Overview of REITs

This BofAML REIT primer provides an overview of the REIT industry and includes a discussion of the sector’s unique quarterly reporting standards and methods of valuation. This primer is divided into separate sections for easy referencing: (1) the basic structure of a REIT and the growth of the industry; (2) REIT earnings and valuation; (3) distributions; and (4) frequently asked questions. We also include an appendix that contains definitions of REIT-specific terms and commonly used acronyms.

Providing 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 are required to derive at least 75% of their income from real estate and distribute 90% of their taxable net income as distributions. Similar to a direct real estate holding, REITs are taxed at the investor level, not the corporate level.

Evolution of REITs

The REIT industry has changed dramatically over the decades. Two cycles in the 1970s and 1980s slightly increased the number of REITs, but it was not until the early 1990s that the sector had strong growth and wide acceptance among investors. Today, most REITs follow an active, hands-on, owner-and-operators model rather than simply owning a collection of assets, as was common in the early years. Collecting rent continues to be the main source of revenue for REITs. They grow internally through occupancy and rent increases, tenant upgrades, and redevelopment of existing properties. REITs generate external growth through accretive acquisitions and ground-up development. REITs own only about 15% of institutionally owned US commercial real estate. Beginning 8/31/16, Equity Real Estate Investment Trusts will get their own GICS sector, leaving the financials umbrella. Mortgage REITs will remain in the financial sector under a newly created industry and sub-industry.

Valuation of REITs

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-fund 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 where the market is valuing a company or sector. We provide an explanation of these valuation methods inside and list the pros and cons of each.
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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.

The REIT structure

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:

- 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, eg, parking facilities provided at the property.

- 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 (eg, 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 80% 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 20% of the REIT universe.

- **Hybrid REITs**: A hybrid REIT is a cross between an equity and a mortgage REIT. Hybrid REITs 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.

Chart 1: All US REITs breakdown, by sector (weighted by market cap)

Source: NAREIT, as of February 28, 2015; Note: Includes Mortgage REITs
The REIT industry’s trade organization is, the National Association of Real Estate Investment Trusts, or NAREIT.

Public non-listed REITs, also known as non-traded REITs, file with the SEC, but shares are not traded on a national exchange.

The non-traded REIT market is estimated to be $70-100 billion.

Chart 2: US non-traded REITs by sector – Number of companies

- Number of companies

Source: SNL; As of 3/23/15; Sectors: (1) Diversified; (2) Single-Tenant; (3) Office; (4) Multifamily; (5) Industrial; (6) Health Care; (7) Shopping Center; (8) Hotel; (9) Retail: Other; (10) Self Storage; (11) Specialty

When REITs were first formed, a REIT’s assets were managed for a fee by an external manager.

Internally managed REITs emerged in the “REIT modernization era” in the 1990s, kicked off by the IPO of Kimco (KIM) in 1994.

Today, internally managed REITs is the industry norm for equity REITs.

Mortgage REITs retain the externally managed structure.

Potential conflicts of interest exist between REIT shareholders and the external manager.

Equity investors prefer internally managed REIT structure for equity REITs to avoid conflicts of interests.

Publicly traded, non-traded, and private REITs

REITs can be either publicly traded (most are listed in 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 publically.

As of March 31, 2014, there are 220 publicly traded REITs included in the FTSE NAREIT All REIT index, of which 179 are equity REITs and 41 are mortgage REITs.

Non-traded REITs: A large and growing market nearing $100B

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 value of the company more difficult to discern (since not traded).

The non-traded REIT market is estimated to be approximately a $70-100 billion market, with an estimated $20B of new capital raised during 2013. As of March 28, 2014, there are approximately 68 non-traded REITs with roughly 6 billion shares outstanding.

A typical investment in a non-traded REIT ranges from $1,000-$2,500. Up-front fees typically represent 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

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

Organizational structure of REITs

When first formed, REITs were thought of as a passive investment vehicle of 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 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.
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 and not operating performance: The manager may be incentivized to acquire assets (increase AUM)

2. Basis of compensation of senior management: As part of the external manager, senior management's interests may not be aligned with the REIT shareholders and may be aligned, instead, with the external manager and incentivized to acquire assets (AUM) 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 vs 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.

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

### 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). Other subsectors of real estate have a lag given longer lease terms, and rent resets depend on the asset’s lease expiration schedule. Most assets have contractual lease bumps that are capped or tied to CPI.

### 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. In light of recent market activity, antitakeover provisions common to many REITs have garnered greater market attention.

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.

Why Invest in REITs?
REITs are attractive to investors typically interested in consistent current income
and long-term growth. Management consists of experienced professionals that
offer investors a unique investment opportunity in a highly liquid and transparent
investment vehicle. With significantly higher than average distribution yields and
competitive long-term rates of return, REITs offer both the advantages of growth
stocks and fixed-income instruments. The low correlation of listed REIT stocks
with the returns of other equities and bonds also provides portfolio diversification
to investors.

Equity REIT sectors
Multi-family ($112 billion market cap)
The multi-family sector includes apartments, student housing, manufactured
housing and single-family rental REITs.

