

# Independent Study Project

## Real Estate Private Equity in Asia: Trends, risks and opportunities

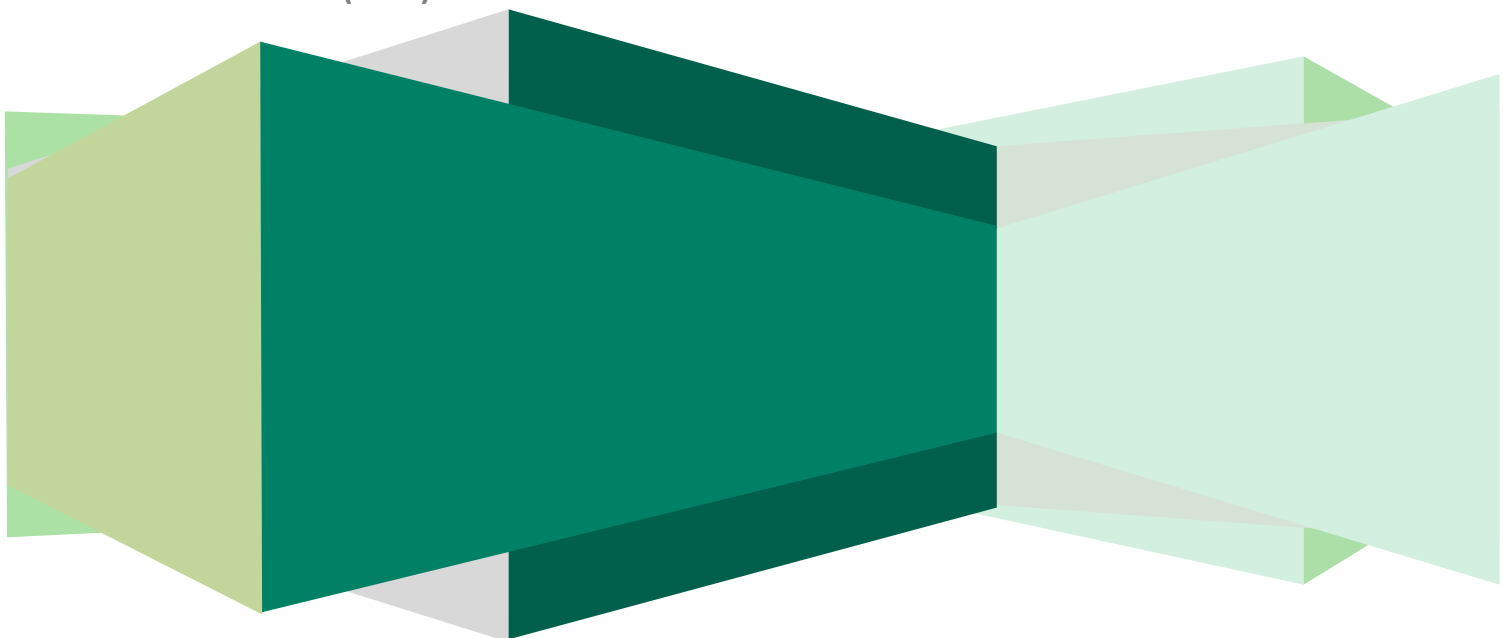
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## Abstract

In light of the recent global financial crisis, investors around the globe are reexamining portfolios, challenging traditional fund management business models, and demanding improved risk-adjusted returns, stronger risk management, accountability, and transparency. Simultaneously, these investors are increasingly looking at Asia given the region's strong macro fundamentals and long-term growth potential – as well as for diversification purposes. To date, wealth creation in Asia has been driven by urbanization; today, the real estate industry group ranks 2<sup>nd</sup> overall (behind banks) in total market capitalization with over \$1 trillion USD (more than the rest of the world combined)<sup>1</sup>. Similarly, private equity as an asset class is young and growing in Asia (under 10 years old) and has much potential given global private equity investors' growing interest in Asia and as Asia's domestic funds continue to emerge and develop. In this independent study project (ISP), we explore and examine the intersection of real estate and private equity in Asia, and specifically try to better understand the current investment trends, risks, and opportunities.

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<sup>1</sup> Analysis from EXS Capital, a pan-Asian private investment advisory and management firm

## 1. Introduction to Real Estate Investing

Real estate investment can be done in several ways depending upon various factors including the amount of investment, risk appetite, level of expertise, expected return, cash flow expectations, complexity of investment, legal and tax regulations. Real Estate is both a physical and a financial asset. So although as an investment it is increasingly crawling across borders and becoming a more international – even global; as an asset class, its key characteristics remain local.

Investments in real estate can be in one of the following forms: unlisted / private real estate and listed / public real estate (real estate securities). In the former, investments are made in real assets and have a steady cash flow from rental income. Public equity real estate is accessed by investments in the share of property companies that are listed /quoted on a stock market. These investments enable access to property investments and expertise with a greater liquidity than unlisted investments.

Another way to classify the Real Estate asset classes is as direct investments (direct ownership in real estate assets via 100% equity or joint venture) in specific properties or indirect investments (PE Funds, REITS, Debt etc) in a property or a portfolio of properties. As can be seen in the examples mentioned, indirect implies that there is there is an intermediary between the investor and the property, which can be a fund or a real estate company.

The following chart categorizes the various investments across the public-private sectors:

	<b>Listed (Public)</b>	<b>Unlisted (Private)</b>
Equity	<ul style="list-style-type: none"> <li>• Public property companies</li> <li>• Listed Funds</li> <li>• ETFs</li> </ul>	<ul style="list-style-type: none"> <li>• Direct Investments</li> <li>• Private Funds</li> <li>• Property Derivatives</li> </ul>
Debt	<ul style="list-style-type: none"> <li>• Mortgage-Backed Securities</li> </ul>	<ul style="list-style-type: none"> <li>• Direct Lending</li> </ul>

### Key Players

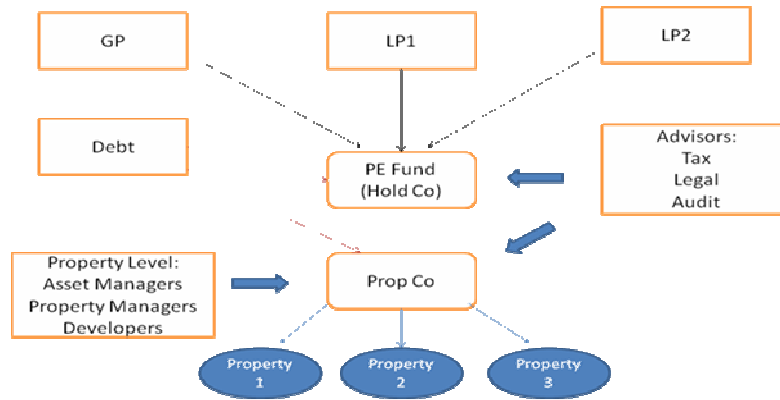
In private equity funds, there can be one or various investors who have invested in the fund and their liability is capped at the amount committed by the investor (LP – Limited Partner). Nearly all investors in private equity are passive and rely on the manager to make

investments and generate liquidity from those investments. Typically, governance rights for limited partners in private equity funds are minimal.

The General Partner (GP) makes all of the decisions about the private equity fund and is also in charge of managing the fund's portfolio. The general partner of a private equity fund will be compensated, or paid, with a management fee. This management fee is a certain percentage of the total amount of the fund's capital. They also earn a carry or performance fee. It is a percentage compensation over and above the hurdle rate or the target rate of return. Due to the complexity of the investments, there are several advisors including the legal, tax, audit etc. at various levels in the waterfall fund structure.

Further, in addition to the parties mentioned above, there will be asset managers, property managers and or developers at each property level who will be responsible for the ongoing operations. In some instances, the asset manager takes on the role of the GP in the fund structure.

### Real Estate PE Fund Structure



### Why Real Estate?

Traditionally, real estate has been considered a good diversification mechanism in a portfolio of investments due to the low/ negative correlation with the economy. Traditional core real estate investments were viewed as long term bond portfolios with a regular cash flows (lease/rental) and an upside potential (capital appreciation). It has also been considered an inflation hedge.

