

# CRISIL YOUNG THOUGHT LEADER 2007

## Methodologies for valuing real estate companies

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## Executive Summary

Most strategic asset allocations have consisted primarily of allocations to the three “traditional” asset classes—stocks, bonds, and cash. Expanding the investable universe beyond these three asset classes typically improves the risk-return characteristics of a strategic asset allocation. For years, many institutional investors have included a policy or strategic asset allocation to commercial real estate.

REITs are publicly traded real estate companies that provide almost all investors access, albeit indirectly, to commercial real estate. The transparent tax treatment of REITs gives investors access to the same cash flow characteristics that previously were only available to direct commercial real estate investors. Today, the growth of global REITs and listed real estate stocks provides investors around the world with access to commercial real estate investment, which should provide investors with new diversification and return enhancement opportunities. Nevertheless, the dramatic growth of REITs and listed real estate also creates new questions for asset allocators as the definition of “real estate investing” evolves.

With this premise, the paper begins with an overview of the global real estate investments over the last couple of years. Following this is the detailed discussion on the scenario in India where a number of issues like the dramatic increase in real estate valuations, the real estate fundamentals, the key issues to be considered for selecting a real estate stock as an investment option and some of the pitfalls to be avoided.

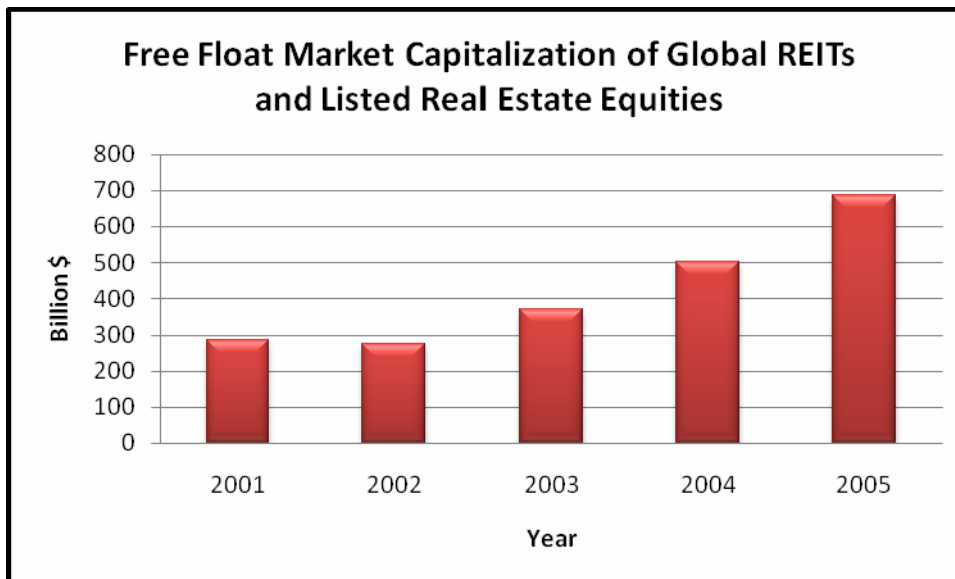
The REIT scenario in India - its possible advantages and issues follow next. With no proper disclosure standards or standard valuation methodologies adopted universally a set of best practices that could be adopted form the crux of the discussion. These best practices give an illustrative account on some of the most important issues plaguing the industry today. These include accounting standards, valuation methodologies, disclosure norms etc. Some of the best practices like the format of cash flow, balance sheet, profit and loss accounts have been numerically illustrated for better understanding.



The paper concludes with an overview of what real estate investment is all about and the way forward to deal with some of the major issues.

## Global Listed Real Estate Investment

Over the last 30 years, the United States and Australia have provided the majority of investment opportunities for REITs and publicly traded real estate companies. However, REITs today operate in more than 20 countries, and listed real estate companies operate in many more, resulting in significant worldwide growth of publicly traded real estate equity market capitalization. The dramatic increase in the amount of money invested in global REITs and listed real estate equities is evident in Figure 1. Between January 2002 and June 2006, the free float equity market capitalization of global REITs and listed real estate equities grew from \$280 billion to \$720 billion, a compound annualized increase of 23%. REITs and listed real estate companies comprise an asset class that is now available to investors around the globe.