Apartments
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. This means apartment REITs can mark their leases to market more
frequently.

The main driver for apartment REITs is job growth, as it directly affects rental
revenues. 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 in
order for landlords to buy occupancy. The strategy for most apartment landlords
is to try to maintain 94-95% occupancy at virtually any cost, which means that
effective rents may fall dramatically through higher concessions (one month 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 lag between unemployment and the time it affects apartment
fundamentals, usually between six months and a year. In a growing economy, the
typical rule of thumb used is that every five new jobs produce one unit of rental
apartment demand. Job growth in the 20-35 year-old age range is even more
beneficial as this is the prime renter age cohort.

Another main driver for apartment REITs is new supply of apartment inventory.
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.
Factors affecting apartments are interest rates and condominium supply

Other factors affecting apartment REITs are interest rates, condominium supply, and rental housing supply. Relatively high interest rates on home mortgages tend to help apartment owners, as this makes home ownership less affordable. 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.

Another factor is the decline in home ownership rate and a secular shift to renting

As a result of the residential mortgage crisis that began in 2007, a significant shift is occurring in the US from owning to renting. The US home ownership rate peaked in 2005-2006 at about 69% and ended 4Q14 at 64.0%. Every one percentage point decline represents approximately 1.1 million households that enter the renting population. The decline in home ownership is expected to continue. Current rhetoric from Washington suggests that potential policy changes will make homeownership less attractive and incentivize private development of affordable multifamily rentals.

Foreclosed homes could also become competitive supply, as rental homes, against apartments

The overall multi-family sector has benefited from the shift to renting, especially from historically low levels of supply. However, construction has ramped up to above historical levels. So far, absorption has not had an impact on rents or occupancy, but we continue to monitor the supply outlook. In addition, foreclosed homes could become competitive against apartments as rental homes, and supply could come on faster than expected and/or above demand.

Purpose-built student housing properties are non-university-owned communities targeted toward students

Student housing

Student housing is non-university-owned properties targeted to university students, primarily at large, public, four-year universities. This subsector is viewed as more defensive than other multi-family property types, as college enrollment tends to be less sensitive to macroeconomic conditions, and even increases when unemployment rises.

The industry exhibits seasonality given the academic calendar. Revenue is lower in 2Q and 3Q as full time students move out during the summer. Operating expenses increase in 3Q because the bulk of tenants move during August and September. Deal activity also tends to be seasonal, as owner/operators focus on leasing in 1Q and 2Q. Many owners wait until 3Q to market assets for sale.

Manufactured housing communities are either all-age or age-restricted

Manufactured housing communities

Companies in this defensive sector own, operate, and develop manufactured housing and recreational vehicle communities within the US. 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 through the downturn. In addition, recurring capital expenditures only amount to $150-250 per site annually. Communities can be all-age or age-restricted (for retirees). RV/resort communities exhibit more seasonality based on timing of holidays and weather with annual, seasonal and transient revenue streams.
Single-family rentals
This is a newly formed subsector that is in its early stages. There is an estimated 14 million single-family rental homes in the US, primarily owned and operated by mom and pops. 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. Industry trends are favorable for single-family home price appreciation, and niche demand for rentals exists. However, longer-term investors are concerned about expenses and capital expenditures.

Health care ($98.6 billion market cap)
The key types of health care 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 only have one type of business, the health care REITs are able to diversify their investments by business and payor mix. For example, the four types of health care facilities have varying pay mechanisms: senior housing (private pay), skilled nursing (public pay), hospitals (public pay), and medical office buildings (private pay).

Most leases for senior housing, skilled nursing, and hospitals are triple net, long in duration, with low turnover

The main drivers of health care REITs include: aging demographics, proximity to the oldest daughter, and proximity to the nearest hospital

Health care REITs have transformed their portfolios to diversifying tenant base, private/public pay mix, geographic exposure, and with TRS/RIDEA deals

Industrial properties include: distribution centers, bulk warehouse space, light manufacturing facilities, research and development facilities, and “flex” office space for sales or administrative functions
Industrial ($32.8 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 commonly located within industrial or warehouse parks. These buildings range in size from 25-50K square feet at the low end to over 1M sf at the high end. Development trends and demand for large distribution centers increased the average building size for the sector over the past decade. While the properties are often leased to a single user, landlords can easily subdivide them for multiple tenant use.

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 warehouses include design traits such as dock doors on multiple sides of the building to promote the efficient flow of goods and 30 foot or higher clear ceiling heights.

Warehouse demand is highly correlated to GDP growth. Key drivers of demand come from inventory storage or the flow of goods through tenant supply chains either in the manufacturing process or during distribution to the end user. Therefore, demand growth depends primarily on consumer spending, manufacturing, and import/export activity (we note historic trends suggest imports require three times the amount of warehouse space than exports). E-commerce and housing increasingly are drivers. Growing demand for same and next day delivery of e-commerce goods continues to reshape tenant supply chains.