## 2. Asia Context and Related Trends

According to the Private Equity Real Estate Quarterly Review APAC, January 2009, PERE magazine quoted that more Asia-dedicated real estate funds closed in 2008 than any other geography. In 2009, Asia-focused real estate fundraising continued with key global players leading the way: Grosvenor (launched a \$600mn Asia fund), Carlyle (\$1 bn Asia fund), AMP Capital Investors (\$2 bn fund targeting Japanese malls and Singapore offices), and Gaw Capital (\$1.5 bn for Chinese real estate).

According to a 2010 Cushman and Wakefield study, global real estate investment volumes are estimated to grow 30% reaching nearly \$480bn USD, with China now holding the top spot with an estimated transaction volume of \$150 bn USD, a 100% YOY increase. The same report showed APAC holding 8 of the top 20 positions with a global market share increase of 59%. Even with government controls to cool the property market in China, the study predicts APAC to continue 20% YOY growth and maintain its lead position.<sup>2</sup>

Driven primarily by rapid urbanization and domestic growth (See Appendix, Figure 1), China remains one of the largest and fastest growing property markets in the world. After China, the next largest market in APAC is Japan, which is gaining increased attention from investors given relatively high yield rates, stable cash flows, and attractive opportunistic investment opportunities, especially with distressed assets, many below replacement costs.

In a 2010 APAC study *Emerging Trends in Real Estate* by Price Waterhouse Coopers, the top 5 investment markets identified were: Shanghai, Hong Kong, Beijing, Seoul, and Singapore. Sydney was also mentioned as increasingly popular given the market maturity (and thus stability). For development investments, Shanghai, Mumbai, and Ho Chi Minh City were highlighted given the strong fundamentals of the respective geographies. Similarly, in a 2010 Schroders report that calculated estimated target rates of return for property markets in APAC, India and China topped the list with Japan and Australia also popular given lower volatilities. Schroders identified the most attractive risk-adjusted return markets as the following: Australian offices, Chinese retail and middle income housing, and Tokyo mid-market residential properties. The below chart from an AXA report highlights India and China as yielding some of the greatest returns in Asia:

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<sup>2</sup> Cushman and Wakefield, *Global property markets on the up - investment volumes forecast to reach \$478 billion in 2010*, 3 Mar, 2010



Beijing. Historically, Asian (and especially Chinese and Indian) investors – due to limited investment options and cultural and family expectations for home ownership – have a strong preference for investing in real estate as an asset class and store of wealth. Many high net worth individuals (HNIs) in Asia also have a preference for luxury property investment as well, and the below ING study highlights risk-adjusted return ratios for key Asian luxury property markets:

**TABLE 1: LONG TERM RISK ADJUSTED RETURN RATIOS IN SELECTED LUXURY ASIAN MARKETS**

	Singapore	Hong Kong	Tokyo	Kuala Lumpur	Taipei	Shanghai	Beijing	Jakarta	Bangkok
<b>Residential</b>	0.22	0.39	0.59	2.61	0.87	0.16	0.64	1.13	1.12
<b>Industrial</b>	0.63	1.04	0.83	2.01	0.65	1.01	0.91	6.43	1.81
<b>Retail</b>	1.08	0.98	1.12	1.46	2.06	2.04	0.68	1.41	1.83
<b>Office</b>	0.41	0.42	0.29	1.73	0.93	1.00	0.91	2.26	1.11

Source: ING REIM Research & Strategy, JLL. Notes: Singapore Prime, Hong Kong overall investment grade, Tokyo High End Multifamily Apartments, Kuala Lumpur overall investment grade, Taipei overall investment grade, Shanghai Luxury Apartments, Beijing Luxury Apartments, Jakarta overall investment grade, Bangkok Condo. Long term ratios were calculated with the standard deviation and the geometric average returns for the years 2001-2008 when available. Tokyo, Taipei and Beijing start in 2002 and Shanghai in 2005. The lowest ratio of each market is highlighted in orange. The highest ratio of each market is highlighted in blue.

[http://www.ingreim.com/images/Global%20Luxury%20Residential%20Markets%202010\\_tcm129-120741.pdf](http://www.ingreim.com/images/Global%20Luxury%20Residential%20Markets%202010_tcm129-120741.pdf)

From our market research, we identified the geographic markets of China and India to offer some of the greatest risk-adjusted opportunities for investors and developers in Asia. We thus engaged in select expert interviews including investors, developers, and consultants to better understand the trends, risks and opportunities for the two emerging Asian markets.

Below are key insights from our expert interviews:

### **India**

On the basis of our interview with experts in the Indian Real Estate industry, we conclude that the return opportunities will continue to come from the main metros in India (Mumbai, Delhi, Bangalore and Chennai). Scarcity in land space and recent clarifications in the policy for redevelopment has provided opportunities. The proposed increase in the FSI (Floor Space Index) for residential and Hotels will help increase the property supply into the market. The commercial segments however have been hit by the global crisis. The reduction in the growth of the IT sector directly results in the decline of the residential housing demand.

As the Indian market lacks transparency with an inadequate legal system to rely on, investors must be cautious while investing in the Indian market. Some of these risks can be mitigated by focusing on the asset quality, track record of the developer and partner. As the industry is still relationship driven, partnering with the correct local players will be essential.

## **China**

Similarly, our network of real estate PE investors and developers from China were also bullish on the China market (at least in the long-term) driven by domestic growth (with a growing affluent population) and the support and control of the Chinese government. They admitted there is significant short-term uncertainty and there is likely to be a correction. The magnitude and timing of the correction, however, remains an open topic of great debate. Overcapacity, especially in tier I cities, and within the commercial property sector in particular, continues to be the driver of downward pricing pressure. The speculative residential sector is cooling given the recent government restrictions including higher equity down payments (e.g. lower leverage), higher taxes, and increased restrictions on multiple home purchases and foreign investment constraints. Despite these controls, there remain powerful drivers of upward pricing pressure including the relaxing of regulations limiting insurance companies investing in residential properties for investment (beyond corporate use). This seemingly endless seesaw exerted by the government remains a driving indicator for the direction of the property market.

Unfortunately, given the limited transparency in the legal system – just as in India – foreign investors are falling victim to great losses in China as evidenced by the exits of some of the world’s leading global, real estate investment groups. As mentioned in a recent Asia Venture Capital Journal, due diligence and partner selection remain critical success factors. Despite the lessons and literature shared in years past, leading international investment banks and global investment groups continue to fall victim to poor partnership decisions and insufficient due diligence leading to dismal returns driven by the many unanticipated risks (e.g. disappearing properties, forged sales documents).

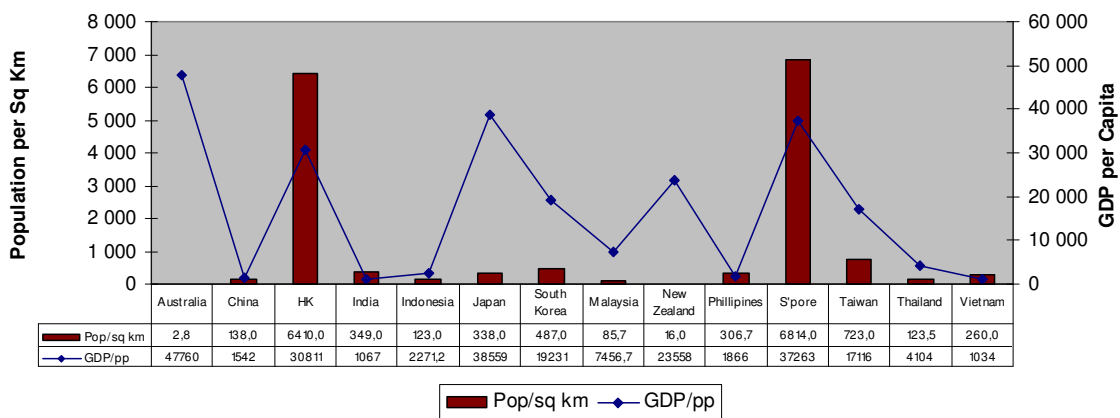
### ***Opportunities in Asia, beyond China and India***

