

Solutions to Questions—Chapter 21
Real Estate Investment Trusts (REITs)

Question 21-1

What are the general requirements regarding income, investments, and dividends with which a REIT must comply to maintain its qualification to be taxed as a REIT?

In general, at least 75 percent of gross income must be from rents, interest on obligations secured by mortgages, gains from the sale of certain assets, or income attributable to investments in other REITs. At least 75 percent of the value of a REIT's assets must consist of real estate assets, cash, and government securities. A REIT must distribute at least 90 percent of its taxable income to shareholders as a dividend. December 18, 2015 enactment of the Protecting Americans from Tax Hikes Act of 2015 (PATH Act) featured significant changes to various real estate investment trust (REIT) rules so that not more than 20% of the assets of a REIT (by value) can consist of securities of one or more TRS for 2018 and later tax years.

Question 21-2

What are the two principal types of REITs?

The two principal types of REITs are mortgage and equity.

Question 21-3

List and characterize equity REITs based on their property types.

- Industrial/Office: REITs that specialize in owning industrial, office and/or a mix of industrial and office properties. These REITs can be further divided based on the property location in which they invest, such as CBD versus suburban.
- Retail: REITs that specialize in owning retail properties. These REITs can be further segregated into retail subcategories, such as neighborhood centers, regional malls, outlet centers, and/or free-standing retail properties.
- Residential: REITs that specialize in owning residential properties. These REITs can be further segregated into residential subcategories, such as multi-family apartments, manufactured home communities, student housing and/or military housing.
- Lodging/Resorts: REITs that specialize in owning lodging/resorts properties, including hotels, resorts and/or motels.
- Health Care: REITs that specialize in owning health care related facilities, including hospitals, senior housing, medical office and/or related health care facilities that are leased back to private health care providers who operate such facilities.
- Self-Storage: REITs that specialize in owning self-storage facilities.
- Timber: REITs that specialize in owning timberland.
- Infrastructure: REITs that specialize in owning various types of infrastructure, including railroads, electric and gas transmission and distribution, cell towers and other forms of infrastructure.
- Diversified or Specialty: REITs that own a variety of different product types or property types that are not otherwise classified, such as golf courses, prisons, data centers, etc.

Equity trusts may be broken down into the following categories:

1. Blank check or "blind pool" trusts.
2. Purchasing or Specified Trusts.
3. Mixed Trusts.
4. Leveraged REITs versus Unleveraged REITs.
5. Finite-Life versus NonFinite-Life REITs.
6. Closed-end versus Open-end REITs.
7. Exchange trusts.
8. Developmental-Joint Venture Equity REITs.
9. Health-Care REITs.

Question 21-4

What is the difference between earnings per share (EPS), funds from operations (FFO), adjusted funds from operations (AFFO), and dividends per share?

Earnings per share (EPS) is based on accounting income which is reduced by any depreciation and amortization which are non-cash deductions. EPS is calculated as GAAP net income minus preferred stock dividends divided by number of common shares outstanding. FFO is calculated by adding back depreciation and amortization and other non-cash deductions to earnings minus any capital gains from property sales. Although subject to different methods of calculation, AFFO is usually calculated by subtracting from FFO (i) normalized recurring expenditures that are capitalized by the REIT and then amortized, and (ii) straight-lining of rents. The resulting AFFO calculation is sometimes referred to as the cash available for distribution (CAD) or funds available for distribution (FAD). Dividends per share is what the REIT actually distributes to shareholders and is calculated as dividends paid divided by number of common shares outstanding.

Question 21-5

Explain how an investor in an equity REIT may receive a current dividend, part of which may be tax-deferred.

Part of the dividend paid by a REIT may represent “return of capital.” This can occur when the dividends per share exceeds earnings per share.

Question 21-6

What are some important lease provisions which investors should be aware of when analyzing the financial statements of REITs?

When analyzing the financial statements of REITs, investors should consider the effect of lease provisions such as provisions for tenant improvements and free rents, leasing commissions and lease guarantees. The accounting treatment of these provisions can affect the reported FFO for one REIT versus another REIT.

Question 21-7

What is a mortgage REIT?

A mortgage REIT is a REIT that primarily invests in mortgages and mortgage backed securities rather than property ownership.

