



# Yale SCHOOL of MANAGEMENT

135 Prospect Street, New Haven, Connecticut 06520

## Real Estate Investment Trusts

Golden days of 30%+ annual returns are over – still some jewels if you dig carefully.



### **Real Estate Investment Trusts**

February 5, 2005

#### **Time Frame**

Short Term: 3 – 6 Months

Long Term: 3 Years

#### **Recommendations**

Industry:

Short Term – Underperform

Long Term – Neutral

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**EXECUTIVE SUMMARY**

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**The real estate gold mine is exhausted.** REITs are currently overvalued. The surge of REIT performance over the S&P 500 has run its course and we expect a 15-18% decline in the RMS REIT index based upon Macro-economic factors and current valuations.

**Key industry drivers and risks:**

- **Interest Rates.** The Fed will continue moderate interest rate hikes. We believe that the current flatness of the yield curve cannot be sustained, and as short-term yields increase, long-term yields would have to rise more than proportionately. While these rate movements will have a negative short-term affect on the industry as investors may frantically withdraw their investments, we believe it is a healthy correction in the yield curve, with favorable long-term implication on the economy.
- **Housing Bubble.** If it exists and it pops, it will have an overall negative effect on the economy. We are cautious and warn that it is a possibility that should not be ignored.
- **Fund flows and volatility.** The fund inflows have increase and will continue increasing due to; a greater number of people approaching retirement age who seek income yielding securities, institutional diversification into the industry, and foreign investors piling into the REIT market while the dollar is cheap and the U.S. foreign investment laws favorable. However, the inflow will be partly offset by investors wary of short-term vulnerability due to interest rates and increased volatility.
- **Valuation.** Recent yield growth is more based on price appreciation than improvements in fundamentals. This has resulted in historically high FFO multiples and NAV premiums, which will prove unsustainable as interest rates increases and economic growth lags.

**REIT Sectors:** This report covers Equity REITs, focusing on the Office, Residential, and Lodging sectors. We favor the Lodging (Outperform) the most, followed by Office (Neutral) and Residential (Underperform).

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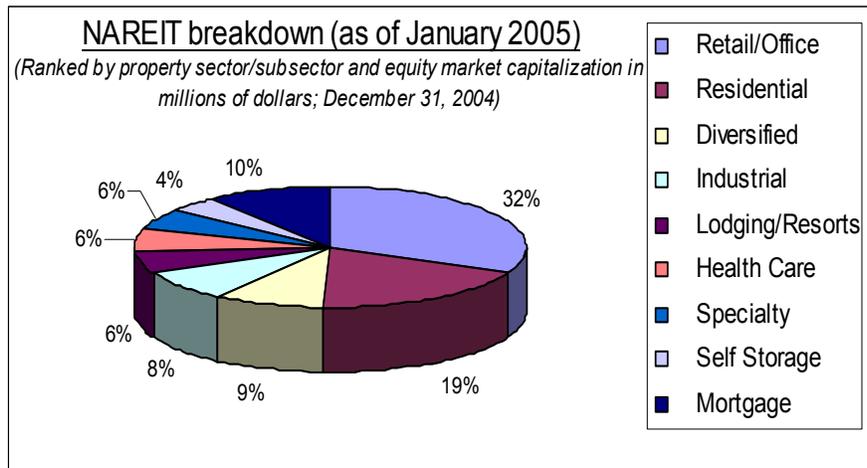
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## INDUSTRY REVIEW - WHY IT'S OVERVALUED

### INDUSTRY OVERVIEW

Real Estate Investment Trusts (REITs) must pay out 90% of their taxable income to shareholders in the form of dividends. Their current value is their dividend stream plus the price appreciation of assets in their portfolio. Annual yield as of 2004 was 5%, according to the National Association of Real Estate Investment Trust (NAREIT). From the perspective of an investor, they are typically placed in the fixed income sphere because their yield is taxable as ordinary income versus the 15% dividend rate granted to common stock. Conventionally REITs only compete with bonds for investors' dollars. However, in an era of flat yield curve, these increasingly price-volatile fixed income instruments are pressured to compete with higher short-term guaranteed rates.

The following is a breakdown of the equity REIT market by NAREIT, which is composed of 95% of all REITs traded in the U.S. exchange.



### PAST PERFORMANCE – BOOMING SINCE 2000

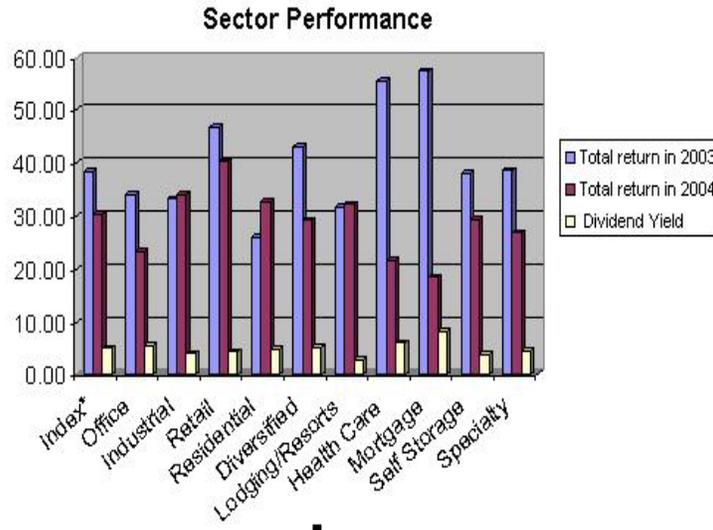
**2004 marked the fifth consecutive year of substantial out-performance by REITs, with a 32% total return<sup>1</sup> versus 9% for the S&P 500.** REITs have posted a cumulative total return of over 180% greater than the S&P 500 since 2000. However, for the coming 2005, there is concern about rising interest rates and potentially unsustainable valuation levels in both the securities market as well as in direct property. Evidence of this is the correction of real estate securities somewhat during the first two weeks of 2005, posting a -7% total return.

Foreign investment, REITs, and private equity have been pushing and will continue to push premium property prices higher. This investor interest can be explained by a number of theories:

- Investors seeking safety who were burned by the technology bubble;
- Aging investors seeking income vehicles;
- Professional investors seeking to diversify their portfolios through investments with low correlation to common stocks;
- The industry's improved visibility to both domestic and overseas investors through additions to major indices and foreign REIT listings;
- Lack of attractive investment opportunities in the stock market during last few years.

<sup>1</sup> Morgan Stanley REIT Index

Even though short term prospects look unpromising for REIT performance and real estates in general, we expect investors to continue in property-based equities on longer-term outlooks; especially if the dollar continues to weaken.<sup>2</sup> Additionally, foreign investors have been enticed by 2004 tax code changes. Previously, foreign REIT investors had to file daunting amounts of paperwork in order to invest. Now the process is similar to that of foreign investment in standard U.S. Equities.



<sup>2</sup> Real Estate Industry Weekly Insights, Morgan Stanley, Jan. 21, 2005

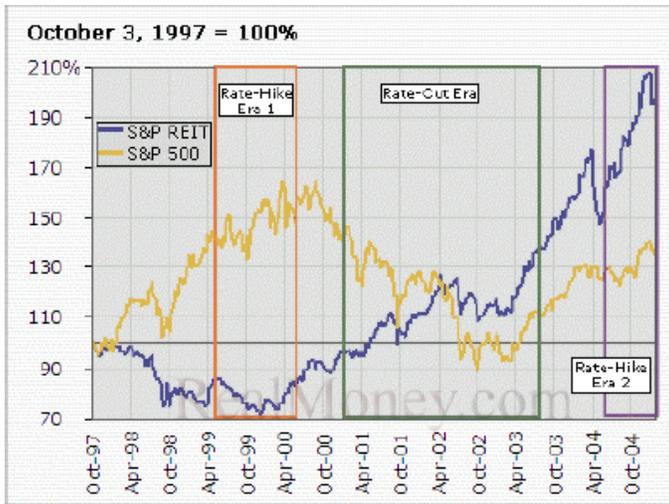
**INTEREST RATES – MEASURED RATE HIKE NOT A CONCERN, BUT A SPIKE WILL BE**

As explained in previous section, REITs compete with bonds for investors' dollars, and are therefore highly sensitive to interest rate movements. However, as long as the Fed continues with its expected rate hike strategy and the rate increases are orderly, REITs should not be significantly affected in the medium- to long-term time frame (1 to 3 years).

