

# Industry Surveys

Real Estate Investment
Trusts

SEPTEMBER 2022

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#### **NEW THEMES**



What's Changed: While store openings have outpaced closures, high inflation and recessionary fears are seen to hamper retail growth in 2022. Read more on page 24.



What's Changed: We updated our forecast for the industrial REIT sub-industry.
See page 33.



What's Changed: In July 2022, legislation was introduced to clamp down on Single-Family Rental Operators and cap rent increases on most single- and multi-family rental units. More details on page 43.

#### **EXECUTIVE SUMMARY**

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 Have Underperformed the Broader Market Index So Far in 2022

As of August 30, 2022, the Dow Jones Equity All REIT index total return was -17.2%, underperforming the S&P Composite 1500 total return of -15.3%. While no sub-industries have positive returns YTD, outperforming sub-industries include hotel & resort REITs (down 7.3%), self-storage REITs (down 8.5%), and health care REITs (down 11.7%). Meanwhile, the worst performing sub-industries have been office REITs (down 28.8%), industrial REITs (down 27.1%), data center REITs (down 23.2%), and residential REITs (down 20.3%), while retail REITs and infrastructure REITs have performed in line (down 15.9% and 15.5%, respectively).

#### We Expect Key Industry Trends to Remain in Place Heading into 2023

We think industrial, residential, infrastructure, data center, and self-storage REITs will outperform through yearend 2022 while office REITs likely lag peers. Markets turned quickly in early 2022 with higher growth stocks experiencing significant pullbacks, as evidenced by many of 2021's best performing REIT sectors (industrial, infrastructure, data centers) seeing poor 1H 2022 performance. However, we believe this trend reverses in 2H 2022 as industry tailwinds such as e-commerce growth, increased data utilization, and the 5G rollout continue to be long-term demand drivers. We see health care REITs continuing to benefit from positive demographic trends while hotel REITs benefit from a return to travel post-pandemic, although variant and recession risks may weigh on performance. Office REITs are likely to struggle as work from home trends stick around.

#### High Inflation and Rising Interest Rates Will Continue to Drive REIT Volatility

Sustained high inflation has prompted the Fed to accelerate their interest rate hiking trajectory, with current estimates leading to rates of 3.50% to 3.75% by year-end 2022 (from 0.0% to 0.25% at the start of 2022). Higher interest rates are a headwind for REITs as they lead to increased borrowing costs and often lower property values. However, 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. Increased volatility should be expected as investors weigh the potential impacts of these variables, with REITs able to adjust rents quickly (i.e., self-storage, hotels) and those with limited need to raise debt likely benefiting.

#### Office REITs Face Difficult Outlook Amid Work from Home Trends and Potential Recession

Our outlook on office REITs is negative as the shift towards remote and hybrid work has resulted in a weak post-Covid-19 recovery while a likely turn in the economy resulting in higher unemployment may cause a further weakening of demand for office space. In H1 2022, physical occupancy among 10 major markets was about 65% and at the 30% level for New York City and San Francisco.

#### Self-Storage REITs Benefit from Resilient Consumer and Demand for More Space

Sustained high demand since the pandemic has been driven by e-commerce growth as retailers look to utilize self-storage facilities for "last-mile" delivery solutions and an acceleration in work from home trends requiring people to find space for home-office setups. We believe these trends are likely to continue into 2023 while industry fundamentals remain strong, with consumers length-of-stay at self-storage facilities rising in 1H 2022.

#### Shortages in U.S. Housing Supply and Low Affordability to Boost Residential REITs

We believe the pendulum for rent versus buy is moving back strongly in favor of rental properties, as affordability and availability make owning a home extremely expensive today. As a result, we believe multifamily and single-family rental units are poised to outperform into 2023.

#### Industrial REIT Fundamentals Remain Exceptional, Despite Significant New Construction Pipeline

We believe the secular shift towards e-commerce is likely to continue moving forward, helping keep demand for industrial real estate elevated. Meanwhile, we think rental rate growth can remain in the high teens for premier industrial REITs through 2022 as vacancy remains near historic lows. While new supply in 2023 is likely to outpace net absorption, we think industrial REITs concentrated within Tier 1 markets will be more insulated from this new supply growth due to limited available space and significant zoning restrictions.

# CFRA

# Industry Snapshot www.cfraresearch.com

## REAL ESTATE INVESTMENT TRUSTS (REITs)

Outlook: Neutral

#### **MARKET CAP BREAKDOWN\* RANK COMPANY MARKET** NO. NAME CAP (\$ billion) American Tower 124.9 1 98.3 **Prologis** 2 Crown Castle 3 76.8 Equinix 62.8 Public Storage 61.5 Others† 824.7 Source: CFRA, S&P Global Market Intelligence \*Data as of August 25, 2022. †Refer to the "Comparative Company Analysis" section of this survey for the list of companies.

#### BY THE NUMBERS



#### **ETF FOCUS**

VNQ Vanguard Real Estate	AUM (\$B) 41.1	Expense Ratio 0.12
SCHH Schwab U.S. REIT	AUM (\$B) 6.3	Expense Ratio 0.07
REET iShares Global REIT	AUM (\$B) 3.1	Expense Ratio 0.14
ICF iShares Cohen & Steers REIT	AUM (\$B) 2.7	Expense Ratio 0.33

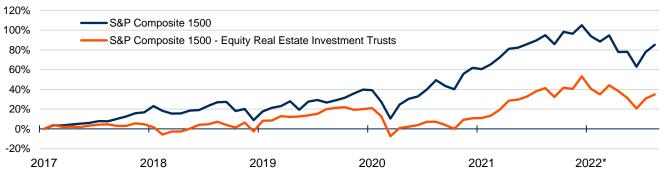


-11.5% Y/Y
Decline in
P/FFO multiple
for August 2022





#### HISTORICAL INDEX PERFORMANCE



\*Data through August 25, 2022.

#### **FINANCIAL METRICS**

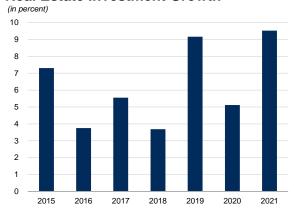
#### **Revenue Growth**



Source: CFRA, S&P Global Market Intelligence.

- ◆ Revenue grew 2.7% in 2021. We expect revenue growth to remain strong moving forward, with growth of 14.2% in 2022 and 5.7% in 2023.
- ◆ 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 2022 as the post-pandemic recovery continues.
- ◆ The Covid-19 pandemic has particularly hurt Office and Hotel REITs. The former is very sensitive to the general economy, employment, and episodic events like the coronavirus, while the latter was further hampered by travel restrictions put in place because of the pandemic. Each is likely to face headwinds from new hybrid or work from home trends as demand for office space declines while business travel is unlikely to reach pre-Covid-19 levels, in our view.

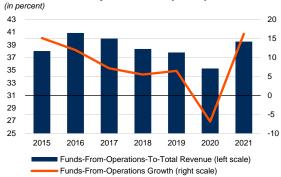
#### **Real Estate Investment Growth**



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

- Real estate investment suffered in 2020 as REITs scaled back, delayed, or even canceled new projects. As such, a higher growth rate of 9.5% was observed in 2021 due to a low base. We believe real estate investment is likely to pick up in 2022 as investors look to real estate as a potential inflation hedge.
- Through the first half of 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 selfstorage, potentially prolonging favorable supply/demand dynamics. Hotels and offices may experience oversupply in urban markets as demand changes structurally.

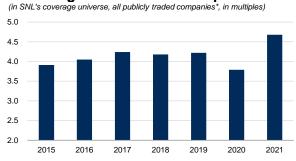
#### **Funds from Operations (FFO)**



Note: Consituents include REITs in Dow Jones's 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 39.5% in 2021 from 35.2% in 2020, largely driven by residential, retail, and industrial REITs.
- ◆ FFO grew 16.2% in 2021 compared with a decline of 6.9% in 2020, largely due to increased economic activities led by rising vaccination rates and Covid-19 related stimulus measures.
- ◆ For 2022, CFRA sees FFO growth moderating from 2021 levels but remaining above the historical average as the post-pandemic recovery continues and revenues rebound. Sustained real estate investment could also steady FFO growth over the coming years.

#### Recurring EBITDA/Interest Expense



Note: Consituents include REITs in Dow Jones's 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 4.7x in 2021 from 3.8x in 2020.
- CFRA attributed this to the increase in recurring EBITDA and the decline in interest expense, which was lowered due to debt refinancing at lower interest rates and, to a lesser degree, debt retirements.
- ◆ In 2022, we see continued, albeit a more tapered, recovery in EBITDA for most property types driven by an economic recovery, particularly in hotels and retail.

#### **REIT Dividend Yield VS. Treasury Yield**



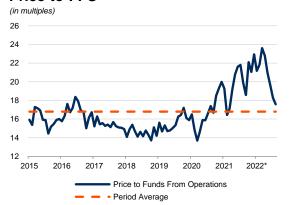
\*Data through August 10.

Note: Consituents include REITs in Dow Jones's coverage universe - i.e., companies listed in NYSE, NYSE MKT, NASDAQ, and OTC.

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

- As of August 10, 2022, the Dow Jones Equity All REIT Index dividend yield was 3.3%, representing a positive spread of 49 basis points (bps) over the 10-year Treasury note yield of 2.8%.
- The two indices experienced the widest spread in March 2020 at 457 bps during the height of the pandemic. In April 2022, amid rapid rate hikes, the spread was at its narrowest with just 9 bps.
- ◆ The average and median yield spread between REITs and the 10-year Treasury since 2015 was 219 bps and 229 bps, respectively. This suggests REITs are currently attractively priced, but this could change if Treasury yields continue to rise.

#### Price-to-FFO



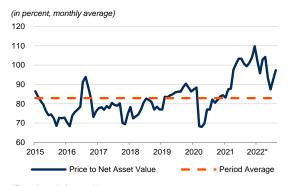
\*Data through August 10.
Note: Consituents include REITs in Dow Jones's coverage universe - i.e., companies listed in NYSE, NYSE MKT, NASDAQ, and OTC.
Source: CFRA, S&P Global Market Intelligence.

from the global pandemic, reaching a historic high of 23.6x in June 2022. However, multiples have begun to compress significantly since then as rising rates and inflation fears have led to equity market turmoil. As of August 10, 2022, despite remaining above their long-run average, P/FFO multiples have retracted to 17.6x.

Price-to-FFO (P/FFO) multiple recovered rapidly

- We think price-to-FFO ratios will largely remain stable through 2022 as inflation fears push more investors into real estate, often viewed as a hedge against inflation. REITs still offer a more attractive dividend yield than the S&P 500, potentially justifying higher P/FFO ratios amid an uncertain market environment.
- Price recovered to a high of 104.2% NAV in April 2022 from the nadir of 68.0% in April 2020. The price/NAV figure stood at 97.3% as of August 10, 2022, amid a slight pullback in the second half of the year. Despite that, prices still stand above the average of 89.3% 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.

#### Price-to-NAV

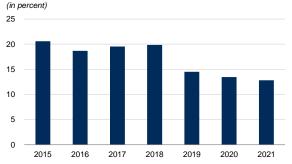


\*Data through August 10.

Note: Consituents include REITs in Dow Jones's coverage universe - i.e., companies listed in NYSE, NYSE MKT, NASDAQ, and OTC.

Source: CFRA, S&P Global Market Intelligence.

#### Variable-Rate Debt/Total Debt

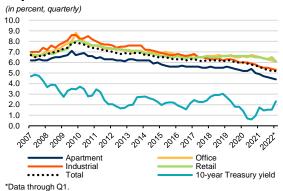


Note: Consituents include REITs in Dow Jones's coverage universe - i.e., companies listed in NYSE, NYSE MKT, NASDAQ, and OTC. Source: CFRA, S&P Global Market Intelligence.

- Variable-rate debt as a percentage of total debt declined to 12.8% in 2021 from 13.5% in 2020 as REITs continue taking advantage of an accommodative 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**

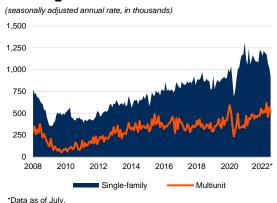


Source: Mortgage Bankers Association, Federal Reserve.

- REIT cap rates declined across the board in Q1 2022 from year-end 2021 levels. The 10-year Treasury yield, on the other hand, trends higher after falling substantially from Q2 2020 through Q4 2020.
- This suggests that property valuations are relatively expensive and raises concerns about how prices might react when interest rates rise.
- However, as Treasury yields have inched higher recently, we think cap rates could start rising to compensate investors adequately.

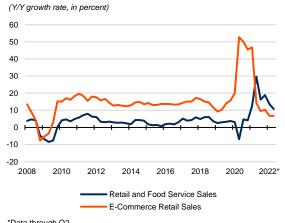
#### **Housing Starts**

Source: U.S. Department of Commerce



- U.S. privately-owned housing starts were at a seasonally adjusted annual rate (SAAR) of 1.43 million units in July 2022, down 8.5% Y/Y.
- ◆ Total existing-home sales in July 2022 slipped 20.2% Y/Y to a SAAR of 4.81 million units, extending the sales decline for the sixth month. According to NAR, this reflects the impact of the peak mortgage rate of 6% in June.
- We attribute such a decline to soaring house prices and higher mortgage rates, which works to cool overheating demand. We forecast existing home sales to remain subdued into 2023 barring a significant retreat of mortgage rates to well below 5%.

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



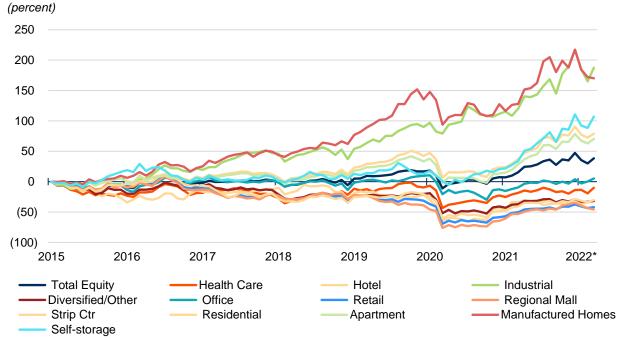
\*Data through Q2. Source: U.S. Census Bureau.

- Brick-and-mortar sales rebounded strongly immediately after lockdown relaxation. However, such increases were a result of a pent-up demand and unsustainable. In Q2 2022, retail sales grew 10.8%, down from a high of 29.7% 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 6.8% Y/Y growth in Q2 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, which will likely hurt retailers for many years to come.

#### **INDUSTRY TRENDS**

Through August 26, 2022, stocks in the real estate sector were down 17.9%, performing worse than the S&P Composite 1500 index's loss of 14.7%. This follows a 38.0% gain in 2021, a 8.5% decline in 2020, a 10.8% gain in 2019, and a 4.2% decline in 2018 for real estate stocks.

#### **REITS INDEX PERFORMANCE BY TYPE**



\*Data through August 10.

Source: CFRA, S&P Global Market Intelligence.

Despite a dismal 2020, the REIT industry regained much of its footing in 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 uncertainties brought on by 40-year high inflation due to substantial economic stimulus during the pandemic, supply chain issues, and the Russia-Ukraine war. With both countries being major exporters of raw food and energy products, being at war meant major disruption for importers that rely heavily on those goods. Such an effect sent ripples across the globe, most notably with increased food and gas prices, sending inflation rates through the roof.

