

CHAPTER 8

Analyzing REITs

This chapter is designed to provide investors with an understanding of the performance and valuation metrics required to evaluate REITs. When used in combination, these measurements provide insight into the financial flexibility, dividend safety, and long-term growth prospects of companies.

One of the more enduring challenges in analyzing REITs—individually and for comparison purposes—is the lack of standardized reporting. Each publicly traded REIT files quarterly Form 10-Q and annual Form 10-K reports with the SEC. These reports provide information about a company’s history and summarize its latest financial performance. Although REITs report results in accordance with GAAP, each company reports slightly differently. For example, one company may detail the line items needed to adjust funds from operation (FFO) to Adjusted FFO (AFFO), whereas another REIT may not disclose its AFFO calculation.

In addition to reading a company’s earnings releases, and SEC filings, investors should also obtain the supplemental information package that most REITs provide (often filed as a Form 8-K with the SEC). REITs provide non-GAAP, supplemental calculations and metrics that may or may not be in accordance with GAAP, but which are helpful for understanding and forecasting their businesses. Most companies post all their SEC filings, along with their press releases, on their company websites; Appendix C provides website addresses for the 223 REITs in the FTSE NAREIT All REITs Index as of December 31, 2015.

Operating Metrics

There are a number of metrics used to assess the relative strength (or weakness) of a REIT's operations. The following pages provide key operating metrics that are germane to understanding REITs.

Net Operating Income (NOI)

Net operating income, or NOI, is similar to an operating company's gross profit margin. As shown in Table 8.1, NOI equals the sum of rental revenues from properties plus any tenant reimbursement revenue, less all property operating expenses, including fees paid to any third-party property managers, taxes, and insurance. (Please refer to Chapter 4 for an overview of leasing terminology.) Said another way, NOI measures the property-level profit on a stand-alone basis, excluding the REIT's corporate overhead or the effects of financing.

Same-Store (Organic) Earnings

Borrowed from the retail industry, the term *same-store* generally refers to revenues, operating expenses, and net operating income from assets the REIT has owned and operated for 12 or more months. Isolating the profitability of assets owned for at least 12 months from earnings generated by recently acquired or developed properties enables investors to gauge how competent the REIT management team is at operating their properties. An increase in same-store NOI is also referred to as "organic" or "internal" growth (though these descriptions are not technically precise); an increase generated from newly acquired or developed buildings is often referred to as "external growth." Each company may have slight variations about how they classify properties into (or out of) their same-store portfolio; generally, once a company has owned and

Table 8.1 Calculating Net Operating Income (NOI)

Rental revenues	\$30.00
+ Tenant reimbursement revenue (including CAM)	15.00
Total property revenues	<u>45.00</u>
– Property operating expenses (including property management fee)	–15.00
– Taxes and insurance	–5.00
Net operating income (NOI)	<u>\$25.00</u>

operated an asset or for 12 months, that asset is added to the same-store portfolio.

Growth in a REIT's same-store NOI measures a REIT management team's ability to grow earnings internally, or "organically"—without buying or building new assets. Contractual increases built into tenant rents, the expiration and re-leasing of space at higher (or lower) market rents, and changes in occupancy levels generate increases or decreases in same-store NOI. Among these variables, a change in occupancy is the dominant driver of fluctuations in same-store NOI because, in addition to no longer receiving rental revenue on the vacated space, the landlord also has to pay the basic operating expenses that no longer get reimbursed by a tenant. These expenses are basic electricity to keep the space's temperature ambient (too cold, and drywall cracks and/or pipes burst; too hot or moist, and mold can infiltrate), plus property taxes and insurance. The basic operating costs are not as high as the full expenses incurred when the space is occupied, but the inability to pass them through to a tenant significantly impedes a landlord's operating margin on the building. The one-two combination punch that vacancy has on landlord's operating margins—the loss of revenue, plus increased operating expenses—is why the demand profile for a property sector is a dominant factor in determining long-term performance.

The one-two combination punch that vacancy has on landlord's operating margins—the loss of revenue, plus increased operating expenses—is why the demand profile for a property sector is a dominant factor in determining long-term performance.

(Please also refer to Chapter 7.) In short, vacancy is not profitable, and property sectors for which demand remains steady during economic downturns tend to outperform other sectors.

'Earnings Growth' for REITs Is 'FFO Growth'

REITs calculate earnings growth like any company: as the percentage change in earnings for the most current reporting period, versus results from the prior year's comparable period, as follows:

$$\begin{aligned} &\text{REIT earnings growth} \\ &= \left[\left(\frac{\text{Current period FFO per share}}{\text{FFO per share for same period a year ago}} \right) - 1 \right] \times 100 \end{aligned}$$

Unlike C-corporations, whose growth is measured as a change in earnings per share (EPS), REITs' growth is measured by the year-over-year change in funds from operations (FFO). In 2003, the SEC officially recognized NAREIT's definition of FFO as a supplemental earnings measure. Accordingly, when referring to a REIT's earnings, analysts and investors are referring to FFO, not EPS.

A REIT increases its FFO by combining same-store growth with external growth derived from properties the REIT acquired or developed, less the FFO from any properties sold. Many REITs also have "other income" that is separate from the profit generated by their buildings. Since the *REIT Modernization Act of 1999*, REITs have had more flexibility to provide tenant services through taxable REIT subsidiaries (TRSs). (Please refer to Chapters 6 & 7 for more information.) Since that legislation went into effect, many REITs now also derive small amounts of additional income from real estate-related services and businesses. FFO also includes the REIT's general and administrative (G&A) costs. Comparing the G&A as a percent of real estate revenues across different REITs in the same property type is a quick way to compare the relative efficiency with which respective management teams operate their real estate. Lastly and similar to EPS, FFO per share also accounts for the effects of any changes to a REIT's capital structure in the form of higher (or lower) interest expense and/or a different diluted share count.

As with any industry, higher earnings growth generally merits a higher valuation, provided that the quality of earnings is sound. For REITs, investors typically ascribe a higher multiple to "better quality" earnings, namely those derived from the business of owning and leasing real estate. Investors generally ascribe a lower valuation to earnings generated from areas of the business that are less predictable, such as income from merchant development or third-party property management activities.