The table identifies the numbers of REITs and listed real estate stocks in each of the indices, the approximate market capitalization of the REITs and listed real estate stocks in each of the indices, the market capitalization of the index, and the percentage of the market capitalization of each index that is represented by REITs and listed real estate stocks.

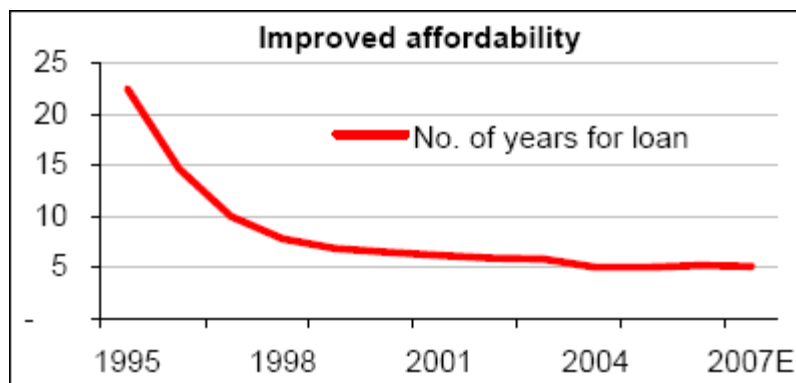


Asset Class Proxy	Total Number of REITs and Listed Real Estate Stocks	Approximate Market Capitalization of REITs and Listed Real Estate Stocks in Index	Market Capitalization of Index	Percentage of market capitalization represented by REITs and Listed Real Estate Stocks
S&P 500	11	\$98	\$11,529	0.85%
Russell 1000 Value	42	\$185	\$6,470	2.86%
Russell 1000 Growth	12	\$32	\$6,264	0.51%
Russell 2000 Value	67	\$52	\$639	8.08%
Russell 2000 Growth	28	\$11	\$642	1.79%
MSCI EAFE	64	\$242	\$11,167	2.16%

Among the Russell indices, no attempt was made to adjust for REITs that are partially assigned to both a growth and value index; thus, the approximate market capitalization of REITs in the Russell indices is biased upward.

## The Case in India

In the past three years, many 'real estate' have seen dramatic increase in their valuations. The fact is that shortage of dwelling units in India is in the vicinity of around 19 m. So, the demand side has never been an issue. It is important to focus on the 'affordability factor', which is determined by broadly three parameters i.e. the property cost, income levels and interest rates. Prior to 2005, it is a known fact that the fall in interest rates on housing loans and income tax sops to individuals on housing loan repayments, boosted demand for housing in the country.



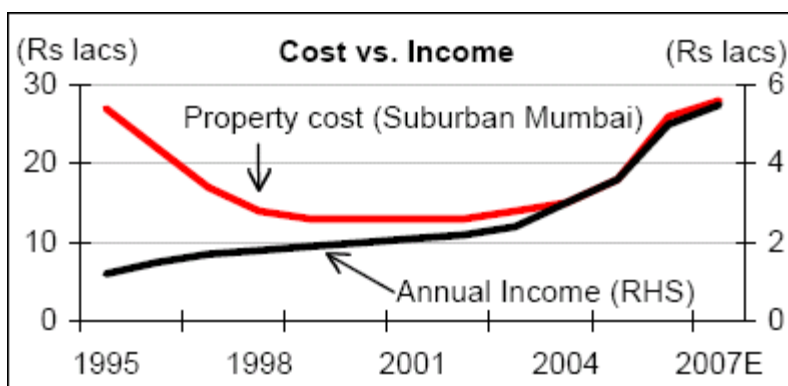
The rise in income accompanied by a decline in property prices, resulted in property being 'affordable' for individuals. Later the property prices starting accelerating at a faster pace led by robust demand, with supply still lagging.