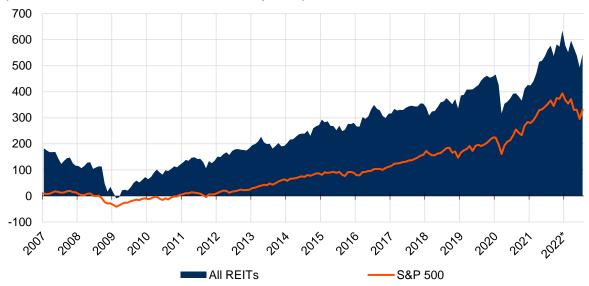
That said, we believe most negatives have been priced in at current market valuation, enabling REIT share prices to recover in 2023 barring further escalation of the Russia-Ukraine conflict, a significant global recession, or other disruptions to the return of normal economic activities around the globe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

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. The low but increasing interest rates make dividend-paying REITs more attractive, while unprecedented actions by the Treasury and money creation by the Federal Reserve 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**





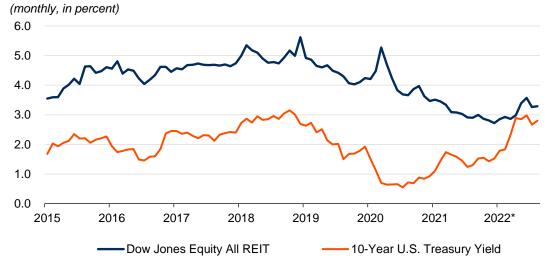
\*Data through July.

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

Year-to-date (YTD) through July 2022, a total of 70 U.S. REITs announced dividend increases, or approximately 42% of the total U.S. REIT industry. This is slightly down from the 88 dividend increases announced in 2021 but contrasts 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 15 YTD hikes – nine of which were shopping centers), residential (14 hikes), and specialty (12 hikes – consisting of data center, energy infrastructure, casino, advertising, timber, communications, land, and cineplex REITs). On the other hand, hotel and resort REITs were the lowest with only one dividend increase. Since the pandemic, hotel and resort REITs suspended dividend payments and drew down their credit facilities to preserve cash. Even with lockdown restrictions being lifted in many areas, most hotel properties are still operating at very low levels. In July 2022, STR reported that occupancy rates averaged 69.6% for hotels in the U.S., while the average daily rate and revenue per available room stood at \$159.08 and \$110.73, respectively.

As of August 10, 2022, the Dow Jones Equity All REIT Index dividend yield was 3.3%, representing a positive spread of 49 basis points (bps) over the 10-year Treasury note yield of 2.8%. U.S. REIT yields reached a post-pandemic high of 3.6% in June 2022 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 REITs as slightly undervalued on this measure.

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

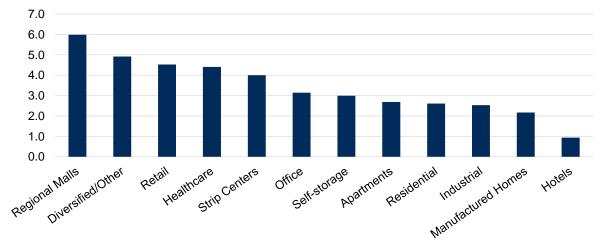


\*Data for All REIT index through June 30; 10-year Treasury through August 10. Source: CFRA, S&P Global Market Intelligence, Federal Reserve.

In addition, to combat unruly inflation, the Federal Reserve had raised interest rates for the first time since the onset of the pandemic in March 2022. Since then, there were three instances of rate hikes, taking the latest benchmark rate to a range of 2.25%-2.50%. For the last 12 months ended July 2022, consumer prices were up 8.5%. While still high, the figure represents a significant drop from 40-year high 9.1% recorded in June. Rising interest rates alone are viewed as a headwind for REITs, as by themselves they are likely to lead 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 FOCUS INDICES DIVIDEND YIELD





However, according to the National Association of Real Estate Investment Trusts (NAREIT), higher interest rates driven by economic growth are generally beneficial for REITs as they support revenue growth. A stronger economy would typically lead to lower vacancy rates, higher rent growth, and subsequently increased funds from operation and net operating income. This, in turn, increases property prices and provides investors with higher dividend payments. Furthermore, REITs are often considered strong inflation hedges because rents are not considered as "sticky" as other prices. Long-term leases will generally have inflation protection built into the rental contract, and short-term leases are likely to reflect current market prices. Additionally, REITs generally 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 1.7% this year, and 1.5% in 2023, according to forecasts by Action Economics as of August 20, 2022.

The national unemployment rate currently stands at 3.5% in July 2022, on par with the pre-pandemic figures and seemingly closer to the Fed's "full employment" mandate. Job growth in July 2022 was significantly higher than estimates despite higher interest rates and recessionary fears. There were 528,000 jobs created during the month, compared to economists' expectation of only 250,000. Action Economics forecasts the rate to remain 3.6% in 2022 and 2023.

However, 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 had also shown steady improvements since the start of the pandemic. In the week ending August 18, 2022, only 250,000 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 246,750. Continuing unemployment claims came off a record peak as well, standing at 1.4 million as of August 6, 2022 (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 reached 6.2% Y/Y in November 2021 before climbing to a 40-year high of 9.1% Y/Y in June 2022, before inching lower to 8.5% Y/Y in July. This prompted the early termination of the Fed's bond-buying program and initiation of a multi-stage interest rate hike starting in March 2022.

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 recently – in April 2021 – that the two resumed their inverse relationship. YTD through August 10, 2022, the 10-year yield gained 101 bps, while shares in the Dow Jones Equity All REIT Index rose by 44 bps.

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



<sup>\*</sup>Data as of August 10.

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

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

DOW JONES EQUITY ALL REIT* INDEX FINANCIALS						
	FOR THE YEAR ENDED					
	2017	2018	2019	2020	2021	
EBITDA/ Interest Expense (x)	4.45	4.50	4.64	3.99	5.27	
Recurring EBITDA/ Interest Expense (x)	4.24	4.18	4.22	3.79	4.68	
Short-term Debt/ Debt (%)	6.95	6.51	6.89	5.89	6.55	
Variable-rate Debt/ Debt (%)	19.55	19.87	14.51	13.45	12.83	

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

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

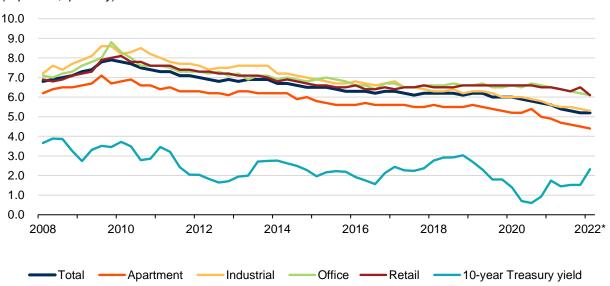
Historically, the investment performance of publicly-traded REITs followed a pattern that very much mirrors the economy, the underlying job market, and the prevailing credit market conditions. The combination of low interest rates and dynamic economic growth pumped investor dollars into U.S. REITs from 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 5.4 ppts in the third quarter of 2020. Since then, we saw the narrowing of cap rate spread to 2.9 ppts as of the first 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)



<sup>\*</sup>Data through Q1.

Source: Mortgage Bankers Association, Federal Reserve.

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.

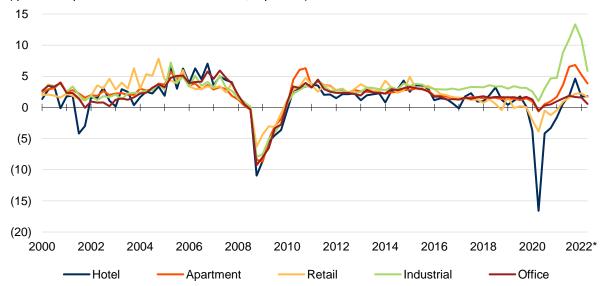
CAPITAL RA (\$, in million		U.S. REITS				
		SE	CONDARY EQUITY		SECONDARY DEBT	
				ATM		
PERIOD	IPO	COMMON SHARES	PREFERRED SHARES	ISSUANCE†	(UNSECURED)	TOTAL
2015	1,423	23,433	2,236	3,534	32,201	62,827
2016	1,690	26,158	4,655	7,707	37,261	77,471
2017	2,950	27,875	10,970	8,379	50,767	100,941
2018	3,264	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*	0	12,277	545	5,180	10,143	28,145

\*Data through May. †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 Q2.

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:

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 assetlite or intellectual-heavy, meaning moving offices has low switching costs.	MEDIUM - While the demand for quality office space will remain, various substitutes 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	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, as in the Seattle and California markets. 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 "momand-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.	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 middletier 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 Airbh and vacation rentals. Covid-19 has demonstrated to companies that much 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.	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 coronavirus 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:

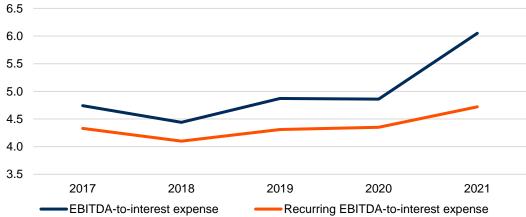
#### Residential REITs

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.

YTD through August 30, 2022, the Dow Jones U.S. Real Estate Residential Index was down 20.3% versus S&P Composite 1500 Index's decline of 15.9%. In comparison, the price performance for residential REITs was up 59.9% in 2021 versus the S&P Composite 1500 Index's gain of 28.5%. As of August 17, 2022, S&P Global Market Intelligence indicated residential REITs traded at 2.9x P/B and have a TEV/Unlevered FCF of 26.8x compared to U.S. equity REITs trading at a 2.8x P/B and 20.6x TEV/Unlevered FCF multiple.

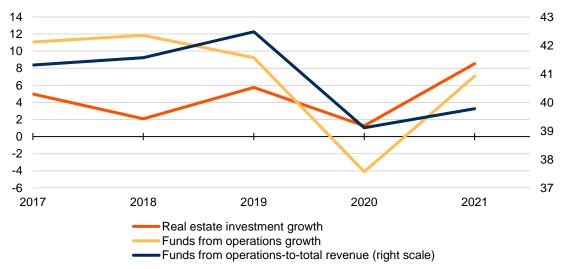
#### (in multiples) 6.5

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



Source: CFRA, S&P Global Market Intelligence.

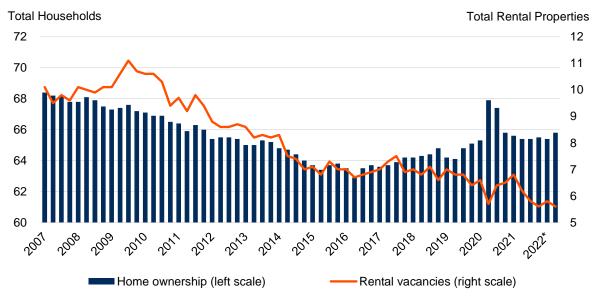
U.S. RESIDENTIAL REIT FUNDS FROM OPERATIONS & REAL ESTATE INVESTMENT (in percent)



We have a positive fundamental outlook for the Residential REITs, as we think multifamily properties are seeing strong gains in tenant demand that will lead to higher rental rates in 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 high single-digit Y/Y in most markets, with coastal markets and high-demand Sunbelt markets experiencing double-digit rate increases for new leases. The total new supply coming into the residential real estate market will likely be moderate in 2022, especially in dense urban markets.

#### RENTAL VACANCIES vs HOME OWNERSHIP RATES





\*Data through Q2.

Source: U.S. Census Bureau.

Top of mind are the housing shortage and affordability for home ownership that make multifamily rental properties attractive, in our view. Most parts of the country are seeing 15%-20% Y/Y increases in new lease rates, while renewal rates have been 8%-12% higher from our observations of the largest metro markets. Residential REITs are likely to be optimistic for Q2 2022, as the pandemic is less disruptive to rental revenue, net operating income, and occupancy levels. We think residential REITs may launch select property developments and will complete developments in progress.

We think demand for rental units may exceed pre-pandemic levels in 2022, given U.S. housing shortage and affordability with record average home selling prices. The pendulum for rent versus buy is moving back strongly in favor of rental properties, as affordability and availability make owning a home extremely expensive today.

Looking ahead to 2022, rental renewal and new lease rates are likely to recover as property owners are less concerned about tenant turnover during strengthening economic conditions. New leases in many markets have already removed one to two free months, and rental rates are moving well above prepandemic levels in most urban markets. We note urban and suburban apartments are in high demand.

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, but high-priced Class A new apartments have solid leasing. We think residential REITs with

high concentrations of properties in Boston, Los Angeles, New York, and Washington D.C. have fully recovered, with young residents coming into the workforce.

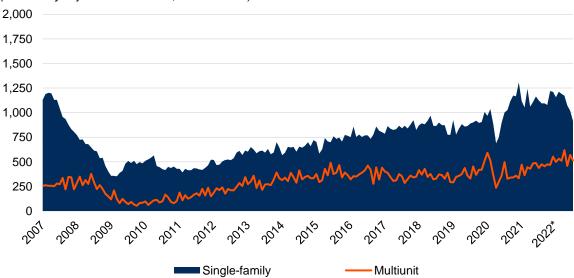
We are positive on leisure rentals of manufactured mobile homes in Sun Belt markets that benefit from baby boomers retiring in large numbers. These homesite communities target retirees from middle-class households, who are a more stable category, and that are not dependent on job employment. Vaccinations are opening up these rental communities.

Another promising area is single-family rental homes that take advantage of families seeking a new lifestyle in the suburbs. Recently, investors were 33% of February existing home sales. Private equity firms and other institutions are increasing their investments in single-family home rental real estate. The property developers target attractive neighborhoods 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 both construction starts and newly issued permits on new multi-family units have returned to more "normal" levels. In June 2022, new multi-family construction starts reached a post-pandemic high of 568,000 units, more than doubling its low in April 2020. The new multi-family units under construction stood at 846,000 as of July 2022, up 0.8% from the previous month and 27.4% from April 2020.

## **SINGLE-FAMILY VS. MULTIUNIT HOUSING STARTS** (seasonally adjusted annual rate, in thousands)

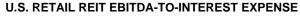


\*Data through July.

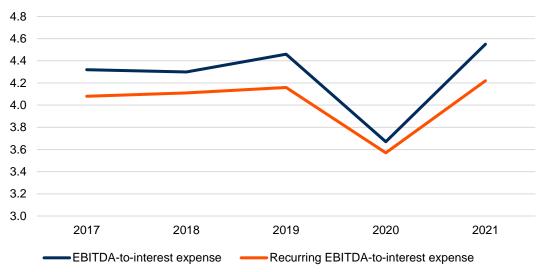
Source: U.S. Department of Commerce.

#### **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, and power centers that feature big-box retailers. Net lease REITs own freestanding properties and structure their leases so that tenants pay both rent and most operating expenses for a property.



(in multiples)



Source: CFRA, S&P Global Market Intelligence.





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

While Retail REITs underperformed the broad equity markets in 2020, the reverse was true in 2021. The Dow Jones U.S. Real Estate Retail Index spiked 55.9%, compared to the S&P Composite 1500 Index's gain of 28.5%. Investors scooped up retail REITs on positive vaccine rollout news, as well as the reopening of many areas and the lifting of restrictions on indoor shopping and dining. With consumer spending elevated, GDP forecasted to remain strong, and interest rates near historic lows, 2022 looked like it would be a continuation of the positive recovery seen in 2021. However, another reversal in share performance has occurred through the first half of 2022 as soaring inflation, rapidly rising interest rates, and growing fears of a recession over the next 6 to 12 months have pushed investors away from this sector. Year-to-date (YTD) through August 30, 2022, the Dow Jones U.S. Real Estate Retail Index was down 15.9% compared to the S&P Composite 1500 index down 15.3%.