In the current flat yield curve environment, REITs' outlook in the short term is hindered by an almost definite rate hike[VSA1]. Some investors' money will be drawn out and put towards alternative short-term instruments that provide more attractive risk-adjusted yields.

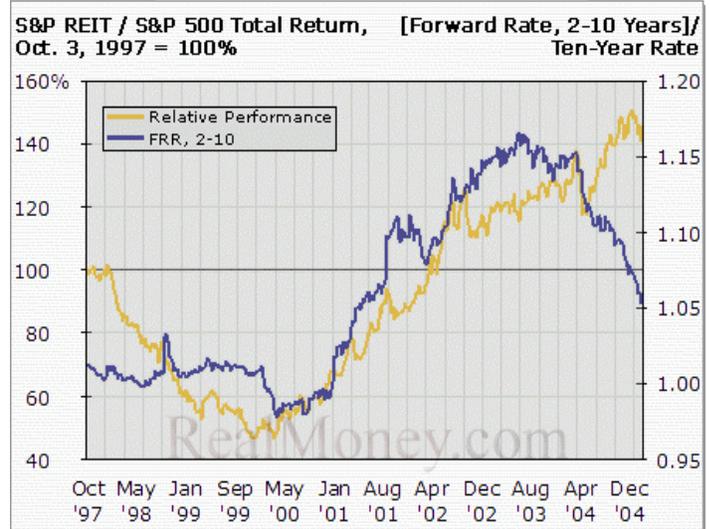
*Let history speak for itself...*

**REIT Performance vs S&P 500,  
as a function of the Fed's policies**



Source: Bloomberg

**Relative REIT Performance vs Yield Curve<sup>3</sup>**



Source: Bloomberg

**Relative REIT Performance vs 10-year Note Yield<sup>4</sup>**



Source: Bloomberg

3 Shape of the yield curve is defined by the forward rate ratio between two and 10 years. This is the rate at which you can lock in borrowing for eight years starting two years from now divided by the 10-year rate itself.

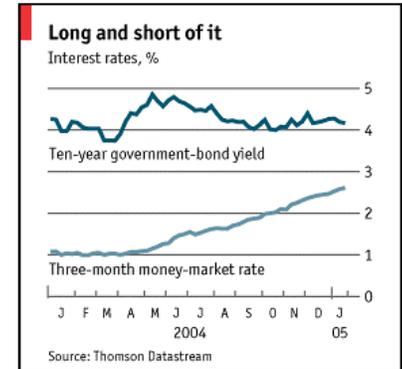
4 [http://www.thestreet.com/\\_tsc/options/futuresshocktsc/10206416\\_2.html](http://www.thestreet.com/_tsc/options/futuresshocktsc/10206416_2.html)

**REIT yield's correlation with interest-rate-sensitive factors:**

- 1) **Fed's rate hikes/cuts.** REITs investors seem to ignore the Federal Reserve's interest rate policies[VSA2].
- 2) **Yield Curve.** Except for the last few months since April 2004, REITs historically underperform<sup>5</sup> when the yield curve is flat. The phenomena is explained by recent abnormal factors such as investment fund flows which are contributing to the market price appreciation.
- 3) **10-year Treasury.** The total returns of REITs relative to the broad market have paralleled 10-year note yields since the broad market peaked in March 2000. (Before that point, REITs underperformed during the tech bubble, and the 10-year note yields themselves were distorted by the effects of the Long Term Capital Management debacle.) This particular comparison makes REITs overvalued relative to note yields at this point.<sup>6</sup>

**A flattening yield curve and pressure to increase long-term rates.** At around 4.2% yields, ten-year U.S. Treasury bonds are virtually identical to where they were a year ago (see chart). Adjusted for some measures of inflation, real long-term interest rates are lower. Stephen Roach of Morgan Stanley reckons inflation-adjusted long-term rates are now more than 2.5 % below their average level of the past 20 years.

However, in the past year, short-term interest rates and inflation are both rising, the current-account deficit is huge and widening, the dollar has fallen and the fiscal outlook has worsened. We expect the investors looking over the next ten years will surely want a better return than 4.2%. In fact, the street consensus is that the 10-year will rise in yield to 4.7%, while the Fed's aggressive rate increases should have the 3-month Treasury at 3.75% by the end of 2005.<sup>7</sup>

**Our View - rate hike has different implications for different sectors and investors with different horizons.**

**Since REIT correlation to both the rising short term rates and the 10-year treasury rate is significant, the outlook is unfavorable for short-term investors.** Those who are investing in REITS for the short-term yield will sell off their stakes in REITs to take advantage of the high market valuations and invest in short-term guaranteed instruments such as money markets and CDs, which do not have any principal fluctuation. This market behavior will result in lower REIT market valuations[VSA3].

**On the other hand, these correlations are favorable for long-term investors –** since higher interest rates are a function of an improving economy, strong job growth, and consumer confidence. These factors will increase the capitalization rates and allow landlords to raise rents, thus increasing the value and return on assets of rental properties owned by REITs. Additionally, higher lending costs make renting preferable to home-buying, and alleviate the current problem of low private savings rates and stronghousing demand[VSA4].

**Potential risks to our views...**

**Scenario 1: Interest rates will rise slower than Fed's predicted pace.** This is a more positive scenario for the short-term outlook and is not improbable based on the expected economic slowdown in 2005[VSA5]. *USA Today* surveyed 58 economists<sup>8</sup> and they forecast a steady pace of growth. This would allow the Federal Reserve to stick to its stated policy of moderate and measured rate increases, instead of using more aggressive monetary policies. The economists expect another quarter point increase at its next meeting in March, and that the rate should rise to 4% by early 2006. These predictions are consistent with the estimated three-month treasury yield of 3.75% by the end of 2005[VSA6].

5 From lower graph in page 6, this is when S&P REITs relative returns are lower than that of S&P 500, as indicated by an index lower than 100.

6 [http://www.thestreet.com/\\_ts/cs/options/futureshockts/10206416\\_2.html](http://www.thestreet.com/_ts/cs/options/futureshockts/10206416_2.html)

7 Spread data obtained from Citigroup, 14 January 2005.

8 [http://money.cnn.com/2005/02/01/news/economy/fed\\_outlook/](http://money.cnn.com/2005/02/01/news/economy/fed_outlook/)

*This outlook suggests there will be meetings this year at which the Fed does not raise interest rates, although there is disagreement among the economists as to when that pause will come.*

The current future contracts even imply that the central bank will raise short-term rates at each of its next three meetings to 3%, and will then stop. Therefore, the financial market also seems to be expecting virtually no more Fed tightening in the second half of 2005 or in 2006.

**Scenario 2: Interest rates will spike.** While very unlikely, this is the worst-case scenario. Should the current economic problems continue, the fiscal imbalances prove unsustainable, and the interest rate face an unexpected spike; REIT prices will face a sudden free fall, just as they did in April 2004. It is unfathomable to what degree it will disable the domestic US economy, not to mention the global markets.

## HOUSING BUBBLE – WE ARE CAUTIOUS

**Alan Greenspan, in a speech in late 2004, insisted that the growing concerns about an American housing bubble were much exaggerated.** He argued that the housing market is less prone to bubbles than the stock market because the market has less liquidity and high transaction costs.

