BofA SECURITIES

U.S. REITs

REIT primer, 15th edition: a comprehensive handbook for investors

Primer

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Equity
United States
REITs

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Overview of REITs

This BofA REIT primer provides an overview of the U.S. REIT industry and discussion of the sector's unique quarterly reporting standards and methods of valuation. The primer is divided into separate sections for easy reference: 1) basic structure of a REIT, 2) types of REIT subsectors that exist, 3) evolution of the industry, 4) REIT earnings & valuation, 5) distributions & 6) FAQ. We include an appendix of REIT-specific terms & acronyms.

REITs provide investors access to commercial real estate

A REIT, or a real estate investment trust, is a company that owns income-producing real estate. REITs were formed in 1960 by Congress as a way for small investors to obtain ownership in commercial real estate. REITs currently account for approximately 20% of the institutionally owned commercial real estate in the US. Most REITs follow an active, hands-on, owner-and-operator model rather than simply owning a collection of assets, as was common in the early years. Collecting rent remains the main source of revenue for REITs. Internal growth is driven by occupancy, rent increases, margin improvement, asset redevelopment, and external growth through acquisitions/ground-up development.

Why publicly traded REITs are attractive

REITs provide stable current income plus long-term growth in a transparent and highly liquid investment vehicle actively managed by experienced & professional management teams. REITs offer similar benefits to growth stocks and fixed-income instruments with above average distribution yields and competitive long-term rates of return. The sector also offers portfolio diversification with a low correlation to other equities and bonds.

How to value a REIT

A REIT's return profile has characteristics of both bonds and equities. The long-term nature of REIT leases provides income visibility, like bonds, while the mark-to-market of leases allows REITs to take part in the economic cycle, like equities. In valuing REITs, we use a number of metrics, including: price to funds from operations (FFO), a key earnings metric for REITs; price to net asset value, which values REITs based on their underlying assets; relative yield analysis, which compares yields across different asset classes; and implied cap rates, to determine what yield the market is using to value a company or sector. We explain these valuation methods inside and list the pros and cons of each.

REITs & rates

Evidence is inconclusive on relative performance over the course of a full Fed tightening cycle. In the last three tightening cycles, REITs underperformed in two & outperformed in one. We ran a simple correlation on REIT returns vs. changes in the US 10-year Treasury yield since 1986 and found the correlation was +0.17, indicating that REITs do not necessarily sell off when long-term rates rise. If higher interest rates are driven by rising growth, we would expect better fundamentals to mitigate higher funding costs.

Key term:

FAQ: Frequently asked questions

New section inside:

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What is a REIT?

A REIT, or real estate investment trust, is a company that owns and, in most cases, operates income-producing real estate such as apartments, office buildings, warehouses, shopping centers, regional malls, or hotels. A small percentage of REITs (mortgage REITs) lend money to owners of real estate and therefore do not have direct ownership of the asset.

REITs were formed in 1960 when Congress passed the Real Estate Investment Trust Act. This legislation provided small investors access to the ownership of commercial real estate. Through securitization, REITs offer investors access to commercial property returns without the barriers to entry associated with traditional property ownership (mainly large price tags and illiquidity). In this way, REITs allow investors to own a "piece" of a mall or apartment building by simply owning shares of a REIT stock.

Section 1: The basic structure of a REIT

The primary benefit of the REIT structure is that the entity does not pay corporate income taxes. Like direct real estate holdings, REITs are taxed at the investor level (as opposed to a corporation that is taxed at the entity level). In order to achieve this tax status, REITs must adhere to the following qualifications[1]:

- Be structured as a taxable corporation
- Be managed by a board of directors or trustees
- Distribute at least 90% of taxable net income as distributions to shareholders
- Have at least 75% of assets in real estate (real property or loans secured by property)
- Derive at least 75% of gross income from real estate income (rents or interest from mortgages)
- Have a minimum of 100 shareholders
- Have no more than 50% of shares held by five or fewer individuals
- Have no more than 25% of assets invested in stocks of taxable REIT subsidiaries (TRS)

Although REITs must generate 75% of their income from real estate or rental income, they can generate additional revenue through a taxable REIT subsidiary (TRS). The TRS was created through the REIT Modernization Act (RMA), which took effect on January 1, 2001. By forming a TRS, REITs can engage in ancillary business activities that were previously prohibited by the IRS. These business activities, which are fully taxed, allow REITs to potentially boost their earnings stream by providing services that their tenants need and/or want. This can include merchant development (developing with intention of selling to third parties), property management, and funds management.

Special rules for income tests

Additional rules for income to be classified as a rental income for a REIT are:

- Rental income for a REIT includes traditional rent, as well as certain charges for services customarily furnished in connection with the rental of property, i.e., parking facilities provided at the property.

[1] Source: NAREIT

- Rents for a REIT may not be based on net income or profits of the tenant, but can be based on a fixed percentage of gross receipt or sales of the tenant.

- Rents cannot be derived from an entity in which the REIT has a 10% or greater interest (by vote or value, assets or net profits).

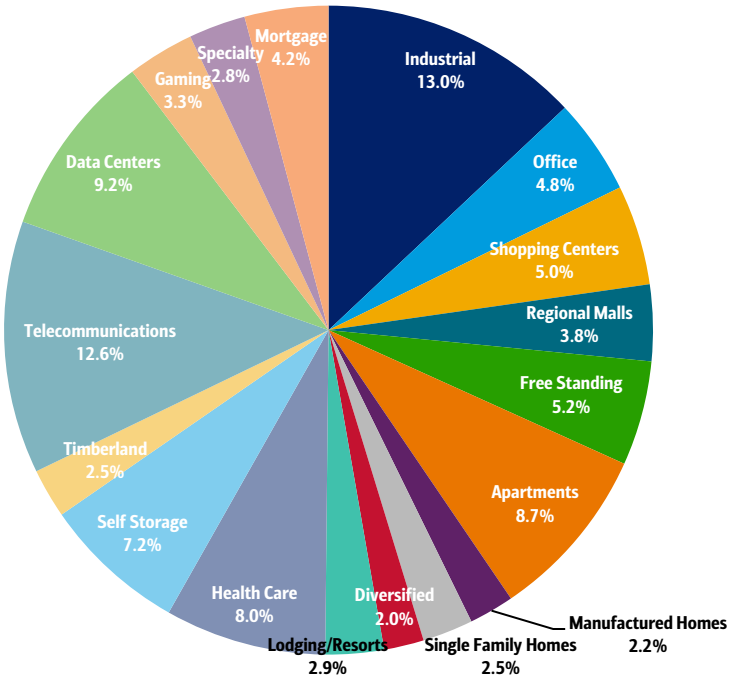
Types of REITs

- **Equity REITs:** An equity REIT is an entity that owns and operates income-producing assets, such as apartments, office buildings, warehouses, shopping centers, regional malls, or hotels. Many of these companies are fully integrated organizations, meaning they engage in the acquisition, development, and management of commercial real estate for their own account. Most REIT property portfolios are concentrated in a specific sector (i.e., apartment REITs or retail REITs), which is referred to as their core portfolio. Some also own small percentages of other property types, called non-core assets. Approximately 96% of REITs are equity REITs.

- **Mortgage REITs:** A mortgage REIT is an entity that lends money to an owner of real estate and therefore does not have direct ownership of the asset. Mortgage REITs comprise roughly 4% of the REIT universe. With the GICS change, it is important to note mortgage REITs stayed under the Financial industry.

- **Hybrid REITs:** A hybrid REIT is a cross between an equity and a mortgage REIT. Hybrids represent less than 1% of the REIT universe. NAREIT discontinued its Hybrid REIT Index in December 2010 and has thus stopped disclosing the number of hybrid REITs.

Exhibit 1: All US REITs breakdown, by sector (weighted by market cap)
Industrial sector has the highest weighting by market cap



Source: NAREIT, as of January 31, 2024; Note: Includes Mortgage REITs

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Publicly traded, non-traded, and private REITs

REITs can be either *publicly traded* (most are listed on the NYSE), *non-exchange traded* (also known as *non-traded REITs*), or *privately held*. Private REITs are not registered with the SEC and do not provide financial or performance data publicly.

As of Jan 31, 2024, there are 195 publicly traded REITs included in the FTSE NAREIT All REIT index, of which 154 are equity REITs and 41 are mortgage REITs.

Non-traded REITs

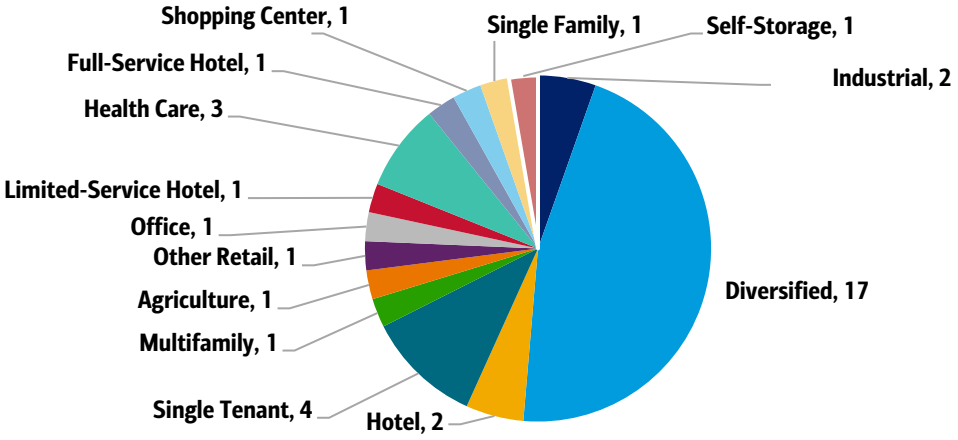
Public non-listed REITs (also known as non-traded REITs) are REITs that file with the SEC but whose shares do not trade on a national stock exchange. This makes these investments more illiquid, as redemption programs vary by company, and the value of the company is less transparent (since not traded). The non-traded REIT market is estimated to be approximately a $70-100 billion market. According to S&P Global Market Intelligence, there are 37 non-traded REITs as of March 13, 2024.

A typical investment in a non-traded REIT (NTR) ranges from $1,000 to $2,500. Up-front fees have historically represented 12-15% of the purchase price, including sales commissions. Many also charge ongoing management fees, and some charge back-end fees.

To exit an investment in non-traded REITs successfully, investors must receive a return of capital and any capital appreciation. Given that shares do not trade, this means the assets of the REIT must be valued and sold; this can be done through one of a number of ways, and each of these strategies holds a unique degree and type of risk:

- Listing on a public exchange with a concurrent publicly sold equity offering
- Listing on an exchange through a modified Dutch auction tender offer (a new and popular strategy in 2012 and 2013) where the lowest price is selected between a set range. This method is considered riskier, as the market is not able to determine pricing, as it would if there was a concurrent equity offering
- A single sale or merger
- The sale of individual assets

Exhibit 2: US non-traded REITs by sector – Number of companies
There are 37 non-traded REITs as of March 13, 2024



Source: S&P Global Market Intelligence; As of 3/13/2024

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It may be beneficial for the non-traded REIT to list for the following reasons:

- If shares of traded REITs are trading at premiums to NAVs
- If the REIT's portfolio is well understood by REIT analysts and investors
- If potential private buyers for the portfolio or individual assets are limited

A sector in transition

Several key events pressured non-traded REIT sales in the past:

- In late 2014, ARCP announced it intentionally concealed accounting errors from investors. ARCP was tied to AR capital, then the largest sponsor of non-traded REITs. As a result of the accounting scandal and resulting FBI/SEC investigations, several brokers stopped selling non-traded REITs associated with AR Capital. Subsequently in 2015, AR Capital suspended new subscriptions and new product offerings.
- In April 2016, new disclosure rules went into effect requiring investor NAV statements to be net of fees. Fee transparency has likely increased awareness among non-traded REIT investors of the high fees these products charge. While this has likely led some investors to shun non-traded REITs, we note more recent fund offerings have lower fee structures.
- In April 2016, the Department of Labor (DoL) released its final fiduciary rule, seeking to address conflicts of interest in retirement advice. The new rule imposed a higher fiduciary standard on the industry, requiring advisors to provide impartial advice in their client's best interest and not accept any payments creating conflicts of interest, unless the product qualifies for an exemption. While the DoL did not explicitly rule out the addition of non-traded REITs into retirement accounts, the higher fiduciary standard likely makes it harder for advisors to recommend these products given their high fee structures.

As a result of these events, the NTR industry migrated toward lower fees and tried to broaden its investor base. More recently, private equity firms such as Blackstone, Starwood & Oaktree entered the non-traded REIT space and rapidly grew assets under management and broadened the investor base. Though the entry of firms like Blackstone has driven unprecedented NTR sales in recent years, certain risks remain. The NTR risk is that as commissions come down, individual financial advisors that help clients allocate their capital will not be incentivized to sell NTRs as aggressively as in the past. In addition, following the DoL ruling, there is still risk that broker-dealer firms will chose to be cautious on what they distribute amid increased regulatory scrutiny and longer-term questions on conflicts of interest.

Over time, we believe regulatory scrutiny may accelerate brokerage firms' transition to fee-based business models, in lieu of commission based structures, which again would question financial advisors incentives to sell NTRs vs. other traditional products. We also see the lack of liquidity for NTRs as an issue, particularly given their relatively higher fees.

VER acquired by O & WPC exited their non-traded REIT business

Given the changing nature of the non-traded REIT world both VER and WPC exited the industry. In November 2017, VER announced that it would sell its non-traded REIT business (Cole Capital) to CIM Group. The deal was completed in early 2018. Also in 2017, WPC announced it would wind down its non-traded REIT business. WPC ceased all non-traded retail (NTR) fundraising activities carried out by its wholly owned broker dealer, Carey Financial LLC as of June 30, 2017. WPC continued to manage all existing non-traded REITs and managed programs through the end of their natural cycle.

Organizational structure of REITs

When first formed, REITs were thought of as a passive investment vehicles for real estate assets, with an external adviser managing the assets for a fee. This is known as the externally managed REIT structure. In this structure, the REIT does not have any employees and does not own any of the systems and software used to manage the properties.

In the late 1980s, the inefficiencies and conflicts of interest that existed between the external adviser and REIT shareholders were recognized. The Tax Reform Act was passed in 1986, which allowed REITs to integrate property management into the organization. Following the "REIT modernization era" and KIM's IPO (November 1991), internally managed REITs emerged and became the industry norm. Today, most (but not all) equity REITs are internally managed, while mortgage REITs commonly use the externally managed structure.

For externally managed equity REITs, potential conflicts of interest between REIT shareholders and the external manager/adviser include, but are not limited to:

1. **Structure of management fees**. If based on assets under management (AUM) and not operating performance, the manager may be incentivized to acquire assets rather than maximize value for shareholders.

2. **Basis of compensation of senior management**. Typically, senior managers of externally managed REITs are paid by the external manager. Depending on compensation arrangements, management's interests may not be aligned with the REIT shareholders. Instead management may be incentivized to increase fees to the external manager.

3. **Structure of the termination fee**. The REIT could be penalized with an outsized fee should it try to terminate its contract with the external manager.

Equity REIT investors prefer internally managed REITs to avoid conflicts of interest between the REIT's shareholders and the external manager/adviser.

Lease structure

REITs derive the majority of their revenue from rental income; however, leases are structured differently depending on the asset type/sector. Lease durations range from nightly (for hotels) to over 10 years (for select retail, healthcare, and office leases). Given that leases lock in a specific rate (or rate increases) for the duration of the lease, longer lease terms generally provide greater income visibility.

Exhibit 3: Lease duration by property type
Hotel/Lodging has the shortest lease duration while Retail triple net has the highest.

Property Type	Average Lease Duration
Hotel / Lodging	daily
Self Storage	monthly
Apartments	annual
Manufactured Housing	annual
Single Family Rental	annual
Student Housing	annual
Industrial	3-7 years
Office - Suburban	5-7 years
Retail - Inline (Strips)	5-7 years
Data Centers	3-15 years
Retail - Inline (Malls)	5-8 years
Retail - Anchor	10+ years
Office - Central Business District	10-12 years
Healthcare (triple net leased)	10-20 years
Retail (triple net leased)	15-20 years

Source: BofA Global Research

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Sources of growth

REITs own income-generating properties, and collecting rent is their main source of revenue. REITs grow revenue internally through occupancy gains, rent increases, tenant upgrades, and redevelopment of existing properties. In addition, REITs can generate external growth through accretive acquisitions, ground-up development and JV/fund management investments.

Real estate and inflation

From a broader perspective, real estate is most often thought of as an asset class that provides inflationary protection. Rents can be re-set higher to reflect higher growth as long as the inflation is tied to an improving economy. Real estate investors prefer short-lease term sectors in a rising rate environment, as leases can be adjusted more quickly. These sectors would be lodging (daily lease reset), self storage (monthly), and apartments (annual). Longer duration leases offer some degree of inflationary protection in the short term as most include annual lease bumps. Lease bumps can be a fixed rate or tied to the CPI with a maximum ceiling. Upon expiration, lease rates are typically reset at the market rate.

Corporate governance

Executive compensation, shareholder voting rights, and composition of boards are highly transparent and scrutinized by shareholders. The legal context and structural arrangement under which REITs operate helps to reduce potential principal agent conflicts. A 2019 study by Goodwin Procter showed 17% of REIT boards are classified (unchanged from 2017), with 59% separating the CEO and Chairman roles. In addition, 6% have a current shareholder rights plan, compared to 7% in April 2017. A majority of REITs incorporated in Maryland, however, have retained the ability to stagger their boards without shareholder consent, which is generally viewed as unfriendly to shareholders. In light of recent market activity as REITs have traded at prolonged discounts to Net Asset Values (NAV), such antitakeover provisions have garnered greater market attention.

MUTA in focus

MUTA (Maryland Unsolicited Takeover Act) allows companies incorporated in Maryland to implement various measures without shareholder approval in order to prevent an unsolicited takeover. These measures can include staggering the board and limiting shareholders' ability to call a special meeting. MUTA has a profound impact on the REIT community with about 80% of all publicly registered REITs domiciled in Maryland, according to Venable LLP, a U.S. law firm with a large REIT practice. In August 2016, proxy advisory services firm Institutional Shareholder Services (ISS) issued its annual

survey on policy guidelines. In the survey, ISS polled respondents on whether it should recommend voting against corporate directors that failed to opt out of MUTA provisions.

ISS proxy voting guidelines are carefully monitored by many institutional investors and the recommendations often form the basis of their voting decisions, While ISS's final policy guidelines did not include any changes on MUTA, we believe the issue will remain a corporate governance sore point for many REIT investors. We acknowledge that antitakeover provisions can be used by management in select cases to negotiate a better deal for shareholders; however, we generally view MUTA provisions as unfriendly to shareholder interests and support REIT decisions to opt out of the statute.

Structural changes and legislation over time

Prior to 1986, REITs were just owners of real estate assets. Today, most REITs follow an active, hands-on, owner-and-operator model. Business models now have room for growth through acquiring, developing and managing real estate, as well as through ancillary businesses.

Tax Reform Act of 1986

The tax reform act of 1986 allowed REITs to integrate property management into the organization and become internally managed REITs. Prior to this act, REITs were legally required to source property management to outside companies – also known as externally managed REITs.

The Modern REIT era – Kimco leads the way

In November 1991, the REIT era as we know it started when Kimco Realty (KIM) completed its IPO by raising $128 million of capital. Thirteen months later, Taubman Centers (TCO) completed its IPO and transformed the securitization of the real estate industry by employing a new structure known as an Umbrella Partnership REIT (UPREIT).

UPREIT and DownREIT

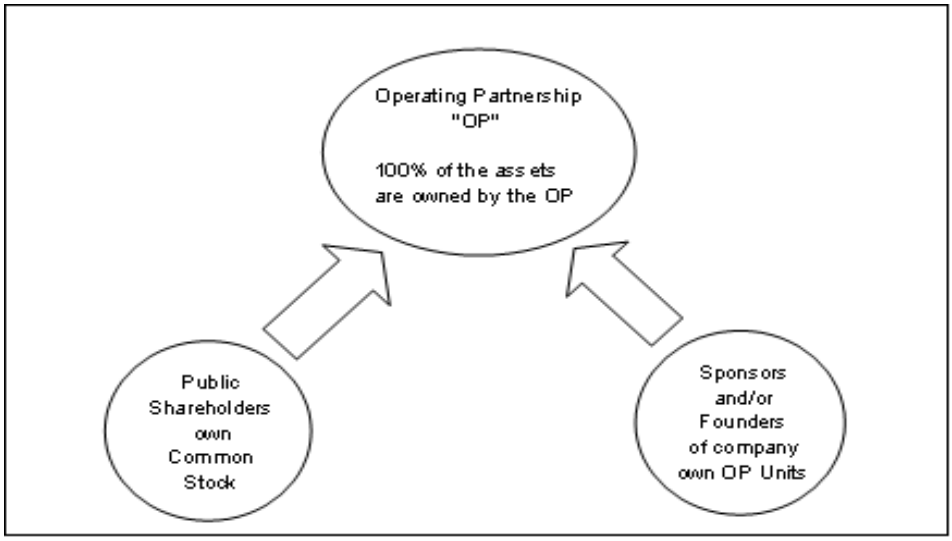
Created by investment bankers in the early 1990s, these two structures allowed real estate operating companies to place assets into a REIT structure in a tax-free manner. In an UPREIT, the founders of the company contribute assets to the REIT in return for operating partnership (OP) units while public shareholders receive traditional common stock as part of the IPO.

From an economic standpoint, OP units and common stock are equivalent as the OP units are convertible into common stock, usually on a 1:1 basis after a certain period of time. Distributions paid are the same on the OP units and the common stock. The major difference is that OP units are not freely tradable, and holders of the OP units face a taxable transaction if and when they sell their OP units.

One issue with the UPREIT structure is that the founders of the REIT (the original owners of the assets and now owners of OP units) have a different tax basis for their units or shares than the shareholders. This creates a potential conflict of interest as the OP unit holders (often members of management) would not want the REIT to sell their properties, as a sale would create a taxable event.

A DownREIT is similar to an UPREIT, but is generally created when the REIT is already a public company and owns and operates separate properties in addition to the controlled partnership's properties.

Exhibit 4: UPREIT ownership structure
In an UPREIT, the founders of the company contribute assets to the REIT in return for operating partnership (OP) units



Source: BofA Global Research

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The creation of these new structures paved the way for a number of IPOs (the IPO boom of 1991-1998). This wave of IPOs increased the attractiveness of REITs, as it enhanced liquidity, provided investors with greater transparency, and gave REITs access to more capital with which to grow.

The REIT Modernization Act

In 2001, the REIT Modernization Act went into effect, which allowed the formation of taxable REIT subsidiaries (TRS). A TRS, which is taxed at the corporate level, can engage in non-rental, ancillary business activities, such as property management, leasing, or merchant development. All of these activities contribute to a REIT's earnings. A REIT can own 100% of the stock of a TRS.

About 75% of publicly traded REITs are formed under Maryland law, which has several antitakeover provisions. For example, Maryland REIT law provides that a REIT may issue shares of beneficial interest, which permits directors to consider the interests of shareholders, employees, and creditors when confronted with a potential bidder. Maryland law also allows boards to classify themselves without shareholder approval and stagger their board of directors. In order to qualify as a REIT, no more than 50% of outstanding stock may be owned by five or fewer individuals. This provides an automatic maximum limit in ownership stakes. Given the search for yield and strong private market valuations of underlying real estate, REITs are prime targets for takeovers. Antitakeover provisions can cut both ways, but when used properly, management can negotiate the best possible deal for their shareholders.

Section 2: Types of Equity REITs

Healthcare ($139.5 billion market cap)

The key types of healthcare facilities that REITs invest in include: senior housing communities (independent living, assisted living, and CCRCs), skilled nursing facilities (SNFs), hospitals, medical office buildings (MOBs), and life science properties. Unlike other REIT sectors that typically only have one type of business, the healthcare REITs are able to diversify their investments by business and payor mix. For example, the four types of healthcare facilities have varying pay mechanisms: senior housing (private pay), skilled nursing (public pay), hospitals (public pay), and medical office buildings/life science (private pay).

Healthcare REITs generally employ two types of lease structures across their portfolios: triple net (NNN) and RIDEA. Triple-net is a common lease structure across healthcare real estate and is used in senior housing, skilled nursing and hospitals. These leases are characterized by their relative stability, which can be especially attractive to investors during periods of macroeconomic uncertainty. In an NNN lease, landlords do not have direct exposure to the underlying performance of the property. Instead, rents typically increase at fixed amounts over the life of the lease. Meanwhile, tenants pay all property operating expenses (the hallmark of an NNN lease), allowing for NOI margins at or near 100%. Landlords also pass through all property capital expenditures, which encourages longer leases and low turnover as tenants want to reap the benefits of their investments as long as possible. A typical triple-net lease will run 10-15 years with multiple five-year extension options.

In a RIDEA structure, by contrast, the REIT is directly exposed to the underlying operating performance of their properties. Healthcare REITs pay a fee to a healthcare operator to run a community. If margins improve, healthcare REITs benefit. On the flip side, this structure adds risk to healthcare REITs' cash flows because if margins shrink, the healthcare REITs' cash flows decline. RIDEA structures are used primarily in senior housing.

The key drivers of healthcare REIT property fundamentals include aging demographics, proximity to the oldest daughter (often the caregiver for aging parents), and proximity to the nearest hospital. Healthcare REITs are generally thought of as relatively defensive, given that the industry is necessity based (there are always people getting older who need care) and the predominance of the triple net lease structure, assuming current rent levels are sustainable.

One of the biggest risks is credit exposure to operators. This becomes a concern if the tenant is struggling to keep afloat, and the risk can be amplified if a healthcare REIT has a large operator exposure. Healthcare REITs also face government reimbursement risk, meaning cuts to Medicare or Medicaid reimbursement rates.

In recent years, healthcare REITs have worked to de-risk their portfolios by divesting weaker assets/property types and diversifying their tenant bases. Key factors underlying these decisions include longer-term challenges within skilled nursing (given reimbursement and payor mix pressures) as well as near/medium-term challenges in senior housing from elevated supply. Several REITs have also focused on increasing their exposure to life science assets and MOBs, which offer a relatively attractive risk/reward given their private-pay focus and steady long-term rent growth.

For more on senior housing REITs, see our Senior Housing Primer.

Industrial ($143.7 billion market cap)

Assets owned by industrial REITs typically include: distribution centers, bulk warehouse space, light manufacturing facilities, research and development facilities, and "flex" office space for sales or administrative functions. Industrial assets may be freestanding, but are often located within industrial or warehouse parks. These buildings range in size

from 25-50K square feet at the low end to over 1M square feet at the high end. While the properties are often leased to a single user, landlords also subdivide them for multiple tenant use. This cycle saw a sharp increase in demand for infill assets close to population centers as warehouse tenants have been laser focused on reducing delivery times to both business and consumer customers. We expect this key trend to continue. We also expect tenants keeping higher levels of inventory on hand to mitigate future supply chain shocks and the re-shoring of manufacturing to North America to add incremental space demand in the coming years.

When compared to other real estate types, industrial assets tend to require lower levels of maintenance capital expenditures given they consist largely of large concrete slab floors surrounded by four walls and a roof with large parking lots and truck courts. Modern logistics facilities include design traits such as dock doors on multiple sides of the building to promote the efficient flow of goods, large truck courts and 30 foot or higher clear ceiling height. Tenants increasingly desire large parking lots as e-commerce uses require significantly more warehouse employees to fill orders than traditional distribution. Additional amenities include solar power installations on rooftops, trailer parking and electric vehicle charging stations.

The biggest driver of demand for space is consumer spending on goods. Construction and trade are also key drivers of warehouse demand according to our analysis. Consumer spending on goods has the highest correlation to net absorption and is a strong driver of effective rent growth. The high correlation between warehouse demand and consumer spending on goods makes sense given that higher consumer spending will translate into a larger volume of goods flowing through the economy. In addition, firms need a greater cushion of inventory to keep up with sales when times are good. The bottom line is that warehouse demand benefits from inventory storage, or the flow of goods through the supply chain either in the manufacturing process or during distribution.

Our analysis finds while warehouse demand has benefited from inventory storage and the flow of goods in the manufacturing / distribution process, trade / supply chain variables weren't a significant leading determinant for net absorption or net effective rent growth until recent supply chain disruptions caused by the pandemic. We expect these factors to continue to grow in importance with the rising need for industrial buildings to accommodate onshoring activities to build supply chain resilience.

Warehousing and storage jobs have been one of the most meaningful drivers of demand for warehouse space. We expect U.S. manufacturing jobs to grow in importance as reshoring is one of the main drivers behind it being above prior peaks following a recession (first time since 1970s).

These key macroeconomic variables that show a 12-month leading relationship with the demand cycles of industrial real estate across the four key categories - (1) Consumption, (2) Trade / Supply Chains, (3) Construction and (4) Jobs. See our Leading Industrial Real Estate Indicator for more details.

The growth in e-commerce sales reflects a shift in demand rather than a pickup in total consumer demand, which is captured by the total consumer spending data. That said, Prologis (PLD) estimates that e-commerce requires more than three times more warehouse space than the traditional model for brick-and-mortar stores. E-commerce requires more logistics space due to online retailers 1) carrying more stock keeping units (SKUs), 2) carrying greater levels of inventory buffers, 3) requiring more space and employees to pick, pack and ship to customers (also individual boxes take up more space than pallets) and 4) accommodating space for returns.

A recent focus among tenants on growing profitability through improved supply chain design created demand for new and larger distribution center developments. As part of this process, third party logistics providers (3PLs) became a larger part of REIT tenant rosters. Typical industrial REIT leases last 3-5 years with 3PL leases at the shorter end.

It is worth noting a recent trend of lengthening lease durations for 3PL leases as well since they can serve multiple clients from a single building. The global nature of trade and tenant warehouse needs uniquely provides industrial REITs with opportunities to grow outside the US.