Given the risks in India and China, real estate PE investors looking for Asia exposure should also consider diversifying into other Asian markets with greater transparency, stronger legal systems, high per-capita GDP, and more stable - though smaller – average returns. Markets such as Japan and Australia should thus receive increased attention. Additionally, given the recent flood of investments into India and China, as well as short-term uncertainty, we also advise investors to consider other Asian markets within South East Asia given strong fundamentals and growth potential. The relatively slower growth in China implies that “for investors, the time has come to think of a world beyond ‘China Plays’” quotes Ruchir Sharma,

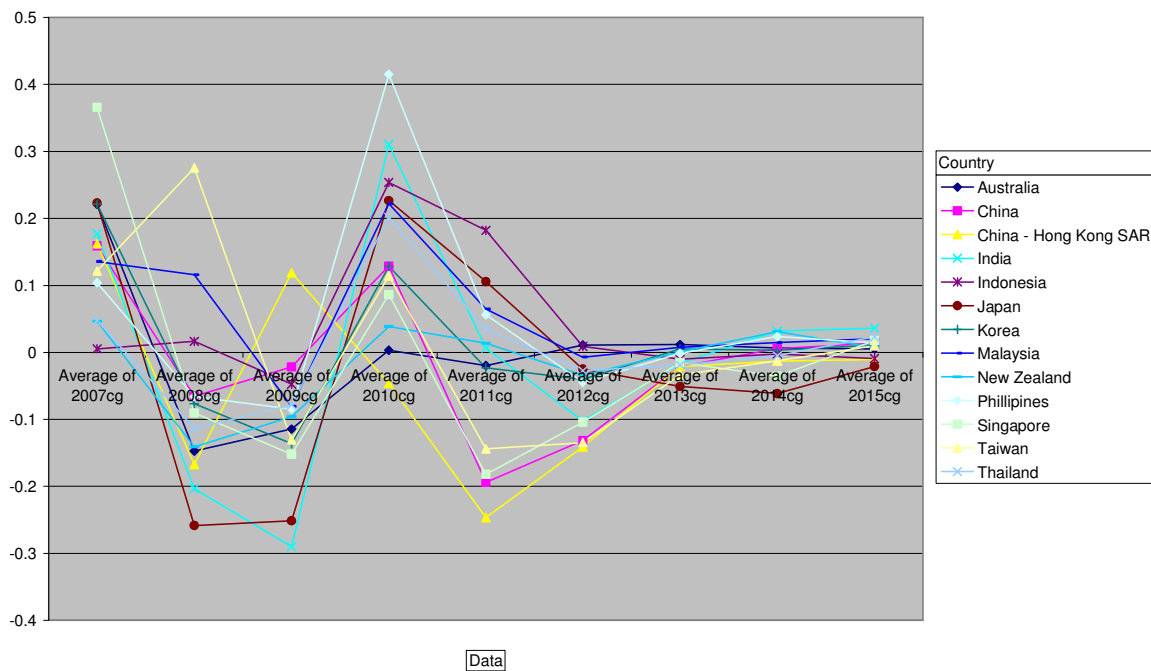


Head of Emerging Markets at Morgan Stanley Investment Management, in a recent Newsweek article (“The Post-China World,” June 28<sup>th</sup> and July 5<sup>th</sup> 2010).

Demographic data show similarities (density ratios) to China and India, and proprietary market data (see tables below) exhibiting historic and projected returns suggest that markets such as Indonesia, Philippines, and Malaysia could yield superior, more stable returns (% along Y-axis) in the short-term. Additionally, we’ve witnessed the rise of “extended China plays” as evidenced by the emergence of Frontier market funds such as Frontier Investment Development Partners (focused on Cambodia, Laos, and Mongolia).



Sector (All) | Chk 2 | Region Asia Pacific



For those limited by mandate to India or China-only funds, we advise looking at tier II and III locations (in China) or sub-geographies within tier I locations (both China and India). For example, one leading global real estate PR investor in China suggested monitoring the rapidly-developing transportation hub in Shanghai, as well as the neighboring cities along the high-speed train routes with a large number of increasingly wealthy residents and businesses. Similarly in India, rapidly developing transportation hubs and resort/holiday destinations (Agra-Delhi-Jaipur) would be interesting investment areas for real estate PE investors.

One final insight from our interviews is the speed of the market. Compared to domestic funds, foreign funds are at a disadvantage for multiple reasons: First, given the importance of local contacts, knowledge, and expertise, local firms are naturally at an advantage, especially when it comes to due diligence and deal sourcing. Second, foreign firms usually have investment committees in multiple parts of the world, further slowing the investment process. Third, unless funds are denominated in local currency, investment targets may be reluctant to strike a deal in foreign currencies, especially given exchange rate risk and limitations to future exits (especially for companies looking to IPO in local markets). Given the advantages of local funds, they are much faster, secure more deals (although often at smaller margins due to higher prices), and are driving much of the deal flow in the region. This difference in philosophy could be a driver of the fast-moving market. As mentioned by one investor: “in 3 years, I’ve already seen 2 cycles.” This need for speed, as well as its relevance to cycles (domestic and global) and market timing remain one of the greatest risks facing real estate PE investors and must be carefully managed.

### **3. Key Risks and Risk Management Practices**

The risk management activities in real estate are similar to those in other asset classes. They include identification of sources of risk, measuring the risks, and designing controls to mitigate the risks. As can be seen in the fund waterfall diagram in Section 1, risks exist at all levels of the organization. This includes firm level, fund level and property level. The risk management charts by TIAA – CREF Asset Management Company (See Appendix 2) describe the various real estate-specific and others risks and risk management measures. The firm level risks are related to business operations and include general management, financing, personnel etc. This may also include operational risk management activities like management of insurance and security. On the product side, it includes viability and structure of the fund. In addition to the above, detailed analysis needs to be placed on portfolio risks. This can be

done by using risk modeling tools and stress test models (using RE software like Argus). At tenant level, risks are related to ‘core’ styles—which are related to in place leases and their credit quality. In addition to the core risk, there are ‘equity’ risks related to rent growth, operating and capital expenses trends and lease roll over prospectus. These risks have greater uncertainty. Another large real estate investment risk is illiquidity of direct investments, especially given the cyclical nature of the industry. Thus, we advise that investors focus on diversification across fund and property development life cycles, and also across joint private and public portfolio of investments – for diversification and liquidity purposes.

In addition to the above mentioned factors, one of our expert interviewer also recommended investors to analyze the cash flow returns and adopt a ‘low volatility approach’ to understand the level of risk of the investments given the same level of return. For more stable investments, the projected fund cash flow will have straight return as against the more spiked returns for the aggressive for the aggressive funds for a given investment period.

Another interesting insight from one of the experts was that traditional risk measures like VaR cannot be applied to the real estate asset class. Risk management entails both quantitative and qualitative aspects. This includes analysis of location, tenant mix, quality and tenure of leases, comparison to market standards. However one ‘cannot quantify everything in real estate’. The deep expertise of the partners would help mitigate some of the risks mentioned.

### *Bubble Trouble?*

One of the greatest risks facing real estate investors – especially in China today – is “bubble risk.” One investor, Jim Chanos, refers to China’s situation as “Dubai times 1000.” For example, in the late 80s, the Japanese property market boomed, reaching 500% growth over 6-years during its expansion before crashing in the early 90s. Similarly, the US property market experienced a period of “irrational exuberance” in the early 2000s spurred by cheap credit, securitized mortgages, and poor risk management (by credit agencies, governments, banks, and investors), leading to the collapse of leading financial institutions and triggering the current global financial crisis. Most recently, speculative property developments and investments in Dubai crashed as the market collapsed driven by overcapacity.

