



RESEARCH NOTE

Publicly Traded International Real Estate

March 2007

Executive Summary

- International real estate markets have soared in recent years. The Dow-Jones Wilshire ex-US Real Estate securities index has risen 39.2% over the last 12 months and 35.1%, annualized, over the last three years, outperforming domestic REITS over both time periods.
- Outside of the US, the REIT structure is not very well developed. Thus, most international public real estate indexes include property companies structured as corporations. Mainly because of its tax advantages, the REIT structure is a more efficient format in which to hold real estate. The international real estate market should benefit as the REIT structure expands to more countries.
- While returns have been impressive in recent periods, the international public real estate market is expensive. Relative to the US, international property companies are trading at a larger premium to their NAV. Additionally, the dividend yield on the Dow-Jones Wilshire ex-US Real Estate index is 2.7%, significantly less than the 3.7% yield on REITS in the US. However, the global commercial real estate market has solid fundamentals and correlations between real estate markets in different countries are low, providing nice diversification benefits.
- **Due to concerns about current valuations, we do not recommend allocations to international public real estate at this time.**

In this Research Note, we present an overview of the international public real estate market. While there are nice diversification benefits associated with an allocation to international real estate, valuations appear to be stretched.

International Property Market Overview

In the US, the bulk of publicly traded real estate securities are in the form of REITS. REITS were created in the US in 1960. Since then, REIT assets have ballooned. According to NAREIT, REITS have a market capitalization of more than \$400 billion. Relative to regular corporate ownership, REITS are an efficient structure in which to hold real estate because they are flow through entities and, therefore, do not pay corporate taxes. To qualify, a company must distribute 90% of its income to shareholders.

Outside of the United States the REIT structure is not very well developed. Most developed countries have authorized the REIT structure, however, many of those did so just recently. For example, the United Kingdom just launched its REIT structure in January of this year and Germany just passed legislation that would allow REITS to be created starting in June of this year. Additionally, some countries that do have REIT structures, do not widely utilize them. For these reasons, REIT only indexes/managers hold limited value.

For international mandates, most indexes and managers expand their universe to include companies that own and operate commercial property (i.e. office, retail, residential, etc.). For example, according to Cohen & Steers, REITS constitute 48% of the S&P/Citigroup World ex-US Property index as of March 31, 2007. Property companies own and operate the same assets as REITS; however, they do not have the structural and tax advantages associated with REITS. The S&P/Citigroup World ex-US Property index is relatively well diversified, covering 18 countries and 330 companies. Another major benchmark, the Dow Jones-Wilshire ex-US Real Estate index has 159 constituents and a market value of approximately \$600 billion. International property indexes are relatively well diversified by property sector. However, international real estate benchmarks are less broad and more concentrated than international equity benchmarks. For example, Australia represents 5% of the MSCI EAFE index, but has a weighting of around 20% in most international real estate indexes. On the table on the next page, we list country weightings for two of the major indexes (there are several other major indexes such as the FTSE/EPRA NAREIT Global-ex US and the UBS Global Investors Index). We should note that several of these indexes also have a relatively short track record. For example, the Dow-Jones index was launched in January 2002 (although it has back tested data going back to 1995).

Selected Country Weightings (as of 3/31/07)				
	Dow-Jones Wilshire Global	DJ- Wilshire ex-US	S&P Citigroup World	S&P Citigroup World-ex US
Asia-Pacific	34	52	40	63
Japan	13	20	15	24
Australia	12	19	12	19
Singapore	5	7	4	6
Hong Kong	4	6	9	14
Europe	26	41	21	33
United Kingdom	12	18	9	14
France	4	6	3	5
Netherlands	3	5	2	3
North America	40	7	39	3
United States	35		37	
Canada	5	7	2	3

UBS estimated in June 2006 that just 8% of global commercial real estate is securitized on public exchanges. Currently, the US accounts for 35% to 40% of the public real estate securities market. By comparison, the US represents about 45% of the global equity market. Due to the rapid pace of buyouts and relative under performance, the market share of US REITS has declined by about 10 percentage points over the last year. According to the European Public Real Estate Association (EPRA), Europe accounts for 40% of the world's commercial market, but just 20% of the world's publicly listed market. EPRA estimates that €100 to €150 billion (\$136 to \$204 billion) of commercial property will shift into publicly listed shares over the next five years. European Investors, a New York based real estate firm, expects the market capitalization of the international property market to double over the next decade. The international real estate market has the potential to benefit from the expansion of the REIT structure to more countries and the increased securitization of real estate. This could lead to higher dividend yields in international markets. However, changing the format in which real estate properties are held should not change the underlying value of these properties.

