toward the 75% income requirement.

### **How REITs Make Money**

Because REITs have to pay out 90% of taxable earnings as dividends, they find it difficult to build up large reserves of capital to fund acquisitions or new buildings on their own. As a result, they depend heavily on capital raised through debt issuances, at-the-market (ATM) equity issuances, property dispositions to fund new developments, and mergers and acquisitions (M&A).

REITs continually adjust the blend of equity and debt, as well as the combination of long- and short-term debt, that they use to fund their businesses. Following the real estate and banking crises of the 1980s, the industry generally scaled back its reliance on borrowing. Debt levels jumped significantly prior to the 2008-2009 financial crisis, but they have more recently declined as managers have sought to reduce leverage. CFRA notes that REITs generally take on mortgage debt to purchase income-producing property and that a high debt-to-assets ratio does not necessarily mean that a REIT is unsafe, especially if it has a high-quality portfolio with a relatively predictable earnings stream.

It is also better that debt maturities be staggered to avoid onerous debt repayment schedules; lease expirations are also generally staggered. However, many REITs tend to maintain diverse funding sources, such as loans from banks and insurance companies, as well as corporate bonds, securitizations, equity, and preferred equity.

A REIT's profits depend on management's ability to find and create investments that yield more than the cost of capital. If a REIT can lock in a wide enough spread to offer returns that are attractive to investors, it can obtain more capital and continue to make more investments.

Minimizing capital costs is critical to maintaining wide spreads. Rising interest rates increases borrowing costs, although the impact can be limited if a REIT locks in low borrowing costs by issuing long-term debt when rates are low. In times of low interest rates, REITs' stocks can benefit because their high dividend yields make them especially appealing when bond yields are low.

A REIT's choice of how to invest its capital also determines profitability. REITs may or may not be geographically diversified, but they tend to specialize in a given part of the real estate industry, such as shopping centers, apartments, self-storage space, or warehouses. In addition, public REITs strive to add higher-quality, better-located properties to their portfolios, which generally allow them to charge higher rents than generic properties.

# HOW TO VALUE A COMPANY IN THIS INDUSTRY

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At CFRA, we recommend a top-down approach to valuation.

## Industry Drivers

**GDP.** GDP measures the value of the goods and services produced in a given area during a defined period. Percentage changes in inflation-adjusted GDP show whether (and how fast) a given economy is growing or shrinking. This economic indicator is reported on a quarterly basis by the U.S. Bureau of Economic Analysis (BEA), part of the U.S. Department of Commerce (DOC). The BEA issues advance and preliminary estimates of GDP prior to reporting the final GDP figure for the quarter.

GDP is essential to understanding trends that affect real estate investment trusts (REITs) and the real estate industry in general. For example, rapid economic growth can encourage companies to hire workers and increase inventories, adding to demand for office and warehouse space. Slow growth or recessions can undermine consumer spending, harming the prospects of REITs that specialize in retail space.

**Unemployment rate.** This statistic, defined as the percentage of the civilian workforce seeking jobs but unable to find work, is most important to office REITs. Because employers need more office space as they add to their workforces, declines in unemployment point to better conditions for these companies. Each month, the U.S. Bureau of Labor Statistics (BLS), a division of the U.S. Department of Labor, releases figures on both unemployment and the net creation of nonfarm jobs.

**Retail sales.** The U.S. Census Bureau (part of the U.S. DOC) publishes estimates of retail sales each month, offering an indication of both the strength of consumer demand and the prosperity of the retail segment. The figures matter to retail REITs because retailers are more likely to maintain existing outlets, and open new ones, when sales are rising. Declining retail sales can also make it harder for retailers to keep up with their lease payments.

**New residential construction.** Housing starts, reported monthly by the U.S. Census Bureau, provide an indication of the amount of new housing that will be available in the future. Increases in the supply of housing force landlords to compete more aggressively for tenants, making it harder for residential REITs to raise or maintain rents. Statistics on both single-family and multi-family housing are available. The single-family figures provide an indication of the outlook for competition from homes for sale, while statistics on multi-family housing (buildings with five or more units) herald changes in the supply of rental space.

**Occupancy rates.** Calculated as the ratio of occupied space to total available space, which is the converse of vacancy rate (discussed below). This statistic serves as one of the indicators of the strength of a particular real estate market.

**Vacancy rates.** Calculated as the ratio of unleased space to total available space, vacancy rates indicate the strength of the rental market for a particular type of real estate in a particular area. Higher vacancy rates put pressure on landlords to reduce rents or offer incentives (such as charging no rent for the first month of a lease) in order to attract tenants. Real estate industry research firms and commercial real estate brokers, such as CBRE Group, Inc., Cushman & Wakefield, and Marcus & Millichap, provide occupancy statistics and projections for the U.S. as a whole and/or for individual markets.

**Net absorption.** Net absorption is the amount of square feet leased during the period minus the space that is vacated. Absorption statistics show how rapidly demand is soaking up new supplies of space. Figures on absorption are available from groups such as Reis and CBRE's Econometric Advisors unit.

## Company Analysis

In evaluating a REIT, an investor should first examine the real estate industry's current health and future prospects relative to general economic conditions, using both qualitative and quantitative factors. On the quantitative side, it is important to examine a variety of ratios and metrics before determining the appropriate valuation.

### Qualitative Factors

There are key qualitative factors to analyze. These factors include the firm's lines of business, its geographical diversification, and its leasing arrangements.

#### Lines of Business

REITs are a varied lot. Although grouped in the same industry, these companies often have operations that are driven by different segments of the economy. Therefore, when assessing a REIT, it is important to understand the sources of a firm's revenues and the factors that could affect earnings and dividends, including seasonality and cyclicalities.

Simon Property Group Inc., for example, is a large owner and operator of regional malls and premium outlet centers; therefore, its business depends heavily on the state of the retail segment. An investor must ascertain where the company is in the retail cycle. Is consumer spending likely to be robust, which would motivate retailers to expand, thereby increasing demand for space and rental rates? Or is consumer spending likely to be sluggish in an overcrowded retail environment, which could herald an increase in bankruptcies, store closings, and higher vacancies?

For other kinds of REITs, revenues may be influenced by different factors. For example, hotel REITs are heavily dependent on consumer and business travelers who tend to stay in hotels for short time periods, so they have more volatile income streams. Health care REITs are dependent upon the fate of their tenants, such as hospitals, with increasingly less dependence on government reimbursements. Nonetheless, these reimbursement levels are relatively modest, but the tenant operators of health care facilities tend to have narrow operating margins, making it harder for health care REITs to raise rents on their properties than it might be for other kinds of REITs.

#### Geographic Diversification

In evaluating a REIT, it is important to look at the locations of the properties in a company's portfolio. Are the company's assets concentrated in one market or section of the country? If so, then its performance could be overly dependent upon the health of that region. If properties are dispersed around the country, the operations should be less subject to regional economic shifts. Are the properties in supply constrained markets (such as New York or San Francisco), where land is relatively expensive and difficult to obtain, or in places like Dallas or Atlanta, where the supply of developable land is greater and barriers to entry lower? Industrial and apartment REITs with properties in the latter two cities might have more difficulty raising rental rates on expired leases than those in New York or San Francisco.

#### Leasing Arrangements

An investor should also determine how soon a company's leases expire, the terms of the leases, and the difference between current market rental rates and the rents the company is receiving under leases already in place. Companies stand to benefit if many of their leases are due to expire at a time when rents are rising. Conversely, revenue can stagnate or fall if a REIT must renegotiate many of its leases when rents are declining.

Retail, office, and industrial REITs tend to write multiyear lease agreements with their corporate tenants; these agreements typically include early termination penalties to ensure that the tenant fulfills its

obligations. Such REITs typically renew only 5% to 10% of their portfolios each year; therefore, they are generally less sensitive to short-term changes in market conditions than are hotel and apartment REITs. Hotels tend to lease their rooms on a daily basis, and apartment REITs rent their apartments on an annual basis, so their income is much more sensitive to changes in demand and rental rates.

## Quantitative Factors

Several measures should be analyzed to assess a firm's potential for financial success. These include funds from operations (FFO), adjusted FFO, earnings per share (EPS), dividend yield, and several ratios.

### Funds from Operations

The most commonly accepted and reported measure of a REIT's operating performance is FFO: a REIT's net income, excluding gains or losses from sales of depreciated operating property (but including sales of undepriciated land), and adding back real estate depreciation. Adding back depreciation of real estate assets allows investors to get around the fact that, although U.S. accounting standards assume that the value of buildings diminishes predictably over time, it actually rises or falls depending on market conditions. Historically, the value of real estate assets has appreciated over the long term.

The formula for FFO is:

$$\begin{array}{r} \text{GAAP Net Income} \\ (+) \text{ Depreciation and Amortization} \\ (-) \text{ (Gains)/Losses on Sales of Property} \\ \hline = \text{Funds from Operations (FFO)} \end{array}$$



**Watch Out!** Extending the depreciable life of an asset will boost a company's earnings while shortening depreciable lives will decrease earnings. Therefore, it is important to refer to the notes to the financial statements to ensure that a change in depreciable life has not occurred. Additionally, compare the depreciable lives used by competitors to those used by the company.

### Adjusted Funds from Operations

The National Association of Real Estate Investment Trusts (NAREIT), a trade association for REITs, defines adjusted funds from operations (AFFOs) as FFO minus two items: normalized recurring expenditures that a REIT capitalizes, and rents calculated on a "straight-line" basis (that is, averaged over the life of each lease). AFFOs are often referred to as funds available for distribution (FAD) or cash available for distribution (CAD) to shareholders. If AFFO has risen annually for several consecutive years, the increase indicates that a company may have positioned itself to achieve sustainable growth.



**Watch Out!** By making nonstandard adjustments to FFO, REITs can effectively inflate FFO. Inflating FFO can result in performance measures that are not comparable to peers and can be motivated by executive compensation plans.

### Earnings per Share

Earnings per share (EPS) are equal to a company's total earnings, divided by the number of shares outstanding. Although real estate experts believe EPS are not widely used or as accurate a performance measure as FFO, EPS does allow comparisons with companies in other property groups.



**Watch Out!** Real estate companies capitalize a portion of their interest costs that relate to the financing of construction projects. As a result, capitalized interest costs are recorded on the balance sheet and then depreciated over the life of the related asset. This provides a benefit in the period incurred as interest expense is typically expensed as incurred. Thus, management can boost earnings by allocating an increasing portion of interest costs as capitalized interest.

## Dividend Yield

To arrive at this measure, annual dividends per share are divided by a company's share price. This is an important measure for REITs, because a relatively high average dividend yield is one reason why the industry is attractive to investors. U.S. REITs are required to distribute 90% of taxable earnings to shareholders.

## Ratios

Several financial ratios are of particular interest when analyzing a REIT.

