THE SIGNIFICANCE AND PERFORMANCE OF LISTED PROPERTY COMPANIES IN THE PHILIPPINES

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ABSTRACT

Located in a highly dynamic region, the Philippines have been emerging as an unexplored property market, with a competitive advantage of a highly skilled labor force. Although the Philippine property market has drawn increasing attention in the recent years, details about the Philippine property market are still limited. This paper presents a profile of the Philippine property market and assesses the significance and performance of listed property companies on the Philippine Stock Exchange. The risk-adjusted performance analysis and significance of listed property companies in the Philippines is assessed over Jan. 1999 – May 2010, with the ongoing property investment issues highlighted.

Keywords: Philippine property market, Philippine listed property companies, risk-adjusted performance analysis.

INTRODUCTION

Located in a dynamic and emerging region, the Philippines have been known as a nation with competitive advantages of highly skilled labor and relatively low operational costs. The Philippines saw its macro-economic performance solidly enhanced since 2001. Specifically, it has emerged as the third largest destination in the offshore and outsourcing industry, behind India and Canada (JLL, 2006, 2008). With investible property value of US$21 billion and accounting for 0.77% global property, the Philippines is considered as one of the emerging property markets in Asia with a long- standing stock market and a mixed culture of Asia and Europe.

With such a significant growth, the Philippines property market also experienced common characteristics seen in the other regional property markets, as well as to some extent, integrated into the regional property markets. Particularly, it was considered as one of the countries in the second tier of interest, beside China, Japan and Malaysia, from the perception of the Singaporean investors (Lim et al, 2002b). Together with Asian property stocks in Hong Kong, Singapore, Thailand, Malaysia and Indonesia,

risk premiums in these Asian markets were found to move closely over time, as well as vary over time (Mei and Hu, 2000). During the period of the Asian financial crisis, like most of other 9 Asian property securities markets, the Philippine property securities underperformed stocks in terms of excess returns (Liow and Sim, 2006). It is further evidenced by Liow and Adair (2009) that 10 observed Asian property markets, including the Philippines property market, provided high risk and negative returns, with their inability to enhance portfolio terminal wealth during the post-Asian crisis. One of a few contrary findings was that the Philippine property securities saw a high degree of exogeneity, but reduced over years, in the periods of pre-, during, post-1997 crisis, and the most recent period in the study made by Liow (2008).

Beside the above mentioned studies on the Asian property markets, there have been a number of studies broadly on Asian property investment performance in the regional and global context in various aspects such as Addae-Dapaah and Loh (2005), Bond et al (2003), Gerlach et al (2006), Jin et al (2007), Liow (2007), Ooi and Liow (2004), Wilson et al (2007), Wilson and Zurbruegg (2004) and in depth on specific Asian country property markets such as Singapore (eg: Liow, 2000, 2001a, 2001b; Ong, 1994, 1995; Sing and Low, 2000), Hong Kong (eg: Chau et al, 2001, 2003; Newell and Chau, 1996; Newell et al, 2004, 2007; Schwann and Chau, 2003), China (eg: Newell et al, 2004, 2005, 2007, 2009), India (eg: Newell and Kamineni, 2007), Vietnam (eg: Nguyen, 2010).

Although the Philippine property market is equally competitive with other regional emerging property markets in some aspects, the information and official researches on this market are limited. Further, there are only a number of studies on the Philippine stock market in the ASEAN context (eg: Majid et al, 2009) or on the Philippine stock market alone (eg: Yu, 2003; Aquino, 2004; Aquino, 2005[1]) and on economic development and governance/management policies (eg: Bird and Hill, 2008[2]; Aldaba, 2006[3]); no in-depth studies on this country property market alone have been found so far. This paper is done in bridging this gap, particularly highlighting the performance of listed property companies on the Philippine Stock Exchange from both the perspectives of local investors, regional property investors and US investors.

ECONOMIC AND INSTITUTIONAL DEVELOPMENT OF THE PHILIPPINES

Figure 1 exhibits the geographic context of the Philippines, with Table 1 describing a social and demographic profile of the Philippines. Enjoying a high growth rate, the

[1] These studies are limited at discussion papers at research/studies institutes; cited in this case from the University of the Philippines, College of Business Administration.
[2] Similarly, this paper is cited from the Center for Contemporary Asian Studies Doshisha University.
[3] From the paper series issued by the Philippine Institute for Development Studies.

Philippines economic growth has averaged 5% since 2001, highest at 7.1% in 2007 and slowed to 3.8% in 2008 and 0.9% in 2009 as an impact of the GFC. Its macro-economic performance has also improved with declining fiscal deficits and tapering debt. Furthermore, this country has received large remittances from the overseas Filipino workers in recent years. These have altogether helped cushion the economy from the global financial crisis (CIA, 2010).

Figure 1: Map of Philippines

Source: www.cia.gov

As can be seen from Table 1, the Philippines have a 37.89 million labor force out of 99.9 million in population. With a high literacy level of 92.6%, English as an official language and a long-standing history of western cultural background, this country has an advantage over its neighbor countries in attracting foreign investment from the western countries. This also reflects the country's major economic activities in services at 55.2%, leaving industry behind at 29.9% and agriculture at 14.9%.