Interestingly, comparing Asia to the rest of the world, markets recovered faster in Asia compared to the western markets leading investors to both examine this phenomenon, and place bets on the future sustainability of the uncertain Asian economy. In a PIMCO study conducted by Koyo Ozeki (Head of Asian Credit Research Team) in December 2009,

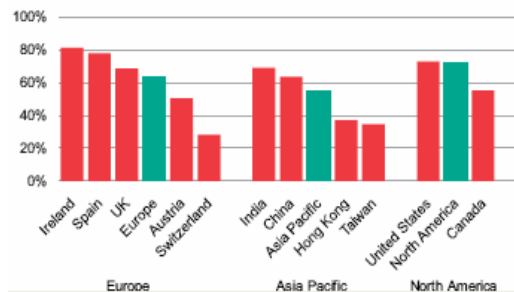
Mr. Ozeki points to China’s superior growth and lower leverage as key differences between China and the western markets and uses this to explain why the China property market will avoid the crises experienced by Japan and US (see tables below for comparisons):

Comparison of real estate bubble

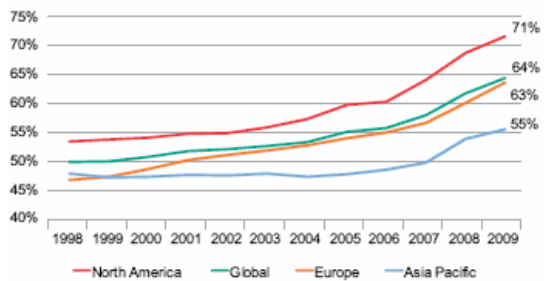
	China 2003-2009	Japan 1985-1991	US 2000-2007
Status of economy Then potential growth rate	High growth 10%	Lower growth 3-4%	Matured economy 3%
Property price hike rate (CAGR.) Period of bubble (Total price hike)	12% 6 years 2x	30% 6 years 5x	10% 7 years 2x
Market	Residential	Commercial	Residential
Size of credit to property sector	40% of GDP	50% of GDP	80% of GDP
Leverage	Low	High	High
Lenders	Banks	Banks	Securitization

The lower leverage in Asia (see data tables below from DTZ research) suggests lower returns in bull markets but smaller losses in bear markets. Thus, China and Asia bulls today use this to explain why the current China property “bubble” will not pop. Instead they argue due to government controls and lower leverage, a correction (of 10-20%) is more likely. Critics insist overcapacity, insufficient controls (are governments really controlling supply?), government stimulus-driven GDP, and optimistic market sentiment as reasons for the inevitable crash. Most agree that China (and extended Asia) is experiencing a bubble and a correction is due – the big question is timing and magnitude.

Debt as a percentage of invested stock – highest and lowest countries per region, 2009



Total debt as a percentage of invested stock by region



Source: DTZ Research

In addition to the real estate risks and risk management practices mentioned above, PEI Risk Management in Private Equity list in their recent publication (Ch. 2 Portfolio construction and optimization), the following emerging market, PE-specific risks:

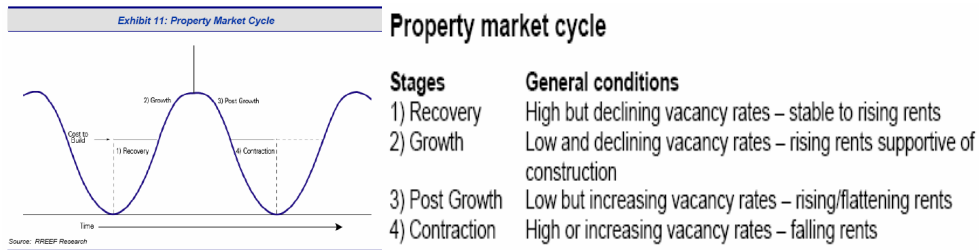
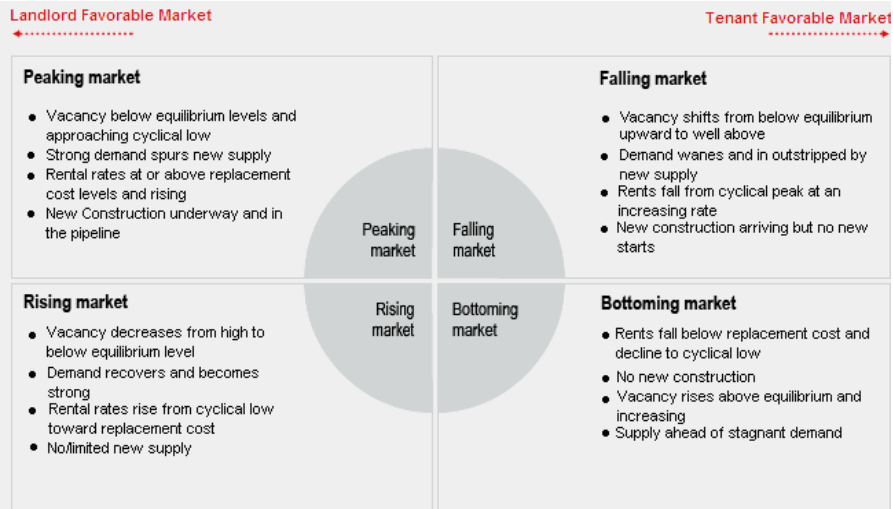
- Portfolio allocation
- Portfolio diversification (across vintage years, financing, strategy, geography...)
- Cash flow forecasts
- Performance monitoring and benchmarks
- Liquidity risk management
- Political risk management
- Currency risk
- Management risk
- Legal and regulatory risk
- Environmental, social, and governance risk
- Exit risk

Consistently from our expert interviews, we learned that policy risk is the single greatest risk in Asia. Related to this is transparency (see Appendix 3).

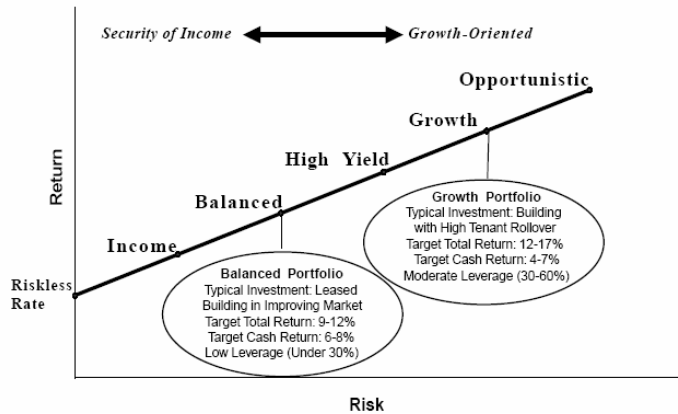
### ***The Case for Global Real Estate Diversification***

Despite the range of real estate, private equity, and emerging market related risks mentioned above, given the cyclical nature of the real estate industry, we do find diversification opportunities across a broad range of investment, property type and geographic options. The Journal of Real Estate Research (Volume 18, Number 1, 1999) describes the real estate cycles and implications for investors and portfolio managers in the global economy and stresses the importance of increased investment of time and resources into research to better understand and manage the global real estate cycles and to properly diversify across investment and property types and geographies. Ultimately, investors seek to invest at cycle troughs, and divest at peaks, thus, given the array of property type and geographic options, dynamic and diversified portfolio strategies can and should be developed.

Jones Lang Lasalle's signature "real estate clock" (next page) pioneered the cycle charts. Others followed, creating similar charts describing cycles (next page and Appendix 5).