Management's Track Record as a Screening Tool

There are over 200 publicly traded REITs. Screening companies using meaningful, easy-to-find performance results will help narrow the list of investment prospects. Over time, better senior-management teams should generate above-average same-store NOI growth and superior annual total returns for shareholders. Assessing management's performance by comparing the last five or more years of reported same-store NOI growth and annual total returns against what that company's peers produced should help investors quickly assess if the REIT they are evaluating tends to

perform on, below, or above-par versus REITs in the same property sector. S&P Global Market Intelligence, whose website is listed in the Further Resources section of this book's conclusion, has one of the more robust databases of historical same-store and other data on individual REITs dating back to the mid-1990s. NAREIT's website, www.reit.com, also provides a host of historical company data, including annual total returns.

Profitability Metrics

Like C-corporations, REITs report net income and EPS calculated in accordance with GAAP. According to GAAP, however, REITs must depreciate the cost of their properties (excluding the amount allocated to the cost of land) over the useful life of an asset. Yet well-located and -maintained buildings tend to appreciate in value over time. In 1991, to address the discrepancy between GAAP rules and current market values for real estate, the REIT community adopted FFO as a supplemental measure of earnings per share. FFO and two additional supplemental performance metrics—adjusted FFO (AFFO) and cash (or funds) available for distribution (CAD or FAD)—are described in the paragraphs that follow, and Table 8.2 illustrates the adjustments that need to be made to reconcile “Net income available to shareholders” to an estimate of CAD.

Funds from Operation

Funds from operation is a supplemental though more broadly used measurement of REIT earnings, created by the REIT industry in 1991 and recognized by the SEC in 2003. According to NAREIT's latest whitepaper on the topic, FFO equals:

- Net income, as computed in accordance with GAAP, excluding:
 - Real estate depreciation and amortization
 - Gains (or losses) on the sales of previously depreciated operating properties
 - Impairment write-offs on previously depreciated operating properties
- Adjust to include the REITs share of FFO (or losses) in unconsolidated entities

NAREIT's definition of FFO excludes preferred dividends. If net income reflects dividends paid to preferred share (or unit) holders, then add the preferred dividends back, as well. Note that the gains

Table 8.2 Reconciliation of GAAP Net Income to CAD

Net income (loss) available to common shareholders ^a
+ Preferred stock dividends paid to preferred share & unit holders
Net income^a
+ Real estate depreciation and amortization
– Gains on the sale of previously depreciated operating properties sold, net of income taxes
+ Impairment write-offs on previously depreciated operating properties
± Reconciling FFO related to noncontrolling interests ^b
Funds from Operation (FFO) attributable to the Company—per NAREIT
– Recurring capital expenditures ^c
± Adjustment for straight-lining of rents ^d
+ Impairment charges on undepreciated property, net of income taxes ^e
– Gain on sale of undepreciated property, net of income taxes ^e
+ Amortization of stock compensation
+ Amortization of deferred financing costs
± One-time items, such as the losses on the early extinguishment of debt
Adjusted FFO (AFFO)
– Capitalized interest expense
– Scheduled principal amortization payments on debt ^f
Cash Available for Distribution (CAD)

^a As defined by GAAP. If starting with net income available to common shareholders, adjust back to “Net income” to begin calculating FFO in accordance with NAREIT’s definition.

^b These generally are partnerships and joint ventures in which the REIT owns less than a controlling interest.

^c Includes non-revenue enhancing items, such as new carpeting or painting the walls of a space, as well as leasing commission paid to a leasing agent. In contrast, non-recurring capital expenditures add value to or extend the life of a property and include major structural items, such as expanding a property or constructing a parking deck. Both recurring and non-recurring items can be capitalized. However, only recurring capital expenditures are deducted in calculating AFFO.

^d In accordance with GAAP, REITs “straight line” the rental income they are contractually entitled to receive for each lease. This is done by reporting the average rent (the sum of the total rent to be received, divided by the length of the lease), as opposed to the actual cash rent paid by the tenant. The straight-lined adjustment REITs report is the aggregate amount to be added to or subtracted from the GAAP rents reported on the income statement to arrive billable rent received in a reporting period.

^e Undepreciated property includes land and recently developed but not yet stabilized buildings (i.e., buildings that were not yet included in a REIT’s operating portfolio).

^f Excludes balloon or maturing principal payments.

and losses on undepreciated property—such as land or recent development projects that were not part of the REIT’s in-service (or *operating*) portfolio—and any impairments on undepreciated property are included in calculating FFO.

Many REITs also report a ‘core’ FFO that better reflects their specific operations than NAREIT’s White Paper definition. When comparing companies, investors need to be aware of (and adjust for) major differences.

Table 8.3 Adjusting NAREIT-Defined FFO to Account for Preferred Dividends

Net income ^a	
+ Real estate depreciation and amortization	
– Gains on the sale of previously depreciated operating properties sold, net of income taxes	
+ Impairment write-downs on previously depreciated operating properties	
± Reconciling FFO related to noncontrolling interests ^b	
<hr/>	
Funds from Operation (FFO) attributable to the Company—per NAREIT	
– Preferred stock dividends paid to preferred share & unit holders	
<hr/>	
Diluted FFO available to common share and common OP unit holders ^c	

^a As defined by GAAP, and before payment of dividends to preferred share and preferred unit holders.

^b These generally are partnerships and joint ventures in which the REIT owns less than a controlling interest.

^c This will be the numerator for calculating diluted FFO per share.

As just mentioned, NAREIT’s definition of FFO does not include the effect of dividends paid to holders of a REIT’s preferred stock and preferred OP units. If a REIT has preferred stock or preferred OP units outstanding, its Net Income will be higher than its Net Income Available to Common Share & Unit Holders. In such instances, subtract the preferred dividends paid to these investors in order to calculate the numerator used to compute diluted FFO per share, as shown in Table 8.3. (The denominator will be the sum of the REIT’s common shares and common OP units outstanding at the end of the reporting period.)