Assuming a 9% growth in annual income of households in general, it is clear that property is not that affordable as it is made out to be. This is because prices have skyrocketed and the supply side is still lagging (in terms of good quality construction). Add to this the fact that interest rates have started moving up in the last one year.

## Real estate fundamentals

### Demand drivers for real estate

Demand supply-gap for quality residential housing, favorable demographics, rising income levels, availability of financing options as well as fiscal benefits available on availing of home loan are the key drivers supporting the demand for residential construction. In addition to this, demand for office space from the IT/BPO segment is expected to continue.



Also, buoyancy in organized retail is expected to result in huge demand for real estate construction.

### Key parameters for selecting a real estate stock

For an average investor, size of the 'land bank' remains the sole criterion for investing in real estate companies. More often than not, their decisions are based on these land banks with little or no importance attached to the execution time and the margins of the projects. While land banks definitely give an indication of visibility in growth of the company's revenues, there are a few other factors that investors need to consider before investing in stocks from the sector. These include:



**Management:** Though management is an important criterion for investment across the sectors, it assumes greater significance in the real estate industry considering the poor disclosure standards followed by the companies.

**Key ratios:** Investors should focus on working capital to sales (considering high gestation period of projects), debt to equity, operating margins and return on capital employed ratios. Also, considering the huge amount of funding required for timely execution of projects, investors should also keep a check on the possible dilution in equity, going forward.

**Valuations:** The 'price to earnings (P/E) ratio', is an appropriate metric for valuing construction companies. Besides, investors can also use 'price to sales (P/S) ratio' for valuation purpose.

When valuing a real estate company, taking the 'best' price per square foot skews the investment decision in favor of risks. It is therefore, pertinent to value real estate companies based on a 'normalized' square foot price. It is also important to focus not just on the 'price per square foot' but also the 'profit per square foot'.

### Some pitfalls

As far as the real estate companies are concerned, these companies are entirely being valued based on their land banks i.e. the total land they own. Further, even the lands are being valued using a high per square feet rate. Add to this the fact that there are no clear valuation methods available for valuing land accurately; not to forget, the highly varied costs of land in different parts of the country.

## Real Estate Investment Trusts in India

REITs, when launched by the mutual funds after SEBI approval, will mobilize substantial investment amounts. Such real estate funds will remove a major handicap for small investors from investing into real estate, since investments in the same calls for large amounts and cumbersome procedures, for both entry as well as exit.

The medium of mutual funds can prove to be useful for retail investors to participate in the real estate boom. By the very nature of things, a mutual fund will not be able to invest in a transaction where there is an unaccounted element. The good news is that the real estate



market is slowly coming around to the "white" economy. On the taxation front, returns from real estate funds will be fully exempt in the hands of investors. Similarly, exemption under Wealth Tax will be available even if the holding is in excess of Rs 1,500,000.

## Best Practices Recommendations

### General Items and Narrative

#### Management review and narrative – Strategy information

Real estate companies should include a “strategy segment” in their management review and narrative. This segment should at least cover the following elements and subjects<sup>1</sup>:

- Corporate vision/ mission
- Review of the strategy for the year under review
- Current Position, such as:
  - Position in current principal markets
  - What is the principal nature of the business? How will that change?
  - Discussion of principal asset classes (locations – countries/ cities; property types; activity types such as investment, trading, facilities management, etc.)
  - Discussion of service activities – current & proposed
- Market Outlook
- Strategy for coming reporting year(s)
- Challenges envisaged in the coming reporting year(s).

