

# THE SIGNIFICANCE AND PERFORMANCE OF LISTED PROPERTY COMPANIES IN VIETNAM

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## **ABSTRACT:**

Vietnam has emerged as a rapidly growing economy in the last few years with the average growth rate in excess of 8.0% per year before the global financial crisis and 5.0% in 2009, with a sizable, young and highly literate labour force. Although Vietnam is located in a region of significant growth of new property developments, details about the Vietnam property market are still not readily available. This paper presents a profile of the Vietnam property market, including the economic status, and assesses the significance and performance of listed property companies on the Ho Chi Minh City Stock Exchange (HSX). The risk-adjusted performance analysis and significance of listed property companies in Vietnam is assessed over August 2003 – August 2009, with the ongoing property investment issues highlighted.

## INTRODUCTION

Foreign investment, in particular property investment, in Vietnam has been increasingly significant in recent years and promising to shortly recover after the downturn of the global financial crisis. In 2008, Vietnam saw a value of investible commercial property at US\$9 billion (EPRA, 2008). This trend is seen in the increasing foreign capital flows in all economic areas and the improving country business environment in recent years. In turn, it encourages the improvement of the domestic sector in all related areas including investment capital flows, business management and competition. This paper presents the profile of property investment in Vietnam, particularly the property securities market in Ho Chi Minh City Stock Exchange (HSX) and further assesses the significance and performance of property securities before and during the global financial crisis over the six year period from August 2003 to August 2009.

Whilst papers have been presented on other property markets in Asia (eg: Japan, Singapore, Hong Kong, Malaysia, China, and India), no previous academic papers have been presented on Vietnam. This paper is the first said paper.



**VIETNAM MAP**

## ECONOMIC AND INSTITUTIONAL DEVELOPMENT

Under the ruling of the Communist Party, Vietnam's poverty reduction and economic growth achievements in the last 15 years is a major success story in economic development. It is said to be one of the best performing economies in the world over the last decade. Vietnam's GDP has on average been in excess of 7 per cent per year during 1995-2003, increasing to in excess of 8 per cent in 2004-2007, dropt to 6.23 per cent in 2008 and forecasting at 5 per cent in 2009, a 10-year low before rising to 6.5 to 7 per cent in 2010 due to the current global financial crisis. This is a country

with high working age proportion at 70%, high rate of literacy at 90% (Exhibit 1). Vietnam also enters the ranks of middle income countries with income per capita raised from US\$260 in 1995 to a 2008 level of US\$2,800 PPP. Its major indicators have been steadily improved over years (Exhibit 2).

Drivers for growth include the increasing role of the private sector with the declining in manufacturing activity assumed by the state sector from 52 percent in 1995 to 25 percent in 2008. It is more attractive for the strong work ethics, social and political stability, lower labor costs, attractive tax incentives and overall government support in the country. The business environment is significantly improved for WTO commitments to be met. Another key factor in Vietnam's favour has been the MNCs' drive for the so-called China plus one scenario, wherein they seek to reduce their excessive dependence on China and to more evenly spread their business risk in Asia. Regarding to transparency and corruption, the country is still at high risk level. Particularly, the global real estate transparency index is enhanced though little (4.69 in 2006 to 4.29 in 2008) but meaningful from opaque (rank #5) to low transparency (rank #4). Foreign trade regime has been improving; the nation plan of reforming state-owned enterprises has also been being performed as WTO commitments are met. The investment rate attained 44.5 percent of GDP in 2008, ranked #2 in the world. Foreign Direct Investment (FDI) commitments almost doubled compared to previous year, to the in excess of \$64 billion whereas stock market capitalization at 11% by the end of 2008, a significant drop from 43 percent of GDP at end 2007. Even though the score for market opportunities worsens, in a reflection of the fact that most other countries in the rankings will also see their scores for market opportunities deteriorate, Vietnam's rankings in this category improve both globally and regionally (Economist Intelligent Unit).

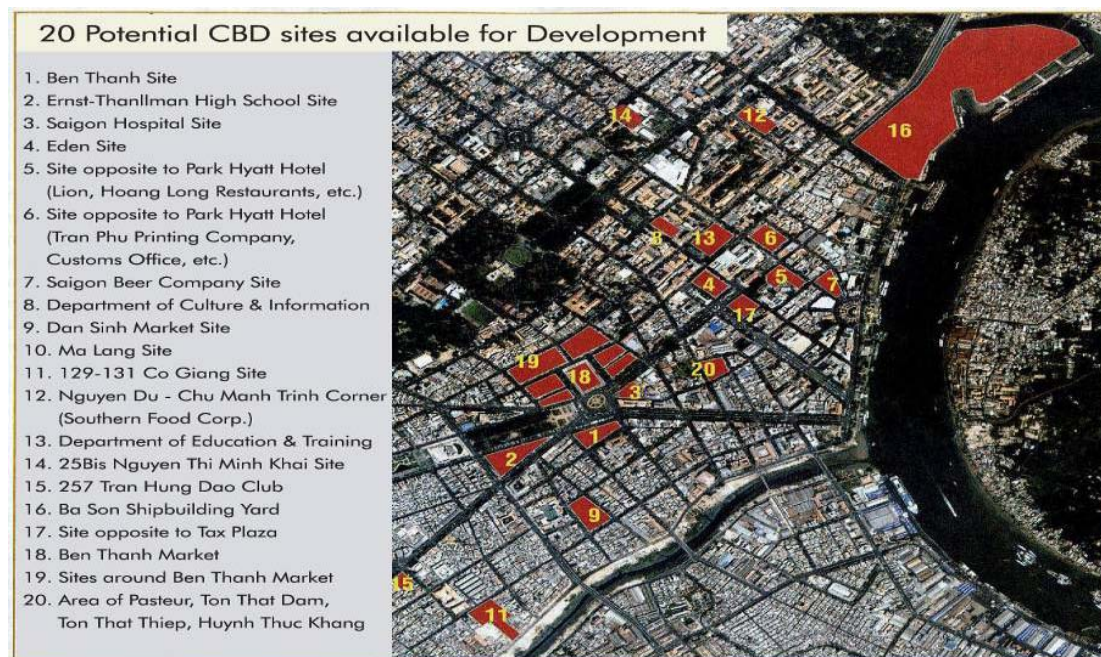
Although achieved some success in socio-economic field so far, VN government still have a long road ahead and face some short term issues to overcome for a sustainable outcome, especially in the post global financial crisis. Whilst the low transparency and high corruption have been enhanced recently, Vietnam is still at high risk in the region, being ranked #121 out of 180 countries for corruption perception (Exhibit 3) and #70 over 134 countries in global competitive index (Exhibit 5). Beside the common issues for economic recovery post global financial crisis, the typical issues for Vietnam could be named as 1) the socio-environment issues; 2) macro economic regulations and business environment.