Some bullish commentators argue that real estate markets are operationally, structurally, and financially less efficient in Europe and the Asia-Pacific region than they are in the US and have significant potential for improvement. As their markets improve, it could lead to increased dividends, higher property values, more stable cash flows, and better returns.

Performance Review

REITS have been among the best performing investments in the US since the beginning of this decade. International real estate benchmarks have also posted very strong returns. The S&P/Citigroup World

ex-US Property index has risen 39.2% over the last 12 months. It has gained 31.2% over the last three years and 30.2% over the last five, outperforming the US REIT market over both periods. This is in part due to the weak dollar. International property companies have also experienced volatility levels similar to US REITs. The annualized standard deviation on the S&P/Citigroup index over the last five years has been 12.1%, while the standard deviation on the Dow-Jones Wilshire REIT index was 15.2% over the same time period. Over the last 10 years, international real estate has been more volatile than domestic real estate.

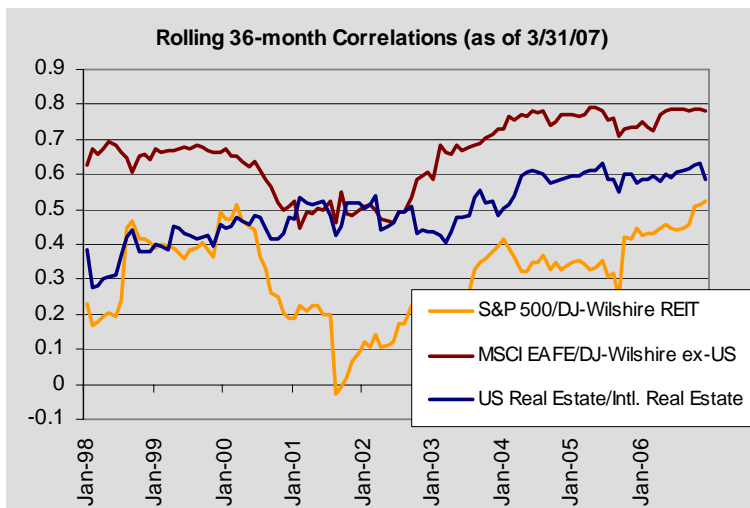
Returns and Volatility (as of 3/31/07)			
	S&P/Citigroup World-ex US	DJ-Wilshire ex- US	DJ-Wilshire REIT
1 Year	39.2	39.2	21.8
3 Years	31.2	28.8	24.0
5 Years	30.2	26.7	22.7
10 Years	11.5	9.1	15.6
1997	-23.2	-23.8	19.5
1998	-8.2	-12.8	-17.0
1999	13.2	4.1	-2.6
2000	3.0	1.2	31.0
2001	-9.5	-7.4	12.4
2002	1.7	0.9	3.6
2003	45.8	40.5	36.2
2004	41.0	39.2	33.2
2005	17.3	10.7	13.8
2006	43.9	44.0	36.0
Standard Deviation			
3 Years	11.2	10.4	17.6
5 Years	12.1	11.5	15.2
10 Years	17.6	16.1	14.7

We estimate that currency has boosted \$USD returns by around 3-4%, per annum, over the last five years. While we believe the dollar is likely to continue to fall, we are uncertain whether the two international real estate indexes will benefit because of their heavy weighting to the Australian dollar and European currencies. These currencies have already experienced a substantial run against the dollar and now appear overvalued on a purchasing power parity basis. Other Asian currencies hold more promise, but they only make up 30-40% of the indexes.

A benefit of international real estate investing is diversification. The correlation between domestic and international real estate has been very low. This is not surprising since real estate is a non-tradable good and property prices and rents are driven primarily by local factors (economic growth, scale of development, etc.). From April 1997 through March 2007, the correlation between the DJ-Wilshire ex-US Real Estate index and

the DJ-Wilshire REIT index was 0.48. Over the last five years, the correlation was 0.50. In contrast, the correlation between US and international equities was 0.85. The correlation between individual markets is also low as shown on the table below. Historically, the correlation between international equities and international real estate has been low, however, in recent periods correlations have been steadily increasing. Additionally, the correlation between international equities and international real estate is higher than the correlation between US real estate and US equities. Nonetheless, one major argument in favor of a permanent allocation to international real estate is its diversification benefits.