Reshoring/nearshoring is an additional driver of U.S. Industrial demand that has become more prevalent over the past few years. Driven by disruptions from COVID-19, trade tensions and geopolitical conflict, there has been a greater emphasis on supply chain localization. Recent legislation supports this shift, including 1) the CHIPS and Science Act, which includes $53bn for U.S. semiconductor production / R&D and 2) the Inflation Reduction Act, which aims to create 900,000 clean manufacturing jobs by offering $60bn in tax credits for manufacturing of solar panels, wind turbines and EVs.

Industrial assets tend to have shorter construction periods (6-12 months) than most other real estate types. The process to permit land can take much longer, especially given the preference of municipalities to use land for higher and better uses such as residential. Until the most recent downturn, short construction lead times for permitted land kept industrial building supply and demand relatively in balance. In fact, sector occupancy historically remained in a tight range from 88-92%. However, REITs have been able to push occupancy above 95% in recent years. We attribute this to strong tenant demand this cycle plus portfolio repositioning since the financial crisis that left many of the REITs with the best buildings in their markets. REITs also upgraded their local operating teams over the same period through M&A and weakness at private competitors unable to compete without the same access to public capital.

The challenge of entitling desirable land kept speculative construction in check longer than anyone expected during this recovery. We expect the challenge of entitling land and demand for unique infill sites to remain a governor on warehouse supply. The US vacancy rate was at historic lows heading into the COVID-19 recession. Strong demand during the downturn pushed the vacancy rate even lower. While developers responded with more construction, interest rates started rising in late 2022 which led to many projects being paused or cancelled.

Property funds are a unique aspect of industrial REIT business models. Property funds are portfolios of industrial properties owned by both the REIT and a group of institutional partners. The REITs typically own around 20% of the fund and operate the assets. The REIT collects management fees and bonuses/promoted interests upon meeting certain return requirements. This gives investors diversification with interests in a larger pool of assets and bolsters a REITs competitive strength in a geographic market by controlling more assets than they could on their own balance sheet alone. Assets enter the funds through acquisitions from third parties, acquisitions from the managing REIT, or when the managing REIT completes and leases new developments. Development projects within funds from their outset have become a rising trend in the sector to allow fund investors to participate in the value creation from these projects. Institutional investors find the funds useful given the challenge of putting large sums of capital to work in the industrial real estate sector since individual assets are relatively small dollar amount investments. Industrial REIT operating platforms also provide valuable scale and expertise. To read more see our Industrial REIT Primer.

Lodging ($33.7 billion market cap)

Lodging REITs consist of a portfolio of hotel properties with no unifying brand that are managed by a third party operator. This is the direct result of a legal restriction placed on REITs – in addition to complying with the restrictions placed on other REITs, lodging REITs are neither able to receive income from hotel operations, nor operate owned hotels. Lodging REITs historically have proven to be highly cyclical as the extremely short-term nature of their leases (nightly) can lead to highly volatile room rates and occupancy levels. Many operating expenses cannot be easily pared back, which can lead to volatile earnings cycles.

Since lodging REITs are not able to receive income from hotel operations or operate owned hotels, Lodging REITs have set up taxable REIT subsidiaries (TRS) that generate income from the hotels, and the TRS' in turn pay the REIT. When the Lodging REITs report earnings, they show the actual room revenue and food/beverage revenue; however, the income from hotel operations is not received by the REIT directly. For more details on Lodging REITs and a deeper dive into the Lodging sector overall, see the most recent Lodging Primer.

Residential ($190.9 billion market cap)

The residential sector includes apartments, manufactured housing and single-family rental REITs.

Apartments ($124.7 billion market cap)

There are three main apartment property types: *garden style* with two or three floors, *mid-rise* averaging five to seven stories, and *high rise*, which includes anything above mid-rise. The average lease duration for apartments is usually one year but can range from one month to two years.

One of the main drivers for apartment demand is job growth. An industry rule of thumb is that every five new jobs produce one unit of apartment rental demand. In a growing economy, job growth in the 20-35 year-old age range is more beneficial to apartment rentals as this is the prime renter age cohort. That said, there has been a trend of baby boomers and “empty nesters” returning to urban centers as they downsize and look for a more amenitized lifestyle. In a downturn, when unemployment is high, tenants tend to trade down, double or triple up, or even decide to move in with parents or other family in order to save money on rent. As a result, effective rents may decline significantly as landlords offer concessions in order to drive occupancy. The strategy for most apartment landlords is to try to maintain 94-95% occupancy, which means that effective rents may fall dramatically through higher concessions (one or two months free on a 12-month lease) and/or lower rent rolls (replacing a vacating tenant with a new tenant paying less per month). Typically, there is a 6-12 month lag between unemployment increasing and the time it affects apartment fundamentals.

Apartment supply is also important for the landlord's ability to push rents. Supply tends to affect properties in lease-up the most as it takes longer to stabilize the property and landlords may have to offer rents lower than their underwriting expectations. On the other hand, when there are extended years of limited, muted or no new supply in the market, apartment REITs can drive rental rate growth aggressively and maintain occupancy.

Other factors that affect apartment REITs are interest rates and condominium supply. Relatively high interest rates on home mortgages tend to help apartment owners, as this makes home ownership less affordable. Lower levels of housing inventory can also boost apartment demand. Condominiums, on the other hand, often present a threat to apartment owners in the form of a “shadow market,” meaning excess condominiums could be converted into apartment rentals, thereby increasing the supply in a market.

As a result of the residential mortgage crisis that began in 2007, a significant shift occurred in the US from owning to renting. US home ownership peaked in 2004 at about 69% and troughed in 2016 at about 63%. Every one percentage point decline represents approximately 1.1 million households that enter the renting pool. Recently there has been a slight uptick in homeownership levels with 2020 ending at 66%. Over the long term, our economists note that tight inventory levels and increasing home price appreciation, as well as tight lending conditions could dampen home ownership.

Manufactured housing communities ($28.6 billion market cap)

Companies in this sector own, operate and develop manufactured housing and recreational vehicle communities, and a few recently expanded into marinas. Tenants rent individual land sites with utility access for placement of manufactured homes and

RVs. The manufactured housing sector is viewed as defensive because it generates steady SS NOI due to low annual resident turnover and consistent increases in average rents. Even during the Great Recession ELS and SUI were able to continue pushing rents. In addition, recurring capital expenditures only amount to roughly $250 per site annually. Communities can be all-age or age-restricted (for retirees).

The manufactured housing and RV resort market is highly fragmented. Collectively, the three publicly traded REITs (ELS, SUI and UMH) own a combined 1,256 MH/RV communities, representing roughly 2.0% of the overall MH/RV market. The majority of the properties not owned by the publicly traded REITs are not operated by large owner-operators. An estimated 9% of all MH communities are in the hands of portfolio operators. The highly fragmented nature of the industry coupled with the largely mom and pop ownership structure presents a significant opportunity for ELS and SUI to grow via acquisitions. That said, MH/RV assets do not transact very often.

A typical MH community is designed to fit a variety of home sizes and designs. Typically, a manufactured home ranges from 400 to over 2,000 square feet. Properties may also have sites that can accommodate a variety of RV types. In general, communities have centralized entrances, internal road systems and designated sites for the placement of a manufactured house or a RV. Properties provide amenities/services such: a clubhouse for social activities, swimming pools, shuffleboard courts, tennis courts, pickle ball courts, golf courses, lawn bowling, restaurants, laundry facilities, cable television and internet service.

The manufactured housing REITs own the land, which is provided to customers to place factory-built homes (MH) or RVs. In addition, some communities may have cottages or cabins on the property, which the community would own but rent to customers. Customers may lease individual developed areas (MH or RV site) or enter right-to-use contracts allowing access to specific properties for limited stays (cottages/cabins).

There are several ways manufactured housing REITs can grow NOI. Internally, MH REITs grow by raising monthly rent payments on leased sites and/or increasing occupancy. Unlike most landlords, MH REITs can consistently push rent increases even during economic downturns. Externally, MH REITs can grow by acquiring new properties or adding new sites to existing properties. ELS is not engaged in developing new greenfield sites given the long lead times to stabilize the property and entitlement hurdles that face new development. For more see our Manufactured Housing Primer.

Single-family rentals ($37.6 billion market cap)

This is a recently formed subsector that is still in its infancy. The majority of US single family rental homes are owned and operated by mom and pop investors with institutional owners only ~2% of the market. Given the large fall in home values in select US markets during the World Financial Crisis, institutional players amassed large portfolios of single-family homes through multiple channels with the intent to renovate, lease and manage them. Currently, single family-rental homes represent about 36% of the entire US rental housing households of roughly 45M. We believe there is an enormous opportunity for industry consolidation over time as public and private owners develop operating platforms to manage portfolios of single-family rentals across the US.

According to our economists, industry trends continue to be favorable long term given the chronic lack of housing across the nation. Single-family rentals offer a more affordable living lifestyle and help alleviate the huge deficit in housing stock. Moreover, we believe aging Millennials will prefer single-family rentals given the larger living accommodations at an affordable rate and usually in suburbs of larger metropolitan areas. Longer-term, question marks remain on the ability to control capital expenditures as initial rehab expenditures made upon acquisitions mature, and the ability to expand into development of properties.

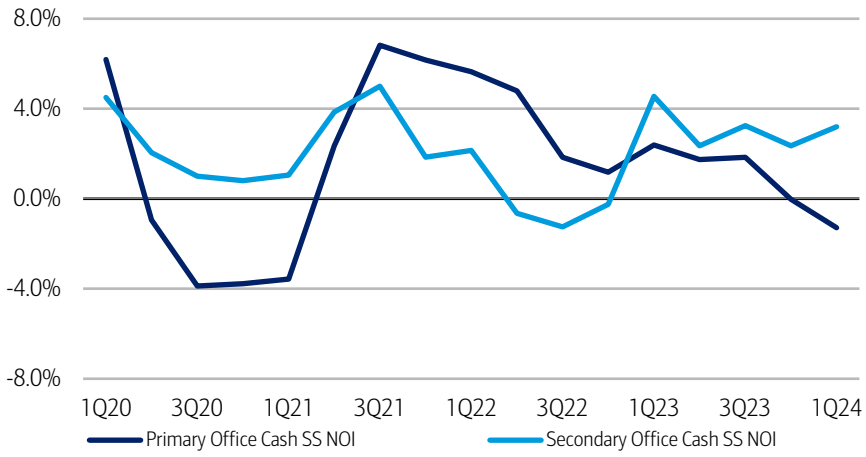
Office ($48.4 billion market cap)

Office REIT assets have traditionally fallen into two primary categories: central business district (CBD) or suburban. CBD typically means high-rise buildings in urban infill submarkets. Suburban typically means stand-alone office buildings or corporate office parks outside the urban core. Development costs, operating costs and rents are usually lower for suburban assets than CBD assets. However, these assets also face greater supply risk given their location in lower barrier-to-entry submarkets.

To improve portfolio, balance sheet and earnings quality, many REITs have sold their lowest quality assets over the past decade and redeployed proceeds into better positioned buildings or developments. This has reduced suburban concentrations for most REITs. Doing so has blurred the lines between what is considered a CBD or a suburban office REIT. The focus has shifted to distinguishing between office REITs with core market exposure (Boston, Los Angeles, New York, San Francisco, and Washington DC) and those concentrated in secondary markets such as Atlanta, Nashville, New Jersey, Philadelphia and Raleigh. The key differentiators are direct market cap rates and rents, global investor appetite for assets in these markets, and building prices per square foot. Investors also tend to group office REITs across different regions such as New York, Sunbelt and West Coast.

In Exhibit 5, we provide the historic average same store NOI growth for REITs traditionally categorized as primary and secondary office REITs. The long-term average shows stronger growth over time for primary names but secondary recently caught up as employers have expanded beyond the traditional largest markets in their search for talent.

Exhibit 5: Historical comparison of SS NOI of primary vs secondary office
Secondary office caught up to primary during the Covid downturn.



Source: Company reports, BofA Global Research

BofA GLOBAL RESEARCH

Office using job growth remains the key driver of office space demand. The average lease duration for office REITs is 5-7 years for suburban leases and 10-12 years for CBD. Some large CBD leases may last up to 20 years. In down markets, this locks in a stable income stream of above market rents with downside risk to in-place rents when leases mature. In improving markets, this could lock in below-market rents for an extended period, with the prospect of material rent increases when in-place leases mature. Office development projects typically take 18 months to three years to complete, depending on building size and location. Including the time it takes to assemble land sites and obtain project approval from the local municipality, projects typically take much longer in most CBD markets.

Office rents are quoted as either gross or net, and per month or per year, depending on local market convention. Both gross and net rent structures protect the landlord against building operating expense inflation. Gross rents include building operating costs (utilities, taxes, common area maintenance) in the first (or base) year's rent paid to the landlord. The landlord then pays these expenses directly. The tenant then reimburses the landlord for any growth in building operating costs above the base year level in subsequent years. Under a net rent structure, the tenant pays the landlord rent, but the tenant pays its share of the building operating expenses directly starting in the base year. The commonly heard term triple net refers to the payment of rent after the three categories of operating expenses listed above.

A noteworthy aspect of the office sector, and office REIT earnings models, comes from the capital expenditures necessary for landlords to maintain office buildings. Office REITs have the widest gap between FFO and AFFO of any REIT sector due to the heavy capital expenditure load required to maintain their buildings and lease space to tenants. Office capital expenditures take the form of leasing costs (broker commissions and tenant improvements on new leases and renewals) and property maintenance expenses. When office market conditions weaken and office landlord lease negotiating power deteriorates, tenant improvement capital expenditures tend to rise. However, when office market conditions improve, tenant improvement capital expenditures tend to decline. Property maintenance expenses tend to rise with inflation and are much less cyclical than leasing costs. That said, landlords often hold off on major capital improvement projects during more challenging market conditions to conserve capital.

A key trend over the past ten years has been the increasing tenant preference for large open floor plates and collaborative workspaces for employees. This movement started with tech and media startups that leased lower cost space in "brick and timber" converted warehouse / light manufacturing buildings on the West Coast and came to appreciate the layout. New construction to serve these same companies as they grew maintained a similar floor design. Tenants believe open floor designs with high concentrations of amenity space lead to more collaborative idea generation and will help attract and retain talent. This layout preference eventually spread beyond tech and media tenants. The effect has been employers downsizing from leasing the traditional 250 square feet per employee to now closer to 200 square feet or less, and reducing overall office leasing costs. The COVID-19 pandemic increased the focus on health and wellness, suggesting more personal space through de-densification and more space per employee. Tenant discussions on post-COVID space design indicate employers will want to design spaces that attract employees to the office and foster collaboration. Work from home during the pandemic proved the capability of employees to remain productive away from the office, but also the challenge of maintaining culture and innovation working remotely. We believe newer buildings will be best positioned to meet tenant workspace needs.

Other key trends in recent years has been: 1) the acceleration in the flight to quality trend with higher tenant preference for newer and more amenitized buildings in easily accessible locations and 2) the growth of co-working and flexible lease providers. Short-term office providers such as WeWork leased space in office buildings from traditional landlords and then offered it to individuals as workspace through membership subscriptions as short as one month. These same short-term office providers increasingly shifted to offering large blocks of space to "enterprise" users such as corporations under shorter lease terms than they would typically sign directly with a landlord. These businesses introduced flexibility on duration and square footage into the office leasing market, and tenants appreciated the option for at least a portion of their space needs. Office shutdowns in the COVID-19 downturn hit co-working revenue streams, memberships, and operators hard and we expect many to shrink their footprints or even go out of business. We expect the demand from tenants for lease flexibility for at least some of their office needs to remain to help them manage uncertainty. This means landlords will likely be asked to sign leases with shorter lease terms or more

flexibility to grow or shrink during the lease period. The key risk is that shorter lease terms lead to higher office cap rates for buildings should landlords comply with these requests.

Retail ($112.6 billion market cap)

Malls ($50.5 billion market cap)

Malls typically are characterized by larger, inward facing, enclosed centers (400,000 sf or more), with two or more anchors (traditionally department stores) and a number of in-line specialty tenants. Malls typically draw from a radius of 7-25 miles and focus on general merchandise/fashion tenants. Of all the various real estate sectors, malls have the highest ownership percentage by public REITs. About 26% of the roughly 1,000 malls in the nation are owned by REITs. Over 70% of the stronger malls (top 25%) are held within REIT portfolios. It should be noted that there is a disproportionate amount of NOI that comes from top tier malls. Mall REITs high level of ownership is a double-edged sword, as it provides the existing landlords with strong pricing power but limited external growth prospects via acquisitions.

Traditionally, malls consisted of 60% anchor tenant space and 40% specialty or in-line tenant space, and the anchor tenants were the major draw to a mall. However, this dynamic is changing. Select retailers have risen in importance in terms of drawing customers to the mall, such as Apple, Tesla, Primark and Dick's Sporting Goods. Anchor tenants have typically paid a relatively low rent, with the specialty tenants paying the majority of the rent.

Mall REIT revenues are related to consumer spending, but not tied to it directly. Retailers typically base their ability to pay rent increases on the cost of occupancy relative to retail sales. If sales have not significantly grown over the term of the lease, then rents will not aggressively grow or could even decline. A weakened consumer can affect REITs through increased vacancy from tenant bankruptcies or reduced store openings and less robust leasing spreads on new leases and renewal leases. One misperception is that mall revenues are made up of percentage rent (rent paid by a tenant if the tenant achieves sales above a pre-determined level). In fact, very little of REIT revenue is tied to sales, less than 4% on average, and the majority of revenue comes from fixed, annualized base rents.

Demographics are a key variable when examining retail assets (e.g., median household income and number of households within a trade area) as they provide an important measure of portfolio quality. If a company's portfolio has strong demographics, there is a greater probability it will withstand the ups and downs of the economy and changes within the local market.

In addition to demographics, there are a few factors that affect the success of a mall. These include tenant mix, which should be tailored by market to meet the needs of the local consumer, and location, as landlords can create synergies within the mall layout (i.e., placing a toy store next to the food court). Also of significant importance are breadth of retailers (to drive traffic and achieve critical mass) and site location (the asset should be visible and accessible from major roadways). As there are fewer opportunities in the mall sector to acquire additional properties or develop in prime locations, growth in the sector is mostly generated through tenant upgrades and redevelopment opportunities. To take this one step further, mall landlords are now looking to add density in and around the mall by developing mixed use assets at their properties. This may include office buildings, apartments, healthcare facilities and more.

Shopping centers ($59.0 billion market cap)

By ICSC's count, there are over 113,000 shopping centers in the U.S. (excluding malls and outlet centers). There are approximately 41,340 open-air neighborhood/community shopping centers in the United States, and about 6% (roughly 2,500 centers) are owned by REITs.

The main types of shopping centers include:

- Convenience center – less than 30,000 sf, anchored by a convenience store
- Neighborhood center – 30,000 to 125,000 sf, anchored by 1+ supermarket or drug store
- Community center – 125,000 to 400,000 sf, anchored by 2+ discount department stores, supermarkets, home improvement, or drug stores
- Power center – 250,000 to 600,000 sf, anchored by 3+ discount department stores, warehouse clubs, or home improvement stores
- Lifestyle centers – 150,000 to 500,000 sf also open air, but generally attract fashion/specialty retailers and can have no anchors or up to two anchors

Similar to malls, shopping center REITs are dependent on consumer spending. Vacancies in shopping centers are affected by net store closings. Historically, shopping center recoveries lag the end of recessions by one or two years. In addition, shopping centers are affected by a weak consumer through less robust leasing spreads (on both new leases and renewals), as retailers are less confident to agree to higher rents.

Like malls, we believe that shopping centers with stronger demographics are more resilient against a slowdown in the consumer and perform better in the long run. Other factors that affect the success of a shopping center include: site location (visibility and ease of access are important), grocery market dominance (important to have the number one or two grocer in the market), and general merchandise dominance.

Outlet centers ($3.1 billion market cap)

Factory outlet centers occupy a niche within the retail real estate industry, with over a 50-year history. Vanity Fair Corporation opened the first multi-tenant outlet center in 1970 within a converted factory building located in Reading, PA. Outlet centers today are typically 50,000 to 400,000 sf in size, made up of manufacturers' outlet stores, with anywhere from 100-125 tenants for phase 1 of projects and more added later should the center expand through additional phases built.

The outlet center industry, at 98.7 million square feet (1.3% of total marketplace retail GLA), was one of the retail center formats that was still developing ground-up projects at a consistent pace, but then stalled during the COVID pandemic. Previously built on the outskirts of town, outlet centers now are being located closer to major cities. From 2019 through 2023, outlet space in the US has changed very little in terms of total square footage as new development has slowed.

Our biggest concern in outlets is retailers potentially getting too aggressive with their outlet store openings and in locations too close to full price. Developers are building new outlet centers closer and closer in to traditional/full price distribution regions, and these new outlets could begin competing more directly with full price. Should this occur, we believe it eventually could damage retailer brands.

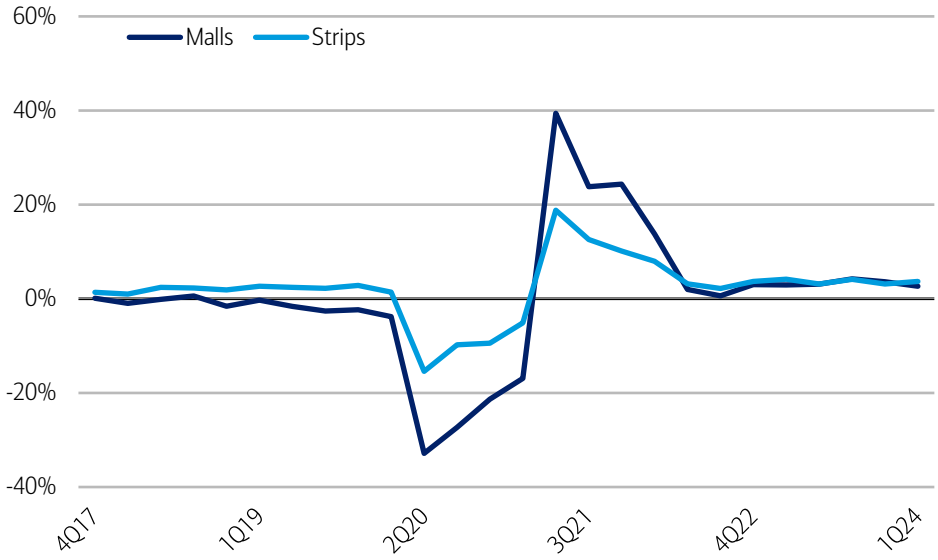
Retail SS NOI trends

After the 2008 and 2009 downturn, shopping center REIT SS NOI lagged mall REITs. In our view, this was due to the larger number of tenant bankruptcies in the shopping center space, coupled with higher exposure to local tenants. This trend reversed in the period from 3Q12 to 3Q13, as shopping center REITs were able to drive stronger SS NOI numbers primarily through anchor occupancy increases. In the last eight quarters, shopping center REIT SS NOI has averaged in a range of 2.2% to 4.2%.

Between 2010 and 2016, the mall SS NOI numbers separated with the stronger numbers reported by the higher quality portfolios (+4%), and lower quality portfolios reporting

weaker numbers (in a range between 0-2%). For the years 2018 and 2019, Mall SS NOI numbers slipped to a range between 2.2% and 2.8% for the higher quality portfolios and -3.0% for the lower quality portfolios. During COVID from 2Q20 through 1Q21, all Mall REITs reported Y/Y declines in SS NOI regardless of portfolio quality. SS NOI growth Y/Y then inflected positive starting in 1Q21.

Exhibit 6: Historical comparison of SS NOI of mall vs strip REITs
SS NOI growth for Strips has been positive since 2Q21



Source : Company reports, BofA Global Research

BofA GLOBAL RESEARCH

Retail freestanding/triple-net ($130.0 billion market cap)

REITs that own retail freestanding properties are also known as triple-net or net-lease REITs. Net lease REITs derive their name from the type of lease signed with tenants. Leases are called triple net because the agreements are structured so that the tenant is responsible for all operating expenses (insurance, taxes, capex), and the landlord collects a net rent. Typically, triple net leases have relatively long lease terms, low embedded rent bumps and renewal options at the end of the lease. As a result, the cash flow of a triple net lease is fairly predictable and stable.

The downside of a steady and stable income stream is that net lease REITs produce modest internal growth. Triple net REITs supplement their modest internal growth with acquisition-fueled external growth. Over the last few years, external growth has contributed 50-75% of each triple net's annual FFO/AFFO growth.

With no development platforms and limited internal growth, the investment spread on an acquisition is the key to driving earnings growth. Two factors drive the investment spread: (1) the initial cap rate on an acquisition and (2) the REIT's cost of capital. The initial cap rate is a function of the asset and the overall risk of the investment. The cost of capital is determined by the relative mix of debt and equity it uses in its capital structure as well as each component's cost.

The lower a REIT's cost of capital, the larger (wider) the REIT's spread will be on a new acquisition, all else equal. A better (lower) cost of capital drives relative outperformance. Therefore, managing, maintaining and improving the REIT's cost of capital is a key goal of a net lease management team. There are many factors that go into a REIT's cost of capital, including a REIT's investment strategy. In our view, the best way to maximize a REIT's cost of capital in the net lease space is to send a clear message on strategy and build a strong historical track record on acquisitions, performance and balance sheet management. To read more see our Triple Net REIT Primer.

Self-storage ($92.3 billion market cap)

Self-storage facilities offer rental units on a month-to-month basis where tenants have direct access to their units. While many types of self-storage structures have been converted from warehouses and other building types, the majority of facilities that are being developed today are specifically designed for consumer/business storage. Unit sizes vary, but the most common include 10x5, 10x10, 10x20, 15x20 and 20x20. The storage units are typically windowless and walled with corrugated metal. Units can be accessed by opening a roll-up metal door.

The industry is fragmented, with the top 10 largest operators owning about 24% of the self-storage industry's facilities. Self Storage Almanac, an independent research firm, estimates the total number of self-storage facilities in the United States to be over 51,000 (and other estimates range 45,000-60,000).

Demand for storage is resilient through good times and bad and sometimes driven by diverse life changes including death, divorce and dislocation. Moderately increasing lengths of stay corroborate the stickiness of the storage customer. Over the long term, we expect industry demand for storage to grow with household formation growth and the economy. That said, there is seasonality to the business with greater demand in 2Q and 3Q due largely to student demand. Peak leasing season typically starts in late April/early May and extends through late August/early September. Self-storage renters fall into four key categories: residential/retail, commercial, student and military.

Despite current elevated new supply, zoning restrictions are generally making the construction of new storage facilities more difficult with local governments hesitant to allow new development given limited job and tax creation. That said, across commercial real estate, self storage is one of the more accessible asset types for small entrepreneurs to develop. Therefore, one of the bigger risks to the industry is future new supply growth in an otherwise saturated market. We also note on-demand or valet storage is a potential disruptive risk longer term, particularly with more affluent customers in an urban setting.

Communications infrastructure ($271 billion market cap)

REITs within this non-traditional real estate sector own and operate various types of communications infrastructure including, but not limited to, towers, data centers, hand fiber optics. The three largest companies in this sector are American Tower (AMT: $87b market cap), Equinix (EQIX: $73b market cap), and Digital Realty (DLR: $48b market cap). The sector is primarily divided into Tower (AMT, CCI, SBAC) and Data Center (DLR and EQIX) subdivisions.

Towers ($150 billion market cap)

Tower companies own and manage cell towers globally, leasing space to tenants that deploy equipment affixed to the tower. Large mobile wireless carriers (like Verizon, T-Mobile, and AT&T) are the main customers of towers, deploying radio equipment across a wide geography to create cellular networks. Location-specific customers like radio broadcasters and TV stations also lease space on towers to a much smaller degree.

Key to the tower business model is long-duration contracts (typically ~30 years including extensions) with low churn (typically 1-2% p.a.) and fixed escalators (typically ~3% p.a. domestically and CPI-linked internationally). These elements combined bestow high levels of certainty and line of sight into revenue expectations years in advance. Idiosyncratic churn events due to carrier consolidation (like TMUS/Sprint in the US or Oi in Brazil) can and do create periodic headwinds as leases on redundant deployments expire.

The operating margin of individual towers is high as tower companies own the structure to which carrier radios are attached. Associated costs are typically ground rent, property tax, maintenance expense, and, at times, security. Tower companies achieve meaningful economies of scale collocating multiple tenants' equipment on the same tower. The incremental cost of adding and maintaining a new tenant on an existing site is minimal.

While carriers are always deploying new equipment to augment their networks, Tower companies typically see new leasing activity in cycles parallel to carrier network build-out phases every 3-8 years. A major driver of domestic carrier spend is handling ever-growing data traffic demand at ever-higher speeds. The United States is currently at the upper bound of countries with 5G availability and while market dynamics vary from continent to continent, as a whole international markets are more in their 5G infancy. We maintain wide-scale adoption of 5G will be a driver for international markets for years to come and overall we remain constructive on international markets and their growth opportunity. This said, select countries with idiosyncratic carrier issues (e.g. Brazil, India, Mexico) can present near-term growth headwinds.

There are three publicly traded U.S. tower REITs: American Tower (AMT), Crown Castle (CCI), and SBA Communications (SBAC). American Tower has taken a uniquely international tack, earning nearly half its revenues overseas, while SBAC (~80%) and CCI (100%) focus on the domestic market. Firms have turned their focus to the potential convergence of communications infrastructure as 5G technologies proliferate. AMT has acquired data center company CoreSite and CCI has invested heavily in the development of "small cells". Small cells are located in densely populated areas attached to fiber optic cables offering latency and bandwidth advantages.

Data centers ($121 billion market cap)

Data center REITs own and operate buildings that house networking, data storage and communications technology infrastructure. This infrastructure includes servers, storage gear, switches, routers and fiber optic communications equipment. The unique design of data centers satisfies the specialized needs of tenants for power, cooling capacity, building security and network connectivity.