## **DIRECT PROPERTY MARKET IN VIETNAM**

The property market in Vietnam saw three major points of time when the property price was at its peak. The first was in the 1993-1995 with the promulgation of Land Law in 1993 which approved public land trade, a commencement for national property market. It was also the time of significant foreign capital inflow investing into Vietnam, creating a strong demand for industrial parks, infrastructure, business offices for foreign invested enterprises and thus land price become ever hot for the time. The second property price shock existed in 2001-2003 when VN-US bilateral trade agreement was signed opening for higher capital invested after ward. This time

sees a warmer market with more money from foreign institutional and individual investors activated by Land Law effective from 1 July 2004. The third hot time in property market was when VN joins the WTO in 2007 in addition to Property Trading Law coming into effective from 1 January 2007. Also from 2007, foreign land users may acquire land using right longer, for 70 years with unlimited renewals and no foreign shareholdings restrictions in VN real estate companies. From Q4-2007 to Q1-2008, a significant foreign capital flow has been directed into property investment. A new money flow from stock market has been directed to property, with a strong investment wave from Asia includes Korea, Japan, and Singapore.

The down turn of the property market in Vietnam started in part from 2008, first with the tight credit policy made by Vietnam government and thus affected the local players who depend on domestic bank loan. Many local developers are struggling, especially those that relied heavily on pre-sale and bank loans to finance their developments. As a result, these developers are facing difficulties in carrying out projects. This situation paves the way for foreign investors to enter talks with local partners who have been resistant to their approach before, and this puts them in a strong position in joint-venture negotiations.



Source: Saigon Times

As a component of real estate investment, retail sector has seen Vietnam as significant developing market due to its location in the emerging region of Asia, the unexplored market with a young population of 50% population at aged 35 or under, with the WTO commitment of 100 percent FDI operation from January 2009. Many official luxury brand names have established a presence in Vietnam. Nevertheless, due to global financial crisis, Vietnam has dropped from number 1 (2008) to number 6 (2009) in AT Kearny's Growth Retail Development Index.

In the office rental sector, the trade centre of the country, HCMC used to see very few tenants in quality office buildings the local companies at the peak time. In the first half of 2008, demand for Grade A office space for both renewals and new take-ups

mainly came from foreign companies. As the impact from global financial crisis on the tenant demand, tenants cut back their capital expenditure and headcount. What is more, fewer new entrants are coming to Vietnam. The 20 potential CBD sites have already available for development. This has not only brought the worldwide large developers joint into the market but make the office sector oversupply as well. Nevertheless, HCMC remains number 1 in buy recommendation for 2009 survey by PWHC.

In the hospitality sector, business travel and tourism growth are driving demand in many property markets. Further, immortalised in film and fiction, Vietnam's unique history, culture and scenery has immense tourist appeal. International arrivals increase significantly from in excess of 2 million in 2003 to in excess of 4 million in 2008. The tourism products being promoted include Cruise Tourism, Golf Tourism, MICE, Gaming, Caravan Tourism (Jones Lang LaSalle, 2008). As one of the demographically youngest countries in the world, Vietnam has an ideal source of talent for the labour-intensive hospitality sector with young population.

The hotel sector sees new investment throughout the country, reflecting its growth in line with country economy. In 2008, property market has received licensed mammoth projects such as the Ho Tram Strip (USD4.2billion), a multifunctional resort complex in Ba Ria Vung Tau Province; the New City (USD4.2 billion) in Phu Yen Province, the Berjaya International University Town (USD3.5 billion) in HCMC, the Da Phuoc City (USD250 million for the first stage) in Da Nang and a luxury resort (USD276 million) in Lang Co, Thua Thien Hue Province, to name a few.

Oak Tree, a US based corporation has proposed the USD5 billion Sunrise resort and Damac Group (the United Arab Emirates) registered for a USD 1 billion resort in Da Nang. Japan's Riviera Group and CSK planned to develop a five star hotel, an office and housing complex, a golf course and a recreation park in Ha Noi with total investment of USD 1 billion. Singapore's leading property developer CapitalLand plans to develop luxury apartments, riverside villas and new urban centre named Saigon Sport City. Investors have highlighted Ho Chi Minh City, the only market surveyed in Jones Lang LaSalle Hotels' Hotel Investor Sentiment Survey as a clear "build" or "buy" market (Jones Lang LaSalle, 2008). However, for 2009 survey by PWHC, HCMC sees decrease in buy recommendation from 78.5 percent in 2008 to 42.9 percent for 2009, an impact of global financial crisis.

In residential sector, demand for property investment in Vietnam market is significantly high. According to Ho Chi Minh City Real Estate Association, the rate of urban residential in VN is currently less than 30% of the population. This figure is expected to increase to 45-50% in the period 2020-2025, providing huge opportunity for property developers. In the first quarter 2009, construction at residential condo has begun moving in HCMC in almost all districts/areas with total number of unit up to 10,779. It is estimated by CBRE that if HCMC average growth rate at 3.1 percent per annum and 5 per cent of them are buyers compared with all planned projects, the market sector is significantly undersupplied. HCMC retains its top ranking by buy recommendations from 2008 with 36.5% buy, 41.5% hold and 22.0% sell recommendations from the 2009 survey. Due to the suitable policies by the state bank of Vietnam, the residential sector for the intermediary income people is likely to recover. Those committed investors have remained active with many looking at

further opportunities to invest, optimistic on the compelling medium to long-term outlook for Vietnam.

Industrial sector, one of the key components driving the economy, sees nearly 200 industrial parks in operation employing over 1 million people. Many IPs are improving infrastructure and in mode of expansion. Very little stock to support the ever-increasing demand with standard ready-built factories requires about 4-5 months for construction. This reflects the calling from government for foreign governmental and private capital investment. Current proposals include new seaports, new international airports, the developing highway system, railway projects, and more. HCMC is ranked 2<sup>nd</sup> across Asia Pacific in the 2009 survey with 47.8% buy, 34.8% hold and 17.4% sell recommendation

Apparently, Vietnam is already showing signs that it has stabilised post global financial crisis, with the residential sector offering the greatest potential because prices had fallen sharply since the end of 2007 and the country's growing middle class could afford to buy homes. While foreign investors rethink their strategies, local joint stock companies step-in to pick up some key assets most notably in the multi-million dollar purchase of a 5-star hotel. Additional multimillion dollar hotel and industrial deals were done during Q2 leaving no doubt in the market the strength of the Vietnamese investor.

## **Challenges**

Due to low liquidity of secondary market combining with incomplete legal frame and regulatory direction, the market for commercial mortgage is not formed. Without this market, banks always struggle with credit for house when they need liquidity. Banks are afraid of offering loan to house buyer and thus charge a high rate with short term.

In residential sector, the liquidity of property market in Vietnam is low due to administration, regulatory frames which limit joining the national capital market. This in turn leads to imaginary house, imaginary land, imaginary apartment existed whilst there is real seriously shortage supply. The market is thus grown unhealthy with potential risk and unable to meet residential demand.

Further more, the general lack of transparency, underdeveloped legal system, and poor administrative efficiency, has made investment a challenge for foreign investors. This also makes the evaluation work become difficult, and more challenge in the downturn market, when the investors turn more cautious and restricted in performance and market information. On the positive side, however, the resurgence of interest of interest from MNCs promotes the transparency in the country.