◆ **Debt as a percentage of capitalization.** This ratio allows investors to compare the level of borrowing used by different REITs. This comparison is important because REITs that rely too heavily on borrowing may be especially vulnerable during difficult times, as illustrated by the real estate and banking crises of the 1980s and 2009. While many U.S. REITs remembered the trouble that REITs had in the 1980s and 2009, some have increased debt as credit has remained abundant through early 2020. When the coronavirus hit, many REITs scrambled to raise even more debt and fully draw their lines of credit in order to secure liquidity to sustain operations through the crisis. While some REITs have made moves to repay this short-term debt or convert it to long-term debt, we have yet to see the full impact through this credit cycle.

◆ **Interest coverage.** This is recurring earnings before interest, taxes, depreciation, and amortization (EBITDA) divided by interest payments plus preferred dividends; it provides a measure of a REIT's ability to meet payments on financial obligations.

◆ **Ratio of fixed-rate to floating-rate debt.** Companies that rely more on variable-rate borrowings stand to benefit when interest rates are falling, but they may be squeezed when rates rise. Investors' expectations for rising rates may undermine prices for REITs that rely on floating-rate debt, even if actual borrowing costs do not increase.

## REIT Valuation

Any discussion of valuation should be prefaced by a mention of how REITs differ from other companies, and how these differences affect valuation. We focus on both elements below.

### REITs Tests

To qualify as a REIT and avoid taxation of profits, companies must meet a series of tests, some of which are instrumental in selecting valuation models and formulating assumptions. The most important of these are the ownership and payout tests.

◆ **The ownership test.** REITs are required to hold at least 75% of assets in real estate or real estate-related securities. The ownership test means that REITs typically hold assets that have demonstrated a propensity to appreciate over time. Most other kinds of companies, in contrast, hold intangible assets or assets that depreciate over time due to wear or obsolescence. Because REITs are backed by positive net asset value (NAV), REITs tend to be somewhat less risky than other publicly-traded companies.

◆ **The payout test.** REITs are required to pay out at least 90% of taxable income in the form of dividends, either common or preferred. To meet the payout test, REITs typically pay out more than 100% of earnings in the form of common dividends, making the stocks particularly attractive to investors interested in yield. These trusts may have other cash sources, which enable the REITs to pay out dividends more than 100%.

Because the dividend portion of total return can never be negative, REITs shares typically have a relatively low correlation with most stocks and bonds; *i.e.*, they tend to behave differently under identical market conditions. Because of their high dividend yields, REITs tend to have a lower standard deviation of returns than many stocks, meaning they are less volatile over the long term. Because of these factors, a lower risk premium is usually assigned to REITs stocks that have a lower beta than the broader equity market. REITs with longer lease terms, which provide some protection during down cycles, tend to be less risky than the industry as a whole.

### Valuation

As opposed to book value (*i.e.*, the value of a company according to its balance sheet), the intrinsic value of a company reflects what the company's actual sale price would be based on other value considerations. There are different ways of measuring the intrinsic value of a REIT company, including NAV, the dividend discount model, the discounted cash flow model, and replacement value.

◆ **Net asset value.** One measure of intrinsic value that we think has taken on added importance is net asset value (NAV) per share. While the book value of many companies can be valued using generally accepted accounting principles (GAAP), CFRA thinks this approach presents problems for REITs-valuation purposes.

In the U.S., GAAP requires buildings to be depreciated on a straight-line basis over a defined period, typically about 30 years. Historically, however, the value of land and buildings has appreciated over the long term. As a result, a divergence between book value and the actual market value of the company's portfolio develops and tends to grow wider over time, resulting in the understatement of a REIT's potential break-up value. What we try to estimate in the NAV calculation is the potential value per share if the company were to liquidate its property portfolio.

The first step in calculating NAV is to estimate the total net operating income of the properties owned by the REIT. Net operating income measures the forward annualized cash flow (primarily rental income) that a property or portfolio of properties will generate. CFRA does this by subtracting estimated property operating expenses from assumed rents. We also make an adjustment for other items – such as straight-line rents recorded but not received, as well as estimated recurring capital expenditures, such as tenant installation costs and leasing commissions – that would be incurred to reach the estimated rent.

We then determine the cash rate of return, or capitalization (cap) rate, at which properties are generally trading in private property transactions. Applying the cap rate to our estimated portfolio NOI, we can calculate an approximate value at which the properties could be sold to other investors. (For this calculation, we ignore non-operating corporate expenses, because it is assumed that only the assets are being sold.)

To the estimated value of the property portfolio, we add all tangible assets on the balance sheet, including properties under construction, cash, and so forth, but we generally avoid intangible assets, assuming little value could be derived from them if the company were to liquidate. From this sum, we subtract liabilities, minority interest, and “mezzanine” financing (a kind of hybrid financing that fills the gap when the combination of equity and primary debt falls short of the capital needed) to arrive at a NAV. We divide this by the number of shares outstanding to calculate NAV per share.

On the other hand, relative valuation aims to assess the value of a company compared with its peer companies. Common methods of measuring relative REITs valuations include price-to-funds from operations (P/FFO); enterprise value-to-earnings before interest, taxes, depreciation, and amortization (EV/EBITDA); current yield; and yield spreads. These can be valuable tools when choosing companies in which to invest.

◆ **P/FFO.** One of the most common relative valuation metrics is P/FFO. This is similar to the much more common price-to-earnings (P/E) ratio used to value companies relative to their peers. To calculate P/FFO, we simply divide the market price of the stock by our forward estimate of FFO. Comparing the result with the average for peer companies reveals whether a stock is trading at a premium or discount relative to shares of other REITs. Of course, shares of individual companies often trade at a discount or premium for valid reasons, such as higher growth rates, geographic concentration in stronger or weaker markets, or concentration in property types with stronger or weaker fundamentals than other REITs.

◆ **EV/EBITDA ratio.** EV/EBITDA attempts to determine what one company may be willing to pay for another. EV is calculated by multiplying the current market price of the shares by the number of shares and equivalents outstanding, and then adding debt; it gives an idea of what it would cost to purchase the company given today's market capitalization. We divide this by an estimate of forward EBITDA to arrive at a normalized multiple similar to P/E or P/FFO. EBITDA is used because it closely matches cash flow from operations and assumes no taxation, since the tax rate of the acquiring entity is not known.

If there is significant merger and acquisition (M&A) activity in a particular property type, it will be easy to perform the EV/EBITDA calculation on actual market transactions, thus arriving at a benchmark market multiple. By comparing this multiple to a particular company's EV/EBITDA, we can determine if its shares are trading at a premium or discount to the market. If a company is trading at a significant discount, it may be a takeover candidate. By applying the market multiple to the company's EBITDA, and then reversing the EV calculation, we can determine what the shares might be worth to an acquiring entity.

◆ **Current yield.** This is the company's stated annual dividend divided by its price per share. This normalizes dividend payments and gives U.S. a percentage that can be compared with the average of peers to determine if a company's stock is trading at a premium or discount relative to peers. As with P/FFO or P/E comparisons, there are often logical reasons for a company's stock to trade out of line with peer averages, so we must consider other factors to determine whether today's market price is in line with our own assessment of relative value.

◆ **Yield spreads.** Because REITs are high-yield instruments, it is worthwhile to check the spread between a REIT's current yield and that of alternative income-oriented investment instruments, such as utility stocks or Treasury bonds. Although REITs yields have historically traded at a positive yield spread to the 10-year Treasury, for example, this spread varies widely and has periodically dipped to negative territory. REITs could historically grow dividend payments at a rate exceeding inflation, while the yield on a Treasury is static once purchased.

In a period of improving fundamentals, REITs will often be able to increase dividends in future periods, making the stocks more attractive than fixed-income investments and contributing to periodic narrowing of yield spreads. Utility companies can also raise dividends over time based on their fundamentals, which should be considered when making yield comparisons with REITs.

# GLOSSARY

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**Absorption**—The amount of space leased or sold in a given location over a set period. Net absorption is the amount of square feet leased during the period, minus the space that is vacated.

**Absorption rate**—Absorption expressed as a percentage of the total square footage available.

**Adjusted funds from operations (AFFOs)**—Generally equal to the trusts funds from operations (FFO) with adjustments made for recurring capital expenditures used to maintain the underlying assets of the REIT.

**Apartment REIT**—A REIT that specializes in investing in multi-family housing, also known as multi-family residential property.

**Capitalization rates (cap rates)**—Ratio of current net operating income to the value of a property.

**Diversified REIT**—A REIT that owns a diversified portfolio in several real estate groups.

**Equity REIT**—A REIT that owns or holds equity in rental real estate; differs from a mortgage REIT.

**Funds from operations (FFO)**—The most commonly accepted and reported measure of a REIT's operating performance. FFO, as defined by the National Association of Real Estate Investment Trusts (NAREIT), is equal to a REIT's net income, excluding gains or losses from sales of property, and adding back real estate depreciation. (Adding back depreciation allows investors to get around the fact that historical accounting standards assume that the value of real estate assets diminishes predictably over time.)

**Health care REIT**—A REIT that owns health care properties, including long-term care facilities and hospitals.

**Industrial REIT**—A REIT that specializes in industrial properties.

**Mortgage REIT**—A REIT that originates or acquires mortgages or other loans secured by real estate collateral. Differs from equity REITs in that it does not own real estate.

**Net asset value (NAV)**—One measure of a REIT's intrinsic value, which estimates the potential value per share if the company were to liquidate its property portfolio.

**Occupancy rate**—The percentage of space in a given property or market that is occupied.

**Office REIT**—A REIT that specializes in commercial properties.

**Real estate investment trust (REIT)**—A private or public corporation that pays no income tax as long as its operations are restricted to certain commercial real estate activities. To qualify as a REIT, a company must pay out 90% of its taxable income to investors each year.

**Real estate operating company (REOC)**—A company that invests in real estate, with shares traded on a public exchange. Similar to a REIT, albeit more flexible in terms of the types of real investments they are capable of making, as well as different in earnings distribution (an REOC reinvests into the business, compared with a REIT that distributes them to unit holders).

**Tax Reform Act of 1986**—Federal law that permitted REITs not only to own but also to operate commercial real estate properties.

**Vacancy rate**—The percentage of space in a given property or market that is not occupied.



# INDUSTRY REFERENCES

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## PERIODICALS

### MarketBeat Report

[cushmanwakefield.com/en/research-and-insight](https://cushmanwakefield.com/en/research-and-insight)  
Statistical report on the industrial real estate market by Cushman & Wakefield.

### REITWatch

[reit.com/data-research/data/reitwatch](https://reit.com/data-research/data/reitwatch)  
Statistical report on the REITs industry by the National Association of Real Estate Investment Trusts (NAREIT).

### U.S. Office Market Outlook Report

[colliers.com/en-U.S./U.S./insights/usresearchlibrary](https://colliers.com/en-U.S./U.S./insights/usresearchlibrary)  
Report and statistics on the office real estate segment by Colliers International.