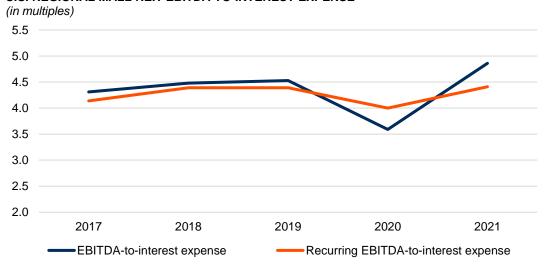
In 2021, store openings outpaced closures for the first time since 2016. Data published by Coresight Research showed that 5,083 store openings were announced by major retailers in 2021, compared to 5,079 closures during the same period. This trend has continued into 2022, with a net positive 3,765 store openings projected through the first quarter, according to Daily on Retail, as retailers took advantage of the strong U.S. consumer and a favorable funding environment. 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 declined 0.3% month-over-month in May 2022, the first decline in five months. 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 the second half of the year, 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 Starting to 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 plans to set up a 30,000 square feet 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 it'd also allow the company to gain more data and insight on real-time shoppers.

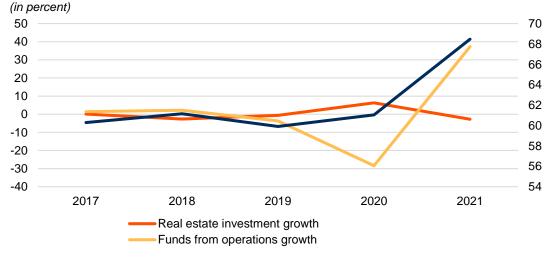
#### Retail REITs - Enclosed Shopping Malls:

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



Source: CFRA, S&P Global Market Intelligence.

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



Source: CFRA, S&P Global Market Intelligence.

#### Coronavirus Drove the Final Nail in the Coffin for Many Shopping Malls

Prior to the outbreak, enclosed shopping malls were already struggling for years. Weaker operators were the first affected but soon spread to the "Class A" operators (see next section below). With the restrictions in place to help stop the spread of the virus, virtually all shopping malls were ordered to close or partially close, leaving their tenants with no choice but to close as well.

Many mall operators allowed tenants to defer a few more months' rent, making it due sometime in mid to late 2021. From an accounting perspective, REITs are required to put these tenants on a cash collection basis if collectability is in doubt rather than continue to account for the full rent on an accrual basis. Nevertheless, it was clear that mall operators faced a massive decline in rent revenue when cash flows were already tight. However, shoppers have largely returned to malls, as evidenced by foot traffic

reaching or even surpassing 2019 levels, while unemployment remains below 4% and consumer spending is high.

The year 2020 did see two publicly traded malls file for bankruptcy – CBL Properties and Pennsylvania Real Estate Investment Trust. Both REITs have continued operations at their respective properties while undergoing restructuring. In 2021, however, only Washington Prime Group filed for Chapter 11 bankruptcy protection. With rising interest rates and a potential recession looming over the next 6 to 12 months, many mall operators may find themselves tested again much sooner than they initially anticipated.

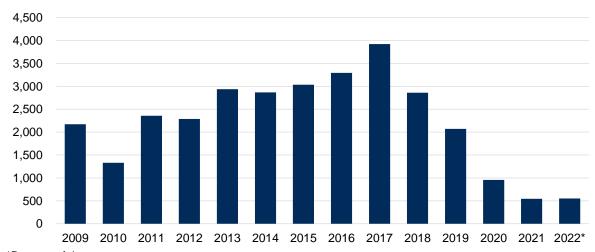
#### Mall Occupancy Gap Widens as Uneven Recovery Continues

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 on a relative basis than 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 inperson 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, we think many major anchor tenants, such as J.C. Penney, Sears, and Macy's, will continue 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**



\*Data as of June.

Source: U.S. Census Bureau.

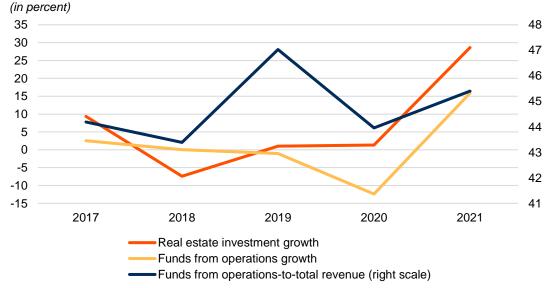
#### **Retail REITs - Shopping Centers:**

#### U.S. STRIP CENTER REIT EBITDA-TO-INTEREST EXPENSE

(in multiples) 4.8 4.6 4.4 4.2 4.0 3.8 3.6 3.4 3.2 3.0 2017 2018 2019 2020 2021 ■EBITDA-to-interest expense Recurring EBITDA-to-interest expense

Source: CFRA, S&P Global Market Intelligence.

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



#### Single Tenant and Grocery Anchored Expected to Fare Better

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 is set to provide a springboard for retailers in this segment amid increasing consumer spending, limited segment development, and overall economic recovery. According to commercial real estate service company JLL Inc., mall foot traffic was only 3.1% below its April 2019 level, and CFRA expects this number to continue improving through 2022.

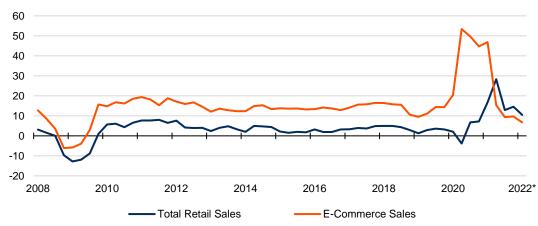
Most single-tenant REITs have a triple net lease structure in which the tenant is solely responsible for all of the costs relating to the property being leased (*e.g.*, real estate taxes, building insurance, maintenance) in addition to the rent. We see REITs with value-oriented tenants, such as off-price 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 14.5% of total U.S. retail sales were conducted online in the first quarter of 2022, according to the U.S. Census Bureau. This gives online retail sales an enormous opportunity to continue to capture retail dollars in our view, 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

\*Preliminary data through Q1. Source: U.S. Census Bureau.

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

	Type of Retailer	Online	Outlook / Rationale
	Gas Stations / Convenience Stores	Sales (%) 0%	One of the few types of stores immune to online sales;
	Restaurants (Quick & Full Service)	0%	longer-term could be affected by fleets of driverless cars.  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.
WO	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.
	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.
ME	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.
MEDIUM	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.
	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.
нен	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.
35	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 pre-pandemic lease occupancies. We have 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? Perhaps when we are all vaccinated or Covid-19 ends.

History suggests office REITs' share prices are sensitive to the economy and employment growth. While both of these metrics declined sharply at the beginning of Covid-19 and remain poised to rebound, we may be entering a new normal as to how companies and their employees want to use office space. Looking ahead to 2022, office real estate is seeing signs of recovering, but the new normal may be very different, with safeguards to protect workers. Delta and Omicron variants are likely to hurt office REIT performance as well.

YTD through August 30, 2022, the Dow Jones U.S. Real Estate Office Index was down 28.8% versus S&P Composite 1500 Index's decline of 15.3%. In comparison, the price performance for office REITs was up 23.4% in 2021 versus the S&P Composite 1500 Index's gain of 28.5%. As of August 17, 2022, S&P Global Market Intelligence indicated office REITs traded at 1.3x P/B and have a TEV/Unlevered FCF of 19.7x compared to U.S. equity REITs trading at a 2.8x P/B and 20.6x TEV/Unlevered FCF multiple.

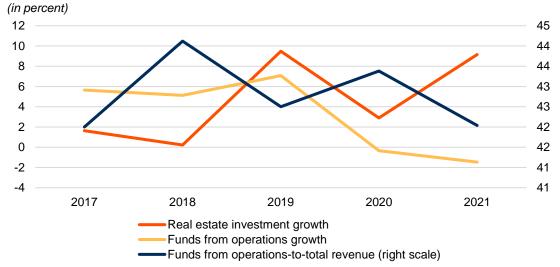
#### **U.S. OFFICE REIT EBITDA-TO-INTEREST EXPENSE**

(in multiples)
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2017 2018 2019 2020 2021

—EBITDA-to-interest expense Recurring EBITDA-to-interest expense

Source: CFRA, S&P Global Market Intelligence.

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



#### New Normal and the Great Resignation Hurt Office Outlook

Employers fear the "Big Resignation" with elevated job movement. We see major risks with a liberated workforce that seeks to work full-time remotely or in a hybrid model that requires one to be in the office one to three days a week. In 2022-2023, we view these work scenarios as negative for office real estate cash flows and office market values. Large urban markets that depend on public trains, subways, and buses may lag 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 revamp the lobby, elevators, office floors, and HVAC systems for Covid-19-compliance.

It will be challenging to get back to pre-pandemic occupancy levels. In H1 2022, physical occupancy among 10 major markets was about 65% and at the 30% level for New York City and San Francisco. The pace of employees returning to offices remains a risk that also affects office real estate transactions.

Currently, there are free rent concessions up to nine months for a seven- to nine-year lease. Both small and large tenants have the pricing power to negotiate lower rental rates, to take less office space, and to receive other incentives. We think this applies to renewing existing leases or signing new leases somewhere else. Tenants are thinking about how much office space is required; we see concentration risk in older office towers and new remote/hybrid policies that thin office workforce.



\*Beginning with Q3 2011, NAR forecasts are generated based on historical data provided by REIS, Inc., and do not correspond with prior historical information from previous forecasts. Source: National Association of Realtors.

Leasing activity in Q1 2022 realized positive net absorption rate totaling 1.6m sq. ft., while leasing activity totaled 45.8m sq. ft., according to CBRE, a leading real estate services firm. The overall vacancy rate fell by 40 bps to 16.8% Q/Q. Downtown office vacancy rose 10 bps to 16.8%, its highest level since 1994. Suburban office vacancy was 16.9%, the narrowest rate in many years.

Office construction has slowed further in Q1 2022 to 89.1m sq. ft. REIT companies plan to invest in select new property developments, as they avoid office acquisitions and seek dispositions of non-core properties. Many office REITs actively prune non-core properties, generally suburban offices with 80% to 90% occupancy rates versus central business district (CBD) markets with mid-90% occupancy.

That said, over the longer term, we still think that urban markets are likely to remain attractive for drawing young talent in financial services, social media, and information technology. The panache of live, work, play in urban markets has been harmed by Covid-19 until the coronavirus is no longer a threat.

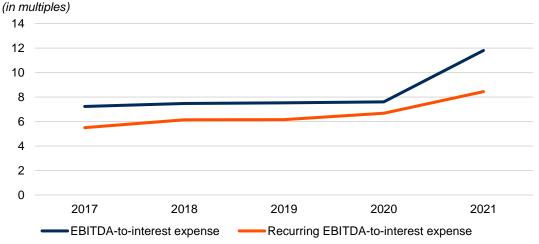
Pandemics tend to reshape life to a new normal that no one knows for sure. Retail tenants in high-rise offices were hurt the worst, and, surprisingly, suburban offices see a comeback with rising occupancies.

#### **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.

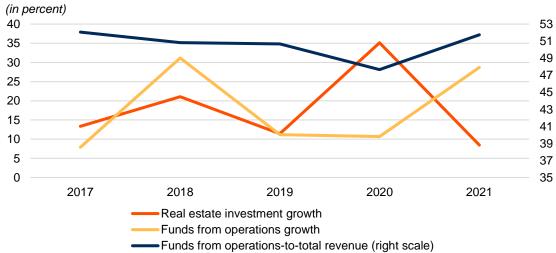
YTD through August 30, 2022, the Dow Jones U.S. Real Estate Industrial Index was down 27.1% versus S&P Composite 1500 Index's decline of 15.3%. In comparison, the price performance for industrial REITs was up 55.2% in 2021 versus the S&P Composite 1500 Index's gain of 28.5%. As of August 17, 2022, S&P Global Market Intelligence indicated industrial REITs traded at 3.0x P/B and have a TEV/Unlevered FCF of 34.7x compared to U.S. equity REITs trading at a 2.8x P/B and 20.6x TEV/Unlevered FCF multiple.

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



Source: CFRA, S&P Global Market Intelligence.

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



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

Robust e-commerce growth over the last decade has been the key driver of growth 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 Q1 2022 increased sequentially, up 2.4% from the previous quarter and 6.6% year-over-year. While e-commerce spending as a percent of retail sales peaked over the pandemic (16.4% in Q2 2020 vs. 14.3% in Q1 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.

Looking ahead, we expect net absorption (demand) to keep pace with new supply through 2022, promoting elevated rental rate growth. Net absorption, a proxy for demand computed by taking the industrial square feet leased during a period and subtracting the square feet that became vacant during that period, has been very strong across U.S. markets over the last few years. In fact, demand (net absorption) has now outpaced new supply growth for five consecutive quarters as of Q1 2022, according to Cushman and Wakefield. While new construction has been increasing steadily during this period, new supply has been hampered by significant supply chain backlogs, labor shortages, and rising materials costs due to high inflation. In our view, each of these issues is likely to persist through year-end 2022.

As a result of this robust demand environment, overall industry vacancy has also decreased to an all-time low of 3.3% in Q1 2022. This is again well below the long-run average vacancy rate of 5.9% over the last 15 years, according to CBRE. These decreasing vacancy rates have come despite average year-over-year rental rate growth that reached an incredible 15.2% in Q1 2022, according to Cushman and Wakefield. This is a major acceleration in rent growth from just 7.8% year-over-year in Q1 2021 and 1.1% in Q1 2020. We expect the tight supply and demand conditions to allow rental rates to remain well above historical levels, although some moderation from 15.2% growth is likely in the second half of 2022 and into 2023.

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 on 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 extremely difficult to start new construction projects. Moreover, residents that live around these areas often put up significant opposition to 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 continue keeping 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 2022 and 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**

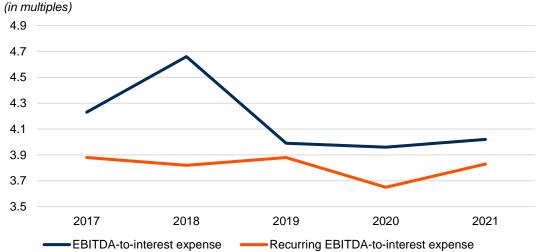
Further industry consolidation is another key theme to watch for over the next 12 months. Industrial REIT M&A activity has been significant over the last year, with multiple significant deals announced. Most recently, on June 6, 2022, Prologis Inc. agreed to acquire Duke Realty Corporation in an all-stock transaction that valued the company at \$26 billion. This acquisition, which is still pending shareholder and regulatory approval, would combine 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. This acquisition is also pending regulatory approval. 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 the 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., genomic and metabolomic technologies).

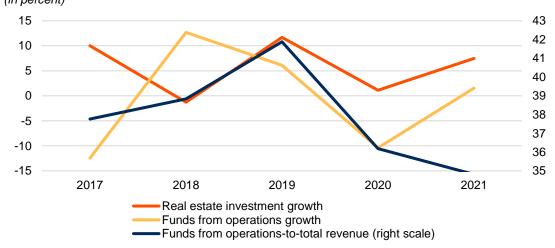
YTD through August 30, 2022, the Dow Jones U.S. Real Estate Health Care Index was down 11.7% versus S&P Composite 1500 Index's decline of 15.3%. In comparison, the price performance for health care REITs was up 16.5% in 2021 versus the S&P Composite 1500 Index's gain of 28.5%. As of August 17, 2022, S&P Global Market Intelligence indicated health care REITs traded at 1.8x P/B and have a TEV/Unlevered FCF of 4.9x compared to U.S. equity REITs trading at a 2.8x P/B and 20.6x TEV/Unlevered FCF multiple.

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



Source: CFRA, S&P Global Market Intelligence.