## **INDIRECT PROPERTY MARKET IN VIETNAM**

Key players in the indirect property market in Vietnam include local companies – pure Vietnamese capital based, foreign invested companies including foreign investment funds and joint venture forms. The earlier players see mostly foreign invested capital with more recently seeing the emerging of the other forms also. Even though the investors are looking forward to the forming of REITs for the easier, more

efficient and smooth capital flows, the Vietnam market sees REITs as vehicle of investment to be formed in the future. Similarly, Vietnam does not have pension fund for investment. Beside securities as an advanced investment asset, the typical investment means are cash, gold and land/direct property.

There are two official stock exchanges of Vietnam capital market, Ho Chi Minh City (HSX) and Ha Noi (HNX) with the former operating in 2000 trading the high market cap stocks whereas the latter operating in 2005 trading small market cap and OTC stocks. Listed property companies are mostly developers including 25 companies listed on either HSX or HNX and accounted for 10 percent total market capitalised of ordinary shares with size significantly smaller than global property investment funds currently operating in Vietnam. Because of their small sizes, their main business areas cover a relatively wide business fields such as property development (characterised as acquisition and trading) and property investment (acquisition and management). This includes construction, trading of property and construction material beside other multi-minor business activities subject to specific company characteristics. The common characteristic is that most of the property companies are significantly listed in less than 2 years reflecting its infancy but growth in the market.

There are more than 60 investment funds from both local and international operating/investing in Vietnam with in excess of 20 focusing on property investment. Active investors include those from Singapore, South Korea, Japan, Malaysia, Russia, the Middle East and the United States. While the current global economic situation has made investors more cautious, interest in high quality, well located assets with strong promoters can still be maintained. This is an attractive market and the opportunity is ripe for property investment due to increased living standards, rapid urbanisation and growing foreign investment inflow.

Particularly, foreign property funds investing in Vietnam include: USD300 million CapitaLand Fund which has already invested in more than four residential development projects in HCMC; Prudential Property Investment Management, PruPIM's raising of a second fund portion for Vietnam with a target of USD250 million; Pacific Star's joint venture with Israeli firm Alony Hetz is in the process of raising USD200 million for the PS Arrow Vietnam Fund; Indochina Land Holdings' USD200 million real estate fund and Dragon Capital's Vietnam Property Fund which was launched in April 2008 having raised USD90 million. Vina Capital's Vinaland which was established in March 2006 has net assets of approximately USD650 million. It also aims to raise \$350 million in a real estate private equity fund in September 2009 with belief that local sector has bottomed. The proposed VinaCapital Vietnam Land II fund will focus on residential developments, shopping malls and business hotels. Aseana Properties, the London-listed Asian property developer, has purchased a half stake in a \$420m (£230m) mixed-use property in Ho Chi Minh City, Vietnam. Aseana has purchased a 51% stake in the equity of the International Hi-Tech Health Park development in the Binh Tan District of the city for \$27.6m (£15m). VIJA PowerSource, a JV of Kyokuto Construction Co and Kobekara VIJA Brain Park will build an IT Office Building of 440,000 sqm (GFA). TECO Group, a JV with Saigontel, will build the Teco-Saigontel Software Park which will comprise 700,000 sqm (GFA) for the hi-tech, software, banking and insurance sectors.

The impact from the global crisis has put 42 funds in troubles with NAV and minority shareholders particularly hedge funds, many of which are real estate funds or have real estate components. There is a change in the market behaviour with more developers, especially local players investing in low capital projects. When the international players turn away from overseas markets like Vietnam or less foreign capital inflow, the Vietnam property market sees its local investors play a more important role with more encouraging government credit and financial policies, in response to the bank being more conservative. This sees the enhancing capacity of domestic players, transparency and operation procedure of existing players to achieve the targeted investment performance.

Another class of players who contribute not a less significant role in both direct and indirect property investment is the property advisory companies. Beside the property advisory activities included in finance and banking institutions, there are several world wide expertises with complete advisory activities in property investment such as Jones Lang LaSalle, CBRE and Savills. Though Savills Vietnam officially started the latest, it has merged with Chesterton Petty Vietnam who operated in the country since 1995. CBRE Vietnam commenced its operation in 2003 whereas JLL has just seen its presence in the country since 2006. Their presence in the market has reflected the significantly emerging of the country and increasingly important investment destination for the region and global wide institutional investors.

## **LITERATURE REVIEW**

In the international investment context with growing investment opportunities and availability of data, there has been a significant amount of research examining the role of international property both direct and securitised in an investment portfolio using quantitative and qualitative analysis. The quantitative analysis employs a wide range of calculations. The majority of international real estate research to date has demonstrated that diversification benefits in a mixed-asset portfolio context. However, the research results have been mixed.

Eichholtz (1996) studied 9 countries of France, Netherlands, UK, Sweden, Hong Kong, Japan, Singapore, Canada, US from 1985 to 1994 using monthly data in local currency to calculate mean returns, standard deviations, correlation coefficients and efficient frontiers. He finds that correlation coefficients between countries for property investments are significantly lower (but beginning to increase) than for stocks and bonds; also, an internationally diversified property portfolio outperforms domestic portfolios in the UK, Japan, US and France; and, an internationally diversified property portfolio outperforms an international stock and bond portfolio.

Eichholtz et al. (1998) use data of real estate securities indices for 12 European countries, 8 countries in Asia-Pacific region and 2 countries in North America to calculate the annualized monthly returns of country index, risk, correlations between monthly returns of each country and the index of continents. They find that Europeans should invest in Asia and to a lesser extent North America, while North Americans should go to Europe. This study provides evidence of continents and the nationality as the investors matter.



In considering international property investment risk, Garvey, Santry and Stevenson (2001) use 4 countries-Australia, HK, Japan, Singapore from January 1975 to March 2001 in local currency. They use the unit root tests, cointegration tests and models and find little evidence of common long-term trends which imply diversification benefits and significant improvements in portfolio performance obtained by diversifying out of an all domestic portfolio into an internationally diversified portfolio in Asia Pacific Rim region. In the long-term, they find little evidence of co-movement or influence between markets on a bivariate basis. Except for Japan, consistent evidence is found of bilateral causal relationships between Australia, HK and Singapore which is of diversified benefit both in the long and short term.

Ling and Naranjo (2002) use Jensen's CAPM to assess the country real estate return in international context. Calculating from data of over 600 publicly traded real estate companies in 28 countries, they find evidence of a world-wide factor impacting the international real estate returns. However, after controlling for this risk, the authors find that a country-specific factor is highly significant in many of the countries, suggesting that international real estate stock investments can provide diversification opportunities.