### U.S. Office MarketView Snapshot

[cbre.U.S./Research-and-Reports/U.S.-Research](https://cbre.U.S./Research-and-Reports/U.S.-Research)  
Market research on the U.S. office market by the CBRE Group, Inc.

## TRADE ASSOCIATIONS

### National Association of Real Estate Investment Trusts

[reit.com/nareit](https://reit.com/nareit)  
National association for REITs and publicly traded real estate companies. Excellent source of statistics and industry views on regulatory developments.

## GOVERNMENT AGENCIES

### U.S. Bureau of Economic Analysis

[bea.gov](https://bea.gov)  
Produces and disseminates statistics that provide a comprehensive, up-to-date picture of U.S. economic activity.

### U.S. Bureau of Labor Statistics

[bls.gov](https://bls.gov)  
This division of the U.S. Department of Labor is the federal government's principal fact-finding agency in the broad fields of labor, economics, and statistics.

### U.S. Department of Commerce

[commerce.gov](https://commerce.gov)  
Its divisions include the U.S. Census Bureau, which publishes retail sales estimates, housing statistics, as well as population statistics and projections.

## REGULATORY AGENCIES

### Board of Governors of the Federal Reserve System

[federalreserve.gov](https://federalreserve.gov)  
The Federal Reserve System supervises and regulates banks; maintains the stability of the financial system; conducts U.S. monetary policy by influencing money and credit conditions; and provides certain financial services to the U.S. government, the public, financial institutions, and foreign official institutions.

## MARKET RESEARCH FIRMS

### CBRE Group, Inc.

[cbre.com](https://cbre.com)  
Provides integrated commercial real estate services.

### Colliers International

[colliers.com](https://colliers.com)  
Real estate research service that offers supply and demand statistics for the major sectors of the real estate markets; it also provides local market information.

### Coresight Research

[coresight.com](https://coresight.com)  
Coresight is a research and advisory that provides analysis and consulting to organizations navigating the intersection of retail, technology, and fashion.

### Cushman & Wakefield

[cushmanwakefield.com](https://cushmanwakefield.com)  
Global private commercial real estate services company that provides reports and statistics on the real estate market.

### JLL Inc.

[jll.com](https://jll.com)  
Jones Lang LaSalle Incorporated is a global commercial real estate services company, founded in the United Kingdom with offices in 80 countries.

### Marcus & Millichap

[marcusmillichap.com](https://marcusmillichap.com)  
Provides real estate brokerage, mortgage brokerage, research, and advisory services in North America in the field of commercial property.

### National Investment Center for Seniors Housing & Care

[nic.org](https://nic.org)  
A nonprofit organization that enables access and choice by providing data, analytics, and connections that bring together investors and providers.

**Newmark Group**

nmrk.com

A publicly listed commercial real estate advisory and services firm.

**SNL Real Estate–S&P Capital IQ Pro**

spglobal.com/marketintelligence/en/campaigns/real-estate

Financial information and research firm that collects, standardizes, and disseminates corporate, financial, market, and merger and acquisition data, plus news and analytics on banking and other industries.

**STR, Inc**

str.com

A division of CoStar Group that provides market data on the hotel industry worldwide, including supply and demand and market share data.

**Yardi Matrix**

yardimatrix.com

Researches and reports on multi-family, student housing, office, industrial, and self-storage properties across the U.S.

**ONLINE RESOURCES****Placer Labs, Inc.**

Placer.ai

Offers a traffic analytics platform that allows anyone to generate insights into any property.

# COMPARATIVE COMPANY ANALYSIS

		Operating Revenues																
Ticker	Company	Yr. End	Million \$							CAGR(%)			Index Basis (2011=100)					
			2022	2021	2020	2019	2018	2017	2016	10-Yr.	5-Yr.	1-Yr.	2022	2021	2020	2019	2018	2017
DIVERSIFIED REITS																		
STOR	ESSENTIAL PROPERTIES REALTY TRUST, INC.	DEC	286.5	229.0	164.0	139.4	96.2	54.4	20.7	NA	39.4	25.1	1385	1107	793	673	465	263
PSB	AMERICAN ASSETS TRUST, INC.	DEC	418.6	373.0	342.1	362.6	326.5	310.5	290.6	6.1	6.2	12.2	144	128	118	125	112	107
EPRT	GLOBAL NET LEASE, INC.	DEC	378.9	391.2	330.1	306.2	282.2	259.3	214.2	157.1	7.9	(3.2)	177	183	154	143	132	121
AAT	§ ALEXANDER & BALDWIN, INC.	DEC	232.1	271.9	197.1	440.5	640.3	432.7	406.7	(1.0)	(11.7)	(14.6)	57	67	48	108	157	106
WRE	ARMADA HOFFLER PROPERTIES, INC.	DEC	454.2	284.1	383.6	257.5	193.7	302.8	258.4	15.4	8.4	59.9	176	110	148	100	75	117
HEALTH CARE REITS																		
WELL	▯ WELLTOWER INC.	DEC	5,802.0	4,737.5	4,603.0	5,121.3	4,700.5	4,316.6	4,281.2	12.4	6.1	22.5	136	111	108	120	110	101
VTR	▯ VENTAS, INC.	DEC	4,116.3	3,818.2	3,789.6	3,859.3	3,701.6	3,567.6	3,447.0	5.2	2.9	7.8	119	111	110	112	107	103
PEAK	▯ HEALTHPEAK PROPERTIES, INC.	DEC	2,061.2	1,896.2	1,644.9	1,240.3	1,191.3	1,848.4	2,129.3	0.9	2.2	8.7	97	89	77	58	56	87
MPW	† MEDICAL PROPERTIES TRUST, INC.	DEC	1,583.7	1,573.2	1,269.7	870.2	798.7	714.8	541.1	22.9	17.2	0.7	293	291	235	161	148	132
OHI	† OMEGA HEALTHCARE INVESTORS, INC.	DEC	878.2	1,062.8	892.4	928.8	881.7	908.4	900.8	9.6	(0.7)	(17.4)	97	118	99	103	98	101
HOTEL AND RESORT REITS																		
HST	▯ HOST HOTELS & RESORTS, INC.	DEC	4,910.0	2,921.0	1,590.0	5,483.0	5,554.0	5,417.0	5,451.0	(0.3)	(1.9)	68.1	90	54	29	101	102	99
PK	PARK HOTELS & RESORTS INC.	DEC	2,516.0	1,355.0	830.0	2,830.0	2,730.0	2,831.0	2,747.0	NA	(2.3)	85.7	92	49	30	103	99	103
PEB	PEBBLEBROOK HOTEL TRUST	DEC	1,391.9	733.0	442.9	1,612.2	828.7	769.3	814.2	13.6	12.6	89.9	171	90	54	198	102	94
XHR	XENIA HOTELS & RESORTS, INC.	DEC	997.6	616.2	369.8	1,149.1	1,058.2	945.3	950.2	7.9	1.1	61.9	105	65	39	121	111	99
DRH	§ DIAMONDROCK HOSPITALITY COMPANY	DEC	1,001.5	567.1	299.5	938.1	863.7	870.0	896.6	3.3	2.9	76.6	112	63	33	105	96	97
INDUSTRIAL REITS																		
PLD	▯ PROLOGIS, INC.	DEC	6,284.6	5,163.7	4,736.1	3,530.8	3,102.7	2,866.7	2,739.4	12.2	17.0	21.7	229	188	173	129	113	105
DRE	REXFORD INDUSTRIAL REALTY, INC.	DEC	631.2	452.2	330.1	267.2	212.5	161.4	125.7	34.3	31.4	39.6	502	360	263	213	169	128
REXR	EASTGROUP PROPERTIES, INC.	DEC	487.0	409.5	363.0	330.8	299.0	274.2	253.0	10.1	12.2	18.9	192	162	143	131	118	108
EGP	§ FIRST INDUSTRIAL REALTY TRUST, INC.	DEC	539.8	476.1	447.8	425.5	403.7	396.4	378.0	5.8	6.4	13.4	143	126	118	113	107	105
FR	† LXP INDUSTRIAL TRUST	DEC	321.2	344.0	330.4	326.0	397.0	392.7	429.5	0.8	(3.9)	(6.6)	75	80	77	76	92	91
OFFICE REITS																		
ARE	▯ ALEXANDRIA REAL ESTATE EQUITIES, INC.	DEC	2,589.6	2,126.4	1,893.8	1,541.4	1,335.0	1,129.4	921.5	16.3	18.1	21.8	281	231	206	167	145	123
BXP	▯ BOSTON PROPERTIES, INC.	DEC	3,090.6	2,865.9	2,737.8	2,974.6	2,715.6	2,620.5	2,560.7	5.0	3.4	7.8	121	112	107	116	106	102
VNO	▯ VORNADO REALTY TRUST	DEC	1,904.7	1,705.2	1,612.2	2,003.6	2,172.9	2,096.0	2,177.9	(4.2)	(1.9)	11.7	87	78	74	92	100	96
KRC	† KILROY REALTY CORPORATION	DEC	1,097.0	955.0	898.4	837.5	747.3	719.0	637.6	11.4	8.8	14.9	172	150	141	131	117	113
CUZ	† COUSINS PROPERTIES INCORPORATED	DEC	765.4	761.9	748.3	670.2	487.4	513.3	269.8	18.8	8.3	0.5	284	282	277	248	181	190

Note: Data as originally reported. CAGR-Compound annual growth rate. []Company included in the S&P 500. †Company included in the S&P MidCap 400. §Company included in the S&P SmallCap 600. #Of the following calendar year.  
Source: S&P Capital IQ.

