AN ANALYSIS OF HONG KONG REITS: CURRENT AND FUTURE OPPORTUNITIES FOR INVESTORS

By

King Man Chow

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Signature of Author: ___________ ________________________________
MIT Sloan School of Management
May 6, 2011

Certified By: __ ____
David Geltner
Professor of Real Estate Finance, Department of Urban Studies & Planning
Thesis Supervisor

Accepted By: _________ ____
Michael A. Cusumano
SMR Distinguished Professor of Management
Program Director, M.S. in Management Studies Program
MIT Sloan School of Management

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ABSTRACT

Real estate investment trust (REIT) is a valuable investment alternative for investors in many markets. Being home to a handful of world-class property developers, Hong Kong, the Asia financial hub, seemed to have met all the criteria to grow a REIT market rapidly. Yet, since the enactment of the Hong Kong REIT Code in 2003, the H-REIT (acronym for Hong Kong REIT) market saw only eight H-REITs being launched, lagging the growth of other REIT markets in the region. This thesis paper seeks to uncover the present investment values in H-REITs and determine what likely would shape the future of the market hence the potential value it could bring to investors, through examining the local real estate capital markets, the regulations, and the supply and demand dynamics, and conducting comparative analysis with stocks of local property companies.

The study finds that the H-REITs are significantly less risky than local property stocks and offer dividend yields that in most cases are greater than the earning yields of those stocks. H-REIT offers real estate exposure, yet provides diversification effect to a portfolio of local property stocks given its low correlations with these stocks. Hurdles to market growth persist as abundance of liquidity, low yields offered by prime properties, poor reception of yield enhancement mechanisms in REITs, agency problems and questionable corporate governance of the H-REITs all contributed to suppressing both the supply and demand for local asset-backed H-REITs. Moreover, the small size of the city seems to indicate that the H-REIT market was destined to depend on cross-border deals. Thanks to the close-tie to China, Yuan-denominated cross-border REITs backed by Mainland China assets appear to be the future of the H-REIT market. While this type of deal clears some of the hurdles to grow the market, it still remains in the hands of the sponsors to add transparencies in H-REIT management structure to gain the much needed trust from investors to build a functioning market.

Thesis Supervisor: David Geltner
Title: Professor of Real Estate Finance, Department of Urban Studies & Planning

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Chapter 1. Hong Kong Real Estate Capital Market

1.1 Overview of HK Real Estate Market

1.1.1 Economy Overview

Hong Kong, a special administrative region of the People's Republic of China, is widely considered to be the financial hub of Asia and the gateway to China. As of 2009, Hong Kong's gross domestic product (GDP) per capita of US$42,716 was the fourth highest among those of Asian countries, behind only Australia, Japan and Singapore[1]. Hong Kong is largely a service economy with the service sector accounts for 92.6% of its GDP in 2009[2].

Table 1.1: Hong Kong's Year 2009 GDP Breakdown by Economic Activity

Economic Activity			2009 (% of Total GDP)		
Services			**92.6**		
	Import/export, wholesale and retail trades			23.6	
		Import and export trade			*19.7*
		Wholesale and retail trades			*3.9*
	Accommodation and food services			3.1	
	Transportation, storage, postal and courier services			6.4	
		Transportation and storage			*6.1*
		Postal and courier services			*0.3*
	Information and communications			3.0	
	Financing and insurance			15.2	
	Real estate, professional and business services			11.2	
		Real estate			*5.6*
		Professional and business services			*5.6*
	Public administration, social and personal services			18.0	
	Ownership of premises			12.1	
Other			**4.2**		
Construction			**3.2**		
GDP at basic prices			**100.0**		

Source: HK Census and Statistics Department

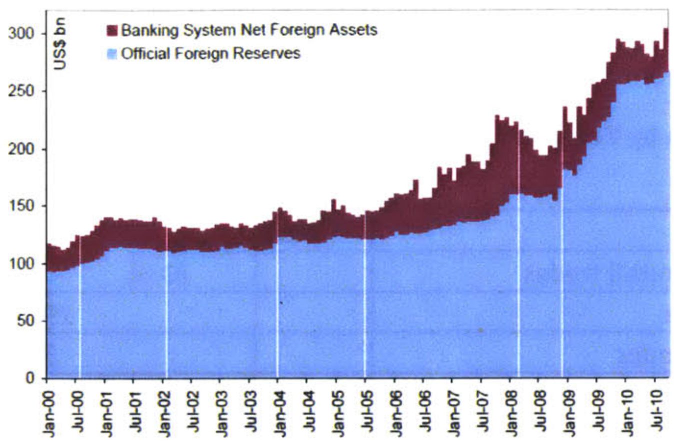
Hong Kong's economy has shown great resilience after the financial crisis, largely due to its close tie with China, the world's fastest growing economy. The city's major stock index Hang Seng Index has nearly doubled in the two years since it bottomed out in March 2009. However, Hong Kong Dollar (HKD) has been weak relative to other major currencies and the interest rate has been kept at a low level in the past

[1] Economist Intelligence Unit. "*Country Report: Hong Kong.*" Economist Intelligence Unit (March 2011).

[2] Hong Kong Census and Statistics Department

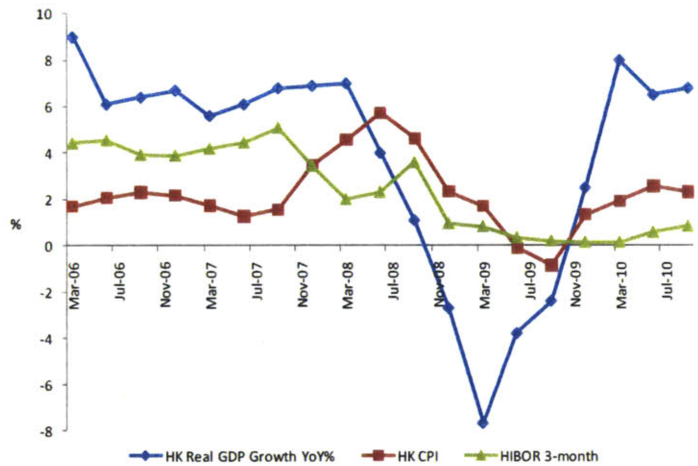
two years, since the exchange rate peg between the Hong Kong Dollar (HKD) and US Dollar[3] forces Hong Kong to follow the weak currency and loose monetary policy adopt by the US government. This has resulted in a large capital inflow and greatly stirred concern of inflation and asset bubbles, as shown in Figure 1.1 and Figure 1.2.

Figure 1.1: HK Foreign Reserves and Banking System Net Foreign Assets



Source: Morgan Stanley Research

Figure 1.2: HK Real GDP Growth, CPI and HIBOR



Source: Bloomberg

One recurring theme regarding Hong Kong's economy in recent years is its increasing dependency on China. Given its sound legislative system, fully convertible currency, and status of the world's freest economy[4], Hong Kong has become the hot bed of initial public offering (IPO). Hong Kong saw a total of US$57 billion raised from IPO in 2010, leading the world in terms of dollars raised from IPO issuance for the second year in a row[5]. The city was accounted for almost a quarter of the global IPO fund-raised proceeds[6], driven by a high volume of IPO listing of Chinese companies on the Hong Kong Stock Exchange.

1.1.2 Overview of the Geography of Hong Kong

Strategically located in the southeastern tip of China, as shown in Figure 1.3, Hong Kong has taken advantage of its deep natural harbor to turn itself into an important logistic hub in the region. With a land area of 1,104 square kilometers and a population of just over 7 million, Hong Kong is widely considered

[3] The peg was set so that the exchange rate of HK Dollars only fluctuate in the range of 7.75 to 7.85 HK Dollar to one US Dollar.
[4] Master, Farah. "*Hong Kong ranks world's freest economy for 17th year.*" Reuters (January 12, 2011)
[5] Stein, Peter. "*Hong Kong Seeks IPO Three-Peat in 2011.*" The Wall Street Journal (January 2, 2011)
[6] Ernst & Young LLP. "*2010 global IPO fund raising to exceed historic peak in 2007.*" Ernst & Young LLP (December 8, 2010)

to be one of the most densely populated areas in the world[7]. The city is comprised of three main territories, namely Hong Kong Island, Kowloon, and New Territories, as shown in Figure 1.4. Since the city's "terrain is hilly to mountainous with steep slopes", only less than 25% of the city's land is developed[8]. The urban development of the city is primarily located in Kowloon, along northern coast of the Hong Kong Island, and scattered throughout New Territories[9].