Data center companies provide the infrastructure, but typically do not own any of the server, storage or networking gear that customers install in the facility. Typical tenants are those that require large amounts of computing capacity, data storage or network connectivity, and include corporations, governments, telecommunications carriers, digital media and content providers, cloud providers, and financial and educational institutions.

Data center REITs develop, own and operate data centers. Data center REIT portfolios span North America, Europe and Asia, with the largest concentration in the US. Within the US, and the World, Northern Virginia stands out as the largest data center market. Given similarities for data center demand and design across continents, we expect overseas expansion and growth for this sector to continue.

Unique to this REIT sector, data center REITs typically price their space to tenants based on power capacity usage ($/kW) rather than rentable square feet. The procurement of large amounts of power is uniquely important to the development of data center property and has become particularly prominent since 2022 as power availability has become scarce. Major data center markets continue to see rising spot/releasing prices as oncoming data center supply is limited. Persistent power procurement issues in primary markets such as Northern Virginia and Silicon Valley have forced data center developers to look harder at secondary and tertiary markets such as Atlanta, Columbus, Hillsboro, Phoenix, Portland, Reno, etc.,

The two main segments of the data center industry are wholesale and retail colocation. Wholesale data center operators cater to hyperscale operators like META, GOOGL, AMZN, and MSFT, leasing multi-MW deployments (and sometimes entire buildings). These operators tend to manage larger data centers and pass through power costs to their customers. Retail colocation providers offer smaller deployments in highly interconnected facilities. Their customers are typically smaller and more diverse enterprises keen on the latency and interconnection benefits of housing a deployment in a network-dense environment.

Secular drivers, including IT outsourcing, IP traffic growth and cloud adoption are driving demand for data center capacity. Bandwidth-intensive applications, such as gaming and video, and the shift in content consumption through over-the-top (OTT) platforms, are similarly expected to remain positive contributors to demand for the foreseeable future. On top of these drivers, the development of Generative AI and large language models are expected to drive new data center demand. The two core elements of Generative AI models are Training and Inference. Training is a hugely compute-intensive exercise where a model learns from a large data set, asking and answering questions in an effort to 'learn' (the intelligence). Inference is then used via the trained AI model to answer novel third party inquiries. DLR and EQIX are positioning themselves to address the incremental demand from both Training and Inference. DLR's wholesale business model should position it well to develop facilities with the power density required to host large AI model Training. EQIX's retail-centric business allows it to live closer to its customers and positions it to better serve Inference opportunities.

Section 3: Evolution of the REIT industry

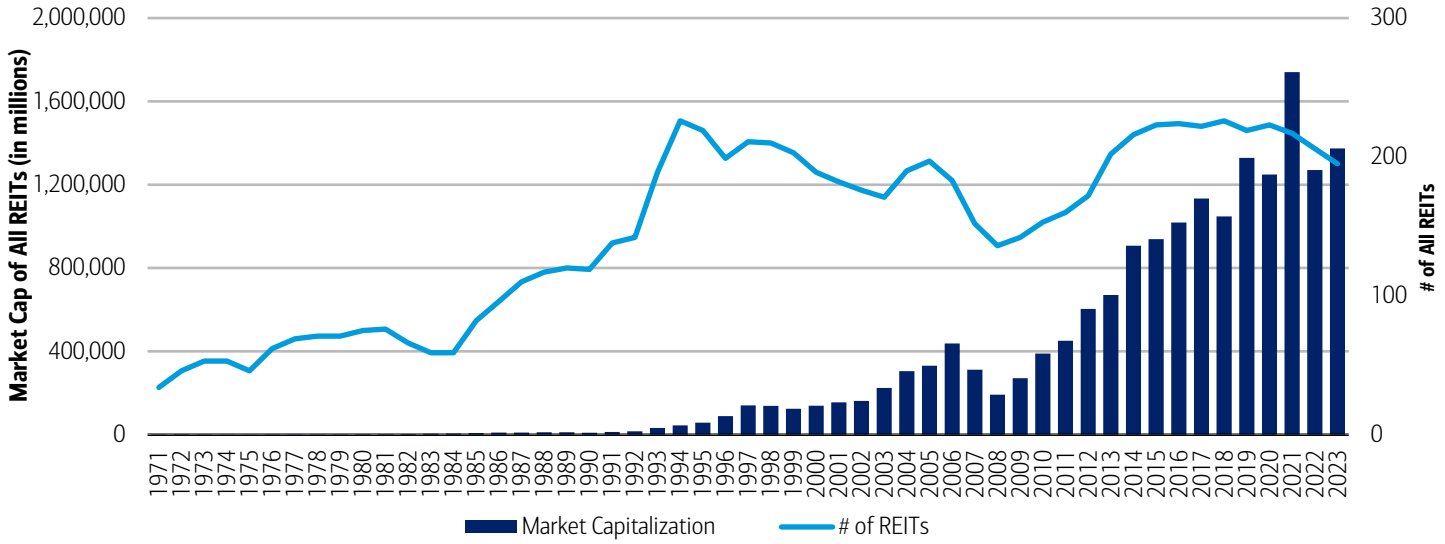
The REIT industry has changed dramatically over the decades since its initial formation in the 1960s. Two cycles in 1970s and 1980s brought small increases in the number of REITs, but it was not until the early 1990s that the sector had strong growth and wide acceptance among investors.

In 1971, REITs had a market cap of just $1.5 billion (representing 34 REITs) and it was still under $10 billion in 1990. At the peak in 2006, the market cap of REITs was over $400 billion. In 2007, both the market cap and number of REITs declined after years of growth due to increased mergers and acquisitions and private equity deals. The SOX Act also placed strict regulations on board structure and cost pressures on smaller REITs.

The economic recession in 2008 pressured the stock prices of many REITs, in part due to their leverage. REITs regained strength in 2009 and climbed through early 2013, at which point 10-year interest rates caused REIT shares to tumble on fear of rising interest rates. As of December 31, 2023, the REIT sector (including mortgage REITs) market capitalization reached just over $1.37 trillion. Since 2009, the number of REITs has increased from 142 to 195.

Given significant changes in the industry, it is difficult to draw conclusions simply based on historical averages. Over the years, the industry has undergone important regulatory changes (i.e., the 1999 REIT Modernization Act), and many investors believe REITs were greatly undervalued during the dot-com boom.

Exhibit 7: All REITs (Equity, Mortgage, and Hybrid REITs) - number and market cap
Number of REITs has increased from 142 in 2009 to 195 in 2023



Source: NAREIT; Note: Includes all REITs: equity, mortgage, and hybrid REITs; as of 12/31/23

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Equity raises

The first wave of equity offerings occurred in the 1990s. There was another spike in 2009, as many REITs tapped the equity markets in order to repair their balance sheets amid a global credit crunch. This was followed by further equity issuance in 2010. As anticipated, 2013 was a year of strong issuance, with equity issuance by REITs peaking at nearly $41.5 bn. Given REIT share performance in the second half of 2013, equity issuance tapered off in 2014 with under $30bn raised. Equity issuance slowed further in 2015, with REITs raising slight under $25bn albeit picking up in 2017 to $31bn. In 2019, equity issuance increased to $32bn after issuances fell to $20bn in 2018. In 2021, approximately $33.5bn were raised through equity issuance. Equity issuances tapered off to $20bn and $12bn in 2022 and 2023 respectively.

Exhibit 8: Equity offerings by REITs, in millions
Approximately $11.6bn have been raised through equity issuance in 2023

Year	# of Equity Offerings [1]	$ Amount Raised [2]
1988	26	$2,159
1989	26	$1,797
1990	18	$1,271
1991	28	$1,594
1992	32	$1,974
1993	100	$13,191
1994	97	$11,121
1995	101	$8,260
1996	145	$12,309
1997	253	$26,266
1998	233	$14,572
1999	31	$2,258
2000	11	$1,172
2001	58	$4,204
2002	88	$6,393
2003	90	$8,117
2004	108	$15,318
2005	82	$12,310
2006	80	$17,966
2007	60	$13,674
2008	62	$11,623
2009	96	$24,234
2010	100	$25,604

Exhibit 8: Equity offerings by REITs, in millions
Approximately $11.6bn have been raised through equity issuance in 2023

Year	# of Equity Offerings (1)	$ Amount Raised (2)
2011	100	$33,382
2012	114	$36,965
2013	140	$41,488
2014	108	$28,173
2015	82	$24,856
2016	79	$27,848
2017	84	$30,825
2018	58	$19,918
2019	86	$32,215
2020	50	$18,692
2021	87	$33,545
2022	66	$20,604
2023	28	$11,570

Source: NAREIT, as of Jan 31, 2024
(1) Includes IPOs and secondary offerings
(2) Prior to 1997, secondary figures include preferred stock deals.

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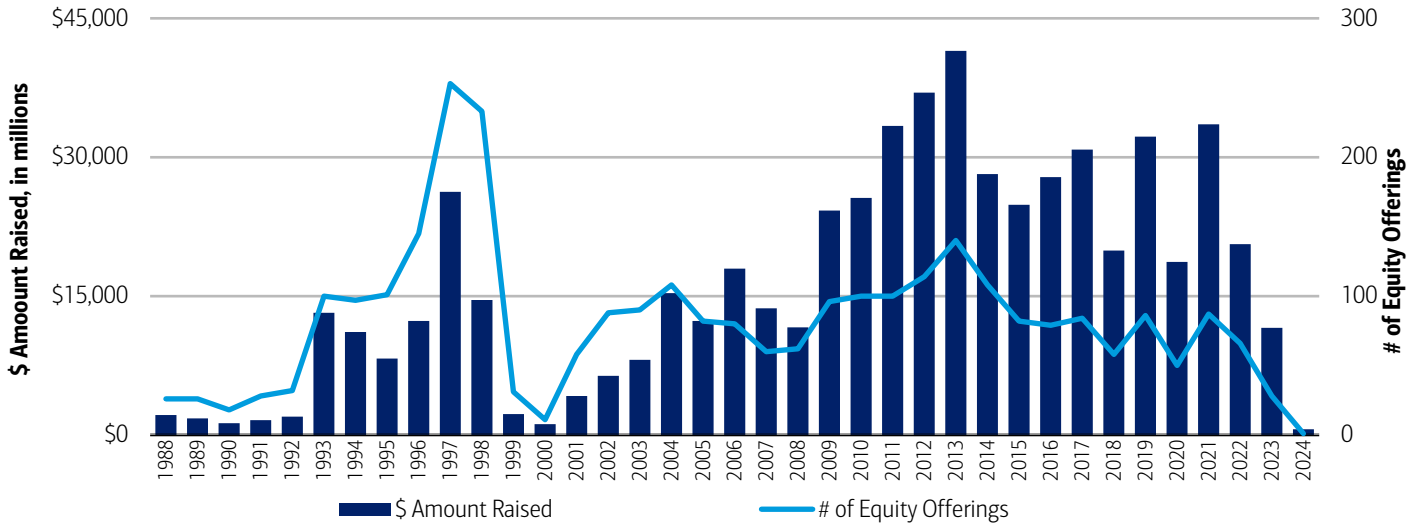
Exhibit 9: Number of equity offerings and amount raised by REITs, in millions
Approximately $606mn has been raised through equity issuance in 2024 YTD



Source: NAREIT, as of Jan 31, 2024
(1) Includes IPOs and secondary offerings
(2) Prior to 1997, secondary figures include preferred stock deals.

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REIT conversions and spinoffs

Following the Great Recession, there has been an increase in conversions to the REIT structure from companies in non-traditional REIT sectors. Examples included towers, datacenter operators, correctional facilities, billboard companies and death care services providers. With the recent tax reform and a lower corporate tax rate, there might be less incentive for conversions to REITs.

On a similar note, interest in companies spinning off their real estate holdings increased after the Great Recession as well. Spinoffs allowed companies to raise capital by spinning off their real estate holdings tax free. For example, Sears spun off its real estate holdings into Seritage Growth Properties in the summer of 2015. An additional factor driving the rising popularity of REIT spinoffs was increased shareholder activism. A popular strategy for activist investors since the Great Recession had been to push for an operating company / property company split to maximize shareholder value.

However, the REIT conversion boom may have come to an end. On December 18, 2015, former President Barak Obama signed into law a bill that restrictions tax-free REIT spinoffs. The bill (Protecting Americans from Tax Hikes Act of 2015) requires, for a tax-free spinoff, that the distributing corporation and the corporation being distributed in the spinoff are REITs immediately after the distribution. Previous tax law allowed companies, regardless of REIT status, to spin off their real estate tax free into a REIT. In addition, if both parties to a spinoff are not REITs immediately after the distribution, then neither the distributing company nor the distributed company are permitted to elect REIT status for 10 years following a tax-free spinoff.

M&A activity

In addition to equity raises, over the last 12 years, there have been over 100 REIT merger and acquisition deals. In 2006-2007, there was a wave of REIT privatizations, with 34 public-to-private transactions worth a total of $122.5 billion, according to NAREIT. Transactional activity peaked in 2006 and then fell off dramatically in 2008 and 2009, as capital was difficult to come by.

Exhibit 10: Historical deal statistics
In 2023, aggregate M&A values fell -54%, following rise in interest rates.

Year	Aggregate Deal Value (M)	Number of Deals
1994	469.79	5
1995	1,413.97	7
1996	5,516.09	7
1997	15,323.24	14
1998	18,597.32	24
1999	12,109.00	14
2000	13,775.25	10
2001	19,602.67	15
2002	5,213.71	12
2003	7,157.73	9
2004	34,874.26	13
2005	40,406.92	16
2006	105,252.70	28
2007	114,136.09	29
2008	2,031.97	5
2009	4,698.37	9
2010	10,718.84	11
2011	35,555.03	9
2012	20,402.94	16
2013	41,265.53	17
2014	25,258.63	13
2015	55,449.59	21
2016	37,244.83	14
2017	26,721.92	20
2018	81,270.02	17
2019	30,248.09	15
2020	31,593.82	17
2021	85,446.44	18
2022	84,033.45	14
2023	38,999.01	8

Source: S&P Global Market Intelligence, BofA Global Research.
Note: Aggregate deal value calculated by S&P Global Market Intelligence as of 3/19/2024; does not include assumed debt
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Merger activity has accelerated since the Great Recession

Transactional activity began to pick up again in 2010 and gained strength in 2011 through today, with several large public-to-public transactions closing:

- Prologis and AMB's merger of equals

- Ventas' acquisition of National Health Properties in 2011 and of Cogdell Spencer in 2012
- Mid-America Apartment Communities' acquisition of Colonial Properties Trust, completed October 2013
- Essex Property Trust's acquisition of BRE Properties, completed March 2014
- Washington Prime Group's acquisition of Glimcher Realty Trust, completed January 2015
- Omega's acquisition of Aviv, completed April 2015
- Equinix acquisition of Telecity, completed January 2016
- American Homes for Rent acquiring American Residential Properties in March 2016
- Regency Centers acquisition of Equity One in March 2017.
- Sabra Health's acquisition of Care Capital Properties in May 2017
- Invitation Homes and Starwood Waypoint Homes merger of equals in August 2017
- Prologis's acquisition of DCT Industrial Trust announced in April 2018
- Government Properties Income Trust and Select Income REIT merger of equals in December 2018, and changed name to Office Properties Income Trust
- Cousins Properties and TIER REIT's merger of equals in March 2019
- Prologis's acquisition of Liberty Property Trust completed in February 2020
- Simon Property Group's Acquisition of Taubman Centers completed in December 2020
- Kimco Realty Corp acquisition of Weingarten Realty Investors completed in August 2021.
- Realty Income acquisition of VEREIT completed in November 2021.
- Industrial Logistics Properties Trust's acquisition of Monmouth Real Estate Investment Corp completed in February 2022.
- In October 2022, Prologis, Inc. completed the acquisition of Duke Realty.
- Extra space Storage, Inc merged with Life Storage, Inc in July 2023.
- Regency Centers Corp closed the acquisition of Urstadt Biddle Properties in August 2023.
- Kimco Realty closed the acquisition of RPT Realty in January 2024.
- Realty Income Corp closed the merger with Spirit Realty Capital in January 2024.
- Healthpeak Properties, Inc closed the merger with Physicians Realty Trust in March 2024

Synergies are realistic and achievable in the commercial real estate space, and for the smaller companies, the costs of being a public company make it difficult to justify the advantage of access to the capital markets. The key variable is whether there are

acquisition opportunities on the private side for public REITs. In our view, larger REITs may pursue smaller REITs if opportunities do not emerge on the private side.

REITs trading at a discount to NAV helped fuel a pickup in privatizations
REIT privatizations started to pick up in 2015 as REITs began trading at a discount to their NAV. Recent REIT privatizations include:

- Brookfield Asset Management's privatization of Associated Estates Realty in August 2015
- Blackstone's purchase of Excel Trust in August 2015
- Lone Star's acquisition of Home Properties in October 2015
- Blackstone's privatization of BioMed Realty Trust in January 2016
- Harrison Street RE Capital's purchase of Campus Crest Communities in March 2016
- DRA Advisors purchase of Inland Real Estate Corporation in 1H16
- Brookfield Asset Management acquisition of Rouse Properties in July 2016.
- Brookfield Asset Management acquisition of General Growth Properties in March 2018
- Greystar's purchase of Education Realty Trust in September 2018
- Blackstone's purchase of Gramercy Property Trust in October 2018
- AXA Investment Managers acquisition of NorthStar Realty Europe Corp in September 2019
- Brookfield Asset Management acquire all of the limited partnership units of Brookfield Property Partners in 2021
- KSL Capital Partners' acquisition of Hersha Hospitality Trust in August 2023
- Blackstone's purchase of Apartment Income REIT Corp in April 2024

Spin outs offer a way to unlock real estate value
REIT spin outs have also taken hold, providing means for management to unlock real estate value. Such transactions include: Urban Edge's spin out from Vornado, completed January 2015; Care Capital Properties spin out from Ventas, completed August 2015; JBG SMITH's spin out from Vornado in July 2017; Spirit Realty's spin out of SMTA in June 2018; DDR's to spin out of RVT in July 2018 and ILPT's spin out of SIR in Dec 2018.

REITs in major indices

REITs increasingly have been accepted as a major asset class, and this is evidenced by their inclusion in major indices. The first REIT to be added to the S&P 500 index was Equity Residential in 2001. Today, there are 29 REITs in the S&P 500 index. There are 30 REITs in the S&P 400 Mid Cap index and 58 REITs in the S&P 600 Small Cap index. On March 16, 2012, Simon Property Group (SPG) was added to the S&P 100 index. SPG is the first REIT to be included in this index.

On February 3, 2020, O was added to the S&P 500 Distribution Aristocrats Index, which recognizes members of the S&P 500 with market caps above $3B that have raised the distribution annually for at least 25 consecutive years. The two other REITs included in the index are ESS and FRT.

Exhibit 11: REITs in the S&P 500
There are 29 REITs in the S&P 500 index

Entry Date	Ticker	Market cap	% of S&P
3/20/2017	AMT	91,662.02	0.21%
11/16/2007	ARE	19,449.27	0.04%
1/9/2007	AVB	25,839.58	0.06%
3/31/2006	BXP	9,099.13	0.02%
4/4/2022	CCI	45,346.52	0.10%
3/14/2012	CPT	10,365.33	0.02%
5/17/2016	DLR	42,926.24	0.10%
7/16/2003	DOC	12,388.48	0.03%
7/26/2017	EQIX	79,291.70	0.18%
NA	EQR	21,475.53	0.05%
11/1/2001	ESS	15,160.25	0.03%
4/1/2014	EXR	29,240.88	0.07%
1/15/2016	FRT	7,321.83	0.02%
1/29/2016	HST	14,609.60	0.03%
3/31/2008	INVH	19,955.09	0.05%
3/19/2007	IRM	23,338.76	0.05%
1/5/2009	KIM	12,723.37	0.03%
4/3/2006	MAA	15,219.77	0.04%
12/1/2016	O	43,328.65	0.10%
8/18/2005	PLD	118,129.69	0.27%
4/6/2015	PSA	43,884.97	0.10%
3/2/2017	REG	9,731.77	0.02%
9/1/2017	SBAC	23,204.34	0.05%
6/25/2002	SPG	50,223.19	0.12%
3/4/2016	UDR	11,115.00	0.03%
3/4/2009	VICI	29,970.39	0.07%
8/11/2005	VTR	17,455.29	0.04%
1/30/2009	WELL	51,837.91	0.12%
3/31/1964	WY	25,198.37	0.06%

Source: Bloomberg
Note: Market cap as of 3/19/2024

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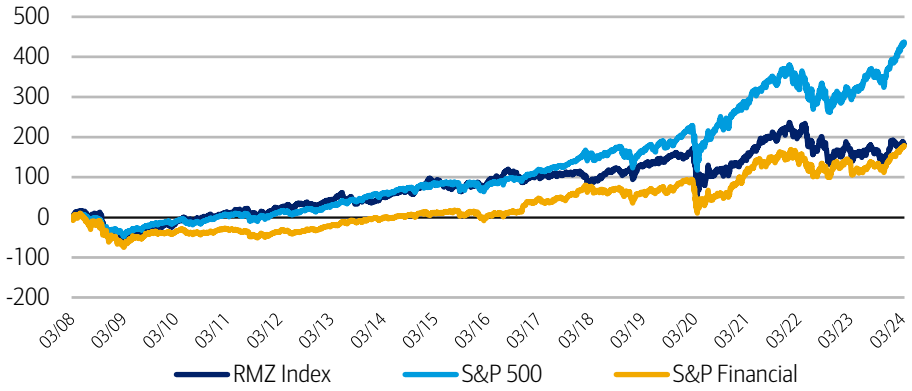
REITs have outperformed financials since the Great Recession

As shown in the chart below, REIT returns tracked S&P Financials returns in 2006-09, but since 2009 REIT returns have outperformed the S&P Financials.

Exhibit 12: Comparison of total return values
Since 2009 REIT returns have outperformed the S&P Financials



Source: Bloomberg
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Equity REITs are became the 11th GICS Sector

In August 2016, the Real Estate Investment Trusts (REITs) industry was removed from Financials to become its own sector (the 11th sector) based on S&P Dow Jones/MSCI's Global Industry Classification Standard (GICS). This excludes mortgage REITs, which remain in Financials under a new Mortgage REITs sub-industry – though there are currently no mortgage REITs in the S&P 500. This was the first new GICS sector since

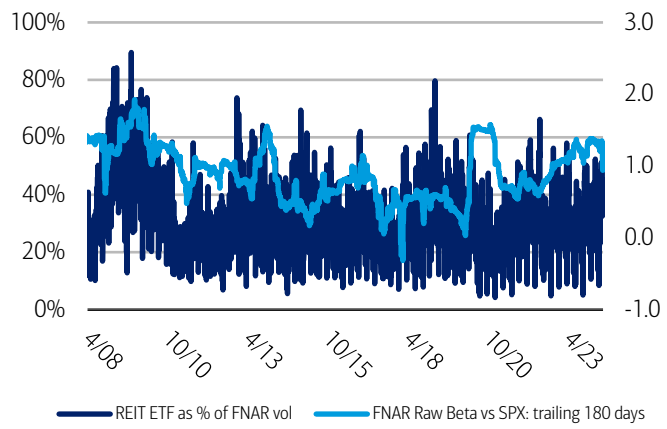
the introduction of GICS in 1999. The change occurred in late August and has been implemented within the index since September 2016. Before the GICS change, REITs were 18% of the S&P 500 Financials sector by market cap. REITs are now of similar size to Utilities and Materials (three of the smaller sectors in the S&P 500 at about 6% each).

Challenge: as REITs get more exposure should you value on NAV or multiples
Generalists and some REIT dedicated investors have started using alternatives to the traditional metrics used for REIT valuation. As we highlighted in our generalist guide to REITs reports (Volume 1 and Volume 2), new entrants to the REIT investing world have changed the way REITs are analyzed and viewed. Analysts, including our team, have historically looked at net asset values (NAV) and same store (SS) metrics to assess valuation and performance. Although, as NAV discounts have persisted for a period of time, growth & cash flow have become increasingly important. As such while we still view NAV as important, AFFO & FFO multiples and PEG/PEGY analyses have become an important part of the REIT valuation mosaic.

REIT ETFs

As REITs were added to the S&P 500, ETF baskets increasingly included REITs, and more REIT ETFs were created. In the SPDR S&P 500 ETF and the iShares Russell 2000 ETF, REITs currently weigh in at 1.42% and 5.80%, respectively. The S&P Real Estate Select Sector Index is an ETF that invests exclusively in public real estate companies.

Exhibit 13: REIT ETF volume share and trailing 6 mo. FNAR beta
REIT ETF as % of FNAR volume as on 4/30/23 was 39.0%



Source: Bloomberg; FNAR: FTSE NAREIT ALL REITS index. Data as of 4/30/2024

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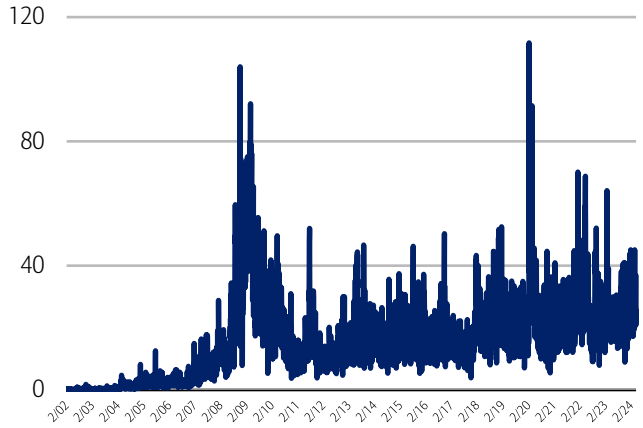
Exhibit 14: Total REIT ETF share volume (in millions)
REIT ETF share volume as on 4/30/24 was 36.74mn



Source: Bloomberg. Data as of 4/28/2023.

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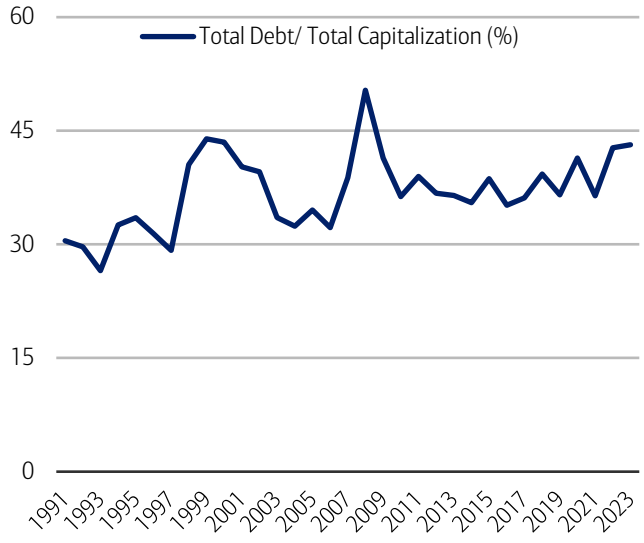
REIT leverage over time

REIT leverage has, for the most part, ranged from 25-50% when looking at REITs' total debt as a percent of total capitalization (Exhibit 15). Since 1990 total debt as a percent of total capitalization has averaged 37%. Since 2000, total debt as a percent of total cap has averaged a modestly higher 38%. When looking at leverage using net debt to EBITDA (Exhibit 16), leverage rose from 4.3x in 1990 to a high of 7.3x in 2020. Since 2009, the net debt / EBITDA ratio has trended lower up to 2019, before rising in 2020. As of year-end 2023, the average net debt to EBITDA ratio was 6.0x.

Exhibit 15: Total debt / total cap has remained fairly stable
Total debt as a percentage of total capital has averaged 38% since 2000



Source: S&P Global Market Intelligence

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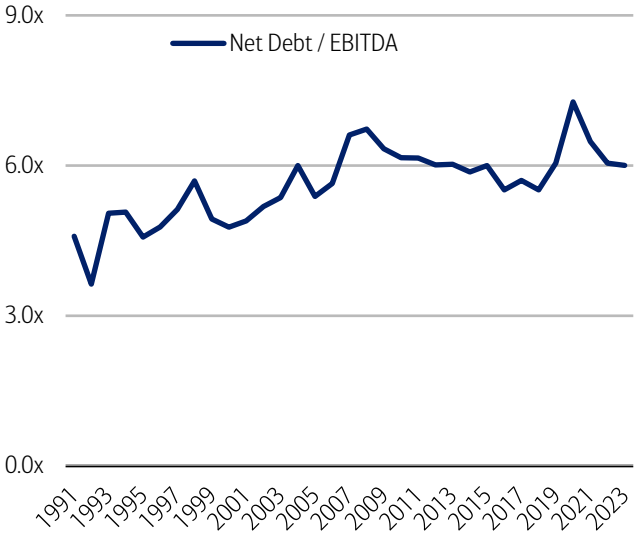
Exhibit 16: Debt as % of EBITDA
Net debt / EBITDA ratio has trended lower since 2008



Source: S&P Global Market Intelligence

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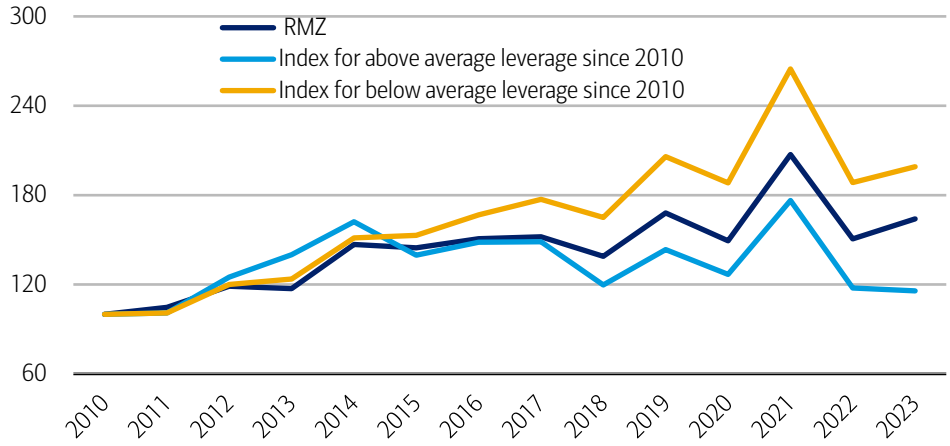
Less levered REITs have outperformed the RMZ since 2010

REITs with lower or below average leverage have outperformed the RMZ, while REITs with higher or above average leverage underperformed the RMZ since 2010 (Exhibit 17). From 2010 to 2023, the average debt to EBITDA ratio for the REITs we analyzed was 7.06x. Since 2010, the RMZ saw an annualized price return of +3.60%. Over the same time period, the high leverage group had annualized price returns of +1.05% and the low leverage group had +5.04% annualized price returns.

