REITs: A Play on Core Real Estate

A historical analysis of public and private real estate returns since 1995 in key global markets indicates that the two are positively correlated and that the degree of correlation becomes higher over longer holding periods or time horizons. Given the differences in pricing mechanisms between the listed and private markets, our analysis also shifted returns series to determine if additional increases in correlation occurred by lagging the performance of listed real estate securities to private market returns. As a result of the analysis, the premise of this paper is to demonstrate:

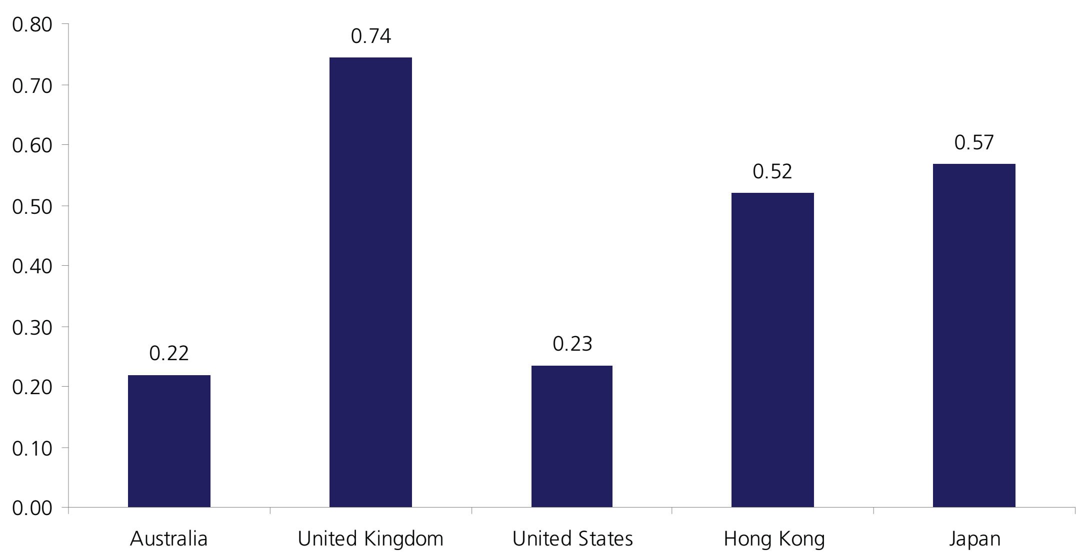
- **REITs are Real Estate** - listed real estate is a reasonable proxy for private real estate
- **Listed Real Estate Leads Private Real Estate** - performance of the listed markets tend to be a leading indicator of the direction of the private real estate market returns.

Historically, public real estate's liquidity, diversification capabilities and transparency has made it a useful addition to diversified portfolios. In the current environment wherein the direct real estate markets are lagging the public real estate markets, and where the listed real estate companies are proactively improving their balance sheets, there are additional considerations to increase allocation to listed real estate stocks in a diversified portfolio.

REITs are Real Estate

To examine the relationship between public and private real estate returns, our study covers five major markets that account for approximately 80% of the market capitalization of the world's developed property markets – Australia, Hong Kong, Japan, the U.K. and the U.S.[1] With the exception of Australia and Japan, our analysis spans from 1995-2008, thus covering both up-market and down-market cycles. Over this period, returns in public real estate have proven to be a reasonable proxy for the private real estate as shown below in Exhibit 1.[2]

Exhibit 1: Coincident Rolling Correlation of Public and Private Real Estate Returns, 1995-2008



Source: NCREIF, IPD, JLL, ING Clarion Real Estate Securities
Note: Data for Australia from 1996 and for Japan from 2000
Japan and Hong Kong Private market data consists of office properties only

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The U.K., Hong Kong and Japan demonstrate the highest correlation between returns. The reason for these higher correlations may lie in the non-index transaction based data series used for Hong Kong and Japan which provide more 'real time' pricing and hence display a higher correlation to the listed real estate indices. In the U.K., the direct market index re-prices every month and thus exhibits a higher correlation with the listed real estate market.

The Australian and the U.S. public markets demonstrate the lowest correlation with the private market over this period. A key reason for this difference is the appraisal-based methodology used in the direct real estate index calculations which has led to an issue in identifying 'true' market pricing.[3] (Alternate sets of private real estate returns for the U.S., based on transaction values show higher correlation with the public real estate markets).[4] Other reasons for lower correlations lie in the smaller pool of properties included in the direct market indices relative to the total commercial real estate markets, which tends to skew returns. The use of leverage in the listed market is an additional factor which helps to explain the lower correlation with the direct market indices, which are calculated on an unleveraged basis. More specific to Australia, the lower correlations may be due to the composition of the asset base (almost 50% of the physical assets lie outside the country) as well as the relatively high levels of non-rental income.