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



# **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 onto health care REITs, a recovery has since ensued. Life sciences and medical office property types continue to exhibit strong sustained growth, while senior operating housing properties (SHOP) have rebounded from pandemic lows. Our analysis of each subsegment follows:

Senior Housing Benefitting from Higher Vaccination Rates and Positive Demographic Trends
Health care REITs concentrated within senior housing are likely to benefit from higher vaccination
rates and easing Covid-19 variant concerns. However, even with higher vaccination rates (over 91%
of the 65+ population is fully vaccinated), some restrictions will remain in place as facilities operate
with the utmost caution. As a result, industry expenses are likely to remain elevated due to increased
operating costs associated with Covid-19 safety precautions. While we expect labor pressures to
continue easing in 2022, elevated labor costs are likely to remain.

SHOP occupancy should continue rebounding from pandemic lows set in Q1 2021 but will likely fall short of pre-pandemic levels in 2022. However, favorable supply/demand dynamics are emerging. There has been a decrease in new senior housing supply, with 35,340 units under construction in Q4 2021, while slightly higher than Q3 2021, coming off the weakest pace since 2015, according to NIC MAP Data Service. Further, inventory growth in Q1 2022 was the weakest since 2013. This trend is likely to contribute to both higher occupancy and rent growth as demand returns or exceeds pre-Covid-19 levels over the long term.

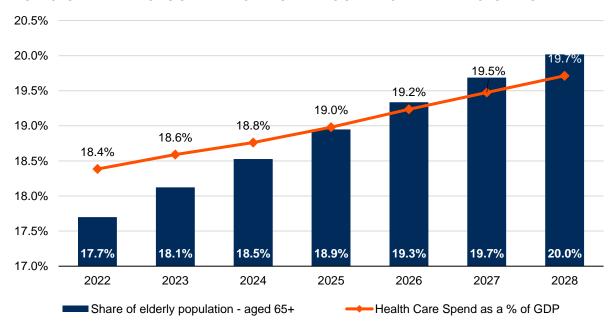
• Medical and Life Sciences Properties Show Strength Through Covid-19 Medical Office properties proved resilient over the pandemic, with rent collections now near 100% and occupancy remaining around pre-Covid-19 levels. Asking rents have continued to increase, and high demand is likely to offset new supply in 2022, contributing to our positive outlook for medical office properties.

Life Sciences may face some headwinds through 2022 as funding likely slows from record 2021 levels, but our outlook remains positive. We expect any slowdown in funding to be minor as interest in drug development, vaccines, and biotechnology remains elevated following the pandemic. Funding reached \$78b in 2021, up from \$70b in 2020 and more than double the \$36b in 2018, according to Cushman & Wakefield. Tenant quality is key when evaluating REITs specializing in life sciences as a tighter funding environment and rising recession risks could put some tenants, especially start-ups, at increased risk of bankruptcy or missed rental payments.

# Long-term Demographic Trends Remain Favorable

Beyond 2022, 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.



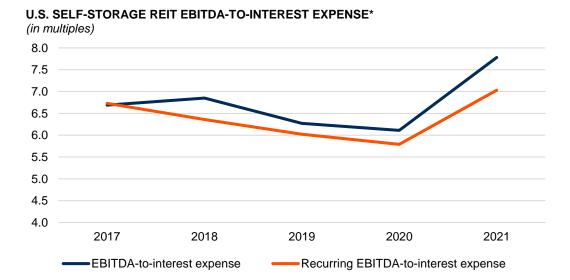


Source: U.S. Census Bureau, Centers for Medicare & Medicaid Services..

# **Self-Storage REITs**

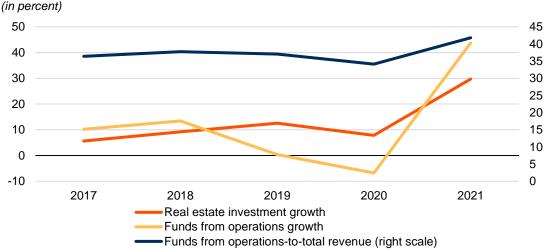
Self-storage REITs own and manage storage facilities and collect rent from customers. Self-storage REITs rent space to both individuals and businesses.

YTD through August 30, 2022, the Dow Jones U.S. Real Estate Self-Storage Index was down 8.5% versus S&P Composite 1500 Index's decline of 15.3%. In comparison, the price performance for self-storage REITs was up 74.9% in 2021 versus the S&P Composite 1500 Index's gain of 28.5%. As of August 17, 2022, S&P Global Market Intelligence indicated self-storage REITs traded at 7.7x P/B and have a TEV/Unlevered FCF of 39.5x compared to U.S. equity REITs trading at a 2.8x P/B and 20.6x TEV/Unlevered FCF multiple.



\*Latest available. Source: CFRA, S&P Global Market Intelligence.

# U.S. SELF-STORAGE REIT FUNDS FROM OPERATIONS & REAL ESTATE INVESTMENT\*



\*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 have 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 20.9%, in line with the Dow Jones Equity All REIT Index's 20.6% drop as of July 13, 2022.

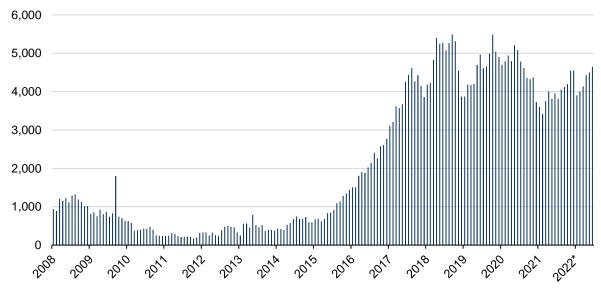
2021 saw exceptional rent growth due to people moving and adapting to changing pandemic lifestyles. A generally strong housing market and increased adoption of flexible working arrangements have all led to an increased demand for storage. The first half of 2022 has seen the self-storage market remain very strong, although rental rate growth has started to decelerate from the rapid growth pace set in 2021. However, through May 2022, industry fundamentals remain strong as properties under construction or in the planning stages of development represent under 10% of existing inventory while street rental rates remained at all-time highs, according to Yardi Matrix. 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 quickly adjust rents, 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 June.

Source: United States Census Bureau.

# **Data Center REITs**

Through August 18, 2022, the FTSE Nareit Equity Data Center Index was down 23.2%, underperforming the S&P Composite 1500 Index, which dropped by 15.3%. Price performance for the Data Center REITs was up 22.7% in 2021 versus the S&P Composite 1500 Index's gain of 28.5%.

### 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 their attractive return on investment. Moving forward, we expect to see additional M&A activity due to the benefits of economies of scale in the industry, while many providers also look to expand operations further internationally.

When Covid-19 hit, there was a large spike in data center usage and traffic as many people were forced to work remotely. Data traffic grew 60% Y/Y at the peak, which has stabilized to around 30% year-over-year growth. 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. However, we believe this trend will likely reverse over the next few years as supply chain delays, labor shortages, and construction delays ease.

Data center customers remained very healthy throughout the pandemic, and we do not expect many requests for payment relief through year-end 2022.

# 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. Having efficient cooling options can be a strong competitive differentiator in a given market.

Datacenter 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 adjusts 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. YTD through August 30, 2022, the FTSE Nareit Infrastructure REITs Index was down 15.5%, in line with the S&P Composite 1500 Index's decline of 15.3%. Price performance for the Infrastructure REITs was up 34.7% in 2021 versus the S&P Composite 1500 Index's gain of 28.5%.

# 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 to accelerate in 2022 by deploying small cells and new macro antennas to support the network. In addition, 5G networks will 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 years to come.

# **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.

# State and Federal Governments Mulling Single-Family Rental (SFR) Regulations

Part of the reason homeownership in the U.S. has been made harder to achieve was because of institutional buyers. These businesses tend to snap up large quantities of foreclosed properties 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.

Legislation was introduced in July 2022 to clamp down specifically on SFR Operators such as Invitation Homes, American Homes 4 Rent, Tricon Residential, Progress Residential, and FirstKey Homes. According to Washington Analysis, a CFRA business, this marks another milestone in the growing scrutiny of the sector but does not change their view that federal policymakers lack a viable near-term path to meaningfully restrict or upend current business practices and models. The bill intends to cap rent increases on most single- and multi-family rental units at CPI or 5% annually, whichever is lower. Despite its obvious benefits, Washington Analysis thinks the bill has near-zero odds of enactment for at least the next 2-3 years and believes federal policymakers lack a viable path to restrict or upend the sector meaningfully.

# **M&A Environment**

In 2021, there were 14 mergers and acquisitions (M&A) involving U.S. REITs with transaction sizes over \$500 million totaling \$102.3 billion were announced, representing a 433% increase over the \$23.6 billion in deal value of the 15 transactions announced in 2020, according to S&P Global Market Intelligence. The 2021 M&A deal total was boosted by a wave of deals involving non-traded REITs. YTD through August 23, 2022, a total of 12 deals worth \$84.3 billion were announced, of which seven deals worth \$46.5 billion have been transacted.

The largest completed deal YTD through August 2022 was the \$13.3 billion acquisition of American Campus Communities (ACC) by Blackstone REIT. ACC is the largest owner, developer, and manager of student housing communities in the U.S., with a portfolio of 166 properties in 71 leading universities, including the University of California-Berkeley, University of Texas, and Arizona State University, among others. In this all-cash acquisition, Blackstone will acquire all of ACC's equity and assume all of its debts in a bet that rents will continue to increase as students gradually return to campus.

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.

On the other hand, the largest announced deal was Prologis' bid to acquire Duke Realty. Duke Realty is an industrial REIT with a portfolio of over 150 million sq ft across 20 of the largest logistics markets in the U.S. The company has an outstanding development pipeline of 11.4 million square feet totaling \$1.6 billion as of Q1 2022. On June 13, 2022, Prologis agreed to acquire Duke Realty in an all-stock deal worth \$26 billion, or \$55.69 per share, subject to regulatory approvals. We have a favorable view on the acquisition for PLD as we believe it enhances PLD's portfolio through DRE's young (average building age of 13 years) and modern industrial assets (average size of over 200k sq. ft.). The transaction furthers PLD's concentration within core Tier 1 markets, such as Southern California (Inland Empire), New Jersey, and Chicago, where DRE's portfolio is heavily concentrated (69% of NOI from Tier 1 markets).

II C DEIT MOAD	EALS ANNOUNG	CED FROM 2021 THROUGH	ALICHET 22 2022*		
(arranged by statu			AUGUS1 23, 2022"		
DEAL STATUS	ANNOUNCE- MENT DATE	ACQUIRER	TARGET	PROPERTY FOCUS	TRANSACTION VALUE (\$, in millions)
Announced	8/11/22	Safehold	iStar Inc.	Diversified REIT	1,776
Announced	5/31/22	PotlatchDeltic	CatchMark Timber Trust	Specialty REIT	910
Announced	5/10/22	Prologis	Duke Realty	Industrial REIT	25,425
Announced	5/6/22	Brookfield Asset Management	Watermark Lodging Trust	Hotel REIT	3,666
Announced	1/31/22	Land & Buildings Investment Management	LXP Industrial Trust	Industrial REIT	6,041
Announced	12/20/21	Blackstone Real Estate Income Trust	Bluerock Residential Growth REIT	Residential REIT	3,201
Announced	7/12/21	Starwood Real Estate Income Trust	Monmouth Real Estate Investment Corporation	Industrial REIT	3,432
Completed	4/25/22	Blackstone Inc.; Blackstone Real Estate Partners IX	PS Business Parks	Diversified REIT	7,528
Completed	4/19/22	Blackstone Real Estate Income Trust	American Campus Communities	Residential REIT	13,294
Completed	2/28/22	W. P. Carey	Corporate Property Associates 18	Diversified REIT	2,947
Completed	2/28/22	Healthcare Trust of America	Healthcare Realty Trust	Healthcare REIT	10,059
Completed	2/17/22	Ares Management	Capital Automotive	Retail REIT	3,800
Completed	2/16/22	Blackstone Real Estate Income Trust	Preferred Apartment Communities	Residential REIT	5,331
Completed	1/24/22	Blackstone Real Estate Income Trust	Resource REIT	Residential REIT	3,541
Completed	11/15/21	American Tower Investments	CoreSite Realty	Specialty REIT	10,281
Completed	11/15/21	KKR & Co.; Global Infrastructure Partners Cerberus Capital	CyrusOne	Specialty REIT	15,239
Completed	11/8/21	Management; Highgate Hotels	CorePoint Lodging	Hotel REIT	1,343
Completed	11/5/21	Industrial Logistics Properties Trust	Monmouth Real Estate Investment Corporation	Industrial REIT	3,711
Completed	9/7/21	Pacific Investment	Columbia Property Trust	Office REIT	3,600
Completed	8/4/21	Management Company VICI Properties	MGM Growth Properties	Hotel REIT	18,074
Completed	7/26/21	Independence Realty Trust	Steadfast Apartment REIT	Residential REIT	4,495
Completed	7/19/21	Kite Realty Group Trust	Retail Properties of America	Retail REIT	4,601
Completed	6/28/21	Ventas Blackstone REIT.;	New Senior Investment Group	Healthcare REIT	2,249
Completed	6/7/21	Blackstone Infrastructure Partners	QTS Realty Trust	Specialty REIT	8,486
Completed	4/29/21	Realty Income	VEREIT	Diversified REIT	17,515
Completed	4/15/21	Kimco Realty	Weingarten Realty Investors	Retail REIT	6,133

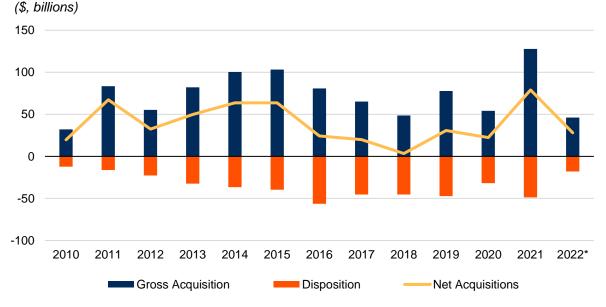
\*Transaction size over \$500 million.

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

# **Real Estate Acquisition and Disposition Outlook**

The U.S. real estate market slowed considerably in 2020, with significantly reduced acquisitions and dispositions. In 2021, net acquisitions rose by more than two-fold, mainly due to a low base and a surge in gross acquisitions. Despite the 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 are likely to 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



<sup>\*</sup>Data through Q2.

45

Source: Nareit, S&P Global Market Intelligence.

Asset dispositions have been a key source of capital for REITs, particularly office REITs, which have been more likely to sell than buy in a robust transaction market with elevated pricing, but we expect that to change in 2022. An increasing number of private equity (PE) 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**

# 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 REITs 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 allows them to charge higher rents than generic properties.

# HOW TO VALUE A COMPANY IN THIS INDUSTRY

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 multifamily housing are available. The single-family figures provide an indication of the outlook for competition from homes for sale, while statistics on multifamily 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 real estate investment trust (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 cyclicality.

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 undepreciated 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:

**GAAP Net Income** 

- (+) Depreciation and Amortization
- (-) (Gains)/Losses on Sales of Property
- =Funds from Operations (FFO)



**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**

**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

### **PERIODICALS**

#### REITWatch

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

### MarketBeat Report

cushmanwakefield.com/en/research-and-insight Statistical report on the industrial real estate market by Cushman & Wakefield.

### U.S. Office Market Outlook Report

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 Market research on the U.S. office market by the CBRE Group, Inc.

### TRADE ASSOCIATIONS

# National Association of Real Estate Investment Trusts (NAREIT)

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)

bea.gov

BEA produces and disseminates statistics that provide a comprehensive, up-to-date picture of U.S. economic activity.

# U.S. Bureau of Labor Statistics (BLS)

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 (DOC)**

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

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

Provides integrated commercial real estate services.