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Real Estate Investment Trusts (REITs)

Problem 21-1

(a) Assuming dividends are set at 90% x EPS, or \$2.03 per share

EPS: (Net Income) ÷ (Shares Outstanding)	=	\$2.26
NOI: (Income from Operations + Depreciation and Amortization) ÷ (Shares Outstanding)	=	\$5.10
FFO: (Net Income + Depreciation and Amortization) ÷ (Shares Outstanding)	=	\$4.46
ROC: (Dividend per Share) - (EPS)	=	(\$0.11)
Cash Retention per Share: (FFO) - (Dividend per Share)	=	\$2.43
Net Assets per Share: (Net Assets) ÷ (Shares Outstanding)	=	\$30.40
Equity or Book Value per Share: (Shareholders equity) ÷ (Shares Outstanding)	=	\$21.20
ROA: (NOI) ÷ (Net Assets)	=	16.8%
ROE: (FFO) ÷ (Equity)	=	21.0%

(b)

Assuming that National paid a minimum dividend of \$2.03 per share (90% of EPS) and investors capitalized dividends paid by National at 0.08, the indicated price would be $\$2.03 \div 0.08$, or \$25.37.

However, market research indicates that investors are paying 12 x FFO for comparable REITs. In National's case this would be 12 x \$4.46, or \$53.52.

Assuming National's dividend is \$2.03, its cash retention would be \$2.43 per share and its investors would not realize any recovery of capital. Indeed, the full amount of the dividend would be taxed at ordinary rates. If a minimum payout is chosen, Blue Street may want to evaluate National's ability to provide a much higher dividend payout as opposed to the cash retention of \$2.43 per share. To have a dividend yield equal to that of comparable REITs, using the share price of \$53.52 suggested by the FFO multiple above, National should consider paying a dividend of around 8% of \$53.52 or about \$4.28. In this case, it would not be retaining as much cash and the amount of dividend paid that exceeds \$2.26 would be considered return of capital and not taxed when paid. The basis of the investor's stock would be reduced by the amount of return of capital which would result in additional capital gain when the stock is sold.

Alternatively, if National chooses to retain more cash flow, its plan for future property acquisitions or use of its cash flow should be evaluated carefully in order to justify paying 12 x FFO.

(c)

Net Revenue	\$100,000,000
Operating expenses	<u>40,000,000</u>
NOI (from properties)	60,000,000

$$\text{NOI} \div \text{Cap rate} = \$60\text{m} \div 0.10 = \$600 \text{ million}$$

$$\begin{aligned}\text{Equity} &= \text{Net Asset Value} - \text{Liabilities} \\ \text{Equity} &= \$600 \text{ million} - \$304 \text{ million} = \$296 \text{ million}\end{aligned}$$

$$\text{Equity} \div \text{shares} = \$296 \text{ million} \div 10 \text{ million} = \$29.60 \text{ per share}$$

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Problem 21-2Approach 1

Balance Sheet - Date of Offering

<u>Assets</u>		<u>Liabilities</u>	
Properties @ Cost	\$100,000,000	Mortgage Loan	\$30,000,000
Tenant Improvements	10,000,000		
<u>Other Capital Costs:</u>			
Financing Fees	900,000	Shareholder Equity	<u>81,500,000</u>
Lease Commissions	<u>600,000</u>		
Total Net Assets	<u>\$111,500,000</u>	Total Liabilities & Equity	<u>\$111,500,000</u>

Operating Statement

	Year		
	(1)	(2)	(3)
Net Revenue	\$15,000,000	\$15,750,000	\$16,537,500
Less:			
Operating Expenses	5,700,000	5,985,000	6,284,250
Management Expenses	750,000	787,500	826,875
G&A Expense	450,000	472,500	496,125
Less Amortization:			
Lease Commission	120,000	120,000	120,000
Financing Fees	90,000	90,000	90,000
Less Depreciation:			
Buildings	2,000,000	2,000,000	2,000,000
Tenant Improvements	<u>250,000</u>	<u>250,000</u>	<u>250,000</u>
Income from Operations	5,640,000	6,045,000	6,470,250
Less Interest	<u>2,400,000</u>	<u>2,400,000</u>	<u>2,400,000</u>
Net Income	<u>\$3,240,000</u>	<u>\$3,645,000</u>	<u>\$4,070,250</u>