		Operating Revenues																
Ticker	Company	Yr. End	Million \$							CAGR(%)			Index Basis (2011=100)					
			2022	2021	2020	2019	2018	2017	2016	10-Yr.	5-Yr.	1-Yr.	2022	2021	2020	2019	2018	2017
RESIDENTIAL REITS																		
AVB	▯ AVALONBAY COMMUNITIES, INC.	DEC	2,608.7	2,310.1	2,302.5	2,327.5	2,289.2	2,189.3	2,052.1	10.5	3.6	12.9	127	113	112	113	112	107
EQR	▯ EQUITY RESIDENTIAL	DEC	2,735.2	2,464.0	2,571.7	2,700.7	2,577.7	2,471.4	2,425.8	4.6	2.0	11.0	113	102	106	111	106	102
MAA	▯ MID-AMERICA APARTMENT COMMUNITIES, INC.	DEC	2,019.9	1,778.1	1,678.0	1,641.0	1,571.3	1,529.0	1,125.3	15.6	5.7	13.6	179	158	149	146	140	136
ESS	▯ ESSEX PROPERTY TRUST, INC.	DEC	1,632.8	1,552.3	1,562.3	1,583.8	1,485.5	1,450.3	1,329.7	11.0	2.4	5.2	123	117	117	119	112	109
UDR	▯ UDR, INC.	DEC	1,522.3	1,356.4	1,260.0	1,290.1	1,041.8	1,027.0	964.4	8.0	8.2	12.2	158	141	131	134	108	106
RETAIL REITS																		
SPG	▯ SIMON PROPERTY GROUP, INC.	DEC	5,291.4	5,114.7	4,602.3	5,671.0	5,645.3	5,527.3	5,435.2	2.2	(0.9)	3.5	97	94	85	104	104	102
O	▯ REALTY INCOME CORPORATION	DEC	3,337.2	2,081.6	1,647.1	1,488.2	1,327.8	1,215.8	1,103.2	21.3	22.4	60.3	303	189	149	135	120	110
KIM	▯ KIMCO REALTY CORPORATION	DEC	1,727.7	1,364.6	1,057.9	1,158.9	1,164.8	1,200.8	1,170.8	8.0	7.5	26.6	148	117	90	99	99	103
REG	▯ REGENCY CENTERS CORPORATION	DEC	1,271.1	1,203.9	1,047.9	1,164.7	1,160.3	1,021.1	645.9	9.8	4.5	5.6	197	186	162	180	180	158
FRT	▯ FEDERAL REALTY INVESTMENT TRUST	DEC	1,079.5	952.5	827.4	933.8	912.0	856.9	801.6	5.9	4.7	13.3	135	119	103	116	114	107
SPECIALIZED REITS																		
AMT	▯ AMERICAN TOWER CORPORATION	DEC	10,711.1	9,356.9	8,041.5	7,580.3	7,440.1	6,663.9	5,785.7	14.1	10.0	14.5	185	162	139	131	129	115
CCI	▯ CROWN CASTLE INC.	DEC	6,986.0	6,340.0	5,840.0	5,763.0	5,370.0	4,255.0	3,921.0	11.1	10.4	10.2	178	162	149	147	137	109
PSA	▯ PUBLIC STORAGE	DEC	4,240.0	3,498.9	2,995.6	2,924.7	2,825.3	2,744.2	2,614.2	8.4	9.1	21.2	162	134	115	112	108	105
EQIX	▯ EQUINIX, INC.	DEC	6,723.2	6,260.0	5,622.6	5,159.2	5,102.3	4,347.6	3,612.0	13.5	9.1	7.4	186	173	156	143	141	120
DLR	▯ DIGITAL REALTY TRUST, INC.	DEC	4,678.3	4,426.2	3,846.0	3,217.3	3,079.5	2,483.4	2,159.3	13.8	13.5	5.7	217	205	178	149	143	115

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Source: S&P Capital IQ.

		Net Income																
Ticker	Company	Yr. End	Million \$						CAGR(%)			Index Basis (2011=100)						
			2022	2021	2020	2019	2018	2017	2016	10-Yr.	5-Yr.	1-Yr.	2022	2021	2020	2019	2018	2017
DIVERSIFIED REITS																		
STOR	ESSENTIAL PROPERTIES REALTY TRUST, INC.	DEC	134.1	95.7	42.3	41.8	15.6	6.3	5.0	NA	84.4	40.1	2,683	1,915	845	837	312	126
PSB	AMERICAN ASSETS TRUST, INC.	DEC	43.5	28.4	27.7	45.7	19.7	29.1	32.6	2.2	8.4	53.3	134	87	85	140	60	89
EPRT	GLOBAL NET LEASE, INC.	DEC	12.0	11.4	10.8	46.5	10.9	23.6	47.1	NA	(12.6)	5.8	26	24	23	99	23	50
AAT	§ ALEXANDER & BALDWIN, INC.	DEC	(50.6)	35.4	5.6	(36.4)	(72.0)	228.3	(10.2)	NA	NM	NM	496	(347)	(55)	357	706	NM
WRE	ARMADA HOFFLER PROPERTIES, INC.	DEC	74.7	21.9	29.2	24.1	17.2	21.0	28.1	23.7	28.8	241.4	266	78	104	86	61	75
HEALTH CARE REITS																		
WELL	▯ WELLTOWER INC.	DEC	141.2	336.1	978.8	1,232.4	805.0	522.8	1,077.8	(7.2)	(23.0)	(58.0)	13	31	91	114	75	49
VTR	▯ VENTAS, INC.	DEC	(47.4)	49.0	439.1	433.0	409.5	1,356.5	649.2	NA	NM	NM	(7)	8	68	67	63	209
PEAK	▯ HEALTHPEAK PROPERTIES, INC.	DEC	500.4	505.5	413.6	45.5	1,061.1	414.2	627.7	(5.0)	3.9	(1.0)	80	81	66	7	169	66
MPW	† MEDICAL PROPERTIES TRUST, INC.	DEC	902.6	656.0	431.5	374.7	1,016.7	289.8	225.0	25.9	25.5	37.6	401	292	192	166	452	129
OHI	† OMEGA HEALTHCARE INVESTORS, INC.	DEC	426.9	416.7	159.3	341.1	281.6	100.4	366.4	13.5	33.6	2.4	117	114	43	93	77	27
HOTEL AND RESORT REITS																		
HST	▯ HOST HOTELS & RESORTS, INC.	DEC	633.0	(11.0)	(732.0)	920.0	1,087.0	564.0	762.0	26.4	2.3	NM	83	(1)	(96)	121	143	74
PK	PARK HOTELS & RESORTS INC.	DEC	162.0	(459.0)	(1,440.0)	306.0	472.0	2,625.0	133.0	NA	(42.7)	NM	122	(345)	NM	230	355	1,974
PEB	PEBBLEBROOK HOTEL TRUST	DEC	(87.2)	(184.9)	(391.7)	115.4	13.4	99.9	73.7	NA	NM	(52.8)	(118)	(251)	(531)	157	18	136
XHR	XENIA HOTELS & RESORTS, INC.	DEC	55.9	(143.5)	(163.3)	55.4	193.7	98.9	85.9	NA	(10.8)	NM	65	(167)	(190)	65	226	115
DRH	§ DIAMONDROCK HOSPITALITY COMPANY	DEC	109.3	(194.6)	(394.4)	183.5	87.8	91.9	114.8	NA	3.5	NM	95	(170)	(344)	160	76	80
INDUSTRIAL REITS																		
PLD	▯ PROLOGIS, INC.	DEC	3,364.9	2,939.7	1,481.8	1,573.0	1,649.4	1,652.3	1,209.9	NA	15.3	14.5	278	243	122	130	136	137
DRE	REXFORD INDUSTRIAL REALTY, INC.	DEC	167.6	128.2	76.4	62.0	46.2	40.7	25.1	NA	32.7	30.7	667	510	304	247	184	162
REXR	EASTGROUP PROPERTIES, INC.	DEC	186.2	157.6	108.4	121.7	88.5	83.2	95.5	19.1	17.5	18.2	195	165	113	127	93	87
EGP	§ FIRST INDUSTRIAL REALTY TRUST, INC.	DEC	359.1	271.0	196.0	238.8	163.2	201.5	121.2	NA	12.3	32.5	296	224	162	197	135	166
FR	† LXP INDUSTRIAL TRUST	DEC	113.8	382.6	183.3	279.9	227.4	85.6	95.6	(4.5)	5.9	(70.3)	119	400	192	293	238	89
OFFICE REITS																		
ARE	▯ ALEXANDRIA REAL ESTATE EQUITIES, INC.	DEC	521.7	571.2	771.0	363.2	379.3	169.1	(65.9)	17.7	25.3	(8.7)	(792)	(867)	NM	(551)	(576)	(257)
BXP	▯ BOSTON PROPERTIES, INC.	DEC	848.9	505.2	872.7	521.5	582.8	462.4	512.8	11.4	12.9	68.0	166	99	170	102	114	90
VNO	▯ VORNADO REALTY TRUST	DEC	(346.5)	176.0	(297.0)	3,147.9	450.0	227.4	906.9	NA	NM	NM	(38)	19	(33)	347	50	25
KRC	† KILROY REALTY CORPORATION	DEC	232.6	628.1	187.1	195.4	258.4	164.6	293.8	(1.4)	7.2	(63.0)	79	214	64	67	88	56
CUZ	† COUSINS PROPERTIES INCORPORATED	DEC	166.8	278.6	237.3	150.4	79.2	216.3	79.1	13.8	(5.1)	(40.1)	211	352	300	190	100	273

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Source: S&P Capital IQ.

		Net Income																
Ticker	Company	Yr. End	Million \$							CAGR(%)			Index Basis (2011=100)					
			2022	2021	2020	2019	2018	2017	2016	10-Yr.	5-Yr.	1-Yr.	2022	2019	2018	2017	2016	2015
RESIDENTIAL REITS																		
AVB	▯ AVALONBAY COMMUNITIES, INC.	DEC	1,136.8	1,004.3	827.6	786.0	974.5	876.9	1,034.0	10.4	5.3	13.2	110	97	80	76	94	85
EQR	▯ EQUITY RESIDENTIAL	DEC	776.9	1,332.9	913.6	970.4	657.5	603.5	4,292.2	(0.8)	5.2	(41.7)	18	31	21	23	15	14
MAA	▯ MID-AMERICA APARTMENT COMMUNITIES, INC.	DEC	637.4	533.8	255.0	353.8	222.9	328.4	212.2	19.7	14.2	19.4	300	252	120	167	105	155
ESS	▯ ESSEX PROPERTY TRUST, INC.	DEC	408.3	488.6	568.9	439.3	390.2	433.1	415.0	12.5	(1.2)	(16.4)	98	118	137	106	94	104
UDR	▯ UDR, INC.	DEC	86.9	150.0	64.3	185.0	203.1	121.6	292.7	(8.5)	(6.5)	(42.1)	30	51	22	63	69	42
RETAIL RET																		
SPG	▯ SIMON PROPERTY GROUP, INC.	DEC	2,139.5	2,249.6	1,112.6	2,101.6	2,440.1	1,948.0	1,838.9	4.1	1.9	(4.9)	116	122	61	114	133	106
O	▯ REALTY INCOME CORPORATION	DEC	869.4	359.5	395.5	436.5	363.6	318.8	315.6	18.5	22.2	141.9	276	114	125	138	115	101
KIM	▯ KIMCO REALTY CORPORATION	DEC	126.0	844.1	1,000.8	410.6	497.8	426.1	378.9	(7.2)	(21.6)	(85.1)	33	223	264	108	131	112
REG	▯ REGENCY CENTERS CORPORATION	DEC	482.9	361.4	44.9	239.4	249.1	176.1	164.9	34.0	22.4	33.6	293	219	27	145	151	107
FRT	FEDERAL REALTY INVESTMENT TRUST	DEC	385.5	261.5	131.7	353.9	241.9	289.9	249.9	9.8	5.9	47.4	154	105	53	142	97	116
SPECIALIZED REITS																		
AMT	▯ AMERICAN TOWER CORPORATION	DEC	1,765.8	2,567.7	1,690.6	1,887.8	1,236.4	1,238.9	956.4	10.7	7.3	(31.2)	185	268	177	197	129	130
CCI	▯ CROWN CASTLE INC.	DEC	1,675.0	1,096.0	1,056.0	860.0	622.0	366.0	357.0	24.4	35.6	52.8	469	307	296	241	174	103
PSA	▯ PUBLIC STORAGE	DEC	4,349.1	1,953.3	1,357.2	1,520.5	1,711.0	1,442.2	1,453.6	16.6	24.7	122.7	299	134	93	105	118	99
EQIX	▯ EQUINIX, INC.	DEC	704.3	500.2	369.8	507.5	365.4	233.0	126.8	17.5	24.8	40.8	555	394	292	400	288	184
DLR	▯ DIGITAL REALTY TRUST, INC.	DEC	377.7	1,709.3	356.4	579.8	331.2	248.3	426.2	6.0	8.8	(77.9)	89	401	84	136	78	58

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Source: S&P Capital IQ.