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. 3PLs tend to match their lease durations to the underlying distribution contracts they sign. The global nature of trade and tenant warehouse needs provides industrial REITs with opportunities to grow outside the US.

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 from 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%.

The availability of capital and optimistic growth outlooks led to large amounts of speculative development in many markets ahead of the late 2007 downturn. When demand declined, it upset the historic supply/demand balance and the sector occupancy rate dipped below its historic range. Fortunately, tenants with strong balance sheets found the new supply attractive, which returned the supply/demand imbalance closer to equilibrium a few short years later. Constraints on capital and bank lending have kept speculative construction in check longer than is typical since the financial crisis.

Property funds are a unique part 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 then
collect management fees and bonuses/promoted interests upon meeting certain return requirements. 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.

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.

Lodging REITs are neither able to receive income from hotel operations, nor operate owned hotels. Instead, the 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.

Lodging ($53.5 billion market cap)

Lodging REITs may neither receive income from hotel operations nor operate owned hotels. However, Lodging REITs have set up TRSs to generate income from hotel operations.
Traditionally, office REITs were categorized as either CBD or suburban. More recently these lines have blurred as most office REITs focus on owning the best assets in the best submarkets in their geographic markets.

Office ($88.8 billion market cap)

Office REIT assets fall into two primary categories: central business district (CBD) or suburban. CBD typically means high-rise buildings in urban infill markets. 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.

Traditionally, Office REITs were categorized as either CBD or suburban. More recently, these lines have blurred as most office REITs focus on owning the best assets in the best submarkets in their target geographic markets. Stronger REIT balance sheets and operating platforms have supported this transition.

In Chart 2, we provide the historic average same store NOI growth for REITs traditionally categorized as CBD and suburban office REITs. The long-term average shows stronger growth over time for CBD names.

Chart 3: Historical comparison of SS NOI of CBD vs suburban office

![Chart 3](chart.png)

Source: Company reports, BofA Merrill Lynch Global Research

Job growth remains the key driver of office space demand. The average lease duration for office REITs is 5-7 years for suburban assets and 10-12 years for CBD assets. 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 in-place rent increases when leases mature. Office development projects typically take anywhere from 18 months to three years, depending on building size and location. Including the time it takes to assemble land sites and project approval from the local municipality, projects typically take much longer in most CBD markets.

Office rents typically are quoted as either gross or net, and per month or per year, depending on local market convention. 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 to maintain office buildings. 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 that leasing costs. That said, landlords tend to hold off on major capital improvement projects during more challenging market conditions to conserve capital.

Based on this, we pay close attention to office REIT adjusted funds from operations (AFFO). AFFO reflects FFO less these routine capital expenditures less any non-cash revenues/expenses, and best reflects the operating cash flow generated by the office REIT portfolio. We calculate AFFO and funds available for distribution (FAD) payout ratios as distribution/AFFO, and find this metric most useful to determine distribution coverage and an office REIT’s distribution safety or distribution growth prospects.

Retail

Malls ($112.4 billion market cap)

Malls typically are characterized by larger, inward facing, enclosed centers (400,000 sf or more), with two or more anchors (often 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. About 56% of the 1,100 malls in the nation are owned by REITs, and over 80% of the stronger malls are held within REIT portfolios. The 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. Historically, anchor tenants were the major draw to a mall, but this dynamic is changing. Select retailers have risen in importance in terms of drawing customers to the mall, such as Apple, American Girl Doll, H&M, and Forever 21. Anchor tenants typically pay a relatively low rent, with the specialty tenants paying the majority of the rent.

Malls REIT revenues are tied to consumer spending, because 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. Retailers typically base their ability to pay rent increases on 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. One misperception is that mall revenues are driven by percentage rent (if a tenant has sales above a pre-determined level they have to pay additional rent). In fact, very little of REIT revenue is tied to sales, less than 3% on average.

Demographics are a key variable when examining retail assets (eg, 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 outstand 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 and or develop in prime locations, growth in the sector is mostly generated through tenant upgrades and redevelopment opportunities.

**Shopping centers ($66.3 billion market cap)**

By CoStar’s count (excluding malls and outlet centers), there are nearly 112,700 shopping centers in the US. When focusing on those shopping centers that are 50,000 sf or larger, that number drops to 33,300. The main property types include:

- Convenience center – less than 30,000 sf, anchored by a convenience store
- Neighborhood center – 30,000 to 150,000 sf, anchored by 1+ supermarkets or drug stores
- Community center – 100,000 to 150,000 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 – also open air, but generally attract fashion/specialty retailers and can have up to two anchors (or none)

Similar to malls, shopping center REITs are highly dependent on consumer spending. Vacancies in shopping centers are affected by net store closings, and historically 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).

Like malls, we believe that properties 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 easy access are important), grocery market dominance (it is important to have the number one or number two grocer in the market), and general merchandise dominance.