**Real Estate Cycle Analysis: Determining Portfolio Strategies**



In addition to the different cycle stages, there are different investment strategies (described in chart above) which come with different risk and return levels, providing further diversification options. Finally, two research reports from NUS Institute of Real Estate as well as the DTZ table (Appendix 4) further suggest that there is geographic diversification potential across global markets:

**Convergence Dynamics across International Securitized Real Estate Markets (Liow and Chua, April 13, 2010)**

*“...the finding of an insignificant risk-return convergence trend also implies that the risk and return characteristics of the real estate securities markets have not become less different from each other over the study period (1993-2008 across 14 markets), supporting the view that the idiosyncratic ‘real estate factor’ and “country factor” of individual markets might be become more important over time...”*

**Investment Dynamics of Greater China Securitized Real Estate Markets and International Linkages (Liow and Newell, January 29, 2010)**

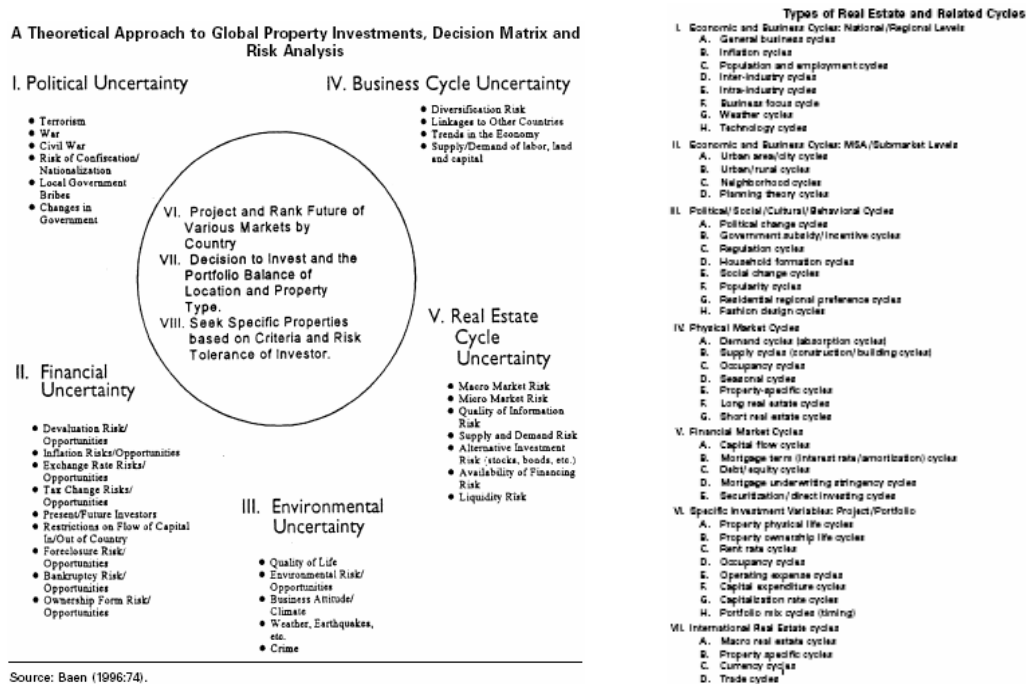
*“...results indicate the conditional volatility linkages and correlations among the Greater China securitized real estate markets have outweighed those relationships with the US, implying closer real estate market integration among the Greater China markets. Diversification potential across the markets is still good due to lower cross-market volatility interactions and correlations...”*

Interviewing INSEAD Real Estate professor and industry expert, Mr. Lahlou Khelifi, we also learn that property locations within specific geographies are in fact shielded from cross-market correlations given the uniqueness of the specific properties.

Thus, based on our research, we conclude that investors can benefit from property type, investment type, and geographic diversification to help manage real estate (and specifically cycle) risks. The challenge is in timing the many different cycles. Long-term property operators and investors are less concerned with cycle timing, but short-term traders (and PE investors moving in and out of cycles), have much greater exposure to timing and thus must be aware of the risks and diversify as much as possible given investment resources. The charts below further summarize the many uncertainties, cycles, and risks for investors<sup>3</sup>.

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<sup>3</sup> Journal of Real Estate Research, Volume 18, Number 1, 1999



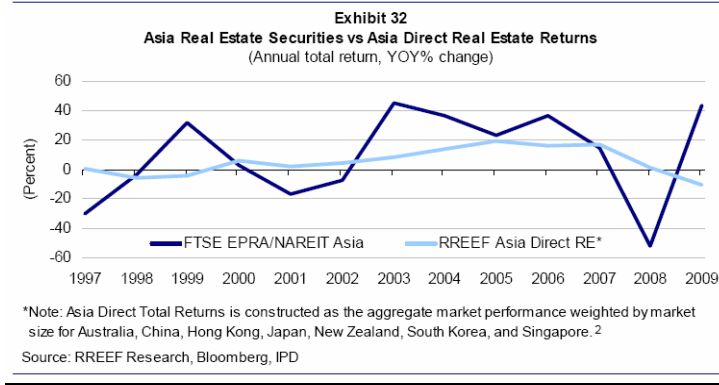
#### 4. Implications for Investors

Depending on cycle projections and forecasts, investors can develop optimal strategies for holding periods, leverage, lease structures, capex investments, and other operating policies. Additionally, portfolio managers can diversify across geographies, cities, sub-markets, property, investment, and product types. Given the cyclical, dynamic nature of the asset class, as well as the high risk and low transparency levels in many of the emerging Asian markets, models and strategies must be extremely flexible and developed with a high level of due diligence. Additionally, due to the high risk, limited market data and benchmarks available, and illiquid nature of the asset class, public markets (and data) could be utilized for benchmarking performance and forecasting market movements. Thus, investors could benefit by rebalancing portfolios across the real estate asset class (i.e. both public and private equity) – for both diversification and liquidity purposes.

While the area of diversification within global real estate cycles is still emerging, leading real estate providers such as Savills have developed benchmark reports collecting data across property types and geographies and mapping them to cycles (see Appendix 5). From the data, we see that there exist opportunities to diversify into and within Asia, across property types and geographies. Systematic forecasting, diversification, and optimization models will require additional research, data, and data validation. Also included in the

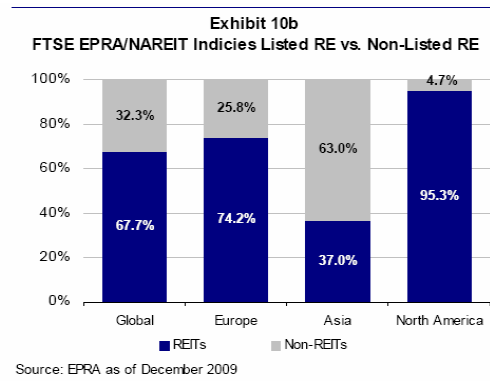


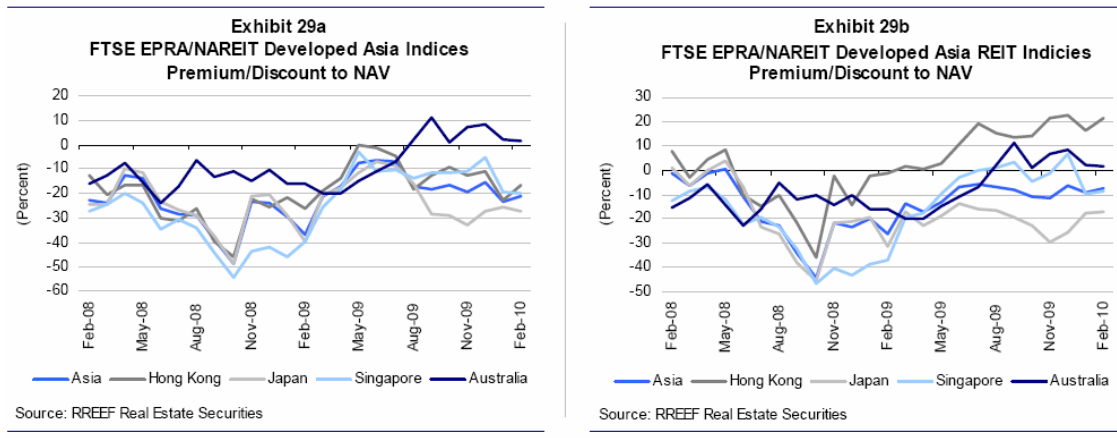
Savills reports are data related to rental rate changes and other indicators such as urbanization, unemployment, GDP, C/A, and CPI forecasts. Additional indicators from the public real estate markets include REIT indexes and direct real estate index returns (see chart below). As mentioned in the report, these indicators can also be used for market timing to complement the macro indicators.



From the above chart, we hypothesize that rebounding Asian REITs, combined with increasingly globalizing developers, will drive real estate PE activity in the region. Additionally, the chart above forecasts that public market performance (measured by REITS, developers, and other public real estate companies) will remain a leading indicator for real estate PE markets, and thus a source of information and potential arbitrage for investors.

Thus, driven by regional growth and expansion, as well as non-Asian investors looking for Asian exposure, we see the Asian real estate market – both public and private – to still have significant growth potential. With only a minority (40%) of real estate investments listed as REITs, and with performance negative over the past few years (see charts below), we anticipate growth and acquisition activity amongst the REITs in Asia, providing investment and exit opportunities for real estate PE funds and investors.