Figure 1.3: Map of China

Source: Enviro-maps.com

Figure 1.4: Map of Hong Kong

Source: Hong Kong Tourism Board

1.1.3 Overview of Hong Kong Office Market

At an occupancy cost of US$184.21 per square feet per annum year as of September 30, 2010, office space in Hong Kong's Central CBD (central business district) was the second most expensive in the world, behind only London's West End (US$193.69), and tops the chart as the biggest riser with a 34.2% year-on-year growth[10]. In Asia, office area in Hong Kong leads the pack in terms of both rental value and capital value as of fourth-quarter of 2010, as shown in Figure 1.5 and Figure 1.6.

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[7] Economist Intelligence Unit. *"Country Report: Hong Kong."* Economist Intelligence Unit (March 2011).
[8] Wikipedia.
[9] Ibid.
[10] CB Richard Ellis, Inc.. "*Hong Kong (CBD) Records the World's Fastest Year-Over-Year Occupancy Cost Rise and Ranks as World's Second Most Expensive Office Market.*" CB Richard Ellis, Inc. (November 15, 2010)

Figure 1.5: Asia Pacific Office Rental Value 4Q10

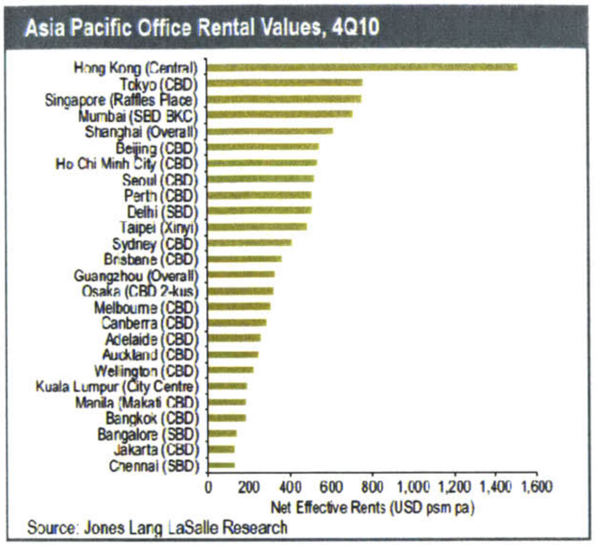
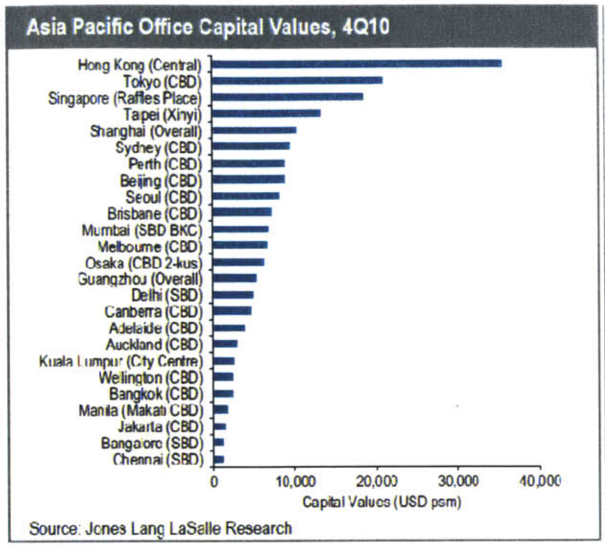


Figure 1.6: Asia Pacific Office Capital Value 4Q10



Hong Kong has a grade-A office stock of 75.46 million square feet and an overall vacancy rate of 4.85% at the end of September 2010[11], as shown in Table 1.2. Approximately three-quarters of Hong Kong's grade-A office space is located on Hong Kong Island , where 44% of the office space is occupied by the finance and banking sector, 23% is occupied by professional services centers, and 17% by the insurance sector[12]. Whereas in Kowloon, the home of a quarter of the city's grade-A office space, 66% of the office space was occupied by wholesale, retail and import/export trades, 13% by manufacturing, and 12% by transportation, storage, postal and courier services. Major office districts of the city are shown in Figure 1.7.

[11] DTZ Research. "*DTZ Property Times Hong Kong Q3 2010*." DTZ (October 13, 2011).

[12] CB Richard Ellis Research. "*MarketView: Hong Kong Office*." CB Richard Ellis, Inc. (Third Quarter 2010)

Figure 1.7: Major Office Districts in Hong Kong

Note: Line refers to subway line of MTRC
Source: CBRE

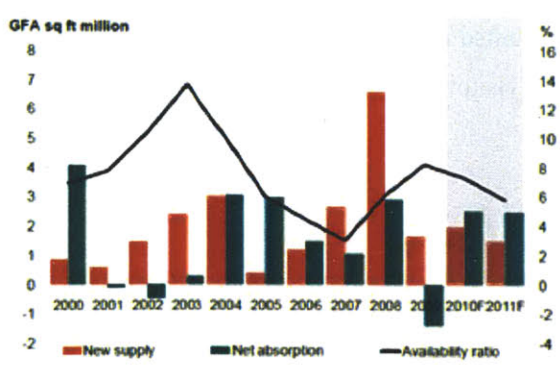
Table 1.2: Office Stocks of Hong Kong at 3Q2010

District	Total stock (Million sq ft)	Availability ratio (%)
Sheung Wan/Central/Admiralty	28.58	4.35
Wanchai/Causeway Bay	15.79	5.28
Island East	10.47	3.54
Hong Kong Island Total	*54.84*	
Tsimshatsui	9.27	5.72
Kowloon East	11.35	6.03
Kowloon Total	*20.62*	
Overall	**75.46**	**4.85**

Source: DTZ Research

In light of the strong economic recovery and businesses' attempt to expand their presences in the Greater China region (that includes Hong Kong, Mainland China and Taiwan), vacant office space in Hong Kong has been falling steadily since the financial crisis and is expected to remain scarce by many[13]. However, there may be a change in that distribution as there is an increasing number of financial institutions and professional firms moving from the traditional central CBD area over to Kowloon for less expensive space. Banks like Deutsche Bank, Credit Suisse and Morgan Stanley have recently moved into the International Commerce Centre in West Kowloon[14], an emerging office site that is near Tsim Sha Tsui.

Figure 1.8: New Office Supply, Net Absorption and Availability Ratio (2000-2011F)



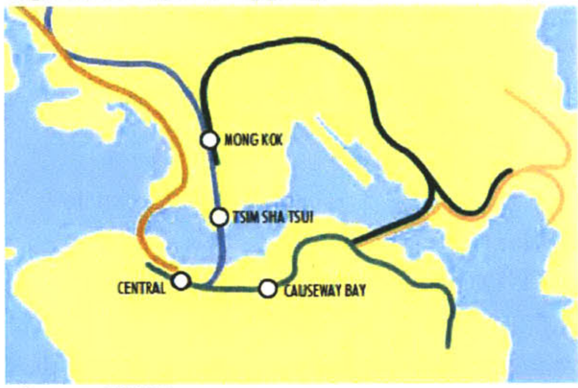
Source: DTZ Research

[13] Sito, Peggy. "*Office rent-rise view challenged.*" South China Morning Post (January 19, 2010)
[14] Website of Sun Hung Kai International Commerce Centre

1.1.4 Overview of Hong Kong Retail Market

Many consider Hong Kong to be a shopper's paradise thanks to its low tariffs and the presence of a wide variety of world-class brands. Hong Kong's retail sales amounted to HK$34.9 billion in 2010, an 18.5% year-on-year jump[15], hence played an important role behind the city's economic growth. The central shopping district of Hong Kong, Causeway Bay, charged a rent of US$1,664 per square foot per annum, which placed the district to be a close second behind New York City's Fifth Avenue (US$1,850) in the run for the most expensive retail area in the world as of September 2010[16].

Figure 9: Major Shopping Districts in Hong Kong



Source: CBRE

Many believe that the sharp jump in retail sales and retail rents post-financial crisis, as shown in Figure 1.10, are driven by the "twin-turbo engine": i) the resilient local consumption; and ii) the solid tourist inflow[17]. Private consumption growth, helped by economic prosperity, is an obvious driving force behind the strong retail consumption hence the rents. More importantly, shoppers across the borders have been contributing significantly, particularly the Mainland China shoppers. Given the proximity and the city's close tie to China, the proportion of Chinese visitors in the total number of visitors have been consistently growing, as shown in Figure 1.11. In the first ten months of 2010, Mainland China visitors account for 64% of the total number of visitors, a 29.4% jump comparing to the same period last year[18]. Tourist spending is estimated to be accounted for approximately 40% of the total retail sales in Hong Kong[19], and many believe that the upside on visitor flow and retail consumption is strong given the city's increasingly

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[15] Hong Kong Census and Statistics Department.