Conover et al (2002) use the monthly data of NAREIT and Standard and Poor's Global Vantage to consider whether foreign stocks, foreign real estate, when added to a portfolio containing the US stocks and US real estate, is able to produce any further diversification benefits. The sample data include securities of real estate companies from Canada, France, Great Britain, Hong Kong, Japan and Singapore surrounding the period of stock market crash in 1987 to measure the value of foreign diversification in a period of increased volatility and greater uncertainty. The study is done in both local currencies and US dollar and finds that five of the six countries examined, foreign real estate has lower correlations between the US stock and foreign real estate, has a significant weight in the efficient international portfolios.

Bond, Karolyi and Sanders (2003) examine the risk and return attributes of securitized international real estate shares, covering 288 real estate companies in 14 countries in Asia, Europe and North America. They examine the usefulness of a range of single-factor and multifactor returns-generating models. Using international CAPM model with the MSCI world index as the global market proxy, multifactor models that capture country-specific and global market risks, country-specific and global size and value risks, they find that there is strong evidence of a strong global market risk component in the real estate sectors of most countries. Another finding is that a country-specific value risk factor has some explanatory power in addition to the country-specific market factor, but U.S.-based market, value and size risk factors do not provide any additional explanatory power. They also find sensitivity to country-specific market risk is much more significant for real estate markets in the Asia-Pacific region than for those in Europe or North America. The presence of a strong local market risk factor attest to the utility of diversification program across real estate markets for U.S.-based investors, these programs are likely to be more effective in Asia-Pacific markets than in European markets. They imply considering different dimensions of the real estate market fundamentals, such as value (book-to-market equity ratios) and size.

Hoesli, Lekander and Wilkiewicz (2004) analyse the benefits of including direct real estate – both domestic and international – in mixed-asset portfolios from the perspective of investors in seven countries on three continents. All analyses were performed with unhedged and then with hedged returns and appraisal-based indices are corrected for smoothing using a variant of the method devised by Geltner. The finding is portfolio allocation models shown to be quite sensitive to the mean returns of assets. Sensitivity tests of the optimal allocation to real estate to the level of desmoothing of real estate returns are also performed. With unhedged returns, the authors find that the optimal weight of real estate in mixed-asset portfolios is 5% - 15% range (hedged returns 15%-25%), leading to a 5% - 10% (hedged returns 10%-20%) reduction in the portfolio's risk. When international real estate investments are considered, the risk reduction is increased to 10% to 20%, the optimal allocation is remarkably constant across countries at approximately 15%. They find real estate stocks seldom enter the domestic efficient portfolios and the breakdown of the real estate allocation between domestic and international assets is changed over countries depending on whether returns are hedged or not. The positive role of real estate in diversifying a portfolio is demonstrated, varying according to the correlation of assets within each country, and to the management's currency risk management strategy.

To identify determinants of the risk-adjusted returns of real estate securities, Ooi and Liow (2005) examine the performance of real estate stocks listed in seven developing markets in East Asia (Hong Kong, Indonesia, Malaysia, Singapore, South Korea, Taiwan, Thailand) between 1992 and 2002. Using weekly data series from Datastream of 212 real estate-related corporations from observation markets, the authors calculate the risk-adjusted returns with Sharpe ratio, correlation, regression of the Sharpe ratio of these individual firms against a set of firm-specific and time-variant variables. They conclude that size, book-to-market value, capital structure and market diversification have significant influence on the performance of real estate securities. Asset structure and development exposure, however, do not have any significant effect on the return behavior, while dividend yield has limited influence. As expected, interest rates and market condition have significant impact on the returns of real estate stocks. The Asia Financial Crisis also has an adverse impact on stocks' performance.

Liow and Sim (2006) collect data of 10 Asian countries and evaluated risk-return performance of real estate stock, comparing their correlation profiles with the real estate security and stock market indices of two developed markets, the US and the UK. They find that many of the analysed are still developing and do not produce high levels of compound returns relative to the US REIT and UK real estate stock market over 1990-2003 time period. The observed Asian markets have also experienced a higher level of volatility compared to their USA and UK counterparts. They conclude that asset allocations using mean-variance optimization are difficult to carry out as many of the Asian listed real estate markets are not normally distributed. However, Asian real estate stocks have been able to provide diversification benefits when combined with the US and UK real estate securities. The case for separate allocations to international listed real estate is weakened by the high correlations that are found in Asian markets between their respective listed real estate and broader market indexes. They also mention a further consideration of transaction costs and illiquidity and

information transparency to evaluate diversification benefit derived from investing in Asian real estate securities.

Liow and Adair (2008) examine the role of Asian real estate companies with regard to their value added performance and portfolio diversification benefits in Asian mixed-asset portfolios and in international real estate securities portfolios over 1996-2005, using 15 national securitised real estate markets of Japan, Australia, New Zealand, Hong Kong, Singapore, Korea, Taiwan, Malaysia, the Philippines, Thailand, Indonesia, China, India, the UK and the US. Performing the risk-return profile, inter-asset correlation analysis, mixed-asset performance analysis, the authors determine the portfolio return, risk and terminal wealth when Asian real estate securities placed in mixed asset portfolios. They apply a constrained domestic portfolio model at maximum 5% cash, 40% bond and 20% real estate securities. They also use six key investment performance criteria to illustrate a composite picture of each country. This include (1) superior average monthly return, (2) lower monthly risk, (3) superior risk-adjusted returns, (4) enhanced portfolio diversification benefits, (5) superior risk-adjusted portfolio returns, (6) enhanced portfolio terminal wealth. Finding the US, UK, Japan, Australia, New Zealand and to a lesser degree, India and Korea as best performing real estate securities markets, they conclude that Asian real estate securities failed to contribute to mixed-asset portfolios of Asian shares, bonds and cash in terms of improved risk-return performance and enhanced portfolio diversification benefits. However, diversification into Asian real estate securities can still provide positive portfolio implications for the US and UK investors.

Following the previous researches, this paper uses some suitable contemporary calculations and methodologies to assess the performance of real estate securities in Ho Chi Minh stock exchange that represents for real estate investment in the country. The next session of the paper will discuss the data source and methodology used in this paper. Following that is the discussion, implication, conclusion and orientation for future research.

## **DATA SOURCE AND METHODOLOGY**

### **Data sources**

The study sample comprises 20 listed property companies in HSX covering all the listed property companies available at August 2009 (Exhibit 6). The study period starts from August 2003 with 3 property companies listed (HAS, KHA, SAV). The potential bias is that some LPCs have property investment / development as a minor business activity or they have other trading activities beside property development and investment. The study period is further divided into two sub-periods: from August 2003 to December 2007 which reflects the blossom period of both direct property investment and stock market and from January 2008 onward reflecting the high country inflationary period and global financial crisis. However, the period January 2008 onward is also the time when Vietnam improves its transparency as survey by Jones Lang LaSalle. This improvement may be offset by the previously mentioned event.

Monthly closing price and stock index are obtained from the HSX, the refinance interest rate is obtained from the State Bank of Vietnam, and 10 year government bond interest rate from Bloomberg. However, this historical data in Vietnam is not available or time period is not long enough for assessment. Therefore, the sole analysis of performance using this data may lead to bias error. Particularly, the historical data on long-term bond interest is not available until July 2006. The property index is not provided by the HSX either. Also, the HSX is considered the main stock exchange of high value of market cap stock whereas the HNX lists the small market cap and OTC securities only. Therefore, the price series of individual property stock on the HSX is employed to construct the property index for HSX. The stock index on HSX is used as benchmark for analysis. The construction of composite property index is run by Bloomberg service.