### **Colliers International**

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

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

Global private commercial real estate services company that provides reports and statistics on the real estate market.

# JLL Inc.

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

Marcus & Millichap 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)

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.

### 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.

# SNL Real Estate-S&P Capital IQ Pro

spglobal.com/marketintelligence/en/campaigns/realestate

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

### Yardi Matrix

yardimatrix.com

Yardi Matrix researches and reports on multifamily, student housing, office, industrial, and self-storage properties across the U.S.

# **ONLINE RESOURCES**

### Placer Labs, Inc.

Placer.ai

Placer.ai offers a traffic analytics platform that allows anyone to generate insights into any property.

# **COMPARATIVE COMPANY ANALYSIS**

									Ope	rating Re	venues								
			_				Million \$				(	AGR(%	h)		Index	Basis	(2011	=100)	
	Ticker	Company	Yr. End	2021	2020	2019	2018	2017	2016	2015	10-Yr.	5-Yr.	1-Yr.	2021	2020	2019	2018	2017	2016
	DIVERSIFIED	REITS																	
NYSE:STOR	STOR	STORE CAPITAL CORPORATION	DEC	783.8	693.3	659.2	540.8	452.8	376.3	284.8	61.2	15.8	13.1	275	243	232	190	159	132
NY SE:PSB	PSB																		
NYSE:EPRT	EPRT	ESSENTIAL PROPERTIES REALTY TRUST, INC.	DEC	229.0	164.0	139.4	96.2	54.4	20.7	20.7	NA	61.7	39.6	1107	793	673	465	263	100
NYSE:AAT	AAT	§ AMERICAN ASSETS TRUST, INC.	DEC	373.0	342.1	362.6	326.5	310.5	290.6	271.2	6.5	5.1	9.0	138	126	134	120	114	107
NYSE:WRE	WRE	WASHINGTON REAL ESTATE INVESTMENT TRUST	DEC	169.2	176.0	176.7	291.7	280.3	313.3	306.4	(3.2)	(11.6)	(3.9)	55	57	58	95	91	102
	HEALTH CAF	REREITS																	
NYSE:WELL	WELL	[] WELLTOWER INC.	DEC	4,742.1	4,606.0	5,121.3	4,700.5	4,316.6	4,281.2	3,859.8	13.7	2.1	3.0	123	119	133	122	112	111
NYSE:VTR	VTR	[] VENTAS, INC.	DEC	3,818.2	3,800.3	3,859.3	3,701.6	3,567.6	3,447.0	3,283.9	8.2	2.1	0.5	116	116	118	113	109	105
NYSE:PEAK	PEAK	[] HEALTHPEAK PROPERTIES, INC.	DEC	1,896.2	1,644.9	1,240.3	1,191.3	1,848.4	2,129.3	1,940.5	1.1	(2.3)	15.3	98	85	64	61	95	110
NYSE:MPW	MPW	† MEDICAL PROPERTIES TRUST, INC.	DEC	1,573.2	1,269.7	870.2	798.7	714.8	541.1	444.7	28.1	23.8	23.9	354	285	196	180	161	122
NYSE:OHI	OHI	† OMEGA HEALTHCARE INVESTORS, INC.	DEC	1,062.8	892.4	928.8	881.7	908.4	900.8	743.6	13.8	3.4	19.1	143	120	125	119	122	121
	HOTEL AND	RESORT REITS																	
NasdaqGS:HST	HST	[] HOST HOTELS & RESORTS, INC.	DEC	2,921.0	1,590.0	5,483.0	5,554.0	5,417.0	5,451.0	5,426.0	(4.7)	(11.7)	83.7	54	29	101	102	100	100
NYSE:PK	PK	PARK HOTELS & RESORTS INC.	DEC	1,355.0	830.0	2,830.0	2,730.0	2,831.0	2,747.0	2,710.0	NA	(13.2)	63.3	50	31	104	101	104	101
NYSE:PEB	PEB	PEBBLEBROOK HOTEL TRUST	DEC	733.0	442.9	1,612.2	828.7	769.3	814.2	777.1	9.7	(2.1)	65.5	94	57	207	107	99	105
NYSE:XHR	XHR	XENIA HOTELS & RESORTS, INC.	DEC	616.2	369.8	1,149.1	1,058.2	945.3	950.2	976.1	7.3	(8.3)	66.6	63	38	118	108	97	97
NYSE:DRH	DRH	§ DIAMONDROCK HOSPITALITY COMPANY	DEC	567.1	299.5	938.1	863.7	870.0	896.6	931.0	(0.6)	(8.8)	89.4	61	32	101	93	93	96
	INDUSTRIAL	REITS																	
NYSE:PLD	PLD	[] PROLOGIS, INC.	DEC	5,163.7	4,736.1	3,530.8	3,102.7	2,866.7	2,739.4	2,356.3	13.3	13.5	9.0	219	201	150	132	122	116
NYSE:DRE	DRE	[] DUKE REALTY CORPORATION	DEC	1,118.6	1,004.3	983.9	957.2	790.3	746.3	805.0	(0.8)	8.4	11.4	139	125	122	119	98	93
NYSE:REXR	REXR	REXFORD INDUSTRIAL REALTY, INC.	DEC	452.2	330.1	267.2	212.5	161.4	125.7	94.0	32.1	29.2	37.0	481	351	284	226	172	134
NYSE:EGP	EGP	§ EASTGROUP PROPERTIES, INC.	DEC	409.5	363.0	330.8	299.0	274.2	253.0	235.0	9.0	10.1	12.8	174	154	141	127	117	108
NYSE:FR	FR	† FIRST INDUSTRIAL REALTY TRUST, INC.	DEC	476.1	447.8	425.5	403.7	396.4	378.0	365.8	4.6	4.7	6.3	130	122	116	110	108	103
	OFFICE REITS	s																	
NYSE:ARE	ARE	[] ALEXANDRIA REAL ESTATE EQUITIES, INC.	DEC	2,126.4	1,893.8	1,541.4	1,335.0	1,129.4	921.5	845.1	14.8	18.2	12.3	252	224	182	158	134	109
NYSE:BXP	BXP	[] BOSTON PROPERTIES, INC.	DEC	2,865.9	2,737.8	2,974.6	2,715.6	2,620.5	2,560.7	2,512.9	4.7	2.3	4.7	114	109	118	108	104	102
NYSE:VNO	VNO	[] VORNADO REALTY TRUST	DEC	1,705.2	1,612.2	2,003.6	2,172.9	2,096.0	2,177.9	1,967.0	(4.9)	(4.8)	5.8	87	82	102	110	107	111
NYSE:KRC	KRC	† KILROY REALTY CORPORATION	DEC	955.0	898.4	837.5	747.3	719.0	637.6	581.3	11.9	8.4	6.3	164	155	144	129	124	110
NYSE:CUZ	CUZ	† COUSINS PROPERTIES INCORPORATED	DEC	761.9	748.4	670.2	487.4	513.3	269.8	210.4	20.5	23.1	1.8	362	356	319	232	244	128

### **Operating Revenues**

Million Ticker Company Yr. End 2021 2020 2019 201 RESIDENTIAL REITS	on \$ 2018	CAGR(%) 10-Yr. 5-Yr. 1-Yr.	Index Basis (2011=100)
	2018 2017 2016 2015	10-Yr. 5-Yr. 1-Yr.	
DECIDENTIAL DEITE			2021 2020 2019 2018 2017 2016
VESIDEALINE VELLS			
NYSE:AVB AVB [] AVALONBAY COMMUNITIES, INC. DEC 2,310.1 2,302.5 2,327.5 2,289	89.2 2,189.3 2,052.1 1,895.4	9.8 2.4 0.3	122 121 123 121 116 108
NYSE:EQR	77.7 2,471.4 2,425.8 2,745.0	4.9 0.3 (4.2)	90 94 98 94 90 88
NYSE:MAA MAA [] MID-AMERICA APARTMENT COMMUNITIES, INC. DEC 1,778.1 1,678.0 1,641.0 1,571	71.3 1,529.0 1,125.3 1,042.8	15.8 9.6 6.0	171 161 157 151 147 108
NYSE:ESS	85.5 1,450.3 1,329.7 1,216.3	12.8 3.1 (0.6)	128 128 130 122 119 109
NYSEUDR UDR [] UDR, INC. DEC 1,305.4 1,260.0 1,290.1 1,041	41.8 1,027.0 964.4 897.6	7.8 6.2 3.6	145 140 144 116 114 107
RETAIL REITS			
NYSE:SPG	45.3 5,527.3 5,435.2 5,257.8	1.7 (1.2) 11.1	97 88 108 107 105 103
NYSE:O O [] REALTY INCOME CORPORATION DEC 2,081.6 1,647.1 1,488.2 1,327	27.8 1,215.8 1,103.2 1,023.3	17.6 13.5 26.4	203 161 145 130 119 108
NYSE:KIM KIM [] KIMCO REALTY CORPORATION DEC 1,364.6 1,057.9 1,158.9 1,164	64.8 1,200.8 1,170.8 1,166.8	5.2 3.1 29.0	117 91 99 100 103 100
NasdaqGS:REG REG [] REGENCY CENTERS CORPORATION DEC 1,203.9 1,047.9 1,164.7 1,160	60.3 1,021.1 645.9 591.2	9.6 13.3 14.9	204 177 197 196 173 109
NYSE:FRT FRT FEDERAL REALTY INVESTMENT TRUST DEC 952.5 827.4 933.8 912	12.0 856.9 801.6 745.4	5.6 3.5 15.1	128 111 125 122 115 108
SPECIALIZED REITS			
NYSE:AMT AMT [] AMERICAN TOWER CORPORATION DEC 9,356.9 8,041.5 7,580.3 7,440	40.1 6,663.9 5,785.7 4,771.5	14.4 10.1 16.4	196 169 159 156 140 121
NYSE:CCI CCI [] CROWN CASTLE INC. DEC 6,340.0 5,840.0 5,763.0 5,370	70.0 4,255.0 3,921.0 3,663.9	12.0 10.1 8.6	173 159 157 147 116 107
NYSE:PSA PSA [] PUBLIC STORAGE DEC 3,498.9 2,984.3 2,924.7 2,825	25.3 2,744.2 2,614.2 2,418.8	6.9 6.0 17.2	145 123 121 117 113 108
NasdagGS:EQIX	02.3 4,347.6 3,612.0 2,725.9	14.9 11.6 11.3	230 206 189 187 159 133
NYSEDLR DLR [] DIGITAL REALTY TRUST, INC. DEC 4,426.2 3,846.0 3,217.3 3,079	79.5 2,483.4 2,159.3 1,778.8	15.3 15.4 15.1	249 216 181 173 140 121

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		-				Million \$				(	CAGR(%	<b>5</b> )		Ind	ex Basis	(2011=10	00)	
Ticker	Company	Yr. End	2021	2020	2019	2018	2017	2016	2015	10-Yr.	5-Yr.	1-Yr.	2021	2020	2019	2018	2017	2016
DIVERSIFI	ED REITS																	
STOR	STORE CAPITAL CORPORATION	DEC	268.3	212.6	285.0	217.0	162.0	123.3	83.8	NA	16.8	26.2	320	254	340	259	193	147
PSB																		
EPRT	ESSENTIAL PROPERTIES REALTY TRUST, INC.	DEC	95.7	42.3	41.8	15.6	6.3	5.0	5.0	NA	80.5	126.4	1,915	845	837	312	126	100
AAT	§ AMERICAN ASSETS TRUST, INC.	DEC	28.4	27.7	45.7	19.7	29.1	32.6	38.5	3.6	(2.7)	2.6	74	72	119	51	76	85
WRE	WASHINGTON REAL ESTATE INVESTMENT TRUST	DEC	16.4	(15.7)	383.6	25.6	19.7	119.3	89.7	(16.9)	(32.8)	NM	18	(17)	427	29	22	133
HEALTH C	ARE REITS																	
WELL	[] WELLTOWER INC.	DEC	336.1	978.8	1,232.4	805.0	522.8	1,077.8	883.8	4.4	(20.8)	(65.7)	38	111	139	91	59	122
VTR	[] VENTAS, INC.	DEC	49.0	439.1	433.0	409.5	1,356.5	649.2	417.8	(18.2)	(40.4)	(88.8)	12	105	104	98	325	155
PEAK	[] HEALTHPEAK PROPERTIES, INC.	DEC	505.5	413.6	45.5	1,061.1	414.2	627.7	(559.2)	(0.6)	(4.2)	22.2	(90)	(74)	(8)	(190)	(74)	(112)
MPW	† MEDICAL PROPERTIES TRUST, INC.	DEC	656.0	431.5	374.7	1,016.7	289.8	225.0	139.6	37.8	23.9	52.1	470	309	268	728	208	161
OHI	† OMEGA HEALTHCARE INVESTORS, INC.	DEC	416.7	159.3	341.1	281.6	100.4	366.4	224.5	23.0	2.6	161.6	186	71	152	125	45	163
HOTEL AN	D RESORT REITS																	
HST	[] HOST HOTELS & RESORTS, INC.	DEC	(11.0)	(732.0)	920.0	1,087.0	564.0	762.0	558.0	(3.1)	NM	(98.5)	(2)	(131)	165	195	101	137
PK	PARK HOTELS & RESORTS INC.	DEC	(459.0)	(1,440.0)	306.0	472.0	2,625.0	133.0	292.0	NA	NM	(68.1)	(157)	(493)	105	162	899	46
PEB	PEBBLEBROOK HOTEL TRUST	DEC	(184.9)	(391.7)	115.4	13.4	99.9	73.7	94.7	NA	NM	(52.8)	(195)	(414)	122	14	106	78
XHR	XENIA HOTELS & RESORTS, INC.	DEC	(143.5)	(163.3)	55.4	193.7	98.9	85.9	88.8	2.3	NM	(12.1)	(162)	(184)	62	218	111	97
DRH	§ DIAMONDROCK HOSPITALITY COMPANY	DEC	(194.6)	(394.4)	183.5	87.8	91.9	114.8	85.6	38.2	NM	(50.7)	(227)	(461)	214	103	107	134
INDUSTRIA	AL REITS																	
PLD	[] PROLOGIS, INC.	DEC	2,939.7	1,481.8	1,573.0	1,649.4	1,652.3	1,209.9	869.4	NA	19.4	98.4	338	170	181	190	190	139
DRE	[] DUKE REALTY CORPORATION	DEC	852.9	299.9	429.0	383.7	1,634.4	312.1	615.3	24.5	22.3	184.4	139	49	70	62	266	51
REXR	REXFORD INDUSTRIAL REALTY, INC.	DEC	128.2	76.4	62.0	46.2	40.7	25.1	1.9	NA	38.5	67.8	6,843	4,077	3,307	2,466	2,172	1,341
EGP	§ EASTGROUP PROPERTIES, INC.	DEC	157.6	108.4	121.7	88.5	83.2	95.5	47.9	21.6	10.5	45.4	329	226	254	185	174	200
FR	† FIRST INDUSTRIAL REALTY TRUST, INC.	DEC	271.0	196.0	238.8	163.2	201.5	121.2	73.8	NA	17.5	38.3	367	266	324	221	273	164
OFFICE RE	ITS																	
ARE	[] ALEXANDRIA REAL ESTATE EQUITIES, INC.	DEC	571.2	771.0	363.2	379.3	169.1	(65.9)	144.2	15.8	NM	(25.9)	396	535	252	263	117	(46)
BXP	[] BOSTON PROPERTIES, INC.	DEC	505.2	872.7	521.5	582.8	462.4	512.8	583.1	6.4	(0.3)	(42.1)	87	150	89	100	79	88
VNO	[] VORNADO REALTY TRUST	DEC	176.0	(297.0)	3,147.9	450.0	227.4	906.9	760.4	(12.4)	(28.0)	NM	23	(39)	414	59	30	119
KRC	† KILROY REALTY CORPORATION	DEC	628.1	187.1	195.4	258.4	164.6	293.8	234.1	26.4	16.4	235.7	268	80	83	110	70	126
CUZ	† COUSINS PROPERTIES INCORPORATED	DEC	278.6	237.3	150.4	79.2	216.3	79.1	125.5	NA	28.6	17.4	222	189	120	63	172	63