Adjusted Funds from Operations (AFFO)

Adjusted funds from operations (AFFO) is a more precise measure of a REIT’s earnings than FFO because it adjusts for GAAP accounting conventions and for recurring capitalized expenditures (see footnotes *c* and *d* of Table 8.2, as well as the Glossary). As such, AFFO represents a more normalized or recurring form of FFO. AFFO is calculated by adding any amortized expenses (which are noncash items) to FFO, then subtracting a “normalized level” of recurring capital expenditures, and adjusting for straight-lined rents. (Recurring capital expenditures and straight-lined rent are also defined in the Glossary.)

Examples of recurring capital expenditures include leasing commissions and tenant improvement paid to lease a space, both of which are capitalized and then amortized (that is, *averaged*) over the life of the lease. Observing the last three-to-five years of

historical data is helpful in estimating a reasonable level of recurring capital expenditures for each REIT. Recurring capital expenditure information typically can be found in the AFFO reconciliations REITs provide in their quarterly supplemental packages. To estimate future spending, divide the average annual recurring capital expenditures by the average square feet leased in each year, then multiply the resulting “CapEx per square foot” number by the amount of occupied square feet forecasted for future years. Note that square feet in this calculation should only include space associated with a REIT’s in-service portfolio. Development square footage should not be included.

Lastly, the effects of any one-time items should be reversed. For example, it is customary to add back charges that get written off when REITs redeem preferred shares. These charges are the original underwriting costs incurred when the REIT issued the preferred stock. They are noncash expenses associated with the redemption, and are nonrecurring. Therefore, it makes sense to exclude them when calculating AFFO.

Cash Available for Distribution (CAD)

Cash available for distribution (CAD) estimates the cash a REIT has available to pay dividends and is the most meaningful indicator of dividend safety. Not every analyst or investor goes the extra mile to calculate CAD, and NAREIT offers no opinion on it. CAD is calculated by subtracting capitalized interest expense and principal amortization payments due on secured debt—excluding any principal amounts that are maturing; these “balloon payments” are accounted for in the financing activities section of a company’s Statement of Cash Flows and typically get refinanced with new debt when they mature.

Balance Sheet Metrics and Analysis

A REIT’s balance sheet can also provide important information about dividend safety or a REIT’s ability to grow FFO. The following metrics enable investors to assess a REITs’ financial flexibility.

Leverage

The REIT industry has progressively de-levered over the decades. Prior to 1990 it was not unusual for real estate companies to finance 80 percent or more of their property values with debt. Using large

amounts of leverage (“levering up”) to acquire or develop buildings results in impressive FFO per share growth; however, it also adds significant risk and, historically, when combined with an economic slowdown, has been the root cause of many private real estate company bankruptcies. In the 2000s, leverage came back in vogue, only to end poorly for many overleveraged private landlords when the global financial crisis began to unfold in 2007.

When assessing the financial health of any real estate company or REIT, investors may want to remember one truism:

“Debt” is a four-letter word

In contrast to the private property market, REITs historically have maintained a more disciplined, conservative approach to financing operations with debt. To wit, as of December 31, 2006, the REIT industry’s average debt-to-gross book ratio was 57 percent. Out of the 130 REITs that composed the FTSE NAREIT All REITs Index going into 2007, only one REIT, General Growth Properties (NYSE: GGP), ended up reorganizing under Chapter 11 bankruptcy law. As discussed in Chapter 3, General Growth’s debt-to-gross book ratio at the end of 2006 was 74 percent, or 17 percentage points greater than the industry average.

Debt-to-Total Market Capitalization Ratio

As of December 31, 2015 and according to NAREIT, equity REITs average debt-to-total market capitalization ratio was 36.0 percent. This ratio is calculated by dividing a company’s total debt outstanding by its total market capitalization, which is the sum of the following:

- Total debt outstanding
- The liquidation value of any preferred stock outstanding, calculated as the liquidation value per share (typically \$25) times the number of preferred shares outstanding; a company’s supplemental package and/or the footnotes to its periodic SEC filings typically contain the liquidation values of preferred shares
- The REIT’s Equity Market Capitalization (EMC or *equity market cap*), calculated as the current stock price times the sum of all common shares and OP units outstanding:

$$\text{EMC} = (\text{Common shares} + \text{OP units}) \times \text{current stock price}$$

The combined formula for calculating debt-to-total market capitalization is as follows:

$$\begin{aligned} & \text{Debt-to-total market capitalization} \\ &= \frac{\text{total debt outstanding}}{\text{total debt} + \text{preferred stock at liquidation value} \\ & \quad + \text{equity market capitalization}} \end{aligned}$$

As discussed in Chapter 3, a debt-to-total capitalization ratio changes depending on a REIT's current stock price, resulting in leverage being over- or understated. To obtain a more accurate idea about how leveraged a REIT is, calculate its debt-to-gross book value ratio.

Debt-to-Gross Book Value Ratio

Gross book value, which is often called *gross asset value*, can be calculated by taking total assets listed on the balance sheet of the REIT's financial statements, less any goodwill or intangibles, plus any accumulated depreciation and amortization (generally listed in the footnotes to the financial statements), as shown in the following equation.

$$\begin{aligned} & \text{Debt-to-gross asset value} \\ &= \frac{\text{total debt outstanding}}{(\text{total assets} - \text{intangibles}) + \text{accumulated depreciation}} \end{aligned}$$

As of December 31, 2015, the average debt-to-gross asset ratio of REITs in the FTSE NAREIT All REITs index was 46.4 percent.

Debt-to-EBITDA Ratio

REITs that are investment-grade rated have to operate their businesses within the leverage limits (or *covenants*) imposed on them by the ratings agencies. The largest three such agencies in the United States are Fitch, Moody's, and Standard & Poor's. One of the most critical ratios the investment community focuses on is a REIT's debt-to-EBITDA, which measures how many years it would take a company, in theory, to pay off its leverage using the most recent quarter's earnings before interest, taxes, depreciation, and amortization (EBITDA). For example, a debt-to-EBITDA ratio of

4.5× implies it would take the REIT four-and-a-half years to repay its debt, assuming the most recent quarter’s EBITDA is recurring.