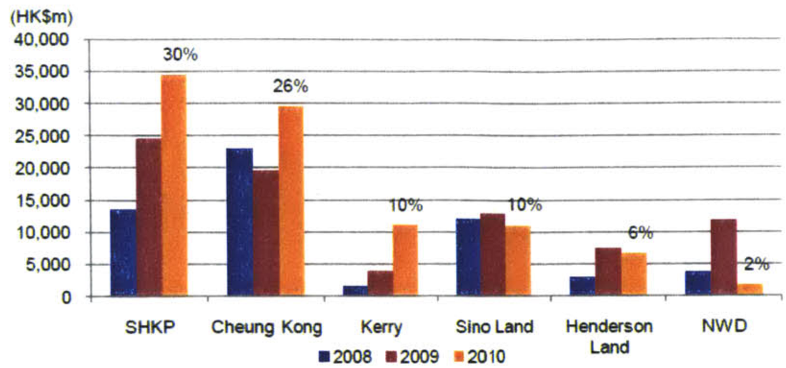
[16] Packard, Simon. "*Rents on Best Streets in Tokyo, Seoul Rise as Retail Heads to Asia-Pacific.*" Bloomberg (September 21, 2010)

[17] Jones Lang Lasalle, "*Encouraging market conditions prevail in 2010 with strong capital values growth recorded across property sectors.*"Jones Lang Lasalle. (December 7, 2010)

[18] Core Pacific - Yamaichi, "*2011 Investment Strategy – Hong Kong retail sector.*" Core Pacific – Yamaichi. (December 2010).

[19] Samsung Securities, "*Hong Kong Property: This time it's different. Oh really?*" Samsung Securities. (January 24, 2011)

Figure 1.12: Market Share of Hong Kong Developers by Contract Sales of Residential Units



Source: Centaline, Samsung Securities

The investment community typically classifies Hong Kong property companies into two categories: property developers and property investors (or landlords). These property developers usually generate most of their income from sale of residential units. On the other hand, property investors, or some called landlords, generate a greater portion of their profit from asset management, and leasing activities for their portfolio of properties.

A list of major properties developers and investors are shown below.

Table 1.3: A List of Major Publically-listed Property Companies in Hong Kong

Hong Kong Property Developers	Stock Code	Hong Kong Property Investors	Stock Code
Sun Hung Kai Properties	0016.HK	Swire Pacific	0019.HK
Cheung Kong	0001.HK	Wharf	0004.HK
Hang Lung Properties	0101.HK	Hysan	0014.HK
Henderson Land	0012.HK	Hongkong Land*	HKLD.SI
Sino Land	0083.HK	Great Eagle	0041.HK
Hang Lung Group	0010.HK		
New World Development	0017.HK		
Kerry Prop	0683.HK		

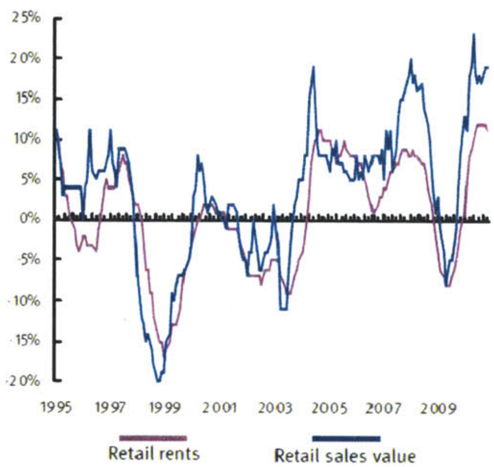
*Hongkong Land is listed on the Singapore Exchange.

1.2 Overview of Real Estate Investment Alternatives in Hong Kong

In this subsection, the Hong Kong real estate capital market is examined from an investor's perspectives through a discussion of the various financial products in Hong Kong that offers Hong Kong/China real estate exposure.

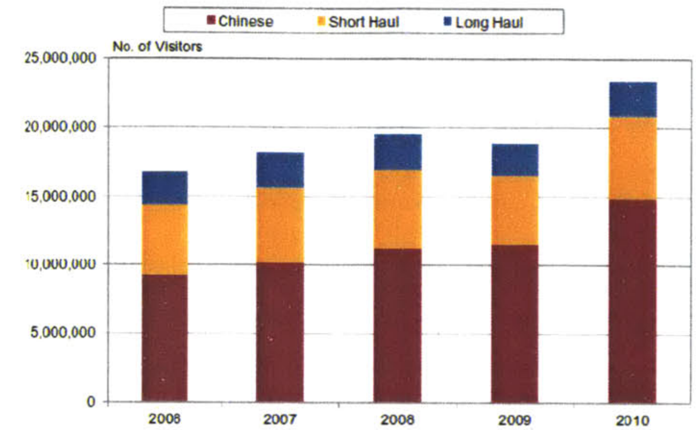
strong tie with China and the more relaxed policies towards allowing more China tourists crossing the border.

Figure 1.10: Retail Rents and Retail Sales Value Growth (Year-on-year % Change)



Source: Census and Statistics Department, Knight Frank
Note: Three-month moving average of yoy growth.

Figure 1.11: Visitors Arrivals by Origin over the First Eight Months, 2006-2010



Source: HKTB, Savills Research & Consultancy

1.1.5 Major Players

Properties companies together make up a large component of Hong Kong's economy. With the help of the "aged, colonial land tenure system in Hong Kong"[20], properties development in Hong Kong is largely dominated by a handful of developers who manage to possess land bank and huge pile of capital, as shown in Figure 1.12. Hence, many consider the property market in Hong Kong to be an oligopoly market[21].

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[20] Lewis, Rebecca. *"Issues for Responsible Investors: Hong Kong Real Estate."* Responsible Research. (November 2010)

[21] CLSA Asia Pacific Markets. *"Retrovision: HK's property lessons for China."* CLSA Asia Pacific Markets (October 2009)

1.2.1 Stocks of Real Estate Companies

In Hong Kong, investors can easily obtain real estate exposure through holding the stocks of real estate companies (that include property developers or property investors) that have their operations in Hong Kong and/or Mainland China, as the Hong Kong Stock Exchange houses over a dozen of Hong Kong-based real estate companies and more than 20 Mainland China developers. The Hong Kong-based companies comprise of both developers and investors, and some of them have exposure to both Hong Kong's and China's development and/or investment market; on the other hand, the majority of the Mainland-based companies are residential developers that focus on solely the China market. Fund raising through IPO issuance in Hong Kong has been popular among Chinese companies, including the developers, as the capital market of Hong Kong is regarded by these companies as the gateway to foreign capital, which is especially important when the local funding in China is tightened.

Table 1.4: List of Major Property Companies Listed in Hong Kong

Hong Kong Property Developers	Stock Code	Market Cap (HKD Bil.)	Market Cap (USD Equiv. Bil.)
Sun Hung Kai Properties	0016.HK	323.8	41.5
Cheung Kong	0001.HK	281.0	36.0
Hang Lung Properties	0101.HK	140.8	18.0
Henderson Land	0012.HK	108.5	13.9
Sino Land	0083.HK	75.4	9.7
Hang Lung Group	0010.HK	61.1	7.8
New World Development	0017.HK	55.6	7.1
Kerry Prop	0683.HK	55.4	7.1
Hong Kong Property Investors			
Swire Pacific	0019.HK	165.9	21.3
Wharf	0004.HK	146.4	18.8
Hysan	0014.HK	36.7	4.7
Great Eagle	0041.HK	16.1	2.1

PRC Developers	Stock Code	Market Cap (HKD Bil.)	Market Cap (USD Equiv. Bil.)
China Overseas Land	0688.HK	110.5	14.2
China Resources Land	1109.HK	71.0	9.1
Evergrande	3333.HK	59.7	7.7
Longfor Prop	0960.HK	56.3	7.2
Country Garden	2007.HK	51.4	6.6
Shimao	0813.HK	40.4	5.2
Agile	3383.HK	39.6	5.1
Guangzhou R&F	2777.HK	35.8	4.6
SOHO China	0410.HK	30.6	3.9
Sino-Ocean Land	3377.HK	28.3	3.6
Poly (Hong Kong)	0119.HK	24.9	3.2
Franshion	0817.HK	20.5	2.6
Shui On Land	0272.HK	19.3	2.5
KWG Prop.	1813.HK	16.5	2.1
Greentown China	3900.HK	14.7	1.9
Powerlong	1238.HK	10.9	1.4
Shenzhen Inv.	0604.HK	9.3	1.2
Shanghai Forte	2337.HK	8.6	1.1
Sunac	1918.HK	7.5	1.0
Fantasia	1777.HK	6.2	0.8

Note: Market cap figures are as of Feb 14, 2011. Source: Bloomberg.