#### Net Income

						Million \$					CAGR(%	b)		Inde	x Basis	(2011=10	0)	
Ticker	Company	Yr. End	2021	2020	2019	2018	2017	2016	2015	10-Yr.	5-Yr.	1-Yr.	2021	2019	2018	2017	2016	2015
RESIDENTI	AL REITS																	
AVB	[] AVALONBAY COMMUNITIES, INC.	DEC	1,004.3	827.6	786.0	974.5	876.9	1,034.0	742.0	8.6	(0.6)	21.3	135	112	106	131	118	139
EQR	[] EQUITY RESIDENTIAL	DEC	1,332.9	913.6	970.4	657.5	603.5	4,292.2	870.1	4.1	(20.9)	45.9	153	105	112	76	69	493
MAA	[] MID-AMERICA APARTMENT COMMUNITIES, INC.	DEC	533.8	255.0	353.8	222.9	328.4	212.2	332.3	27.0	20.3	109.4	161	77	106	67	99	64
ESS	[] ESSEX PROPERTY TRUST, INC.	DEC	488.6	568.9	439.3	390.2	433.1	415.0	232.1	26.4	3.3	(14.1)	210	245	189	168	187	179
UDR	[] UDR, INC.	DEC	150.0	64.3	185.0	203.1	121.6	292.7	340.4	22.3	(12.5)	133.4	44	19	54	60	36	86
RETAIL RE	<b>і</b> т																	
SPG	[] SIMON PROPERTY GROUP, INC.	DEC	2,249.6	1,112.6	2,101.6	2,440.1	1,948.0	1,838.9	1,827.7	8.2	4.1	102.2	123	61	115	134	107	101
0	[] REALTY INCOME CORPORATION	DEC	359.5	395.5	436.5	363.6	318.8	315.6	283.8	8.6	2.6	(9.1)	127	139	154	128	112	111
KIM	[] KIMCO REALTY CORPORATION	DEC	844.1	1,000.8	410.6	497.8	426.1	378.9	894.1	17.4	17.4	(15.7)	94	112	46	56	48	42
REG	[] REGENCY CENTERS CORPORATION	DEC	361.4	44.9	239.4	249.1	176.1	164.9	150.1	21.5	17.0	705.1	241	30	160	166	117	110
FRT	FEDERAL REALTY INVESTMENT TRUST	DEC	261.5	131.7	353.9	241.9	289.9	249.9	210.2	6.2	0.9	98.5	124	63	168	115	138	119
SPECIALIZ	ED REITS																	
AMT	[] AMERICAN TOWER CORPORATION	DEC	2,567.7	1,690.6	1,887.8	1,236.4	1,238.9	956.4	685.1	20.5	21.8	51.9	375	247	276	180	181	140
CCI	[] CROWN CASTLE INC.	DEC	1.096.0	1,056.0	860.0	622.0	366.0	357.0	1,521.0	20.4	25.1	3.8	72	69	57	41	24	23
PSA	[] PUBLIC STORAGE	DEC	1,953.3	1,357.2	1,520.5	1,711.0	1,442.2	1,453.6	1,311.2	9.0	6.1	43.9	149	104	116	130	110	111
EQIX	[] EQUINIX, INC.	DEC	500.2	369.8	507.5	365.4	233.0	126.8	187.8	18.1	31.6	35.3	266	197	270	195	124	68
DLR	[] DIGITAL REALTY TRUST, INC.	DEC	1,709.3	356.4	579.8	331.2	248.3	426.2	296.7	27.0	32.0	379.6	576	120	195	112	84	144

				Return	n on Re	evenue	es (%)			Retu	n on	Assets	(%)			Retu	ırn on	Equity	(%)	
Ticker	Company	Yr. End	2021	2020	2019	2018	2017	2016	2021	2020	2019	2018	2017	2016	2021	2020	2019	2018	2017	2016
DIVERSIFIE	ED REITS																			
STOR	STORE CAPITAL CORPORATION	DEC	34.2	30.7	43.2	40.1	35.8	32.8	2.7	2.4	3.4	3.0	2.7	2.5	5.3	4.5	6.8	6.2	5.7	5.4
PSB																				
EPRT	ESSENTIAL PROPERTIES REALTY TRUST, INC.	DEC	41.8	25.8	30.0	16.2	11.6	24.2	2.9	1.7	2.1	1.1	0.7	1.1	5.3	3.1	4.8	4.2	3.5	0.0
AAT	§ AMERICAN ASSETS TRUST, INC.	DEC	7.6	8.1	12.6	6.0	9.4	11.2	0.9	1.0	1.6	0.9	1.3	1.6	3.0	2.8	5.7	3.3	4.8	5.5
WRE	WASHINGTON REAL ESTATE INVESTMENT TRUST	DEC	9.7	NM	217.0	8.8	7.0	38.1	0.9	NM	14.6	1.1	8.0	5.3	NM	NM	NM	0.1	NM	12.6
HEALTH C	ARE REITS																			
WELL	[] WELLTOWER INC.	DEC	7.1	21.3	24.1	17.1	12.1	25.2	1.0	3.0	3.7	2.7	1.9	3.7	2.1	6.1	8.1	5.3	3.5	7.0
VTR	[] VENTAS, INC.	DEC	1.3	11.6	11.2	11.1	38.0	18.8	0.2	1.8	1.8	1.8	5.7	2.8	0.5	4.1	4.1	3.9	12.5	6.3
PEAK	[] HEALTHPEAK PROPERTIES, INC.	DEC	26.7	25.1	3.7	89.1	22.4	29.5	3.3	2.6	0.3	8.3	2.9	4.0	1.9	2.3	2.7	13.8	7.3	4.8
MPW	† MEDICAL PROPERTIES TRUST. INC.	DEC	41.7	34.0	43.1	127.3	40.5	41.6	3.2	2.6	2.6	11.5	3.2	3.5	8.3	6.0	6.5	24.3	8.2	8.4
OHI	† OMEGA HEALTHCARE INVESTORS, INC.	DEC	39.2	17.9	36.7	31.9	11.1	40.7	4.3	1.7	3.5	3.3	1.1	4.1	10.5	3.9	8.7	7.7	2.6	9.2
O		520	00.2		00	00				•••	0.0	0.0			10.0	0.0	0	• • • •	2.0	0.2
HOTEL AN	D RESORT REITS																			
HST	[] HOST HOTELS & RESORTS, INC.	DEC	NM	NM	16.8	19.6	10.4	14.0	NM	NM	7.5	9.0	4.8	6.7	NM	NM	12.3	15.5	7.9	10.7
PK	PARK HOTELS & RESORTS INC.	DEC	NM	NM	10.8	17.3	92.7	4.8	NM	NM	2.7	5.0	27.0	1.4	NM	NM	5.3	8.3	53.8	4.2
PEB	PEBBLEBROOK HOTEL TRUST	DEC	NM	NM	7.2	1.6	13.0	9.1	NM	NM	1.8	0.2	3.9	2.6	NM	NM	3.1	0.5	6.4	4.4
XHR	XENIA HOTELS & RESORTS, INC.	DEC	NM	NM	4.8	18.3	10.5	9.0	NM	NM	1.7	6.1	3.2	3.0	NM	NM	3.2	11.4	6.1	5.1
DRH	§ DIAMONDROCK HOSPITALITY COMPANY	DEC	NM	NM	19.6	10.2	10.6	12.8	NM	NM	5.4	2.7	3.0	3.8	NM	NM	9.7	4.7	5.0	6.3
INDUSTRIA	IL REITS																			
PLD	[] PROLOGIS, INC.	DEC	56.9	31.3	44.5	53.2	57.6	44.2	5.0	2.6	3.9	4.3	5.6	4.0	8.5	5.2	6.6	8.2	9.5	7.0
DRE	DUKE REALTY CORPORATION	DEC	76.2	29.9	43.6	40.1	206.8	41.8	8.2	3.3	5.1	4.9	22.1	4.6	15.2	5.9	8.8	8.3	7.2	8.9
REXR	REXFORD INDUSTRIAL REALTY, INC.	DEC	28.4	23.1	23.2	21.7	25.2	20.0	1.9	1.5	1.7	1.7	1.9	1.7	3.2	2.6	2.8	2.9	3.6	3.1
EGP	§ EASTGROUP PROPERTIES, INC.	DEC	38.5	29.9	36.8	29.6	30.3	37.7	4.9	4.0	4.8	4.2	4.3	5.2	11.1	8.8	11.7	10.7	12.0	16.0
FR	† FIRST INDUSTRIAL REALTY TRUST, INC.	DEC	56.9	43.8	56.1	40.4	50.8	32.1	6.5	5.2	6.8	5.2	6.8	4.3	13.2	10.7	14.0	10.6	15.1	10.5
OFFICE RE	TE .								I						1					
ARE	[] ALEXANDRIA REAL ESTATE EQUITIES, INC.	DEC	26.9	40.7	23.6	28.4	15.0	NM	1.9	3.4	2.0	2.6	1.4	NM	4.0	7.0	4.5	5.6	3.3	NM
BXP	[] BOSTON PROPERTIES, INC.	DEC	17.6	31.9	17.5	21.5	17.6	20.0	2.3	3.8	2.5	2.9	2.4	2.7	7.7	12.5	8.0	8.7	7.0	7.2
VNO	VORNADO REALTY TRUST	DEC	10.3		157.1	20.7	10.8	41.6	1.0	NM	17.2	2.6	1.3	4.4	2.8	NM	47.3	7.1	3.7	6.6
KRC	† KILROY REALTY CORPORATION	DEC	65.8	20.8	23.3	34.6	22.9	46.1	5.9	1.9	2.2	3.3	2.4	4.4	12.0	4.2	4.9	6.8	4.7	8.7
CUZ	† COUSINS PROPERTIES INCORPORATED	DEC	36.6	31.7	22.4	16.2	42.1	29.3	3.8	3.3	2.1	1.9	5.1	1.9	6.1	5.3	4.2	2.9	8.2	2.9
002	The second of the second city is	220	00.0	· · · ·				20.0	0.0	0.0			0		0	0.0		2.0	0.2	2.0
RESIDENTI	AL REITS																			
AVB	[] AVALONBAY COMMUNITIES, INC.	DEC	43.5	35.9	33.8	42.6	40.1	50.4	5.0	4.3	4.1	5.3	4.8	5.8	9.3	7.6	7.3	9.3	8.5	10.3
EQR	[] EQUITY RESIDENTIAL	DEC	54.1	35.5	35.9	25.5	24.4	176.9	6.3	4.5	4.6	3.2	2.9	20.7	12.3	8.7	9.3	6.3	5.8	40.4
MAA	[] MID-AMERICA A PARTMENT COMMUNITIES, INC.	DEC	30.0	15.2	21.6	14.2	21.5	18.9	4.7	2.3	3.2	2.0	2.9	1.8	9.0	4.3	5.8	3.6	5.2	4.6
ESS	[] ESSEX PROPERTY TRUST, INC.	DEC	31.5	36.4	27.7	26.3	29.9	31.2	3.8	4.4	3.5	3.2	3.5	3.4	8.3	9.5	7.2	6.4	7.2	6.9
UDR	[] UDR, INC.	DEC	11.5	5.1	14.3	19.5	11.8	30.4	1.4	0.7	1.9	2.6	1.6	3.8	3.6	1.6	4.8	5.8	3.4	8.2

		_		Returr	n on Re	evenue	es (%)			Retu	rn on .	Assets	(%)			Retu	ırn on	Equity	/(%)	
Ticker	Company	Yr. End	2021	2020	2019	2018	2017	2016	2021	2020	2019	2018	2017	2016	2021	2020	2019	2018	2017	2016
RETAIL RE	∃TS																			
SPG	[] SIMON PROPERTY GROUP, INC.	DEC	44.0	24.2	37.1	43.2	35.2	33.8	6.7	3.2	6.7	8.0	6.0	5.9	63.7	37.6	67.7	66.8	47.1	41.3
0	[] REALTY INCOME CORPORATION	DEC	17.3	24.0	29.3	27.4	26.2	28.6	0.8	1.9	2.4	2.4	2.3	2.4	2.0	3.8	4.9	4.7	4.5	4.7
KIM	[] KIMCO REALTY CORPORATION	DEC	61.9	94.6	35.4	42.7	35.5	32.4	4.6	8.6	3.7	4.5	3.6	3.4	10.7	18.9	8.0	9.1	8.0	7.2
REG	[] REGENCY CENTERS CORPORATION	DEC	30.0	4.3	20.6	21.5	17.2	25.5	3.3	0.4	2.2	2.3	1.6	3.7	6.0	0.8	3.8	3.8	3.8	7.1
FRT	FEDERAL REALTY INVESTMENT TRUST	DEC	27.5	15.9	37.9	26.5	33.8	31.2	3.4	1.7	5.2	3.8	4.6	4.6	9.7	5.0	13.4	9.7	12.5	12.5
SPECIALIZ	ZED REITS																			
AMT	[] AMERICAN TOWER CORPORATION	DEC	27.4	21.0	24.9	16.6	18.6	16.5	3.7	3.6	4.4	3.7	3.7	3.1	37.1	29.8	28.4	17.0	15.3	13.1
CCI	[] CROWN CASTLE INC.	DEC	17.3	18.1	14.9	11.6	8.6	9.1	2.8	2.7	2.2	1.9	1.1	1.6	13.1	10.6	7.8	5.2	3.7	4.9
PSA	[] PUBLIC STORAGE	DEC	55.8	45.5	52.0	60.6	52.6	55.6	11.2	11.5	13.4	15.7	13.4	14.3	21.4	15.2	16.7	19.0	15.7	15.7
EQIX	[] EQUINIX, INC.	DEC	8.0	6.6	9.8	7.2	5.4	3.5	1.8	1.4	2.1	1.8	1.2	1.0	4.6	3.8	6.3	5.2	4.2	3.2
DLR	[] DIGITAL REALTY TRUST, INC.	DEC	38.6	9.3	18.0	10.8	10.0	19.7	4.7	1.0	2.5	1.4	1.2	3.5	9.4	2.5	5.6	3.1	3.2	8.9