Calculating a REIT’s debt-to-EBITDA sounds straightforward: Divide total debt outstanding by the most recently reported quarter’s EBITDA, annualized. However, in practice, there are many adjustments that need to be made to the denominator to ensure the EBITDA is *recurring*. Many (but not all) REITs that have investment-grade ratings disclose their debt-to-EBITDA ratio in the “debt analysis” pages of their quarterly supplemental information packages. A lower ratio equates to lower levels of debt and, implicitly, a more secure common dividend.

Weighted Average Cost of Capital (WACC)

Often referred to as a company’s “cost of capital,” the weighted average cost of capital (WACC) is the average return a company expects to pay all its stakeholders: lenders, preferred shareholders, and common shareholders. WACC is calculated by proportionately weighting the cost of each of the three types of capital—debt, preferred, and common shares—as a percentage of the company’s total market capitalization (defined earlier in this chapter). The formula for calculating WACC is as follows:

$$\text{WACC} = \frac{D}{\text{TMC}} \times D_c + \frac{P}{\text{TMC}} \times P_c + \frac{E}{\text{TMC}} \times E_c$$

or simply:

$$\text{WACC} = \frac{(D \times D_c) + (P \times P_c) + (E \times E_c)}{\text{TMC}}$$

where:

D is the total amount of debt outstanding

D_c is the average interest rate on total

P is the liquidation value of all preferred stock*

P_c is the average dividend rate on all preferred stock

E is the equity market capitalization*

E_c is the cost of equity

TMC is the total market capitalization*

*These calculations are discussed in Chapter 7.

Determining the cost of equity for the preceding calculation is not as easy as looking something up in the company’s SEC filings

or supplemental package. Technically, common stock does not have an explicit cost associated with it the way that loans and preferred stock issuances do with their respective interest rates and dividend coupon rates. One accepted method is to use the average expected total return for the industry, which for REITs is 10–12 percent (please refer to Table 2.1 in Chapter 2). To be more precise, use the average total returns specific to each property sector, as shown in Table 7.1 of Chapter 7. Another method for calculating a company's cost of equity is to use the following formula:

$$E_c = \frac{\text{Current Dividend, Annualized}}{\text{Current Share Price}} + \text{Average Dividend Growth}$$

There are other methods for calculating the cost of equity, some of which are more scientific, some of which are more subjective. As long as the approach for estimating the cost of equity is consistently applied, then the relative WACCs should be meaningful for comparing across different REITs.

A higher WACC could signal a company's capital allocation is out-of-whack.

Companies with a higher WACC implicitly are riskier than companies with lower costs of capital. Before investing, be sure to understand if a company's WACC is higher than its peers because the company is newer to the public market and, as a result, perhaps has a less institutional quality balance sheet. Provided investors and analysts believe management is allocating capital wisely, a company can lower its WACC over time by refinancing maturing debt with new debt that has a lower interest rate, or by redeeming existing preferred stock by issuing new, lower-cost preferred stock, and also by increasing its common share price. Each of these tactics will lower a company's WACC, but they are only possible if management consistently executes a growth strategy that investors deem to be a good balance between risk and returns.

Alternatively, a company may have a higher WACC than its peers because its management team does not allocate capital well. A company that grows FFO by leveraging up its balance sheet with short-term, variable rate debt—which carries a lower interest rate than long-term debt—may fool investors for a little while; ultimately,

when that company has to refinance debt at higher rates, or, more likely, if investors chose to sell their shares because they are uncomfortable with the increased leverage, the REIT's stock price will decline, further increasing the company's WACC.

Valuation Metrics

Valuation is a critical step in selecting which REITs to buy, hold, or sell. The following metrics provide different ways to measure a REIT's relative value versus a group of peer companies or on an absolute basis.

Price/Earnings Multiple

As was discussed at the beginning of this chapter, REITs trade off expected FFO per share estimates rather than EPS. Accordingly, REIT earnings multiples are expressed as FFO multiples, calculated simply as the current stock price divided by current or next year's FFO per share estimates, depending on how forward looking your analysis is. The equation to calculate price/earnings (P/E) is:

A REIT's P/E

$$= P/\text{FFO} = \frac{\text{current stock price}}{\text{the current or next year's estimate of FFO per share}}$$

A lower FFO multiple may indicate a REIT is trading at a bargain price. So if Rockland REIT trades at 10.0× next year's estimate FFO, and REIT ABC with a similar portfolio of assets trades at 12.5×, Rockland REIT may be a good value relative to REIT ABC. If there is no fundamental problem with Rockland REIT's markets and operations, then its shares probably represent a good value. Looking at other metrics, such as FFO growth and leverage, will help determine the answer.

PEG Ratios

Investors look at FFO multiples as a simple calculation of the relative valuation of REITs within their sectors. Although FFO multiples are helpful indicators for assessing relative value, price multiple-to-earnings growth, or PEG ratios, are a better indicator

of how much an investor is paying today for a company's expected earnings growth. PEG ratios for REITs are calculated by dividing the price/FFO multiple by expected future growth in FFO. For example, if a REIT's FFO multiple on next year's estimated FFO is 9.5x, and the REIT's FFO per share is expected to increase 8 percent next year, the PEG ratio is 9.5 divided by 8, which equals 1.2x. This can be calculated using the following equation:

$$\text{A REIT's PEG ratio} = \frac{\text{next year's FFO multiple}}{\text{next year's expected growth in FFO per share}}$$

Because PEG ratios isolate the growth component of value, they provide investors with a clearer understanding of how much they are paying today for future earnings. Assuming comparable risk profiles among companies, lower PEG ratios represent better relative values for investors. One caveat regarding PEG ratios is that in years when companies are expected to deliver flat or modestly negative earnings growth, PEG ratios should be calculated using a longer-term (three–five-year) estimate of earnings potential for each company.