Exhibit 17: REITs with lower leverage have outperformed
REITs with below average leverage outperformed the ones with above average leverage



Source: S&P Global Market Intelligence, FactSet

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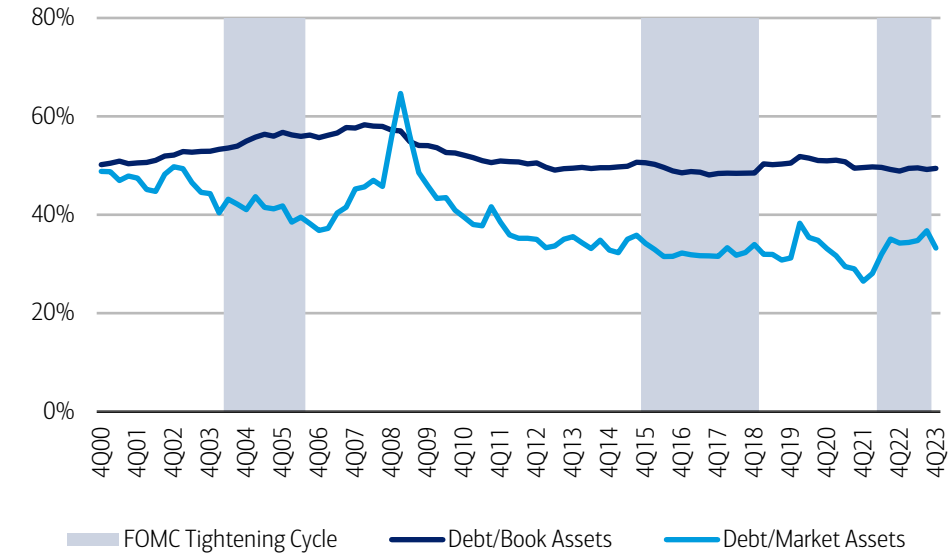
Our analysis included 92 REITs with an average debt to EBITDA ratio from 2010 to 2023 of 7.06x. We divided the REITS into two groups: (1) a high leverage group that consisted of 32 REITs and (2) a low leverage group that included 60 REITs. The high leverage group included REITs that had an average leverage ratio from 2010 to 2023 that was above the average (7.06x). The low leverage group consisted of the REITs with leverage below the average. In our analysis, we only included REITs that have existed since 2010 and continuously traded through year-end 2023.

Exhibit 18: Historical REIT average of debt to total assets
The average debt to total assets has declined by -8.2% since 4Q07



Source: NAREIT

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Debt to total assets shows decreasing use of debt from pre-crisis levels

REITs have strengthened their balance sheets over the past few years and reduced leverage by relying heavily on equity capital on joint ventures to finance their external growth. The average debt-to-book assets ratio of REITs has declined -8.2% from the end of 2007. The decrease in the use of debt is a positive in the current rising interest rate environment as the cost of debt rises.

REIT balance sheets by sector

Below we summarize REIT leverage and floating rate exposure by sector.

Exhibit 19: Summary Exhibit

Apartments and Single Family Rentals have the best balance sheet with lower leverage and unhedged floating rate debt exposure

	Net Debt / EBITDA	Rank	Unhedged floating rate debt % of total debt	Rank	Combined Rank
Apartments	4.6x	2	5.9%	4	1
SF Rentals	5.4x	6	0.3%	1	2
Healthcare	5.0x	4	5.5%	3	3
Industrial	4.6x	3	6.9%	7	4
Malls	5.8x	10	3.8%	2	5
Self storage	4.4x	1	14.2%	11	6
Shopping centers	5.6x	8	6.1%	5	7
Comm. Infrastructure	5.0x	5	9.6%	9	8
Net lease	5.4x	7	6.9%	8	9
Mfd. housing	5.7x	9	6.4%	6	10
Office	8.3x	11	11.1%	10	11

Source: BofA Global Research as of 1Q24

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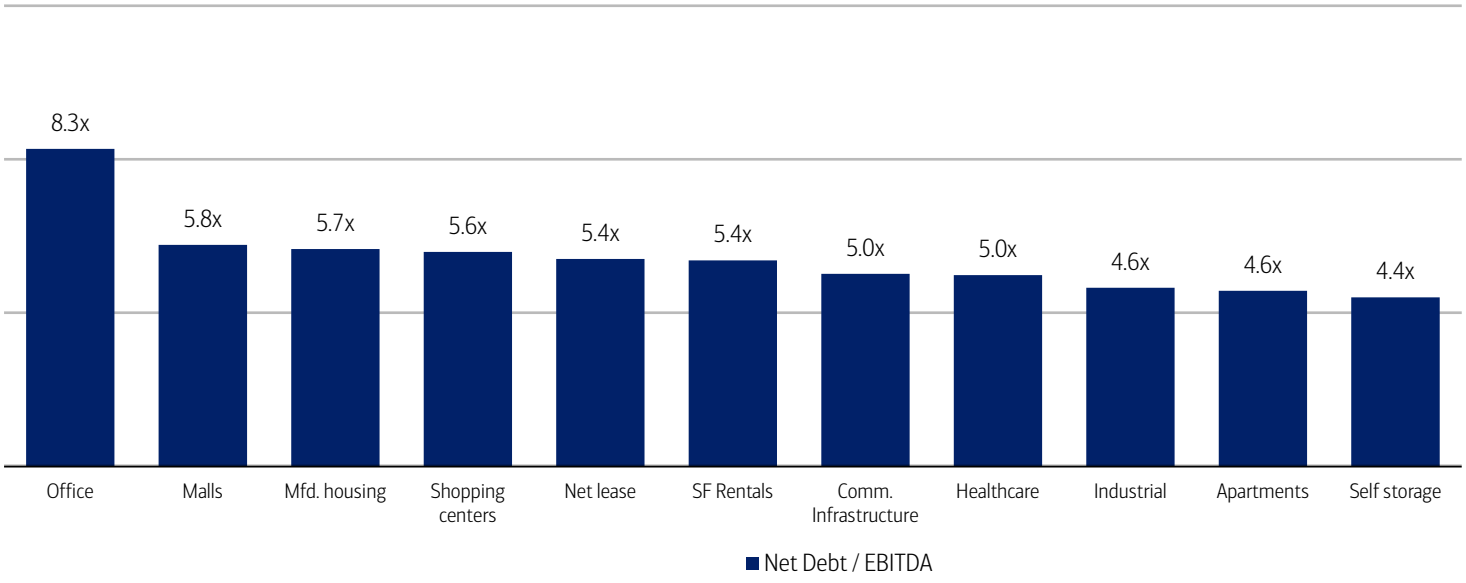
Exhibit 20: Leverage

Office has the highest net debt to EBITDA ratio of 8.3x while Self Storage has the lowest at 4.4x



Source: Company filings as of 1Q24

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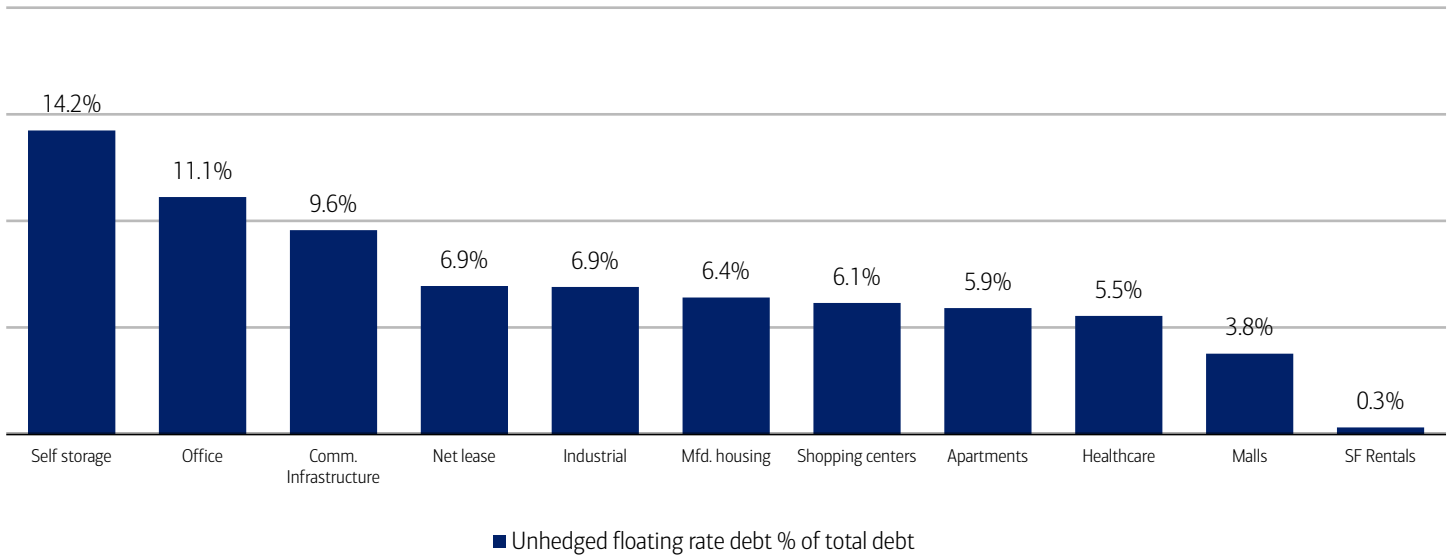
Exhibit 21: Unhedged floating rate debt % of total debt
Self Storage has the most unhedged floating rate debt at 14.2% of total debt while SF Rentals have the lowest



Source: Company filings as of 1Q24

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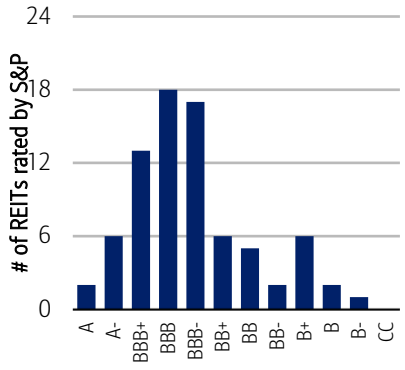
REITs rated by rating agencies

Rating agencies like S&P, Moody's & Fitch rate REITs based on multiple criteria, including debt coverage ratios, fixed cost coverage ratios, company size, diversity of portfolio, management capabilities, etc. As of March 25, 2024, S&P had ratings on 78 publicly traded REITs, Moody's had ratings on 55 and Fitch had ratings on 41.

The following charts show the number and ratings of S&P-rated, Moody's-rated, and Fitch-rated REITs. For S&P, A to BBB- implies investment grade. BB+ and below implies speculative grade. The majority of the S&P-rated REITs (56 out of 78) fall in the investment grade category. For Moody's ratings, Aaa to Baa3 ratings are considered investment grade (currently 37 REITs out of 55). For Fitch ratings, AAA to BBB ratings are considered investment grade (34 out of 41).

Exhibit 22: Ratings distribution of REITs rated by S&P
56 of 78 REITs fall in the investment grade category



Source: S&P Global Market Intelligence

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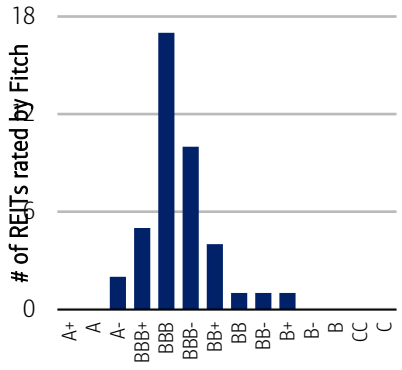
Exhibit 23: Ratings distribution of REITs rated by Fitch
34 of 41 REITs fall in the investment grade category



Source: Bloomberg

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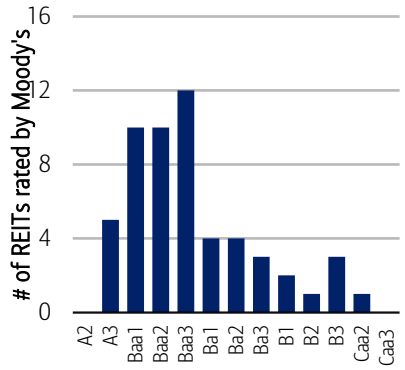
Exhibit 24: Ratings distribution of REITs rated by Moody's
37 of 55 REITs fall in the investment grade category



Source: Bloomberg

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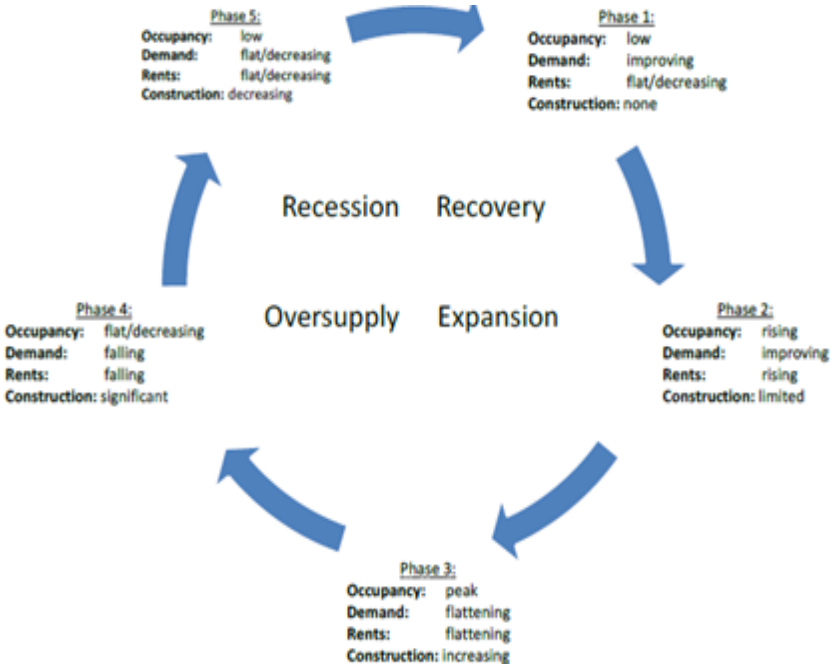
The real estate life cycle

No two cycles are the same, but historically they have averaged a 10-year pattern. Some factors that are affecting our present cycle include government regulations/policies, taxes, accessibility of capital and availability of information through technology. The subsectors within REITs may begin or end at different times, but each have a comparable path as characterized in the graph below. Understanding where the REIT is in its life cycle is important when determining strategic priorities and objectives.

Exhibit 25: Real estate life cycle
There are five phases in a real estate life cycle



Source: BofA Global Research

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Supply growth is one of the key triggers that have historically heralded the end of the real estate cycle. We see two opposing forces potentially changing the supply reaction function in the current cycle:

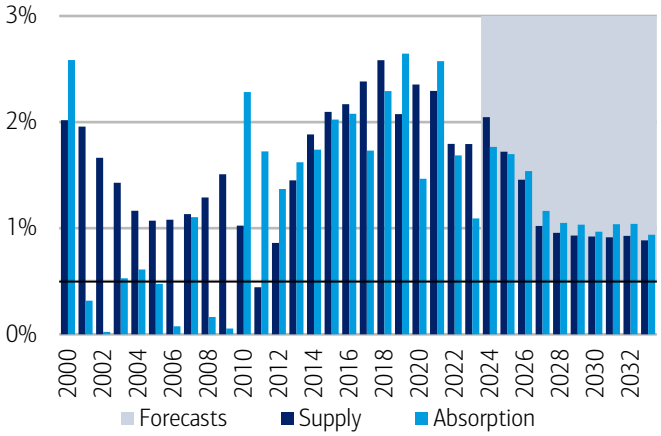
Fiscal stimulus would boost construction costs; tempering CRE supply growth

We see any large scale infrastructure plan on the federal or state level as a positive as it may temper real estate supply growth. For real estate owners such as REITs, this would be welcome news since it would drive up construction costs, slowing supply growth.

Loosening or rolling back financial regulations could increase construction loans

Tightening of financial regulations can create a more muted supply response in any cycle. For example, Basel 3 has made it less profitable and more capital intensive for banks to provide construction loans. Merchant builders needed to provide substantially more equity, raising their costs and concentrating their equity in fewer projects. On the other hand, a large-scale rollback in regulations could mean changing the rules that would make it easier for banks to provide development financing.

Exhibit 26: Apartments - supply vs. demand history vs. forecasts
For 2024, REIS forecasts supply (2.0% of inventory) to exceed absorption (1.8%)



Source: BofA Global Research, REIS, Note: supply & net absorption as % of inventory. Data as of 1Q24

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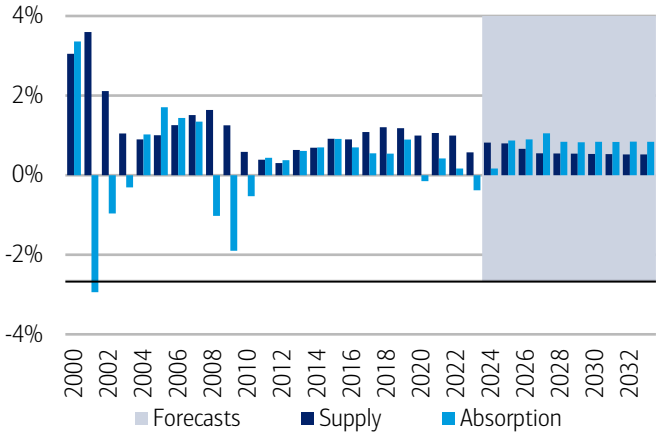
Exhibit 27: Office - supply vs. demand history vs. forecasts
For 2024, REIS forecasts supply (0.8% of inventory) to exceed absorption (0.2%)



Source: BofA Global Research, REIS, Note: supply & net absorption as % of inventory. Data as of 1Q24

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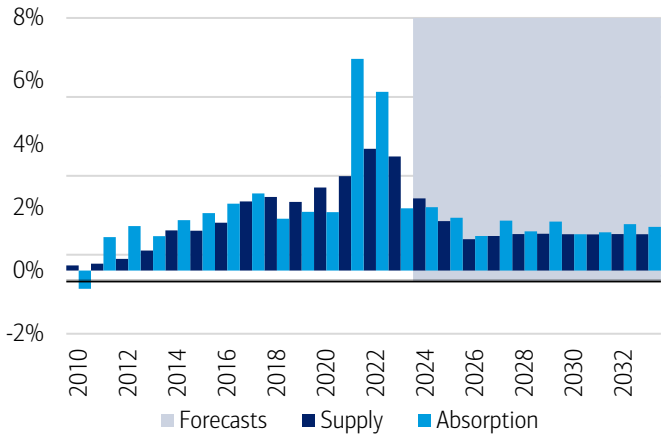
Exhibit 28: Industrial - supply vs. demand history vs. forecasts
For 2024, REIS forecasts supply (2.3% of inventory) to exceed absorption (2.0%)



Source: BofA Global Research, REIS, Note: supply & net absorption as % of inventory. Data as of 1Q24

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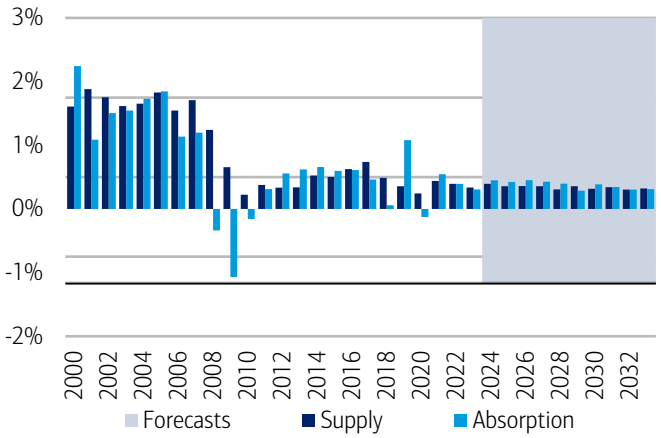
Exhibit 29: Retail - supply vs. demand history vs. forecasts
For 2024, REIS forecasts supply (0.4% of inventory) to be level with absorption (0.4%)



Source: BofA Global Research, REIS, Note: supply & net absorption as % of inventory. Data as of 1Q24

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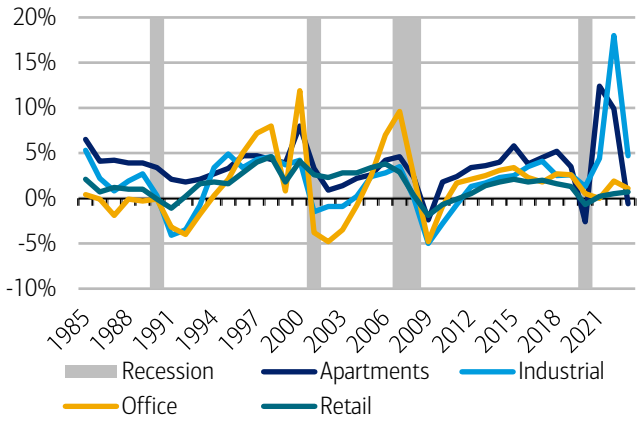
Recession analysis: a view of prior cycles

In this section, we analyze REIT sector performance during prior recessions. We have data on more sectors during the GFC than the DotCom downturn due to the expansion of the REIT sector during the period between these cycles.

In Exhibit 30, we show national year over year (Y/Y) rent growth since 1985 for Apartments, Industrial, Office and Retail. The pattern across the cycle is similar for all four sectors. Rent growth accelerates across the business cycle and peaks right before the recession. During the recession, rent growth slows and for most sectors turns negative. Office had the most variability whereas Retail showed the most stability.

In Exhibit 31, we show net absorption as a percent of the total stock. We believe this metric is the best proxy for demand. Absorption as a percent of the total stock tells us how much of the total supply is taken up (or given back if negative) in the current period. Absorption has typically been positive throughout the expansion phase of the business cycle and then slowed / turned negative during and immediately following a recession. The 1990 recession, however, was unique in that absorption remained positive throughout the downturn.

Exhibit 30: Asking Rent percentage
Office had the most variability whereas Retail showed the most stability



Source: REIS, BofA Global Research, (hash marks indicate end of year)

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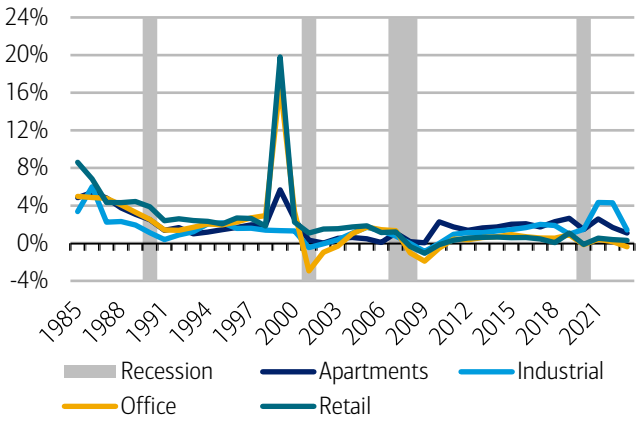
Exhibit 31: Net Absorption as a percentage of Total Stock
Absorption remained positive throughout the 1990 recession



Source: REIS, BofA Global Research, (hash marks indicate end of year)

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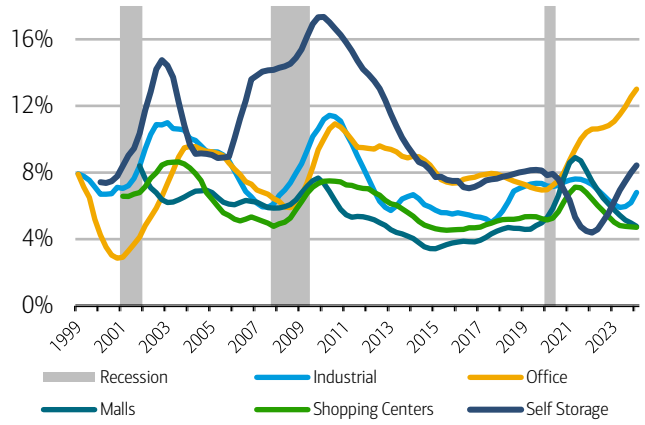
In Exhibit 32 and Exhibit 33, we plot vacancy levels across the REITs. Across these sectors, Office experienced the biggest increases in vacancy levels following a recession. Self-Storage and Manufactured Housing benefited from the housing market's disruption and collapse of site-built housing respectively, as both sectors saw vacancies trend lower following the Great Recession. Apartments had the most stable vacancy levels.

Exhibit 32: Vacancy (percent)
Office experienced the biggest increases in vacancy levels following a recession



Source: Company filings, BofA Global Research, (hash marks indicate start of year)
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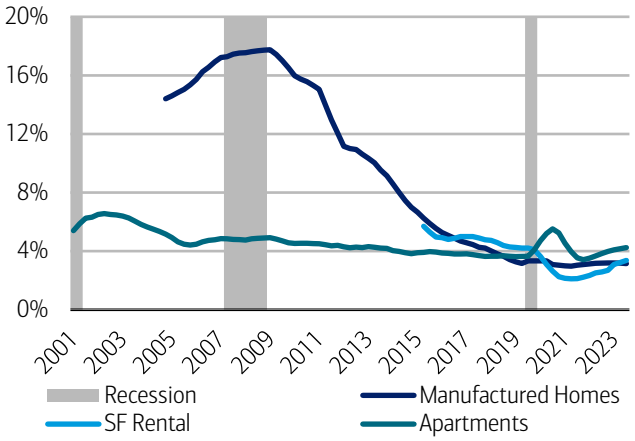
Exhibit 33: Vacancy (percent)
Manufactured Housing saw vacancies trend lower following the great Recession



Source: Company filings, BofA Global Research, (hash marks indicate start of year)
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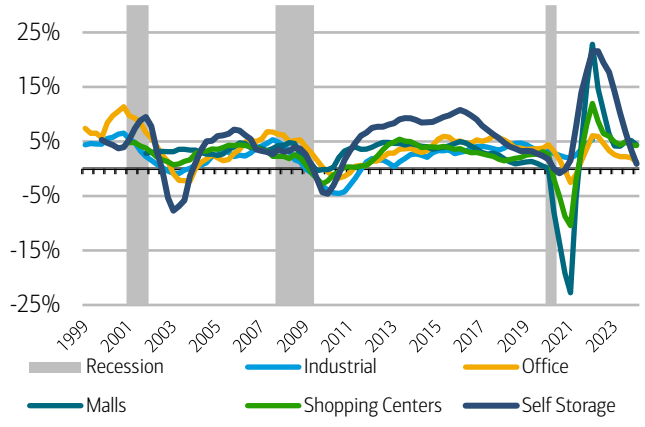
Asking rent, net absorption, and vacancy are factors that impact same store (SS) net operating income (NOI) growth, a key metric for REITs. Exhibit 34 and Exhibit 35 show how SS NOI has trended over time and through recessions for each sector going back to 1999. Our analysis shows that Industrial, Single Family Rental, and Manufactured Housing were relatively stable and the only ones that maintained positive SS NOI growth through and immediately following the COVID recession. Apartments, Malls, Shopping Centers, and Healthcare reported negative SS NOI growth following the pandemic but have since recovered.

Exhibit 34: SS NOI growth (year over year percent change)
Industrial REITs were the only sector to maintain positive SS NOI growth through the COVID recession



Source : Company filings, BofA Global Research, (hash marks indicate start of year)
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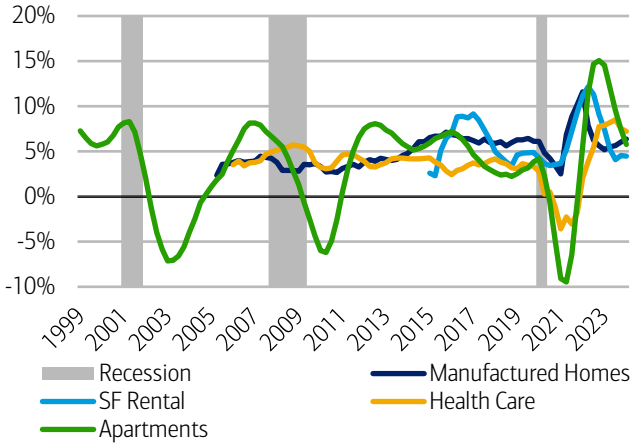
Exhibit 35: SS NOI growth (year over year percent change)
Manufactured Housing and Single Family Rentals maintained positive SS NOI growth during the Covid recession



Source : Company filings, BofA Global Research, (hash marks indicate start of year)
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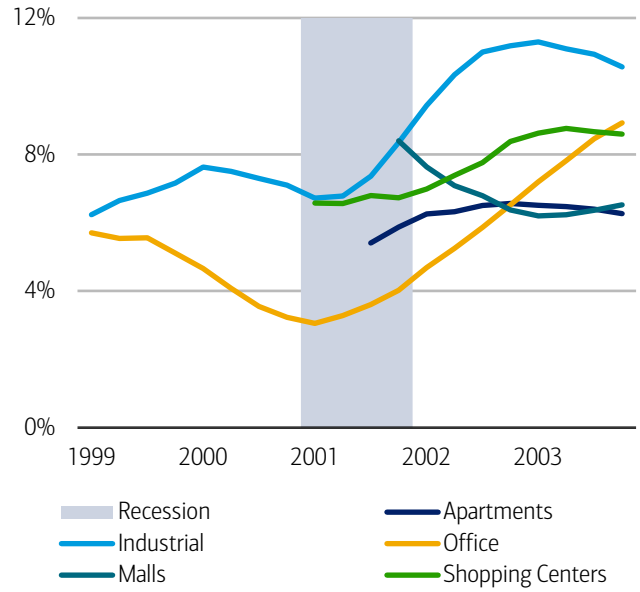
Scenario 1: Which sectors perform best in a recovery?