**Outlet centers ($3.4 billion market cap)**

Factory outlet centers occupy a niche within the shopping center industry with over a 45-year history. Vanity Fair Corporation opened the first multi-tenant outlets center in 1970, within a converted factory building located in Reading, PA. Outlet centers today are typically 50,000 to 500,000 sf in size, made up of manufacturers’ outlet stores, with anywhere from 100-125 tenants for phase 1 of projects, and more, should the center get expanded and have additional phases built.

The outlet center industry, at 83 million square feet, has expanded rapidly in recent years, starting in 2011, and is the one retail real estate format that is aggressively developing ground-up projects. Previously built on the outskirts of
town, outlet centers now are being located closer to major cities. While internal operating metrics for the outlet business have slowed relative to previous years, they still remain in a healthy range. On the other hand, development activity of outlet centers remains robust with significant growth. In the last two years, outlet space in the US has expanded by approximately 5% (measured by square footage), and we expect this pace to continue in 2015.

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 downturn, shopping center REITs SS NOI lagged mall REITs (see Chart 4). 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 from 3Q12 to 3Q13 as shopping center REITs were able to drive occupancy (particularly in the small shop space) while malls, which had fewer vacancies during the recession, had already reached stabilized occupancy levels. Mall SS NOI suffered in 1Q14, through challenging weather, but has returned to a nearly 4.0% pace for the remainder of the year.

![Chart 4: Historical comparison of SS NOI of mall vs strip REITs](chart)

Source: Company reports, BofA Merrill Lynch Global Research

Self storage ($48.6 billion market cap)
Self storage facilities offer rental on a month-to-month basis where tenants supply their own locks and have direct access to units. While many types of structures have been converted from warehouses and other buildings, the majority of facilities that are being developed today are specifically designed for consumer/business storage. The users of self-storage are roughly split: 25% business/75% residential. 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.

A typical storage facility is located on 2.5-5 acres with 5-7 buildings with drive-up accessibility. Overall, the storage facility may contain 50,000-80,000 sf of rentable space. More advanced storage facilities offer climate controlled units or above-average access from interior hallways, so can charge higher rents. Investment grade facilities have at least 30,000 sf and have at least 300 units.
The industry is fragmented, with the top five largest owners (four public self storage REITs and U-Haul) owning less than 11% of the self storage industry’s facilities. According to 2015 Self-Storage Almanac, there are approximately 51,000 storage facilities in the United States. Self Storage Data Services, an independent research firm, estimates the total number of self-storage facilities in the United States to be over 45,000 (and other estimates range 50,000-60,000).

Even though zoning issues are making the construction of newer self storage facilities more difficult, across the range of real estate options, the self-storage facility is one of the more accessible for small entrepreneurs. Therefore, one of the bigger risks to the industry is future new growth in otherwise saturated areas of self-storage.

**Data centers ($29.5 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. Most are converting their non-data center real estate assets into data center space through redevelopment. Acquisitions serve as another key driver of data center REIT portfolio growth. Data center REIT portfolios span North America, Europe and Asia, with the largest concentration in the US. Given similarities for data center demand and design across continents, we expect overseas expansion for this sector to continue.

Unique to this REIT sector, data center REITs typically price their space based on power capacity usage ($/kW) rather than rentable square feet. However, data center REITs convert their rent and operating metrics to per square foot numbers when they report earnings and operating metrics to the street for consistency with REIT sector peers.

For data centers, rising demand stems from growing enterprise IT requirements and an increased willingness by IT departments to outsource the infrastructure (data center space, power, and cooling) underlying critical server, storage, and networking equipment. IDC estimates that approximately 8% of worldwide data center square footage is outsourced vs only 5.7% as of 2010. IDC projects the total amount of outsourced data center square footage to rise to 12% by 2017, providing a steady growth opportunity for data center REITs.
Retail freestanding REITs own free-standing retail properties such as gas station/convenience stores, fast food or buffet restaurants, drugstores, etc, as well as industrial and office assets.

Leases are structured on a triple net leased basis, which lends to the sector nickname of triple net REITs.

Recent conversions include infrastructure and tower REITs.

There is increasing discussion of potential conversions to REIT-status by non-traditional real estate companies, such as prisons and billboards.

While REITs avoid corporate-level taxes, REITs have a burden in distributing 90% of taxable income as distributions.

In 2013, the IRS and Congress began separate investigations into the REIT conversion process and qualifications.

In early 2014, proposed tax changes could make it more difficult for corporations with non-traditional real estate assets to elect REIT status.

**Retail freestanding/triple-net ($31.5 billion market cap)**

REITs that own retail freestanding properties are also known as triple-net REITs because leases with their tenants are on a triple-net lease basis. These property types include retail properties like gas station/convenience stores, fast food and buffet restaurants, or retail/service such as drugstores, fitness centers, child care, auto repair, etc, as well as industrial and office assets.

Triple-net lease agreements are structured in a way where the tenant is responsible for all operating expenses (insurance, taxes, capex), and the landlord collects a net rent. Leases have a relatively long lease terms (15-20 years), low rent bumps embedded (1.5-2.0% or CPI escalators) 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 triple-net lease sector is popular in the non-traded and private REIT format for investors to receive stable distributions.