1.2.2 Bonds of Real Estate Companies

Since Hong Kong property companies have solid balance sheets and low gearing ratios, as shown in Table 1.5, they are not in need of raising cash, hence the bond issuing activities for these companies in recent years have not been active. Mainland developers, on the other hand, are much more aggressive on raising funds through selling debts in Hong Kong. Mainland developers have reportedly raised about a total of HK$76.5 billion (or US$9.8 billion) from the Hong Kong capital market in 2010[22]; the US Dollar bond issuance of these companies amounted to US$6.45 billion, according to DBS[23]. The rush to raise capital in Hong Kong is largely due to the credit tightening policies of Chinese government, limiting the availability of bank loan to these companies[24]. These US Dollars bonds are generally high-yield issuance with yields reaching as high as 13.5%[25] and are usually available to only institutional investors or high-net-worth individuals.

Table 1.5: Debt and Gearing of selected Hong Kong Property Companies (As of Jan 2011)

As at last FY result	SHKP	CK	Henderson	Sino land	Kerry	NWD	Hang Lung	Wharf	Hysan	HKL	Champion	Midland
Net gearing	15.2%	9.5%	19.2%	21.5%	18.2%	24%	net cash	17.5%	5.1%	18.8%	n/a	n/a
Cash on hand (HK$m)	7,859	11,423	10,495	4,495	6,656	23,600	11,535	18,412	433	9,563	1,406	1,477
Recurrent income (HK$m)	13,245	8,995	7,108	2,409	1,418	1,720	4,546	7,319	1,707	5,210	2035	n/a

Source: Samsung Securities

1.2.3 Real Estate Funds

Currently, there is no listed-fund on the Hong Kong Stock Exchange. Hong Kong investors can gain real estate exposure through the holding of real estate securities mutual funds, which typically invest in companies in the real estate and real estate-related industries. Most of these funds that invest in Asia (ex-Japan) have a regional mandate to invest in real estate companies across Asia or Greater China.

Investors can also gain real estate exposure through investing in real estate private equity funds. While there believes to be no Hong Kong-focused real estate private equity fund available to investors, which is not too surprising considering the size of the city, there are regional funds that focus on Greater China or country funds that focus solely on China. These funds typically have an opportunistic investment style and invest heavily in development projects in the region.

Private equity has increasingly become a popular financing mean for developers in China and real estate private equity funds with China exposure is now an attractive investment alternative for global investors. The first China-focused real estate private equity fund was closed in 2002, after which the fund raising

[22] People's Daily. "*Property developers rush for high-yield bond offerings in HK.*" People's Daily (January 11, 2011)

[23] DBS Group Research. "*China Property Monthly.*" DBS Group (January 11, 2011)

[24] People's Daily. "*Property developers rush for high-yield bond offerings in HK.*" People's Daily (January 11, 2011)

[25] Ibid.

activity rapidly heated up and 12 funds raised a total of US$5.4 billion alone in 2008. As at September 2010, there are 11 funds that focus specifically on China, which amounts to an aggregate commitment of US$4.6 billion[26]. In 2010, it is estimated that the total amount of foreign capital in China's real estate industry exceeded RMB 150 billion (approximately US$22.9 billion), as there has been an increasing number of partnerships being formed between Mainland China developers and investment funds that include sovereign wealth funds, namely Government of Singapore Investment Corporation (GIC), and global private equity players, such as Blackstone, UBS Global Asset Management and GTC Real Estate[27] [28]. While most of these private equity funds are denominated in US Dollars, DTZ, the leading global real estate consultant, predicted that over 80% of these foreign fund management companies that currently have presence in China will set up Chinese Yuan-based funds in the future.

1.2.4 Securitization Products (RMBS/CMBS)

With a well-developed legal framework and a common law system that is largely based upon English law, Hong Kong did not need to introduce specific legislation to facilitate securitization and is considered to be "one of the most securitization-friendly jurisdictions in the Asia-Pacific region"[29].

RMBS

The first mortgage-securitization deal in Hong Kong was originated by Bank of America (Asia) and was issued in 1994, the year when three other RMBS deals were closed in Hong Kong, with originators include Citibank, Standard Chartered and Cheung Kong, the first real estate developer to enter the MBS arena. However, these four private deals were not perceived to be successful as many thought that "they were not priced appropriately and that potential investors had not been properly educated"[30]. The four more RMBS deals that were later issued in 1997 were much better received; these four deals were believed to be fully subscribed by domestic and foreign investors[31]. However, the lack of liquidity and secondary trading prohibited the market to blossom and no RMBS deals were issued in Hong Kong until the emergence of Hong Kong Mortgage Corporation's MBS program.

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[26] Moylan, Andrew. "*China-Focused Private Equity Real Estate Fundraising.*" Preqin(September 3, 2010)
[27] China Breifing. "*Foreign Participation Surges in China's Property Development.*" China Breifing (March 29, 2011)
[28] Cruise, Sinead. "*UBS/Gemdale JV eyes debut Chinese property buys.*" Reuters (April 7, 2010)
[29] Mallesons Stephen Jaques. "*Securitisation in Hong Kong.*" Global White Page (2008)
[30] Lamoreaux, Pamela. "*Comparison of Mortgage-Bakced securitization Systems in US, Hong Kong and Korea.*" International MBS Seminar (December 20, 2000)
[31] Ibid.

Hong Kong Mortgage Corporation

In March 1997, the Hong Kong Mortgage Corporation (HKMC) was established with the missions to enhance the stability of the banking sector by offering a reliable source of liquidity, to promote wider home ownership, and to facilitate the growth and development of the debt securities and MBS markets in Hong Kong[32]. Wholly-owned by the Hong Kong government, the HKMC modeled itself after the Fannie Mae[33], a residential mortgage agency in US, and launched a mortgage insurance program in March 1997 with a maximum loan-to-value ratio of 85%. In October 1999, HKMC initiated the Guaranteed Mortgage-Backed Pass-Through Programme, under which HKMC purchased residential mortgages from originating banks, and securitized them into the form of MBS. In the securitization process, HKMC sold the residential mortgages to an SPE, whose notes would then be sold to the investors, who may include the originating banks. There are two key features in this program: i) HKMC guarantees the timely payment of principal and interest of the MBS, and that all cash received by the SPE will be passed-through to the investors; and ii) originating banks could also be one of the investors. Given the latter feature, originating banks had the option of holding the MBS notes to continue receiving a stream of cash flows, or selling the notes to investors for a lump sum of cash. This feature of the program therefore brought itself the name "back-to-back" securitization program in the local banking community.

The year 2001 marked two key milestones for HKMC as it standardized the mortgage origination documents and initiated its second program, the US$3 billion Bauhinia Mortgage-Backed Securitisation Programme that enabled HKMC to arrange issues in multiple currencies to meet the demands of various investors. The success of this program's first two MBS issues, which raised HK$2 billion in March 2002 and HK$3 billion in November 2003 respectively, led HKMC to issue the third MBS deal under the program in November 2004, where the issuance of the HK$2 billion MBS allows participation of both institutional and retail investors, the first of its kind in Asia at that time.

[32] Website of Hong Kong Mortgage Corporation

[33] Cheung, Susie, *"A Presentation at Asian Bond Market Forum."* The Hong Kong Mortgage Corporation Ltd. (November 14, 2003)

Table 1.6: List of MBS issued by the HKMC

HKMC MBS Pass-Through Programme

Issue Date	Original Seller	Series No.	Issue Amount (HK$ in million)	Issue Amount (US$ Equiv. in million)
Oct-99	Dao Heng Bank Ltd.	DHHK-0001-4	1,000	128.2
Dec-99	American Express Bank Ltd.	AMEX-0005-6	600	76.9
Aug-01	American Express Bank Ltd.	AMEX-0007	600	76.9
Jun-06	FORTIS Bank Asia HK	BBHX-0012	600	76.9
		Total:	2,800	359.0

HKMC Bauhinia MBS Programme

Issue Date	Sponsor	Series No.	Issue Amount (HK$ in million)	Issue Amount (US$ Equiv. in million)
Mar-02	HKMC	2002-1	2,000	256.4
Nov-03	HKMC	2003-1	3,000	384.6
Nov-04	HKMC	2004-1	2,000	256.4
Nov-05	HKMC	2005-1	1,000	128.2
Nov-06	HKMC	2006-1	2,000	256.4
		Total:	10,000	1,282.1

Source: HKMC

Despite the past successes of HKMC and its efforts in pushing the development of the MBS market, limited activities in MBS issuance and trading were seen in Hong Kong. In fact, HKMC has not issued any deal since its HK$2 billion issue in November 2006[34], partially due to the financial crisis that started in mid-2008, which dried up tremendous amount of liquidity and demand for securitization product. More importantly, however, the stagnancy of the market lies somewhat on the supply side. The low RMBS activities in Hong Kong are believed to be due to the follow reasons:

- Other types of conventional funding are readily available at cheap rates[35];
- Banks have strong liquidity hence have no desire to remove high-quality mortgages from their balance sheets[36];
- Low mortgage rates provided by the banks to customers due to price competition caused the mortgages to be unattractive for an MBS issuance.