**However, there are plenty of symptoms of a bubble mentality in the United States.**<sup>9</sup> Specifically, there has been a surge in the turnover of existing homes to a record rate of 9% in 2004. Investors have been buying new properties and reselling within a year in the hope of a large gain. The rate of growth in the housing stock exceeds the rate of growth in the number of households by a margin greater than at any time in the past 40 years.

**Calculations by *The Economist* suggest that house prices have hit record levels in relation to incomes in the US.** In other words, ratios of prices to incomes are now above levels that have proved unsustainable in the past. Taking the average ratio of house prices to incomes in 1975-2000 as a baseline, American house prices are now almost 30% overvalued. If real interest rates are permanently lower, this could justify higher prices in relation to incomes, but several studies conclude that lower interest rates cannot explain all of the surge in house prices.

**The global housing boom has been unusual in its strength, duration and ubiquity.** Never before had so many countries had housing booms at the same time, driven largely by low interest rates. However, in its latest *World Economic Outlook*, the IMF warns that just as the upswing in house prices has been a global phenomenon, so will any downturn be—with corresponding adverse implications for global economic activity.

**We remind investors to bear in mind the overall implication of these factors, and not to overlook the current risks in the industry.**

## HIGHER VOLATILITY

**In 2004, REIT volatility is somewhat higher than it traditionally has been.** The most obvious example would be in April 2004, when REIT prices fell roughly 20% during a six-week period after a strong jobs report raised fears that the Federal Reserve would be more aggressive about raising interest rates. Investors worried that a stronger economy and higher rates would cause other sectors to become more attractive alternatives to real estate, and quickly sold out of the REIT market. These fears proved unfounded, however, and REITs quickly recovered from this setback.

In a recent article in NAREIT<sup>10</sup>, Martin Cohen of Cohen & Steers Capital Management expects more volatility as REITs become more popular in the future. This is mostly driven by increasing complexity in investment methods, such as index funds and derivative-related trading that have only existed last few years.

<sup>9</sup> The Economist (9 Dec 2004)

<sup>10</sup> NAREIT: The Investment Landscape, the November/December 2004 issue



**INCREASED FUND FLOWS – DOMESTICALLY AND INTERNATIONALLY**

The REIT industry had net investment inflows of \$6.9 billion in 2004, 1.5 times the figure for 2003 and two times the figure in 2002[VSA8].

**Increased attention from institutional dollars**--this partly contributed to the industry’s rising volatility.

**Cross-border capital flows into real estate are growing strongly on the back of high demand from retail and institutional investors and the increasing globalization of the industry.**<sup>11</sup> The overseas money inflow is due to tax relief and simplified rules:

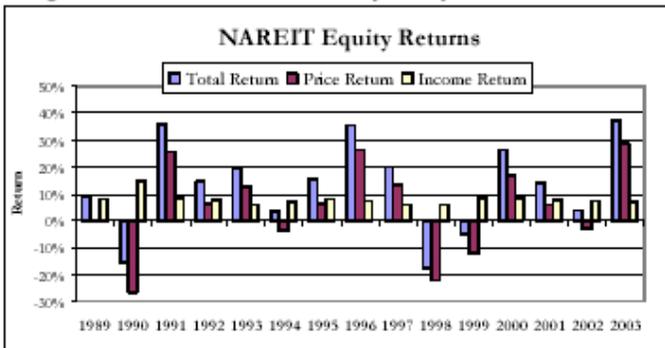
- The 2004 Tax Reform Bill provides some long-sought tax relief for non-U.S. investors in publicly traded REITs (as long as they own less than 5% of a U.S. REIT). Previously, foreigners were subjected to a withholding tax on capital gains and losses whenever the REIT bought or sold assets. Under the new law, those extra taxes will no longer apply.
- The Jobs Creation Act 2004 simplifies the filing procedure for foreign investors. The new provisions conform filing and tax treatment with other securities. In legal terms, the law aligns tax policy with the general Foreign Investment in Real Property Tax Act that governs other foreign ownership of U.S. holdings. Foreign investment in REIT shares is simplified down to the same process as if buying stocks on the NYSE or NASDAQ.

**Demographic change.** As baby boomers age and income producing investments become more attractive, cash inflow to REITs from this demographic segment will increase.

**INDUSTRY VALUATION – YIELD MOSTLY DRIVEN FROM PRICE APPRECIATION; FUNDAMENTALS HAVE NOT BEEN IMPROVING.**

**Little of the interest in the real estate in recent years seems to have originated from improving fundamentals – what typically drives investment in any corporate sector.** In fact, only the retail sector has evidence of strong fundamental performance over the past 4 years. Investors appear to have forsaken fundamentals for a host of other investing rationales. In fact, the source driving these returns is more from investors’ demand (price appreciation) than the REIT fundamentals (dividend yields). Price appreciation accounted for 71% of the total return in 2004 and 76% in 2003[VSA9].

Figure 3: NAREIT Performance by Component



Source: Ibbotson

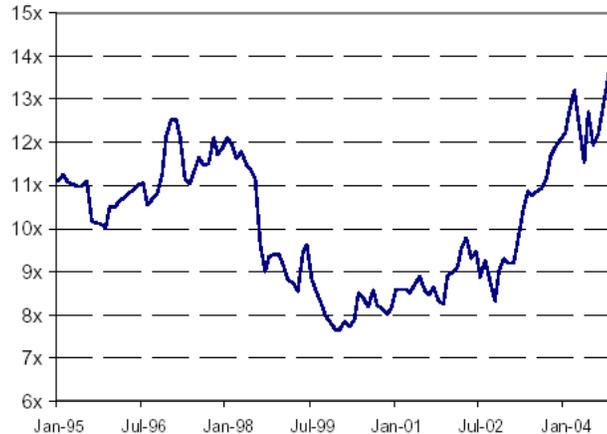
Period	Composite REIT Index			
	Return Components			Dividend Yield <sup>2</sup>
	Total	Price	Income	
<b>Annual (including current year to date)</b>				
1998	-18.82	-23.82	5.00	7.81
1999	-6.48	-14.06	7.59	8.98
2000	25.89	15.91	9.98	7.71
2001	15.50	7.05	8.45	7.38
2002	5.22	-2.15	7.36	7.32
2003	38.47	29.34	9.13	5.75
2004	18.89	13.63	5.26	5.14

**We believe that as real estate becomes better understood as a public investment vehicle, investors will more closely tie the stock price to the outlook for fundamentals.** Until investors tie their investment decisions more closely to individual REIT fundamentals, predicting stock price performance is difficult, and the REIT shares’ aggregate movement will continue to rely more heavily on exogenous environment than on actual operating performance.

<sup>11</sup> Reuters, Feb 4, 2005

**Funds From Operations (FFO)** – FFO is the measure of operating cash flow for the REIT industry (see Glossary for definition). For the industry, FFO multiple seems to be high relative to historical level. This is partly due to the recent housing bubble. Additionally, the capitalization rate is at an unrealistically low level due to record-low short-term interest rates. This is causing unrealistically high valuations for REITs. Since the CAP Rate closely follows short-term rates, the cap rate will be increasing with them and thus the valuations of REITS will fall. The only sector which has rising FFO to counter this fact is the retail sector. We recommend that investors look into individual sectors for the sector-specific valuations.