Relevant Ratios for Year One

Assuming dividends are set at \$4.00 per share

EPS: (Net Income) ÷ (Shares Outstanding)	=	\$3.24
NOI: (Income from Operations + Depreciation and Amortization) ÷ (Shares Outstanding)	=	\$8.10
FFO: (Net Income + Depreciation and Amortization) ÷ (Shares Outstanding)	=	\$5.70
ROC: (Dividend per Share) - (EPS)	=	\$0.76
Cash Retention per Share: (FFO) - (Dividend per Share)	=	\$1.70
Net Assets per Share: (Net Assets) ÷ (Shares Outstanding)	=	\$111.50
Equity or Book Value per Share: (Assets) - (Liabilities)	=	\$81.50
ROA: (NOI) ÷ (Net Assets)	=	7.3%
ROE: (FFO) ÷ (Equity)	=	7.0%

Approach 2

Balance Sheet - Date of Offering

<u>Assets</u>		<u>Liabilities</u>	
Properties @ Cost	\$100,000,000	Mortgage Loan	\$30,000,000
Tenant Improvements	10,000,000		
<u>Other Capital Costs:</u>			
Financing Fees	900,000	Shareholder Equity	<u>81,500,000</u>
Lease Commissions	<u>600,000</u>		
Total Net Assets	<u>\$111,500,000</u>	Total Liabilities & Equity	<u>\$111,500,000</u>

Operating Statement

	Year		
	(1)	(2)	(3)
Net Revenue	\$15,000,000	\$15,750,000	\$16,537,500
Less:			
Operating Expenses	5,700,000	5,985,000	6,284,250
Management Expenses	750,000	787,500	826,875
G&A Expense	450,000	472,500	496,125
Lease Commission (expensed)	600,000	0	0
Financing Fees (expensed)	900,000	0	0
Less Depreciation:			
Buildings	2,000,000	2,000,000	2,000,000
Tenant Improvements	<u>2,000,000</u>	<u>2,000,000</u>	<u>2,000,000</u>
Income from Operations	2,600,000	4,505,000	4,929,750
Less Interest	<u>2,400,000</u>	<u>2,400,000</u>	<u>2,400,000</u>
Net Income	<u>\$200,000</u>	<u>\$2,105,000</u>	<u>\$2,529,750</u>

Relevant Ratios for Year One

Assuming dividends are set at \$4.00 per share

EPS: (Net Income) ÷ (Shares Outstanding)	=	\$.20
NOI: (Income from Operations + Depreciation and Amortization) ÷ (Shares Outstanding)	=	\$8.10
FFO: (Net Income + Depreciation and Amortization) ÷ (Shares Outstanding)	=	\$4.20
ROC: (Dividend per Share) - (EPS)	=	\$3.80
Cash Retention per Share: (FFO) - (Dividend per Share)	=	\$1.70
Net Assets per Share: (Net Assets) ÷ (Shares Outstanding)	=	\$111.50
Equity or Book Value per Share: (Assets) - (Liabilities)	=	\$81.50
ROA: (NOI) ÷ (Net Assets)	=	7.3%
ROE: (FFO) ÷ (Equity)	=	7.0%

(a) Note that major differences occur in the above ratios under each approach. Using the \$4.00 dividend in each case, note the changes in EPS and ROC in particular.

	<u>Approach 1</u>	<u>Approach 2</u>
EPS	\$3.24	\$0.20
ROC	0.76	3.80

Although Approach 1 provides the highest EPS, it provides a lower ROC. As a result, if a \$4.00 dividend is paid, more will be taxable to shareholders. FFO per share, which is the focus of many investors, is \$5.70 per share for method 1 but \$4.20 per share for method 2. Clearly the adoption of accounting treatment should be carefully considered by Robust.

Problem 21-3

- (a) FFO = \$8 + \$2 = \$10 per share
 FFO x FFO Multiple = \$10 x 10 = \$100 per share
- (b) \$6 ÷ (0.12 - 0.02) = \$60
- (c) \$10.00 per share x 1 million shares = \$10 million
 \$10 million ÷ 0.08 = \$125 million value of properties
 \$125 million - \$40 million liabilities = \$85 million NAV
 \$85 million ÷ 1 million shares = \$85 per share