Dividend Yield

At December 31, 2015, the average equity REIT offered investors a current return, or dividend yield, of 4.3 percent, which was 200 basis points above the yield on 10-year U.S. Treasury notes, and 210 basis points greater than the S&P 500 Index's yield. Unsurprisingly, many investors choose to invest in REITs solely for their current yield. Chapter 3 discussed REIT dividends at length, so this section will simply restate two points. First, a REIT's current yield is calculated as the current dividend annualized (multiplied by four, in most cases), divided by the current stock price:

$$\text{Current Yield} = \frac{\text{Current quarterly dividend} \times 4}{\text{Current price per share}}$$

Second, because many investors hold investments for several years, it is also important to understand the concept of yield on cost, which is calculated by dividing the current dividend annualized by the investor's cost basis in the REIT's stock:

$$\text{Yield on Cost} = \frac{\text{Current quarterly dividend} \times 4}{\text{Shareholder's per share cost basis}}$$

Three General Rules about Dividend Safety

1. REITs that own property types with short-term lease revenues carry more risk of cutting their dividends than those with longer-term leases.
2. Dividends tend to be more at-risk in companies whose management teams incur too much leverage. A debt-to-gross asset value of 50 percent generally should be the absolute maximum amount of leverage (and even that level may prove to be too high, depending on the property sector).
3. REITs with dividend yields that materially exceed the industry's average tend to be companies with significantly more corporate risk and less secure dividends. (Please see the discussion of sucker yield in Chapter 3.)

Bottom line: If a REIT's yield looks too good to be true, it probably is.

Dividend Safety

Although Chapter 3 addressed dividend safety, the point bears repeating. Although the contractual nature of leases makes most property sector dividends reasonably secure, REITs have cut or suspended their dividends in times of financial crisis—both in the wake of the S&L crisis of the late 1980s/early 1990s, and more recently in response to the global financial crisis of 2007–2008.

Putting aside these two extreme economic times, REIT dividends tend to be sustainable. By calculating a REIT's dividend payout ratio, discussed next, investors can assess how secure the dividend is, at least in the near term.

Dividend Coverage, or Payout Ratios

FFO, AFFO, and CAD payout ratios are a common means of evaluating the relative security of a company's dividend. FFO is quoted more broadly because stock analysts provide Thomson First Call, Bloomberg, and S&P Global Market Intelligence with their estimates of FFO per share for companies. Increasingly, analysts are also furnishing AFFO per-share estimates on REITs they analyze, but the practice is not yet uniform. As discussed in Chapter 7, FFO payout ratios indicate the relative ability of a REIT to meet its

dividend obligation, in that, if the payout ratio is less than 1.0, the dividend is reasonably secure:

$$\text{Dividend payout ratio} = \frac{\text{current quarterly dividend}^* \times 4}{\text{next year's FFO}^\dagger \text{ per share estimate}}$$

Note: *If the REIT pays a monthly dividend, multiply the most recent dividend by 12.

†Use AFFO or CAD per-share estimates, if available, instead of FFO.

Dividing the annualized dividend by the next year's estimate of AFFO or CAD per share is a better method for gauging dividend safety than using FFO estimates; however, investors may need to do the spadework to create their own estimates of both metrics, if stock analysts providing research on the REIT do not provide these estimates.

Dividend Discount Model

Investors who are interested in owning REITs primarily for dividend income should also employ the dividend discount model to evaluate whether a REIT's shares are fairly priced. The following formula will calculate the present value of a REIT's expected future dividends, using a discount rate and a reasonable expected annual growth rate for the current dividend. If the fair value for a REIT calculated using the dividend discount model is higher than the price at which the stock is trading, then the stock most likely is a good value.

$$\text{Fair stock price} = \frac{\text{Annualized dividend per share}}{\text{Discount Rate} - \text{Dividend Growth Rate}}$$

Dividend Discount Model Example

To illustrate the dividend discount model with a practical example, assume that Rockland REIT:

- Pays a dividend of \$0.25 per share per quarter
- Has increased its annualized dividend 3 percent, on average, for the past five years
- Has a cost of equity (or *discount rate*) of 12 percent

Based on the dividend discount model, \$11.11 is a fair value for Rockland REIT's shares:

$$\$11.11 = (\$0.25 \times 4) \div [12\% - 3\%]$$

If Rockland REIT's shares are trading below \$11.11, then the stock most likely is a good investment from a valuation standpoint.

In terms of the inputs, you can use a company's historical annualized growth rate in its dividend, which often is cited in an annual report to shareholders or company presentation posted on the company's website. Determining which discount rate, or cost of equity, to use is more difficult. In addition to the methods discussed earlier in this chapter related to WACC, some investors simply add an equity risk premium of 500 basis points to the 10-year U.S. Treasury bond rate (the *risk-free* rate).

Net Asset Valuation (NAV)

One way to assess if the managers of a REIT are prudent allocators of shareholder capital is to observe the investment tactics they use when their stock is trading significantly above or below net asset value (NAV). NAV estimates the current market value of a REIT's properties, net of other non-real estate assets and liabilities. Investors prefer NAV per share over gross book value per share because the latter does not account for changes in the value of the underlying land on which properties are built, or the future earnings potential (and associated change in market value) of real estate assets.

REITs whose shares trade at a premium to NAV have a cost of capital advantage and should continue buying and/or developing to grow their portfolios (assuming they issue enough common stock to maintain their prior debt ratios, discussed earlier). In contrast, if a REIT's shares are trading at a significant discount to NAV, management should shrink its portfolio by selling the lowest performing or lowest growth assets and use the proceeds to pay down debt (or redeem any callable preferred shares). If the discount persists for several quarters, management should also consider buying back common stock—but only if they can do so without increasing their total debt.

REITs whose stocks trade at premiums to estimated NAV per share might have some specific reason, such as their property

Stock Price Above NAV = Green Light on Growth

Stock Price Below NAV = Red Light on Growth

sector or markets may be in favor with investors. Alternatively, the premium may indicate the shares are overvalued. Conversely, if a stock is trading at a steep discount to NAV per share, then either the market is undervaluing the business, in which case investors can buy shares at an attractive sale price; or the investment community believes management is destroying shareholder value, in which case the shares are cheap for a reason and should be avoided.