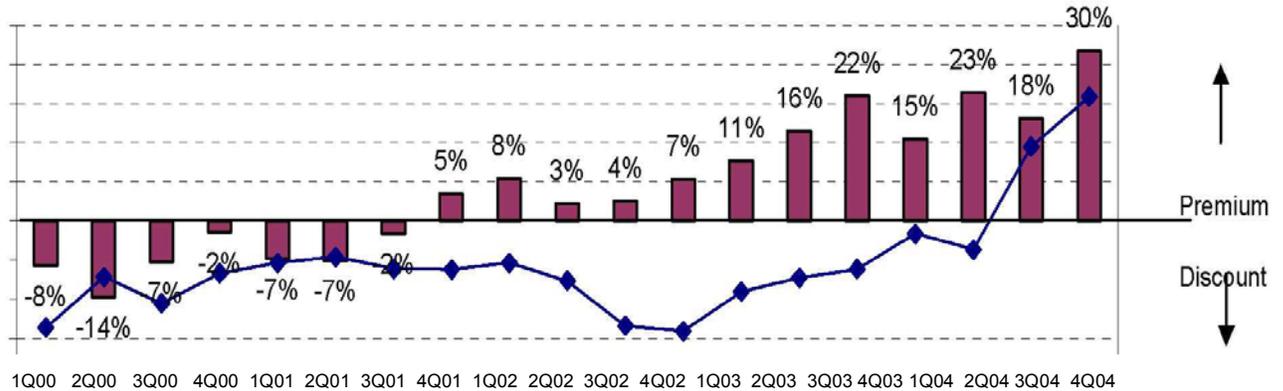
Figure 8: REIT Sector FFO Multiple, Monthly (1995–2004)



Source: FactSet and Lehman Brothers

**Net Asset Value (NAV)** – NAV is the book value of assets less liabilities. At year end 2004, REIT shares traded at a record 128% of their NAV and 14.4 times their estimated FFO. We believe that this multiple will not be sustainable in 2005, especially while short term interest rates rise further.

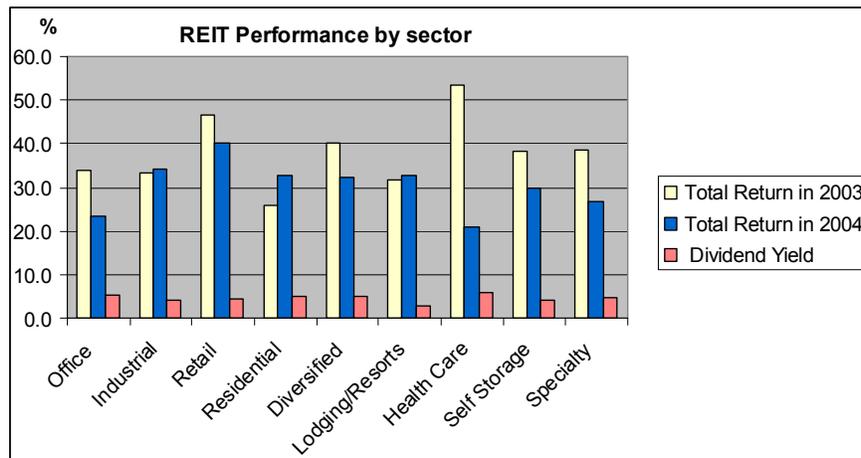
Average NAV Premium/Discount since 1Q00- before the tech bubble burst.



Of the major sectors, Shopping Centers (+36%) and Warehouses (+38%) are currently trading at the biggest premiums. Apartments (+25%) and Malls (+24%) are trading the cheapest to our NAV estimates. (Lehman REITS, 22 Dec 2004)

**SECTOR PROFILE**

<b>Covered Sectors</b>	<b>Rating</b>
Office	ST: Neutral LT: Outperform
Residential	ST: Underperform LT: Underperform
Lodging	ST: Outperform LT: Neutral



## Office

### Recommendation - Neutral

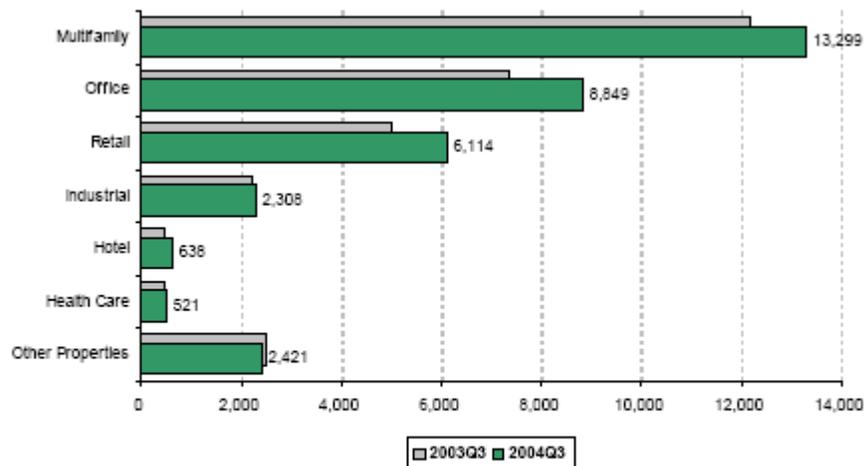
- We expect short term growth to remain flat or slightly negative due to:
  - Lease resigning at lower rental rates.
  - Modest economic recovery.
  - Supply overabundance.
- We expect long term growth to increase and the improvement of valuation fundamentals.
  - Rental rates will increase as occupancy rates improve.
  - Increased demand due to improved economic environment.

### Sector Overview

The overabundance of supply and low capitalization rates in the office sector leaves little room for growth through rental rate increases or external investment opportunities in the near future.

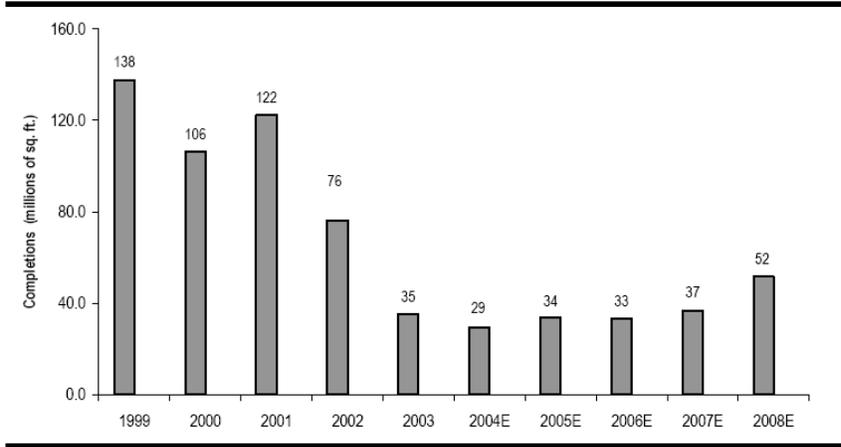
The good news is that the development of new office space has finally slowed to reflect the decrease demand. New development has dramatically decreased from the 2001 level of 113 M sq. ft. to around 18 M sq. ft., or less than 0.5% of the total supply. There should be a slight increase in development as reflected by the 20% increase in commercial mortgage origination in 2004 (see figure 1 below). Reis data estimates that development will be limited to approximately 34 M sq. ft.

**Figure 1: Commercial and Multifamily Mortgage Originations by Commercial Mortgage Bankers (in \$ millions).**  
Source: MBAA (<http://www.mortgagebankers.org/marketdata/housing.html>)



Source: Mortgage Bankers Association.  
Copyright 2004 Mortgage Bankers Association. All rights reserved.

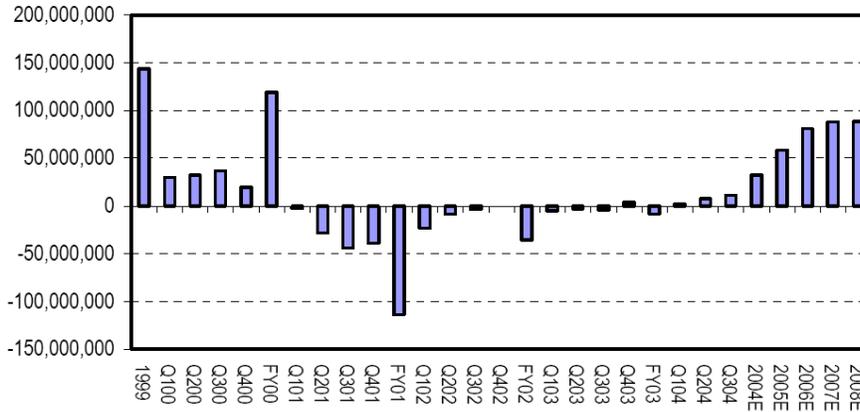
Figure 2: U.S. Office Completions



Source: REIS Inc.; Bear, Stearns & Co. Inc. estimates.