Table 1: Social, economic and financial profile of Philippines: 2009

Social profile:

Area: 300,000 km^2

Population: 99.9 million

Languages: Filipino and English (both are official)

Capital: Manila

Population profile: 0 – 14 years (34.9%), 15 – 64 years (60.9%), 65+ years (4.2%)

Population below poverty line: 32.9% (2006 estimate)

Literacy: 92.6%

Economic and financial profile:

Labor force: 37.89 million

GDP: US$160.6 billion

GDP growth: 0.9% (2009)

GDP sectors: agriculture (14.9%), industry (29.9%), services (55.2%)

Unemployment: 7.5%

Inflation: 3.2%

Currency: US$1 = 47.8 Philippine Pesos

Industrial production growth: -2% (2009)

Export partners: US(17.6%), Japan (16.2%), Netherlands (9.8%), Hong Kong (8.6%), China (7.7%), Germany (6.5%), Singapore (6.2%), South Korea (4.8%)

Global competitiveness: #71 out of 134 countries

Corruption perception: #141 out of 180 countries

Sovereign credit rate: BB^- - stable (S&P, 23 Aug. 2010),
Ba3 - stable (Moody's, 10 Mar. 2010)

Stockmarkets: US$130.5 billion

Central bank: Bangko Sentral ng Pilipinas

Real estate loans: PHP387.94 billion (March 2010)

Investible property: US$21 billion; 0.77% of global property

Property market transparency: semi – transparent

Sources: CIA (2010), EPRA (2010), JLL (2010), TI (2008), WEF (2008), S&P, Moody's, Central Bank of the Philippines

The cultural and historical factors, along with a steady supply of skilled manpower, make the Philippines a top choice for the multinational companies. Factors for choosing the Philippines as their contact centre venue are the country's customer-oriented and service-driven workforce. Compared with other Asians, the Filipinos are

more receptive and adaptable to the western culture, because of their long-standing shared history, higher level of English proficiency, and ability to deliver quality service at lower costs. In addition to cost-effective labor, operational costs are relatively low, wherein call centre infrastructure such as customer relationship management technologies, interactive voice response system, computer telephone integration technologies, call management system, automated quality monitoring and recording system are highly accessible (JLL, 2006; 2008).

The Philippines see its growth for industrial operations lean towards the information technology sector. With an industry average growth rate of 50% over 2005-2007 and covering 5% of the market worldwide, it is the third-largest destination of the outsourcing and offshoring (O&O) firms, next to India and Canada (15%, 27%, 37% in O&O market by destination location for the Philippines, Canada and India respectively) (JLL, 2008). It is further evident with Makati ranked #6 out of top 8 global outsourcing cities (Tholons, 2008). This city was also recognized as one of the established cities in finance and accounting, legal services, human resources, and contact centres, with Cebu City moving up to rank #1 (2008) from #4 (2007) in the category of emerging global outsourcing cities (Tholons, 2007; JLL, 2008). The Philippines have become a favorable location for IT and business process outsourcing (BPO) services, illustrated by its BPO export value aggregating close to 50% of India's BPO export (Tholons, 2009). Planning for this industry, the local government has determined the roadmap 2010 to identify three main initiatives; that is to create and develop talent, to provide a healthy business environment and to determine and develop potential cities for offshoring and outsourcing investment (JLL, 2008).

With reforms implemented in the financial sector, the Philippines banking sector has remained stable and sound enough to deal with the adverse impacts of the GFC. This is further evident with high credit worthiness, a BB- and Ba3 ranked by S&P and Moody's respectively, and a stable level in sovereign credit rate. Low interest rates, healthy bank liquidity, stable outlook on inflation and resilient remittances from the overseas Filipino workers signaled a positive economic prospect in the country.

Although the country is ranked low in terms of the global competitiveness (#71 out of 134 countries) and high in the corruption level (#141 out of 180 countries), it is partly enhanced with a market transparency level stable at semi-transparency in the property market since 2004, an improvement from a low transparency in 2002. This also reflected a constant effort by the Philippine government in improving the overall business environment and macro-economic performance (see Table 1) to reinforce the investors' confidence in an emerging property market.

However, the Philippine government still faces several long term challenges; it must maintain the reform momentum, especially in its major industries in order to catch up with regional competitors including established and emerging markets. This is

particularly challenging in the high uncertainty of the post-GFC period, when the global market is still at its turning point before reaching stability and the US market is yet to recover. The Philippines will need still higher, sustained growth to make progress in alleviating poverty, given its high population growth and unequal distribution of income (CIA, 2010).

DIRECT PROPERTY MARKET IN THE PHILIPPINES

Land ownership is generally only for the Filipino citizens and corporations that have at least 60% of capital owned by the Filipinos. With land leases, foreign companies investing in the Philippines can lease land for 50 years and renew the lease once for another 25 years (CBRE, 2009b).

The Philippines property market had constantly grown from 2002 until the impact of the GFC was evident. The positive effects of the stable Philippines peso, the increasing tourist arrivals, the booming BPO and the solid overseas Filipino worker remittances are factors contributing to the growth of the Philippines property market. Fortunately, the impact of the GFC on this country's property market in the second half of 2009 has been reduced, together with the passage of the new REIT law.

The Philippines office market is strongly driven by the rapid growth of the information technology and BPO industries. Since 2002, demand for the prime office space started accelerating, reducing the supply-demand gap and then outpacing the stock of supply (JLL, 2006). This lead to the emerging districts outside of metro Manila steadily gaining popularity with the BPO companies, with those sensitive to operational expenses finding this ideal to their situation, with the quality labor force and adequate facilities at more affordable rates.