Ticker	Company	Yr. End	Return on Revenues (%)							Return on Assets (%)							Return on Equity(%)						
			2022	2021	2020	2019	2018	2017	2022	2021	2020	2019	2018	2017	2022	2021	2020	2019	2018	2017			
DIVERSIFIED REITS																							
STOR	ESSENTIAL PROPERTIES REALTY TRUST, INC.	DEC	46.8	41.8	25.8	30.0	16.2	11.6	3.4	2.9	1.7	2.1	1.1	0.7	5.9	5.3	3.1	4.8	4.2	3.5			
PSB	AMERICAN ASSETS TRUST, INC.	DEC	10.4	7.6	8.1	12.6	6.0	9.4	1.5	0.9	1.0	1.6	0.9	1.3	4.7	3.0	2.8	5.7	3.3	4.8			
EPRT	GLOBAL NET LEASE, INC.	DEC	3.2	2.9	3.3	15.2	3.9	9.1	0.3	0.3	0.3	1.3	0.3	0.8	0.8	0.7	0.7	3.0	0.8	1.7			
AAT	§ ALEXANDER & BALDWIN, INC.	DEC	NM	13.0	2.8	NM	NM	52.8	NM	1.9	0.3	NM	NM	10.2	3.5	6.9	1.7	NM	NM	24.2			
WRE	ARMADA HOFFLER PROPERTIES, INC.	DEC	16.5	7.7	7.6	9.3	8.9	7.0	3.3	1.1	1.5	1.3	1.4	2.0	11.9	3.3	5.2	5.8	5.4	7.8			
HEALTH CARE REITS																							
WELL	▯ WELLTOWER INC.	DEC	2.4	7.1	21.3	24.1	17.1	12.1	0.4	1.0	3.0	3.7	2.7	1.9	0.8	2.1	6.1	8.1	5.3	3.5			
VTR	▯ VENTAS, INC.	DEC	NM	1.3	11.6	11.2	11.1	38.0	NM	0.2	1.8	1.8	1.8	5.7	NM	0.5	4.1	4.1	3.9	12.5			
PEAK	▯ HEALTHPEAK PROPERTIES, INC.	DEC	24.3	26.7	25.1	3.7	89.1	22.4	3.2	3.3	2.6	0.3	8.3	2.9	7.1	1.9	2.3	2.7	13.8	7.3			
MPW	† MEDICAL PROPERTIES TRUST, INC.	DEC	57.0	41.7	34.0	43.1	127.3	40.5	4.6	3.2	2.6	2.6	11.5	3.2	10.6	8.3	6.0	6.5	24.3	8.2			
OHI	† OMEGA HEALTHCARE INVESTORS, INC.	DEC	48.6	39.2	17.9	36.7	31.9	11.1	4.5	4.3	1.7	3.5	3.3	1.1	11.1	10.5	3.9	8.7	7.7	2.6			
HOTEL AND RESORT REITS																							
HST	▯ HOST HOTELS & RESORTS, INC.	DEC	12.9	NM	NM	16.8	19.6	10.4	5.2	NM	NM	7.5	9.0	4.8	9.6	NM	NM	12.3	15.5	7.9			
PK	PARK HOTELS & RESORTS INC.	DEC	6.4	NM	NM	10.8	17.3	92.7	1.7	NM	NM	2.7	5.0	27.0	4.0	NM	NM	5.3	8.3	53.8			
PEB	PEBBLEBROOK HOTEL TRUST	DEC	NM	NM	NM	7.2	1.6	13.0	NM	NM	NM	1.8	0.2	3.9	NM	NM	NM	3.1	0.5	6.4			
XHR	XENIA HOTELS & RESORTS, INC.	DEC	5.6	NM	NM	4.8	18.3	10.5	1.8	NM	NM	1.7	6.1	3.2	4.0	NM	NM	3.2	11.4	6.1			
DRH	§ DIAMONDROCK HOSPITALITY COMPANY	DEC	10.9	NM	NM	19.6	10.2	10.6	3.4	NM	NM	5.4	2.7	3.0	7.0	NM	NM	9.7	4.7	5.0			
INDUSTRIAL REITS																							
PLD	▯ PROLOGIS, INC.	DEC	53.5	56.9	31.3	44.5	53.2	57.6	3.8	5.0	2.6	3.9	4.3	5.6	7.4	8.5	5.2	6.6	8.2	9.5			
DRE	REXFORD INDUSTRIAL REALTY, INC.	DEC	26.5	28.4	23.1	23.2	21.7	25.2	1.8	1.9	1.5	1.7	1.7	1.9	3.0	3.2	2.6	2.8	2.9	3.6			
REXR	EASTGROUP PROPERTIES, INC.	DEC	38.2	38.5	29.9	36.8	29.6	30.3	4.6	4.9	4.0	4.8	4.2	4.3	10.6	11.1	8.8	11.7	10.7	12.0			
EGP	§ FIRST INDUSTRIAL REALTY TRUST, INC.	DEC	66.5	56.9	43.8	56.1	40.4	50.8	7.2	6.5	5.2	6.8	5.2	6.8	16.0	13.2	10.7	14.0	10.6	15.1			
FR	† LXP INDUSTRIAL TRUST	DEC	35.4	111.2	55.5	85.9	57.3	21.8	2.8	9.6	5.2	8.8	7.7	2.4	4.9	17.9	10.0	18.6	17.2	6.3			
OFFICE REITS																							
ARE	▯ ALEXANDRIA REAL ESTATE EQUITIES, INC.	DEC	20.1	26.9	40.7	23.6	28.4	15.0	1.5	1.9	3.4	2.0	2.6	1.4	3.2	4.0	7.0	4.5	5.6	3.3			
BXP	▯ BOSTON PROPERTIES, INC.	DEC	27.5	17.6	31.9	17.5	21.5	17.6	3.5	2.3	3.8	2.5	2.9	2.4	12.4	7.7	12.5	8.0	8.7	7.0			
VNO	▯ VORNADO REALTY TRUST	DEC	NM	10.3	NM	157.1	20.7	10.8	NM	1.0	NM	17.2	2.6	1.3	NM	2.8	NM	47.3	7.1	3.7			
KRC	† KILROY REALTY CORPORATION	DEC	21.2	65.8	20.8	23.3	34.6	22.9	2.2	5.9	1.9	2.2	3.3	2.4	4.6	12.0	4.2	4.9	6.8	4.7			
CUZ	† COUSINS PROPERTIES INCORPORATED	DEC	21.8	36.6	31.7	22.4	16.2	42.1	2.2	3.8	3.3	2.1	1.9	5.1	3.6	6.1	5.3	4.2	2.9	8.2			
RESIDENTIAL REITS																							
AVB	▯ AVALONBAY COMMUNITIES, INC.	DEC	43.6	43.5	35.9	33.8	42.6	40.1	5.6	5.0	4.3	4.1	5.3	4.8	10.2	9.3	7.6	7.3	9.3	8.5			
EQR	▯ EQUITY RESIDENTIAL	DEC	28.4	54.1	35.5	35.9	25.5	24.4	3.8	6.3	4.5	4.6	3.2	2.9	6.9	12.3	8.7	9.3	6.3	5.8			
MAA	▯ MID-AMERICA APARTMENT COMMUNITIES, INC.	DEC	31.6	30.0	15.2	21.6	14.2	21.5	5.7	4.7	2.3	3.2	2.0	2.9	10.6	9.0	4.3	5.8	3.6	5.2			
ESS	▯ ESSEX PROPERTY TRUST, INC.	DEC	25.0	31.5	36.4	27.7	26.3	29.9	3.3	3.8	4.4	3.5	3.2	3.5	7.1	8.3	9.5	7.2	6.4	7.2			
UDR	▯ UDR, INC.	DEC	5.7	11.1	5.1	14.3	19.5	11.8	0.8	1.4	0.7	1.9	2.6	1.6	1.9	3.6	1.6	4.8	5.8	3.4			

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Source: S&P Capital IQ.

Ticker	Company	Yr. End	Return on Revenues (%)							Return on Assets (%)							Return on Equity(%)						
			2022	2021	2020	2019	2018	2017	2022	2021	2020	2019	2018	2017	2022	2021	2020	2019	2018	2017			
RETAIL REITS																							
SPG	▮ SIMON PROPERTY GROUP, INC.	DEC	40.4	44.0	24.2	37.1	43.2	35.2	6.5	6.7	3.2	6.7	8.0	6.0	59.6	63.7	37.6	67.7	66.8	47.1			
O	▮ REALTY INCOME CORPORATION	DEC	26.1	17.3	24.0	29.3	27.4	26.2	1.8	0.8	1.9	2.4	2.4	2.3	3.2	2.0	3.8	4.9	4.7	4.5			
KIM	▮ KIMCO REALTY CORPORATION	DEC	7.3	61.9	94.6	35.4	42.7	35.5	0.7	4.6	8.6	3.7	4.5	3.6	1.2	10.7	18.9	8.0	9.1	8.0			
REG	▮ REGENCY CENTERS CORPORATION	DEC	38.0	30.0	4.3	20.6	21.5	17.2	4.4	3.3	0.4	2.2	2.3	1.6	7.9	6.0	0.8	3.8	3.8	3.8			
FRT	FEDERAL REALTY INVESTMENT TRUST	DEC	35.7	27.5	15.9	37.9	26.5	33.8	4.7	3.4	1.7	5.2	3.8	4.6	13.0	9.7	5.0	13.4	9.7	12.5			
SPECIALIZED REITS																							
AMT	▮ AMERICAN TOWER CORPORATION	DEC	16.5	27.4	21.0	24.9	16.6	18.6	2.6	3.7	3.6	4.4	3.7	3.7	15.8	37.1	29.8	28.4	17.0	15.3			
CCI	▮ CROWN CASTLE INC.	DEC	24.0	17.3	18.1	14.9	11.6	8.6	4.3	2.8	2.7	2.2	1.9	1.1	21.3	13.1	10.6	7.8	5.2	3.7			
PSA	▮ PUBLIC STORAGE	DEC	102.6	55.8	45.3	52.0	60.6	52.6	24.8	11.2	11.5	13.4	15.7	13.4	44.6	21.4	15.2	16.7	19.0	15.7			
EQIX	▮ EQUINIX, INC.	DEC	10.5	8.0	6.6	9.8	7.2	5.4	2.3	1.8	1.4	2.1	1.8	1.2	6.3	4.6	3.8	6.3	5.2	4.2			
DLR	▮ DIGITAL REALTY TRUST, INC.	DEC	8.1	38.6	9.3	18.0	10.8	10.0	0.9	4.7	1.0	2.5	1.4	1.2	2.0	9.4	2.5	5.6	3.1	3.2			

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Source: S&P Capital IQ.