<b>Indicators</b>	<b>Base day</b>
Bond	15-Jul-06
Cash	31-Aug-03
Share	31-Aug-03
Property	31-Aug-03
Listed PCs (August 2009)	25
Listed on HSX	22

## **Methodology**

There are three principal index weighting schemes, namely price-weighted, unweighted and market value-weighted.

Market cap weighted index for asset classes are not available on HSX. To assess the performance of listed property companies on Ho Chi Minh City Stock exchange (HSX), the property index is to constructed by Bloomberg with the list selected by the author. The base value at 100 is from August 2003 with 4 property stocks. The up-to-date property index constituent includes 22 stocks from the listed companies on HSX.

The closing monthly index is used for analysing and calculating the quantitative ratios such as annual mean returns, risk, Sharpe ratio with refinance rate as bench mark. The efficient frontier is also constructed to assess the property investment possibility in Vietnam market. The excess returns ( $R_{it} - R_{ft}$ ) are measured based on the difference between the stock index, property index and individual firm's nominal rates of return and the risk-free rate, represented by the yield on the refinance rate. The corresponding statistics for 3 developed markets, namely U.S., U.K. and Australia are also included for comparison

To assess the impact of global financial crisis, the analysis period is broken down into 2 periods, from August 2003 to December 2007 and from January 2008 onward. The results is found in below exhibits 7-9

From the above data source, this paper uses the calculations of mean returns, risk, Sharpe ratios, correlation coefficients and efficient frontiers to analyse the performance of real estate securities in Ho Chi Minh stock exchange and its potential role in international investment portfolios from perspective of the US, the UK and Australian investors.

## **LISTED PROPERTY COMPANIES PERFORMANCE ANALYSIS**

### **Risk-adjusted returns**

Exhibits 9, 12, 15 present the risk-adjusted performance analysis for the property companies listed in HSX over the six year period of August 2003 – August 2009 and sub-periods of August 2003 – December 2007 and January 2008 – August 2009 respectively. These local currency data illustrate the investment opportunity in domestic currency. Return on property securities over the period of August 2003 – August 2009 underperformed that seen on stocks (6.22% versus 25.09%) with risk level on the property securities returns being about 1.5 times that on shares (45.97% versus 72.03%). However, this performance has been improved from 1.63% to 19.14% with risk increasing at a less speed from 70.45% to 77.7% over two sub-periods. This is the consolidation results of the sector improvement being offset by the impact of GFC, which is clearly a positive sign for property securities performance. Overall, the properties and shares adjusted returns underperformed returns on bonds. The resulting return is stable for both the first sub-period and the whole considered period. In other words, the performance enhancement on the second sub-period is not significantly great enough to change the whole period performance. Properties securities only outperformed shares in the period of GFC. (Sharpe ratios of shares: 0.27 → n/a → 0.10 versus properties: (0.02) → 0.00 → 0.00 for first and second sub-period, full period respectively). In other words, in the normal business cycle, property securities underperformed shares. Although Vietnam shares give a high return, it has been offset by the underlined high risk and finally resulted in less risk-adjusted return than that on bonds. This result is reasonable as we know by intimacy that in the GFC, cash is king and investment in bonds gives more stable returns.

Compared to benchmark markets, Vietnam property securities outperformed the US, UK, Australia property securities over the six year period and the GFC sub period but underperformed three benchmark markets in the pre GFC. It could be inferred that Vietnam property securities performance have improved over the second sub-period compared to the first sub-period whilst the benchmark markets get worse. Another explanation is that the impact of GFC did not hit Vietnam market as badly as it did on the developed markets or this effect is great enough to dominate and affect the full period.

### **Diversification benefits**

It is important to assess the diversification benefits of property securities both in within country (across asset classes) and from the perspective of developed markets/foreign investors (across markets). The exhibits 10, 13, 16 present the correlations with shares and bonds within Vietnam and across the markets. The positive and low relations of property securities with bonds present the diversification benefit from including property securities in the investment portfolios. These figures of relation is rather stable (0.04 → 0.07 → 0.04 for full, first and second sub periods

respectively). The resulting figures see the enhanced benefit from including property securities in investment portfolios of bonds.

The positive, higher but less than 0.5 relation with shares is evidenced for diversification investment benefit from including property securities in portfolio with shares. The correlation is stable in the full period and the first sub-period in the normal business cycle. However, this correlation is higher in the global financial crisis tells us that when the condition gets worse, things are higher negatively correlated. Specifically in this case of property securities - bonds and property securities – stocks relations are higher in GFC than in normal time. This higher figures compared to that relation with bonds presents the fact that property securities and shares have some more common interest / risk factors than with bonds, eg the securities regulations, trading factors, etc. Nevertheless, the correlation of shares with direct property may be estimated at lower level. The historical fluctuations have shown that there is a trade-off between capital flows in direct property investment and stock market. Overall, the correlation of property securities with shares has been increased reflecting the decrease in benefit from diversified investment with share portfolios.

Regarding to the possibility of diversification investment across markets, the exhibits 18, 19 present the correlations with shares, property securities of US, UK, Australia markets. The resulting figures show that the correlations of Vietnam shares are higher than that seen on Vietnam property securities with any single asset class. This implies that there is more benefits from adding Vietnam property securities than Vietnam shares into foreign investment portfolios from the perspectives of US, UK and Australia investors. Similar with the property only portfolios, there is still evidence of enhanced benefit from adding Vietnam property securities comparing the correlation of Vietnam property securities with those of each pair of asset classes in the Exhibit 19.

### **The efficient frontier and optimal investment portfolios**

Exhibits 11, 14, 17 illustrate the efficient frontiers, the possible optimal investment portfolios of bonds, shares and property securities during the considered periods. These charts see no property securities in the efficient frontiers and this result complies with the previous analysis in risk-adjusted returns. The figures and charts show that property securities always underperformed bonds and except for period January 2008 onwards, the property securities do not enhance the domestic investment portfolio. These results agree with the characteristics of emerging markets as unstable returns on investment in Vietnam market. On the other hand, the data series also implies that the efficient frontier does not include property securities exclusively in its optimal portfolios. This is because the equity securities include property stocks in its component.

It is unnecessary to construct the efficient frontier for foreign portfolio including Vietnam property securities since the returns on property securities of the benchmark markets are negative during the full period. It is thus definitely benefit to include Vietnam property securities in the property only portfolios.

## **PROPERTY IMPLICATIONS AND CONCLUSIONS**

This paper has presented a profile of the Vietnam property market and further highlighted the significance, risk-adjusted performance and portfolio diversification benefits of the property securities in Vietnam market and from the perspectives of US, UK and Australian investors.