This saw the emerging of new business districts or urban centers, especially in the major cities across the country at a steady pace. These developments are strongly supported by the local and national government, as well as local business groups through granting of incentives and active marketing and promotion of the developments. As such, both local and major national development projects have been seen at various stages of completion in recent years. However, the growth in the office sector is still dependent on the global economic conditions and the performance of the offshore and outsourcing industry as a major driver of demand.

In the retail sector, it is marked with the Retail Trade Act of 2000, opening the retail market to foreign retailers, in which foreign ownership of as much as 100% is allowed

under the law, depending on the capitalization of the business and subject to certain terms and conditions[4] (CBRE, 2009b).

While other property segments have been affected by the GFC, the retail industry shows a less severe impact. This is partly supported by the overseas Filipino worker remittances, growing by 2.58% year on year at the fourth quarter of 2009, leading to higher consumer spending than anticipated. There is also continuous development of the retail infrastructure and expansion among convenient stores, as well as stand-alone shops. Rental rates and occupancies are seen to be stable, while demand and supply of stock in the Metro Manila retail market are reportedly going up (CBRE, 2009).

Despite of the GFC, there is an overall steady flow of transactions in the residential, retail and hospitality sectors. During the GFC period, the acquisitions, expansions and developments in the Makati CBD and fringe residential area have improved due to an improved economic outlook over the first quarter of 2010. This positive outlook is due to signs of improving the global as well as domestic economic conditions. The positive outlook is further being reinforced with the promising REIT Act and Implementing Rules and Regulations, as will be discussed later in this study, strengthening the property sector by opening the market for the smaller investors.

In the industrial sector, growth for the industry operations leans towards the information technology sector, with increasing involvement of the local government to continuously relieve the burden on the industrial sector. However, as an impact of the GFC on all economic activities, the slump in export demand has affected investment activities in the industrial sector. Nevertheless, positive developments due to strong interest for logistics and the continuing need for storage facilities and specialized warehouses have brightened this sector during the GFC period.

Beside the above mentioned positive components, there are some financial factors with negative effects on the Philippine direct property market. Almost all transactions are in cash, especially the pre-sale ones. This sees an underdeveloped mortgage market which hampers the local demand. The ratio of housing loans to GDP remains small at 5% at March 2010, of which residential accounting for 43.37% and commercial of 56.63% (Central Bank of the Philippines, 2010). Other factors also hamper the local mortgage market expansion, namely banks' restrictive lending conditions and the long time for approval of loan applications among a few major banks offering housing loans. There are still complaints about land titling and registration problems, with unclear procedures as well as delays in the foreclosure process.

[4] According to the Philippine Retail Trade Act of 2000, foreign retailers not dealing exclusively in luxury goods must source at least 30% of their stock inventory, by value, locally for the first 10 years after the law's effective date. Foreign retailers selling luxury products must have at least 10% of their inventories consisting of products assembled in the Philippines.

INDIRECT PROPERTY MARKET IN THE PHILIPPINES

Whilst the implementation of the REIT law is pending, the indirect property market in the Philippines sees only the presence of listed property companies on the Philippine Stock Exchange (PSE).

Companies listed on the PSE are either on the First Board, Second Board or the Small and Medium Enterprises Board. Listed companies are classified into the sectors of financial, industrial, holding firms, property, services, and mining and oil. Companies engaged in land and property development are classified under the property sector.

There are 40 listed property companies at September 2010, dropping from 45 at June 2010. Amongst these 40 property companies, 36 have been listed before 2000, 2 in 2007. Listed in the property sector are the companies with major activities in land and property development, accounting for 60% of its total revenue. In the case where a company can be categorized in more than one sector, the categorized sector should account for at least 50% of the company's total revenue. On the stricter criteria for pure property companies by Macquarie Research, only 35 Philippine property companies are recognized, lower than the number seen on the PSE. The Philippines property market is, nevertheless, considered significant in the emerging markets in Asia, with a market cap at £9.2 billion, accounting for 2.1% of the Asian property market and 0.9% of the global property market. At this position, it is ranked at #6 in Asia and #15 globally (see Table 2). The property index on the PSE is calculated from the 11 listed property companies under a set of criteria.

Besides the listed property companies as a major player in the Philippines indirect property market, there are 43 investment funds traded on the PSE with 8 balanced funds, 8 equity funds and 1 index fund. This sees 17 funds investing directly or indirectly in the Philippines property securities. Besides the government pension fund managed by the Government Services Insurance System (GSIS) which is partially being invested in the PSE and a global investment program, there is no private pension fund operating or investing in the Philippines.

Another class of player who plays a significant role in the Philippines property market is the property advisory companies. Besides the major finance and banking institutions with property advisory activities being included, there are several with worldwide expertise in property investment. CBRE saw its activities in the Philippine property market back to 1995 through its association with an official establishment of CBRE Philippines in 1998. Its comprehensive range of services include property sales, leasing, tenant representation, office services, investment sales, property management, facilities management, asset management, project management research and consulting, valuation services, and technical services.

Similarly, Jones Lang Wootton entered the Philippines property market on the back of several agency leasing projects and property management for landmark buildings in the Makati Central Business District. However, Jones Lang LaSalle Philippines did not see its official operation until being merged with Leechiu and Associates in 2008 to become Jones Lang LaSalle Leechiu. Previously, Leechiu and Associates had its operations in Makati City since 2003. The presence of these leading property advisors with complete services in property investment, like any other established property market in the region, reflects the significant position of the Philippines property market.