[34] Pang, Peter. "*Hong Kong Mortgage Corporation mortgage-backed securities issues.*" BIS Review. (2006)

[35] Chen, Jeffrey. "*Structured Finance and Securitisation 2010: Country Q&A - Hong Kong.*" Mondaq Business Briefing (April 1, 2010)

[36] Lamoreaux, Pamela. "*Comparison of Mortgage-Bakced securitization Systems in US, Hong Kong and Korea.*" International MBS Seminar (December 20, 2000)

CMBS

The first CMBS issuance in Hong Kong took place in September 1995 when Eton Properties launched a single asset securitization deal that was worth HK$959 million[37]. Soon after that, local developer Sino began to take advantage of this mean of financing and issued two CMBS in 1996 and 1997 respectively. The short-lived boom of the CMBS market came in the period of 1999-2000, when a total of five CMBS deals were recorded in the period, thanks to developer's lack of funding options at that time[38]. Among the five deals, the Wharf HK$4.49 billion CMBS deal was notably the largest securitization deal in Asia at that time. These deals reportedly attracted both foreign and domestic buyers, as they offered a mean to obtain Hong Kong property exposure other than stocks. However, the CMBS market then fell silent until July 2005, when the Fortune REIT (which was only listed in Singapore then) tapped the Hong Kong CMBS market for the Triumph HK$2.39 billion CMBS[39]. The Triumph deal marked the last CMBS deal done in Hong Kong to-date and highlighted that an active REIT market can be an engine of growth to the CMBS market, a market that Hong Kong is long to have[40]. The main factors contributed to the stagnant Hong Kong CMBS market are believed to be the abundant liquidity and the inexpensive funding sources available for Hong Kong developers.

Table 1.7: List of CMBS issued in Hong Kong

Date	Developer/Sponsor	Properties	Size (in HK$ millions)	Size (in US$ Equiv. millions)
Sep-95	Eton Properties	174 luxury apartments in Queen's Garden, Central	959	123
Nov-96	Sino & the Ng family	425 apartments and 779 carparks in Pacific Palisades, North Point	1,045	134
Mar-97	Sino & the Ng family	5 commercial buildings comprising 2m sq.ft. of offices & 0.5m sq.ft. of retail space	2,340	300
Feb-99	Wharf	7 commercial buildings comprising 1.7m sq.ft. of offices and 0.9m sq.ft. of retail space	4,485	575
Jun-99	Sino	21 commercial, residential and industrial properties comprising 2.445m sq.ft. & 3,385 carparks	2,356	302
Dec-99	Chinese Estate	Windsor House, Causeway Bay	1,821	233
Sep-00	Paliburg	Kowloon City Plaza, Kowloonn City and Paliburg Plaza, Causeway Bay	1,400	179
Jul-05	Fortune REIT	11 retail malls owned by Fortune REIT	2,390	306

Source: Asia Financial (Research) and Asset Securitization Report.

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[37] Yip, Jim. "*Commercial Mortgage-Backed Securities (CMBS) –An Alternative Debit Financing Instrument for Developers*." Asia Financial (Research) Ltd. (2001)

[38] Ibid.

[39] Davies, Rob, "*Fortune REIT prices step-up coupon Hong Kong CMBS.*" Asset Securitization Report. (July 25, 2005)

[40] Gada, Kalpesh. "*Asian CMBS Market Review: Real Estate Securitization in India and Factors Favoring CMBS.*" Moody's Investors Service. (May 8, 2008)

1.2.5 REITs

A total of 8 REITs had been listed on the Hong Kong Stock Exchange (one is under-going de-listing process) since the first H-REIT (the acronym for Hong Kong REIT) came to the market in 2005 after the REIT Code was enacted in Hong Kong in 2003. Comparing to other markets, the H-REIT market is rather a slow growing one and sees only one REIT, The Link, dominating the market cap of the asset class.

Table 1.8: List of H-REITs as of February 2011

Securities	Stock Code	IPO Date	Market Cap* (HK$ millions)	Market Cap* (US$ millions)	% of H-REIT market Cap	Geographic Exposure	Asset Type
The Link REIT	0823.HK	25-Nov-05	54,803	7,026	53%	Hong Kong	Retail / Car Park
Prosperity REIT	0808.HK	16-Dec-05	2,599	333	3%	Hong Kong	Office / Industrial
GZI REIT	0405.HK	21-Dec-05	4,616	592	4%	Mainland China	Retail / Office
Champion REIT	2778.HK	24-May-06	22,829	2,927	22%	Hong Kong	Retail / Office
Sunlight REIT	0435.HK	21-Dec-06	3,936	505	4%	Hong Kong	Retail / Office
Regal REIT	1881.HK	30-Mar-07	7,751	994	8%	Hong Kong	Hotel
Fortune REIT	0778.HK	20-Apr-10	6,803	872	7%	Hong Kong	Retail
H-REIT Total Market Cap			**103,337**	**13,248**	**100%**		
RREEF China Commercial Trust REIT** (currently in delisting process)	0625.HK	22-Jun-07	-	-	-	Mainland China	Retail / Office

*Market cap as of Feb 14, 2011.
** Proceeds resulted from asset sales has been redistributed to investors in April 2010; currently in delisting process.

Before the birth of The Link REIT, Hong Kong developer Cheung Kong had already issued the Fortune REIT, which held a portfolio of suburban shopping malls in Hong Kong, on the Singapore Exchange in 2003, before listing it by introduction on Hong Kong Stock Exchange in April 2010[41]. The listing of Fortune REIT in Singapore was perhaps one of the driving forces for the Hong Kong government to push for the REITs market.

Valued at HK$22 billion (US$2.8 billion) at the point of IPO, the first H-REIT The Link was sponsored by the Hong Kong Housing Authority, securitizing the 151 shopping centers, and 79,000 parking spaces that were owned and managed by the government agency. It was a major push for the government to jumpstart the H-REIT market. The Link has a "turnaround story" that offers value generation potential through privatizing the properties (from the government's hand) and professionally managing these assets to increase their yields. The Link REIT was successfully launched in 2005 and was the biggest REIT IPO in the world for that year. Within two months after the successful launch of The Link and its resulting positive reception, two more H-REITs were listed. After that, the H-REIT market has not been overly active as there were just four new REITs in 2006 and 2007, followed by a three year drought until the

[41] In other words, the Fortune REIT is now dual-listed on both Singapore Exchange and Hong Kong Stock Exchange.

listing by introduction of Fortune REIT. The H-REITs have not been actively acquiring properties; for the properties that they have acquired, more often than not the properties are sold by the sponsors of the REITs. In the following, some of the characteristics of H-REITs are discussed.

Cross-border deals

The revision of the REIT Code in 2005 lift the geographic limitation of assets held in REITs helped to bring cross-border deals into the H-REIT scene. The GZI REIT and the RREEF China Commercial Trust REIT were launched in December 2005 and June 2007 respectively. At a time when many believed that China was the next hottest property market, the GZI REIT was considered a golden, if not the only, way to gain a more direct, relative to investing in stocks of developers, China rental exposure via the listed-securities market. GZI's IPO saw oversubscriptions of 81 times and 495 times respectively for its institutional and retail portions[42]. However, cross-border deals with China assets also present the region-specific risks like the fraudulent case encountered by the RREEF CCT REIT, which led to a downward revaluation of the asset's value.

Financial Engineering

It is worth noting that a number of H-REITs had employed some form of financial engineering to sweeten the terms in order to gain more traction from investors. A couple of commonly used yield enhancement mechanisms are interest rate swap with "step-up" structure and dividend waiver.