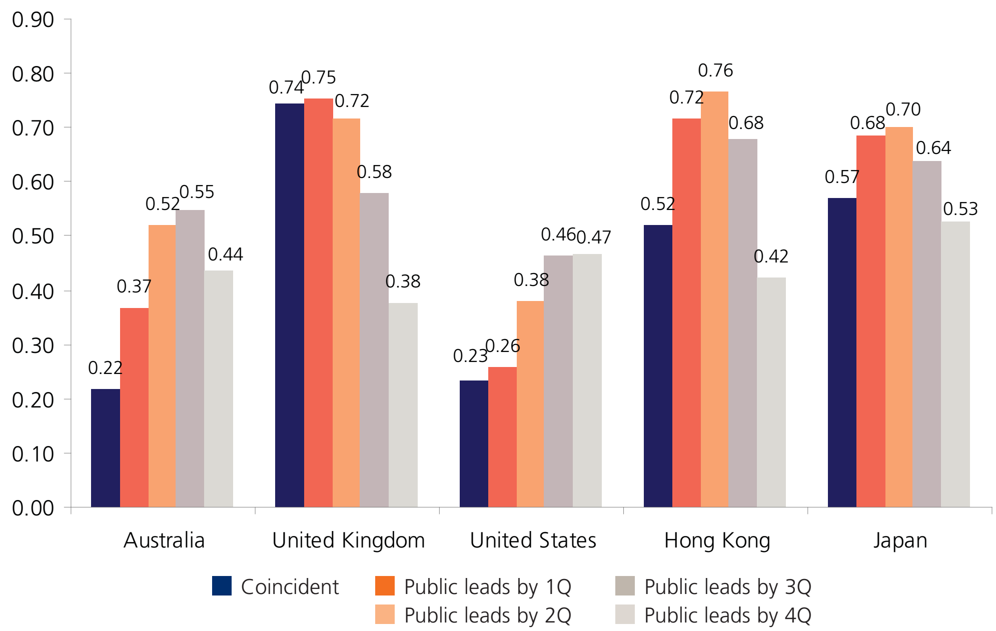
The correlation between the private and public real estate, in most of the markets covered in our analysis, tend to increase over time given the cyclical nature of real estate. Longer duration comparisons of returns capture more complete private real estate markets cycles which tend to be longer than public real estate cycles.

However, perfect correlation between the public and private real estate markets will never be possible because of the differences in their respective pricing mechanisms and differences in liquidity. In the listed market, changes and expectation of changes in property values are reflected almost instantaneously, while in the direct market quarterly or annual appraisals are used to reflect market valuations. The inevitable result is a lag between the two different forms of ownership, with public markets given their rapid assimilation of price information typically leading the direct markets.

Listed Real Estate Leads Private Real Estate

If public markets returns lead private market returns, lagging public real estate market returns should lead to a higher correlation

Exhibit 2: Rolling Annual Correlation of Public and Private Real Estate Returns, 1995-2008