In the near future, the indirect property market in the Philippines is promising to grow to a new phase of significance with the passage of REIT Act of 2009 on 17 Dec 2009 and the finalization of its Implementing Rules and Regulations on 13 May 2010. The benefits and opportunities from the creation of Philippines REITs are seen to the property investors of all classes, and broader to all financial investors in the capital market context in this country. This includes the tax incentives and more liquid capital flows for the investors of both institutional and individual.

Table 2: Significance of property securities markets in Asian countries: June 2010

Country	Number of property securities	Market capitalisation	Percentage of Asia market	Percentage of global market	World ranking (by £)
Hong Kong	134	£199.4B	44.4%	20.3%	2
Japan	143	£70B	15.6%	7.1%	3
Singapore	65	£61.4B	13.7%	6.3%	4
China	80	£57.3B	12.8%	5.8%	5
India	42	£19.5B	4.3%	2.0%	11
Philippines	**35**	**£9.2B**	**2.1%**	**0.9%**	**15**
Taiwan	47	£9.1B	2.0%	0.9%	16
Malaysia	81	£8.7B	1.9%	0.9%	17
Thailand	52	£7.0B	1.6%	0.7%	22
Indonesia	40	£5.3B	1.2%	0.5%	26
Vietnam	5	£1.2B	0.3%	0.1%	40
South Korea	7	£0.3B	0.1%	0.0%	47
Sri Lanka	16	£0.2B	0.0%	0.0%	48
Total Asia	**747**	**£448.6B**	**100%**	**44.7%**	
Total Global	**1,995**	**£980.4B**		**100%**	

Source: Macquarie Securities (2010)
Reference exchange rate at 30 June 2010: 46.3100 PHP/USD, 69.9790 PHP/GBP (Central Bank of the Philippines)

Significance of REIT Act of 2009 and implementing rules and regulations of REIT Act

Because of the significant potential benefits given from the REIT Act of 2009 and its implementation rules and regulations to the Philippines property investors, as well as to the overall development of this market, this study presents the potential benefits of Philippines REITs to its investors. An overall benefit to the Philippines financial market is a more transparent business environment created by the REITs. Requirements from the REIT Act and its implementation in property management include financial records and daily operational management, creating a high transparency in the property investment activities and related business. Similar positive effects are also seen in the requirements related to REIT shareholders and assets.

In terms of financing capital, a REIT can get a maximum debt level of 70% from a minimum level of 35% of its deposited property if it has a publicly disclosed investment grade credit rating by a duly accredited or internationally recognized rating agency. This creates motivations for REITs to gain high leverage through a high quality credit, thus contributing to a more transparent and an efficient business environment for the Philippines property market, promoting the development of a mortgage market in this country, especially for bondholders in REITs.

In terms of taxations, REIT and its investors are entitled to substantial tax incentives such as:

- Income payments to a REIT is subject to a lower creditable withholding tax of 1%
- Sale or transfer of real property to REITs is subject to 50% of the applicable Documentary Stamp Tax (DST). Similar is applied to registration and annotation fees
- These tax incentives are also granted to unlisted REITs who are listed maximum 2 years after the availment of the incentives
- Sale, barter, exchange or disposition of listed investor securities through the Exchange is exempt from the DST. Similar is applied to initial public offerings and secondary offerings of investor securities
- Dividends received by domestic corporations or resident foreign corporations investors are exempt from income tax or any withholding tax. This also applies for the overseas Filipino investors in 7 years from the effect of the implementing tax regulations.

(Source: REIT Act of 2009 and Implementing Rules and Regulations, 2010)

All of the above incentives are considered substantial to Philippines REITs and their investors, encouraging the capital flows from local, overseas Filipino and foreign investors. Although the real effects of these tax incentives for the growth of the

Philippines property market still depend on a broad system of the other regulations and the national business environment, the REIT Act 2009 and its Implementing Rules and Regulations are expected to significantly contribute to the future growth of the Philippines property market.

DATA SOURCES AND METHODOLOGY

Data sources

To assess the performance of property investment from the perspective of the local investors, this study uses the monthly indices of Philippines stocks and Philippines property, and the monthly yield indices of Philippine bond and Philippine 90-day T-Bill in local currency.

In the regional context, it uses the monthly price index of Asia-Pacific property which represents the property investment in the Asia Pacific as a benchmark. The series of Asia-Pacific emerging markets property index is not available until July 2006 and thus is not a suitable benchmark in this study.

From the perspective of the US investors, it uses the US stock, US real estate, US bond and US T-Bill data series for assessment. All of these monthly price index data are taken from Datastream over the period of January 1999 – May 2010, with a shorter time span for Philippines bonds (February 1999 – April 2009) when it ended. When considering asset performance from a perspective of the US investors, all indices are in the US Dollar currency for high accuracy.

All of these data series are the monthly closing price indices, with the interest series being the monthly yield indices[5]. No direct property index is available for the Philippines property market; hence only listed property securities in the Philippines are analysed in this paper.

Methodology

To assess the property investment performance from the price indices of the selected asset classes, the annual mean return, risk, risk-adjusted return are calculated for all

[5] Details of indices used:
- Philippine Treasury Bill 90d - Middle Rate
- Philippine Govt Bond Yield 10 Yr- Middle Rate
- Philippine SE I(PSEI) - Price Index, USD & Peso
- Philippine SE Property -Price Index, USD & Peso
- S&P Asia Pacific Property USD - Price Index
- US Treasury Constant Maturities 3 Mth - Middle Rate
- US Bond Yield Govt.10 Yr(Econ) - Middle Rate
- DJ US Total Stock Market - Price Index
- DJTM United States Real Estate USD - Price Index

asset classes over the full period of Jan. 1999 – May 2010. A profile of return versus risk of all asset classes is also presented. Regarding the diversification benefits for diversified investment, the correlation matrix and rolling 3-year correlations of observed asset classes are presented and discussed. Further, the risk profiles are presented in the graphs of three-year rolling risk to assess the significance and stability of all asset classes. Finally, an optimal investment portfolio combining all possible observed asset classes is addressed.