In Exhibit 36 and Exhibit 37, we plot vacancy levels across REIT sectors during the DotCom crash and GFC. Vacancy levels for office and industrial REITs continued to increase even after the DotCom recession ended and only started trending lower 2.5 years after the official end of the recession. We saw a similar trend during the GFC with vacancy rising for Self Storage, Healthcare, Industrial, Office and Shopping Centers post-recession. Vacancy rates for Manufactured Homes were the quickest to recover.

Exhibit 36: Vacancy rates during the DotCom Crash
Industrials had elevated vacancy during the DotCom crash



Source: Company filings, BofA Global Research

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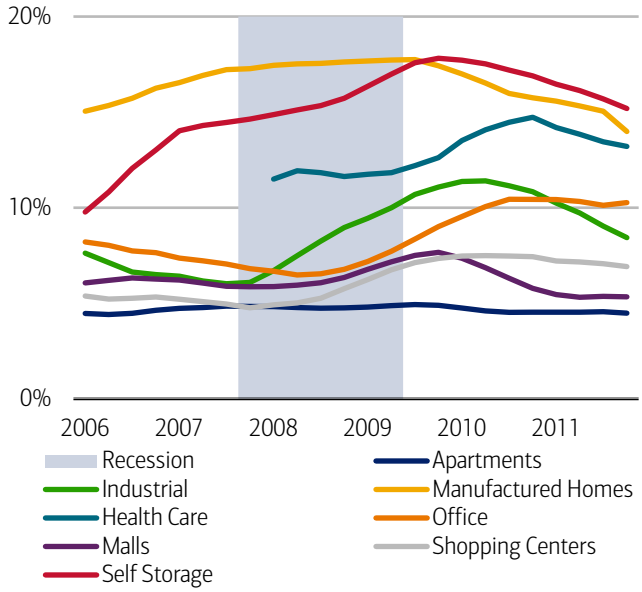
Exhibit 37: Vacancy rates during the Global Financial Crisis
Vacancy rates for Manufactured Homes were the quickest to recover



Source: Company filings, BofA Global Research

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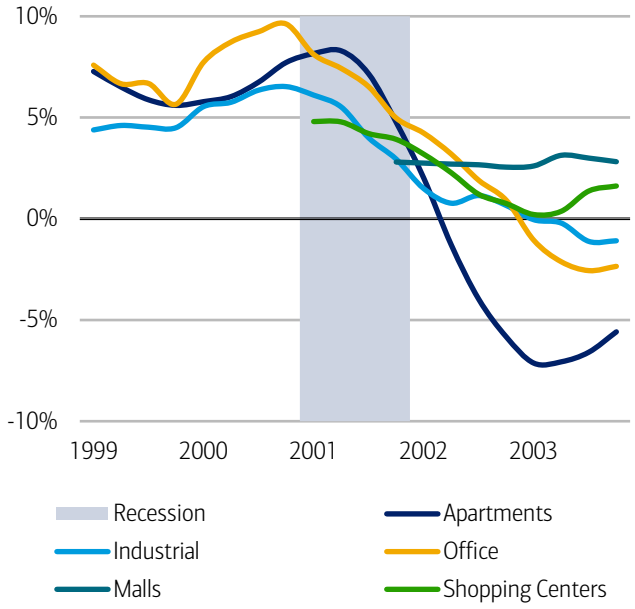
Exhibit 38 and Exhibit 39 provide same store NOI results for the same sectors and highlight self storage and retail (malls and shopping centers) rebounded fastest back to pre-recession levels after the GFC and Apartments both declined and recovered the most. Manufactured Homes and Healthcare delivered the least variability in SS NOI growth.

Exhibit 38: Y/Y SS NOI growth during the DotCom Crash
Apartments had the largest decline in SS NOI during the DotCom crash



Source: Company filings, BofA Global Research

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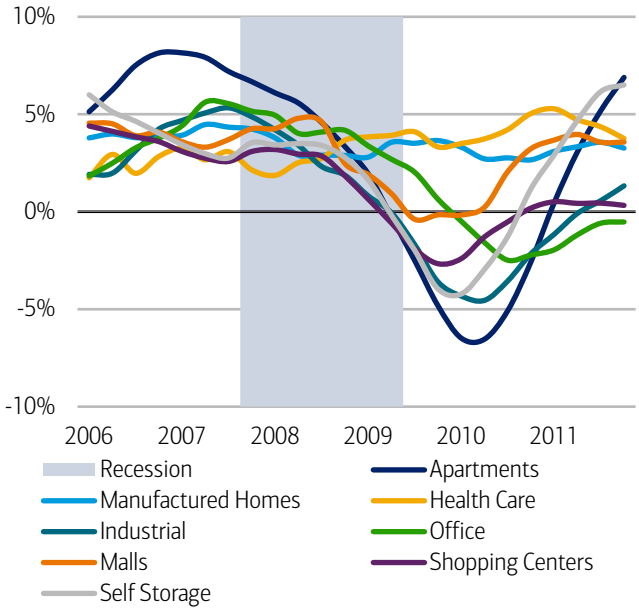
Exhibit 39: Y/Y SS NOI growth during the Global Financial Crisis
Apartments had the largest SS NOI declines during the GFC, but also recovered quickly



Source: Company filings, BofA Global Research

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Scenario 2: Which sectors performed worst during the recession in 2020?

We analyzed occupancy rates (Exhibit 40) and SS NOI growth (Exhibit 41) by sector before and during the pandemic for a view on the sectors hardest hit. From March 2020 through 1Q22, the pandemic weighed most on occupancy for Office, Health Care and Malls, and least on Single Family Rentals and Self Storage. The pandemic weighed most on Retail same store NOI, and least on Manufactured Homes and Industrial.

Exhibit 40: Occupancy loss during the COVID-19 pandemic
Self Storage gained occupancy during the pandemic while occupancy loss was highest in Office

Sector	2Q20	3Q20	4Q20	1Q21	2Q21	3Q21	4Q21	1Q22	Total
Self Storage	-0.17%	0.51%	0.81%	0.69%	1.03%	0.56%	0.24%	0.09%	3.77%
SF Rental	0.39%	0.71%	0.86%	0.46%	0.39%	0.10%	0.04%	-0.01%	2.94%
Industrial	0.07%	-0.01%	-0.09%	-0.06%	0.00%	0.02%	0.13%	0.17%	0.23%
Manufactured Homes	0.00%	0.00%	0.00%	0.25%	-0.05%	0.04%	0.03%	-0.06%	0.20%
Apartments	-0.31%	-0.35%	-0.29%	-0.14%	0.35%	0.45%	0.31%	-0.78%	-0.76%
Shopping Centers	-0.20%	-0.55%	-0.87%	-0.70%	-0.46%	-0.02%	0.32%	0.39%	-2.09%
Malls	-0.54%	-0.77%	-1.10%	-0.87%	-0.32%	0.19%	0.59%	0.64%	-2.17%
Health Care	-0.36%	-0.83%	-1.38%	-1.35%	-1.00%	-0.19%	0.41%	0.75%	-3.95%
Office	-0.22%	-0.43%	-0.58%	-0.75%	-0.70%	-0.57%	-0.44%	-1.32%	-5.00%
All REITs Average	**-0.15%**	**-0.19%**	**-0.29%**	**-0.27%**	**-0.08%**	**0.06%**	**0.18%**	**-0.02%**	**-0.76%**

Source: Company filings, BofA Global Research

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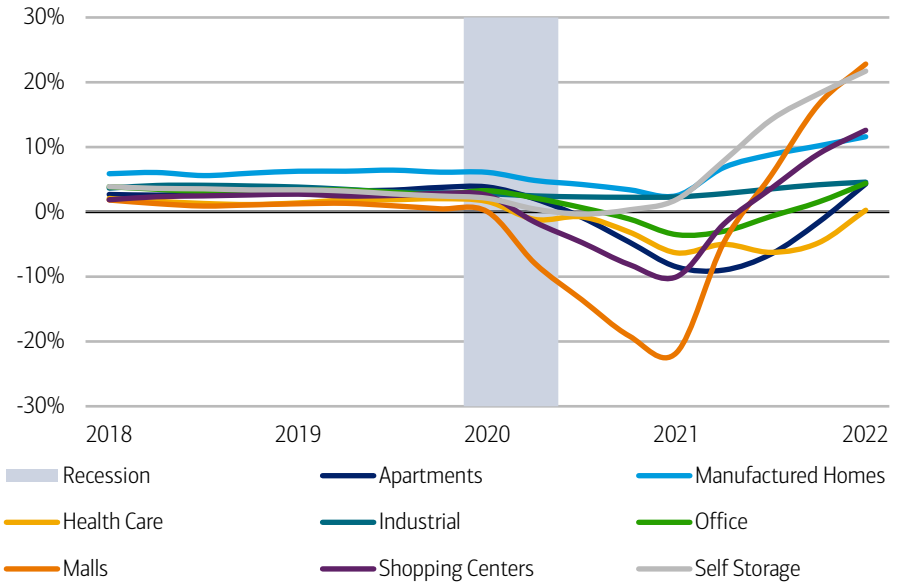
Exhibit 41: Y/Y SS NOI growth during the Global Pandemic
Mall REITs lead the SS NOI decline during the Covid-19 pandemic



Source: Company filings, BofA Global Research

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Our comparison of multiples below indicates multiples today are higher than during the GFC lifted by much higher multiples for Industrial, Apartments and Manufactured Homes.

Exhibit 42: Historical FFO multiples by sector during GFC and COVID-19
REIT FFOx multiples today are higher than during the GFC

	Apartment	Healthcare	Industrial	Office	Malls	Shopping Centers	Self Storage	Comm. Infrastructure - Data Centers	Comm. Infrastructure - Towers	Triple Nets	Manuf. Homes	All REITs
Current FFOx	15.2x	16.3x	22.3x	10.5x	12.6x	12.9x	17.3x	22.3x	17.3x	12.5x	19.3x	**16.2x**
Avg. since Mar '20	19.1x	17.1x	25.3x	15.5x	9.8x	13.6x	20.2x	22.5x	23.7x	15.4x	24.6x	**18.8x**
Avg. during GFC	13.4x	11.3x	10.1x	10.4x	10.8x	10.6x	14.8x		6.4x		6.5x	**10.5x**
Avg. from 3Q09 to Feb '20	19.1x	14.3x	19.2x	16.7x	15.7x	15.5x	20.4x	15.3x	19.9x	15.2x	17.9x	**17.2x**
Trough	7.6x	6.5x	5.2x	5.1x	2.6x	6.8x	10.6x	4.0x	1.9x	4.3x	1.1x	**5.1x**
Peak	27.1x	21.2x	35.6x	39.3x	20.7x	21.0x	27.2x	28.6x	30.9x	37.4x	32.5x	**29.2x**

Source: FactSet, BofA Global Research
Note: Current FFOx as at 4/11/2024; 'Average from Mar '20 till now' include data from Mar to April 2024.
Note: GFC = Global Financial Crisis

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Fund flows have significant impact on REIT NAVs

We believe fund flows are a key theme to monitor as capital flows influence cap rates and ultimately commercial real estate (CRE) values. Cap rates impact the NAV valuation methodology that we use to determine our stock price objectives. We track total investment volume into US CRE and the distribution of that investment across property types, foreign capital flows and RE private equity activity.

As interest rates rebounded, CRE investments declined -50.7% Y/Y in 2023, to $380 bn compared to 2022. Given the lack of distressed sales and a focus on the highest quality properties, cap rates expanded +44bp in 2023 to 6.7% compared to 6.1% in 2022 and the 10-year average of 6.2%. The expansion in cap rate compares to +153bp expansion in 10yr US treasury yields to 3.7%.

Foreign investment in US Commercial Real Estate (CRE)

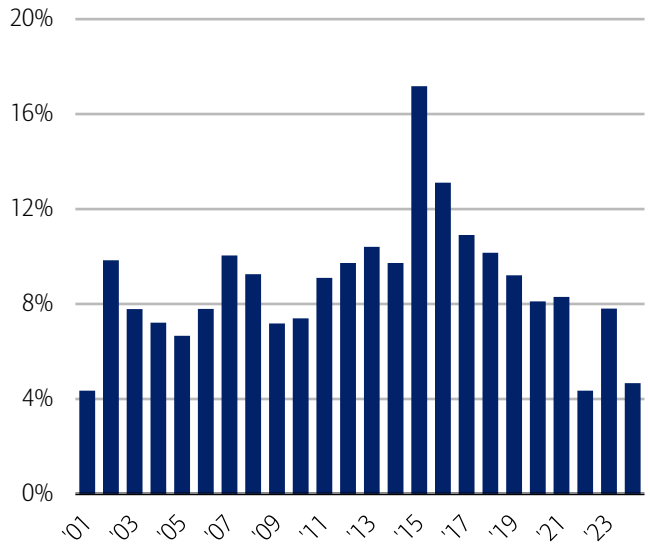
Foreign investment comprised 7.8% of total US CRE investment in 2023 improving from 4.3% in 2022. Total foreign investment in US CRE in 2023 was $29bn, declining -11.5% Y/Y from 2022. This compares to last cycle's peak of $58 bn in 2007.

Real Property Tax Act (FIRPTA)

Modifications to Foreign Investment in Real Property Tax Act (FIRPTA) made in late 2015 that permit greater ownership of US assets for foreign pension funds helped foreign direct investment volumes in US CRE. The FIRPTA modification treated foreign pension funds like US pension funds by exempting them from FIRPTA withholding for any US asset-related disposition gains or distributions.

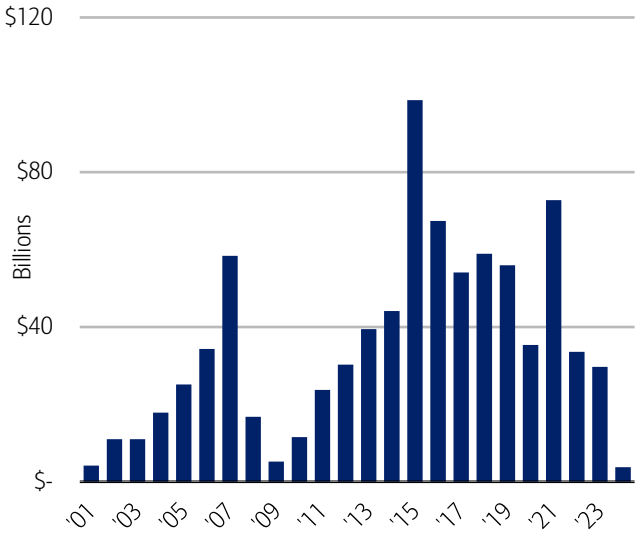
In addition, the legislation allows all foreign investors (not just foreign pension funds) to own up to 10% (from 5%) of a REIT and be exempt from FIRPTA. Previously, FIRPTA was triggered upon sale or a capital gain distribution if a foreign investor held more than 5% of a US REIT's shares.

Exhibit 43: Cross border percentage of total investment dollars
In 2023, foreign investment comprised 7.8% of total deals, improving from 4.3% in 2022



Source: BofA Global Research, RCA

Exhibit 44: Total foreign investment into US
In 2023, foreign investment in US CRE declined -11.5% Y/Y



Source: BofA Global Research, RCA

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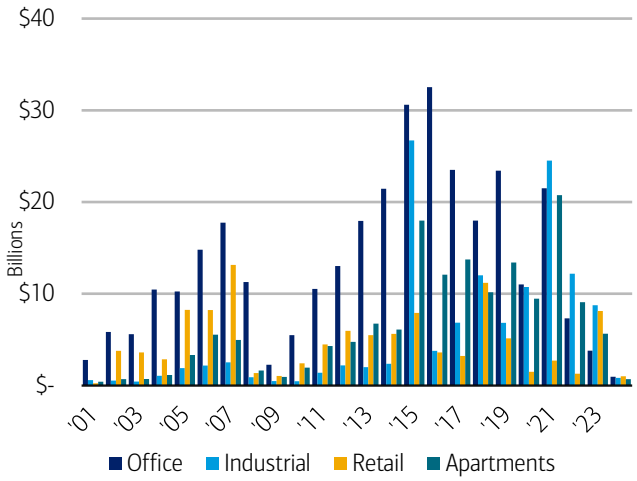
Total investment in US CRE is more diversified across property types this cycle. Retail was the most active property type for investment last year. In 2023, Industrial comprised 29% of investment, retail 27%, apartments 19% and office 13%. In 2022, industrials comprised 36%, apartments 27%, office 22% and retail 4%. This compares to the 10-year average of 34% for office, 22% for apartments, 10% for retail and 21% for industrial.

Exhibit 45: Total Foreign Investment in US CRE by Property Type
Industrials was the most favored property type in 2022 for foreign investors



Source: BofA Global Research, RCA

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Foreign Investment Risk Review Modernization Act (FIRRMA)

At the end of 2019, the US treasury passed two new regulations amending the Foreign Investment Risk Review Modernization Act (FIRRMA) to increase the government's authority to block foreign investments in real estate and businesses involved in critical technology, infrastructure or personal data starting on February 13, 2020. Heightened focus was on real estate located near transport hubs. Urban real estate and single family properties will be exempt. Positively, US allies (Canada, Australia and the U.K.) are exempt.

The impact of 2017's tax reform on REITs

Tax on pass through entities

In 2017's tax legislation Congress lowered the tax rate for pass-through entities to a max 29.6% instead of the owner's current marginal income tax rate by way of a 20% tax deduction on certain pass-through business income. According to our tax analyst team in DC and expert calls hosted with Big 4 accounting firms, distribution derived from real estate rental income qualified for the new pass through tax rate which is a benefit for REITs. We believe the reduction increased the attractiveness of REITs to higher net worth individuals vs. the current top ordinary income tax rate of 39.6% on the distribution derived from rental income. Capital gains distributions would continue to be taxed at the capital gains rate.

1031 exchanges

1031 exchanges have been generally eliminated except for real estate. This tax law allows an owner of real estate to sell their asset and reinvest the proceeds without paying capital gains taxes. That said, President Biden has proposed to eliminate 1031 exchanges or at least limit them. We will watch this closely but given they are mainly used for smaller transactions, we see limited impact on public REITs.

Depreciation deductions

Tax reform called full depreciation in year one, with it phasing out 20% per year thereafter. Although, REITs can choose to be excluded from the interest limitation as a real property trade or business, where residential real property would be depreciated using 30-year life, non-residential real property depreciated using a 40-year life, and qualified interior improvements depreciated using a 20-year life.

Deductibility of state and local taxes

Congress capped the deductibility of state and local taxes (SALT) at $10,000. This has had the biggest impact on higher tax states such as California, New York, and New Jersey. All else equal this has a negative impact on consumers and businesses in these higher tax states. With less disposable income we see this as a negative for Retail REITs with higher levels of exposure to these states.

In addition, we have seen both residents and businesses focus on lower tax states for relocation. Businesses have announced moves to Sunbelt states to reduce operating costs, access pools of talent, and offer employees a better quality of life.

Business interest tax deductibility

Net business interest expense was limited to 30% of adjusted taxable income (EBITDA before 2022; EBIT thereafter). At taxpayer's election, limit does not apply to interest of a real property trade or business, which includes any real property development, redevelopment, reconstruction, acquisition, conversion, rental, operation, management, leasing, or brokerage trade or business (including lodging). All interest of a corporation is treated as business interest (except for real property trade or business) subject to the 30% limit.

Mortgage interest tax deductibility

Congress lowered the cap on mortgage interest deductibility to $750,000, this has impacted the own vs rent equation for households, particularly those in areas with higher home values on the coasts. All else equal, lowering this deduction has raised the cost of homeownership and been positive for Single Family Rental REITs and the Apartment REITs.

Section 4: REIT earnings and valuation

Funds from operations (FFO)

This section addresses many accounting issues affecting REITs including:

- Definition of funds from operations (FFO) and explanation of how it differs from GAAP net income
- The difference between reported and "normalized" FFO
- The purpose and definition of adjusted funds from operations (AFFO)

In 1991, NAREIT adopted a definition of funds from operations (FFO) as a supplemental industry-wide standard measure of REIT operating performance that would not have certain drawbacks associated with net income under generally accepted accounting principles (GAAP). The definition was clarified in 1995, 1999 and 2002. Today, FFO represents the industry's key earnings metric.

Exhibit 46: Net Income to FFO
Reconciliation of Net Income to FFO

GAAP Net Income (including any impairment charges)
- Minus gains from sales of property
+ Plus losses from sales of property
+ Plus Impairment charges
+ Plus real estate depreciation & amortization
(including pro rata share of unconsolidated joint venture net income & depreciation)

= FFO

Source: NAREIT

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Real estate depreciation and amortization

Although GAAP treats real estate depreciation as an expense, real estate values historically have not eroded over time because of increasing land costs and higher replacement costs. Therefore, operating results for real estate companies that use GAAP historical cost accounting can be misleading. The term funds from operations was created to address this problem, and essentially excludes (adds back) historical cost depreciation from GAAP net income. Since the introduction of the term, FFO has become widely used by REITs and is useful in determining the operating results of REITs as well as comparing results between REITs.

Impairment charges

Until 2004, REITs added back impairment losses to FFO, which in essence, were just an early recognition of a loss on a sale. Initially, this add-back made intuitive sense, since gains and losses on real estate were also excluded from FFO. In 2004, NAREIT issued further guidance on reporting FFO based on SEC discussions and clarified impairment write-downs should not be excluded from FFO. However, in 2012, NAREIT announced that the SEC is now neutral to exclusion of impairment charges to calculate FFO. REITs have now started adding back impairment losses in their FFO calculation. We also note at the same time REITs must exclude gains on sale, but are permitted to exclude the loss on a sale – which is identical to an impairment loss except in the timing of the event.

FFO/share

FFO per share is derived by dividing FFO by the weighted average of fully diluted shares and units. We also call this reported FFO per share.

Normalized funds from operations

While most REITs adhere to the strict definition of FFO when disseminating their quarterly and annual results (known as reported FFO), this figure can provide a distorted view of the company's underlying fundamentals as it includes non-cash charges and non-

recurring items. A normalized FFO figure removes these non-recurring items, thereby providing investors with a clearer picture of a company's recurring earnings power.

Exhibit 47: Reported FFO to normalized FFO
Reconciliation of FFO to normalized FFO

Reported FFO
+ Plus topic D-42 charges
+ Add back non-recurring items

= Normalized FFO

Source: NAREIT, BofA Global Research

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Topic D-42 charges

This charge occurs when a company redeems an existing series of preferred stock outstanding. As part of the redemption process, a company must write off the original issuance cost related to the preferred stock that the REIT capitalized onto the balance sheet at the time of the offering. Since this charge is non-cash in nature (the underwriting fees were spent several years ago), we believe it distorts a company's true earnings power.

Non-recurring items

We also add back (or deduct) other non-recurring items to get to normalized FFO. Common examples are: one-time acquisition/deal costs that were expensed, gains or losses from early extinguishments of debt and foreign currency exchange gains or losses.

To adjust for non-recurring items, companies have started providing multiple sets of guidance ranges, namely reported/actual FFO and an alternative FFO measure that is a normalized FFO (sometimes called "FFO as adjusted" or "core FFO"). To add to the confusion, Street estimates vary regarding the guidance range on which their estimate is based, creating a meaningless consensus average value. Investors should take care to determine whether results/guidance for these companies actually meet or miss Street expectations. See our report Tackling the problem of "alternative FFO" reporting for more details.

Looking at lease accounting changes

Accounting Standard Update 2016-02 changes lease accounting

As of January 1, 2019, REITs were no longer be able to capitalize internal leasing costs/wages or external non-incremental legal costs. This was a result of Accounting Standard Update 2016-02. The rule states REITs will no longer capitalize internal leasing costs/wages or external non-incremental legal costs and instead will expense these and other non-incremental costs as they are incurred. As a result, REITs now include these costs under selling, general, and administrative expenses, no longer being included in depreciation and amortization. The change creates a negative impact on Funds from Operations (FFO), though does not affect Adjusted Funds from Operations (AFFO) as the added expenses are non-cash expenses. Looking forward the year-over-year beginning in 2020 the negative impact to FFO is removed as the expenses became normalized.

Exhibit 48: Effects of ASU 2016-02 of FFO
REITs will no longer be able to capitalize internal leasing costs/wages or external non-incremental legal costs

BEFORE Net Income to FFO	AFTER Net Income to FFO
GAAP Net Income (including any impairment charges)	GAAP Net Income (including any impairment charges)
- Minus gains from sales of property	- Minus gains from sales of property
+ Plus losses from sales of property	+ Plus losses from sales of property
+ Plus Impairment charges	+ Plus Impairment charges
+ Plus real estate depreciation & amortization (including pro rata share of unconsolidated joint venture net income & depreciation)	▼ + Plus real estate depreciation & amortization (including pro rata share of unconsolidated joint venture net income & depreciation)
= FFO	▼ = FFO

Source: NAREIT

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New Lease Accounting Standard effects ground leases and retail REIT tenants

Lessees under the new lease accounting standard will be required to make a distinction between operating leases and finance leases. Finance leases are similar to the accounting of capital leases where the right to use the lease is capitalized and subsequently amortized over the lease term. The impetus behind the update to the lease accounting standard is to provide greater transparency and accuracy to financial reporting, such that operating leases longer than 12 months should be recorded on the balance sheet rather than disclosed in the footnotes. The capitalization of these leases would be recognized as a right-of-use asset and the ensuing lease liability would be amortized over the life of the lease on a straight line basis. This change most impacts REITs with ground leases and sectors with a high concentration of qualifying leases (e.g. retail, airlines, and telecommunications) and would negatively some financial ratios, namely debt service coverage.

Adjusted funds from operations (AFFO)

Although FFO is a starting point for measuring a REIT's profitability, it tends to overstate it. Further adjustments should be made to FFO in order to better determine a REIT's true cash flow. The resulting measure, adjusted funds from operations (AFFO), is also known as cash available for distribution (CAD) or funds available for distribution (FAD).

Exhibit 49 highlights the three deductions we take from FFO in order to arrive at AFFO. We note there is no GAAP definition or universally accepted method of calculation for AFFO.

Exhibit 49: FFO to AFFO
Reconciliation of FFO to AFFO

Reported FFO
- Minus recurring capital expenditures
+/- Adjust for straight-line rent
+/- Adjust for FAS 141/142/143 income

= AFFO

Source: NAREIT

BofA GLOBAL RESEARCH

Recurring capital expenditures

Recurring capital expenses are used to maintain the value of the building (rather than enhance the value). These costs are capitalized and then depreciated, which means they are overlooked when measuring "earnings" for REITs since depreciation is added back to net income in deriving FFO. Since we view recurring capex as an economic expense (accounting treatment notwithstanding), we deduct recurring capex from each company's FFO, so as better to arrive at a company's "true" cash earnings. We identify three types of recurring capital expenditures:

- **Capitalized maintenance:** Capitalized maintenance capex are routine expenditures that do not really enhance the value of a property but are necessary to maintain the property. Examples include painting the parking lot of a shopping center, or routinely replacing the roofs, appliances, and carpets in an apartment building.

- **Tenant improvements (TI):** Tenant improvement (TI) allowances are given to tenants to build out the rental space to suit their needs. The amount of TI is determined during lease negotiations and is generally found in leases for office and retail properties. Since TI varies by tenant (and has limited resale value), the build-out does not necessarily contribute to the property's value.

- **Leasing costs:** Leasing costs are commissions paid to brokers for leasing the space. These costs are capitalized and amortized over the life of the lease rather than expensed at once.

Recurring capital expenditures is obtained from information directly reported by REITs or extracted from various sections of financial disclosures.

Straight-line rent adjustment

Non-cash revenue, known as straight-line rent, occurs when a landlord enters into a long-term lease with a tenant and the lease contains contractual rent increases over the life of the lease. Based on GAAP accounting, the company must "straight-line" the entire revenue stream over the term of the lease rather than recognize revenue as the cash is collected each period. Exhibit 50 provides an example of how a lease (with contractual step-ups) overstates the actual cash collected during the early portion of the lease and understates the cash collected during the latter part of the lease.

Exhibit 50: Straight-line rent calculation
Exhibit shows overstatement of actual cash collected during the early portion of the lease and understatement of the cash collected during the latter part of the lease

	Cash Rents	Straight line rents 1	Straight line rent adj.
Year 1	$40	$45	($5)
Year 2	$45	$45	$0
Year 3	$50	$45	$5
Total Collections	$135	$135	$0

Source: BofA Global Research
(1) Equal to the average of the cash rents over 3 years.