Net absorption is improving modestly and is expected to be about 59 M sq. ft. in 2005. Occupancy increased by 0.23% and net absorption increased by 28.8 M sq. ft. year over year. However, despite the contraction of supply growth and the improvement in net absorption, this is only a small reduction in the current office space inventory of 615 M sq. ft.

Figure 3: National Historical and Projected Net Office Absorption (sq. ft.)



Source: Reis Data

In addition, we expect rental rates to decrease slightly in the coming year. Most office leases are set for five years; the implication of this being that many of the industry leases being re-contracted in 2005 and 2006 were signed during much higher market prices per sq. ft. and will proceed at much lower per sq. ft. rates. The national rental rate average in 2004 was \$20.11 per sq. ft., a decrease of 1.1% from 2003, but rates are expected to stabilize in the first two to three quarters of 2005.<sup>12</sup> Historically, rate increase power did not strengthen until occupancy rates reached 10%.<sup>13</sup> Using the net office absorption projections from RBC Capital Markets, as well as Reis and Bear Stearns, we project approaching 10% occupancy rates in 2008.

Table 1: Vacancy rate projections based on estimated completion and absorption rates.

(in millions sq. ft.)	Year			
	2005	2006	2007	2008
Total Market sq. ft.	3634	3634.03	3634.07	3634.12
Vacancy	615	590	545	500
Expected Completion	34	33	37	52
Expected Net Absorption	59	78	82	84
Vacancy Rates	16.9%	16.2%	15.0%	13.8%

<sup>12</sup> RBC Capital Markets, US 2005 REIT Outlook. 17 Dec 2004

<sup>13</sup> RBC Capital Markets, US 2005 REIT Outlook. 17 Dec 2004

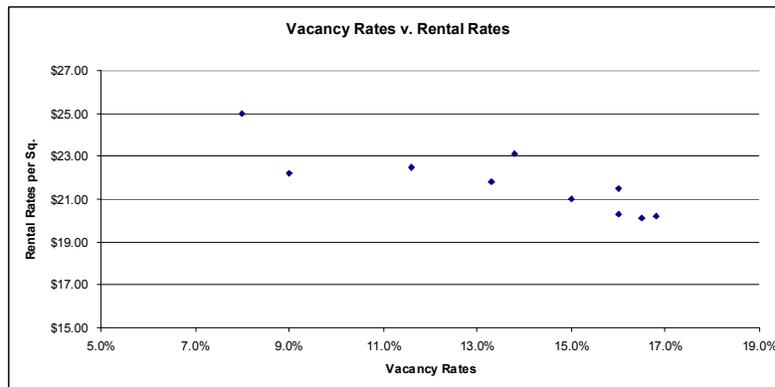
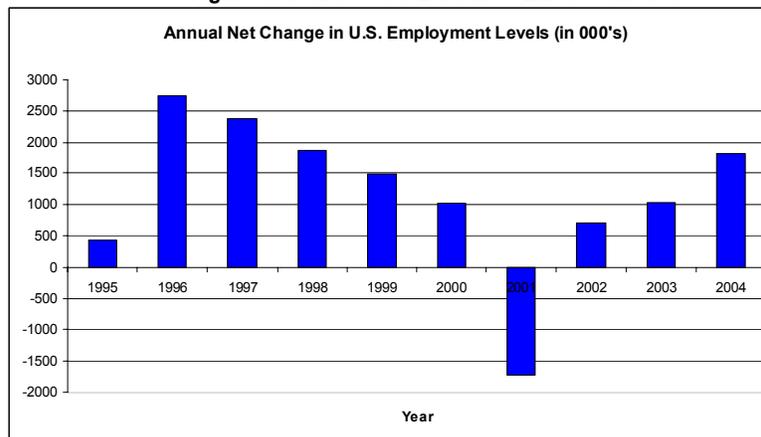


Figure 3: Relationship between vacancy rates and rental rates per sq. ft. The data points start at year 1999 and go to 2008E at one year intervals.<sup>14</sup>

A regression of the data shown in the graph above gives additional evidence of rental rates as a function of vacancy rates (see appendix for regression results).

Job growth continues to be less than expected. However, it has been moderately increasing since 2002, with the current unemployment rate down to 5.2% in January 2005. We believe that the office rental market will improve, but lag behind the improvement in the labor market. We expect the current office space inventory to take several quarters to absorb. Therefore, short term improvements in the office sector are unlikely despite positive economic data and minimal new development.

Figure 4: Source: U.S. Bureau of Labor Statistics<sup>15</sup>



## Valuation

We rate this sector as NEUTRAL due to limited improvement of macro factors as described in this section and over-valuation. While the 20.7% premium to NAV for Office REIT is in-line with the overall average for REITs; the Office sector carries with it more inherent risk because it is so strongly correlated to business growth as shown in the relationship between vacancy rates and rental rates. This added risk should be reflected in a lesser premium over NAV than the REIT industry average. In addition, we expect an increase in cash outflow due to investors moving to less volatile investment vehicles as interest rates increase.

<sup>14</sup> Source of historical vacancy rates, historical rental rates, estimated vacancy rates, and estimated rental rates is Reis Data.

<sup>15</sup> [http://data.bls.gov/PDQ/servlet/SurveyOutputServlet?data\\_tool=latest\\_numbers&series\\_id=LNS12000000&output\\_view=net\\_1mth](http://data.bls.gov/PDQ/servlet/SurveyOutputServlet?data_tool=latest_numbers&series_id=LNS12000000&output_view=net_1mth)

	Valuation Statistics										
	Adjusted EBITDA/FV	NAV/Share	Price/NAV	FV/Adj EBITDA	Implied RE Yld.	Implied Value	FFO Multiple		Div. Yield	Payout Ratio	
							04E	05E			
Office Property Valuation	5.5%	\$ 33.10	120.7%	18.4	7.6%	\$ 212.02	13.4	12.2	5.5%	72.3%	
REIT Average	5.7%	\$ 33.00	119.3%	18.1	7.0%	N/A	14.5	13.4	5.4%	71.8%	

	Balance Sheet			FFO Growth	
	Debt/Total Ttl Debt	Mkt Cap. VR	Interest Coverage	2004/2003	2005/2004
	Office Property Valuation	46%	8%	3.2	-6.3%
REIT Average	46%	7%	2.9	0.6%	4.8%

Source: First Call, Reuters Plus, SNL, and Lehman Brothers

Notes:

Adjusted EBITDA/FV: EBITDA less capex and straight-line rents, FV= Firm value equals market equity + total debt + preferred equity - cash on hand - other significant assets (primarily construction in progress.)

Implied Yield = Adjusted NOI (Net Operating Income) for capex and straight-line rents.

JV = Joint Venture

## Residential

### Recommendation – Underperform

- We expect short term growth to remain flat or slightly negative due to:
  - Strong existing and new home sales.
  - The continuation of low mortgage rates.
  - Flat or declining demand.
- We expect long term growth to remain flat due to:
  - Projected low historical mortgage rates continuing through 2007.
  - Continued low capitalization rates.

### Sector Overview

Demand for apartment units has been in a steady decline since 2001 due to the all-time low mortgage interest rates. The average occupancy rates remain 3.5% below their peak level in 2000 and have only increased 0.8% in 2004. In addition, data from Reis shows that institutional quality occupancy has decreased by 0.1% year over year, but increased by 0.2% to 93.4% occupancy from the third quarter 2004 to the fourth quarter 2004.