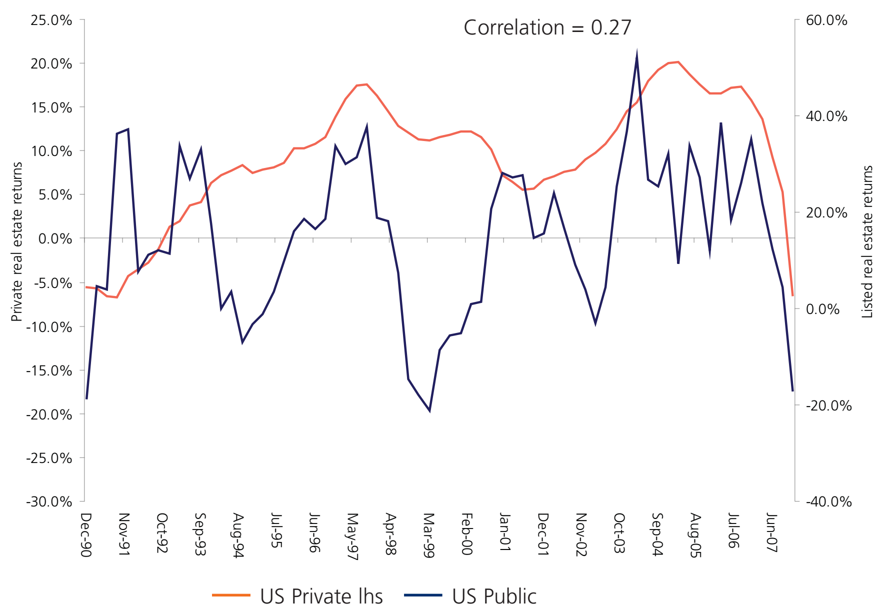


Sources: IPD/PCA, NCREIF, S&P Developed Property Index, ING Clarion Real Estate Securities
Australia return series from June 1996

between listed and private real estate returns. To analyze this proposition, we lagged public market returns by one to four quarters to examine if correlations with private markets increased. As presented in Exhibit 2, lagging public market returns to the private markets does increase correlation levels materially across all countries in our study. Hong Kong's public market typically reaches its peak (or trough) one to two quarters before the private market, while the U.S. public market reaches its peak (or trough) typically three-to-four quarters ahead of the private market. The Japanese and U.K. public markets typically reach their peaks (or troughs) by two quarters, while the Australian public market typically leads the private market by three quarters. Hong Kong's relatively short lead time can be attributed to shorter lease cycles that allow quicker transfer of information to the private real estate market. In Hong Kong, the transaction-based index used in calculating direct market returns also helps increase correlation with public real estate returns. The relatively longer lead time in the U.S. may be ascribed to the lagged nature of appraisal-based valuations in the direct real estate market.

An analysis of the returns between public and private real estate in the U.K. and U.S., two of the most established listed markets with well-recognized direct market indices, reinforces the point that while public leads, the gap and timing vary. As mentioned earlier, in the U.S. the public markets reach their peak (trough) three-to-four quarters before the private markets. Exhibit 3 visually demonstrates the lag between public and private market pricing as well the relatively smoothed return profile of the NCREIF NPI index.

Exhibit 3: Rolling Year-over-Year U.S. Public and Private Real Estate Returns (Shown with a 12-Month Lag) 1991-2008



Source: NCREIF, S&P Developed Property Index,, ING Clarion Real Estate Securities

In the U.K., the lead time between public market peaks (or troughs) relative to private market values is shorter as the gap on average is two quarters. The correlation of lagged public and private real estate returns is also stronger (Exhibit 4).

While the magnitude in the performance lag between the public and private markets varies among countries, the public markets provide an accurate glimpse of the direction in values for the private real estate market. The public market also tends to overshoot and over/under state returns to a larger degree than returns eventually reported by private real estate indices. The higher peaks (or troughs) can be attributed to instantaneous price discovery in the public markets as compared to the appraisal-based valuation mechanism in the private market. On average, U.S. listed real estate securities typically trade within a band of +/- 10% to the estimated net asset values of the underlying real estate as shown in Exhibit 5. Additionally, the public market's exposure to the broader equity market gives it a higher beta than the direct real estate. This is a trade off in exchange for the higher liquidity that listed real estate offers investors.