In particular to the property market, Vietnam is in emerging phase with regards to the size, depth, sophistication and maturity compared to regional and global markets. The increasing inflow of FDI, the impressive economic development, improved living standards, emerging consumer trends and emerging tourism industry in Vietnam offer foreign property investors huge opportunities even in the period of global financial crisis. Over the six year period from August 2003 to August 2009, it has proved a diversified benefit from being included in diversified portfolios, although risk-adjusted return on property securities underperformed the domestic stocks and there is less benefit over the observation years from including property securities in a domestic diversified portfolio. The reported underperformance of real estate stock so far may be a sign of underestimated growth stock for the investors. Real estate stocks are usually recommended buy by major investment advisors in early 2010. In the perspective of foreign investors, there is evidence of benefit from including Vietnam property securities as a foreign opportunistic asset in the portfolio in stead of including a foreign stable asset from a developed market.

The significance implication from this research is also to bring a profile of the country property market from the perspective of foreign investors. It is worth noticing that in the economic aspect, VN is highly recognised for its achievements in economic development, in improved economic environment and conditions, and technological development. This economic growth and political stability have been the key drivers in attracting foreign investors to Vietnam. Multi national companies are withdrawing part of their investments from China and diversifying into neighbouring countries including Vietnam under the China plus one model.

In financial aspect, the government have flexible policies in different economic stages to get the stability of financial system, to improve financial market efficiency and easier to capital flows. The country is gradually improving its legislative system to meet the demands for integration and to create a transparent and fair legal environment for investment. However, there are several major potential constraints to foreign investment. These include the country's low administrative efficiency, low transparency, an underdeveloped legal system as well as its requirements for significant infrastructural improvements.

In line with the regional progress in the recent years, the property securities have provided enhanced returns, reduced risk and enhanced risk-adjusted returns even during the global financial crisis. More recent years have seen a stronger performance in linkage between the improved business environment, economic achievement and particular property investment and development across the nation. In the longer term, driven by local economic and demographic dynamics and expected international

property investor demand, the Vietnam direct property investment and property securities are expected to play a continuing significant role, given the continuing improved economic regime and business environment throughout the country.

To achieve this, Vietnam has to overcome the challenges including but not limited to technical factors. This includes the ever-mentioned non-transparent, highly corruptive factors. While property investment is expected to give higher return in long-term particularly true for the emerging market like Vietnam, the assessment in longer time frame is currently unable due to the unavailability of data. These research findings promise and propose broader and deeper research in future to assess this low transparent market. Also, the research findings need a further assessment in detail of individual listed property companies to reinforce and to explain the conclusions. Beside deeper country market research, this paper promotes a research in broader horizon, a regional context such as Asia emerging and Asia portfolios.



## REFERENCES

- Bond, S.**, Karolyi, A. and Sanders, A. (2003), International real estate returns: a multifactor, multicountry approach. *Real Estate Economics* 31: 481-500
- Chin, W.**, Dent, P. (2006), An analysis of the level of maturity in South-East Asian property markets. *Pacific Rim Property Research Journal* 11(4): 355-372
- Conover, M.**, Friday, S. and Sirmans, S. (2002), Diversification benefits from foreign real estate investment. *Journal of Real Estate Portfolio Management* 8: 17-26
- Eichholtz, P.**, Huisman, R., Koedijk, K. and Schuin, L. (1998), Continental factors in international real estate returns. *Real Estate Economics* 26(3): 493-509
- Garvey, R.**, Santry, G. and Stevenson, S. (2001), The linkages between real estate securities in the Asia Pacific. *Pacific Rim Property Research Journal* 7: 240-258
- Hoesli, M.**, Lekander, J. and Witkiewicz, W (2004), International evidence on real estate as a portfolio diversifier. *Journal of Real Estate Research* 26(2): 165-206
- Ling, D.** and Naranjo, A. (2002), Commercial real estate return performance: a cross-country analysis. *Journal of Real Estate Finance and Economics* 24(1): 119-142
- Liow, K. H** and Sim, M. C. (2006), The risk and return profile of Asian real estate stocks. *Pacific Rim Property research Journal* 12(3), 283-308
- Liow, K. H** and Adair, A. (2008), Do Asian real estate companies add value to investment portfolio? *Journal of Property Investment & Finance* 27(1): 42-64
- Ooi J.T.L** and Liow K.H (2004). Risk-adjusted performance of real estate stocks: Evidence from developing markets. *Journal of Real Estate Research* 26 (4): 371-393
- Wilson, P. and Zurbrugg, R (2003)**, International diversification of real estate assets: is it worth it. *Journal of Real Estate Literature* 11(3): 259-277

### Exhibit 1: General profile of Vietnam

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Area: 329,560 sq km

Population: 86.9 million (July 2009 est.)

Languages: Vietnamese (official), English (increasingly favored as a second language)

Capital: Hanoi

Major cities: Ha Noi, Ho Chi Minh

Government: Communist state

Literacy: 90.3%

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Sources: [www.economist.com](http://www.economist.com), [www.cia.gov](http://www.cia.gov), [www.gso.gov.vn](http://www.gso.gov.vn), IMF Country report April 2009

### Exhibit 2: Main economic indicators

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	2008
	Year
Nominal GDP (US\$ Billion)	90.88
GDP per capita	2,800
Consumer price inflation (average)	24.5%
Trade balance (\$US billion)	-12.284
Exports of goods, (\$US billion)	62.9
Exports of goods (% change, previous year)	29.5
Net Foreign direct investment (US billion)	7.8
US\$/VND Official FXRates	16,548
Stock market index (end of period, Jul 2000 =100)	315.6
Stock market index (annual % change)	-66.0

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Source: IMF Country report April 2009, [www.cia.gov](http://www.cia.gov)

### Exhibit 3: Significance of corruption perception\* of Asian countries\*\*: 2008

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#1: Denmark, New Zealand, Sweden	#4: Singapore	#5: Switzerland
#9: Australia	#12: Hong Kong	#14: Germany
#18: Japan, USA	#39: Taiwan	#40: South Korea
#47: Malaysia	#72: China	#80: Thailand
#85: India	#92: Sri Lanka	<b>#121: Vietnam</b>
#126: Indonesia	#141: Philippines	#166: Cambodia

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Source: TI (2008)

\*: 180 countries are assessed for corruption perception

\*\* : includes other selected countries as international benchmarks

#### **Exhibit 4: Transparency of real estate\* in Asian Countries\*\***

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##### **Highly transparent:**

Australia, USA, Canada, UK, France, Hong Kong, Singapore

##### **Transparent:**

Germany, Spain, Italy, Switzerland, Malaysia, Japan

##### **Semi-transparent:**

Taiwan, South Korea, Thailand, Philippines, China (Tier 1), India (Tier 1, 2)

##### **Low transparency:**

Indonesia, Macau, China (Tier 2, 3), India (Tier 3), **Vietnam**

##### **Opaque:**

Cambodia

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Source: JLL (2008)