#### Management review and narrative – Financial risk management policies

Real estate companies should provide a clear description of their policies for managing financial risks, including:

- A description and sensitivity analysis of the aggregate effect of interest rate changes on a company’s interest and other financial expenses
- A description of the group’s policy in relation to fixed vs. floating interest rate exposures
- A description of the group’s policy in relation to interest rate maturity dates



- A description of the group's policy in relation to managing currency positions

### Development assets

Real estate companies should include the following information in their management narrative on development assets:

- Information on sub-portfolios as appropriate: (e.g. appropriate sector, region or city):
  - Development costs, including costs to date, costs to completion and capitalized interest
  - Breakdown of lettable area according to regions and usage (e.g. office, residential, etc)

### Investment assets

Real estate companies should include the following information on investment assets in their management narrative or in an exhibit:

- Information on sub-portfolios as appropriate: (e.g. appropriate sector, region or city)
- A list of the major properties owned, containing the major information for each major property/building in the portfolio

## Accounting and valuation principles

### Investment property – Accounting basis

#### *Issue*

IAS 40.24 allows real estate companies to choose either the fair value model or the cost model as their accounting policy for its investment properties.

#### *Rationale*

- Fair value accounting will enhance uniformity, comparability and transparency of financial reporting by real estate companies.
- Fair value accounting allows performance benchmarking with direct property market indices.

#### *Recommendation*

- Real estate companies should account for their property investments based upon the fair value model.



- Where real estate companies decide not to follow the above recommendation and instead account for their investment properties based upon the depreciated cost model, the rationale for this should be clearly explained in the notes to the accounts.

### **Investment property – Valuation standard**

**Valuation** - the valuation of investment property held by real estate companies should be at fair value (market value), assessed in accordance with International Valuation Standards (IVS), as set out by the IVSC.

**Timing** - Companies should have the portfolio valued by an external valuer at least once a year per the year end reporting date. Companies are encouraged to have their portfolios externally valued twice a year.

**Reporting** - the full-ungearred portfolio value should be reported as a minimum, in addition to a note of confirming compliance with IVS and any departures or additional assumptions employed.

**Disclosure** - real estate companies should disclose the valuation methodology applied (e.g. open market value existing use, net of purchasers costs), and specify the quantitative elements and assumptions applied in valuing the investments property. For instance, when a DCF approach is used, the average growth rates, costs, discount rates and exit yields should be quoted.

**Balance Sheet** - the valuation of assets for the entire portfolio, and sub-portfolios, should directly and transparently tie to a company's balance sheet. A reconciliation of the movements in the value of investment properties from the prior year should be provided in the notes to the accounts.

### **Borrowing costs**

Real estate companies undertaking (re)development projects or refurbishments should capitalize borrowing costs during the development period as follows:

**Start:** at the beginning of the project, e.g. when expenses for the project are being made.

**End:** at completion of (the construction of) the project. No interest is to be capitalized for the period in which the real estate is finalized, but not (fully) let.

**Rate:** the borrowing costs to be capitalized (with disclosure of the rate used).



## Presentation of accounts

### Profit & loss accounts

Real estate companies could present their profit & loss accounts in a format, which resembles the one presented below.



<b>Consolidated income statement</b>			
For the year ended 31 December 2005			
<b>In thousands of euro</b>	<b>Note</b>	<b>2005</b>	<b>2004</b>
<b>Total revenues</b>		60,407	43,061
<b>Total expenses excluding finance costs</b>		(46,982)	(27,577)
Gross rental income		18,836	20,451
Interest received on finance lease assets		411	370
Ground rents paid		(460)	(414)
Service charge income on principal basis		3,458	3,112
Service charge expenses on principal basis		(3,216)	(3,260)
Property operating expenses		(9,971)	(8,974)
<b>Net rental income</b>		9,058	11,285
Proceeds from sale of trading property		9,424	-
Carrying value of trading properties sold		(8,976)	-
<b>Profit on disposal of trading properties</b>		448	-
Administrative expenses		(7,409)	(6,668)
Other income		7,741	6,898
Other expenses		(2,175)	(1,544)
<b>Net other income</b>		(5,566)	(5,354)
Investment property disposal proceeds		12,437	8,334
Carrying value of investment property disposals		(10,446)	(6,092)
<b>Profit on disposal of investment property</b>		1,991	2,242
Valuation gains		8,100	3,896
Valuation losses		(4,329)	(625)
<b>Valuation movements</b>		3,771	3,271
<b>Net operating profit before finance lease cost</b>		13,425	15,484
Share of the profit of associates		200	180
Dividend income		267	240
Net financing costs		(849)	(764)
<b>Profit before tax</b>		13,043	15,140
Income tax expense			