The performance analysis is made in the local context including the Philippine bonds, stocks and properties as all available investible asset classes for the Philippine investors, and in a broader context, a performance analysis in this study includes the US bonds, US stocks, US property companies and Philippine stocks, Philippine property companies and Asia-Pacific property companies as the possible investible asset classes from a perspective of the US investors. Finally, the impact of the GFC on the performance of property securities and other asset classes is also discussed by a performance analysis over the two sub-periods of Jan. 1999 – Jun. 2007 and Jul. 2007 – May 2010.

LISTED PROPERTY COMPANIES: PERFORMANCE ANALYSIS

Risk-adjusted returns

Table 3 Panel A presents the risk-adjusted return analysis for all the asset classes in the Philippines over the period of January 1999 – May 2010. Returns on the property securities in this period underperformed that seen on stocks (3.56% versus 4.66%). Property securities risk (32.41%) was also higher than the overall stock market risk (23.47%). On a risk-adjusted basis, the relationship between stocks and property securities remains unchanged. The Sharpe ratio shows property securities underperformed stocks, while bonds were the best performing asset class for the local investors.

This finding implies the Philippines property securities underperformed the Philippines equity market, even though the property stocks increased in price and was well-performed in recent years. Further, whilst the performance of the Philippine direct property has been quite positive, explanation for this outcome may be traced on the analysis on direct property investment as well as the operational and financial factors affecting Philippine property companies.

Table 3: **Risk-adjusted analysis: January 1999 – May 2010**

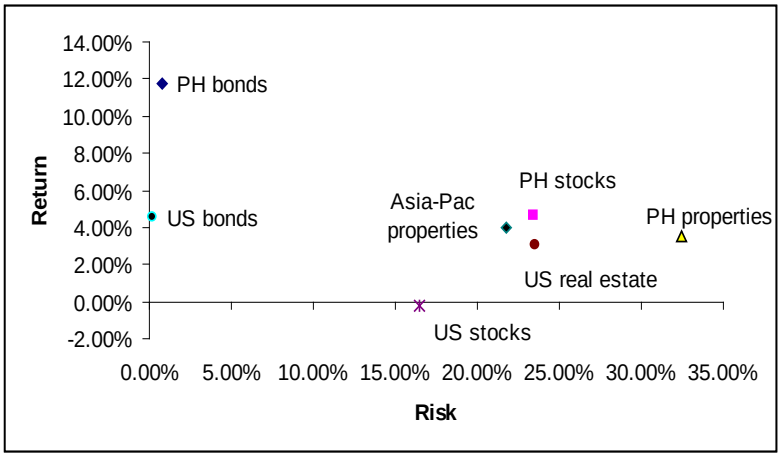
	Mean	Risk	Sharpe ratio
Panel A: Local market investors (local currency)			
Philippine property	3.56%	32.41%	- 0.085
Philippine stocks	4.66%	23.47%	- 0.071
Philippine bonds	11.79%	0.79%	6.876
Philippine T.Bill	6.33%		
Panel B: From regional and US investors' context (USD currency)			
Philippine property	1.89%	35.47%	- 0.026
Philippine stocks	2.97%	26.67%	0.006
US Real estate	3.03%	23.50%	0.010
US stocks	-0.25%	16.47%	- 0.185
US bonds	4.52%	0.24%	7.103
Asia-Pac property	3.95%	21.79%	0.053
US T.Bill	2.80%		

To consider the performance of the Philippine property securities in a broader context, Table 3 Panel B presents the risk-adjusted performance for Philippine stocks and property companies with the US asset classes and the Asia-Pacific properties. Returns on all the asset classes were positive, except for that on US stocks (US properties: 3.03%, US stocks: -0.25%, Asia-Pacific properties: 3.95%). It is worth noting that in the US Dollar currency, Philippine property companies underperformed both the regional property companies and the US property companies over January 1999 – May 2010.

Figure 2 presents profiles of returns versus risks of all the observed asset classes. Against risk, bonds outperformed stocks and property securities across country