Ticker	Company	Yr. End	Current Ratio						Debt/Capital Ratio(%)						Debt as a % of Net Working Capital					
			2022	2021	2020	2019	2018	2017	2022	2021	2020	2019	2018	2017	2022	2021	2020	2019	2018	2017
DIVERSIFIED REITS																				
STOR	ESSENTIAL PROPERTIES REALTY TRUST, INC.	DEC	2.7	2.7	3.1	2.4	1.9	0.1	36.3	36.6	35.1	37.8	40.0	107.0	1354.7	1243.9	1208.4	2050.6	3162.5	NM
PSB	AMERICAN ASSETS TRUST, INC.	DEC	2.4	3.7	3.8	2.9	2.6	4.0	58.2	57.7	53.0	51.2	61.7	61.1	1743.2	947.2	840.5	1144.7	1782.8	1164.7
EPRT	GLOBAL NET LEASE, INC.	DEC	9.4	6.2	4.3	10.4	7.3	3.9	62.2	59.9	59.3	52.2	55.4	51.7	959.1	1308.7	1272.0	562.2	696.7	1159.2
AAT	\$ ALEXANDER & BALDWIN, INC.	DEC	1.4	2.2	1.8	1.6	2.0	0.3	31.2	33.2	38.5	38.2	39.0	47.1	634.1	313.7	700.5	854.8	611.6	(89.9)
WRE	ARMADA HOFFLER PROPERTIES, INC.	DEC	7.0	3.6	7.5	7.8	7.4	5.8	54.2	54.2	56.4	59.4	60.4	55.2	347.8	403.3	425.3	396.9	379.9	400.3
HEALTH CARE REITS																				
WELL	▯ WELLTOWER INC.	DEC	2.8	2.5	3.6	7.6	1.9	2.2	40.5	42.7	44.5	46.8	45.2	43.2	904.6	1284.1	570.5	585.6	1408.6	1027.5
VTR	▯ VENTAS, INC.	DEC	0.4	0.4	0.6	0.5	0.4	0.6	54.0	51.7	53.1	52.9	50.6	50.4	NM	NM	NM	NM	NM	NM
PEAK	▯ HEALTHPEAK PROPERTIES, INC.	DEC	0.4	0.5	3.4	4.9	2.2	3.2	50.5	50.8	46.6	47.7	46.4	58.9	NM	NM	296.1	186.1	942.8	735.9
MPW	† MEDICAL PROPERTIES TRUST, INC.	DEC	5.4	7.5	9.2	15.5	10.7	7.0	54.4	57.2	54.7	50.0	47.0	56.1	372.4	286.2	246.5	166.4	203.7	384.0
OHI	† OMEGA HEALTHCARE INVESTORS, INC.	DEC	1.0	2.3	1.6	1.9	2.4	5.1	56.5	56.1	55.7	54.2	54.7	54.0	77638.0	1696.4	2589.2	2332.5	1573.5	685.6
HOTEL AND RESORT REITS																				
HST	▯ HOST HOTELS & RESORTS, INC.	DEC	2.1	14.0	33.2	6.2	6.5	4.4	38.0	42.7	46.3	33.7	33.3	35.5	1064.4	441.8	242.2	276.1	239.5	412.2
PK	PARK HOTELS & RESORTS INC.	DEC	1.1	3.7	5.4	2.3	1.7	2.3	47.6	51.5	51.4	37.5	34.5	33.1	4989.7	717.7	600.2	960.3	1063.9	804.6
PEB	PEBBLEBROOK HOTEL TRUST	DEC	1.1	0.8	1.0	0.6	0.6	0.6	43.6	43.6	41.1	38.0	42.2	37.1	18136.4	NM	674695.6	NM	NM	NM
XHR	XENIA HOTELS & RESORTS, INC.	DEC	3.3	6.9	7.0	1.9	1.8	3.1	49.5	51.0	47.0	42.2	38.4	44.6	505.4	283.3	370.5	1164.1	1244.3	592.4
DRH	\$ DIAMONDROCK HOSPITALITY COMPANY	DEC	5.6	4.2	6.8	2.9	2.4	4.6	42.8	41.3	38.2	36.3	34.1	33.8	513.1	715.4	536.3	559.7	881.4	315.3
INDUSTRIAL REITS																				
PLD	▯ PROLOGIS, INC.	DEC	1.0	1.5	1.6	2.4	1.4	1.4	29.2	31.9	31.7	31.3	30.1	33.5	NM	2581.9	2071.4	941.6	2802.8	2925.7
DRE	REXFORD INDUSTRIAL REALTY, INC.	DEC	1.0	1.3	3.5	2.7	5.9	0.9	21.9	21.7	25.9	24.8	28.5	32.9	42427.3	4540.8	714.7	1072.5	421.0	NM
REXR	EASTGROUP PROPERTIES, INC.	DEC	0.9	0.9	0.9	0.7	0.7	0.8	49.1	48.2	51.0	50.7	55.7	60.7	NM	NM	NM	NM	NM	NM
EGP	\$ FIRST INDUSTRIAL REALTY TRUST, INC.	DEC	2.1	1.7	3.1	1.7	1.2	1.8	45.0	41.7	45.2	45.3	43.6	46.8	829.6	1300.4	537.7	1533.8	6785.1	1500.7
FR	† LXP INDUSTRIAL TRUST	DEC	2.1	2.7	2.7	2.8	3.6	1.9	38.4	39.2	40.2	43.2	52.6	60.7	1029.0	701.4	798.0	1020.4	681.9	2562.3
OFFICE REITS																				
ARE	▯ ALEXANDRIA REAL ESTATE EQUITIES, INC.	DEC	3.1	2.2	3.3	3.0	2.7	1.8	30.9	31.6	36.0	40.0	41.0	42.4	785.4	1035.2	745.5	1038.4	986.7	1377.3
BXP	▯ BOSTON PROPERTIES, INC.	DEC	1.8	3.2	4.7	3.1	3.5	2.8	62.2	61.6	61.0	59.6	57.3	55.9	1365.7	969.6	542.6	879.6	840.2	1045.0
VNO	▯ VORNADO REALTY TRUST	DEC	4.0	4.6	6.1	3.4	4.3	7.0	56.4	54.7	49.9	47.8	62.7	63.1	554.7	393.8	344.2	371.2	696.8	408.0
KRC	† KILROY REALTY CORPORATION	DEC	1.8	2.0	2.5	1.0	3.0	1.5	42.9	41.7	42.6	43.7	41.1	37.2	1143.4	937.4	522.3	21963.3	893.3	1768.4
CUZ	† COUSINS PROPERTIES INCORPORATED	DEC	0.7	0.8	1.5	2.2	1.0	2.0	33.4	32.7	32.5	33.4	27.4	27.9	NM	NM	2286.8	807.4	NM	757.5
RESIDENTIAL REITS																				
AVB	▯ AVALONBAY COMMUNITIES, INC.	DEC	1.5	1.2	0.8	0.5	0.6	0.7	42.5	42.6	41.3	39.9	39.8	41.4	2508.7	5896.8	NM	NM	NM	NM
EQR	▯ EQUITY RESIDENTIAL	DEC	0.3	0.5	0.2	0.1	0.1	0.2	39.1	42.3	42.9	47.5	44.9	45.9	NM	NM	NM	NM	NM	NM
MAA	▯ MID-AMERICA APARTMENT COMMUNITIES, INC.	DEC	0.1	0.3	0.1	0.2	0.2	0.3	39.7	42.3	43.5	41.5	41.5	40.6	NM	NM	NM	NM	NM	NM
ESS	▯ ESSEX PROPERTY TRUST, INC.	DEC	0.5	1.2	0.7	0.7	0.8	0.5	50.2	50.3	49.3	47.4	46.6	46.9	NM	10029.4	NM	NM	NM	NM
UDR	▯ UDR, INC.	DEC	0.1	0.1	0.4	0.3	0.8	0.1	54.2	54.3	55.9	53.4	48.3	51.3	NM	NM	NM	NM	NM	NM

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Source: S&P Capital IQ.

Ticker	Company	Yr. End	Current Ratio						Debt/Capital Ratio(%)						Debt as a % of Net Working Capital					
			2022	2021	2020	2019	2018	2017	2022	2021	2020	2019	2018	2017	2022	2021	2020	2019	2018	2017
RETAIL REITS																				
SPG	▮ SIMON PROPERTY GROUP, INC.	DEC	0.4	0.6	0.7	0.6	0.6	1.1	86.1	85.2	88.0	88.5	85.3	84.8	NM	NM	NM	NM	NM	17165.1
O	▮ REALTY INCOME CORPORATION	DEC	1.5	2.8	5.1	1.0	1.0	1.0	39.2	38.2	44.7	43.9	44.5	45.3	2953.6	2003.6	850.1	NM	217697.5	NM
KIM	▮ KIMCO REALTY CORPORATION	DEC	1.8	2.6	3.4	1.2	1.1	1.4	42.4	42.5	48.5	51.8	47.3	49.7	3482.9	2055.7	1485.1	11486.1	12141.0	4026.4
REG	▮ REGENCY CENTERS CORPORATION	DEC	0.8	1.1	2.4	2.2	1.8	1.5	37.2	37.9	39.4	38.4	36.6	34.8	NM	11162.2	1159.5	2023.5	2710.8	3889.0
FRT	FEDERAL REALTY INVESTMENT TRUST	DEC	0.8	1.7	3.7	1.5	1.8	1.5	55.8	58.5	61.5	54.7	54.8	55.9	NM	1735.9	503.3	2176.9	1574.0	2350.2
SPECIALIZED REITS																				
AMT	▮ AMERICAN TOWER CORPORATION	DEC	0.4	0.4	0.8	0.5	0.5	0.8	73.3	81.0	85.6	76.2	72.6	70.8	NM	NM	NM	NM	NM	NM
CCI	▮ CROWN CASTLE INC.	DEC	0.4	0.6	0.6	0.6	0.8	0.9	73.5	71.1	66.7	62.9	58.6	56.2	NM	NM	NM	NM	NM	NM
PSA	▮ PUBLIC STORAGE	DEC	1.5	0.8	0.7	1.2	1.0	1.4	40.3	42.5	22.3	17.3	13.4	13.8	2431.7	NM	NM	3293.2	11068.0	1204.3
EQIX	▮ EQUINIX, INC.	DEC	1.8	1.8	1.3	1.3	1.0	1.8	52.6	51.5	49.2	52.1	56.7	54.8	869.3	856.4	1777.2	1362.8	NM	850.3
DLR	▮ DIGITAL REALTY TRUST, INC.	DEC	0.6	0.6	0.6	0.9	0.7	0.6	45.8	42.1	41.9	48.7	50.5	43.8	NM	NM	NM	NM	NM	NM

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Source: S&P Capital IQ.