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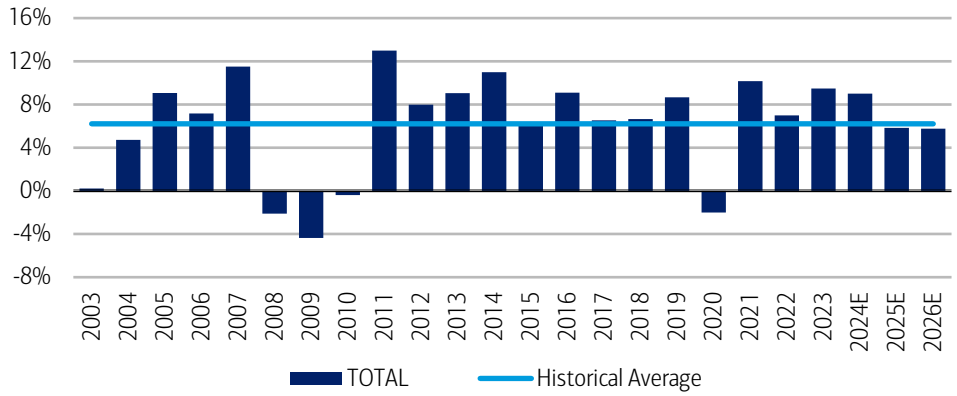
FAS 141/142/143 adjustments

Financial Accounting Standards (FAS) 141 requires a company to "value the existing leases" on a newly acquired asset. While the actual mechanics of this calculation are complicated, the basic idea is that a company needs to determine whether the existing leases within a newly acquired building are above or below the current market rent and then record that difference on the balance sheet and amortize that figure (whether positive or negative) into revenue over the life of the remaining lease term.

All REITs disclose FAS 141 (sometimes called "above/below rents"), while FAS 142 and 143 are less commonly reported. FAS 142 relates to accounting for goodwill and other intangible assets upon acquisition, and FAS 143 relates to the retirement of tangible long-lived assets and the associated retirement costs of such assets.

Historical normalized FFO/share growth

Exhibit 51: Normalized FFO/share growth – All REITs under coverage by BofA REIT team
We forecast +9.0% growth in normalized FFO/sh for '24E and +5.8% for '25E for all REITs



Source: Factset, BofA Global Research;
Note: Excludes lodging REITs and mortgage REITs covered by other teams at BofA Global Research
Note: Data is market cap weighted as of 5/23/2024

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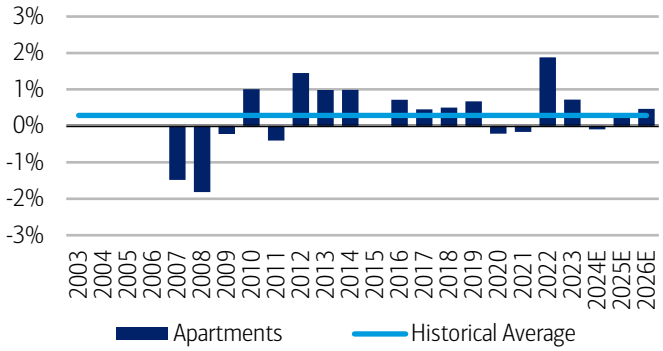
Exhibit 52: Apartments - normalized FFO/sh growth
We forecast -0.1% growth in normalized FFO/sh for '24E and +0.3% in '25E



Source: Factset, BofA Global Research;
Note: Data is market cap weighted as of 5/23/2024

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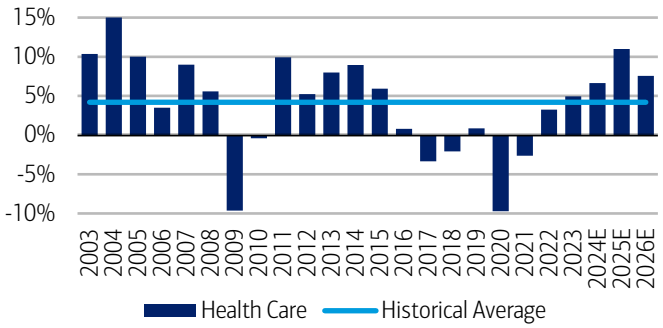
Exhibit 53: Healthcare - normalized FFO/sh growth
Normalized FFO/sh growth for Healthcare REITs to improve to +6.6% in '24E and to +11.0% in '25E



Source: Factset, BofA Global Research;
Note: Data is market cap weighted as of 5/23/2024

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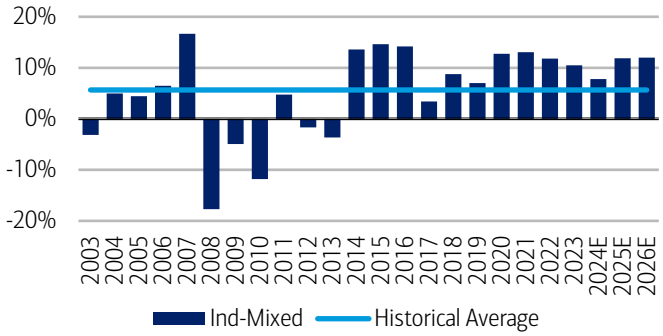
Exhibit 54: Industrial/mixed - Normalized FFO/sh growth
We forecast normalized FFO/sh growth to moderate to +7.8% growth for industrial REITs in '24E and improve to +11.9% in '25E



Source: Factset, BofA Global Research;
Note: Data is market cap weighted as of 5/23/2024

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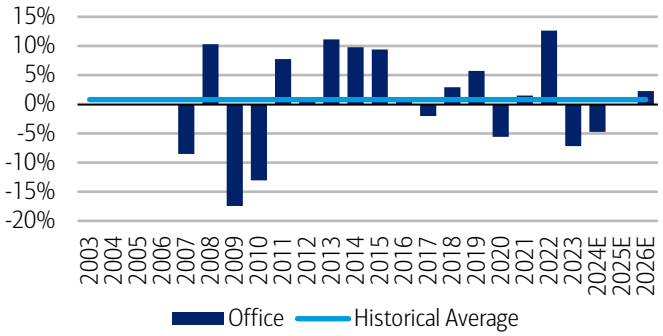
Exhibit 55: Office - normalized FFO/share growth
Normalized FFO/sh growth to decline to -4.7% in '24E and recover to flat Y/Y for '25E



Source: Factset, BofA Global Research;
Note: Data is market cap weighted as of 5/23/2024

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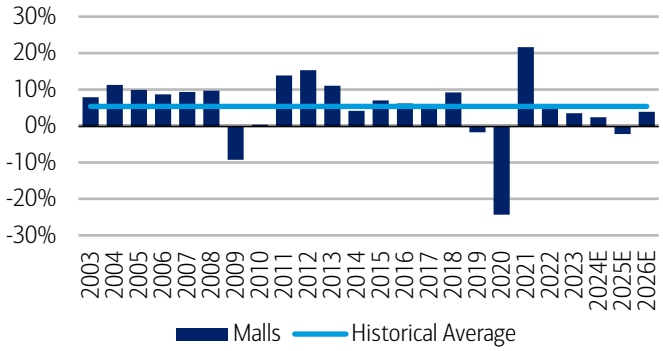
Exhibit 56: Malls - normalized FFO/sh growth
We forecast normalized FFO/sh growth for Mall REITs to moderate to +2.4% in '24E and decline -2.2% in '25E



Source: Factset, BofA Global Research;
Note: Data is market cap weighted as of 5/23/2024

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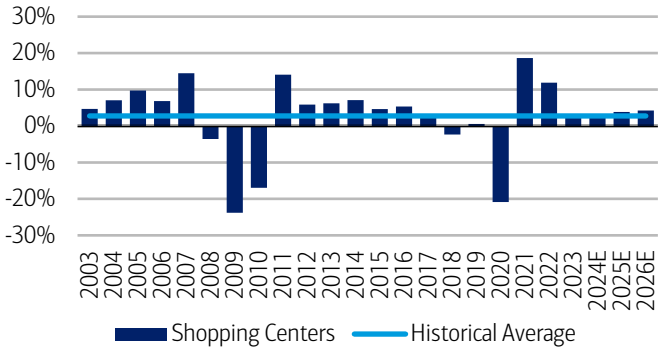
Exhibit 57: Shopping center - normalized FFO/sh growth
Normalized FFO/sh growth to moderate slightly to +2.5% in '24E and improve to +3.9% in '25E



Source: Factset, BofA Global Research;
Note: Data is market cap weighted as of 5/23/2024

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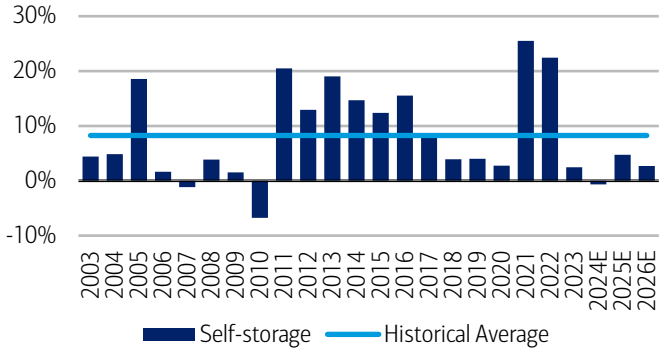
Exhibit 58: Self storage - Normalized FFO/sh growth
We forecast normalized FFO/sh growth to decline to -0.7% for '24E and improve to +4.7% for '25E



Source: Factset, BofA Global Research;
Note: Data is market cap weighted as of 5/23/2024

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Net asset value (NAV)

One of the main valuation metrics for REITs is net asset value (NAV), used to determine the underlying value of a REIT.

Calculating NAV

Calculating the NAV is essentially an approximation of the liquidation value of the underlying real estate, before the impact of taxes on property sales. NAVs generally are neither disclosed in financial statements nor reported by companies. Therefore, analysts and investors must estimate the market values of a REIT's assets and liabilities. Although differences between operating characteristics in various real estate sectors cause difficulties for developing a consistent framework for determining NAVs, the biggest challenge is determining the appropriate cap rate to use for each company's underlying real estate value.

The BofA REIT Team calculates NAV as follows

Step1: Determine forward 12-month cash net operating income (NOI)

Core NOI, or GAAP NOI, calculated by annualizing current quarter's result. Property level revenue, minus property level expenses and lease termination fees, plus acquisition income, plus annualized pro rata share of JV NOI, and adjustments for mid-period acquisitions, dispositions, and development coming online. We may apply a seasonality factor or a forward growth rate, depending on the sector (i.e., malls exhibit seasonality).

The current period is chosen because buyers of real estate focus on the earnings potential of a property, not its past performance. Cap rates are forward looking and generally defined as a consequence of income over the next 12 months.

After removing annualized straight-line rent and FAS 141 from the core NOI, we add construction in process (CIP) rental income at the estimated development yield. Last, we deduct management fees and a capex reserve to reach net pro forma NOI.

Step 2: Determine market value of assets by applying a cap rate

Divide the net pro forma NOI with the appropriate cap rate. A cap rate is simply the inverse of the cash flow multiple. For example, dividing the cash flow estimate by a 10% cap rate is the same as applying a 10x multiple to the cash flow. Dividing the company's forward NOI by the cap rate gives us an estimated market value of the company's properties. Various methods are used to determine the appropriate cap rate to use for each company, including market observations and running investor IRR hurdle models.

Step 3: Determine value of third party income

Apply a cap rate to the third party income stream. After determining the cash flow produced from a company's ancillary businesses, we apply a cap rate to this income stream. Since management contracts are typically cancelable on short notice (often 30 days), we generally ascribe a lower valuation to fee income than to rental income.

Step 4: Determine gross market value of assets

Add assets. After adding the results of steps 2 and 3 together, we then add cash and cash equivalents, other assets, land held for development (most apply a discount based on market conditions), value of unleased space, and existing development projects (valued at cost) to derive the gross market value of assets.

Step 5: Determine net market value of assets

Deduct liabilities. This includes wholly owned debt, other liabilities, pro rata share of JV debt, and preferred stock. The resulting estimate is our net asset value (NAV).

Step 6: Determine NAV per share

Divide the net asset value by the total number of fully diluted shares outstanding to derive net asset value per share.

Forward NAV

We calculate forward NAV (meaning one year out) by growing the current core net operating income (TTM or most recent quarter annualized, adjusted for seasonality) by our estimated internal growth rate for the next 12 months. We can also apply different cap rate (if we expect a change) and any share issuance/buy backs that are expected. Future developments are also accounted for, as are potential acquisitions.

Calculating BofA price objectives

In order to derive our price objectives, we apply a premium or discount (or neither) to our forward NAV estimates for each company. These premiums and discounts are generally based on our perception of expected earnings growth, balance sheet strength and quality of management teams.

Capitalization rates

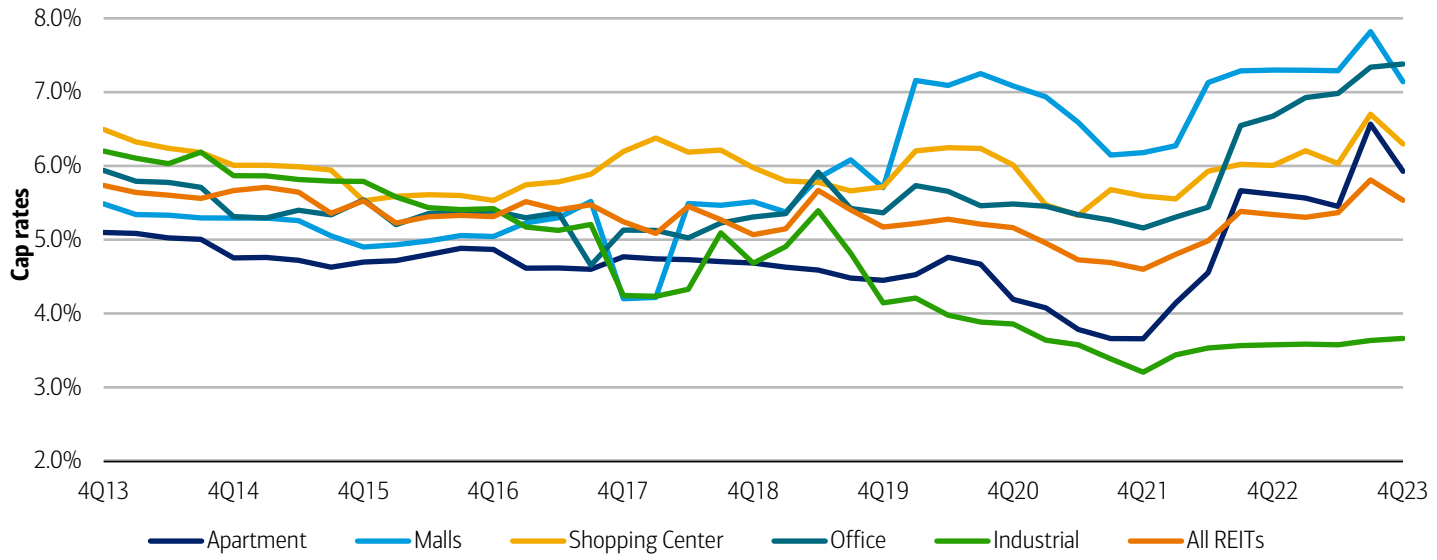
The capitalization rate, or cap rate, is the initial yield on a real estate investment. It is often used during acquisition/disposition discussions as a way to express the value of real estate. The cap rate is computed by taking the cash flow during Year 1 and dividing by either the acquisition price or the total expected development cost. The cap rate can refer to a singular asset or a portfolio of assets.

As an example, an 8% cap rate means the buyer of a property will receive $8 of cash flow for every $100 investment. Said differently, the buyer paid a multiple of 12.5x (1 ÷ 8% = 12.5x) to acquire the asset. A buyer wants to purchase an asset at a high cap rate (meaning a lower purchase price), while a seller wants to sell the asset at a lower cap rate (and higher value).

Cap rates in NAV valuation

Estimating and applying the appropriate cap rate is particularly important in valuing REITs by NAV. The cap rates applied to NAV valuations are estimated and can be based on recent actual transactions or reverse engineered through investor return hurdles.

Exhibit 59: Historical BofA market-weighted sector average applied cap rates
BofA applied cap rates have expanded +36bp since 4Q19 to 5.53% for 4Q23.



Source: FactSet, BofA Global Research

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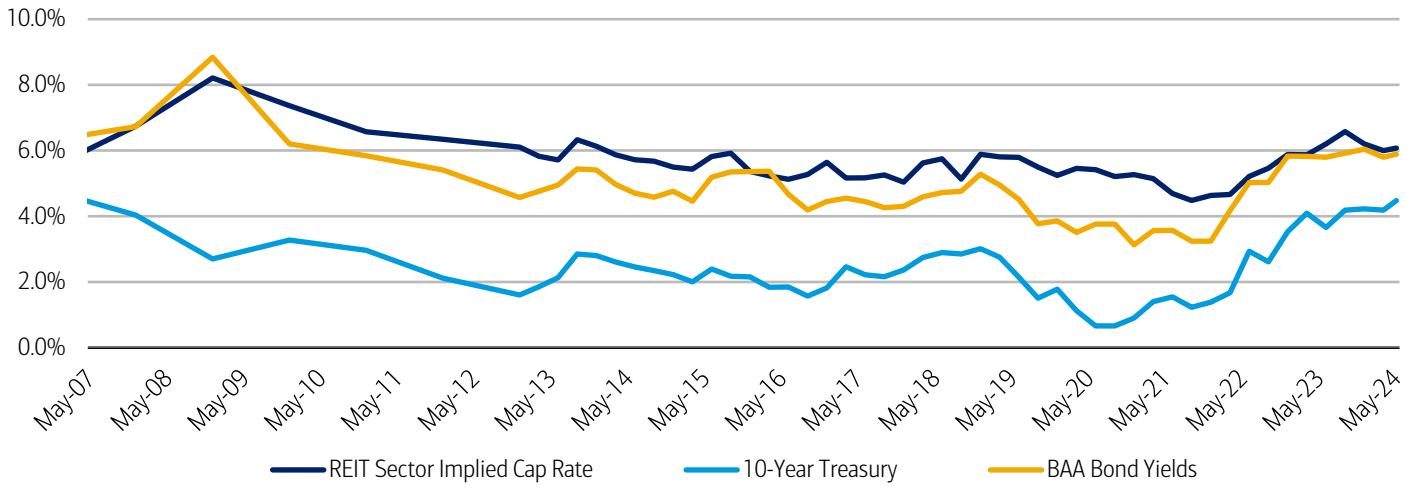
Implied cap rates

Cap rates can also be understood on an implied basis, which uses the current stock price to determine the real estate returns required by the capital market (investors). The implied cap rate is calculated by dividing the forward NOI estimate by the implied gross property value, which is the sum of equity market cap based on today's stock price, plus NAV liabilities, and minus NAV (other) assets.

Essentially, the NAV calculation works backwards based on today's stock price to determine the implied cap rate. Note that it is important to deduct the NAV (other) assets from the implied gross property value. Otherwise, other assets will skew the implied cap rate if it is included in the denominator, and in our view, will not be comparable to the applied cap rates in NAVs.

Exhibit 60: REIT Implied Cap Rates
Historical REIT Implied Cap Rates vs. U.S. 10-year Treasury and BAA Bond Yields. Current implied cap rate is 6.1%, +160bp over 10-year yield of 4.5%



Source: Factset and BofA Global Research; as of 5/23/2024

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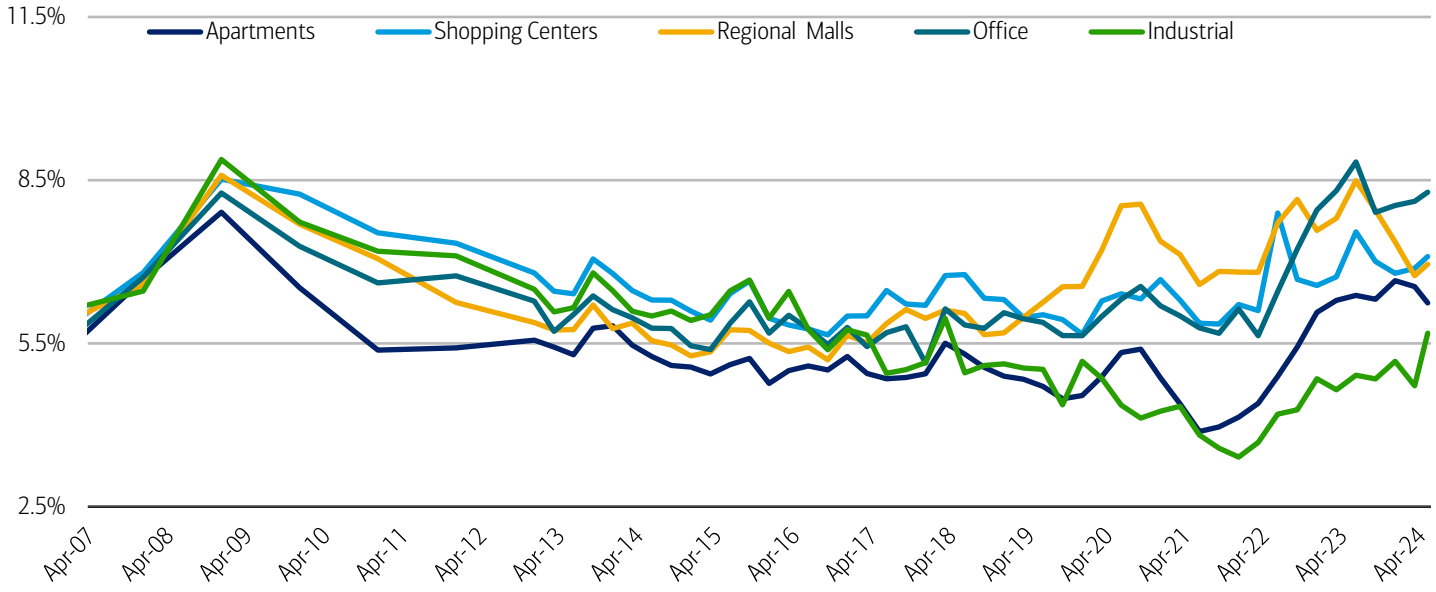
Exhibit 61: Historical implied cap rates for selected asset classes
Implied cap rates for office expanded the most while industrial expanded the least over the past two years



Source: FactSet, BofA Global Research; as of 5/23/2024

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Valuation

Unlike traditional companies, which are valued on EPS or book value, REITs are valued under different criteria including FFO, AFFO, and NAV (see previous section for a complete discussion of these metrics). The reason we use these metrics is that real estate is purchased in the private sector based on cash flow streams from the asset, not on GAAP earnings or historical book values. As a result, several metrics were created to evaluate REITs in the early 1990s. In the following sections we outline the valuation metrics and provide historical time series to show how the REIT sector has traded over time.

The valuation metrics we look at are price-to-FFO, price-to-forward NAV, yield spreads, and implied cap rates. We also consider the trends of direct real estate pricing in the overall commercial real estate market, as REITs make up only about 20% of the institutionally owned commercial real estate market and 10% of all commercial real estate.

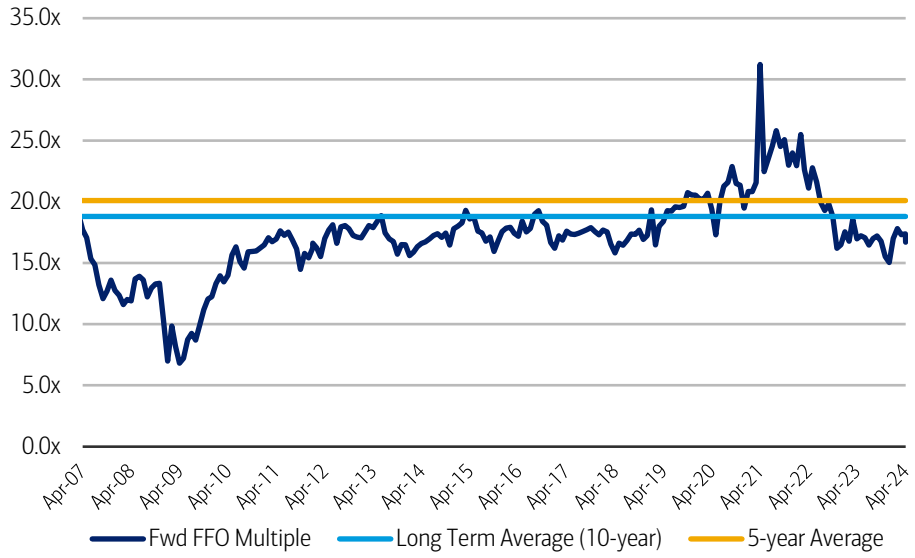
Price-to-FFO

Price-to-FFO (or FFOx) is analogous to the price-to-earnings (P/E) ratio in other industries. FFOx is the most widely used ratio for valuation purposes, as FFO is the main earnings metric for REITs.

Lease termination fees and non-recurring items (both included in FFO) can skew results, so we recommend using P/FFO in conjunction with other valuation methods. Normalized FFO or AFFO (adjusted funds from operations) may provide better approximations of a company's true cash flow, but calculations can vary among investors and analysts to get to both measures.

As shown in the Exhibit 62, REITs are currently trading at a forward FFO multiple of around 16.7x, below the long-term (10-year) average of 18.8x and below the five-year average of 20.1x (as of 4/3/24).

Exhibit 62: Historical price-to-FFO multiples
REITs are currently trading at a forward FFO multiple of around 16.7x, below the long-term (10-year) average of 18.8x and below five-year average of 20.1x (as of 4/3/24)



Source: BofA Global Research; as of 4/3/24

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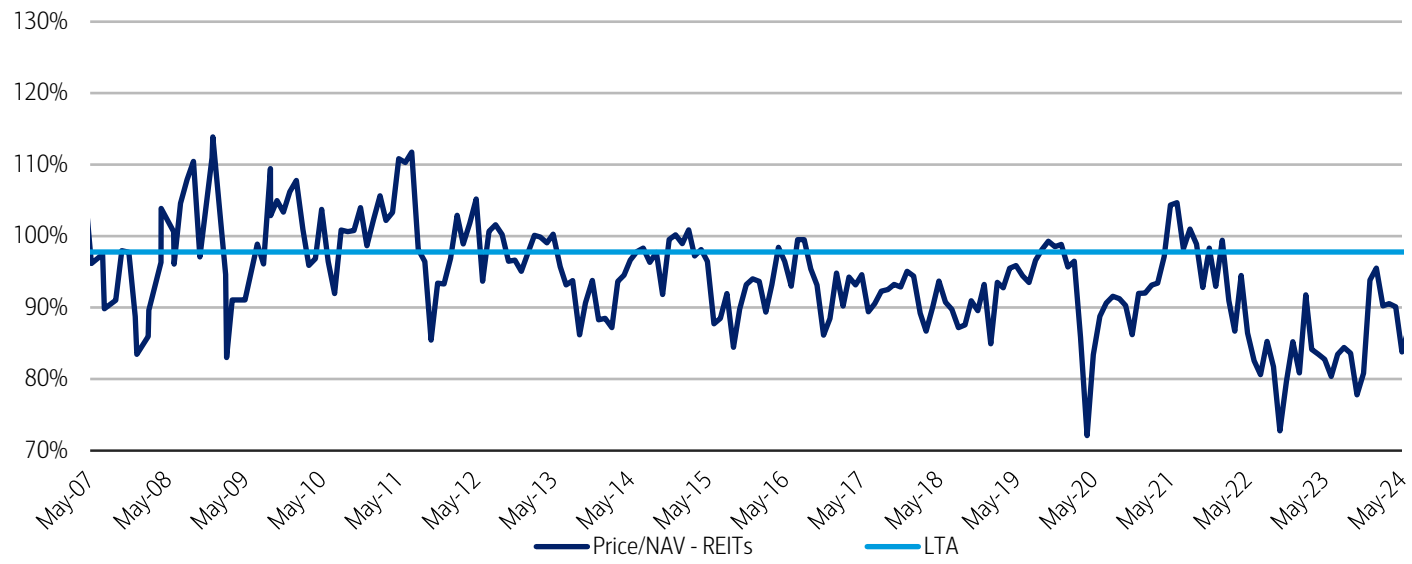
Price-to-forward NAV

Comparing price-to-NAVs for REITs is similar to using price-to-book ratios to evaluate other public companies. Price-to-book ratios are not a useful tool when evaluating REITs because book value is based on historical costs and does not reflect the rise and fall of

property prices and land values. Therefore, we use NAVs as a surrogate for the underlying value of REITs.

Price/NAV calculations generally use an estimate of the company's forward NAV. This forward NAV metric is useful because expected NAV growth may explain why one REIT trades at a higher premium to NAV versus another REIT. In general, REITs with higher NAV growth should trade at larger premiums to their current NAV and vice versa. If this relationship is inconsistent when comparing two REITs or a group of REITs, then it may provide an opportunity to identify expected outperformance for a REIT or group of REITs.