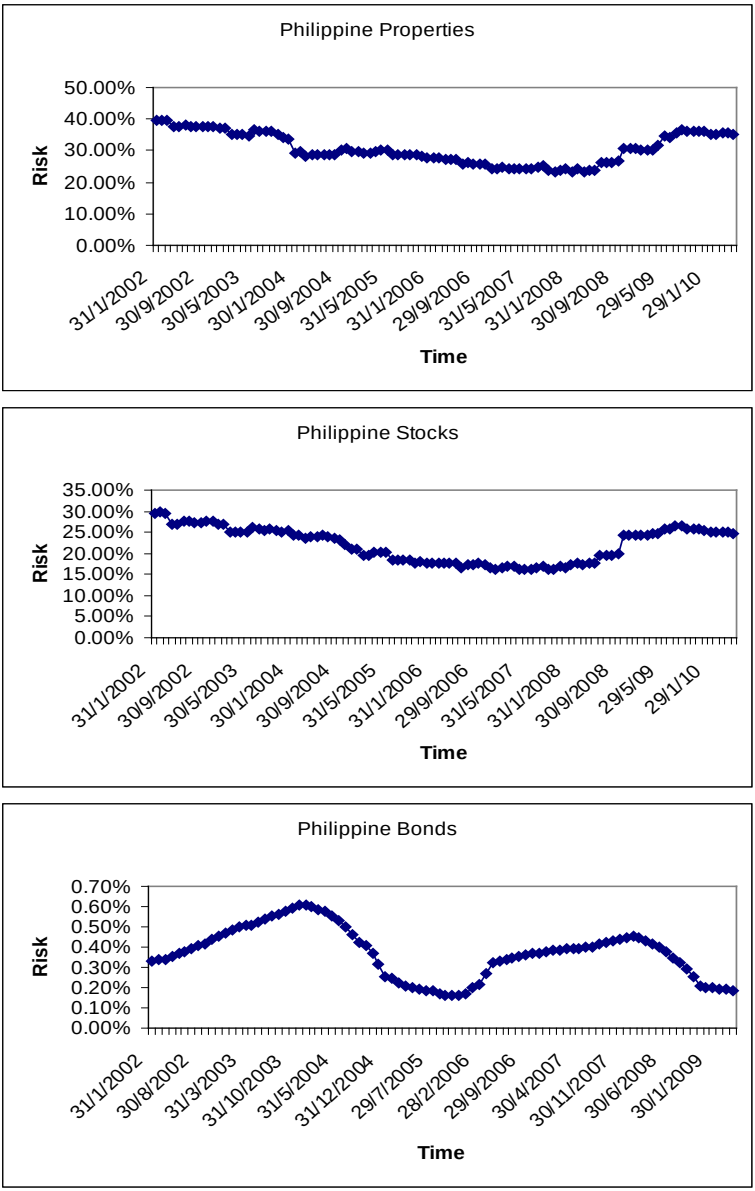
markets. In other words, property companies and stocks added more risk than return to the portfolio with the Philippine property companies adding the highest relative risk.

Figure 2: Risk – return profile: Jan. 1999 – May 2010



To assess the overall risk stability over time, Figure 3 presents the profiles of three-year rolling risk of the Philippines asset classes over the full period of January 1999 – May 2010. The risks of Philippine property companies and Philippine stocks indicate an enhancement over time until the impact of the GFC was evident on the markets. Compared to the benchmark market, however, the risks of the Philippine assets were still higher than the US property companies which showed a stable and low level until they experienced the impact of the GFC. Also, the risk in the Philippine property companies sector was higher than that seen for Asia-Pacific property companies.

Figure 3: Three year rolling risk: Jan. 1999 – May 2010 (*)



(*) The rolling risk profiles of other asset classes are provided upon request.

Diversification benefits

It is important to assess the diversification benefits of property securities, both within country (across asset classes) and from the perspective of the developed markets, specifically the US investors in the presence of the regional property securities. Table 4 presents the correlations for the Philippine property companies with all the observed asset classes across markets over the period of January 1999 – May 2010. The positive and low correlation of Philippine property securities with bonds (r=0.04) indicates a potential diversification benefit of including property in a mixed-asset portfolio from the local context. Nevertheless, a positive and higher correlation of the Philippines property securities and stocks (r=0.88) presents a less diversification benefit from combining these asset classes. At one side, this reflects the fact that property securities are stocks and thus share some common factors with stocks. At the other side, this may be partly resulted from the potential bias that property securities are included in the stock index.

Table 4: Correlation matrix: Jan. 1999 – May 2010

	PH bonds	PH stocks	PH property	US bonds	US stocks	US real estate	AP property
PH bonds	1.00						
PH stocks	- 0.04	1.00					
PH property	0.04	0.88	1.00				
US bonds	0.60	- 0.10	- 0.09	1.00			
US stocks	0.04	0.47	0.43	0.03	1.00		
US real estate	0.11	0.30	0.35	0.01	0.63	1.00	
Asia-Pac property	0.07	0.48	0.48	0.03	0.73	0.59	1.00

From the perspective of the US investors, Philippine stocks had higher correlations with the non-property asset classes ($r_{US\ Bonds,PH\ Stocks}$= -0.1 versus $r_{US\ Bonds,PH\ properties}$ = -0.09 and $r_{USstock,PH\ stocks}$=0.47 versus $r_{US\ stocks,PH\ properties}$ =0.43), whereas Philippine property companies had a higher correlation with US property companies (r =0.30) compared to that with Philippine stocks (r=0.35). Although the difference was marginal, this indicates a potential diversification benefit of including Philippine property companies; given this asset class enhances its performance. Correlation of US stocks with Asia-Pacific property companies (r=0.73) was also higher than with Philippine property securities (r=0.43). The same rank order for the correlation of US property companies with Asia-Pacific property companies (r=0.59) is recognized, compared to that with Philippine property companies (r=0.35). Overall, the analysis

shows a more potential diversification benefit from including Philippine property companies in portfolios.

To assess the stability of the correlations over time, Figure 4 presents three-year rolling correlations of the major asset classes over the period of January 1999 – May 2010. All the correlations with Asia-Pacific property companies showed a high level of volatility and increasing correlation in the GFC.