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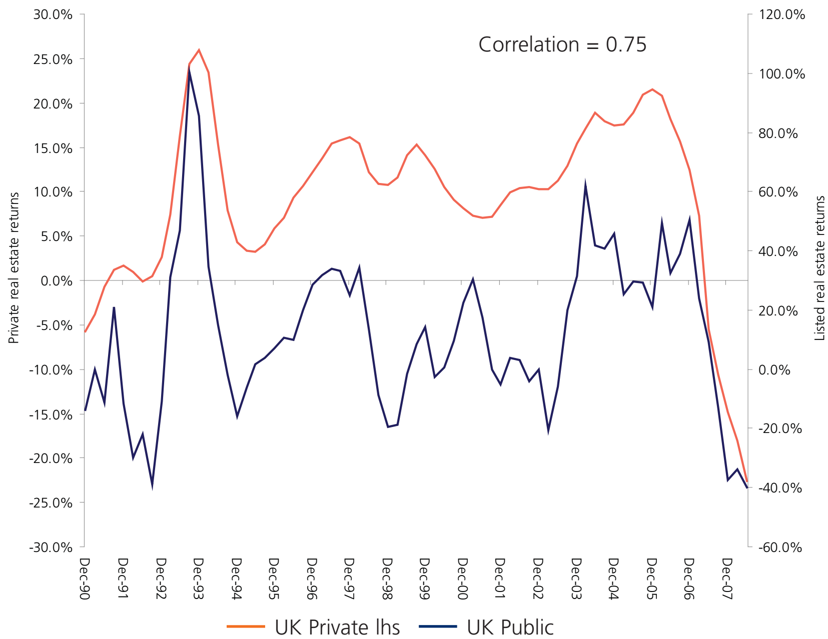
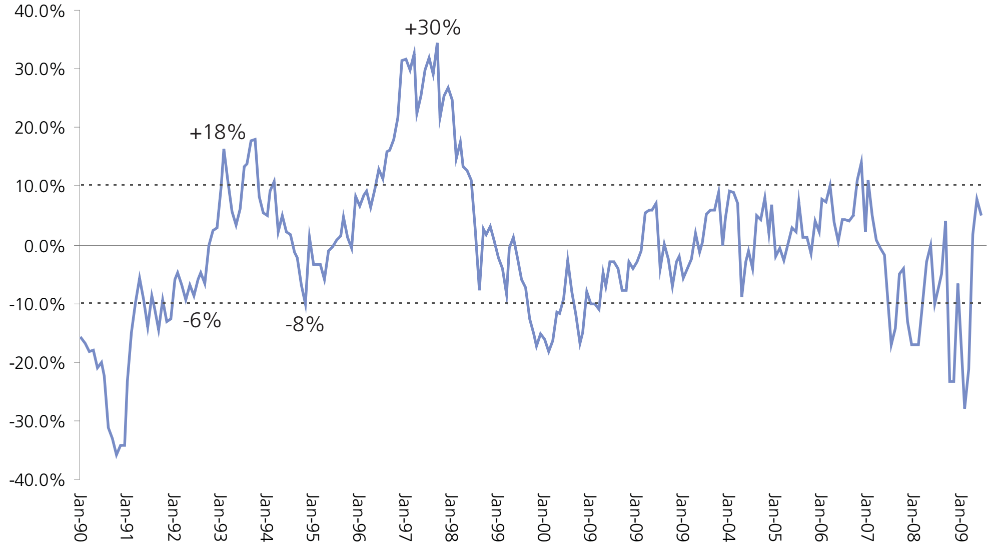
Exhibit 4: Rolling Year-over-Year U.K. Public and Private Real Estate Returns (Shown with a 6 Month Lag), 1991-2008



Source: IPD, S&P Developed Property Index, ING Clarion Real Estate Securities

Exhibit 5: U.S. Share Price Premium/Discount to Estimates of NAV



Source: Green Street Advisors, ING Clarion Real Estate Securities, as of 6/30/2009
NAV discount is not necessarily indicative of future performance

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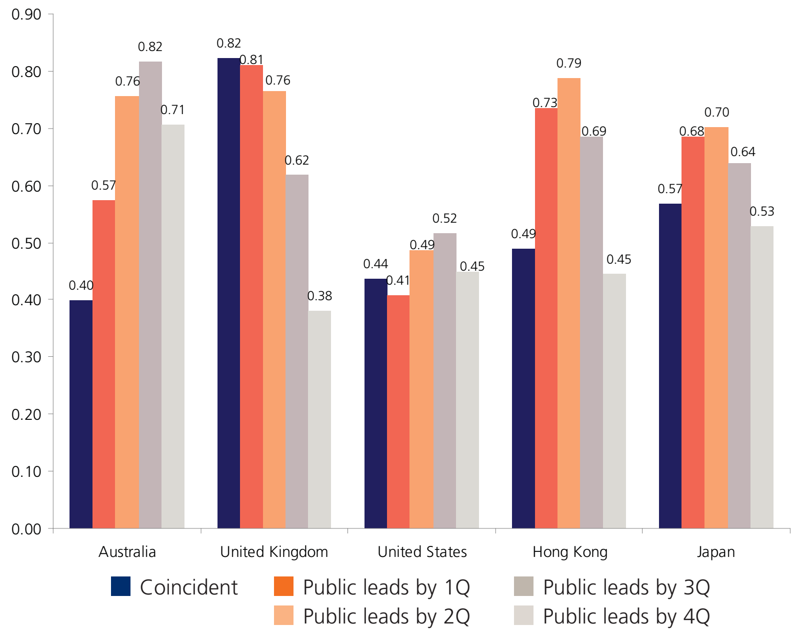
Since 2000, the relationship between public and private real estate returns has grown stronger as shown in Exhibit 6. Several industry and market developments have contributed to this increase; however a key reason has been the adoption of the REIT structure led by Hong Kong, Japan and the U.K. The introduction of the REIT structure has helped to remove structural discounts to underlying property values due largely to the tax efficiencies from adopting the new structure. A second reason is attributable to the use of greater leverage by private real estate investors, evidenced by the growth in value-added and opportunistic funds. Finally, a significant growth in transaction volume in the private market (which increased by 165% globally between 2003 and 2007 according to RCA (Real Capital Analytics) and DTZ (DTZ Holdings) increased the data points to the appraisal process.