**Infrastructure/tower ($68.5 billion market cap)**

REITs of this non-traditional real estate sector own and operate various types of infrastructure. The two largest companies in this sector are American Tower (AMT: $32b market cap) and Crown Castle (CCI: $25b market cap), both tower REITs that own wireless and broadcast communications towers worldwide. AMT converted to a REIT in 2012, and CCI converted effective the beginning of 2014. Tower companies’ core business is leasing space on owned wireless towers to wireless carriers, government agencies, and broadband data providers.

Currently, one other micro-cap REIT (market cap $15 million) is included in the infrastructure sector, Power REIT, which owns real estate related to energy.

**REIT conversions**

Following the Great Recession, there has been an increase in conversions to the REIT structure from companies in non-traditional REIT sectors. Recent examples for potential conversions include towers, datacenter operators, correctional facilities, billboard companies and death care services providers. Some retailers have been exploring the possibility of spinning off their owned real estate into REITs as well.

Some potential advantages to REIT conversion may include no corporate-level taxes and possible multiple expansion. That said, the REIT structure does have a tax burden. REITs must distribute 90% of taxable income as a distribution; on average, we estimate REITs are currently paying out 75% of their annual cash flow. As a result, REITs must depend heavily on the capital markets to fund growth. This could pose a hurdle for some companies contemplating a conversion to REIT status.

Additionally, companies hoping for conversions may face hurdles from the government. In 2013, the IRS and Congress began separate investigations into the REIT conversion process and qualifications, after several conversions occurred or were under way, including correctional facilities (prisons) and billboards. In mid 2013, the IRS formed an internal working group to review current standards.

In late 2013, the IRS completed its review of REIT ruling standards and resumed issuing private letter rulings of requested REIT conversions. No formal announcement or conclusion has been issued by the IRS regarding the study undertaken by its working group. In April 2014, two billboard companies received favorable private letter rulings issued by the IRS, allowing them to proceed with their planned REIT conversions.
In early 2014, the Congressional House Ways and Means Committee released proposed draft tax reform legislation. The draft noted that several taxable C corporations have explored REIT conversions as an avenue to avoid paying corporate income taxes, which is not the intention of REIT rules. The proposed changes would make it more difficult for corporations with non-traditional real estate assets to elect REIT status by limiting REIT-eligible assets to assets that are “more closely related to real estate.”

**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 explosive 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 leverage. REIT stocks regained strength starting in 2009, climbing through to 2013 from organic growth, secondary issuances, and IPOs.

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 (e.g., the 1999 REIT Modernization Act), and many investors believe REITs were greatly undervalued during the dot-com boom.

**Chart 5: All REITs (equity, mortgage, and hybrid REITs) – number and market cap**

Source: NAREIT; Note: Includes all REITs: equity, mortgage, and hybrid REITs, as of 12/31/14
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 billion. Given REIT share performance in the second half of 2013, equity issuance tapered off in 2014 with under $30 million raised. However, equity issuance has picked up again, with $9.1 billion raised year to date as of the end of March 2015.

M&A activity/spinoffs

In addition to equity raises, over the last 10 years, there have been 96 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 2007 and then fell off dramatically in 2008 and 2009, as capital was difficult to come by.

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
- Venta’s 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
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.

REIT spinoffs have also taken hold, providing means for management to unlock real estate value. Activity has picked up over the last year, with Washington Prime Group’s spinoff from Simon Properties, completed May 2014; Urban Edge’s spinoff from Vornado, completed January 2015; and SpinCo’s planned spinoff from Ventas, expected to close in 2H14.

### 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 22 REITs in the S&P 500 index. There are 31 REITs in the S&P 400 Mid Cap index and 31 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 13, 2012, HCP 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 consecutively annually for at least 25 years. HCP is the only REIT to be included in this index.

### REIT ETFs

As REITs were added to the S&P 500, ETF baskets increasingly included REITs, and more REIT ETFs were created. This is evident in the increase REIT ETF volumes over the recent years, as well as REIT ETF volumes as a percentage of total REIT volumes.

In the SPDR S&P 500 ETF, the SPDR S&P 500 Financials ETF and the iShares Russell 2000 ETF, REITs currently weigh in at 2.4%, 15.2% and 8.5%, respectively. Based on the daily fund flows of these three ETFs, along with the Vanguard REIT ETF and the iShares DJ Real Estate Index ETF, BofAML Small-Cap Strategist Steven Desanctis estimates $287 million dollars of daily REIT volume from these five ETFs.
REITs: Currently part of the financials sector, but...

Today, REITs are included within the larger financials sector. As shown in the chart below, REIT returns were moving with the S&P Financials in 2006-09, but have moved away from the S&P Financials since 2009 and are more in sync with S&P 500 returns.