\*: 82 countries are assessed for property market transparency

\*\* : includes other selected countries as international benchmarks

#### **Exhibit 5: Significance of Asian countries\*\* amongst global competitiveness\*: 2008**

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#1: USA	#2: Switzerland	#5: Singapore
#7: Germany	#9: Japan	#11: Hong Kong
#12: UK	#13: South Korea	#16: France
#17: Taiwan	#18 Australia	#21: Malaysia
#30: China	#34: Thailand	#50: India
#55: Indonesia	<b>#70: Vietnam</b>	#71: Philippines
#77: Sri Lanka	#109: Cambodia	

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Source: WEF (2008)

\*: 134 countries are assessed for global competitiveness

\*\* : includes other selected countries as international benchmarks

**Exhibit 6: Significance of property securities markets in Asian countries:**

Country	Number of property securities	Market capitalisation	Percentage of Asia market	Percentage of global market	World ranking (by £)
Hong Kong	126	£121B	41.4%	18.5%	2
Japan	163	£74B	25.3%	11.3%	3
Singapore	62	£27B	9.2%	4.1%	7
China	78	£39B	13.2%	5.9%	4
India	38	£11B	3.8%	1.7%	10
Taiwan	47	£4B	1.4%	0.6%	26
Malaysia	84	£6B	2.1%	0.9%	18
Philippines	35	£5B	1.5%	0.7%	24
Thailand	51	£3B	0.9%	0.4%	29
Indonesia	40	£3B	0.9%	0.4%	29
South Korea	7	£0.2B	<0.1%	<0.1%	45
<b>Vietnam</b>	<b>5</b>	<b>£0.5B</b>	<b>0.2%</b>	<b>&lt;0.1%</b>	<b>42</b>
Sri Lanka	17	£0.1B	<0.1%	<0.1%	52
<b>Total Asia</b>	<b>753</b>	<b>£292B</b>	<b>100.0%</b>	<b>44.7%</b>	
<b>Total Global</b>	<b>2068</b>	<b>£653B</b>		<b>100.0%</b>	

Source: Macquarie Securities (2009)

**Exhibit 7: Significance of listed real estate in Asian countries**

<b>Countries</b>	<b>2007 Real Estate (\$bn)</b>	<b>30-04-09 RE v Listed RE (%)</b>	<b>30-04-09 Stk Mkt v Listed RE (%)</b>
Japan	1,994	7.97%	5.87%
Hong Kong/China	640	25.63%	4.47%
South Korea	384	0.26%	0.21%
India	157	5.10%	1.33%
Taiwan	139	2.28%	0.94%
Indonesia	70	0.20%	0.15%
Thailand	52	7.68%	4.32%
Malaysia	50	1.40%	0.40%
Singapore	126	32.45%	17.99%
Pakistan	20	0.00%	0.00%
Philippines	23	17.74%	7.78%
<b>Vietnam</b>	<b>9</b>	<b>0.00%</b>	<b>0.00%</b>
<b>Asia</b>	<b>3,664</b>	<b>10.53%</b>	<b>4.50%</b>
Europe	7,818	2.83%	3.01%
Africa/Middle East	177	14.21%	3.24%
Latin America	836	0.20%	0.11%
North America	6,460	6.01%	3.75%
<b>World</b>	<b>19,347</b>	<b>5.87%</b>	<b>3.88%</b>

Source: EPRA (2009)

**Exhibit 8: Significance of Real Estate Companies in Vietnamese Stock Market:  
August 2009**

<b>Company name</b>	<b>Year listed</b>	<b>Market cap at August 2009 (US\$ million)</b>
Khanh Hoi Import Export Joint Stock Company	2002	21.04
Savimex Corporation	2002	16.66
Ha Noi P&T Construction & Installation Joint Stock Company	2002	8.19
Tan Tao Investment Industry Corporation	2006	477.98
Song Da Urban & Industrial Zone Investment And Development Joint Stock Company	2006	341.24
Hochiminh City Infrastructure Investment Joint Stock Company	2006	119.06
Thu Duc Housing Development Corporation	2006	110.42
Hoa Binh Construction & Real Estate Corporation	2006	29.12
Lu Gia Mechanical Electric Joint Stock Company	2006	15.54
DIC Investment And Trading Joint Stock Company	2006	9.82
Vincom Joint Stock Company	2007	683.61
Tu Liem Urban Development Joint Stock Company	2007	87.86
Construction Joint Stock Copany No 5	2007	29.23
Ba Ria – Vung Tau House Development Joint Stock Company	2007	25.81
Idico Urban And House Development Joint Stock Company	2007	12.29
Hoang Anh Gia Lai	2008	970.82
Binh Chanh Construction Investment Shareholding Company	2008	164.23
Licogi 16 Joint Stock Company	2008	91.57
NBB Investment Corporation	2008	48.87
Sonadezi Long Thanh	2008	32.49
Development Investment Construction Joint Stock Corporation	2009	319.81
Industrial Urban Development Joint Stock Company No.2	2009	30.8
<b>Total HSX</b>		<b>26,361.27</b>
Kinh Bac City Development Share Holding Corporation	2007	556.38
Cholon Real Estate Joint Stock Company	2007	13.38
Song Da - Thang Long JSC	2008	48.76
<b>Total HNX</b>		<b>7,068.23</b>
<b>Total market capitalisation</b>		<b>33,429.50</b>
<b>Per cent RE securities vs stock</b>		<b>13%</b>

Source: Author's calculation from Ho Chi Minh City stock exchange, Ha Noi stock exchange, exchange rate 17,823

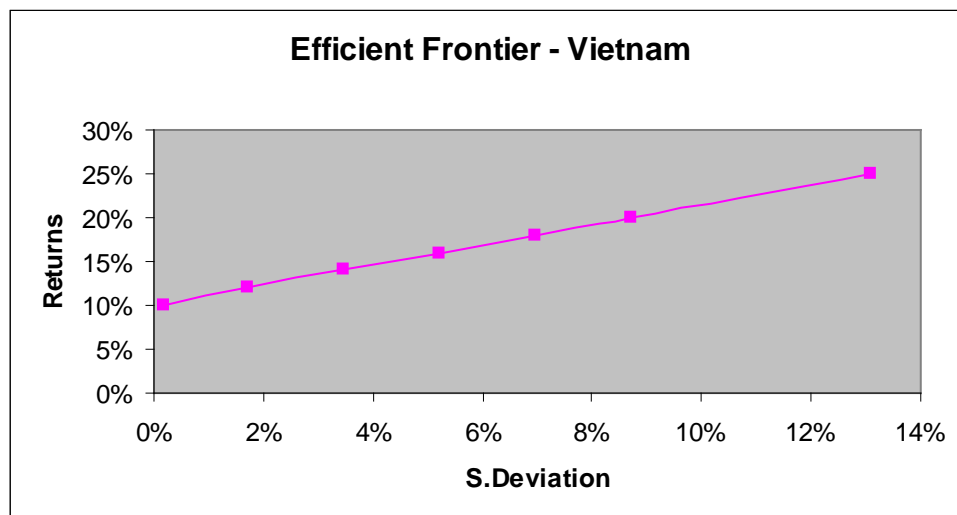
**Exhibit 9: Quantitative analysis: August 2003 – August 2009**