Ticker	Company	Yr. End	Price/Earnings Ratio (High-Low)						Dividend Payout Ratio(%)						Dividend Yield(High-Low, %)					
			2022	2021	2020	2019	2018	2017	2022	2021	2020	2019	2018	2017	2022	2021	2020	2019	2018	2017
DIVERSIFIED REITS																				
STOR	ESSENTIAL PROPERTIES REALTY TRUST, INC.	DEC	30	-	19	40	-	25	66	-	17	41	-	21	57	-	52	NA	-	NA
PSB	AMERICAN ASSETS TRUST, INC.	DEC	54	-	33	85	-	58	104	-	45	58	-	47	102	-	76	72	-	61
EPRT	GLOBAL NET LEASE, INC.	DEC	NM	-	NM	NM	-	NM	NM	-	NM	52	-	44	3926	-	2763	84	-	68
AAT	§ ALEXANDER & BALDWIN, INC.	DEC	NM	-	NM	54	-	31	304	-	116	NM	-	NM	NM	-	NM	10	-	6
WRE	ARMADA HOFFLER PROPERTIES, INC.	DEC	17	-	11	91	-	63	50	-	19	46	-	34	44	-	35	55	-	44
HEALTH CARE REITS																				
WELL	▯ WELLTOWER INC.	DEC	322	-	188	113	-	76	38	-	14	30	-	22	37	-	25	62	-	50
VTR	▯ VENTAS, INC.	DEC	NM	-	NM	472	-	357	54	-	14	64	-	47	57	-	41	19	-	16
PEAK	▯ HEALTHPEAK PROPERTIES, INC.	DEC	40	-	23	40	-	30	48	-	26	419	-	298	13	-	10	38	-	29
MPW	† MEDICAL PROPERTIES TRUST, INC.	DEC	16	-	7	21	-	18	30	-	16	25	-	18	6	-	4	17	-	15
OHI	† OMEGA HEALTHCARE INVESTORS, INC.	DEC	19	-	14	22	-	16	64	-	21	28	-	21	27	-	18	69	-	53
HOTEL AND RESORT REITS																				
HST	▯ HOST HOTELS & RESORTS, INC.	DEC	24	-	17	NM	-	NM	NM	-	NM	16	-	12	15	-	11	27	-	23
PK	PARK HOTELS & RESORTS INC.	DEC	29	-	16	NM	-	NM	NM	-	NM	23	-	15	15	-	11	2	-	2
PEB	PEBBLEBROOK HOTEL TRUST	DEC	NM	-	NM	NM	-	NM	NM	-	NM	54	-	39	NM	-	NM	32	-	23
XHR	XENIA HOTELS & RESORTS, INC.	DEC	41	-	27	NM	-	NM	NM	-	NM	47	-	34	15	-	9	25	-	18
DRH	§ DIAMONDROCK HOSPITALITY COMPANY	DEC	24	-	16	NM	-	NM	NM	-	NM	13	-	10	30	-	21	26	-	23
INDUSTRIAL REITS																				
PLD	▯ PROLOGIS, INC.	DEC	40	-	23	42	-	24	54	-	31	37	-	23	24	-	19	22	-	16
DRE	REXFORD INDUSTRIAL REALTY, INC.	DEC	91	-	54	98	-	58	105	-	67	102	-	60	80	-	63	65	-	45
REXR	EASTGROUP PROPERTIES, INC.	DEC	52	-	32	57	-	34	53	-	32	42	-	27	41	-	31	39	-	28
EGP	§ FIRST INDUSTRIAL REALTY TRUST, INC.	DEC	24	-	16	31	-	19	30	-	18	23	-	15	26	-	21	19	-	15
FR	† LXP INDUSTRIAL TRUST	DEC	42	-	23	11	-	7	18	-	12	10	-	7	10	-	8	34	-	28
OFFICE REITS																				
ARE	▯ ALEXANDRIA REAL ESTATE EQUITIES, INC.	DEC	70	-	41	57	-	41	29	-	19	52	-	36	37	-	31	84	-	68
BXP	▯ BOSTON PROPERTIES, INC.	DEC	24	-	12	39	-	28	27	-	13	42	-	33	36	-	29	48	-	40
VNO	▯ VORNADO REALTY TRUST	DEC	NM	-	NM	95	-	67	NM	-	NM	4	-	4	39	-	30	130	-	85
KRC	† KILROY REALTY CORPORATION	DEC	40	-	19	14	-	10	54	-	28	45	-	33	30	-	23	51	-	44
CUZ	† COUSINS PROPERTIES INCORPORATED	DEC	38	-	20	22	-	17	27	-	14	35	-	26	52	-	40	18	-	15
RESIDENTIAL REITS																				
AVB	▯ AVALONBAY COMMUNITIES, INC.	DEC	32	-	20	35	-	22	39	-	21	39	-	30	27	-	22	31	-	27
EQR	▯ EQUITY RESIDENTIAL	DEC	45	-	29	25	-	16	36	-	19	34	-	24	41	-	31	43	-	37
MAA	▯ MID-AMERICA APARTMENT COMMUNITIES, INC.	DEC	42	-	26	49	-	27	67	-	39	45	-	30	54	-	44	39	-	33
ESS	▯ ESSEX PROPERTY TRUST, INC.	DEC	57	-	33	48	-	30	38	-	21	50	-	35	45	-	37	41	-	34
UDR	▯ UDR, INC.	DEC	237	-	146	123	-	76	250	-	145	79	-	61	58	-	44	92	-	78
RETAIL REITS																				
SPG	▯ SIMON PROPERTY GROUP, INC.	DEC	25	-	13	25	-	12	42	-	12	27	-	21	24	-	19	30	-	24
O	▯ REALTY INCOME CORPORATION	DEC	53	-	39	85	-	67	72	-	37	59	-	45	53	-	38	57	-	48
KIM	▯ KIMCO REALTY CORPORATION	DEC	165	-	113	15	-	9	9	-	3	27	-	18	18	-	13	30	-	20
REG	▯ REGENCY CENTERS CORPORATION	DEC	28	-	19	36	-	21	242	-	122	49	-	40	47	-	38	72	-	59
FRT	FEDERAL REALTY INVESTMENT TRUST	DEC	30	-	19	41	-	25	81	-	41	31	-	25	43	-	34	37	-	30
SPECIALIZED REITS																				
AMT	▯ AMERICAN TOWER CORPORATION	DEC	76	-	48	53	-	35	71	-	47	56	-	37	60	-	48	57	-	38
CCI	▯ CROWN CASTLE INC.	DEC	54	-	32	81	-	58	74	-	50	83	-	59	95	-	82	141	-	105
PSA	▯ PUBLIC STORAGE	DEC	18	-	12	37	-	22	38	-	26	36	-	27	27	-	21	34	-	29
EQIX	▯ EQUINIX, INC.	DEC	110	-	66	158	-	107	198	-	116	97	-	57	100	-	74	163	-	117
DLR	▯ DIGITAL REALTY TRUST, INC.	DEC	150	-	76	29	-	21	159	-	107	57	-	43	102	-	81	127	-	97

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Source: S&P Capital IQ.