Exhibit 6: Rolling Year-on-Year Correlation of Public and Private Real Estate Returns, 2000-2008



Sources: IPD/PCA, NCREIF, S&P Developed Property Index, ING Clarion Real Estate Securities

Why Public Leads the Private Real Estate Market

Two key factors explain the lead between public real estate over the direct market. The most critical factor is liquidity, which allows for instantaneous pricing of information in the public market. Since public real estate securities are traded on national exchanges they are liquid and reflect price movements (investor expectations) rapidly. On the other hand, private market transactions are relatively illiquid and expensive, thus delaying price discovery. In time periods where transaction activity is limited (as has been the case over the past 12-18 months), the illiquidity is exacerbated and price discovery made even more challenging and less accurate. While the listed markets may overshoot, arbitrage will eventually rectify the mispricing.

The second key factor for the lag between public and private real estate returns is the appraisal valuation mechanism used in calculating direct real estate values. The public market incorporates all available information into real-time price changes, thus creating instantaneous price discovery. On the other hand, private market pricing is determined by a variety of endogenous and exogenous factors. The private market pricing mechanism is inherently less transparent than the public market pricing mechanism and is typically based on recent transaction values using a small set of transaction data (if such data are available). As a result, price discovery does not occur until actual sale of property which creates a disconnect between the appraised valuation and the actual transaction price.

Over the long term, listed and direct property returns typically converge. In the short term, arbitrage opportunities can exist and persist, depending upon market conditions. The trade off for an investor is an acceptance of higher price volatility in the listed market in return for daily liquidity and the ability to make significant tactical alterations to a portfolio.

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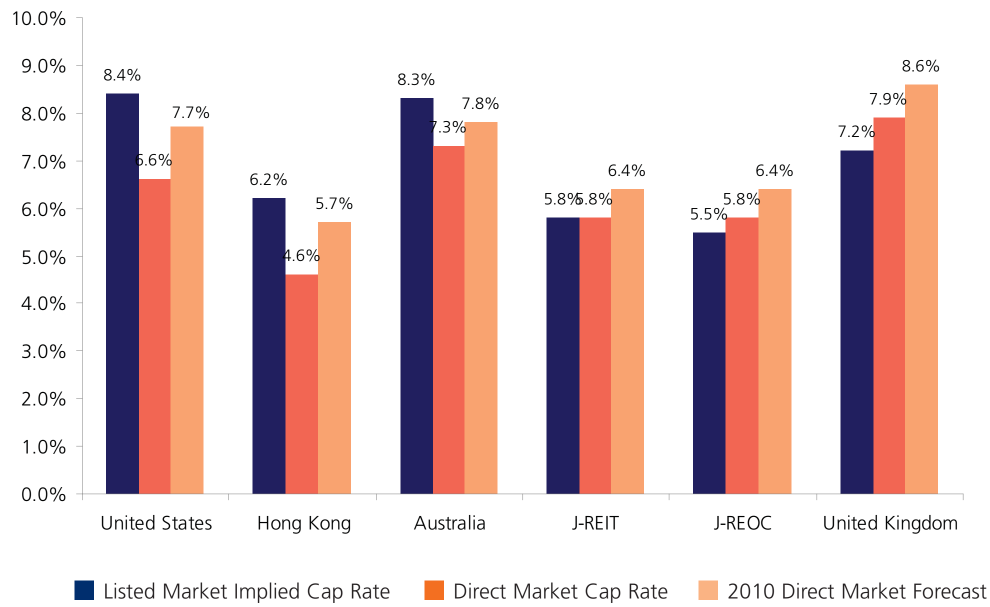
Which Way Next?