...Equity REITs to become the 11th GICS Sector in 2016

Equity Real Estate Investment Trusts will leave the financial sector to become the 11th GICS sector on August 31, 2016. Mortgage REITs will remain in the financial sector under a newly created industry and sub-industry. An outcome of the GICS decision for the REITs sector is that an allocation to real estate would now be made at the director of research or CIO level rather than by the financial PM. Feedback gathered by MSCI and S&P Dow Jones Indices during the annual...
GICS structural review “confirmed that Real Estate is now viewed as a distinct asset class and is increasingly being incorporated separately into the strategic asset allocation of asset owners.” Financial portfolio managers and financials ETFs would no longer have to own REITs. At the same time, this could mean less volatility and therefore a lower beta, which theoretically would help with portfolio diversification.

**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 April 23, 2015, S&P had ratings on 90 publicly traded REITs, Moody’s had ratings on 86 and Fitch had ratings on 46.

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 (61 out of 90) fall in the investment grade category. For Moody’s ratings, Aaa to Baa3 ratings are considered investment grade (currently 63 REITs out of 86). For Fitch ratings, AAA to BBB ratings are considered investment grade (25 out of 46).

**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.
Structural changes of REITs 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.

See page 5 for more details on the internally managed vs externally managed REIT structure.

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 through the issuance of 6.4 million shares. 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.
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 1: UPREIT ownership structure

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.
The return profile for REITs exhibits characteristics of both equities and bonds. 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 (e.g., acquisitions, development, and redevelopment).

For investors of REIT shares, an attractive total return offers both equity- and bond-like benefits. Investors can achieve gains (and losses) through stock price appreciation as well as the distribution yield (distributions are discussed in further detail on p. 39). 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.

Historical performance of REIT shares
Investors historically viewed real estate as a slow growth asset class with limited return potential. However, Chart 13 shows that REITs outperformed the broader market over five-year, 10-year, and 15-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 (depicted by the strong five-year return) as more investors were looking for safety and distributions. Over the past one-year and three-year period, uncertainty has been persistent in the market with respect to policy decisions, Eurozone crisis, rising interest rates, and other macro factors.

Chart 14: Historical compound annual total returns of REITs vs S&P 500 (1) as of 1/30/15

Source: NAREIT, BofA Merrill Lynch Global Research; as of 1/30/15
(1) All return periods are run through 1/30/2015, using the FTSE NAREIT Equity REIT index

REITs and interest rates
No negative correlation longer term
History does not provide a clear-cut answer to how REITs respond to Fed tightening. In the last three tightening cycles, REITs underperformed in two and outperformed in one. Our analysis shows that in periods of rising long-term rates, REITs are not necessarily negatively correlated to rising rates, and negative correlations have been decreasing. Each period is different. However, the greatest risk of rising rates for REITs is a short-term, knee-jerk reaction.
We believe rising rates will have a modest impact on cap rates, direct market pricing and FFO. But while REITs may underperform the market, their valuations will not necessarily decrease. Our analysis suggests the impact of rising rates will be modest, and as noted, evidence is inconclusive on relative performance during previous Fed tightening cycles. In our view, the greatest risk is a knee-jerk market reaction, similar to the decline when Fed tapering fears arose in June 2013. Our strategists found a similar outcome of underperformance ahead of previous tightening cycles. However, their data show that REITs actually performed in line with the market six months after the first Fed hike.

Chart 15: REITs and interest rates: no negative correlation

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.
Table 5: Net Income to FFO

<table>
<thead>
<tr>
<th>GAAP Net Income (including any impairment charges)</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Minus gains from sales of property</td>
</tr>
<tr>
<td>+ Plus losses from sales of property</td>
</tr>
<tr>
<td>+ Plus Impairment charges</td>
</tr>
<tr>
<td>+ Plus real estate depreciation &amp; amortization</td>
</tr>
<tr>
<td>(including pro rata share of unconsolidated joint venture net income &amp; depreciation)</td>
</tr>
<tr>
<td>-------------------------------------------------</td>
</tr>
<tr>
<td>= FFO</td>
</tr>
</tbody>
</table>

Source: NAREIT, BofA Merrill Lynch Global Research

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 SEC is now neutral to exclusion of impairment charges to calculate FFO. REITs have now started adding back impairment losses in their FFO calculation, even though they must exclude gains on sale and 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.
Non-recurring items are often one-time expenses or non-cash items that are not part of the normal operations of the company.

However, a trend has emerged for companies to adjust for non-recurring items and provide results and guidance based off of these adjustments.

Street estimates can vary based on the inclusion or exclusion of non-recurring items.

Adjusted funds from operations (AFFO) is also known as cash available for distribution (CAD) or funds available for distribution (FAD).

AFFO is a better proxy of a REIT’s available cash flow than FFO.

### Table 6: Reported FFO to normalized FFO

<table>
<thead>
<tr>
<th>Reported FFO</th>
</tr>
</thead>
<tbody>
<tr>
<td>+ Plus topic D-42 charges</td>
</tr>
<tr>
<td>+ Add back non-recurring items</td>
</tr>
<tr>
<td>= Normalized FFO</td>
</tr>
</tbody>
</table>

Source: NAREIT, BofA Merrill Lynch Global Research

### 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.

### Adjusted funds from operations

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).

Table 7 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.
Table 7: 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 Merrill Lynch 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.