	(4,475)	(4,028)
<b>Profit for the period</b>	8,568	11,112
<b>Attributable to:</b>		
Equity holders of the parent	8,140	10,632
Minority interest	428	480
<b>Profit for the period</b>	8,568	11,112
Basic earnings per share (euro)	2.50	3.35
Diluted earnings per share (euro)	2.37	3.31

### Balance sheet

Real estate companies could present their balance sheet according to the structure and elements presented on the next page.



<b>Consolidated Balance Sheet</b>		
As at 30 December 2005		
In thousands of euro	2005	2004
<b>Assets</b>		
Investment Property	25,960	14,141
Development Property	4,211	10,003
Other property, plant and equipment	5,300	5,603
Finance lease receivables	8,222	8,744
Investments in associates	2,025	1,558
Other investments	3,037	3,379
Goodwill	1,041	1,282
Deferred tax assets	143	432
<b>Total non-current assets</b>	<b>52,484</b>	<b>47,461</b>
Investment properties held for sale	100	-
Development properties held for sale	200	-
Trading properties	18,965	15,399
Investments	243	568
Income tax receivable	81	228
Other receivables	19,538	21,532
Cash and cash equivalents	2,415	1,990
<b>Total current assets</b>	<b>41,787</b>	<b>39,717</b>
<b>Total assets</b>	<b>94,271</b>	<b>87,178</b>
Equity		
Issued capital	15,045	14,550
Share premium	4,613	3,500
Hedging and translation exposure	300	-
Other reserves	942	942
Retained earnings	19,722	14,121
Total shareholders' equity	40,622	33,113
Minority interest	1,196	820
Total equity	41,818	33,933
<b>Liabilities</b>		
Interest-bearing loans and borrowings	20,942	17,116
Employee benefits	1,907	1,730



Provisions	910	400
Deferred tax liabilities	2,914	373
<b>Total non-current liabilities</b>	<b>28,135</b>	<b>21,119</b>
Bank overdraft	334	282
Interest-bearing loans and borrowings	4,390	6,476
Other payables	18,834	24,168
Provisions	760	1,200
<b>Total current liabilities</b>	<b>52,453</b>	<b>53,245</b>
<b>Total equity and liabilities</b>	<b>94,271</b>	<b>87,178</b>

### Cash flow statement

It is recommended that the cash flow statement uses the indirect method. Real estate companies could present their cash flow statement according to the structure presented on the following page.



Consolidated statement of cash flows		
For the year ending 31 December 2005		
In thousands of euro	2005	2004
<b>Operating activities</b>		
Net profit before finance lease cost	7,144	11,113
Unrealized valuation results	1,924	(3,271)
Realized gains/losses disposals	(1,991)	(2,242)
Depreciation and amortization	-	-
Movement in receivables	2,005	1,800
Movement in payables	(2,683)	657
Movement in provisions	(440)	-
<b>Cash generated from operations</b>	<b>5,959</b>	<b>8,057</b>
Interest paid	(1,255)	(1,734)
Interest received	145	238
Income taxes paid	(514)	1,048
<b>Cashflows from operating activities</b>	<b>4,335</b>	<b>5,513</b>
<b>Investing activities</b>		
Proceeds from sale of investment property	8,223	1,235
Proceeds from sale of developed property	500	-
Dividends received	200	291
Acquisition of investment property	(7,953)	-
Capital expenditure on investment properties	(500)	-
Acquisition of other investments	(2,298)	-
Development expenditure	(3,751)	(3,101)
Acquisition of other property, plant and equipment	(588)	(449)
<b>Cashflow from investing activities</b>	<b>(6,167)</b>	<b>(2,024)</b>
Proceeds from the issue of share capital	1,630	-
Proceeds from the issue of convertible notes	5,000	-
Proceeds from the issue of redeemable preference shares	2,000	-
Proceeds from other non-current borrowings	200	-
Repurchase of own shares	-	(280)
Repayment of borrowings	(4,397)	(1,500)
Payment of finance lease liabilities		