Exhibit 63: Total REITs - historical price to NAV
As of '24 May, REITs traded at 86% of NAV, below their LTA of 98%



Source: FactSet and BofA Global Research

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Exhibit 64: Market cap weighted price to NAV for selected real estate sectors
Historical price to NAV for REIT sub sectors from '99 to '24 YTD. As of '24 May, REITs traded at 86% of NAV, below their LTA of 98%

	Total REITs	Apartments	Shopping Centers	Regional Malls	Office (1)	Industrial	Self Storage
Dec-03	119%	111%	121%	133%	112%	119%	113%
Dec-04	114%	112%	118%	114%	111%	122%	113%
Dec-05	101%	100%	106%	101%	99%	101%	108%
Dec-06	108%	107%	114%	102%	107%	114%	108%
Dec-07	83%	78%	87%	81%	75%	98%	90%
Dec-08	114%	108%	115%	94%	114%	113%	150%
Dec-09	106%	107%	105%	106%	104%	109%	108%
Dec-10	99%	102%	96%	101%	96%	102%	103%
Dec-11	93%	92%	90%	95%	90%	91%	105%
Dec-12	95%	89%	98%	97%	94%	97%	101%
Dec-13	88%	84%	94%	85%	92%	92%	88%
Mar-14	94%	93%	98%	89%	98%	99%	96%
Jun-14	98%	97%	99%	95%	101%	100%	98%
Sep-14	98%	98%	100%	96%	99%	97%	97%
Dec-14	100%	99%	101%	101%	100%	102%	99%
Mar-15	97%	95%	102%	95%	98%	94%	98%
Jun-15	88%	90%	89%	85%	86%	84%	92%
Sep-15	84%	86%	84%	84%	79%	81%	94%
Dec-15	94%	97%	98%	86%	91%	94%	105%
Mar-16	93%	92%	97%	88%	87%	86%	102%
Jun-16	93%	90%	98%	87%	91%	96%	100%

Exhibit 64: Market cap weighted price to NAV for selected real estate sectors
Historical price to NAV for REIT sub sectors from '99 to '24 YTD. As of '24 May, REITs traded at 86% of NAV, below their LTA of 98%

	Total REITs	Apartments	Shopping Centers	Regional Malls	Office (1)	Industrial	Self Storage
Sep-16	95%	94%	96%	93%	96%	101%	91%
Dec-16	88%	90%	89%	84%	89%	92%	90%
Mar-17	94%	98%	90%	87%	96%	85%	97%
Jun-17	89%	91%	84%	81%	90%	95%	94%
Sep-17	93%	93%	87%	78%	89%	103%	96%
Dec-17	95%	91%	87%	89%	92%	102%	100%
Mar-18	87%	81%	85%	83%	83%	92%	93%
Jun-18	91%	86%	81%	85%	89%	100%	98%
Sep-18	88%	91%	94%	94%	90%	101%	91%
Dec-18	93%	93%	93%	91%	87%	105%	93%
Mar-19	93%	95%	95%	86%	89%	99%	92%
Jun-19	94%	96%	90%	86%	89%	105%	98%
Sep-19	98%	101%	91%	81%	89%	113%	108%
Dec-19	99%	98%	97%	87%	94%	117%	94%
Mar-20	86%	89%	80%	76%	82%	90%	92%
Jun-20	89%	80%	88%	90%	85%	104%	90%
Sep-20	91%	83%	86%	80%	83%	104%	95%
Dec-20	92%	94%	87%	89%	89%	98%	89%
Mar-21	93%	96%	91%	94%	89%	95%	96%
Jun-21	105%	107%	100%	107%	99%	110%	106%
Sep-21	99%	100%	84%	86%	92%	107%	102%
Dec-21	93%	92%	85%	79%	84%	105%	94%
Mar-22	87%	86%	86%	79%	84%	90%	89%
Jun-22	83%	83%	83%	71%	77%	85%	87%
Sep-22	82%	80%	83%	78%	71%	86%	86%
Dec-22	85%	91%	88%	91%	78%	85%	77%
Mar-23	84%	85%	84%	87%	70%	90%	80%
Jun-23	80%	82%	74%	76%	67%	84%	81%
Sep-23	84%	82%	81%	84%	85%	84%	85%
Dec-23	94%	100%	90%	98%	93%	84%	93%
Mar-24	91%	88%	87%	99%	84%	91%	91%
May-24	**86%**	**92%**	**86%**	**93%**	**81%**	**73%**	**93%**

Source: FactSet and BofA Global Research. Note: (1) Price/NAV's for Aug-96 through Jun-02 are for the office/industrial sector

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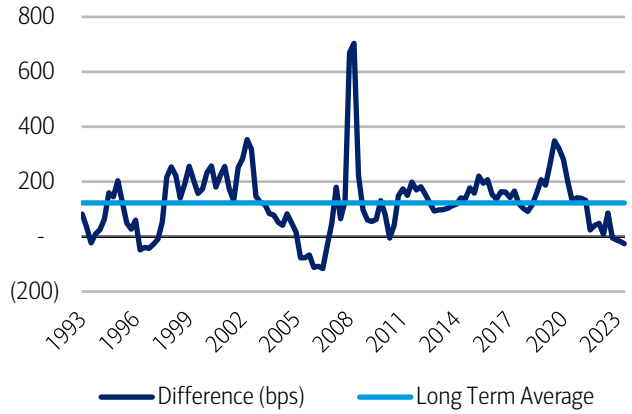
Distribution yield spreads

REIT distribution yields can be compared against the yields of other asset classes to determine relative value. We find it useful to look at the current and historical spread between the REIT distribution yields and the 10-year Treasury yield, the BAA corporate bond yield, the S&P 500 yield, and the S&P Utility yield.

Exhibit 65: REIT Distribution rate vs. 10Yr. Treasury Yield
As of '24 May, distribution rate for REITs is -26 bps below 10Yr Treasury Yield



Source: FactSet, Bloomberg and BofA Global Research

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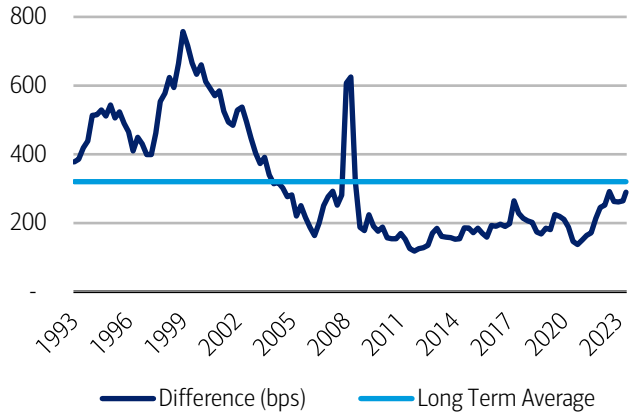
Exhibit 66: REIT Distribution rate vs. S&P 500 Yield
As of '24 May, distribution rate for REITs is 290 bps above S&P 500 yield



Source: FactSet, Bloomberg and BofA Global Research

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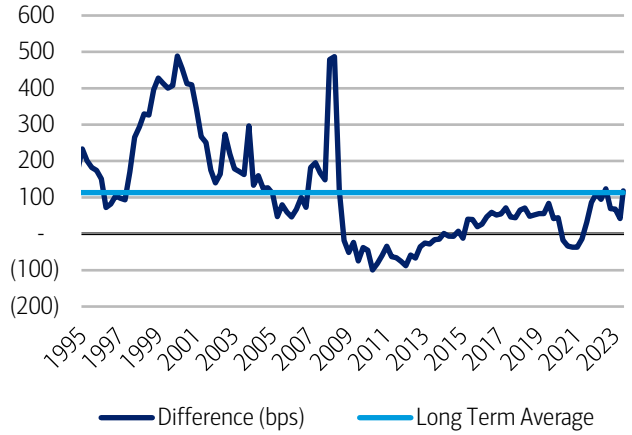
Exhibit 67: REIT Distribution rate vs. S&P Utility Yield
As of '24 May, distribution rate for REITs is 118 bps above S&P 500 utility yield



Source: FactSet, Bloomberg and BofA Global Research

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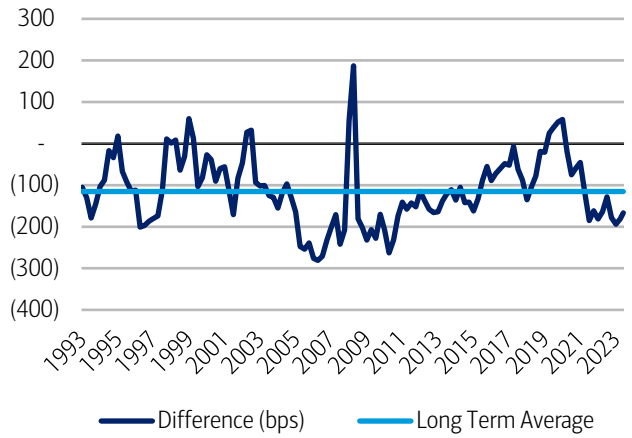
Exhibit 68: REIT Distribution rate vs. US Corp BAA Yield
As of '24 May, distribution rate for REITs is -167 bps below US Corp BAA yield



Source: FactSet, Bloomberg and BofA Global Research

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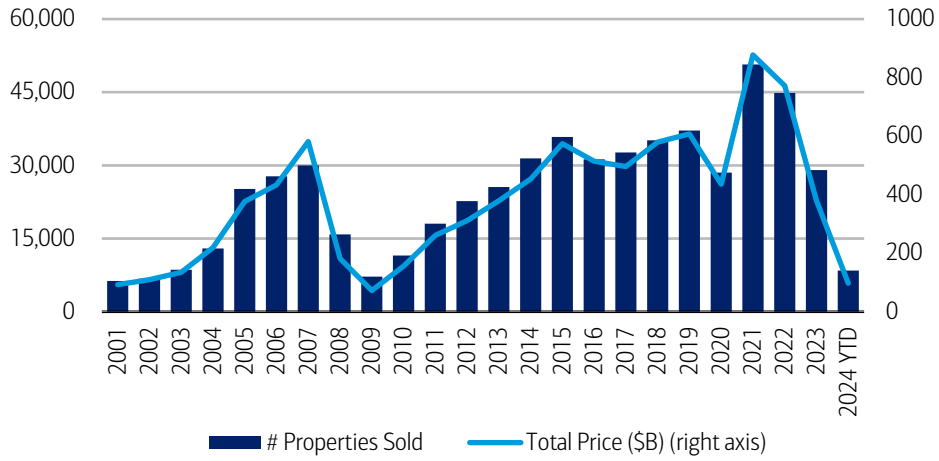
Direct real estate pricing

REITs only make up about 20% of institutionally owned commercial real estate. Therefore, much of the transactional activity that occurs in the overall commercial real estate market can influence REIT returns and performance. Direct property values can be derived by examining their: 1) cap rates, or initial yield on a property; 2) replacement value, which represents the cost to replace an asset; and 3) repositioning potential, which signifies the value the property could obtain if it were converted to a more productive use.

In 2008 and 2009, transactional activity slowed dramatically, making it difficult to use transactional data to determine the appropriate cap rate. Transactional activity picked up in 2010 and 2011 but was far less than the amount of activity in 2006 and 2007. Real estate transactions continued to climb 2012-2015, nearing pre-crisis highs. 2016 volume remained strong, though lower than 2015 levels. Deal volumes declined in 2023 following increase in interest rates. Consistently heard in the industry during the recovery is the amount of capital on the sidelines waiting to invest in US commercial real estate, including foreign capital.

Exhibit 69: Total historical real estate transactions
2023 transaction volume was $380bn and 2024 YTD $98bn



Source: Real Capital Analytics, BofA Global Research, As of February 2024.

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Implied cap rates

Another widely used valuation tool is looking at the implied cap rates of stocks and sectors, which fluctuates based on market cap. The implied cap rate lets us know where the market is valuing a particular company or sector. It is calculated by taking the forward NOI estimate, and then dividing by the implied gross property value, which is the sum of the current equity market cap, plus NAV liabilities, and minus NAV (other) assets.

We find implied cap rates are a useful tool to see what returns investors require as a check against the cap rates we are applying in our own NAV calculations. Essentially, the implied cap rate calculation is the NAV calculation worked backwards based on today's stock price to solve for the market's cap rate.

Note that it is important to deduct the NAV (other) assets from the implied gross property value. Otherwise, other assets will skew the implied cap rate if it is included in the denominator, and in our view, will not be comparable to the applied cap rates in NAVs.

Blended distribution discount model and FFOx

In our view, the NAV approach for deriving price objectives for the healthcare REITs and triple net REITs is problematic. Cap rates for healthcare assets often trade 100-150 basis points higher than office, industrial, and retail assets and 250-300bps higher than residential assets. The spread may be due to a more limited pool of buyers as some direct real estate investors are not comfortable trading healthcare assets, although MOBs and senior housing are becoming more institutionalized. In the triple net space, single asset transactions are dominated by 1031 buyers who in some cases have specific tax reasons driving investment decisions. Triple-net assets have not historically been focused on by traditional real estate investors.

Therefore, instead of an NAV approach, we use a blend of the distribution discount model (DDM) and multiples (FFO for healthcare and AFFO for triple-nets) to derive our healthcare REIT and triple net REIT price objectives. We think the DDM is appropriate as the healthcare REITs and triple net REITs have more predictable and stable cash flow streams than other REIT sectors. For healthcare REITs, leases are typically triple net with 10-15 year terms and +2.0-3.5% escalators. For triple net REITs, leases are 15-20 years on average and carry annual rent bumps of +1.5%. These long-term leases provide a stable and rising income stream, which should allow companies to continue to raise distributions. This long-term, predictable, growing income stream is captured through the use of a DDM for valuation. The DDM uses predicted future distributions and discounts them back to present value.

To capture a shorter-term view, we blend the DDM approach with a multiple approach. We apply a premium or discount to the FFO current multiple for healthcare REITs. For the triple net REITs, we apply a premium or discount to the AFFO current multiple. We use the current multiple for triple net REITs because of the large changes to the triple net REITs' portfolios over the last five years, which have resulted in significantly more stable and diversified portfolios.

Distribution discount model steps

1. We use our estimated distributions from our earnings models.
2. Calculate a terminal value.
3. Calculate the cost of equity.
4. Take the net present value of the future distribution payments and terminal value using the discount rate (cost of equity).

FFOx steps

1. We take the current FFOx (for healthcare REITs) or the current AFFOx (for triple net REITs) and apply a premium or a discount.
2. We apply this to our forward four quarters of FFO estimates.

Alternative metrics: cash flow growth and PEG/PEGY

With Real Estate now carved out as a separate GICs sector, generalist investors may have a larger role in analyzing and valuing REIT shares in the future. Analysts, including our team, have historically looked at net asset values (NAV) and same store (SS) metrics to assess valuation and performance. Outside of the REIT world, though, cash flow is king. Over time, we would not be surprised if NAVs and SS metrics were deemphasized in favor of cash flow multiples and cash flow growth.

Pros and cons of valuation metrics

As discussed in the previous section, we use P/FFO, P/NAV, distribution yields, and implied cap rates to determine the relative value among our REIT universe. We recommend evaluating all four metrics, as there are pros and cons of using just one of these metrics in isolation. Looking at where companies are trading vis-à-vis peers on all metrics, as well as comparing where individual companies are trading versus historical valuations, allows us to derive a complete picture of relative valuation.

Price-to-NAV

Net asset value attempts to approximate the liquidation value of the underlying real estate, before the impact of income taxes on property sales. If a company's stock price becomes too cheap relative to NAV, then that company could go private to capture any implied arbitrage. The NAV can be used to calculate an implied price per square foot or price per unit for a company, which can then be compared to where similar assets are trading in the private market.

- **Pros:** NAV allows an analyst to apply different multiples to different cash flows depending on the risk profile of the cash flows. The NAV concept also adjusts for different capital structures so we can look at where a company is trading on both a levered and unlevered basis.

- **Cons:** The NAV calculation is subjective as it requires many assumptions by analysts, who employ varying assumptions and calculation methodologies. Some argue that NAV is not a REIT's true market value because it ignores the value of the REIT's business enterprise.

Price-to-FFO

FFO is the industry's main earnings metric, so P/FFO is analogous to the P/E ratio in other industries. FFO is calculated as net income, plus depreciation and amortization, plus/minus the gains/losses on the sale of assets.

- **Pros:** As opposed to NAV, which requires many assumptions to calculate, FFO (and the values used to derive FFO) is reported by most REITs. This allows for a more standardized comparison across companies and sectors.

- **Cons:** FFO may not be the most robust proxy for free cash flow, as it contains several non-cash items. Normalized FFO adjusts for one-time charges and impairments, and AFFO adjusts for other non-cash charges to reach a closer approximation of free cash flow (FCF). However, estimates for normalized FFO and AFFO vary among analysts.

  There is still some variation in how some companies calculate FFO. For example, certain companies include gains on sale of properties while others do not. Lease termination fees can also skew results, if included. These gains may be incorporated with other items on the income statement, making it difficult to pull this item out of the calculation.

  FFO does not adjust for differences in capital structure. This can lead to a company appearing more expensive on a P/FFO multiple basis simply because they employ more equity or more fixed rate capital.

Price-to-AFFO

AFFO or adjusted funds from operation (also known as CAD or FAD) is considered a better proxy of a REIT's free cash flow. The P/AFFO is analogous to the P/Free Cash Flow (FCF) ratio in other industries and is preferred by some over P/FFO. AFFO is calculated as FFO minus recurring cap ex, plus and adjustments for straight-line and FAS 141/142/143 income.

- **Pros:** AFFO is a more robust proxy for FCF than FFO. This allows for a more meaningful earnings metric across REITs and is especially helpful in capital-intensive property types such as Office.

- **Cons:** AFFO is not widely reported by all REITs. Moreover, analysts can make their own adjustments to AFFO for what they believe is the clearest picture of FCF. Similar to FFO, there is variation in how companies calculate AFFO, CAD, or FAD, which can skew what measure is reported. As a result, estimates for AFFO vary among analysts and can skew the P/AFFO metric. Like FFO, AFFO does not adjust for differences in capital structure. This can lead to a company appearing more expensive on a P/AFFO multiple basis simply because they employ more equity or more fixed rate capital.

Distribution yields

Distribution yield is calculated as the forward four quarters distribution divided by the share price.

- **Pros:** Distribution yields require no assumptions and are easily compared across all companies as well as against indices such as the S&P 500.

- **Cons:** Distributions may be set too high if the supporting free cash flow has declined or the quality of AFFO supporting the distribution is poor. When using distribution yields as a valuation tool, investors need to develop a sense for the safety of the distribution by computing the AFFO coverage ratio and determining the overall quality of cash flows. A good approximation of a REIT's ability to pay its distribution is the AFFO payout ratio (forward distribution divided by AFFO) or the AFFO coverage ratio (AFFO divided by the distribution; the inverse of the payout ratio). Distribution growth is also important and is a function of AFFO growth and the AFFO coverage ratio.

Implied cap rates

As discussed in a previous section, implied cap rates are calculated by dividing the forward NOI estimate by the sum of equity market cap based on today's stock price, plus NAV liabilities minus NAV assets.

- **Pros:** Implied cap rates reveal the real estate returns required by the capital market (investors). As this measure provides an aggregate view of many investors' assumptions, it helps smooth differences among investor assumptions and provides a consensus view for the value of a REIT stock or sector.

- **Cons:** There can be some variations in calculating implied cap rates, i.e., whether to include capex reserve or management fee, which may also vary by sector. Implied cap rates are also impacted by the amount of construction-in-progress included as well as the expected development pipeline. There is therefore no one way to calculate an implied cap rate, which can generate differences among investors and analysts.

Section 5: REIT distributions

A cornerstone of maintaining REIT status is that at least 90% of taxable income must be distributed to investors as distributions. The distributions come primarily from the relatively stable and predictable stream of rents paid by the tenants who occupy the properties. Since rental rates usually rise during periods of inflation (as many lease rates are tied to CPI), REIT distributions tend to be protected from the long-term corrosive effect of rising prices.

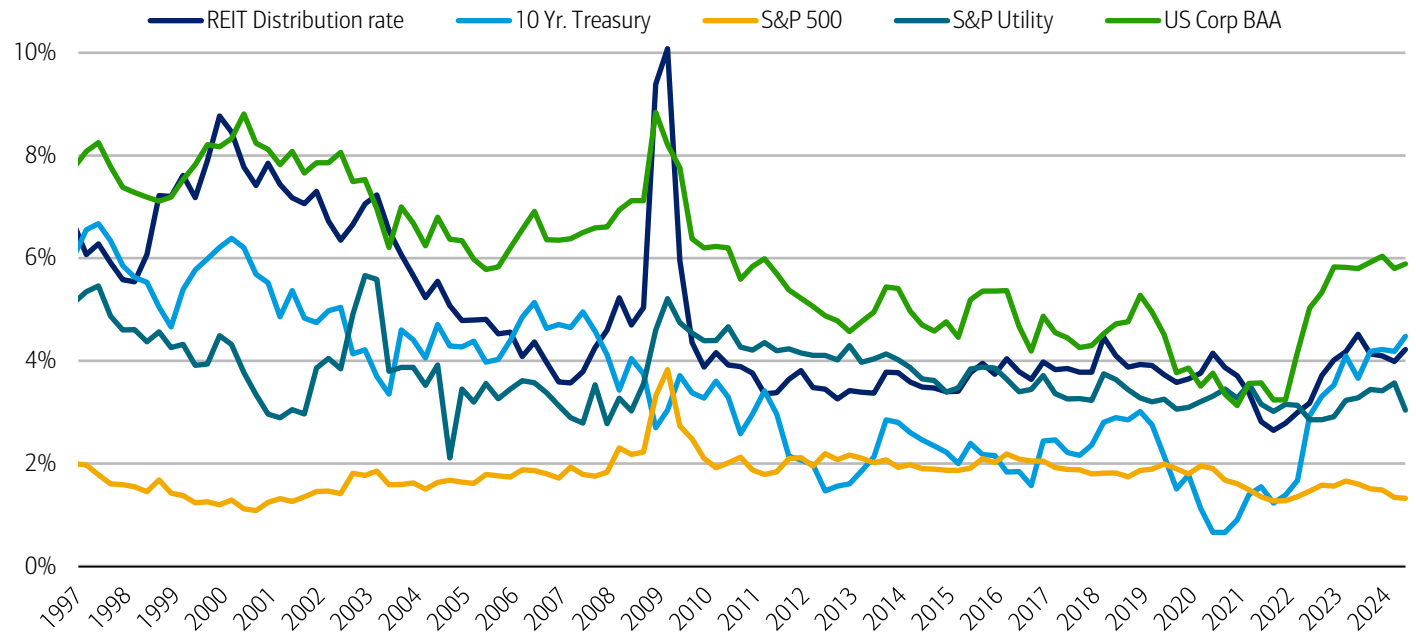
REIT distributions are taxed at the investor level, and each company provides information to its shareholders as to how the prior year's distributions should be allocated for tax purposes. This information is distributed by each company to its shareholders on IRS Form 1099. Distribution distributions can be allocated to: 1) ordinary income; 2) capital gains; or 3) return of capital – all of which are taxed at different rates. A return of capital distribution is defined as that part of the distribution that exceeds the REIT's taxable income.

Prior to 2008, distribution growth for REITs averaged at 5.5% a year over the prior eight years, and investors enjoyed a steady stream of all-cash distributions. In December 2008, the IRS ruled that REITs could choose to pay up to 90% of the distributions in stock. Many boards revised their distribution policies and cut their distributions significantly or reverted to paying a combination of cash and stock distributions in order to preserve cash amid the global credit crunch. In 2009, Vornado Realty Trust (VNO) and Simon Property Group (SPG), among others, chose to pay quarterly distributions partially in stock. Most returned to all-cash distributions during 2010. By year-end 2010 and early 2011, many REITs began to raise their distributions.

Investors and analysts use the FFO or AFFO payout ratio to measure a REIT's ability to pay distributions. The ratio divides the annual distribution by either annual FFO or AFFO.

The REIT distribution yield (calculated as the forward four quarters distribution divided by the stock price) was at 4.22% as of May 23, 2024.

Exhibit 70: Historical REIT distribution yield
Historical REIT distribution yields vs. 10yr, S&P 500 dividend yield, S&P Utility yield and US Corp BAA yield



Source: FactSet, NAREIT, BofA Global Research; as of 5/11/2023

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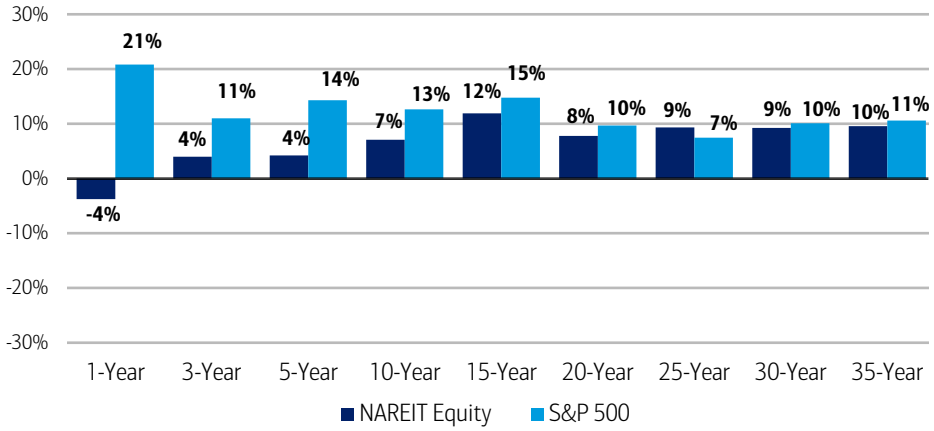
REIT returns

For investors in REIT shares, an attractive total return offers both equity- and bond-like benefits. Through the lease structure, REITs receive a steady stream of income, like bonds. However, about 10-20% of leases come due each year and rents are marked to market, which allows REITs to take part in the economic cycle. In addition, REITs experience earnings growth, like an equity, through their various sources of growth (i.e., acquisitions, development, and redevelopment). Investors can achieve gains (and losses) through stock price appreciation as well as the distribution yield. However, REITs also can experience the downside of equity-like returns, as they did in 2007 and 2008, and macro-driven volatility, as they did in 2010-2012, as well as during the 2020 pandemic.

Historical performance of REIT shares

Investors historically viewed real estate as a slow growth asset class with limited return potential. However, Exhibit 71 shows that REITs outperformed the broader market over the 20, 25 and 30 year periods. The sector underperformed broader market indices beginning in 2007, as REIT shares were more greatly affected by the global recession and credit crunch. However, REITs bounced back strongly over 2010 and 2011 as more investors were looking for safety and distributions. Over the past one-year and three-year periods, uncertainty has been persistent in the market due to the COVID-19 pandemic, US-China trade tensions, Brexit, geopolitical uncertainty and other macro factors.

Exhibit 71: Historical compound annual total returns of REITs vs S&P 500 (1) as of 12/31/23
Nareit Equity one-year returns are lower than S&P 500 returns for the same period



Source: NAREIT, BofA Global Research; as of 12/31/23
(1) All return periods are run through 12/31/2023; using the FTSE NAREIT Equity REIT index

BofA GLOBAL RESEARCH

REITs and interest rates

In our latest edition of Rising Rates on REITs, we look at the impact that steepening has on REIT performance and multiples. We found that historically REIT performance lagged S&P 500 during periods of interest rate steepening. Earnings multiples compressed during periods of steepening. The Fed's Operation Twist was positive for REIT multiples.

REITs lagged the S&P 500

There have been 3 major interest rate steepening periods since 2006: 2006-10, 2012-13 and 2019-21. During the 2006-10 period, we found that the RMZ declined -42.4% vs the S&P 500's -20.8%. During the 2012-13 period, the RMZ declined -0.5% vs the S&P 500's +38.1%. During the 2019-21, the RMZ rose +3.3% vs. the S&P 500's +43.4%

Earnings multiples have historically compressed during steepening periods

During the 2006-10 period, the average FFOx across our coverage universe fell -3.1x. During 2012-13 period, the average FFOx fell -2.3x. However, during the 2019-21 period, the average FFOx expanded +3.2x The multiple compression appears to be driven by higher long term borrowing costs and REITs yields becoming less attractive versus fixed income products.

REIT multiples and performance were positive during Operation Twist

The Fed In 2011, attempted to slow the steepening and engaged in Operation Twist. This involved selling shorted dated Treasuries and buying longer dated securities in an attempt to slow / prevent the steepening. Overall our analysis found Operation Twist as beneficial to REITs. Both from a performance and multiple perspective. REIT FFOx expanded during Operation Twist rising 2.3x.

Exhibit 72: Percent change in performance during steepening periods by Index

The data below shows the 6 months before, during, and 6 months after each steepening period by market index

	Operation Twist			06-10 interest rate steepening			12-13 interest rate steepening			19-21 interest rate steepening		
	6M before	During	6M after	6M before	During	6M after	6M before	During	6M after	6M before	During	6M after
S&P 500	-7.9%	23.0%	12.8%	8.1%	-20.8%	-2.5%	2.7%	38.1%	7.7%	3.1%	43.4%	11.3%
RMZ	-6.0%	21.9%	0.6%	16.7%	-42.4%	11.4%	8.1%	-0.5%	16.2%	6.5%	3.3%	14.8%
Healthcare	-4.0%	24.5%	-2.8%	23.0%	-1.2%	11.7%	11.1%	-10.8%	15.5%	11.0%	-13.9%	4.7%
Industrial	-12.9%	33.0%	-7.0%	20.2%	-62.5%	-2.9%	2.7%	2.1%	13.2%	14.8%	30.7%	20.0%
Office	-13.4%	13.1%	1.7%	21.1%	-43.3%	9.6%	3.5%	1.7%	16.2%	-0.4%	-4.3%	10.1%
Retail	-1.1%	30.3%	0.4%	13.4%	-52.5%	9.0%	12.2%	0.4%	15.4%	-13.0%	-18.8%	16.3%
Apartments	-0.4%	6.3%	2.0%	16.9%	-36.2%	21.2%	11.7%	-15.6%	21.1%	12.6%	1.9%	20.6%
Self Storage	8.3%	31.1%	4.4%	20.7%	-17.5%	21.0%	9.5%	9.9%	17.9%	18.1%	15.6%	25.0%

Source: S&P Global Market Intelligence

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Exhibit 73: Change in FFO multiple during steepening periods by REIT subsector

The data shows the 6 months before, during, and 6 months after each steepening period by REIT sub-sector.