According to analyses published by Green Street Advisors, historically, REITs trade at a modest premium to NAV per share, as the market generally prescribes some premium for liquidity and an even greater premium to REITs with management teams that have consistently added value through rigorous property management and asset allocation tactics. That said, according to an analysis provided by S&P Global Market Intelligence, REITs traded at an average 2.7 percent discount to NAV at the end of 2015. Investor concerns about slowing global economic growth and the potential for higher interest rates from Federal Reserve actions caused most REIT property types to finish that year below NAV (see Figure 8.1). Because NAV increasingly dominates investor buy-and-sell decisions,

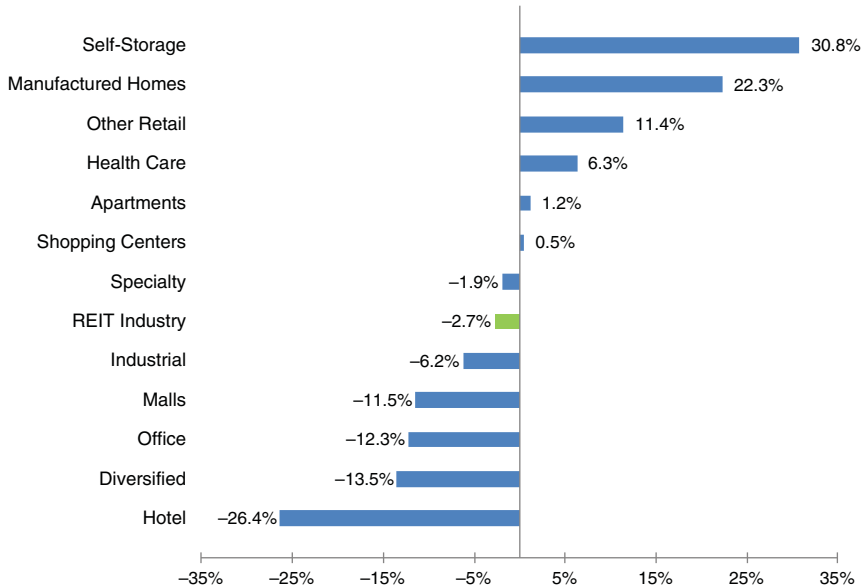


Figure 8.1 REIT's Average Premium (Discount) to NAV at December 31, 2015 (Includes U.S. REITs with at least three NAV per-share estimates. Property sectors are weighted by market capitalization.)

Source: S&P Global Market Intelligence.

Table 8.4 Basic Calculation of NAV per Share

Cash NOI "run rate" for recent quarter	\$10,000
× 4 to annualize	<u>× 4</u>
Annualized adjusted cash NOI	\$40,000
× (1 + 3 percent annual same-store growth assumption)	<u>× 1.03</u>
Annualized adjusted cash NOI	\$41,200
÷ Cap rate	<u>5.5%</u>
Fair market value of a REIT's in-service properties*	\$749,100
Adjusted for:	
+ Accounts receivable, cash, and other tangible assets, net of current liabilities	1,500
+ Fair value of properties held for sale, net of related debt	50,000
+ Properties under development at costs invested to date	20,000
Total	
– debt	–250,000
– Preferred stock, at liquidation value	<u>–150,000</u>
Net asset value (NAV)	<u>\$420,600</u>
Shares and OP units outstanding at the end of the quarter	25,000
NAV per share (rounded to nearest dollar)	<u>\$16.82</u>

*Number is rounded for presentation purpose.

the remainder of this chapter demonstrates how it may be calculated for Rockland REIT.

Calculating NAV

Although there are several calculations involved in estimating a REIT's NAV, the basic concept is simple: estimate the current market value of the REIT's portfolio, then add any other tangible assets, subtract all liabilities, and divide the sum by the shares and OP units outstanding. Table 8.4 provides a simplified example of an NAV calculation, after which the five major components of NAV are broken down in more detail.

Step 1: Estimating a Quarterly Run Rate for "Cash" NOI

The first step in calculating NAV is to calculate a REIT's billable NOI (as opposed to GAAP NOI) for the most recently reported earnings period. (NOI was discussed at the beginning of this chapter.) Note that billable (or *contractual*) NOI is often referred to as "cash" NOI. The goal of step 1 is to isolate the cash NOI due from a REIT's in-service portfolio and adjust it for any assets bought, sold, or placed into service during the most recent reporting period. In-service properties are ones that are not under development. Other assets,

such as income from a business services TRS or properties still under construction, are valued in a later step.

Cash NOI Estimation

Estimate Cash NOI for most recently reported quarter:	First Approach	Second Approach	Likely Source
Rental revenues + tenant recoveries reported for Q	\$15,000	–	Income statement
– Property operating expenses for Q	–6,550	–	Income statement
Net operating income (NOI) reported for Q	8,450	–	
± Straight-lined rent adjustment	–1,000	–	AFFO calculation (supplemental)
Cash NOI for Q	\$7,450	\$7,500	

- The first approach represents financials of a REIT that does not disclose cash NOI, in which case investors need to use line items from the income statement and the straight-lined rent adjustment disclosed in the reconciliation from FFO to AFFO (likely in the supplemental information package).
- The second approach shows the shortcut investors can take advantage of in instances where REITs report their cash NOI (most likely in the supplemental information package available on their websites).
- HFS vs. Discontinued Operations—The \$50 difference between the two cash NOI numbers exists because in the first approach, the REIT has assets held for sale (HFS) that qualify for discontinued operations treatment; as a result, their NOI is not in continuing operations. In the second approach, the HFS assets do not qualify for discontinued operations treatment, so their NOI is still reported in continuing operations.

Properties that are in-service but not collecting rent because they are vacant are not directly valued by NAV. One of the fastest ways a REIT can grow its NAV per share is to re-lease vacant space.

Straight-Lined Rent In compliance with GAAP, REITs *straight-line* the rental income they receive by reporting the average annual rent to be received over the life of a lease instead of the contractual rent due each period. The straight-lining of rent adjustment a REIT reports is the amount to be added to or subtracted from GAAP rents (reported on the income statement) to arrive at “cash” rents. The following example demonstrates the straight-lining of rents:

Example of Straight-Lining Rents	Year 1	Year 2	Year 3	Year 4
Contractual rent per square foot	\$15.00	\$16.50	\$18.00	\$19.50
× Square feet leased	5,000	5,000	5,000	5,000
Cash rent to be received (“A”)	\$75,000	\$82,500	\$90,000	\$97,500
Total cash rent to be received	\$345,000			
÷ Lease length (in years)	4			
Average rent reported annually for GAAP (“B”)	\$86,250			
Therefore:				
GAAP rent reported on financial statements	\$86,250	\$86,250	\$86,250	\$86,250
– Straight-lined rent adjustment (A – B)*	(11,250)	(3,750)	3,750	11,250
Cash rent due	\$75,000	\$82,500	\$90,000	\$97,500

*Note in this example that after the halfway point in the lease, the straight-lined rent adjustment becomes positive, meaning that the NOI calculated from the REIT’s income statement will need to be *increased* by the straight-line adjustment amount.