New home sales and existing home sales continue to remain strong as historically low mortgage rates continue. These rates are the major contributor to flat occupancy growth. The 30-year mortgage has held steady near its historical low and only made a moderate increase in 2004 to 5.8%. Based on the 10-year treasury yield, projected mortgage rates continue to increase at this moderate rate, making only a minimal impact on decreasing housing starts, existing home sales, and new home sales.<sup>16</sup> In addition, without a meaningful increase in interest rates, capitalization rates should hold around the current national range between 5.5 – 7.0%.<sup>17</sup>

Table 2: Source - MBAA (<http://www.mortgagebankers.org/marketdata/housing.html>)

	2004	2005	2006	2007
<b>Housing Measures (thousands)</b>				
Housing Starts (single and multi family)	1949	1853	1700	1658
Home Sales (existing and new)	7802	7256	6710	6590
<b>Interest Rates (%)</b>				
30-Yr Fixed Rate Mortgage	5.8	6.2	6.5	6.9
10-Yr Treasury Yield	4.3	4.5	4.9	5.2
1-Yr Treasury ARM	3.9	4.5	5.0	5.4
1-Yr Treasury Yield	1.9	3.1	3.7	4.4
<b>Mortgage Originations</b>				
Total 1 to 4 family (Bil \$)	2852	2542	2206	2115
Purchase	1585	1559	1517	1556
Refinance	1266	983	689	559
Refinance Share (%)	44	39	31	26
ARM Share (%)	35	37	36	32

The residential sector has reacted to the low borrowing rates and strong home sales by decelerating supply since 2000. The number of completions relative to total market units fell 1.3% in 2003, approximately 1.1% in 2004, and is expected to drop 1.0% in 2005.<sup>18</sup>

Rental rates have made modest growth in 2004, increasing by 2.1% year over year, to an average of \$784 per unit. While showing signs of growth, these levels remain unimpressive as they are equivalent to fourth quarter 2001 levels.

<sup>16</sup> Source: Mortgage Bankers Association.

<sup>17</sup> RBC Capital Markets, US 2005 REIT Outlook. 17 Dec 2004

<sup>18</sup> RBC Capital Markets, US 2005 REIT Outlook. 17 Dec 2004

## Valuation

We rate this sector as UNDERPERFORM due to the continuation of historically low lending rates, expected minimal decline in home purchases, and over valued market prices. The residential sector is priced at a premium of 114.3% of NAV and while it is below the REIT average of 119.3% there is no potential growth justification for this valuation. The prospects for rental income growth will continue to remain weak thanks to lending rates, as highlighted by the FFO growth rates.

	Valuation Statistics									
	Adjusted EBITDA/FV	NAV/Share	Price/NAV	FV/Adj EBITDA	Implied RE Yld.	Implied Value	FFO Multiple 04E	FFO Multiple 05E	Div. Yield	Payout Ratio
Apartment Property Valuation	5.6%	\$ 34.90	114.3%	17.9	6.5%	\$ 103.48	15.9	15.1	5.7%	89.0%
REIT Average	5.7%	\$ 33.00	119.3%	18.1	7.0%	N/A	14.5	13.4	5.4%	71.8%

	Balance Sheet			FFO Growth	
	Debt/Total Ttl Debt	Mkt Cap. VR	Interest Coverage	2004/2003	2005/2004
Apartment Property Valuation	48%	9%	2.6	0.0%	0.0%
REIT Average	46%	7%	2.9	0.6%	4.8%

Source: First Call, Reuters Plus, SNL, and Lehman Brothers

Notes:

Adjusted EBITDA/FV: EBITDA less capex and straight-line rents, FV= Firm value equals market equity + total debt + preferred equity - cash on hand - other significant assets (primarily construction in progress.)

Implied Yield = Adjusted NOI (Net Operating Income) for capex and straight-line rents.

JV = Joint Venture

# Lodging

## Recommendation – Outperform

### Recovery Continues to gain momentum; future upside not fully priced in.

- The lodging industry is a cyclical business that is coming off a trough that was deeper and more extended than most anticipated. 2004 was an impressive year, but we believe that the U.S. hotel industry is in the early stages of a significant recovery and its top and bottom line growth should be significantly more favorable than other industries.
- The steady decline in unemployment, a boost in corporate budgets, and an increase in corporate travel and group meeting business are expected to fuel a demand-driven recovery in occupancy and average daily room (ADR) rates.
- We would highlight the nature of the recovery: 1) business-travel-driven, which is more price-inelastic and therefore implies improving margins, 2) ADR-driven improvement in RevPAR (Revenue Per Available Room). This change in revenue structure translates to a stronger bottom line margin. Given the current industry FFO multiples, we believe that the market has not yet fully recognized nor priced in the subtle changes in the sector and their implications on future performance. Thus we rate the sector **OUTPERFORM**.

## Sector Overview

**Favorable macro environment.** Positive economic outlooks, growing corporate profits, and improving consumer spending are encouraging indicators of travel demand growth across both business and individual customer segments.

**Optimistic 2005 travel outlook.** According to OAG, a global content management company specializing in travel and transport, their analysis reveals steady global flight increases and specifically highlights the revival of travel demand for North America.<sup>19</sup> We believe this is further enhanced by 1) a weak U.S. dollar, which can increase foreign travel to the United States, and 2) airline fare wars initiated in early 2005 for both business and leisure travel.

**In particular, travel demand by business groups is expected to accelerate this year.** This is a more price-inelastic customer segment that is driving U.S. hotel revenue and profits higher.<sup>20</sup> Therefore, this change in revenue mix will have positive implications on the sector's margins.

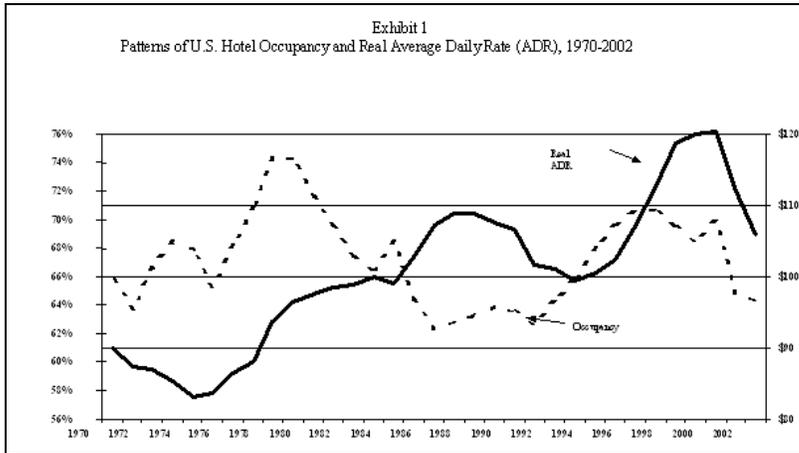
**The expected continued strong demand is also verified by the following indicators:**

1) Hotel Occupancy Cycle

Consistent with the prediction on the graph below, the hotel industry has reached its inflection point in 2004. We believe 2005 will continue to benefit from the upward cycle.