	Hong Kong	UK	Australia	Japan
US	0.43	0.31	0.39	0.43
Japan	0.13	0.24	0.03	-
Australia	0.32	0.50	-	-
UK	0.38	-	-	-
Hong Kong	-	-	-	-



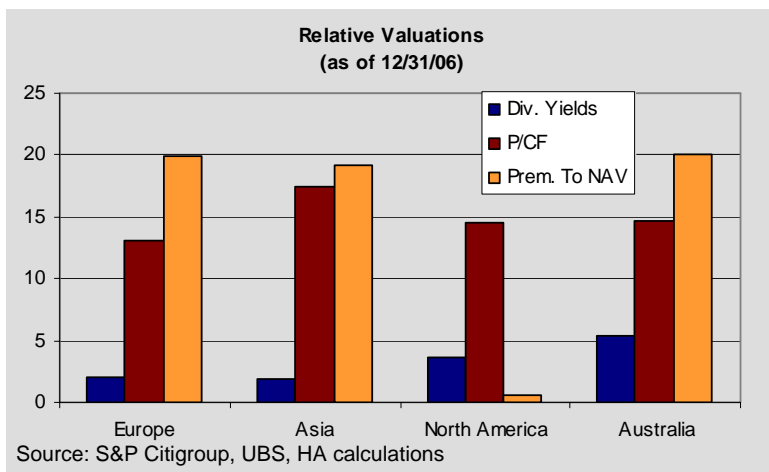
While international real estate has performed extremely well in recent periods, it has experienced extended periods of poor performance. For example, from January 1997 to December 2001, the S&P/Citigroup index declined by 5.7%, on annualized basis, while US REITS rose 7.3% on annualized basis. International real estate has also provided poor protection during prior crisis periods. From September 1997 through October 1998, the S&P/Citigroup World ex-US Property index declined by 44%, while US REITS fell just 7%. However, like domestic REITS, international real estate held up well during the market downturn in 2002. Low historical correlations can also be somewhat misleading. For example, the correlation of prices between different cities in the same country might be low due to different local circumstances. However, both cities are influenced by the same macro-economic conditions. Like equity markets, the global real estate market has benefited

from low interest rates, large amounts of liquidity, and strong economic growth. A change in any of these factors would likely have a negative impact on equity and real estate markets in many different countries. Thus, the question is whether current fundamentals and valuations justify an allocation.

Current Environment

While the fundamentals underpinning the global real estate market appear solid, valuations for publicly traded property companies are elevated. Investors in domestic REITS have benefited greatly from valuation expansion since 2000 as the dividend yield has fallen from 8.5% to 3.7%. As detailed in the last few editions of our Quarterly Research Report, domestic REITS now appear very expensive relative to historical levels, although they appear to be trading in line with their underlying real estate holdings. Data for international real estate suggests that they are trading at even more expensive valuations than domestic real estate.

As of 3/31/07, the dividend yield on international real estate was 2.7% according to Dow-Jones/Wilshire, which is about 30% lower than the 3.7% dividend yield on domestic REITS. Therefore, purely from an income perspective, international real estate appears pricier and less attractive than domestic REITS. When looking at individual markets, yields are higher in Australia than they are domestically. However, interest rates in Australia are also higher than in the US and payout ratios average nearly 100% in Australia, according to UBS. Asian real estate yields are about 2.0% according to S&P/Citigroup, significantly lower than the 3.7% US yield. European yields are also lower; however, the payout ratio only averages 70% in Europe so there is substantial room for improvement. Part of the reason for the lower yields in Europe might be that many companies are structured as REOCs (real estate operating companies) instead of REITS. The transition of property companies from a corporate structure to a REIT structure might push yields higher in that region. Nonetheless, based on current yields, international real estate does not appear to be attractive.



Source: S&P Citigroup, UBS, HA calculations

International real estate companies appear to be trading at a substantial premium to their net asset value. According to UBS, as of 12/31/06, Australia, Europe and Asia are all trading at about a 20% premium to the value of their underlying assets. US REITS, in comparison, appear to be trading near their net asset value. Again, the fact that the REIT structure is not prevalent in other countries might make these figures less meaningful. However, similar to the US, real estate companies in most foreign markets were trading at a significant discount to their NAV in the earlier part of the decade. Some countries are still trading at a discount to NAV; however, even these countries are trading at levels above their historic averages. On the other hand, foreign real estate companies are trading at comparable levels to the US when measured on a price-to-cash flow.

While publicly traded real estate companies appear expensive when compared to their NAV, one could argue that the multiples at which private transactions are taking place justify current valuations and that current net asset values understate the fair market value of the underlying properties. One could also argue historical measures are misleading because of the evolution of the publicly traded global property market. However, based on the current income yield and the multiples at which companies are trading; the market appears to be expensive and likely overvalued.

Some argue that while publicly traded international real estate companies are not cheap, they are fairly valued and still offer the opportunity to earn attractive returns. This is because the fundamentals underpinning the global commercial real estate market appear to be solid and international property companies should experience strong cash flow growth in future periods. Cash flows grew by nearly 9% in 2006 and are expected to grow by approximately 10% in 2007. Cash flows are expected to grow in the high single-digits over the next decade. Falling vacancy rates combined with limited supply could lead to large increases in rents in some markets.