*Industry Insights – Words from the Wise (interviews and articles from recent publications)*

As mentioned in the Journal of Real Estate research:

*“Investors must change their view of the world. The view must be away from trends, herd mentality and perpetuity capitalization models, and toward a cycle view of the world—one that is dynamic, constantly changing, never in equilibrium (except perhaps for an instant), and where flexibility and a degree of contrarianism is important for investment success.”<sup>4</sup>*

From numerous experts, we also heard the following recommendations for investors:

*“Given GP’s increasing need for faster fundraising and deal making in Asia, and investors’ increasing unwillingness to pay fees without proven performance, there will be an emergence of ‘club deals’ where investors pool together to offer only performance-based fee structures”*

*“Given market uncertainty and the risks of mistiming cycles, really, the best way to make money is to obtain cheap land [and develop and invest in Greenfield projects]...”*

*“...private equity groups need all the help they can find to finance deals. One option is for the seller to provide vendor financing to the buyer....Another possibility is for bond markets to finance buy-out deals.” – FT, Deals and Dealmakers, June 23, 2010*

Given the vast amount of uncertainty in the industry – both in the real estate sector, but also within the private equity sector, real estate private equity investors must develop new business models to survive the current market evolution. According to Professor Khelifi, the traditional real estate private equity industry will undergo a transformation given the recent

<sup>4</sup> Journal of Real Estate Research, Volume 18, Number 1, 1999

poor performance of PE funds as LPs will be less likely to pay fees for GPs “doing no work” and GPs needing a faster way to raise funds. He predicts the next market evolution to be a “club deal” model where GPs partner, provide low-to-no fee business models, and instead get compensated based on performance.

This sentiment is also shared in an interview with an institutional investor in the Middle East where the traditionally passive investors are shying away from the pure ‘private equity deals’ to a ‘club deal’ platform where they retain significant controlling and veto rights. This would not only lead to greater transparency but also lead to a reduction in risks due to active participation in investments. Some GPs and traditional real estate PE business models are already undergoing these slight evolutions and business model innovations:

#### *Equity Estates<sup>5</sup>*

A hybrid “destination club” and “luxury residence fund” innovating and intersecting the traditional timeshare and PE fund models, raising funds from investors in exchange for nights stays at luxury properties and a share of capital gains following the sale of the properties upon the fund’s exit. Similar to the PE fund’s traditional 80/20 model, Equity Estates redistributes 100% of the investor’s investment (minimum \$300,000+ for 10 years) and 80% of the fund’s appreciation (keeping 20%). Equity Estates manages and minimizes risk by using low leverage (up to 30% NAV) to avoid high debt exposure and exposure to cycles. Instead of dividends, coupons, or rental income payments (from equity, debt, and REIT investments respectively), Equity Estates provides nights stays at the luxury properties.

#### *Active Management Approach*

Another approach would be to partner with asset managers who have an equity stake in the investment. While choosing partners, focus should be placed on managers who have expertise and substantial experience in real estate. The team would also bring on greater operating knowledge on specific assets and investments and have access to relationship based deals otherwise not available on the market. As mentioned earlier, operational experience in the different asset classes (retail, residential, developments etc.) by the asset management team supplemented with greater transparency to the investors is a good mechanism to control risk. Finally, as one expert mentioned ‘when real estate investments become financial transactions, greater is the risk taken on.’

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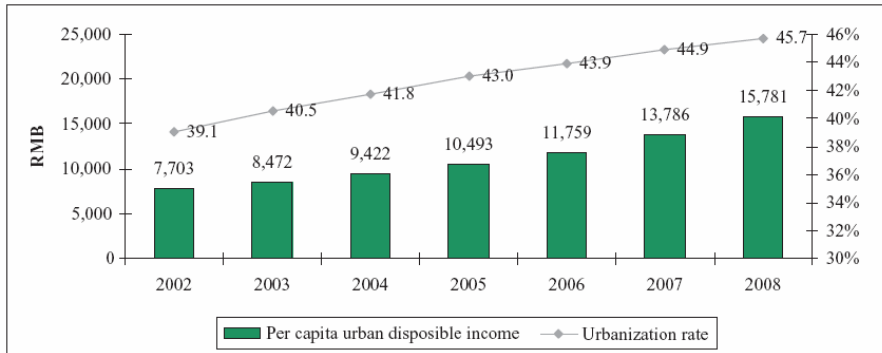
<sup>5</sup> Blog Review: <http://vacationhomeinsider.blogspot.com/2009/09/equity-estates-destination-club-thrives.html>

## 5. Conclusion

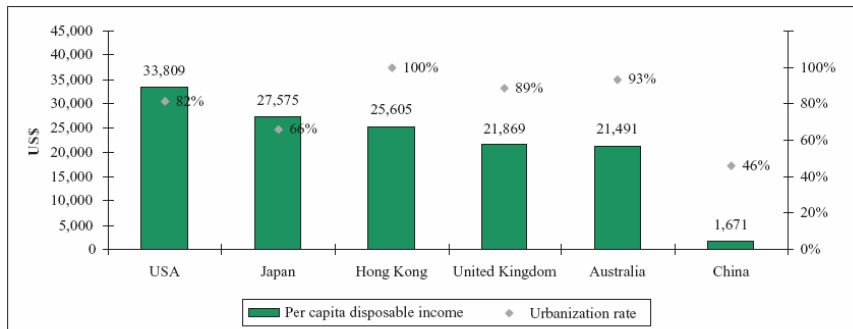
On the basis of our research and conversations with industry experts, we can see that there has been a shift in the trends driving the real estate industry (from private equity in the late 80s and 90s to securitizations in the 90s and 2000s to new ‘club’ and other specialty fund plays emerging today). Greater focus is being placed in Asia as an opportunity to diversify away from the mature American and European markets. Large economies like China and India (as well as other dense, emerging Asian markets) continue to urbanize rapidly and have a growing affluent population, fueling returns and driving demand in the real estate sectors (especially residential).

However, as shared by various experts, investors should be cautious and any investment decision must only be followed after adequate due diligence at all levels. We have tried to analyze various types of risks and how the same can be mitigated by reviewing various academic data, analyst reports, and through our interactions with industry experts. Even though there is no universally accepted solution to hedging real estate risks, we believe that by ensuring adequate due diligence, especially in partnering with the correct counter party, diversifying for both hedging and liquidity benefits, and actively monitoring portfolios would help investors better manage risk in this traditionally local asset class, which continues to expand its boundaries globally.