<sup>19</sup> <http://www.oag.com/oag/website/com/en/Home/Press+Room/Press+Releases/OAG+Reveals+Major+Upturn+in+Global+Airline+Capacity>

<sup>20</sup> <http://edition.cnn.com/2005/TRAVEL/01/20/bt.conference.hotels.reut/>



Source: PKF Consulting

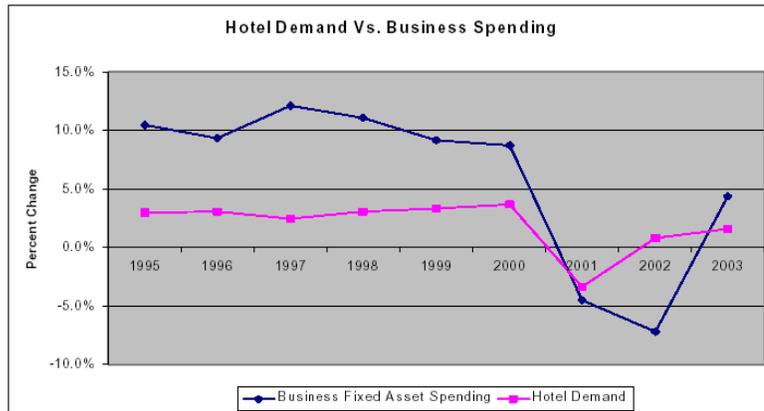
**Notes:**

1. Occupancy has a definite cyclical pattern. This pattern appears smoother since the late 1980s, which may be the consequence of lower information costs. The pattern of real ADR also appears cyclical, albeit with an upward trend.
2. During two periods, 1972-1974 and 1985-1987, occupancy and real ADR moved in opposite directions. These atypical and anomalous movements are likely the result of the federal government policies in place during those respective times.
3. Since the early 1990s, and for some years before 1990, occupancy leads ADR just as economic theory predicts.

2) U.S. Business Fixed Asset Investment Change

2004 overall private-sector output (minus government spending and trade) grew only by 5.5%, while business investment climbed 10.3%.

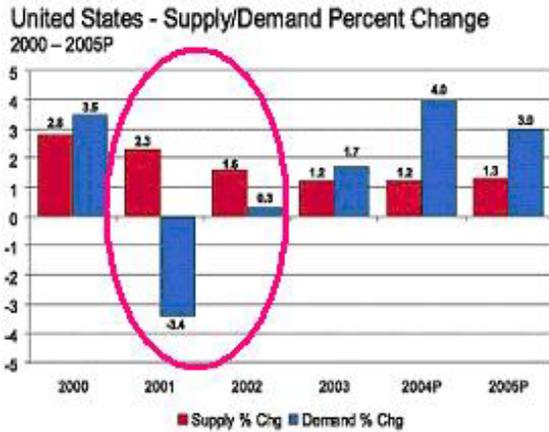
**Business Investment expected to climb in 2005.** US Chamber of Commerce forecasts that business investment to expand 8.5% in 2005. In a panel of three Midwestern economists in Cleveland, Meil and DeKaser are forecasting an 11% to 12% rise in spending for business equipment, fueled by strong corporate profits and large amounts of cash already in corporate coffers.<sup>21</sup>



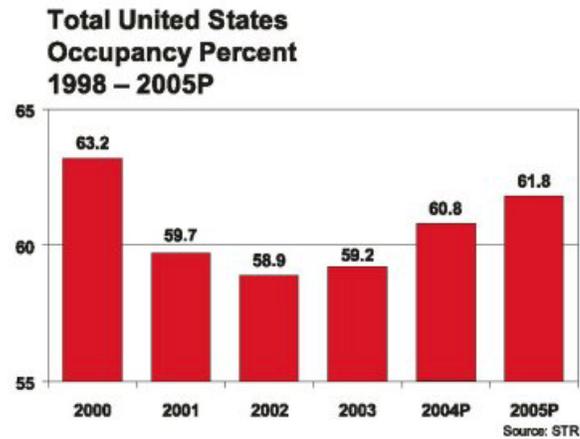
The U.S. Realty Consultants (USRC) has analyzed historical hotel demand increases in relation to historical levels of business fixed asset investment, as tracked by the U.S. Bureau of Economic Analysis. **They found that the demand for corporate travel, as well as group and convention demand for hotels often mirrors the statistical data on corporate fixed investment.**

**Over the next two years, supply is expected to trail demand, resulting in significant occupancy growth.** PKF Consulting projects that demand will grow at 3.5% to 4%. New supply will grow at only 1% to 1.5% per year (at historically low levels), this raises occupancy rates and ADRs to be priced more aggressively. We expect 2005 to be the second consecutive strong year for the U.S. lodging industry.

<sup>21</sup> <http://www.fundsupermart.com/main/research/viewSector.tpl?articleNo=4340>



Source: Smith Travel Research (STR)



Source: Smith Travel Research (STR)

**Improving RevPAR, fueled by rental gains exceeding occupancy gains.** PricewaterhouseCoopers estimates that RevPAR, a combination of room prices and occupancy rates, rose 7.5% last year and will rise 7.3% in 2005<sup>22</sup>. Mark Lomanno, president of Smith Travel Research, also believes that real room rate increases are only at the very beginning of the cycle<sup>23</sup>.

**Better negotiation power – positive implications on ADR.** Francis Cash, chief executive of mid-scale hotel operator La Quinta Corp., said his chain was able to negotiate price increases last fall - for the first time in several years - with all of its big corporate customers.<sup>16</sup>

**However, operating costs are still on the rise and industry profitability will peak in 2006.** R. Mark Woodworth, executive managing director of Hospitality Research Group (HRG), believes that operating costs are still on the rise.<sup>16</sup> As hotels continue to focus on expense control, this improving top-line environment should lead to improved flow-through to the bottom line. This will result a healthy improvement in hotel profitability. The industry is expected to reach its historical peak in 2006 or 2007.

<sup>22</sup> <http://edition.cnn.com/2005/TRAVEL/01/20/bt.conference.hotels.reut/>

<sup>23</sup> Outlook 2005: A Roundtable Discussion. [http://www.hotel-online.com/News/PR2004\\_4th/Dec04\\_ButlerOutlook.html](http://www.hotel-online.com/News/PR2004_4th/Dec04_ButlerOutlook.html)

**Valuation**

**Significance of ADR-driven growth.** ADR traditionally “flows through” nearly 100% to the bottom line Net Operating Profit (NOI). For example, during a period of relatively flat occupancy, a 64.1% increase in ADR led to a 119.1% increase in profitability.<sup>24</sup> Therefore, even though the RevPAR growth rate was 9.6% for 2004 and is expected to slow down to 6.9% in 2005 by industry consensus, we believe the margins will benefit and there will be a more than proportional growth to FFO.

**Rate Growth Begins to Take Hold  
Top 50 Markets**

	2003	2004E	2005E
Occupancy	81.80%	85.10%	86.70%
% Change	0.3%	5.7%	2.5%
ADR	\$94.25	\$97.80	\$101.94
% Change	-1.1%	3.7%	4.2%
RevPAR	\$58.07	\$63.65	\$68.04
% Change	-0.8%	9.6%	6.9%
FFO % Change	-10.00%	9.00%	n/a
Price/FFO	12x	12.5x	10x

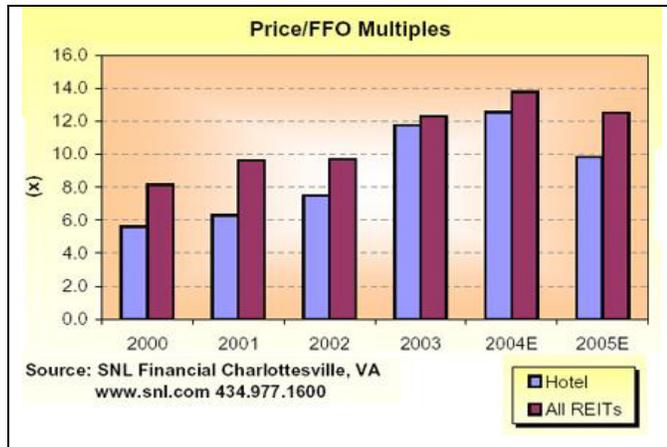
Source: PKF Consulting  
Source: PKF Consulting

**Hotel REITs RevPAR Growth**

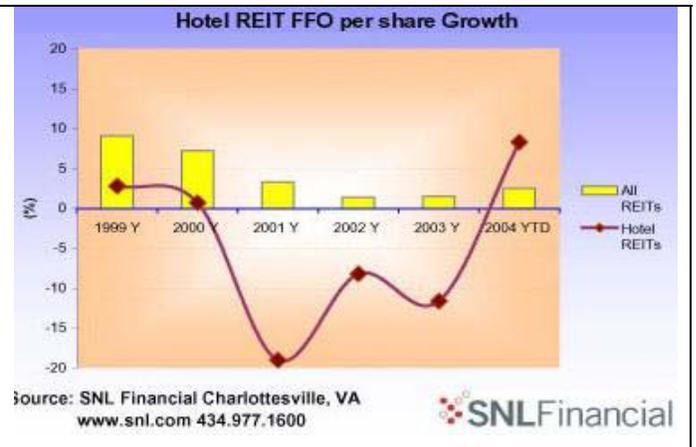


Source: NAREIT.com

**Upside potential for current Price/FFO Multiple.** We believed that the investor has not fully recognized the change in revenue structure in the current estimated Price/FFO Multiple of 10x.