	Operation Twist			06-10 interest rate steepening			12-13 interest rate steepening			19-21 interest rate steepening		
	6M before	During	6M after	6M before	During	6M after	6M before	During	6M after	6M before	During	6M after
Apartments	-2.4x	-0.5x	-0.9x	2.8x	-4.9x	3.4x	-0.7x	-4.8x	3.1x	1.9x	2.0x	1.9x
Healthcare	-1.9x	1.9x	-1.0x	0.4x	-0.9x	1.9x	0.4x	-2.4x	1.5x	2.2x	1.4x	0.3x
Industrial	-5.2x	6.0x	-1.5x	1.2x	-0.8x	1.7x	-1.0x	1.4x	1.1x	2.6x	4.1x	2.7x
Lodging	-4.5x	1.2x	0.2x	0.4x	5.8x	-2.6x	-3.4x	0.1x	1.3x	-1.2x	-3.4x	15.0x
Malls	-0.1x	2.0x	-1.7x	1.7x	-3.5x	1.8x	0.9x	-3.2x	2.8x	-2.3x	0.8x	1.5x
Manufactured Housing	0.2x	-0.6x	1.0x	0.6x	-3.2x	1.8x	-0.2x	-0.8x	2.4x	5.1x	-1.9x	2.0x
Net Lease	-1.6x	-1.3x	-0.6x	2.0x	4.6x	2.2x	-1.0x	-0.3x	0.4x	1.8x	0.7x	-1.0x
Office	-2.6x	1.6x	0.0x	2.3x	-4.5x	2.8x	0.7x	-0.7x	1.9x	-0.4x	12.4x	-15.1x
Self-Storage	0.2x	1.3x	-0.4x	3.5x	-4.7x	2.2x	0.6x	-3.3x	2.0x	4.1x	0.5x	1.9x
Shopping Centers	-2.8x	3.1x	-0.1x	2.3x	-4.5x	1.2x	0.8x	-2.2x	0.1x	-0.1x	3.6x	-1.0x
Single Family	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	-1.8x	2.8x	7.1x	-2.7x
Comm. Infrastructure - Data Centers	-0.6x	0.3x	-3.1x	1.9x	-3.7x	0.7x	-0.2x	-5.6x	1.5x	1.3x	4.5x	3.8x
Comm. Infrastructure - Towers	n.a	n.a	-4.7x	n.a	n.a	n.a	18.1x	-2.7x	0.2x	4.5x	0.7x	0.2x
All REITs	-1.9x	2.3x	-1.4x	2.1x	-3.1x	2.1x	2.8x	-2.3x	1.4x	2.5x	3.2x	-0.2x

Source: S&P Global Market Intelligence, BofA Global Research

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Top-down view: impact of Fed tightening is ambiguous on REIT performance

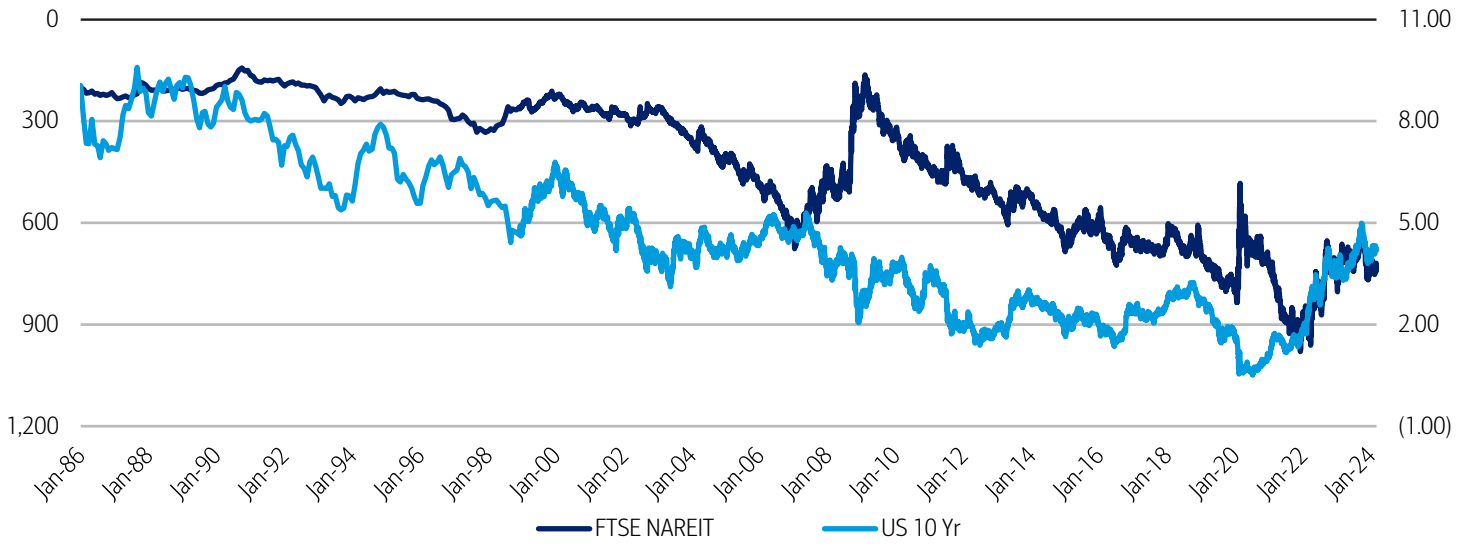
Evidence is inconclusive on relative performance over the course of a full Fed tightening cycle. In the last three tightening cycles, REITs underperformed in two and outperformed in one. Interestingly, our strategists found that REITs under-perform ahead of tightening cycles. However, their data shows that REITs performed in line with the market six months after the first Fed hike.

No negative correlation between the 10-year and overall REIT performance

We ran a simple correlation on REIT returns vs changes in the US 10-year Treasury yield. Going back to 1986, we found the correlation was +0.17 indicating that REITs do not necessarily sell off when long-term rates rise.

Exhibit 74: REITs and interest rates: no negative correlation

Correlation of REIT returns vs. the US 10-year treasury yield was +0.17 since 1986



Source: Bloomberg, BofA Global Research

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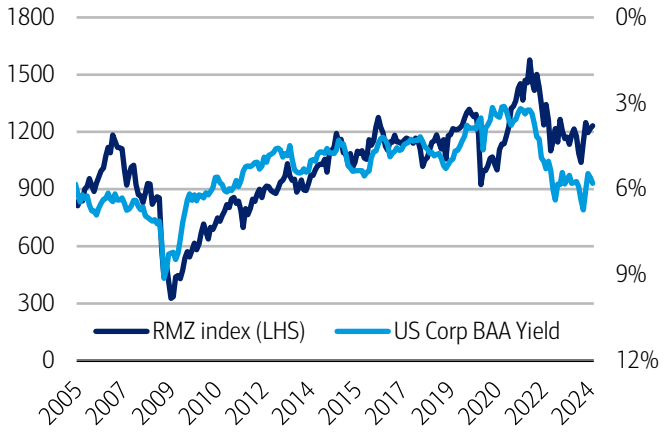
Rates & REITs: an imperfect relationship

Exhibit 75 shows the RMZ index vs the US Corporate BAA yield. The US Corporate BAA yield has jumped sharply rising from 3.4% at the beginning of 2022 to 5.8% in March-24. We believe this back up in yield has been a driving factor in REIT's underperformance in 2022. REITs returned +9.0% in 2023, following levelling off in BAA corporate yields from 5.8% at beginning of 2022 to 6.0% at end of 2023. All else equal, investors who are concerned with near term income will weigh the REITs distribution yield vs alternatives such as bonds. Exhibit 76 shows how the increase in the US Corporate BAA yield has corresponded with a similar increase in the RMZ's distribution yields.

Exhibit 75: REITs underperformance partly driven by a back up in rates
The back up in the US corporate BAA yield has partly driven the RMZ lower



Source: Bloomberg, FactSet

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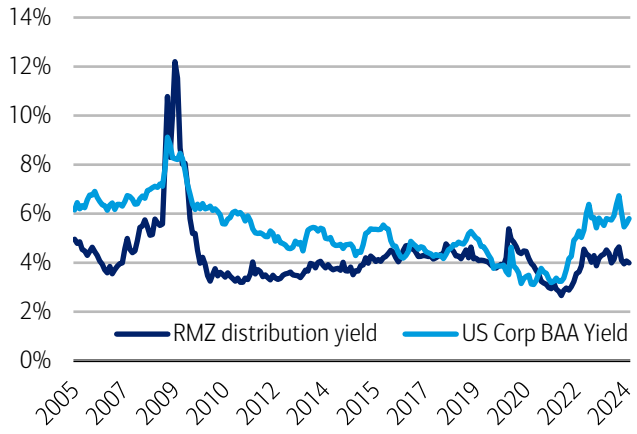
Exhibit 76: Corporate bond yields vs the RMZ distribution yield
The recent increase in the RMZ distribution yield has coincided with a back up in the US corporate BAA yield.



Source: Bloomberg, FactSet

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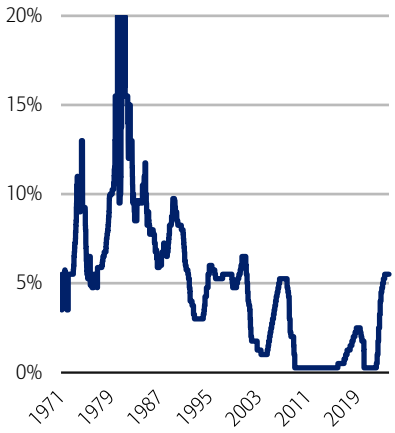
Exhibit 77: Fed Funds target rate (upper bound)
The last hike was on July 2023



Source: Bloomberg, BofA Global Research

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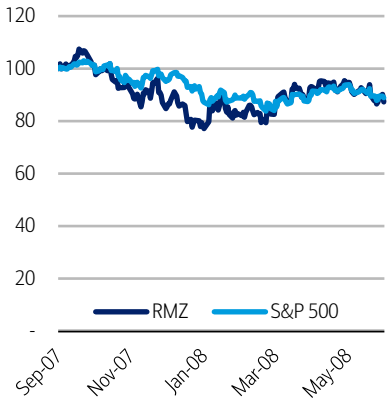
Exhibit 78: RMZ vs. S&P 500 post Fed's cut on 9/18/2007 (index = 100)
RMZ was in line with S&P 500 in the 9-month period post Fed cut



Source: Bloomberg, BofA Global Research

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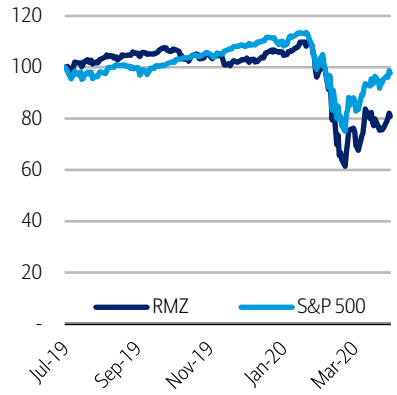
Exhibit 79: RMZ vs. S&P 500 post Fed's cut on 7/31/2019 (index = 100)
RMZ was underperforming S&P 500 in the 9-month period post Fed cut



Source: Bloomberg, BofA Global Research

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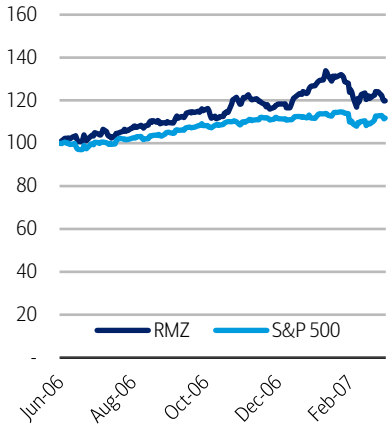
Exhibit 80: RMZ vs. S&P 500 when Fed paused hiking on 6/29/2006 (index = 100)
RMZ was outperforming S&P 500 in the 9-month period after pausing



Source: Bloomberg, BofA Global Research

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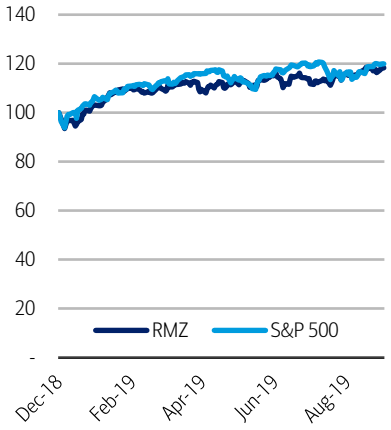
Exhibit 81: RMZ vs. S&P 500 when Fed paused hiking on 12/19/18 (index = 100)
RMZ was in line with S&P 500 in the 9-month period after pausing



Source: Bloomberg, BofA Global Research

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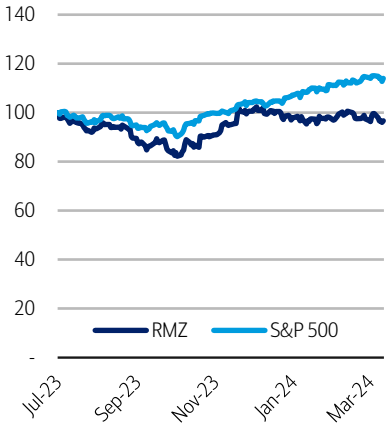
Exhibit 82: RMZ vs. S&P 500 assuming Fed paused hiking on 7/26/2023 (index = 100)
RMZ was underperforming S&P 500 in the 9-month period after pausing



Source: Bloomberg, BofA Global Research

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Section 6: Frequently asked questions

What's the difference between REITs and private real estate companies?

REITs represent only about 20% of total institutionally owned commercial real estate. As public corporations, REITs must file financial statements with the SEC, providing investors with more transparency than private real estate companies or limited partnerships. REIT shares also have the advantage of being liquid securities, easily bought and sold on listed exchanges, with minimal transaction costs. REITs have greater access to the capital markets and can more easily raise equity either for growth (i.e., acquisitions) or to de-lever balance sheets.

What's the difference between REITs and Limited Partnerships?

REITs are not partnerships, but like other corporations, REITs participate in partnerships through the Joint Venture (JV) structure. REITs often form JVs with other large institutions, foreign REITs, domestic or foreign pension funds, etc.

Major differences between a REIT and a partnership

1. REIT shares are liquid securities that are publicly traded on major exchanges
2. There is no minimum investment for REITs
3. Investors re-elect directors, with the majority independent of management
4. REITs must have at least 100 shareholders; partnerships are made up of any number of general and limited partners
5. REITs can raise equity and debt through the capital markets
6. REITs cannot pass losses on to investors

Source: NAREIT

REIT shareholders report taxes in a different manner than investors of limited partnerships. Investors of REITs receive the traditional IRS Form 1099 with information about the amount and type of income they received. Limited partnership investors receive an IRS Schedule K-1, which is much more complex than the Form 1099. REIT investors also pay less state taxes when filing compared to a limited partnership investor.

What's the difference between REITs and homebuilders?

The main business for REITs is generally to own and operate real estate, while homebuilders tend to develop and sell real estate. The revenue stream of these two businesses is different, as REITs derive most of their revenue from rental income, which is a generally stable and visible income stream. Homebuilders, on the other hand, generally develop on a speculative basis, meaning there is limited pre-commitment from buyers, which can make income streams more variable.

Additionally, there is generally some level of pre-commitment from future REIT tenants before a REIT begins to build an asset, while homebuilders often develop without any pre-commitment from buyers and therefore undertake additional risk by developing the property on their own balance sheet.

What is Section 1031 and Section 721?

Under tax code section 1031, an owner of a building that sells an asset and purchases another building within a specific period of time does not have to pay taxes on the gains from sale of the building. The original owner has 45 days from the date of sale to identify the new building to be purchased and 180 days to complete the purchase. The proceeds cannot be used to purchase REIT stocks on a tax-free basis; however, since the tax-free basis only applies to like-kind exchanges (other physical assets).

Tax code section 721 permits an owner to transfer properties to a REIT's operating partnership (OP) and in return, receive partnership interests (OP units) on a tax-deferred basis, certain conditions permitting. Operating partnerships are generally found in the UPREIT and DownREIT structures, discussed in a previous section. After a certain period of time, the OP units can be converted into REIT stock or cash, but the conversion is taxed. OP unit holders receive interest distributions, similar to distributions received by holders of REIT stocks.

Can REITs own assets overseas?

Yes, many US REITs do own assets overseas, although for most, only a small percentage of their portfolio is overseas and a small percentage (5-6%) of earnings come from these assets. Some of the REITs under our coverage that own and operate assets outside the US are Digital Realty (specialty), Kimco (retail), Prologis (industrial), and Simon Property Group (retail).

REITs are subject to local taxes on foreign earnings in each location, and therefore the company needs to evaluate every project outside the US on an after-tax basis. This allows the companies to properly assess the risk/reward characteristics of these foreign investments against investment opportunities in the US. Finally, companies must take into account the exchange rate risk associated with any investments outside the US.

What is the difference between internally and externally managed?

Externally managed REITs have an external adviser managing the assets for a fee, usually a percentage of assets under management. In this structure, the REIT does not have any employees and does not own any of the systems and software used to manage the properties.

In the late 1980s, the inefficiencies and conflicts of interests that existed between the external adviser and REIT shareholders were recognized. The Tax Reform Act was passed in 1986, which allowed REITs to integrate property management into the organization. Following the "REIT modernization era" and KIM's IPO, internally managed REITs emerged and became the industry norm.

Today, most (but not all) equity REITs are internally managed, while mortgage REITs commonly use the externally managed structure.

See page 8 for an analysis of conflicts of interests between the external manager and REIT shareholders in externally-managed REITs.

What is the correlation between REIT performance and equities?

When measuring against the S&P 500 and the Russell 2000, REITs have increasingly grown to be more correlated with the broader movement of equities in the last ten years. Evaluated at year-end 2023, the strongest positive correlation was over the last 1 year (0.92 versus S&P 500) and over the last 6 months (0.98 versus S&P 500). The correlation is lower over the last 25 years (0.65 versus S&P 500) and over last 10 years (0.67 versus the Russell 2000).

Exhibit 83: REITs vs equity indices
Strongest positive correlation was over the last 1 year versus S&P 500.

	6-mo	1-yr	18-mo	3-yr	5-yr	10-yr	25-yr
REITs vs. S&P 500	0.98	0.92	0.92	0.90	0.85	0.76	0.65
REITs vs. Russell 2000	0.92	0.90	0.89	0.79	0.78	0.70	0.67
S&P 500 vs. Russell 2000	0.89	0.82	0.87	0.84	0.89	0.87	0.84

Source: NAREIT, BofA Global Research; evaluated for year end 2023

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Appendix: acronyms & definitions

1031 exchange
A real estate transaction where the landlord sells an existing property and uses the proceeds to purchase another property on a tax-free basis.

Adjusted funds from operations (AFFO)
A closer measure of cash flow or economic profitability for REITs than FFO. This metric also provides a better indicator of the sustainability of a REIT to pay distributions. AFFO is calculated as FFO minus recurring capex, minus straight line rent adjustment, minus adjustment to FAS 141.

AFFO coverage ratio
AFFO divided by the distribution; the inverse of the payout ratio.

AFFO payout ratio
Distribution payment divided by AFFO.

A-REITs
Australian REITs.

ATM offering
At the market offering; a type of follow-on offering of stock used to raise capital over time.

Common area maintenance (CAM)
Mostly found in retail real estate, CAM charges are expenses charged to tenants related to maintaining the common areas of the property, such as snow removal, cleaning, trash removal, and security.

Capital expenditures (capex or cap-ex)
Recurring capital expenditures is capital spent by the landlord to maintain the upkeep and status of a property – but does not enhance the overall value of the property. When calculating AFFO, recurring capex is deducted from FFO, among other adjustments.

Capitalization rate (cap rate)
The initial yield on a real estate investment and a way to value real estate in terms of acquisitions and dispositions. The "cap rate" of a property is determined by dividing asset cash flow divided by asset purchase price or the total expected development cost. Asset cash flow is usually the property's first year NOI stream.

CBD
Central business districts (office REITs).

CCRC
Continued care retirement communities (healthcare REITs).

Class A, B, C
Classification of the quality of real estate; a subjective measure. "Class A" is the highest-quality real estate, in the best locations and commands the highest rents, "class B" is a slightly below class A assets in terms of quality and location, and "class C" is usually average/fair, older, and un-renovated in weaker locations.

CMBS
Commercial mortgage-backed securities. A type of mortgage-backed security that is secured by the loan on a commercial property. CMBS provides another source of financing for real estate companies.

Co-tenancy
A common clause in retail lease contracts that allows tenants to get a reduction in rent from landlords if key tenants or a certain number of tenants leave the center.

CRE
Commercial real estate.

DDM (Distribution Discount Model)
Distribution discount model is a valuation tool that can be used to value REIT stocks by using predicted distributions and discounting them back to present value. Generally used for companies with stable cash flows and stable distributions.

DownREIT
Structured similarly to an UPREIT in that it allows properties to be placed into a REIT on a tax-free basis. Existing partners receive OP units (operating partnership units) in exchange for the assets, which can be tendered for cash later or REIT shares. A DownREIT differs from an UPREIT in that it is generally created when the REIT is already a public company.

EBITDAR coverage
EBITDAR is earnings before interest, taxes, depreciation, amortization and rent. The EBITDAR coverage ratio is the ratio of EBTIDAR to contractual rent for leases (or interest & principal for loans). This ratio is used by the healthcare REITs to view tenant cash flow coverage. Compared to the EBITDARM coverage ratio, EBITDAR is a stricter, more conservative ratio.

EBITDARM coverage
EBITDARM is earnings before interest, taxes, depreciation, amortization, rent and management fees. The EBITDARM coverage ratio is the ratio of EBITDARM to contractual rent for leases (or interest and principal for loans). This ratio is used by the healthcare REITs to view tenant cash flow coverage. Compared to the EBITDAR coverage ratio, EBITDARM is a more flexible ratio.

Economic Cap Rate
When industry professionals refer to “cap rate” they are most likely referring to nominal cap rates. Economic cap rate however, is a more apt measure of initial yield. Economic cap rate takes into consideration cap-ex and is calculated by dividing economic NOI (difference of nominal NOI and normalized cap-ex) by property value.

Equity REIT
A REIT that owns and operates real estate properties.

Externally managed REIT
Organizational structure of a REIT where an external adviser (also known as the manager) manages the REIT’s assets for a fee. The REIT itself does not have any employees and does not own any of the systems and software used to manage the properties. Today, most (but not all) equity REITs are internally managed, while mortgage REITs commonly use the externally managed structure. Depending on the external adviser’s fee structure and termination fee, potential conflicts of interest between REIT shareholders and the external manager/adviser could exist.

FAS 141
GAAP accounting requirement for newly acquired assets where landlords must determine whether existing leases are above or below market rents, book the difference on the balance sheet, and amortize over the remaining life of the lease. An adjustment for the FAS 141 income ensures true cash flow is measured during the calculation of AFFO.

Funds from operations (FFO)
The REIT industry's key earnings metric. Calculated as GAAP net income, minus real estate gains (plus real estate losses), plus impairment charges, plus GAAP real estate depreciation and amortization. FFO includes the pro rata share of unconsolidated joint venture net income and depreciation.

GSE
Government-sponsored enterprises. Financial services corporations sponsored by the US government that aim to enhance the flow of credit to targeted sections of the economy. Fannie Mae and Freddie Mac are examples. Apartment REITs and Healthcare REITs have accessed GSE funding.

Gross lease
Under a gross lease, the tenant pays a special rental rate, and the landlord agrees to pay for the first year's operating expenses, also known as the expense stop. Tenants will pay for their pro rata share if operating expenses increase in the future.

Gross leasable area (GLA)
A building's total floor area, in square feet, designed for tenant leasing. It is generally the area for which tenants pay rent, and thus the area that generates revenue for the owner.

Hybrid REIT
A REIT that is a crossover between an equity REIT and a mortgage REIT.

Implied cap rate
Calculated by taking the forward NOI estimate, and dividing by the sum of: equity market cap (based on current stock price), plus NAV liabilities, minus NAV assets. The implied cap rate is essentially the NAV calculation backwards.

Internally managed REIT
REIT organization structure where the property management is integrated into the REIT. In the late 1980s, the inefficiencies and conflicts of interests that existed between the external adviser and REIT shareholders were recognized. The Tax Reform Act was passed in 1986, which allowed REITs to integrate property management into the organization. Following the "REIT modernization era" and KIM's IPO, internally managed REITs emerged and became the industry norm. Today, most (but not all) equity REITs are internally managed, while mortgage REITs commonly use the externally managed structure.

Joint venture (JV)
A partnership between a REIT and another entity, where they jointly buy, sell, and own income-producing properties together. The partner can be a pension fund, another REIT, a foreign REIT, foreign investor, etc.

J-REITs
Japanese REITs.

Lease cancellation fees
Income received for the early cancellation of leases.

Life cos
Life insurance companies. Often a source of lending to REITs.

Loan-to-value (LTV)
A measure of how leveraged a loan is. Calculated by dividing the value of the mortgage loan by the value of the property, given in percentage form.

MOB
Medical office buildings (healthcare REITs).

Mortgage REIT
A REIT that that lends money to real estate owners and owns portfolios of real estate debt, rather than directly owning real estate.

NAREIT
National Association of Real Estate Investment Trusts. The REIT industry's trade organization.

Net absorption
A measure of demand in the market. Typically calculated as the percentage change of total square feet leased during a specific time frame.

Net asset value (NAV)
NAV seeks to calculate the "net market value" of all the company's assets, after subtracting liabilities. NAV is calculated by taking the fair market value of the company's assets, minus the fair market value of the company's liabilities. To derive NAV per share, divide the NAV by fully diluted shares outstanding.

Net operating income (NOI)
NOI is the cash flow generated at the property, excluding corporate-level expenses. NOI is calculated by taking property level revenue, and subtracting property-level expenses (real estate taxes, operating expenses, and marketing expenses).

Non-core assets
Assets owned by a REIT that are not its core asset type (i.e., a retail REIT owning a small collection of warehouses). REITs may own a small percentage of non-core assets in order to diversify their own portfolio.

Non-listed or non-traded REIT
Public non-listed REITs (also known as non-traded REITs) are REITs that file with the SEC but whose shares do not trade on a national stock exchange. This makes these investments more illiquid, as redemption programs vary by company. The non-traded REIT market is estimated to be approximately a $70-100 billion market.

Normalized funds from operations (normalized FFO)
Normalized FFO makes adjustments for impairment charges that skew FFO. This provides a better measure of the REIT's long-term FFO-generating ability or business performance, excluding one-time, unusual charges.

Operating partnership (OP)
A new partnership formed in the UPREIT or DownREIT structure where the REIT owns the majority interest of the partnership. Owners of assets sell their assets to the Operating Partnership and receive interests, or OP units, in return.

Operating partnership units (OP units)
Interests in the Operating Partnership of a REIT. Original owners of assets exchange their properties with the OP to receive OP units, which can be exchanged as stock or cash after a specific period of time.

Payout ratio
Distribution divided by FFO. Distribution sustainability is better measured by AFFO, since adjustments are made to FFO to get to a closer proxy of recurring cash flow.

Price-to-NAV
Price-to-NAV is a valuation metric for REITs, similar to price-to-book value. Book value is based on historical costs and does not reflect the rise/fall of property prices; therefore REITs use NAV to derive the underlying value of its properties.

Real Estate Investment Trust Act of 1960
Federal law that authorized the formation of REITs to provide small investors the opportunity to participate in the benefits of direct ownership of commercial real estate, but with less and diversified risk and with the benefits of liquid, publicly traded securities.

Real estate investment trust (REIT)
A security that sells like a stock on the major exchanges and invests in real estate directly, either through properties (equity REITs) or mortgages (mortgage REITs). REITs receive special tax considerations and typically offer investors high yields, as well as a highly liquid method of investing in real estate.

REIT Modernization Act
Federal law that went into effect in 2001. It allowed REITs to own up to 100% of stock of taxable REIT subsidiaries (TRS).

Rent concessions
Rent abatement granted to the tenant by landlord. Usually occurs during lease negotiations.

Replacement cost
The cost to replace an asset or a property of the exact same or similar value.

RevPAU
Revenue per available unit. Used by apartment REITs to derive a proxy for rental revenue growth.

RIDEA
REIT Investment Diversification and Empowerment Act of 2007 allows healthcare REITs to participate in higher level of entrepreneurial activities through TRSs.

RMS
MSCI US REIT Index; the Morgan Stanley REIT Index. RMS is an end-of-day and total return index, which includes the distribution.

RMZ
MSCI US REIT Index; the Morgan Stanley REIT Index. The RMZ is a real-time price-only index.

Same-store net operating income (same-store NOI/SS NOI)
Measures NOI on a static number of properties to give insight as to how a portfolio of assets performs over a period of time. This provides a clearer picture of the operational performance because REITs acquire and dispose of properties frequently.

Single-family rental (SFR)
Single-family rental is a newly formed REIT subsector that is in its early stages (first IPO was SBY in 2012). Given the large fall in home values in select US markets, institutional players have started to amass portfolios of single-family homes through multiple channels with the intent to renovate, lease and manage them.

SNFs
Skilled nursing facilities (healthcare REITs).

Special servicing
Loans are transferred to special servicers who handle collection and foreclosure efforts for delinquent loans greater than 60 days, defaulting loans, and loans in receivership.

Straight-line rent
In GAAP accounting, long-term leases have contractual rent increases built in but rent must be "straight-lined," or averaged, over the life of the lease. During the AFFO calculation, an adjustment is made to extract the true cash amount of rent collected rather than the average value.

Taxable REIT subsidiaries (TRS)
Authorized in 2001, TRS – which are taxed at the corporate level – allows REITs to engage in ancillary business activities and boost earnings by providing services to tenants and others. REITs can own up to 100% of stock of the TRS, but only up to 25% of the REITs' assets may be in a TRS.

Tax Reform Act of 1986
Federal law that allowed REITs to integrate property management into the organization. Prior to this act, REITs were legally required to source property management to outside companies.

Tenant improvement (TI) allowance
Tenant improvement allowances are given to tenants to build out the space to suit their needs. TIs are usually found in leases for office and retail properties.

3PLs
Third party logistics providers. Product distribution in Industrial REITs can be outsourced to 3PLs.

Triple net leases
A lease where the tenant is contractually responsible for all the expenses of the property, including operating expenses, real estate taxes, insurance, etc.

Umbrella Partnership REIT (UPREIT)
A structure created in the early 1990s as a way for properties to be placed into the REIT on a tax-free basis (without actually having to sell them). Existing partners receive OP units (operating partnership units) in exchange for the assets, which can be tendered for cash later or REIT shares.

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