Figure 4: Three year rolling correlation: Jan. 1999 – May 2010

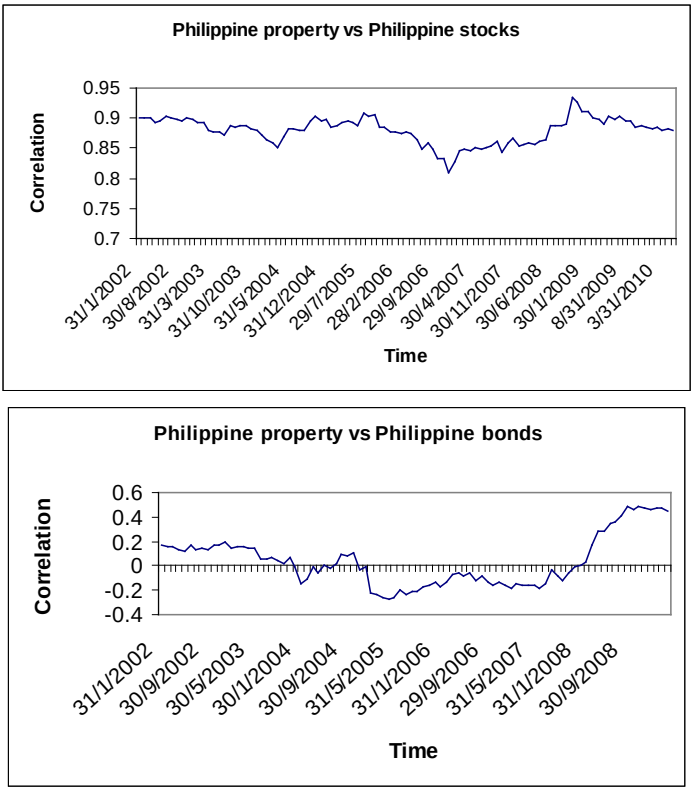
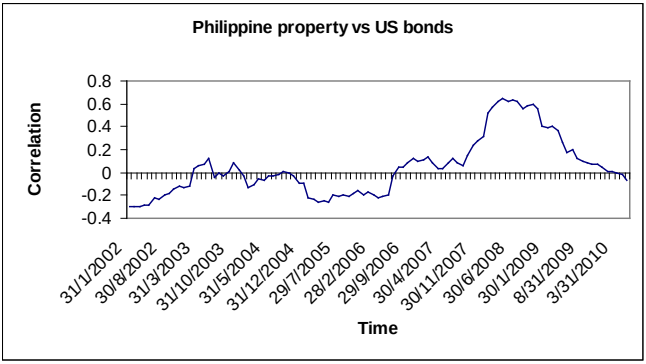
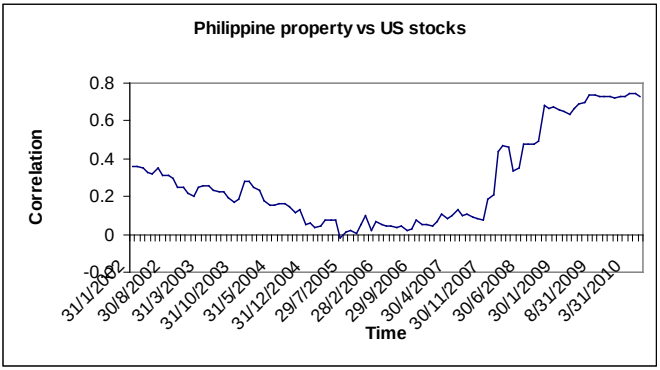
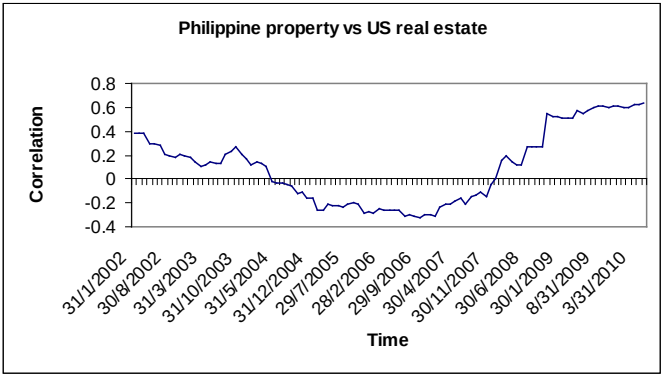


Figure 4: Three year rolling correlation: Jan. 1999 – May 2010 - Cont. (*)







(*) The major rolling correlation profiles are presented only. Others are available upon request.

The efficient frontier and optimal investment portfolios

Given the performance of all asset classes over the period of January 1999 – May 2010, the Solver function indicated only one optimal investment point over this period. The efficient portfolios for the local investors considered Philippine bonds as the best performing asset class. Adding the second best one, the Philippine stocks, would decrease return and increase risk and thus is eliminated from the optimal portfolios. This efficient frontier saw only one optimal point with 100% of Philippine bonds.

From the perspective of the US investors, a similar situation is seen on the efficient frontier for the local investors. With superior returns on the US bonds, the optimal investment portfolio is to put 100% of investment capital in US bonds to maximize the risk-adjusted returns over the period of January 1999 – May 2010. Overall analysis of efficient frontier from the perspective of both the local and US investors indicates that the Philippine property companies were not fully recovered from the 1997 Asian crisis when it experienced the impact of the GFC. On the other hand, the Philippine property securities market needs more innovative factors to enhance its prospective performance.