Ticker	Company	Yr. End	Earnings per Share(\$)						Tangible Book Value per Share(\$)						Share Price (High-Low, \$)																	
			2022	2021	2020	2019	2018	2017	2022	2021	2020	2019	2018	2017	2022	2021	2020	2019	2018	2017												
DIVERSIFIED REITS																																
STOR	ESSENTIAL PROPERTIES REALTY TRUST, INC.	DEC	0.99	0.82	0.44	0.63	0.26	35.50	17.10	15.87	14.30	13.62	11.83	723.84	29.60	-	18.88	32.92	-	20.00	29.34	-	6.08	27.10	-	13.39	14.75	-	13.05	0.00	-	0.00
PSB	AMERICAN ASSETS TRUST, INC.	DEC	0.72	0.47	0.46	0.84	0.42	0.62	19.69	19.95	20.55	21.30	16.76	17.45	39.20	-	24.01	40.83	-	27.21	48.15	-	20.15	49.26	-	38.94	42.85	-	30.62	44.83	-	36.79
EPRT	GLOBAL NET LEASE, INC.	DEC	(0.09)	(0.20)	(0.09)	0.39	0.01	0.30	13.66	15.43	12.47	14.25	12.43	13.77	16.01	-	9.82	20.12	-	13.78	21.71	-	8.77	20.62	-	17.23	22.53	-	15.55	25.25	-	20.09
AAT	ALEXANDER & BALDWIN, INC.	DEC	(0.70)	0.48	0.08	(0.51)	(1.02)	4.35	13.56	13.88	14.40	14.14	14.83	10.09	25.66	-	15.80	26.57	-	14.89	23.32	-	8.32	25.69	-	17.70	29.23	-	17.58	46.96	-	27.50
WRE	ARMADA HOFFLER PROPERTIES, INC.	DEC	0.94	0.17	0.38	0.41	0.36	0.29	5.50	5.11	4.98	4.92	4.92	4.38	15.80	-	10.04	15.64	-	10.62	19.43	-	6.40	19.03	-	13.68	16.17	-	12.73	16.01	-	12.66
HEALTH CARE REITS																																
WELL	WELLTOWER INC.	DEC	0.30	0.78	2.33	3.05	2.02	1.26	40.30	38.15	37.33	36.65	35.09	35.67	99.43	-	56.50	89.80	-	59.38	89.99	-	24.27	93.17	-	66.82	74.75	-	49.58	78.17	-	63.06
VTR	VENTAS, INC.	DEC	(0.12)	0.13	1.17	1.17	1.14	3.78	21.99	23.40	23.50	24.07	23.97	25.58	64.02	-	35.33	61.09	-	45.40	63.38	-	13.35	75.40	-	54.59	65.70	-	46.55	72.36	-	58.96
PEAK	HEALTHPEAK PROPERTIES, INC.	DEC	0.92	0.93	0.77	0.09	2.25	0.88	11.41	11.12	11.54	11.53	11.81	10.42	36.85	-	21.41	37.69	-	28.15	37.64	-	18.63	37.93	-	26.80	30.27	-	21.48	33.67	-	25.09
MPW	MEDICAL PROPERTIES TRUST, INC.	DEC	1.50	1.11	0.81	0.87	2.76	0.82	12.36	12.00	11.35	12.51	11.32	9.40	24.13	-	9.90	23.74	-	19.39	24.29	-	12.35	21.63	-	15.50	17.52	-	11.82	14.22	-	11.90
OH1	OMEGA HEALTHCARE INVESTORS, INC.	DEC	1.80	1.75	0.70	1.58	1.40	0.51	12.66	13.61	13.79	15.28	13.82	14.65	33.71	-	24.81	39.31	-	27.06	45.22	-	13.33	45.01	-	33.39	38.34	-	24.90	35.14	-	26.43
HOTEL AND RESORT REITS																																
HST	HOST HOTELS & RESORTS, INC.	DEC	0.88	(0.02)	(1.04)	1.26	1.47	0.76	9.41	9.02	8.96	10.26	10.12	9.43	21.63	-	15.10	19.02	-	13.16	18.66	-	7.86	20.35	-	15.51	22.47	-	15.94	20.65	-	17.26
PK	PARK HOTELS & RESORTS INC.	DEC	0.71	(1.95)	(6.11)	1.44	2.31	12.21	19.17	18.64	20.55	24.41	24.84	24.97	20.58	-	10.92	24.67	-	15.77	26.01	-	3.99	33.02	-	21.68	34.27	-	23.91	31.46	-	24.65
PEB	PEBBLEBROOK HOTEL TRUST	DEC	(0.95)	(1.80)	(3.25)	0.63	(0.06)	1.19	23.71	24.13	24.93	27.75	27.32	21.36	26.14	-	12.54	26.45	-	17.57	26.98	-	5.39	34.35	-	24.51	41.65	-	26.59	38.96	-	26.21
XHR	XENIA HOTELS & RESORTS, INC.	DEC	0.49	(1.26)	(1.44)	0.49	1.75	0.92	12.76	12.47	13.60	15.18	15.69	14.54	20.36	-	12.64	21.40	-	14.15	21.80	-	6.15	23.33	-	16.67	25.90	-	16.47	22.76	-	16.21
DRH	DIAMONDROCK HOSPITALITY COMPANY	DEC	0.47	(0.96)	(1.97)	0.90	0.43	0.46	7.59	7.19	8.15	9.55	8.89	9.02	11.15	-	7.18	11.49	-	7.88	11.79	-	1.96	11.52	-	8.76	12.99	-	8.70	12.08	-	10.43
INDUSTRIAL REITS																																
PLD	PROLOGIS, INC.	DEC	4.25	3.94	2.01	2.46	2.87	3.06	55.53	43.55	41.49	34.58	34.01	28.24	174.54	-	98.03	169.93	-	93.08	112.37	-	59.82	92.80	-	56.40	68.95	-	55.21	67.53	-	48.33
DRE	REXFORD INDUSTRIAL REALTY, INC.	DEC	0.92	0.80	0.51	0.47	0.41	0.48	32.97	28.03	22.15	19.68	17.14	14.38	84.68	-	48.74	81.68	-	45.90	53.48	-	31.79	48.80	-	28.45	33.54	-	26.32	31.71	-	21.34
REXR	EASTGROUP PROPERTIES, INC.	DEC	4.36	3.90	2.76	3.24	2.49	2.44	44.41	37.66	31.68	30.47	24.47	21.27	228.64	-	137.47	229.84	-	131.28	153.26	-	83.40	138.15	-	87.94	102.05	-	77.74	95.03	-	67.69
EGP	FIRST INDUSTRIAL REALTY TRUST, INC.	DEC	2.72	2.09	1.53	1.88	1.31	1.69	18.43	16.50	14.55	13.67	12.79	11.66	66.32	-	42.91	66.74	-	40.08	46.12	-	25.89	43.24	-	27.77	34.04	-	27.30	32.91	-	25.31
FR	LXP INDUSTRIAL TRUST	DEC	0.38	1.34	0.66	1.15	0.93	0.33	7.21	7.07	6.02	5.55	4.46	4.01	16.11	-	8.81	15.75	-	9.98	12.08	-	7.86	11.19	-	8.00	9.70	-	7.59	11.42	-	9.00
OFFICE REITS																																
ARE	ALEXANDRIA REAL ESTATE EQUITIES, INC.	DEC	3.18	3.82	6.01	3.12	3.52	1.58	107.51	98.58	82.40	71.06	64.20	58.10	224.33	-	126.74	224.95	-	154.37	179.79	-	109.22	163.51	-	110.66	131.00	-	109.04	134.37	-	106.89
BXP	BOSTON PROPERTIES, INC.	DEC	5.40	3.17	5.54	3.30	3.70	2.93	39.12	37.27	37.22	35.43	36.79	36.38	133.11	-	64.43	124.24	-	88.45	147.83	-	69.69	140.35	-	107.94	132.82	-	107.84	140.13	-	116.77
VNO	VORNADO REALTY TRUST	DEC	(2.13)	0.53	(1.83)	16.21	2.01	0.85	23.55	25.55	27.84	30.42	18.04	17.30	47.26	-	20.03	50.91	-	35.02	68.68	-	27.64	70.54	-	58.60	78.31	-	59.48	111.72	-	71.90
KRC	KILROY REALTY CORPORATION	DEC	1.97	5.36	1.63	1.86	2.55	1.51	45.92	46.22	43.22	40.24	38.70	37.16	79.06	-	37.66	74.05	-	54.26	88.99	-	45.28	85.29	-	60.87	77.73	-	59.05	78.33	-	67.00
CUZ	COUSINS PROPERTIES INCORPORATED	DEC	1.11	1.87	1.60	1.17	0.75	2.08	29.64	29.58	28.80	27.94	24.91	24.56	42.41	-	21.72	40.70	-	31.01	42.99	-	21.15	41.37	-	30.76	39.52	-	30.12	38.52	-	31.24
RESIDENTIAL REITS																																
AVB	AVALONBAY COMMUNITIES, INC.	DEC	8.12	7.19	5.89	5.63	7.05	6.35	80.54	78.36	77.21	78.31	76.97	75.43	259.05	-	158.35	254.61	-	154.84	229.40	-	118.17	222.87	-	168.34	191.91	-	152.65	199.52	-	169.50
EQR	EQUITY RESIDENTIAL	DEC	2.05	3.54	2.45	2.60	1.77	1.63	29.43	29.07	28.17	27.65	26.99	27.27	94.32	-	58.15	91.20	-	56.79	87.53	-	45.43	89.55	-	63.41	72.75	-	54.97	70.46	-	59.49
MAA	MID-AMERICA APARTMENT COMMUNITIES, INC.	DEC	5.48	4.61	2.19	3.07	1.93	2.86	52.00	51.72	51.33	53.10	53.99	55.73	230.71	-	141.13	231.63	-	122.15	148.88	-	82.00	140.15	-	92.19	104.98	-	85.16	110.95	-	92.50
ESS	ESSEX PROPERTY TRUST, INC.	DEC	6.27	7.51	8.69	6.66	5.90	6.57	88.37	91.72	92.24	94.10	95.11	95.03	363.36	-	205.24	357.90	-	226.79	329.74	-	175.81	334.17	-	235.51	267.41	-	214.03	270.04	-	218.41
UDR	UDR, INC.	DEC	0.26	0.48	0.20	0.63	0.74	0.44	12.20	10.55	10.64	11.11	10.38	10.38	61.06	-	37.18	60.42	-	36.73	51.25	-	29.20	50.61	-	38.18	42.98	-	32.88	40.71	-	34.41
RETAIL REITS																																
SPG	SIMON PROPERTY GROUP, INC.	DEC	6.52	6.84	3.59	6.81	7.87	6.24	9.36	9.94	8.96	7.78	10.04	11.04	165.83	-	86.02	171.12	-	82.06	149.89	-	42.25	186.44	-	142.40	191.49	-	145.78	188.10	-	150.15
O	REALTY INCOME CORPORATION	DEC	1.42	0.87	1.14	1.38	1.26	1.10	30.01	27.23	25.63	24.78	22.63	21.68	75.40	-	55.50	74.60	-	57.00	84.92	-	38.00	82.17	-	61.59	66.91	-	47.25	63.60	-	52.85
KIM	KIMCO REALTY CORPORATION	DEC	0.16	1.60	2.25	0.80	1.02	0.87	14.81	15.31	12.69	10.93	12.22	12.02	26.57	-	17.71	24.95	-	14.28	20.78	-	7.45	21.86	-	14.32	18.37	-	13.16	26.16	-	17.02
REG	REGENCY CENTERS CORPORATION	DEC	2.81	2.12	0.26	1.43	1.46	1.00	33.59	33.13	33.22	33.88	34.01	34.39	78.78	-	51.97	78.07	-	43.49	64.65	-	31.80	70.26	-	56.50	69.78	-	54.87	72.05	-	58.63
FRT	FEDERAL REALTY INVESTMENT TRUST	DEC	4.71	3.26	1.62	4.61	3.18	3.97	34.21	30.63	29.88	31.24	29.23	28.09	140.51	-	86.43	138.40	-	81.85	131.56	-	64.11	141.35	-	115.09	135.68	-	106.41	145.80	-	119.37
SPECIALIZED REITS																																
AMT	AMERICAN TOWER CORPORATION	DEC	3.82	5.66	3.79	4.24	2.77	2.67	(54.48)	(63.62)	(38.33)	(30.35)	(25.71)	(26.07)	292.55	-	178.17	303.72	-	197.50	272.20	-	174.32	242.00	-	153.93	168.58	-	130.37	155.28	-	102.51
CCI	CROWN CASTLE INC.	DEC	3.86	2.53	2.35	1.79	1.23	0.80	(14.39)	(13.58)	(11.72)	(10.64)	(9.69)	(8.98)	209.00	-	121.71	208.87	-	146.15	180.00	-	114.18	149.47	-	104.22	117.60	-	98.85	114.97	-	83.96
PSA	PUBLIC STORAGE	DEC	23.50	9.87	6.29	7.29	8.54	6.73	31.33	28.16	26.13	27.47	28.05	27.03	421.76	-	270.73	377.36	-	212.22	240.75	-	155.37	266.76	-	193.89	234.90	-	180.48	232.21	-	192.15
EQIX	EQUINIX, INC.	DEC	7.67	5.53	4.18	5.99	4.56	3.00	42.69	39.47	33.55	22.93	0.61	0.67	847.71	-	494.89	885.26	-	586.73	839.77	-	477.87	609.97	-	343.58	461.73	-	335.29	495.35	-	355.18
DLR	DIGITAL REALTY TRUST, INC.	DEC	1.11	5.94	1.00	2.35	1.21	0.99	16.48	24.01	191																					

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