Source: SNL Financial Charlottesville, VA  
www.snl.com 434.977.1600



Source: SNL Financial Charlottesville, VA  
www.snl.com 434.977.1600

**REIT price to consensus NAV.** According to SNL Financial’s research, the REIT Hotel sector still trades as a relative discount to the broader REIT market, and at a deeper discount when compared to the equity REIT segment.

REIT price to consensus NAV			
Positive signs for the Hotel sector aren't limited to "No Vacancy." Experiencing year to date price increases in line with the all REIT median has brought the Hotel sector very near premium territory after an extended stay at discount rates.			
Sector (# of Companies)	Price* Premium/Discount	Price Change	
		YTD	QTD
REIT Hotel (13)	-3.2%	15.0%	5.7%
Equity REITs (125)	18.1%	18.5%	7.9%

\*Close Nov. 4, 2004

Source: SNL Financial Charlottesville, VA  
www.snl.com 434.977.1600

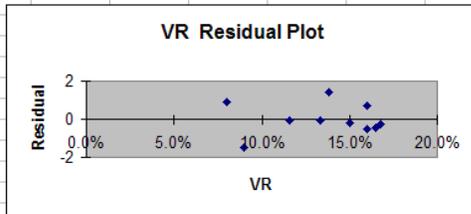
<sup>24</sup> [www.usrc.com/Publications/Archive/Profits.htm](http://www.usrc.com/Publications/Archive/Profits.htm)

**APPENDIX**

**OFFICE SECTOR**

Regression of rental rates versus occupancy rates.

SUMMARY OUTPUT						Vacancy Rates (%) v. Rental Rates (sq. ft. /yr)		
<i>Regression Statistics</i>						Year/Qtr	VR	RR
Multiple R	0.842761					1999	9.0%	\$ 22.20
R Square	0.710246					2000	8.0%	\$ 25.00
Adjusted R Square	0.674027					2001	13.8%	\$ 23.10
Standard Error	0.872147					2002	16.0%	\$ 21.50
Observations	10					2003	16.8%	\$ 20.20
<i>ANOVA</i>						2004E	16.5%	\$ 20.10
	df	SS	MS	F	Significance F	2005E	16.0%	\$ 20.30
Regression	1	14.91588	14.91588	19.60966	0.002202	2006E	15.0%	\$ 21.00
Residual	8	6.085117	0.76064			2007E	13.3%	\$ 21.80
Total	9	21.001				2008E	11.6%	\$ 22.50
<i>Coefficients</i>								
		Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95%	Upper 95%
Intercept	27.3445	1.288699	21.21869	2.56E-08	24.37275	30.31624	24.37275	30.31624
VR	-40.989	9.256182	-4.42828	0.002202	-62.3338	-19.6442	-62.3338	-19.6442
<i>RESIDUAL OUTPUT</i>								
Observation	predicted R	Residuals						
1	23.65549	-1.45549						
2	24.06538	0.934618						
3	21.68802	1.411978						
4	20.78626	0.713735						
5	20.45835	-0.25835						
6	20.58132	-0.48132						
7	20.78626	-0.48626						
8	21.19615	-0.19615						
9	21.89297	-0.09297						
10	22.58978	-0.08978						



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**GLOSSARY (from [www.investinreits.com](http://www.investinreits.com))**

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**Adjusted Funds From Operations (AFFO)**

This term refers to a computation made by analysts and investors to measure a real estate company's cash flow generated by operations. Since Funds from Operations (FFO) does not deduct for capital expenditures required to maintain the existing portfolio of properties, an alternative measurement is AFFO.

AFFO is usually calculated by subtracting from FFO both (1) normalized recurring expenditures that are capitalized by the REIT and then amortized, but which are necessary to maintain a REIT's properties and its revenue stream (e.g., new carpeting and drapes in apartment units, leasing expenses and tenant improvement allowances) and (2) "straight-lining" of rents. This calculation also is called Cash Available for Distribution (CAD) or Funds Available for Distribution (FAD).

**Capitalization Rate**

The capitalization rate (or "cap" rate) for a property is determined by dividing the property's net operating income by its purchase price. Generally, high cap rates indicate higher returns and greater perceived risk.

**Cash (or Funds) Available for Distribution**

Cash (or Funds) available for distribution (CAD or FAD) is a measure of a REIT's ability to generate cash and to distribute dividends to its shareholders. In addition to subtracting from FFO normalized recurring real estate-related expenditures and other non-cash items to obtain AFFO, CAD (or FAD) is usually derived by also subtracting nonrecurring expenditures.

**Cost of Capital**

The cost to a company, such as a REIT, of raising capital in the form of equity (common or preferred stock) or debt. The cost of equity capital generally is considered to include both the dividend rate as well as the expected equity growth either by higher dividends or growth in stock prices. The cost of debt capital is merely the interest expense on the debt incurred.

**EBITDA**

Earnings before interest, taxes, depreciation and amortization. This measure is sometimes referred to as Net Operating Income (NOI).

**Equity Market Cap**

The market value of all outstanding common stock of a company.

**Funds From Operations (FFO)**

The most commonly accepted and reported measure of REIT operating performance. Equal to a REIT's net income, excluding gains or losses from sales of property, and adding back real estate depreciation.

**Implied Equity Market Cap**

The market value of all outstanding common stock of a company plus the value of all UPREIT partnership units as if they were converted into the REIT's stock. It excludes convertible preferred stock, convertible debentures and warrants even though these securities have similar conversion features.

**Net Asset Value (NAV)**

The net "market value" of all a company's assets, including but not limited to its properties, after subtracting all its liabilities and obligations.

**Real Estate Investment Trust Act of 1960**

The federal law that authorized REITs. Its purpose was to allow small investors to pool their investments in real estate in order to get the same benefits as might be obtained by direct ownership, while also diversifying their risks and obtaining professional management.

**Real Estate Investment Trust (REIT)**

A REIT is a company dedicated to owning, and in most cases, operating income-producing real estate, such as apartments, shopping centers, offices and warehouses. Some REITs also engage in financing real estate.

**REIT Modernization Act of 1999**

Federal tax law change whose provisions allow a REIT to own up to 100% of stock of a taxable REIT subsidiary that can provide services to REIT tenants and others. The law also changed the minimum distribution requirement from 95% to 90% of a REIT's taxable income -- consistent with the rules for REITs from 1960 to 1980.

**Straight-lining**

Real estate companies such as REITs "straight line" rents because generally accepted accounting principles require it. Straight lining averages the tenant's rent payments over the life of the lease.

**Tax Reform Act of 1986**

Federal law that substantially altered the real estate investment landscape by permitting REITs not only to own, but also to operate and manage, most types of income-producing commercial properties. It also stopped real estate "tax shelters" that had attracted capital from investors based on the amount of losses that could be created.

**Total Market Cap**

The total market value of a REIT's (or other company's) outstanding common stock and indebtedness.

**Total Return**

A stock's dividend income plus capital appreciation, before taxes and commissions.

**DISCLAIMER**

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## **Important Disclaimer**

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