Step 2: Estimating a Quarterly Run Rate for Cash NOI

Very few REITs provide good disclosure on what their quarterly cash NOI “run rate” from in-service properties is. Run-rate cash NOI is the cash NOI calculated in step 1, adjusted for the estimated addition (or deletion) of cash NOI in the period related to the REIT’s investment activity. The following example demonstrates how to adjust a REIT’s cash NOI to a run-rate that can serve as the basis of the NAV calculation:

Step #2 – Adjustments to Cash NOI from Step #1 to estimate “run rate” for the in-service portfolio:	First Approach	Second Approach
Cash NOI for Q, calculated in Step #1	\$7,450	\$7,500
+ Unaccounted NOI from:		
• Acquisitions made during Q (A)	17	17
• Developments placed into service in the Q (B)	58	58
– NOI from assets sold during the Q (C)	–20	–20
– NOI from assets held for sale (“HFS”) (D)	–	–50
Net adjustment to cash NOI from investment activity in the Q	56	6
Cash NOI “run rate” for Q	\$7,506	\$7,506

Explanations of footnotes A through D in Step 2 are as follows:

^AThe company acquired a building in the middle of the quarter. The purchase price was \$2,500 and the property has a stabilized return (or ‘yield’) of 5.5%. Accordingly, only half of the asset’s NOI was included in the most recent reported quarter.

^BThe company developed a building for \$5,000 that has a stabilized yield of 7.0% and placed it into service on the 60th day of the 90-day quarter. Therefore, only one month (30 days) of NOI was in the latest quarter’s NOI; two month’s NOI needs to be added.

^COn the 30th day of the 90-day quarter, the company sold an asset for \$3,000 and at an exit cap rate of 8%. One month of NOI from this asset was in the most recent quarter’s NOI and needs to be subtracted.

The table below calculates the amount of cash NOI that needs to be added to or subtracted from cash NOI to get to a run-rate:

Adjustment	Total Cost	Cap Rate	Total NOI	Qtly NOI	Months of NOI to Adjust	Adjustment to Cash NOI
A—Acquisition	\$2,500	5.5%	\$138	\$34	$+45/90 = 1/2$	\$17
B—Development	\$5,000	7.0%	350	88	$+60/90 = 2/3$	58
C—Asset sold	(\$3,000)	8.0%	–240	–60	$-30/90 = (1/3)$	–20
Total estimated adjustments from investment activity in the Q						\$56

^DIf a company has assets held for sale (“HFS”), investors need to understand if the assets also qualify for discontinued operations treatment. If they do, then no adjustment is required. The Second Approach reflects a scenario where HFS assets do not qualify as discontinued operations. Accordingly, their NOI needs to be deducted to arrive at a run rate for NOI. This scenario assumes the assets HFS have a book value of \$2,500 and generate an 8.0% cash NOI yield, resulting in quarterly NOI of \$50 (calculated as $\$2,500 \times 8\%$, divided by 4).

Step 3: Annualize the Quarterly Run Rate for Cash NOI & Adjust for Same-Store Growth

The third step is to annualize the cash NOI run rate calculated in Step 2, plus make a reasonable assumption about what degree these earnings will grow (or contract) over the next 12 months:

Annualized cash NOI, assuming 2% same-store growth	First Approach	Second Approach
Cash NOI Run Rate for Q (from Step #2)	\$7,506	\$7,506
× 4	× 4	× 4
Cash NOI Run Rate, annualized	30,022	30,022
× 2% same-store growth assumption	× 1.02	× 1.02
Cash NOI annualized, with growth	\$30,623	\$30,623

Same-Store Growth Assumption As Table 8.5 shows, each property sector exhibits certain growth or contraction during times of economic expansion or decline. Investors should make a reasonable assumption, based on the historical same-store growth a company has achieved, tempered by the investors' outlook on the broader economy.

Step 4: Calculate Fair Market Value of the In-Service Portfolio

The fourth step uses the annualized cash NOI calculated in Step 3 to estimate the fair market value of the REIT's in-service properties. As the example below shows, divide the annualized cash NOI calculated in Step 3 by an appropriate cap rate.

Table 8.5 Historical Same-Store NOI Growth Rates for Major Property Types

	1999–2008	2009–2010	2011–2015
Apartments	2.4%	–2.8%	6.0%
Industrial	2.0%	–4.4%	3.2%
Malls	3.3%	–0.6%	3.0%
Office	0.0%	–1.1%	1.5%
Self-Storage	3.8%	–1.4%	8.3%
Shopping Centers	2.3%	–2.3%	2.9%

Source: S&P Global Market Intelligence.

Calculate Fair Market Value of in-service portfolio:	First Approach	Second Approach
Annualized cash NOI (from Step #3)	\$30,623	\$30,623
÷ Cap rate	6.50%	6.50%
Fair market value of in-service properties	\$471,116	\$471,116

Fair market value is the price a buyer would pay today for the REIT's assets, before taking into consideration the assumption of any debt and preferred shares the REIT has used to finance their purchase. In an actual transaction, the buyer would analyze each property and calculate the present value of expected cash NOI from the portfolio over 5 or 10 years. A short-hand way of expressing the resulting value is to use a capitalization rate, or *cap rate*.

The cap rate is expressed as the quotient of the portfolio's annualized adjusted cash NOI divided by the purchase price a buyer is willing to pay. In the analytical world, there is always a lot of debate about which cap rate is appropriate for calculating a REIT's NAV. Although there is no "right answer," knowledge of the debate should help investors adopt one that is defensible.