			(	Currer	nt Rati	0			Deb	t/Capi	tal Ra	tio(%)		1	Debt as a	% of Net \	Working	Capital	
Ticker	Company	Yr. End 2021	2020	2019	2018	2017	2016	2021	2020	2019	2018	2017	2016	2021	2020	2019	2018	2017	2016
DIVERSIFII																			
STOR PSB	STORE CAPITAL CORPORATION	DEC 1.9	2.6	2.7	1.4	1.7	2.1	45.8	42.6	44.5	44.2	45.0	48.6	1884.9	1049.1	1088.5	4113.6	2637.0	2016.3
EPRT	ESSENTIAL PROPERTIES REALTY TRUST, INC.	DEC 2.6	3.1	2.4	1.9	0.1	5.7	36.6	35.1	37.8	40.0	107.0	61.0	1273.5	1208.4	2050.6	3162.5	NM	2411.8
AAT	§ AMERICAN ASSETS TRUST, INC.	DEC 3.5	3.8	2.9	2.6	4.0	3.9	57.7			61.7		55.9	965.1	840.5	1144.7	1782.8	1164.7	1149.8
WRE	WASHINGTON REAL ESTATE INVESTMENT TRUST	DEC 5.4	11.0	2.1	3.9	2.7	2.0	27.4			53.6		51.4	218.7	118.3	1035.1	443.6	790.3	1652.0
HFAI TH C	AREREITS																		
WELL	[] WELLTOWER INC.	DEC 1.9	3.6	7.6	1.9	2.2	3.6	42.7	44.5	46.8	45.2	43.2	43.9	1687.6	570.5	585.6	1408.6	1027.5	578.3
VTR	I VENTAS, INC.	DEC 0.4	0.6	0.5	0.4	0.6	1.2	51.7	53.1	52.9	50.6	50.4	50.9	NM	NM	NM	NM	NM	9609.0
PEAK	[] HEALTHPEAK PROPERTIES, INC.	DEC 0.5	3.4	4.9	2.2	3.2	5.2	50.8	46.6	47.7	46.4	58.9	61.1	NM	296.1	186.1	942.8	735.9	426.0
MPW	† MEDICAL PROPERTIES TRUST, INC.	DEC 9.5	9.2	15.5	10.7	7.0	5.3	57.2	54.7	50.0	47.0	56.1	47.2	215.6	246.5	166.4	203.7	384.0	323.9
OHI	† OMEGA HEALTHCARE INVESTORS, INC.	DEC 2.7	1.6	1.9	2.4	5.1	3.8	56.1	55.7	54.2	54.7	54.0	50.9	1405.1	2589.2	2332.5	1573.5	685.6	593.4
HOTEL AN	ID RESORT REITS																		
HST	[] HOST HOTELS & RESORTS, INC.	DEC 14.0	33.2	6.2	6.5	4.4	2.1	42.7	46.3	33.7	33.3	35.5	33.6	441.8	242.2	276.1	239.5	412.2	1216.0
PK	PARK HOTELS & RESORTS INC.	DEC 3.7	5.4	2.3	1.7	2.3	3.2			37.5	34.5	33.1	44.0	717.7	600.2	960.3	1063.9	804.6	808.1
PEB	PEBBLEBROOK HOTEL TRUST	DEC 0.7	1.0	0.6	0.6	0.6	0.4	43.6	41.1	38.0	42.2	37.1	36.5	NM	674695.6	NM	NM	NM	NM
XHR	XENIA HOTELS & RESORTS, INC.	DEC 6.8	7.0	1.9	1.8	3.1	3.1	51.0	47.0	42.2	38.4	44.6	39.5	284.4	370.5	1164.1	1244.3	592.4	505.0
DRH	§ DIAMONDROCK HOSPITALITY COMPANY	DEC 4.2	6.8	2.9	2.4	4.6	6.1	41.3	38.2	36.3	34.1	33.8	33.4	658.4	536.3	559.7	881.4	315.3	288.5
INDUSTRIA	AL REITS																		
PLD	[] PROLOGIS, INC.	DEC 1.3	1.6	2.4	1.4	1.4	2.4	31.9	31.7	31.3	30.1	33.5	36.5	3337.0	2071.4	941.6	2802.8	2925.7	1173.6
DRE	DUKE REALTY CORPORATION	DEC 2.3	2.0	2.8	3.5	6.7	9.1	37.5	39.3	36.5	36.1	34.6	45.4	1350.6	1991.6	1070.6	583.7	302.9	195.3
REXR	REXFORD INDUSTRIAL REALTY, INC.	DEC 1.3	3.5	2.7	5.9	0.9	1.1	21.7	25.9	24.8	28.5	32.9	34.3	4782.5	714.7	1072.5	421.0	NM	13869.9
EGP	§ EASTGROUP PROPERTIES, INC.	DEC 0.9	0.9	0.7	0.7	8.0	8.0	48.2	51.0	50.7	55.7	60.7	64.0	NM	NM	NM	NM	NM	NM
FR	† FIRST INDUSTRIAL REALTY TRUST, INC.	DEC 1.6	3.1	1.7	1.2	1.8	1.6	41.7	45.2	45.3	43.6	46.8	51.2	1330.4	537.7	1533.8	6785.1	1500.7	2084.6
OFFICE RE	ets							Ì											
ARE	[] ALEXANDRIA REAL ESTATE EQUITIES, INC.	DEC 2.1	3.3	3.0	2.7	1.8	1.2	31.6	36.0	40.0	41.0	42.4	43.6	1102.4	745.5	1038.4	986.7	1377.3	4204.3
BXP	[] BOSTON PROPERTIES, INC.	DEC 3.2	4.7	3.1	3.5	2.8	1.5	61.6	61.0	59.6	57.3	55.9	54.5	969.6	542.6	879.6	840.2	1045.0	2057.7
VNO	[] VORNADO REALTY TRUST	DEC 4.4	6.1	3.4	4.3	7.0	3.7	54.7	49.9	47.8	62.7	63.1	51.6	397.6	344.2	371.2	696.8	408.0	212.7
KRC	† KILROY REALTY CORPORATION	DEC 1.9	2.5	1.0	3.0	1.5	1.2	41.7	42.6	43.7	41.1	37.2	38.2	994.1	522.3	21963.3	893.3	1768.4	2349.0
CUZ	† COUSINS PROPERTIES INCORPORATED	DEC 0.8	1.5	2.2	1.0	2.0	1.2	32.7	32.5	33.4	27.4	27.9	35.5	NM	2286.8	807.4	NM	757.5	7836.3
RESIDENTI	IAL REITS																		
AVB	[] AVALONBAY COMMUNITIES, INC.	DEC 1.2	0.8	0.5	0.6	0.7	1.0	42.6	41.3	39.9	39.8	41.4	40.9	6612.8	NM	NM	NM	NM	37406.3
EQR	[] EQUITY RESIDENTIAL	DEC 0.5	0.2	0.1	0.1	0.2	0.5	42.3	42.9	47.5	44.9	45.9	45.2	NM	NM	NM	NM	NM	NM
MAA	[] MID-AMERICA APARTMENT COMMUNITIES, INC.	DEC 0.2	0.1	0.2	0.2	0.3	0.3	41.6	43.5	41.5	41.5	40.6	40.4	NM	NM	NM	NM	NM	NM
ESS	[] ESSEX PROPERTY TRUST, INC.	DEC 1.0	0.7	0.7	0.8	0.5	1.1	50.1	49.3	47.4	46.6	46.9	46.7	49893.9	NM	NM	NM	NM	13994.9
UDR	[] UDR, INC.	DEC 0.1	0.4	0.3	0.8	0.1	0.2	54.3	55.9	53.4	48.3	51.3	45.9	NM	NM	NM	NM	NM	NM
								<u> </u>											

		<u>_</u>		С	urren	t Rati	0			Deb	t/Capi	tal Rat	tio(%)		D	ebt as a	% of Net	Working	Capital	
Ticker	Company	Yr. End	2021	2020	2019	2018	2017	2016	2021	2020	2019	2018	2017	2016	2021	2020	2019	2018	2017	2016
RETAIL RE	∃TS																			
SPG	[] SIMON PROPERTY GROUP, INC.	DEC	0.4	0.7	0.6	0.6	1.1	0.7	84.2	88.0	88.5	85.3	84.8	81.8	NM	NM	NM	NM	17165.1	NM
0	[] REALTY INCOME CORPORATION	DEC	0.7	5.1	1.0	1.0	1.0	1.0	38.6	44.7	43.9	44.5	45.3	46.2	NM	850.1	NM	217697.5	NM	NM
KIM	[] KIMCO REALTY CORPORATION	DEC	2.5	3.4	1.2	1.1	1.4	1.2	42.5	48.5	51.8	47.3	49.7	48.0	2140.4	1485.1	11486.1	12141.0	4026.4	9375.0
REG	[] REGENCY CENTERS CORPORATION	DEC	1.0	2.4	2.2	1.8	1.5	1.4	37.7	39.4	38.4	36.6	34.8	38.5	240244.2	1159.5	2023.5	2710.8	3889.0	3962.2
FRT	FEDERAL REALTY INVESTMENT TRUST	DEC	1.6	3.7	1.5	1.8	1.5	1.2	58.4	61.5	54.7	54.8	55.9	55.1	1867.1	503.3	2176.9	1574.0	2350.2	5938.2
SPECIALIZ	ZED REITS																			
AMT	[] AMERICAN TOWER CORPORATION	DEC	0.4	0.8	0.5	0.5	0.8	1.0	81.0	85.6	76.2	72.6	70.8	69.4	NM	NM	NM	NM	NM	33506.8
CCI	[] CROWN CASTLE INC.	DEC	0.6	0.6	0.6	8.0	0.9	1.4	71.1	66.7	62.9	58.6	56.2	61.5	NM	NM	NM	NM	NM	3321.2
PSA	[] PUBLIC STORAGE	DEC	8.0	0.7	1.2	1.0	1.4	0.6	42.5	22.3	17.3	13.4	13.8	4.0	NM	NM	3293.2	11068.0	1204.3	NM
EQIX	[] EQUINIX, INC.	DEC	1.8	1.3	1.3	1.0	1.8	1.4	51.5	49.2	52.1	56.7	54.8	54.3	856.4	1777.2	1362.8	NM	850.3	1189.6
DLR	[] DIGITAL REALTY TRUST, INC.	DEC	0.6	0.6	0.9	0.7	0.6	0.6	42.1	41.9	48.7	50.5	43.8	53.2	NM	NM	NM	NM	NM	NM

			Price	/Earnings R	Ratio (High-I	Low)		Dividend	Pavout R	atio(%)		Divid	lend Yield	(High-Lov	v. %)	
Ticker	Company	Yr. End 2021	2020	2019	2018	2017	2016	2021 2020 2			2021	2020	2019	2018	2017	2016
DIVERSIFI	ED REITS															
STOR	STORE CAPITAL CORPORATION	DEC 37 - 3	1 48 - 17	33 - 22	29 - 21	29 - 22	38 - 27	148 166	108 118	130 132	6.2 - 4.4	4.8 - 3.9	9.6 - 3.5	4.8 - 3.4	5.5 - 4.2	5.9 - 4.5
PSB																
EPRT	ESSENTIAL PROPERTIES REALTY TRUST, INC.	DEC 40 - 2			57 - 52			117 205							6.3 - 5.8	
AAT	§ AMERICAN ASSETS TRUST, INC.	DEC 85 - 5			102 - 76			247 218							3.4 - 2.7	
WRE	WASHINGTON REAL ESTATE INVESTMENT TRUST	DEC 142 - 11	1 NM - NM	7 - 5	100 - 72	135 - 120	21 - 15	554 NM	25 371	466 72	3.5 - 2.5	5.7 - 2.6	6.9 - 3.7	5.3 - 3.8	4.7 - 3.7	4.0 - 3.5
UEAL TH C	ARE REITS															
WELL	[] WELLTOWER INC.	DEC 113 - 7	6 38 - 14	30 - 22	37 - 25	62 - 50	28 - 19	308 114	11/ 169	25/ 121	32 - 25	11 - 27	105 - 36	52 - 29	7.0 - 4.8	57 - 45
VTR	[] VENTAS, INC.	DEC 113 - 7		64 - 47	57 - 25			1402 212		61 158					6.7 - 4.8	
PEAK	[] HEALTHPEAK PROPERTIES, INC.	DEC 40 - 3		419 - 298	13 - 10			129 190 1		168 156					6.8 - 5.1	
MPW	† MEDICAL PROPERTIES TRUST, INC.	DEC 21 - 1		25 - 18	6 - 4			98 132		113 97					8.2 - 5.8	
OHI	† OMEGA HEALTHCARE INVESTORS, INC.	DEC 22 - 1			27 - 18			153 384							10.4 - 7.0	
	ID RESORT REITS									=						
HST	[] HOST HOTELS & RESORTS, INC.							0 NM	64 58	111 78					4.7 - 3.8	
PK	PARK HOTELS & RESORTS INC.	DEG THE T	M NM - NM			2 - 2			161 79	15 135					8.5 - 5.4	
PEB	PEBBLEBROOK HOTEL TRUST		M NM - NM		NM - NM					124 172					4.9 - 3.7	
XHR DRH	XENIA HOTELS & RESORTS, INC.		M NM - NM M NM - NM	47 - 34 13 - 10	15 - 9 30 - 21			NM NM NM NM	227 63 56 117	120 134 109 88					5.8 - 4.3 5.0 - 3.9	
DKH	§ DIAMONDROCK HOSPITALITY COMPANY	DEC NIVI - I	IIVI INIVI - INIVI	13 - 10	30 - 21	26 - 23	20 - 14	INIVI INIVI	50 117	109 88	1.4 - 0.0	0.0 - 0.0	14.8 - 0.0	5.7 - 4.5	5.0 - 3.9	4.7 - 4.2
INDUSTRIA	AL REITS															
PLD	[] PROLOGIS, INC.	DEC 42 - 2	4 54 - 31	37 - 23	24 - 19	22 - 16	24 - 16	64 116	86 68	57 74	2.9 - 1.5	2.6 - 1.6	3.7 - 2.1	3.4 - 2.3	3.2 - 2.7	3.6 - 2.6
DRE	[] DUKE REALTY CORPORATION	DEC 29 - 1	7 51 - 32	30 - 21	28 - 23	7 - 5	33 - 21	46 118	74 76	17 82	2.3 - 1.6	2.7 - 1.7	3.6 - 2.3	3.4 - 2.4	3.3 - 2.7	3.2 - 2.5
REXR	REXFORD INDUSTRIAL REALTY, INC.	DEC 98 - 5	8 105 - 67	102 - 60	80 - 63	65 - 45	64 - 42	116 153	143 142	115 143	2.2 - 1.2	2.1 - 1.3	2.5 - 1.5	2.2 - 1.5	2.4 - 1.9	2.7 - 1.8
EGP	§ EASTGROUP PROPERTIES, INC.	DEC 57 - 3	4 53 - 32	42 - 27	41 - 31	39 - 28	26 - 17	84 111	89 81	104 85	3.0 - 1.7	2.4 - 1.7	3.4 - 2.1	3.2 - 2.2	3.3 - 2.6	3.6 - 2.7
FR	† FIRST INDUSTRIAL REALTY TRUST, INC.	DEC 31 - 1	9 30 - 18	23 - 15	26 - 21	19 - 15	28 - 18	52 65	49 67	50 68	2.6 - 1.6	2.6 - 1.8	3.7 - 2.1	3.2 - 2.1	3.1 - 2.6	3.3 - 2.6
OFFICE RE	are							Î		ĺ						
ARE	ALEXANDRIA REAL ESTATE EQUITIES, INC.	DEC 57 - 4	1 29 - 19	52 - 36	37 - 31	84 - 68	NM - NM	115 69	124 102	190 NM	35 - 21	28 - 21	36 - 24	35 - 25	3.1 - 2.7	31 - 27
BXP	[] BOSTON PROPERTIES, INC.	DEC 39 - 2		42 - 33	36 - 29				128 101	114 131					3.3 - 2.3	
VNO	[] VORNADO REALTY TRUST	DEC 95 - 6						268 NM	18 119	-					4.3 - 3.3	
KRC	† KILROY REALTY CORPORATION	DEC 14 - 1		45 - 33		51 - 44			100 69	100 51					2.7 - 2.2	
CUZ	† COUSINS PROPERTIES INCORPORATED	DEC 22 - 1	7 27 - 14	35 - 26		18 - 15	37 - 23		95 135	46 64					3.2 - 2.5	
RESIDENTI AVB	IAL REITS  [] AVALONBAY COMMUNITIES, INC.	DEC 35 - 2	2 39 - 21	39 - 30	27 - 22	24 27	25 - 21	88 107	107 83	88 70	24 25	41 26	E2 20	25 27	3.8 - 3.1	22 20
EQR	[] AVALONBAY COMMUNITIES, INC. [] EQUITY RESIDENTIAL	DEC 35 - 2				43 - 37		68 97	86 120	123 16					3.7 - 3.0	
MAA	[] MID-AMERICA APARTMENT COMMUNITIES, INC.	DEC 49 - 2		45 - 30				89 181							4.3 - 3.4	
ESS	[] ESSEX PROPERTY TRUST, INC.	DEC 49 - 2		50 - 35		41 - 34		111 94		104 99					3.4 - 2.8	
UDR	[] UDR. INC.	DEC 123 - 7		79 - 61		92 - 78		292 659							3.9 - 3.0	
RETAIL RE																
SPG	[] SIMON PROPERTY GROUP, INC.	DEC 25 - 1			24 - 19			105 130							5.3 - 4.2	
0	[] REALTY INCOME CORPORATION	DEC 85 - 6		59 - 45		57 - 48		325 244							5.4 - 4.1	
KIM	[] KIMCO REALTY CORPORATION	DEC 15 -			18 - 13				129 106						8.5 - 5.9	
REG	[] REGENCY CENTERS CORPORATION		1 242 - 122	49 - 40		72 - 59		112 670							4.0 - 3.0	
FRT	FEDERAL REALTY INVESTMENT TRUST	DEC 41 - 2	5 81 - 41	31 - 25	43 - 34	37 - 30	49 - 39	128 246	89 125	98 107	4.6 - 3.1	5.2 - 3.2	6.4 - 3.2	3.5 - 2.9	3.7 - 3.0	3.3 - 2.7
SPECIALIZ	ZED REITS															
AMT	[] AMERICAN TOWER CORPORATION	DEC 53 - 3	5 71 - 47	56 - 37	60 - 48	57 - 38	59 - 42	88 114	85 109	94 104	2.5 - 1.9	2.5 - 1.7	2.4 - 1.6	2.2 - 1.5	2.3 - 1.8	2.3 - 1.7
CCI	[] CROWN CASTLE INC.	DEC 81 - 5	8 74 - 50	83 - 59	95 - 82	141 - 105	108 - 82	217 207	235 305	420 359	3.8 - 2.8	3.6 - 2.6	4.1 - 2.7	4.3 - 3.0	4.3 - 3.7	4.7 - 3.5
PSA	[] PUBLIC STORAGE	DEC 37 - 2	2 38 - 26	36 - 27	27 - 21	34 - 29	40 - 30	81 118	106 94	113 104	2.7 - 1.9	3.7 - 2.4	5.0 - 3.4	4.1 - 3.0	4.4 - 3.4	4.1 - 3.5
EQIX	[] EQUINIX, INC.	DEC 158 - 10	7 198 - 116	97 - 57	100 - 74	163 - 117	215 - 147	209 256	165 202	267 394	2.0 - 1.4	1.9 - 1.3	2.2 - 1.3	2.7 - 1.7	2.4 - 1.7	2.2 - 1.6
DLR	[] DIGITAL REALTY TRUST, INC.	DEC 29 - 2	1 159 - 107	57 - 43	102 - 81	127 - 97	51 - 33	81 348	172 281	288 142	4.1 - 2.6	3.7 - 2.7	4.2 - 2.8	4.0 - 3.2	4.1 - 3.1	4.0 - 3.0