The data show that a clear lead exists between public and private real estate returns across the five key global markets. We now examine which form of investment offers the more compelling value over the short- to medium-term (defined as the next 12-18 months). From a valuation perspective, current cap rates in the listed market compare favorably to current cap rates in the direct market (see Exhibit 7). More compelling are the forecasts of the future direction of yields, shedding light on what may lie ahead for direct market valuations over the next 12-18 months. With the exception of the U.K., implied cap rates from the listed market are substantially higher than the spot direct market cap rates in all our major markets. In other words, the listed market is trading at significantly lower values than the direct market, as of mid-2009. Another important observation is that direct market cap rates are forecast to increase (or property values forecast to decline) in all five markets between mid-2009 and 2010. What this tells us is that even with the direct real estate market forecast to decline in value through 2010, at current yields, the listed market remains more attractively valued.

Exhibit 7: Comparison of Listed and Direct Market Cap Rates



Valuation Gap	-21%	-26%	-12%	0%	5%	10%

Source: IPD, NCREIF, JLL and ING CRES. Listed and direct market cap rates as of 6/30/2009.
Source for 2010 direct market forecasts: ING Real Estate Research Estimates

On an absolute basis, the global listed real estate market (calculated using the S&P Developed Property Index) is down roughly 50% from its peak valuation achieved in 2007, even after factoring in the recent rebound from mid-March lows. Private markets are correcting too albeit in a lagged manner and are still to reach the troughs achieved by the public real estate markets.Thus on an absolute level, global public real estate stocks are attractively priced.

Additionally, public real estate companies have been able to access equity and debt capital markets having raised over $41 billion globally between October 2008 and July 2009. The once moribund debt markets are also become more accessible to real estate companies though secured debt remains more accessible than unsecured debt.

Access to equity and debt capital markets for the listed real estate companies will place them well to take advantage of sales from distressed owners looking to de-lever their balance sheets. Acquisitions will start to become accretive to earnings growth, and for listed real estate companies, offer an opportunity to add high quality real estate assets at reasonable values. Just as the 2005-2007 real estate cycle was marked by large privatization transactions by private sponsors, the next few years could well witness the resurgence of public real estate stocks and the emergence of new listed real estate companies.

Conclusion

Differences in valuation mechanisms between listed and private real estate will lead to inevitable deviations in return patterns; however, over complete market cycles the data provide evidence that there is a positive correlation between return series. For investors who have a long-term investment horizon, performance of listed real estate stocks should lead the performance of direct real estate and be a reasonable proxy for returns. The public real estate market provides an inexpensive means of achieving the benefit of diversification on a global basis, through a transparent portfolio of quality real estate holdings, which are valued on a real-time basis, facilitating an efficient and inexpensive solution to investors that wish to take advantage of favorable relative and absolute pricing.

The efficiencies of pricing transparency and liquidity in the listed markets, supported by a lag in the return series data, show that listed market performance leading direct real estate market performance by one to four quarters, depending on country. Listed real estate has re-priced significantly from 2007 peak valuations and direct real estate values are declining across the five major markets in our study with additional declines forecast for the next 12-18 months.

Although past returns are no guarantee of future performance, historical evidence suggests that the listed market has been an accurate barometer of expected value. There are growing signs that pricing in the listed markets may have bottomed. Global listed real estate companies are taking advantage of improving capital markets to position their balance sheets in preparation for favorable acquisition opportunities in the coming months and years, which would lead to accretive earning growth and the provide a solid base for the next up market.

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Footnotes

1 *As per 6/30/2009 weights in the EPRA/NAREIT Developed Index.*

2 *For our return analysis we have used the S&P Developed Property Index in local currency calculated quarterly to represent the listed real estate markets. For direct real estate returns, we have calculated quarterly returns using the IPD/PCA All Property Returns Index (Australia), IPD All Property Index (UK) and the NCREIF NPI Index (US). For Hong Kong and Japan, we have constructed quarterly returns using prime non-index data series from JLL Hong Kong Office (central) and JLL Tokyo Office CBD (3 kus).*

3 *For a detailed analysis of appraisal based valuation methodology and some of the issues with it see "How Reliable Are Commercial Appraisals? Another Look", Jeffrey Fisher, Mike Miles and Brian Webb (1999), Real Estate Finance, Volume 16, Number 3, pp. 9 – 15, 1999 and "Temporal Aggregation in Real Estate Return Indices," Real Estate Economics, American Real Estate and Urban Economics, David Geltner (1993).*

4 *The transaction based index is calculated by the MIT Center for Real Estate and is a statistical methodology that produces estimates of price movements and total returns based on transactions of properties sold from the NCREIF Index database.*

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