The impact of the global financial crisis: sub-period performance analysis

To assess the dynamics of Philippine property companies and the impact of the GFC over the period of January 1999 – May 2010, Table 5 presents the performance of each asset class in local currency over the two sub-periods of Jan. 1999 – Jun. 2007 and Jul. 2007 – May 2010 respectively. Over the first sub-period of Jan. 1999 – Jun. 2007, Philippine property companies outperformed Philippine stocks in both absolute return (10.05% versus 7.74%) and Sharpe ratio (0.095 versus 0.029). In the dynamics of local and regional business and more importantly, the impact of the GFC, the second period saw Philippine property companies more badly impacted than Philippine stocks in both the absolute return (-13.11% versus -3.77% p.a. for property securities and stocks respectively) and on a risk-adjusted basis (Sharpe ratio = -0.491 versus -0.32).

From the perspective of the US investors, Table 6 presents the performance of each asset class in the US Dollar currency over the two sub-periods of Jan. 1999 – Jun. 2007 and Jul. 2007 – May 2010 respectively. Over the first sub-period, all the observed asset classes saw positive returns, with Philippine property securities underperforming both US property securities and Asia-Pacific property securities. Asia-Pacific property companies were the best performed among the risky asset classes. On a risk-adjusted basis, this rank order remains unchanged (Sharpe ratios = 0.527, 0.44, 0.125 for Asia-Pacific property securities, US property securites and Philippine property securities respectively), with US bonds best performing (Sharpe ratio = 6.927). Although Philippine property securities outperformed Philippine

stocks, Philippine property securities underperformed all the observed property securities classes. US stocks was the only asset class that saw a loss on the risk-adjusted basis in the first sub-period.

Table 5: Risk-adjusted return analysis from local investors' perspective: Jan 1999 – June 2007 and Jul 2007 – May 2010

	Mean	Risk	Sharpe ratio
Panel A: Jan. 1999 – Jun. 2007			
Philippine property	10.05%	**31.36%**	0.095
Philippine stocks	7.74%	23.01%	0.029
Philippine bonds	12.68%	0.69%	8.175
Philippine T.Bill	7.07%		
Panel B: Jul. 2007 – May 2010			
Philippine property	-13.11%	35.33%	- 0.491
Philippine stocks	-3.77%	24.94%	- 0.320
Philippine bonds	7.81%	0.76%	4.751
Philippine T.Bill	4.22%		

With the impact of the GFC, all the observed asset classes witnessed loss in terms of absolute return. Asia-Pacific property securities suffered the most significant loss (-17.09%), with US property securities being the second worst (-14.21%) and Philippine property securities not far behind (-13.12%). On a risk-adjusted basis, the rank order remains unchanged. The overall performance of the two sub-periods saw US bonds giving the best performance on both absolute returns and risk-adjusted basis. This again confirms that US bonds were the only asset class to dominate the optimal investment portfolio.

Table 6: Risk-adjusted return analysis: US investors' perspective

	Mean	Risk	Sharpe ratio
Panel A: Jan. 1999 – Jun. 2007			
Philippine property	7.68%	34.44%	0.125
Philippine stocks	5.42%	26.24%	0.078
US Real estate	9.78%	14.56%	0.440
US stocks	3.14%	14.35%	- 0.017
US bonds	4.82%	0.21%	6.927
Asia-Pac property	12.43%	17.17%	0.527
US T.Bill	3.38%		
Panel B: Jul. 2007 – May 2010			
Philippine property	-13.12%	38.52%	- 0.341
Philippine stocks	-3.78%	28.21%	- 0.175
US Real estate	-14.21%	39.36%	- 0.391
US stocks	-9.41%	21.51%	- 0.491
US bonds	3.66%	0.16%	15.788
Asia-Pac property	-17.09%	31.16%	- 0.586
US T.Bill	1.16%		

PROPERTY IMPLICATIONS AND CONCLUSIONS

This paper has presented a profile of the Philippine property market and further assessed the significance and performance, risk-adjusted performance and diversification benefits of listed property securities in the Philippine stock market from the perspective of US investors.

In the past ten years, the Philippine property market has inherited solid national economic growth, the strong and stable national financial market even in the GFC period, the supportive BPO industry and the constant remittances from the overseas Filipino workers. This saw the Philippine property market recovering after the 1997 Asian crisis and constantly grew until the impact of the GFC was evident.

Analysis of the Philippine property securities market indicated growth and expansion across the country in terms of market size and sophistication. However, in the local context, performance analysis on the basis of absolute and risk-adjusted returns indicated the underperformance of the Philippine property securities. Over the period of Jan. 1999 – May 2010, Philippine property securities underperformed Philippine bonds and stocks in terms of both absolute and risk-adjusted returns. This can be a combination of a just-recovery from the 1997 Asian crisis and the impact of the 2007-2009 GFC.

From the perspective of the US investors, a similar situation was witnessed. The underperformance of the Philippine property securities has eliminated itself from the efficient frontier as a potential international asset. Although Asia-Pacific property securities were the second best performing asset in analysis, it underperformed US bonds and as such, the efficient frontier for the US investors saw US bonds only. Although the diversification benefits of including Philippine property securities were seen in both of the local and international context, the high risk and low return of Philippine properties indicates a negative added value when including Philippine property securities in diversified portfolios. This implies that the Philippines property market needs innovative factors for a sustainable momentum to reach higher growth and better performance in future. The creation of the Philippine REIT market may be effective, with the strict application of laws in nourishing an advanced business environment to overcome the country weaknesses as addressed in the previous sections. Until the Philippine property securities market enhances its performance, the diversification benefits from this market are unattainable for both of the local and international investors.

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