	(531)	(562)
Payment of transaction costs	(302)	-
Dividends paid	(1,243)	(520)
<b>Cashflow from financing activities</b>	<b>2,357</b>	<b>(2,862)</b>
Net increase in cash and cash equivalents	525	627
Cash and cash equivalents at 1 January	1,568	966
Effect of exchange rate fluctuations on cash held	(12)	(25)
<b>Cash and cash equivalents at 31 December</b>	<b>2,081</b>	<b>1,568</b>

## Notes and additional disclosure

### Financing and debt position

To enable readers to fully understand key those elements of their accounts, entity's should provide full narrative explanation of:

- The components of the net finance charge in their accounts;
- Explanations of the market valuations of their hedging instruments and/or debt.

In addition real estate companies should provide a clear description of their debt profile, at least including information on:

- Proportion of debt that is secured by specific assets versus unsecured;
- Weighted average cost of debt.

### Net asset value and earnings per share

#### Introduction

The introduction of IFRS has resulted in substantial changes to reported profits and net assets for real estate investment companies. Companies across Europe have begun reporting their results under IFRS and many are making various adjustments to the IFRS GAAP measures for Earnings per Share ('EPS') and Net Asset Value ('NAV') per Share to help explain their performance to investors and analysts.



In those countries where real estate has been accounted for on the balance sheet at fair value it has become common for industry analysts to calculate and publish a 'triple net' NAV per share. Guidance has also been included for the calculation of a similar measure.

These performance measures do not replace the GAAP measures but provide additional information to help investors understand the performance of a company.

### Earnings per share (EPS)

The intention is that the adjustments would be audited so that the EPRA measures of earnings and net asset value per share have credibility with investors.

Earnings per share (EPS)	
<b>Diluted EPS per IFRS income statement</b>	X
(i) Revaluation movement on investment properties, development properties held for investment and other investment interests	X/(X)
(ii) Profits or losses on disposal of investment properties, development properties held for investment and other non-current investment interests	X/(X)
(iii) Tax on profits or losses on disposals	X/(X)
(iv) Negative goodwill / goodwill impairment	(X)/X
(v) Movement in fair value of financial instruments	X/(X)
(vi) Deferred Tax	X/(X)
(vii) Minority interests in respect of the above	X/(X)
<b>Diluted EPS</b>	X

### NAV

Net asset value per share (NAV)	
<b>NAV per share per the financial statements</b>	X
Effect of exercise of options, convertibles and other equity interests	(X)
<b>Diluted NAV, after the exercise of options, convertibles and other equity interests</b>	X
(i) Revaluation of investment properties, development properties held for investment and other noncurrent investments	X
(ii) Fair value of tenant leases held as finance leases	X
(iii) Fair value of trading properties	X



(iv) Fair value of financial instruments	X/(X)
(v) Deferred tax	X
<b>Diluted NAV</b>	<b>X</b>

### Triple net NAV

Triple net asset value (NAV)	
<b>Diluted NAV</b>	<b>X</b>
(i) Fair value of financial instruments	X/(X)
(ii) Fair value of debt	X/(X)
(iii) Deferred tax	(X)
<b>Diluted NNAV</b>	<b>X</b>

### Conclusion

Real estate as an asset class is vastly different from capital market assets. It is a natural hedge against inflation, experiences low volatility and hence generates positive long-term returns. With different valuation techniques and methodologies followed, differing disclosure norms, different accounting standards, following the best practices suggested could lead to normalization of disclosure information which could eventually lead to better informed decisions.



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