Interest rate swap with a "step-up" structure: One of the more commonly seen yield enhancement tools is the use of a "step-up" interest rate swap arrangement, which was used by Prosperity REIT, Champion REIT and Sunlight REIT[43]. Under the terms of agreement, a REIT, with floating rate liabilities, entered into the swap with dealers on the day of IPO, where the REIT would periodically receive floating rate payments and pay fixed rate "step-up" payments, whose fixed (predetermined) interest rates started at a low, below market level and gradually rose during the life of the swap. In order to enjoy the low interest rates in the early part of the life of the swap, the REIT had to make an upfront payment, which was partially funded by the IPO proceeds. The rationale behind entering into a "step-up" swap was that the lower financing cost in the first few years would boost yields for the REIT during that period, and the rise in financing cost (in other words rise in fixed interest rate), due to the "step-up" structure of the swap, should be covered by the rise in rental income. In effect, however, IPO subscribers were funding part of

[42] Whiting, Dominic (2006) Playing the REITs Game: Asia's New Real Estate Investment Trusts, John Wiley & Sons (Asia) Pte. Ltd., Singapore.
[43] Ibid.

that distribution themselves, in the form of paying for the "step-up" swap. Nevertheless, these IPOs were met with sizable demand, as investors hoped to make a quick profit on the jump in share price immediately after IPOs.

Distribution Waiver: In an attempt to enhance yields, the sponsors (or the property companies that spun off the properties to the REIT), who tended to hold a significant ownership in the listed REIT, would enter into such a waiver to waive their entitlement to any dividend payments for the first few years (for example, Champion REIT's waiver on distribution to its sponsor Great Eagle expired three years after its IPO). The distribution dilution effect, triggered by the waiver's expiry, would hopefully be minimized by, yet again, the rise in rental income.

Other forms of yield enhancement employed include rental guarantee (for the first few years) by the sponsors and payments to the asset management companies in units instead of cash.

Some industry practitioners believe that the financial engineering is one of the reasons that discourage investments into H-REITs. It has also led some investors to believe that only the less desired buildings would be spun-off by the developers, as it was evident that most buildings in the existing H-REITs were not considered trophy assets.

Substantial Ownership by Sponsors

H-REITs, like many REITs in Asia, are also characterized by a significant ownership by sponsors[44]. In addition, the sponsors also have substantial ownership stakes in the REIT manager and asset manager; under this "interconnected structure", related party transactions are common and the potential for conflict of interests are substantial[45]. With the exception of The Link, which is sponsored by a government agency, the H-REITs still have majority of their units held by sponsors, as shown in Table 1.9.

[44] Pica, Angela. "*Asia-Pacific REITs: Building Trust through Better REIT Governance.*" CFA Institute (February 2011)

[45] Pica, Angela. "*Asia-Pacific REITs: Building Trust through Better REIT Governance.*" CFA Institute (February 2011)

Table 1.9: Sponsors' ownerships in H-REITs

H-REITs	Sponsor	Sponsor's ownership At IPO[1]	Sponsor's ownership Most Recent Record[2]
Link	HKHA[3]	-	-
Prosperity	Cheung Kong	22.00%	20.79%
GZI	Yue Xiu Property	31.30%	37.10%
Champion	Great Eagle	43.20%	51.40%
Sunlight	Henderson Land	22.70%	33.1%[4]
Regal	Regal International	67.80%	74.12%
Fortune	Cheung Kong	31.6%[5]	31.60%

Source: Offering prospectuses.

[1] Assuming full-alotment option exercised.

[2] Most recent record acccording to latest annual reports or filings.

[3] The Hong Kong Housing Authority is a government entity.

[4] The amount is owned by Mr. Lee Shau Kee, the chairman of Henderson Land the sponsor.

[5] The 31.6% is the ownership figure being showned on the listing circular for Hong Kong exchange listings.

Chapter 2. Structure and Policy of H-REITs

2.1 Legislative Framework of H-REITs

The Hong Kong REIT Code was enacted in 2003 and all REIT-related regulation is under the governance of Securities and Future Commission (SFC), the securities regulatory body of Hong Kong. All H-REITs have to follow the unit trust structure and be listed in the Hong Kong Stock Exchange (which is also known as the Main Board). There is no formal minimum capital requirement in the REIT Code, but the REIT must meet the requirements lay out in the listing rules.

Listing Requirement

- The expected market capitalization of a new applicant at the time of listing must be at least HK$200 million;
- 25% of the units must be held in the public's hands (ie. public float).

Investment Restrictions

- Invest only in real estate that generate recurrent rental income;
- No geographic restrictions (the geographic restriction limit for REITs to hold only Hong Kong-based assets was lifted in 2005);
- Property developments and investments in uncompleted projects should not exceed 10% of the REIT's net asset value;
- Leverage is capped at 45% of gross asset value (revised upward from 35% in 2005);
- Holding period of not less than two years unless otherwise approved by its unitholders;
- Must have majority (more than 50%) ownership and control in each property in its portfolio at all time[46].

Payout Requirements

- Must distribute at least 90% of annual net income after tax, while trustee can exclude certain revaluation gains and capital profits.

[46] An exception is allowed only if it is proven to be in the best interests of unitholders or a legal opinion stating that the H-REIT will have a good and marketable legal and beneficial ownership in the property.

Tax Considerations

- **REIT Level:**
    i. Hong Kong properties held through SPVs are subject to property tax of 15%, or profits tax of 16.5% from the 2008/09 year of assessment;
    ii. Dividend income from SPVs is tax exempt;
    iii. No capital gain tax;
    iv. No Hong Kong tax on income from foreign properties.

- **Domestic and Foreign Shareholders' Level:**

  For both corporate and individuals shareholders
    i. Dividends, capital gains[47], return of capital distributions, and income from foreign investments are not subject to Hong Kong tax.

2.2 General Structure of H-REITs

The H-REITs follow quite a simple and traditional structure as shown in Figure 2.1. H-REITs can be internally-managed or externally-managed. An internally-managed REIT, namely the first H-REIT The Link, is a trust that owns the underlying assets as well as the manager; on the other hand, an externally-managed REIT, a structure that all other H-REITs adopt, is regarded to be a more traditional structure that has an external manager to handle all the management matters[48]. Most H-REITs would own the properties through wholly-owned special purpose vehicles (SPVs), which are labeled as the "holding companies and property companies" in Figure 2.1; these SPVs were incorporated for the sole purpose of holding these underlying assets[49].

Most H-REITs, with the exception of The Link, were sponsored by listed real estate companies in Hong Kong, meaning these companies spun off their properties into REITs and raised cash in return. Although these sponsors no longer directly own the properties underlying the REITs, they still hold a substantial amount of units in these REITs. Moreover, they are heavily involved in the daily management of the REITs and the properties, as the sponsors (or owners of the sponsors) tend to own a majority stake in the REIT manager and the property manager.

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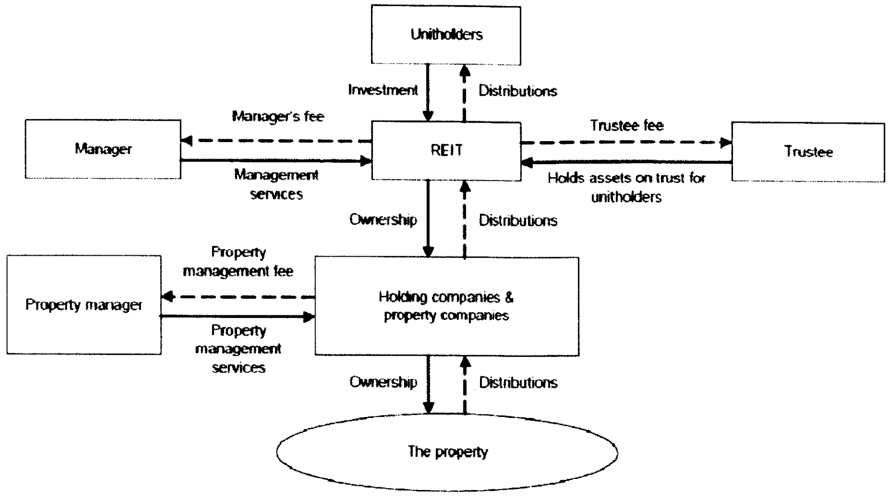
[47] unless on revenue account and arise from trade, profession or business carried on in Hong Kong.

[48] Pica, Angela. "Asia-Pacific REITs: Building Trust through Better REIT Governance." CFA Institute (February 2011)

[49] Ibid.

Figure 2.1: Typical Structure of H-REIT



Source: Fox-Pitt, Kelton

2.3 Major Differences Between H-REITs and US-REITs

Structure

Unlike H-REITs, which have to be registered as a unit trust structure, US-REITs can be structured as corporations, trusts, or associations. Moreover, US-REITs can be privately- or publicly- held, whereas H-REITs are mandatory to be listed on stock exchange.