Stronger economic growth in Japan and continental Europe might also serve to push prices and rents upward in the retail and office sectors in those areas. However, much of this might have already taken place. For example, according to data from Jones Lang LaSalle and UBS, vacancy rates for class-A office properties in Tokyo's central business district fell from 9% in 2003 to 0.3% at the end of 2006. Rents increased by 25-35% over this time period. However, rents for retail properties and lower-level office properties have jumped less sharply. Additionally, property prices in many Asian markets (e.g. Japan) are still below their 1997 peak. Overall, it appears that the fundamentals underpinning the global commercial real estate market (falling vacancy rates, limited supply in attractive markets, strong

economic growth, relatively low interest rates) are attractive.

However, valuations for international property companies appear unattractive on both on an absolute basis and on a relative basis when compared to domestic REITS. Some argue that future growth prospects for international real estate justify current high valuations. Still, even if one argues that companies are fairly valued, it appears that the market has already priced potential future growth in. The market also does not seem to be pricing in any downside risks. A slowdown in growth rates or a change in market conditions could result in a steep decline in prices.

Investment Vehicles

Some argue that while market averages look expensive, individual countries/companies are undervalued and thus there are plenty of opportunities that a skillful manager can exploit. However, investment options are limited, but growing, in the space. International real estate has become a trendy asset class and several managers have launched global real estate products, however, most of these products and managers do not have a long-term track record. One has to have faith that any skill demonstrated through US REIT management will transfer to international markets. Still, it would seem a skillful REIT manager might have more opportunity to extract alpha from international markets because of greater inefficiencies.

We often recommend indexing domestic REIT allocations. There are two passive international real estate options currently available to investors. State Street offers an ETF that tracks the Dow-Jones Wilshire ex-US Real Estate Securities index (SPDR DJ Wilshire International Real Estate) and Dimensional Fund Advisors (DFA) offers a passively managed fund that invests in international real estate. The expenses on both of the products are high. State Street's fund has an expense ratio of 0.60%, and DFA's fund is expected to cost 0.56%. These are more expensive than domestic REIT index funds. State Street's domestic REIT index (SPDR DJ Wilshire REIT Index) charges an expense ratio of only 0.25%. This widens the dividend yield advantage of domestic REITS. Net of fees, the yield on a domestic REIT index fund will be around 3.4% versus about 2% for an international real estate fund.

Conclusion

The long-term trends of the international real estate market appear to be favorable. The REIT structure is expanding to more countries and an increasing share of commercial properties are likely to becoming securitized. This should help improve the operating and financial efficiency of foreign real estate markets and companies and could lead to higher yields. The fundamentals underpinning the commercial real estate market (falling

vacancy rates, limited supply in attractive markets, strong economic growth, relatively low interest rates) are attractive and could drive prices and rents higher in many countries. International property companies have experienced strong cash flow growth in recent periods and that strong growth is likely to continue.

To us, the most compelling reason to adopt an international real estate allocation is for diversification. Since real estate exhibits a low correlation to equities and individual markets are not highly correlated to each other, there are diversification benefits associated with an allocation to international real estate. An allocation to international real estate, of course, would also offer greater foreign currency exposure. That said, more than half the universe is denominated in European currencies and the Australian dollar, which are arguably overvalued versus the buck.

Our most significant concern is valuations. It appears that current prices already have priced in most if not all future growth potential. International real estate companies are trading at a significant premium to the value of their underlying properties. In addition, income yields are very low. International real estate appears very expensive on both an absolute basis and relative to domestic REITS. Domestic REITS offer about a 40% higher dividend yield. One has to bear in mind the risks. High current valuations suggest downside risks are present in today's market. Any downturn in economic or capital market conditions or a slow-down in growth could result in a sharp drop in prices.

Due to current valuations, we do not recommend allocations to international public real estate at this time.

Generally, given the high prices of core real estate, we prefer to get exposure to real estate through private partnerships implementing value-added strategies, some of which purchase properties overseas. For clients holding domestic REIT portfolios, either as a placeholder for private investments or as a permanent allocation, we do not view international REITS as a compelling alternative at this point. The dividend yield on international real estate is much lower than that on domestic REITS, and the costs to index the asset class are more than twice as high. While the diversification benefits (including currency) are attractive, we do not believe they are enough to overcome the higher valuations and costs.

We will continue to monitor international public real estate closely and may recommend allocations in the future, particularly if a correction provides a better entry point from a valuation perspective. We will also keep an eye open for active managers who might be able to overcome the valuation disadvantages through skillful country/security selection.

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Sources and Acknowledgements:

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