Table 8: Straight-line rent calculation

<table>
<thead>
<tr>
<th>Year</th>
<th>Cash rents</th>
<th>Straight line rents</th>
<th>Straight line rent adj.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$40</td>
<td>$45</td>
<td>($5)</td>
</tr>
<tr>
<td>2</td>
<td>$45</td>
<td>$45</td>
<td>$0</td>
</tr>
<tr>
<td>3</td>
<td>$50</td>
<td>$45</td>
<td>$5</td>
</tr>
<tr>
<td>Total</td>
<td>$135</td>
<td>$135</td>
<td>$0</td>
</tr>
</tbody>
</table>

Source: BofA Merrill Lynch Global Research

(1) Equal to the average of the cash rents over three years.

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. Table 8 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.
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

Chart 15

REITs normalized FFO/share grew in 2011 and were even stronger in 2012 after a decline in 2009 and 2010 following the downturn

We expect positive but lower growth in 2015 than 2014
Chart 17: Apartments & student housing - normalized FFO/sh growth

Source: Factset, BofA Merrill Lynch Global Research

Chart 18: Health care - normalized FFO/sh growth

Source: Factset, BofA Merrill Lynch Global Research

Chart 19: Industrial/mixed - Normalized FFO/sh growth

Source: Factset, BofA Merrill Lynch Global Research

Chart 20: Office - normalized FFO/share growth

Source: Factset, BofA Merrill Lynch Global Research
Chart 21: Malls - normalized FFO/sh growth

Source: Factset, BofA Merrill Lynch Global Research

Chart 22: Shopping center - normalized FFO/sh growth

Source: Factset, BofA Merrill Lynch Global Research

Chart 23: Self storage - Normalized FFO/sh growth

Source: Factset, BofA Merrill Lynch Global Research
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 (see p. 22 for a discussion of cap rates).

The BofAML REIT Team calculates NAV as follows

Step 1
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 on line. We may apply a seasonality factor or a forward growth rate, depending on the sector (e.g., 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 core net operating income by our estimated internal growth rate for months 13-24. 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 BofAML 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.

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.
Chart 25: REIT implied cap rates

- REIT Sector Implied Cap Rate
- 10-Year Treasury
- BAA Bond Yields

Source: FactSet, BofA Merrill Lynch Global Research; as of 4/30/15

Chart 26: Historical implied cap rates for selected asset classes

- Apartments
- Shopping Centers
- Malls
- Office
- Industrial

Source: FactSet, BofA Merrill Lynch Global Research; as of 4/30/15
We use the following valuation methods:
- Price-to-FFO
- Price-to-NAV
- Yield spreads
- Direct real estate pricing
- Implied cap rates
- Distribution discount model & FFO multiple

Price-to-FFO (or FFOx) is the REITs’ most commonly used earnings multiple and is analogous to the price-to-earnings (P/E) ratio in other industries.

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 the last 10 years.

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 15% of the institutionally owned commercial real estate market and 5-10% 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 Chart 25, REITs are currently trading at a forward FFO multiple of around 16.9x, above the long-term (10-year) average of 15.1x and five-year average of 15.8x (as of 3/31/14).

Chart 27: Historical price-to-FFO multiples

![Historical price-to-FFO multiples chart](chart.png)

Source: BofA Merrill Lynch Global Research; as of 4/30/15
P/NAV for REITs is similar to using price-to-book ratios in other industries, however, book value is not suitable for REITs because it is based on historical costs and does not reflect the rise and fall of property prices and land values. P/NAV generally use estimates of a company’s forward NAV.

**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.

**Chart 28: Historical price-to-NAV**

Source: BofA Merrill Lynch Global Research; as of 4/30/15

**Table 9: Market cap weighted price-to-NAV for selected asset classes**

| Asset Class | Jan-97 | Jan-98 | Jan-99 | Jan-00 | Jan-01 | Jan-02 | Jan-03 | Jan-04 | Jan-05 | Jan-06 | Jan-07 | Jan-08 | Jan-09 | Jan-10 | Jan-11 | Jan-12 |
|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Total REITs | 126%   | 103%   | 78%    | 90%    | 97%    | 98%    | 119%   | 114%   | 112%   | 101%   | 103%   | 108%   | 83%    | 114%   | 106%   | 96%    |
| Apartments  | 114%   | 98%    | 85%    | 97%    | 105%   | 91%    | 111%   | 98%    | 12%    | 102%   | 107%   | 98%    | 11%    | 100%   | 106%   | 96%    |
| Shopping Centers | 127% | 94% | 67% | 92% | 114% | 109% | 121% | 109% | 98% | 102% | 107% | 75% | 81% | 94% | 114% | 95% |
| Regional Malls | 105% | 107% | 75% | 78% | 95% | 87% | 133% | 112% | 11% | 108% | 99% | 111% | 75% | 99% | 114% | 104% |
| Office (1) | 140% | 106% | 76% | 97% | 97% | 87% | 112% | 119% | 98% | 107% | 101% | 122% | 98% | 119% | 113% | 113% |
| Industrial | 139% | 101% | 80% | 97% | 92% | 98% | 112% | 119% | 113% | 108% | 108% | 108% | 98% | 108% | 113% | 113% |
| Self Storage | 128% | 108% | 79% | 98% | 90% | 90% | 113% | 113% | 113% | 108% | 110% | 110% | 98% | 108% | 113% | 113% |
Table 9: Market cap weighted price-to-NAV for selected asset classes