Investment Restrictions

US-REITs are allowed for more flexibility on investments than the H-REITs are. One of the major differences is that US-REITs have no limit on the amount to be invested in development projects for its own portfolio, whereas H-REITs have a 10% limits on its net asset value (NAV). Moreover, US-REITs can invest in mortgages on real estate property, allowing the emergence of equity, mortgage, and hybrid specializations in REITs. In addition, US REITs have no leverage limit and no holding period restriction[50], whereas H-REITs are subject to a 45% of gross asset value (GAV) leverage limit and a two-year holding period. All of the above essentially allow investors to have more choices in US-REITs along the risk and the asset class spectrums.

[50] However, only sales of properties with over two-year ownerships by US REITs would comply with the safe harbor rule and be eligible for tax benefits.

Dividend Payout

A 90% threshold is adopted by both US-REITs and H-REITs, though this rule is applied to the taxable income (other than capital gains) for US-REITs and after-tax income for H-REITs.

Conversion into REIT status

Hong Kong has no specific transition regulations for corporations converting into REITs. US companies can file a special tax return in the year that it wishes to convert.

Tax considerations

For US-REITs, the dividend distributed to investors are not taxed at the REIT (or corporate) level; instead, the dividend payments (as well as distributions of capital gain and of return of capital) are taxed at the investors' level. On the other hand, corporate tax is applied to the H-REITs' taxable income, but dividend payment (or any kind of distributions) at the investor's level is not taxed. Some may therefore conclude that the REIT status provides tax exemption at both countries though at different levels; however, one must also note that dividend payments from any public stock investments are not taxed at the investor's level in Hong Kong, hence investors are not any better off in investing in units of H-REITs or stocks of public companies. Since H-REITs do not enjoy any tax breaks, unlike the US REITs, there also is no apparent tax incentive for developers to spin-off their assets into REITs or convert themselves into REITs[51].

2.4 Major Differences between H-REITs and other major Asian REITs[52]

Hong Kong is considered a late-comer in the development of REIT market in Asia, as Japan, Singapore, and South Korea introduced their respective REIT legislations in the 2000-2002 period and saw the first REIT issuances in their respective markets shortly after that. In comparison to other major REIT markets in Asia, Hong Kong appears to have a stricter regulation. First, all H-REITs have to be listed on the stock exchange, while this is optional for REITs in Japan and South Korea. Moreover, Hong Kong has a lower leverage limit than other, as well as an investment restriction of only investing in real estate, whereas in other major Asia market, REITs only have to invest a minimum of 70-75% in real estate or real estate related assets. A summary of the comparison of H-REITs to other Asian REITS can be found at the Table 2.2.

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[51] Whiting, Dominic (2006) Playing the REITs Game: Asia's New Real Estate Investment Trusts, John Wiley & Sons (Asia) Pte. Ltd., Singapore.

[52] KPMG International. "*Taxation of Real Estate Investment Trusts: An overview of the REIT regimes in Europe, Asia, the United States and Canada.*" KPMG International (April 2010)

	JAPAN	SINGAPORE	HONG KONG	SOUTH KOREA	TAIWAN	THAILAND	MALAYSIA
Structure	Trust or corporate (listed REITs are all corporations)	Collective investment scheme (Unit trust) or corporate	Unit trust	Corporate-Restructuring, Entrusted Management, Development-Specialised, Self-Managed	Trust (Real estate asset trust or investment trust)	Closed-end mutual fund	Unit trust
Management structure	External	External	Internal/ External	Internal/ External	Internal/ External	External	External
% invested in real estate	For listed J-REIT, at least 75% of assets must be invested in real estate	At least 70% of deposited property should be invested in real estate or real estate-related assets	Only invest in real estate	At least 70% in real estates or corporate restructuring related properties	Cash, government bonds, property, property-related rights, beneficiary securities or ABS issued under Real Estate Securitization Act/ Financial Asset Securitization Act (RESA/ FASA) must form at least 75% of the NAV	Must invest at least 75% of NAV in property	At least 50% of a fund's total asset value must be invested in real estate and/or single-purpose companies at all times
Geographical restrictions	No restriction under the Investment Trust and Investment Company Act, but no overseas acquisitions have been made as the requirements on real estate appraisal of overseas properties are ambiguous.	No	No	No	No restriction under the RESA; subject to approval	Thailand only	No restriction basically, subject to approval from SC and relevant authorities
Property developments	Restricted – at least 50% of total assets are income producing and unlikely be sold within one year	Property developments and investments in uncompleted projects should not exceed 10%	Prohibited, but H-REIT may acquire uncompleted units comprising less than10% NAV	Allow	Allow for urban renewal, infrastructure or public amenities construction; investments should not exceed 15% of asset value	May acquire properties over 80% completed but prohibited to invest in dormant land (for PFPO)	Prohibited, but may enter into conditional forward purchase agreement
Leverage	No restriction	Over 35% of total assets permitted with disclosed credit rating (capped at 60%)	Capped at 45% of gross asset value	REITs are permitted to have exceptional borrowing up to 1000% of equity capital, upon special approval of shareholders	Varies based on credit rating; 50% of total asset value for REITs with credit rating of twAA or above	Not more than 10% of NAV	50% of total asset value (revised from 35%)
Dividend payout	At least 90% of distributable income to qualify for tax deduction	At least 90% so as to enjoy exemption from paying corporate tax	At least 90% of annual net income after tax	At least 90%	At least 90% of distributable income	At least 90% of net profits	Not specified in the M-REIT guideline

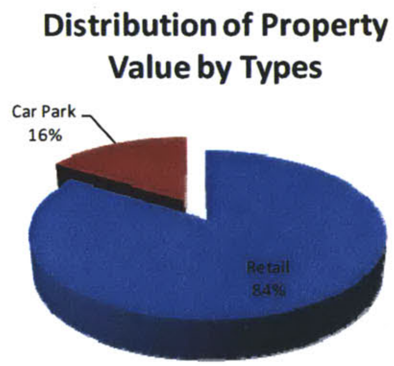
Source: CB Richard Ellis

Chapter 3. Analysis of H-REITs

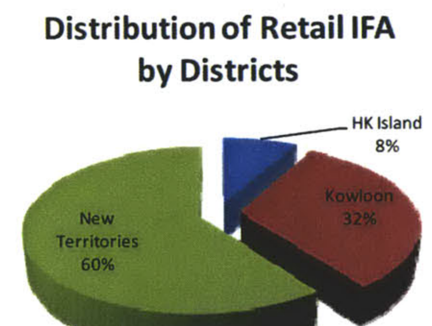
3.1 Individual REIT Analysis

The Link REIT (823.HK)

IPO Date:	25-Nov-05	Market Cap:	HK$54,803m (US$7,026m)
Asset Manager:	The Link Management Ltd.		
Sponsor:	Hong Kong Housing Authority (HKHA)		
Geographic Exposure:	Hong Kong		
Strategy:	Main strategy is to drive revenue from stablised shopping centres and deliver incremental revenue from completed asset enhancement initiatives. Management team looks to extract growth and value potential from existing portfolio.		
Asset type:	Retail / Car park		
Credit Rating:	A/A2		
Portfolio:	It has a portfolio of 180 properties comprising 149 integrated retail and car park facilities, two standalone retail facilities and 29 standalone car park facilities. The portfolio had internal floor area (IFA) of approximately 11 million square feet of retail space and approximately 80,000 car park spaces.		



Property value amounted to HK$53.8b as of March 2010.



Total Retail IFA amounts to appx. 11mil. sq ft as of March

Top 3 Properties by Value*

Property Name	Type	Location	IFA (Sq ft)	Car Park Spaces	Net Passing Income* (HK$ mil. Per annum.)	Cap Rate	Value* in (HK$ mil.)	% of Total Portfolio*
Lok Fu Plaza	Retail	Kowloon	274,920	793	98.64	5.52%	2,728.7	5.1%
Chung Fu Shopping Centre	Retail	NT	218,465	1,177	110.21	6.44%	1,575.0	2.9%
Tsz Lok	Retail	Kowloon	204,314	940	101.58	6.35%	1,503.0	2.8%

* As at 31Mar2010.