**Appendix 1: China Urbanization Charts**



Source: CFIC



Source: CEIC; Euromonitor

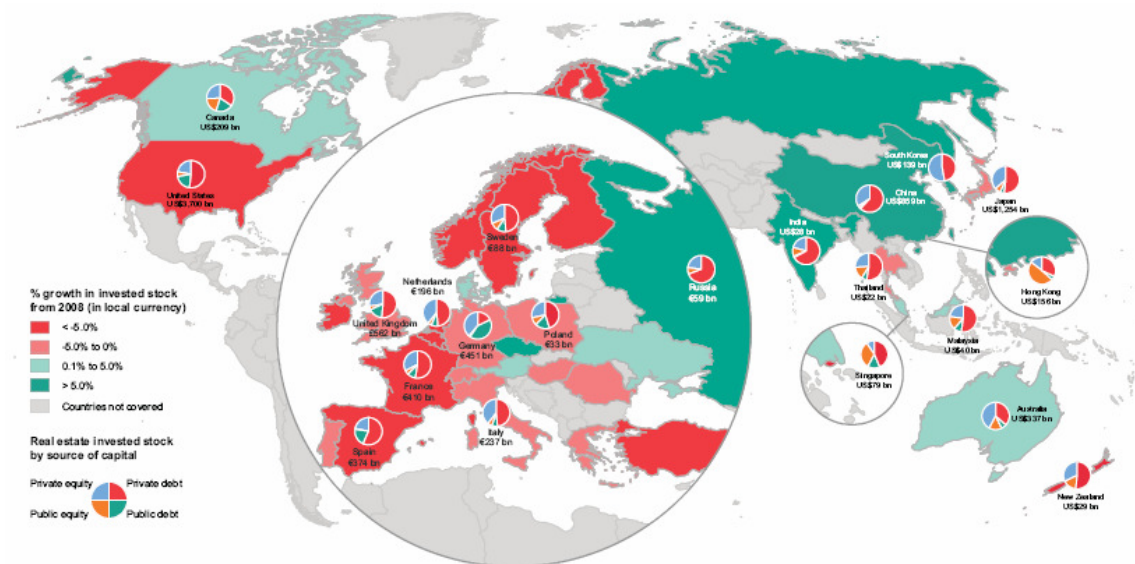
**Appendix 2:**

	RISK ITEM	WHAT IS IT	HOW TO MEASURE IT	HOW TO MANAGE IT
PORTFOLIO-LEVEL RISKS	<b>Investment Concentrations</b>	Risks related to size of each investment exposure	Tracking error versus benchmark	Monitoring, guidelines and limits
	<b>Asset Correlations</b>	Risks related to allocation among asset categories	Portfolio performance volatility	Strategy decisions, benchmarking, value-at-risk measurement
PRODUCT-LEVEL RISKS	<b>Product Design Features</b>	Related to competitiveness, style purity, "run on the bank" risk, etc.		Tracking style purity, monitoring competition, effective client communications
FIRM-LEVEL RISKS	<b>Leverage</b>	Essentially a tactical tool that can be applied at the property or business level	Proxies include the fees and targeted return on capital that should compensate for firm-level risks	Monitoring price and availability of financing, internal duration matching, monitoring refinancing risk
	<b>Business Operating Risk</b>	Related to general management, accounting and cash management, marketing, personnel, etc.	Proxies include the fees and targeted return on capital that should compensate for firm-level risks	Operational risk management, audit activities, public relations and marketing expertise
	<b>"Strategic" Risk</b>	"Related to changes in the business environment and from adverse business decisions, improper implementation of decisions or lack of responsiveness to changes in the business environment" (Basel II)	Proxies include the fees and targeted return on capital that should compensate for firm-level risks	Board oversight of high level business strategy and implementation
OTHER RISKS	<b>Country Risk</b>	Related to economic, political and currency stability, legal framework, property rights, transparency, and corruption	JLL transparency index, institutional investor rankings, transparency international corruption index, world bank, IMF and rating agency analyses	Strategic decisions, risk modeling, guidelines, limits
	<b>Ownership Structure Risk</b>	Related to JV structures and partners, specialized property types, environmental problems, etc.	Proxies to measure these risks are not readily available	Limits, due diligence requirements
	<b>Illiquidity</b>	Related to the transactions costs, time delay, and varying availability of buyers	Monitoring the flow of transactions on a property type and geographic basis to gauge the depth of the market, data from real capital analytics and NCREIF	Asset-liability management, cash management, liquidity management
REAL ESTATE RISKS	<b>Value-Add and Opportunistic Risk</b>	Related to construction, repositioning, lease-up, cycle timing	Spread related to higher risk investment styles, similar to "venture capital" activities	Effective acquisition analysis, ongoing effective management of property construction and improvement, style guidelines and monitoring
	<b>Core Real Estate-Equity</b>	Related to rent growth, expenses, rollover, down time, and cap rate uncertainties and "event risk" related to ownership	Spread between corporate debt and real estate equity returns	Efficient property management and transaction execution, accurate acquisition and disposition analysis, effective market selection
	<b>Core Real Estate-Tenant Credit Risk</b>	Credit risk including bond-like risk of credit tenants and higher risk of non-credit rated	Spread on investment grade and non-investment bond weighted to tenant composition and lease duration	Efficient lease management, tenant exposure guidelines
CAPITAL MARKET RISKS	<b>Availability and Pricing of Capital</b>	Risk to real estate cap rates from generalized "risk-pricing" environment	Cap rate spreads over Treasuries compared with corporate debt spreads over Treasuries	Monitoring and timing leverage decisions to take advantage of cycle low interest rates
	<b>Inflation</b>	Expected inflation, affects slope of the Treasury curve and indirectly affects real estate cap rates	Spread between Fed funds and 10-year Treasury	Monitoring
	<b>Real Rate</b>	Riskless rate varies over the business cycle and will affect real estate cap rates	Presented by coupon on TIPs	Monitoring and timing leverage decisions to take advantage of cycle low interest rates

### Appendix 3: Transparency Index

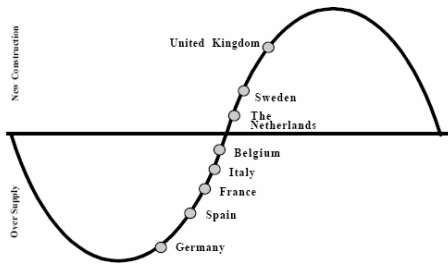
2010 Rank	Market	2010 Score	2010 Tier
1	Australia	1.22	1
4	New Zealand	1.25	1
16	Singapore	1.73	2
18	Hong Kong	1.76	2
25	Malaysia	2.30	2
26	Japan	2.30	2
33	Taiwan	2.71	3
39	Thailand	3.02	3
41	India Tier 1 Cities	3.11	3
42	South Korea	3.11	3
44	Macau	3.13	3
45	China Tier 1 Cities	3.14	3
48	Philippines	3.15	3
49	India Tier 2 Cities	3.17	3
54	China Tier 2 Cities	3.38	3
55	India Tier 3 Cities	3.39	3
57	Indonesia	3.46	3
65	China Tier 3 Cities	3.73	4
76	Vietnam	4.25	4

### Appendix 4: Global Growth across Geographic Markets

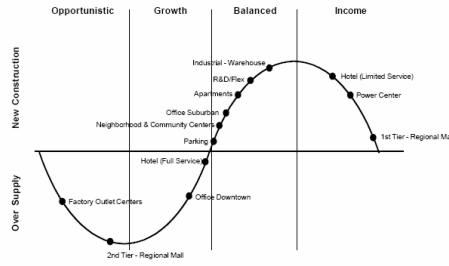


## Appendix 5: Cycles in Europe

Status of European Hotel Markets  
Second Quarter 1998



Source: Second quarter 1998, *Market Research*, page 7. LaSalle Investment Management Research.



Source: 1998 *Investment Strategy Annual*, page 27. LaSalle Investment Management Research, Chicago.

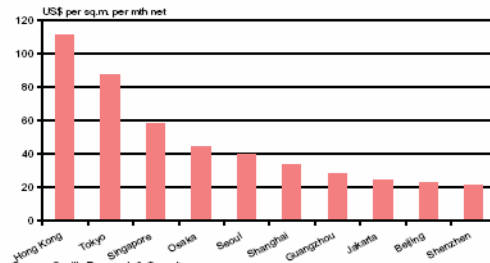
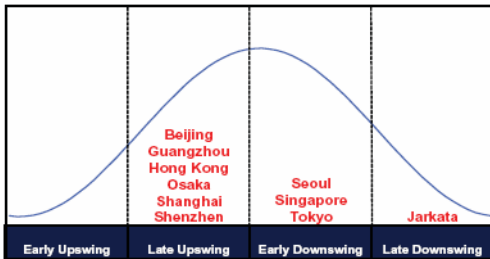
## Cycles in Asia

Exhibit 2: Asia Pacific Office Market Cycle

Office Market Cycle		Forecast Years					
Emerging Markets		YE09	YE10	YE11	YE12	YE13	YE14
GRW	POW						
RCD	CON						
GDP Grow (%)		6.7%	8.7%	7.9%	8.0%	8.0%	8.1%
% Vacant		19.9%	22.4%	19.7%	17.2%	14.9%	13.9%
Rent Momentum		Decrease+	Decrease	Stable	Increase	Increase+	Increase
Mature Markets		YE09	YE10	YE11	YE12	YE13	YE14
GRW	POW						
RCD	CON						
GDP Grow (%)		-3.8%	1.7%	2.1%	2.9%	3.2%	2.7%
% Vacant		8.8%	9.1%	8.4%	7.5%	6.5%	6.3%
Rent Momentum		Decrease+	Stable	Stable	Increase	Increase	Stable