<table>
<thead>
<tr>
<th></th>
<th>Total REITs</th>
<th>Apartments</th>
<th>Shopping Centers</th>
<th>Regional Malls</th>
<th>Office (1)</th>
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<th>Self Storage</th>
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<tr>
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<td>94%</td>
<td>90%</td>
<td>92%</td>
<td>88%</td>
<td>94%</td>
</tr>
</tbody>
</table>

Source: BofA Merrill Lynch Global Research; (1) Price/NAV’s for Aug-96 through Jun-02 are for the office/industrial sector; as of 4/30/15

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.

Chart 29: REIT distribution yield vs Treasury yield

Chart 30: REIT distribution yield vs average US corporate BAA yield

Source: FactSet, BofA Merrill Lynch Global Research; as of 4/30/15
REITs have the advantage of referring to private market direct pricing for data points.

Direct property values can be derived by examining their:

1) Cap rates, or initial yield on a property (see p. 22 for a discussion of cap rates)
2) Replacement value, which represents the cost to replace an asset
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 in 2012, 2013, and even further in 2014, nearing 2005 levels. 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.

**Direct real estate pricing**

REITs only make up about 15% 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 (see p. 22 for a discussion of cap rates); 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.

**Chart 31: REIT distribution yield vs S&P 500 yield**

**Chart 32: REIT distribution yield vs S&P Utility yield**

Source: FactSet, BofA Merrill Lynch Global Research; as of 4/30/15
Implied cap rates

Another 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.

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 multi-family 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. In the triple net space, there is a lack of competition for triple net assets due to the specialized nature of the business, which leads to higher cap rates than we think are warranted given the stability of the NOI streams.

Therefore, instead of an NAV approach, we use a blend of the distribution discount model (DDM) and multiples (AFFO for healthcare and FFO for triple-nets) to derive our healthcare REITs’ and triple net REITs’ 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% rent 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. For healthcare REITs, our AFFO multiple is based on a five-year trading average, to which we apply a premium or discount. For the triple net REITs, we apply a premium or discount to the FFO 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 five-year average AFFOx (for healthcare REITs) or the current FFOx (for triple net REITs) and apply a premium or a discount.
2. We apply this to our forward four quarters of FFO estimates.
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; can adjust the capital structure to see levered vs unlevered

**Cons:** Many assumptions needed in the NAV calculation by analyst; ignores the company’s business enterprise

Price-to-FFO

**Pros:** Most standardized comparison across all REITs

**Cons:** May not be a robust proxy for cash flow; Does not adjust for differences in capital structure

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 (aka CAD or FAD)

Pros: AFFO is a more robust proxy for FCF than FFO

Cons: Not widely reported by all REITs, and calculations differ; does not adjust for differences in capital structure

Distribution yields

Pros: No assumptions needed

Cons: Need to look at AFFO estimate (no consensus estimate) and payout and coverage ratios to determine the quality of the cash flow

Implied cap rates

Pros: Reveals the real estate returns required by the market

Cons: Variations exist in calculating implied cap rates

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 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, eg, 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.
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 3.59% as of April 24, 2014.

Chart 34: Historical REIT distribution yield

Source: FactSet, NAREIT, BofA Merrill Lynch Global Research; as of 4/30/15
REITs represent only about 15% of total institutionally owned commercial real estate.

**REITs are not partnerships**

REITs participate in partnerships in the form of joint ventures (JVs) – often with large institutions, foreign REITs, domestic and foreign pension funds, etc.

**REITs are not homebuilders**

REITs aim to hold assets for the long-term and collect a steady stream of income from tenants whereas homebuilders often develop and sell.

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**Frequently asked questions**

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

REITs represent only about 15% 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 (e.g., 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 are:

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’s 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 5 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 five years. Evaluated at year-end 2013, the strongest correlation was over the last five years (0.80 versus both the S&P 500 and the Russell 2000). The correlation is lower over the last 18 months (0.45 versus the S&P 500 and 0.24 versus the Russell 2000).
### Table 10: REITs vs equity indices

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</table>

Source: NAREIT, BofA Merrill Lynch Global Research; evaluated for year end 2014
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 (health care 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 EBITDAR to contractual rent for leases (or interest & principal for loans). This ratio is used by the health care 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 health care 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, plus real estate gains (minus 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 Health Care 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 (health care REITs).

Mortgage REIT
A REIT 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 (e.g., 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 health care REITs to participate in a 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 (health care 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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* Ratings dispersions may vary from time to time where BofA Merrill Lynch Research believes it better reflects the investment prospects of stocks in a Coverage Cluster.

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