Capitalization Rates – *Capitalization rates* (or more commonly, *cap rates*) are a measure of the expected unleveraged return on assets. Another way to think about cap rates is that they are the inverse of a P/E ratio, where "price" is the fair market value (or purchase price) of the asset, and "earnings" are the property's cash NOI. Cap rates for the same type of property may differ vastly based on the general quality of the physical assets, as well as the quality of its locations (based on the relative strength of the markets' supply-and-demand fundamentals), and buyer or seller motivation to complete the trade.

$$\text{Cap rate} = \frac{\text{"Earnings"}}{\text{"Price"}} = \frac{\text{Property's Cash NOI}}{\text{Market value or price paid for a property}}$$

In theory, the cap rate should approximate a price at which the assets of the REIT could be sold in the direct property markets. Investors can estimate which cap rates to use for their NAV calculations by looking at the cap rates at which similar assets (or portfolios of assets) have traded recently. Ultimately, however, cap rates are

subjective. If a seller is motivated by some extenuating circumstance, such as the inability to refinance debt on the property that may be maturing, the seller may be willing to sell the asset below what the fair market value would be without extenuating circumstances. The lower the price, the higher the cap rate. The amount of money one buyer is willing to pay for an asset may differ widely from what another buyer would pay. Differences among buyers' bids are a function of multiple factors, including divergent views on the economic outlook, or tenant relationships that one buyer possesses that would enable him to lease the assets better/worse than other potential buyers, or differing plans to redevelop the asset over time.

Step 5: Adjust Fair Market Value for Other Investments and Financing

The final step in calculating NAV is to adjust the fair market value calculated in Step 4 to include values for assets that are not currently generating NOI, and to subtract the REIT's total debt and preferred stock outstanding:

Adjust Fair Market Value for Other Investments and Financing:		First Approach	Second Approach
Fair market value of in-service properties		\$471,116	\$471,116
± Accounts receivable, cash, and other tangible assets, net of current liabilities	(E)	-15,000	-15,000
+ Properties HFS, net of associated debt	(F)	2,500	2,500
+ Properties under development:	(G)		
• 1st Approach: development shown at cost		100,000	
• 2nd Approach: development shown at 110 percent of cost			110,000
+ Land for development at book value	(H)	25,000	25,000
+ Construction management business (5× net income, annualized)	(I)	4,000	4,000
- Total debt	(J)	-200,000	-200,000
- Preferred stock, at liquidation value	(J)	-75,000	-75,000
Net asset value (NAV)		<u>\$312,616</u>	<u>\$322,616</u>
Shares and OP units outstanding at the end of Q		25,000	25,000
NAV per share		\$12.50	\$12.90
- vs. -			
Closing current stock price		\$10.00	\$10.00
Premium (discount) to NAV per share		-20.0%	-22.5%

(continued)

Explanations of the footnotes to Step 5's are as follows:

^EUsing information from the REIT's balance sheet, add tangible assets not accounted for as in-service properties, such as cash and restricted cash, accounts receivable, and prepaid expenses. Tangible assets do not include deferred items, such as deferred leasing and financing costs or deferred rent receivable.

^FAssets held for sale—Because the NOI from assets HFS was not included in the cash NOI in the First Approach, and because the Second Approach deducted the cash NOI from assets HFS as part of calculating the run rate NOI, the assets HFS are not yet valued for NAV purposes. They will be listed on the balance sheet at book value, and should be added.

^GIf a REIT has properties under development, they most likely are not accounted for in NOI. The industry values developments two ways. First, if the REIT's disclosure is adequate, investors can project the estimated cash flows from the development projects and calculate their net present value. However, this calculation is complicated and usually not materially better than the more simplified method of adding the costs incurred to-date for any development or redevelopment project, including land being used in the development. If the developments appear to be low risk in nature (e.g., they are pre-leased), a premium of 10 percent (or more) can be added.

^HAdd land at book value (generally listed on the balance sheet or in a schedule in the supplemental).

^IValue business services by adding their last four quarters of net income, and multiply the sum by five, which is the equivalent of applying a 20 percent cap rate. Such services are viewed as being variable, so a high cap rate typically is appropriate.

^JNext, subtract all debt outstanding and the liquidation value of any preferred stock or preferred units (preferred stock "issued" at the OP level).

This resulting sum is the REIT's NAV. Divide the NAV by the sum of the REIT's total shares and OP units outstanding to calculate NAV per share.

Implied Capitalization Rate

A REIT's implied capitalization rate (implied cap rate) is analogous to an unlevered internal rate of return (IRR) in that it is the unleveraged return an investor locks-in if he or she buys the REIT at the current price. Since a cap rate is equal to the inverse of a company's earnings multiple, a REIT with a higher implied cap rate generally is considered a better relative value than a comparable REIT trading at a lower implied cap rate, especially if similar quality properties have recently been sold in similar markets at lower cap rates.

A second way to apply implied cap rates in analyzing REITs is to compare them to cap rates being paid for similar assets in the direct

If a REIT's implied cap rate > cap rates on similar assets for sale in the direct property market, the REIT's shares are an attractive value.

property markets. For example, if the implied cap rate of an industrial REIT is higher than cap rates on recent, comparable industrial assets that recently traded owners, then buying the industrial REIT's shares is the better value.

To calculate the implied cap rate at which a REIT is trading, enter the current stock price as the REIT's NAV per share and solve for the cap rate. Table 8.6 illustrates these steps, which are simply the reverse of the major steps used to calculate NAV.

Table 8.6 Implied Cap Rate Calculation

Step 1:	REIT's current share price	\$10.00
	× shares and OP units outstanding	25,000
	Implied net asset value	\$250,000
Step 2:	Adjust for non-income-producing items & financing:	
	Implied net value of Rockland REIT (from above)	250,000
	+ Preferred stock, at liquidation value	75,000
	+ Total debt	200,000
	– Construction management business	–4,000
	– Land for development at book value	–25,000
	– Properties under development	–100,000
	– Properties HFS, net of associated debt	–2,500
	± Accounts receivable, cash, and other tangible assets, net of current liabilities	15,000
	Implied fair market value	\$408,500
Step 3:	Divide the annualized cash NOI calculated in Step #3 in calculating NAV by the implied fair market value:*	
	Annualized adjusted cash NOI	\$30,623
	÷ Implied gross asset value	\$408,500
	Implied Cap Rate	7.5%

*Based on information presented in the First Approach in Step #3 of calculating NAV.