\* Weighted by the size of GDP at the national level in US dollar

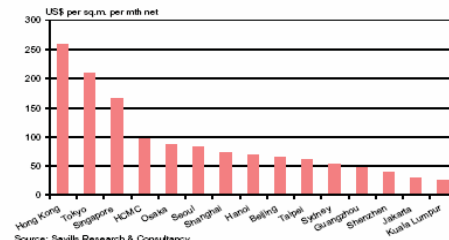
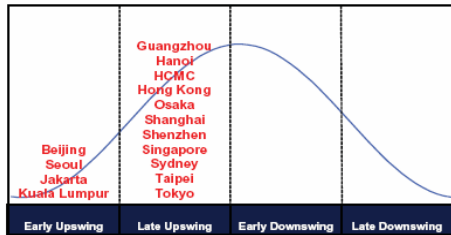
### Luxury Apartments (Top 10)



	Hong Kong	Tokyo	Singapore	Osaka	Seoul*	Shanghai	Guangzhou	Jakarta	Beijing	Shenzhen
Rent (US\$ psm net pm)	99.4	87.3	57.7	44.2	30.8	33.9	28.4	18.2	23.1	19.1
Management Fee (US\$ psm net pm)	6.6	Inclusive	Inclusive	Inclusive	N/A	Inclusive	Inclusive	4.1	Inclusive	0.9
Gov't Rates / Tax (US\$ psm net pm)	5.0	Inclusive	Inclusive	Inclusive	Inclusive	Inclusive	Inclusive	1.9	Inclusive	1.5
Total	110.9	87.3	57.7	44.2	30.8	33.9	28.4	24.2	23.1	21.6

\* Seoul's Rent = (Security deposit x interest Rate)/12 + Monthly payment  
Average Management fees for Seoul are not available as management fees include utility charges and vary from month to month

### Prime Offices (Top 5)



	Hong Kong	Tokyo	Singapore	HCMC	Osaka	Seoul	Shanghai	Hanoi	Beijing	Taipei	Sydney	Guangzhou	Shenzhen	Jakarta	Kuala Lumpur
Rent (US\$ psm net eff. pm)	235.4	198.7	165.3	87.8	82.8	62.7	67.2	66.1	58.0	54.3	50.5	41.0	34.6	20.3	26.0
Management Fee (US\$ psm net pm)	12.4	Inclusive	Inclusive	Inclusive	Inclusive	10.7	6.6	7.3	6.2	4.2	0.6	6.1	5.6	6.7	Inclusive
Gov't Rates / Tax (US\$ psm net pm)	11.8	9.9	Inclusive	8.8	4.1	Inclusive	Inclusive	6.2	Inclusive	2.7	2.8	Inclusive	Inclusive	2.7	Inclusive
Total	259.6	208.6	165.3	96.6	86.9	82.4	73.7	68.6	64.8	61.2	53.9	47.1	40.1	29.7	28.0



## Appendix – (Select) List of Internet Resources

### Industry Trends

<http://www.preqin.com/>  
<http://industry-news.org/real-estate-private-equity-news/>  
<http://www.perenews.com/Articles.aspx?aID=5824>  
[http://www.investmentmanagement.prudential.com/media/managed/documents/pim/Pru\\_AsianQ\\_Apr\\_10.pdf](http://www.investmentmanagement.prudential.com/media/managed/documents/pim/Pru_AsianQ_Apr_10.pdf)  
[http://www.axa-im.com/index.cfm?pagepath=research/multi\\_expert\\_research/alternative\\_investment\\_research](http://www.axa-im.com/index.cfm?pagepath=research/multi_expert_research/alternative_investment_research)  
<http://www.pwc.com/gx/en/investment-management-real-estate/emerging-trends/asia-pacific-2009.jhtml>

### Risks and Risk Management

[http://www.tcasset.com/news/research\\_docs/C42581\\_TCAM\\_White\\_Paper\\_Risk\\_Management\\_Single.pdf](http://www.tcasset.com/news/research_docs/C42581_TCAM_White_Paper_Risk_Management_Single.pdf)  
<http://www.weforum.org/pdf/globalrisk/globalrisks2010.pdf>  
<http://www.globalpensions.com/global-pensions/advertisement/1595221/asia-s-real-estate-markets-balancing-risk-return>  
<http://www.risk.net/category/risk-management/market-risk/stress-testing>  
<http://www.ipd.com/OurProducts/Indices/IPDIndexGuide/tabid/935/Default.aspx>  
<http://www.ncreif.com/property-index-returns.aspx>  
<http://www.preqin.com/item/private-equity-performance-benchmarks/1/1320>

### Benchmarking Performance – Sample Public Market Indices

[https://www.rreef.com/cps/rde/xbcr/ai\\_en/Global\\_RE\\_Securities\\_2010\\_OutlookandBeyond3-10.pdf](https://www.rreef.com/cps/rde/xbcr/ai_en/Global_RE_Securities_2010_OutlookandBeyond3-10.pdf)  
[http://www.ftse.com/Indices/FTSE\\_EPRA\\_NAREIT\\_Global\\_Real\\_Estate\\_Index\\_Series/Downloads/EPRA\\_NAREIT\\_Index\\_Series\\_Renaming\\_9\\_Dec\\_08.pdf](http://www.ftse.com/Indices/FTSE_EPRA_NAREIT_Global_Real_Estate_Index_Series/Downloads/EPRA_NAREIT_Index_Series_Renaming_9_Dec_08.pdf)  
<http://www.bloomberg.com/apps/quote?ticker=SHPROP%3AIND>  
<http://www.bloomberg.sg/apps/quote?ticker=HSP:IND>  
<http://www.nareit.com/portfoliomag/05special/p40.shtml>  
[http://www.cbre.com.sg/inet\\_newsmanager/newsfiles/PR\\_REITs%20Asia%202H09.pdf](http://www.cbre.com.sg/inet_newsmanager/newsfiles/PR_REITs%20Asia%202H09.pdf)

### Misc. Firm Ranks, Distressed Debt Investing, Industry Blogs, Historical and other papers

<http://www.peimedia.com/productimages/Media/000/183/351/PERE%2030%20download%20sample.pdf>  
[http://www.asiape.com/PDF/Japan\\_Roundtable\\_A5.pdf](http://www.asiape.com/PDF/Japan_Roundtable_A5.pdf)  
<http://www.peimedia.com/productimages/Media/000/165/467/Sample-16.pdf>  
<http://www.preqin.com/blog/101/2489/value-added-fundraising>  
<http://blogs.wsj.com/deals/2010/03/15/michael-lewiss-the-big-short-read-the-harvard-thesis-instead/>  
<http://www.hks.harvard.edu/m-rcbg/students/dunlop/2009-CDOmeltdown.pdf>  
<http://aux.zicklin.baruch.cuny.edu/jrer/papers/pdf/past/vol18n01/v18p007.pdf> p.56  
[https://www.rreef.com/cps/rde/xbcr/ai\\_en/Asia\\_PCM\\_Jan2010.pdf](https://www.rreef.com/cps/rde/xbcr/ai_en/Asia_PCM_Jan2010.pdf)  
<http://www.ghb.co.th/en/Journal/Vol1/11.pdf>  
<http://www.imf.org/external/pubs/ft/wp/2002/wp0220.pdf>

## Appendix - Expert Interview Question List

**(Full list below – select questions were asked based on time and access availability):**

#### Investment Trends

- Describe your fund’s investment focus? How does Asia fit into the strategy?
- Within Asia – how do you see China v/s India and Japan v/s Australia
- How do you manage government regulations/ policies
- What are your funds’ financial and operational “value-added” services?
- What are other trends and opportunities you see in the industry?

#### Risks and Risk Management

- What do you see as your fund’s greatest risks?
- How do you measure and manage all the risks?
- How do you identify, measure, and time “fault lines” and other inflection points in the cycles and inter-connected cycles?
- Do you see a risk of a double-dip? **Why or why not?**

#### Risk-Return Measurement

- What tools (benchmarks/indexes) do you use to measure performance? Risk?
- What are your biggest challenges, and what resources/tools would you need to address and resolve these challenges?