			Char	· (#\		т	املطانه	Paak W		. Char	- (¢)				Char	. Drice	/Link In	¢\							
Ticker	Company	Yr. End	2021	Earnin 2020				2016	2021		2019				2021	20	20	5nare 201		High-Lo) 201		20	17	201	•
DIVERSIFIE		Yr. End 2021 2020 2019 2018 2017 2016						2010	2021	2020	2019	2010	2017	2010	2021	20	20	201	19	20	10	20	17	201	0
STOR PSB	STORE CAPITAL CORPORATION	DEC	0.99	0.84	1.24	1.06	0.90	0.82	18.71	18.77	18.54	17.25	16.07	15.17	37.13 - 30.	02 40.11	- 13.00	40.96 -	27.35	31.05 -	22.51	26.58	19.65	31.44 -	22.01
EPRT	ESSENTIAL PROPERTIES REALTY TRUST, INC.	DEC	0.82	0.44	0.63	0.26	35.50	0.00	15.87	14.30	13.62	11.83	723.84	0.00	32.92 - 20.0	00 29.34	- 6.08	27.10 -	13.39	14.75 -	13.05	0.00	0.00	0.00 -	0.00
AAT	§ AMERICAN ASSETS TRUST, INC.	DEC	0.47	0.46	0.84	0.42	0.62	0.72	19.95	20.55	21.30	16.76	17.45	17.44	40.83 - 27.3	21 48.15	- 20.15	49.26 -	38.94	42.85 -	30.62	44.83	36.79	46.38 -	34.07
WRE	WASHINGTON REAL ESTATE INVESTMENT TRUST	DEC	0.19	(0.20)	4.75	0.32	0.25	1.65	15.26	15.65	17.20	13.37	13.95	14.09	27.05 - 20.	74 32.22	- 16.95	31.41 -	22.53	31.85 -	22.70	33.96	29.90	34.61 -	23.89
HEALTH C	ARE REITS																								
WELL	[] WELLTOWER INC.	DEC	0.78	2.33	3.05	2.02	1.26	2.81	38.15	37.33	36.65	35.09	35.67	36.67	89.80 - 59.3	38 89.99	- 24.27	93.17 -	66.82	74.75 -	49.58	78.17	- 63.06	80.19 -	52.80
VTR	[] VENTAS, INC.	DEC	0.13	1.17	1.17	1.14	3.78	1.87	23.40	23.50	24.07	23.97	25.58	24.43	61.09 - 45.4	40 63.38	- 13.35	75.40 -	54.59	65.70 -	46.55	72.36	- 58.96	76.80 -	46.87
PEAK	[] HEALTHPEAK PROPERTIES, INC.	DEC	0.93	0.77	0.09	2.25	0.88	1.34	11.12	11.54	11.53	11.81	10.42	10.83	37.69 - 28.	15 37.64	- 18.63	37.93 -	26.80	30.27 -	21.48	33.67	- 25.09	40.43 -	25.11
MPW	† MEDICAL PROPERTIES TRUST, INC.	DEC	1.11	0.81	0.87	2.76	0.82	0.86	12.00	11.35	12.51	11.32	9.40	9.31	23.74 - 19.	39 24.29	- 12.35	21.63 -	15.50	17.52 -	11.82	14.22	- 11.90	15.92 -	9.61
OHI	† OMEGA HEALTHCARE INVESTORS, INC.	DEC	1.75	0.70	1.58	1.40	0.51	1.90	13.61	13.79	15.28	13.82	14.65	16.36	39.31 - 27.	06 45.22	- 13.33	45.01 -	33.39	38.34 -	24.90	35.14	26.43	38.09 -	26.96
HOTEL AN	D RESORT REITS																								
HST	HST [] HOST HOTELS & RESORTS, INC. DEC (0.02) (1.04) 1.26 1.47 0.					0.76	1.02	9.02	8.96	10.26	10.12	9.43	9.48	19.02 - 13.	16 18.66	- 7.86	20.35 -	15.51	22.47 -	15.94	20.65	17.26	19.51 -	12.17	
PK		DEC	(1.95)	(6.11)	1.44	2.31	12.21	0.67	18.64	20.55	24.41	24.84	24.97	16.32	24.67 - 15.	77 26.01	- 3.99	33.02 -	21.68	34.27 -	23.91	31.46	24.65	33.40 -	28.44
PEB	PEBBLEBROOK HOTEL TRUST	DEC	(1.80)	(3.25)	0.63	(0.06)	1.19	0.64	24.13	24.93	27.75	27.32	21.36	21.91	26.45 - 17.	57 26.98	- 5.39	34.35 -	24.51	41.65 -	26.59	38.96	- 26.21	31.85 -	20.51
XHR	XENIA HOTELS & RESORTS, INC.	DEC	(1.26)	(1.44)	0.49	1.75	0.92	0.79	12.48	13.60	15.18	15.69	14.54	14.54	21.40 - 14.	15 21.80	- 6.15	23.33 -	16.67	25.90 -	16.47	22.76	16.21	19.87 -	12.10
DRH	§ DIAMONDROCK HOSPITALITY COMPANY	DEC	(0.96)	(1.97)	0.90	0.43	0.46	0.57	7.19	8.15	9.55	8.89	9.02	9.08	11.49 - 7.	38 11.79	- 1.96	11.52 -	8.76	12.99 -	8.70	12.08	10.43	11.61 -	7.28
INDUSTRIA	L REITS																								
PLD	[] PROLOGIS, INC.	DEC	3.94	2.01	2.46	2.87	3.06	2.27	43.55	41.49	34.58	34.01	28.24	27.08	169.93 - 93.0	08 112.37	- 59.82	92.80 -	56.40	68.95 -	55.21	67.53	- 48.33	54.87 -	35.25
DRE	[] DUKE REALTY CORPORATION	DEC	2.25	0.80	1.18	1.07	4.58	0.88	15.58	13.59	13.38	12.68	12.47	9.55	66.22 - 37.	61 43.45	- 25.19	36.04 -	24.88	29.48 -	24.30	30.14	- 23.93	28.99 -	18.52
REXR	REXFORD INDUSTRIAL REALTY, INC.	DEC	0.80	0.51	0.47	0.41	0.48	0.36	28.03	22.15	19.68	17.14	14.38	12.26	81.68 - 45.	90 53.48	- 31.79	48.80 -	28.45	33.54 -			21.34	23.60 -	15.14
EGP	§ EASTGROUP PROPERTIES, INC.	DEC	3.90	2.76	3.24	2.49	2.44	2.93	37.66	31.68	30.47		21.27	18.79	229.84 - 131.		- 83.40	138.15 -		102.05 -			67.69		49.31
FR	† FIRST INDUSTRIAL REALTY TRUST, INC.	DEC	2.09	1.53	1.88	1.31	1.69	1.05	16.50	14.55	13.67	12.79	11.66	10.35	66.74 - 40.	08 46.12	- 25.89	43.24 -	27.77	34.04 -	27.30	32.91	- 25.31	29.75 -	18.89
OFFICE RE	TS .														1										
ARE	[] ALEXANDRIA REAL ESTATE EQUITIES, INC.	DEC	3.82	6.01	3.12	3.52	1.58	(1.99)	98.58	82.40	71.06	64.20	58.10	52.50	224.95 - 154.3	37 179.79	- 109.22	163.51 -	110.66	131.00 -	109.04	134.37	- 106.89	114.67 -	70.69
BXP	[] BOSTON PROPERTIES, INC.	DEC	3.17	5.54	3.30	3.70	2.93	3.26	37.27	37.22	35.43	36.79	36.38	36.32	124.24 - 88.	45 147.83	- 69.69	140.35 -	107.94	132.82 -	107.84	140.13	- 116.77	144.02 -	107.28
VNO	[] VORNADO REALTY TRUST	DEC	0.53	(1.83)	16.21	2.01	0.85	4.34	25.55	27.84	30.42	18.04	17.30	29.99	50.91 - 35.0	02 68.68	- 27.64	70.54 -	58.60	78.31 -	59.48	111.72	- 71.90	108.69 -	78.91
KRC	† KILROY REALTY CORPORATION	DEC	5.36	1.63	1.86	2.55	1.51	2.97	46.22				37.16	35.33	74.05 - 54.:		- 45.28	85.29 -	60.87	77.73 -	59.05	78.33	- 67.00	77.54 -	46.76
CUZ	† COUSINS PROPERTIES INCORPORATED	DEC	1.87	1.60	1.17	0.75	2.08	1.25	29.58	28.80	27.94	24.91	24.56	22.40	40.70 - 31.	01 42.99	- 21.15	41.37 -	30.76	39.52 -	30.12	38.52	- 31.24	45.60 -	28.36
RESIDENTIA	AL REITS																								
AVB	[] AVALONBAY COMMUNITIES, INC.	DEC	7.19	5.89	5.63	7.05	6.35	7.52	78.36	77.21	78.31	76.97	75.43	74.23	254.61 - 154.	34 229.40	- 118.17	222.87 -	168.34	191.91 -	152.65	199.52	- 169.50	192.29 -	158.32
EQR	[] EQUITY RESIDENTIAL	DEC	3.54	2.45	2.60	1.77		11.68	29.07	28.17	27.65	26.99	27.27	27.41	91.20 - 56.		- 45.43	89.55 -		72.75 -		70.46	- 59.49	81.76 -	
MAA	[] MID-AMERICA APARTMENT COMMUNITIES, INC.	DEC	4.61	2.19	3.07	1.93	2.86	2.69	51.71	51.33	53.10	53.99	55.73	56.04	231.63 - 122.		- 82.00	140.15 -		104.98 -		110.95		110.01 -	
ESS	[] ESSEX PROPERTY TRUST, INC.	DEC	7.51	8.69	6.66	5.90	6.57	6.27	-	92.24	94.10	95.11	95.03	94.48		79 329.74		334.17 -					- 218.41		191.25
UDR	[] UDR, INC.	DEC	0.48	0.20	0.63	0.74	0.44	1.08	10.49	10.64	11.11	10.38	10.38	11.40	60.42 - 36.		- 29.20	50.61 -			32.88		34.41	38.61 -	
RETAIL RE	ITS																								
SPG	[] SIMON PROPERTY GROUP, INC.	DEC	6.84	3.59	6.81	7.87	6.24	5.87	9.94	8.96	7.78	10.04	11.04	12.72	171.12 - 82.	06 149.89	- 42.25	186.44 -	142.40	191.49 -	145.78	188.10	- 150.15	229.10 -	173.11
0	REALTY INCOME CORPORATION	DEC	0.87	1.14	1.38	1.26	1.10	1.13	27.23	25.63	24.78	22.63	21.68	20.27	74.60 - 57.		- 38.00	82.17 -		66.91 -			- 52.85	72.30 -	
KIM	KIMCO REALTY CORPORATION	DEC	1.60	2.25	0.80	1.02	0.87	0.79	15.31	12.69	10.93	12.22	12.02		24.95 - 14.		- 7.45		14.32		13.16		- 17.02	32.24 -	
REG	REGENCY CENTERS CORPORATION	DEC	2.12	0.26	1.43	1.46	1.00	1.42			33.88	34.01	34.39		78.07 - 43.			70.26 -			54.87		- 58.63	85.35 -	
FRT	FEDERAL REALTY INVESTMENT TRUST	DEC	3.26	1.62	4.61	3.18	3.97	3.50			31.24		28.09			35 131.56		141.35 -		135.68 -			119.37		
SPECIALIZ	ED REITS																								
AMT	[] AMERICAN TOWER CORPORATION	DEC	5.66	3.79	4.24	2.77	2.67	1.98	(63.62)	(38,33)	(30.35)	(25.71)	(26.07)	(22.43)	303.72 - 197.	50 272.20	- 174.32	242.00 -	153.93	168.58 -	130.37	155.28	- 102.51	118.26 -	83.07
CCI	[] CROWN CASTLE INC.	DEC	2.53	2.35	1.79	1.23	0.80	0.95			(10.64)	(9.69)	(8.98)					149.47 -					- 83.96		75.71
PSA	[] PUBLIC STORAGE	DEC	9.87	6.29	7.29	8.54	6.73	6.81	28.16	26.13			27.03			22 240.75					180.48		- 192.15		200.65
EQIX	[] EQUINIX, INC.	DEC	5.53	4.18	5.99	4.56	3.00	1.79		33.55		0.61	0.67	9.25		73 839.77							- 355.18		
DLR	DIGITAL REALTY TRUST, INC.	DEC	5.94	1.00	2.35	1.21	0.99	2.20				6.39	13.91	12.82	178.22 - 124.0										
	- ·								•						•										

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