<b>Vietnam</b>	<b>Cash</b>	<b>Bonds</b>	<b>Shares</b>	<b>Property Companies</b>
Annualized mean returns	7.12%	10.03%	25.09%	6.22%
Annualized risk		0.68%	45.97%	72.03%
Returns/risk		14.69	0.55	0.09
Sharpe Ratio		2.11	0.10	0.00

**Exhibit 10: Correlation: August 2003 – August 2009**

	<i>Bonds</i>	<i>Shares</i>	<i>Properties Companies</i>
Bonds	1.00		
Shares	-0.10	1.00	
Property Companies	0.04	0.46	1.00

**Exhibit 11: Efficient frontier: August 2003 – August 2009**



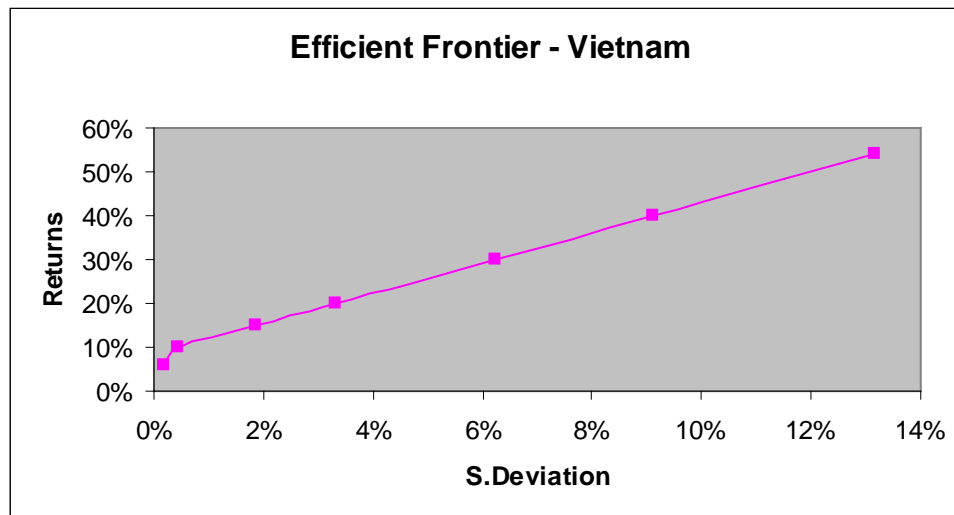
**Exhibit 12: Quantitative analysis: August 2003 – December 2007**

<b>Vietnam</b>	<b>Cash</b>	<b>Bonds</b>	<b>Shares</b>	<b>Property Companies</b>
Annualized mean returns	5.98%	8.49%	54.00%	1.63%
Annualized risk		0.13%	41.16%	70.45%
Returns/risk		66.27	1.31	0.02
Sharpe Ratio		3.61	0.27	-0.02

**Exhibit 13: Correlation: August 2003 – December 2007**

	<i>Bonds</i>	<i>Shares</i>	<i>Properties</i>
Bonds	1.00		
Shares	0.26	1.00	
Property	0.07	0.40	1.00

**Exhibit 14: Efficient frontier: August 2003 – December 2007**



**Exhibit 15: Quantitative analysis: January 2008 – August 2009**

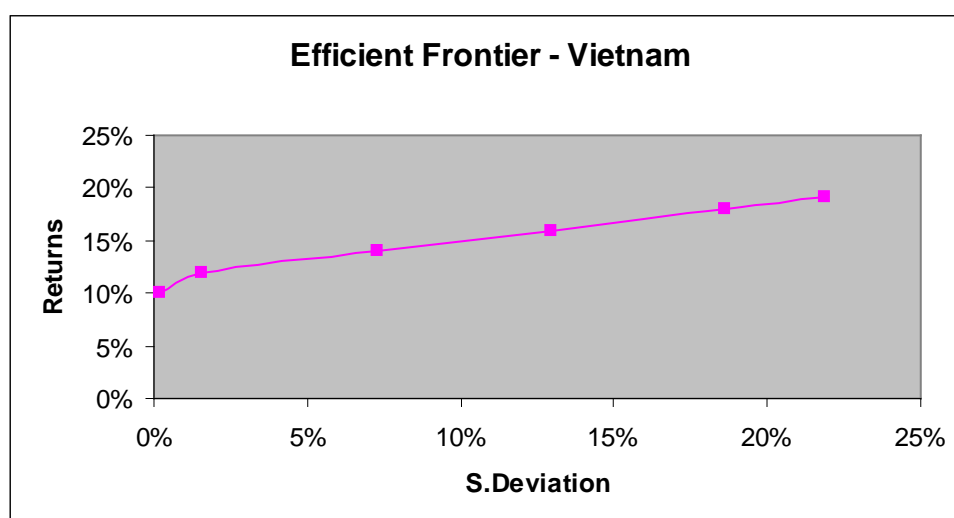
<b>Vietnam</b>	<b>Cash</b>	<b>Bonds</b>	<b>Shares</b>	<b>Property Companies</b>
Annualized mean returns	10.13%	11.45%	-27.15%	19.14%
Annualized risk		0.77%	55.28%	77.70%
Returns/risk		14.95	-0.49	0.25
Sharpe Ratio		2.11	N/A	0.00

**Exhibit 16: Correlation: January 2008 – August 2009**

	<i>Bonds</i>	<i>Shares</i>	<i>Properties Companies</i>
Bonds	1.00		
Shares	-0.06	1.00	
Property Companies	0.04	0.60	1.00



**Exhibit 17: Efficient frontier: January 2008 – August 2009**



**Exhibit 18: Correlation of shares, property securities for international markets with Vietnam**

	<i>VN Shares</i>	<i>VN PCs</i>	<i>US Shares</i>	<i>US PCs</i>	<i>UK Shares</i>	<i>UK PCs</i>	<i>Aust Shares</i>	<i>Aust PCs</i>
<i>VN Shares</i>	1.00							
<i>VN PCs</i>	0.44	1.00						
<i>US Shares</i>	0.48	0.26	1.00					
<i>US PCs</i>	0.41	0.07	0.80	1.00				
<i>UK Shares</i>	0.40	0.33	0.86	0.61	1.00			
<i>UK PCs</i>	0.34	0.15	0.67	0.74	0.63	1.00		
<i>Aust shares</i>	0.44	0.22	0.87	0.60	0.88	0.55	1.00	
<i>Aust PCs</i>	0.48	0.29	0.68	0.57	0.64	0.59	0.69	1.00

**Exhibit 19: Correlation of property securities for international markets with Vietnam**

	<i>VN PCs</i>	<i>US PCs</i>	<i>UK PCs</i>	<i>AUST PCs</i>
<i>VN PCs</i>	1.00			
<i>US PCs</i>	0.07	1.00		
<i>UK PCs</i>	0.15	0.74	1.00	
<i>AUST PCs</i>	0.29	0.57	0.59	1.00