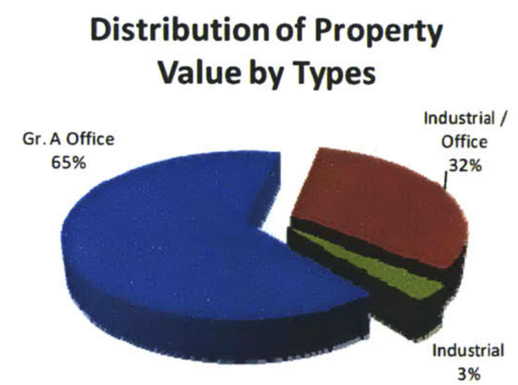
IPO Price	10.30

As of 31Mar11	
Share Price	24.35
52-week high	25.40
52-week low	18.62
Dividend Yield	4.19%

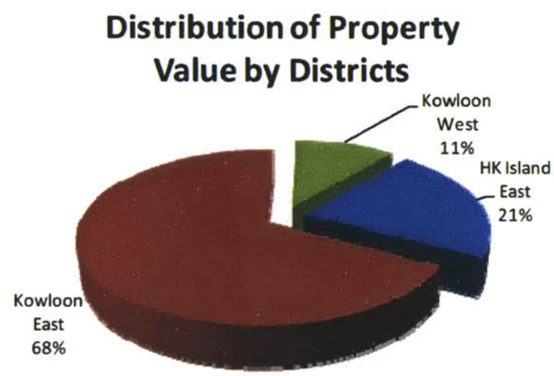
Source: Company data and Bloomberg.

Prosperity REIT (808.HK)

IPO Date	16-Dec-05
Market Cap:	HK$2,599m (US$333m)
Asset Manager:	ARA Asset Manager (An wholly-owned subsidiary of Cheung Kong)
Sponsor:	Cheung Kong (Holdings)
Country Exposure:	Hong Kong
Asset type:	Office / Industrial
Strategy:	The management team aims to benefit unit-holders through proactive asset management and multi-dimensional growth strategies, such as asset enhancement and tenant mix fine-tuning.
Portfolio:	The portfolio contains a total of 7 properties: 3 Grade-A office buildings, 3 industrial/office buildings, 1 industrial buildings. With a total gross rentable area of about 1.22 million sq. feet, these properties have a valuation of HK$5,529 million as of June 30, 2010.



Property value as of June 30, 2010.



Valuation as of June 30, 2010.

Top 3 Properties by Value*

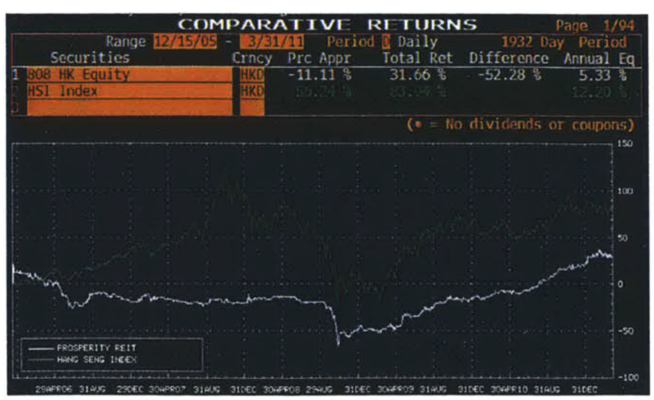
Property Name	Type	Location	GFA (Sq ft)	Car Park Spaces	Net Property Income** (HK$ mil. Per annum.)	Value* in (HK$ mil.)	% of Total Portfolio*
The Metropolis Tower	Office	Kowloon East	271,418	98	69.3	2,055.0	37.2%
Prosperity Millennia Plaza	Office	HK Island East	217,955	43	37.3	1,182.0	21.4%
Prosperity Place	Industrial/Office	Kowloon East	240,000	60	29.5	711.0	12.9%

* As at 30Jun2010.

** As at 31Dec2009.

IPO Price	2.16

As of 31Mar11	
Share Price	1.92
52-week high	2.00
52-week low	1.35
Dividend Yield	5.72%

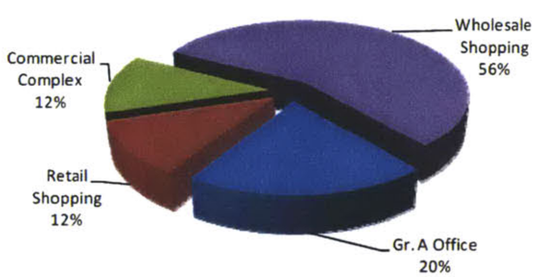


Source: Company data and Bloomberg.

GZI REIT (405.HK)

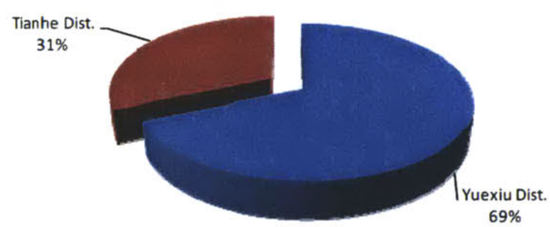
IPO Date	21-Dec-05
Market Cap:	HK$4,616m (US$592m)
Asset Manager:	GZI REIT Asset Management
Sponsor:	Guangzhou Investment Company (GZI)
City Exposure:	Guangzhou city, Mainland China
Asset type:	Retail / Office
Strategy:	The Manager adopted specific assts strategy for each of the five properties so as to optimize the competitiveness of the properties and achieve constant growth of the asset portfolio revenue. The manager also adopts active and prudent investment and financial principles.
Portfolio:	Two Grade-A offices, a wholesale shopping center, a retail shopping center, and a commercial complex. The total portfolio amounted to RMB 5.22b. The aggregate area of ownership was approximately 223,614.3 sq. meters; total rentable area was approximately 211,031.1 sq. meters.

Distribution of Property Value by Types



Property value as of June 30, 2010.

Distribution of Property Value by Districts



Property value as of June 30, 2010.

Property Name	Type	Location	GFA (Sq. meter)	Net Property Income** (Rmb mil. Per annum.)	Value* in (Rmb mil.)	% of Total Portfolio*
White Horse Building	Wholesale Shopping Center	Yuexiu District	50,128	243.6	2,943.0	56%
Fortune Plaza	Office	Tianhe District	41,355	49.4	608.5	12%
City Development Plaza	Office	Tianhe District	42,397	45.6	431.0	8%

* As at 30Jun2010.

** As at 31Dec2009. Estimates based upon the split of operating income.

IPO Price	3.08

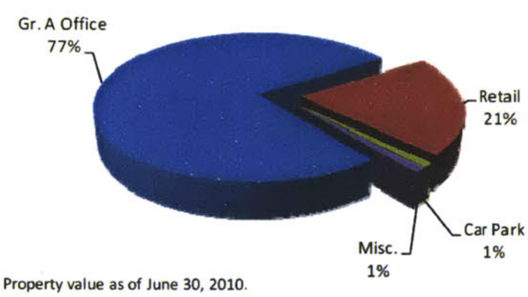
As of 31Mar11	
Share Price	4.06
52-week high	4.39
52-week low	3.14
Dividend Yield	6.13%

Source: Company data and Bloomberg.

Champion REIT (2778.HK)

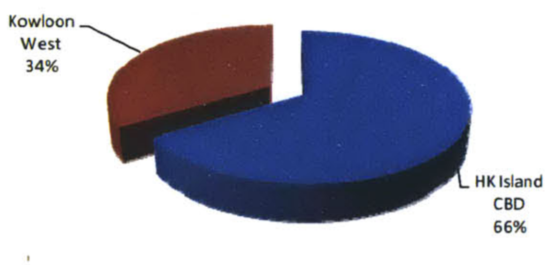
IPO Date	24-May-06
Market Cap:	HK$22,829m (US$2,927m)
Asset Manager:	Eagle Asset Management (CP) Ltd. (a wholly-owned subsidiary of Great Eagle Holdings)
Sponsor:	Great Eagle Holdings Ltd.
City Exposure:	Hong Kong
Asset type:	Office / Retail
Strategy:	The manager looks to add value through asset management strategies, such as rental income maximization, occupancy and tenancy renewal management and tenant base optimization. The manager actively considers yield accretion acquisition opportunities and had acquired the Langham Place in 2008 from the Great Eagle.
Portfolio:	Contains 2.85 million sq. feet of prime office and retail floor area by way of two properties: Citibank Plaza and Langham Place. Total valuation amounted to HK$45,302m as of June 30, 2010.

Distribution of Property Value by Types



Property value as of June 30, 2010.

Distribution of Property Value by Districts



Property value as of June 30, 2010.

Top 3 Properties in Value*

Property Name	Type	Location	GFA (Sq ft)	Car Park Spaces	Net Property Income** (HK$ mil. Per annum.)	Value* (in HK$ mil.)	% of Total Portfolio*
Citibank Plaza	Office	HK Island CBD	1.56 m	608	1,314.5	29,923.0	66%
Langham Place	Office/Retail Mixed-use	Kowloon West	1.29 m	250	566.2	15,378.0	34%

* As at 30Jun2010.
** As at 31Dec2009.

IPO Price	5.10

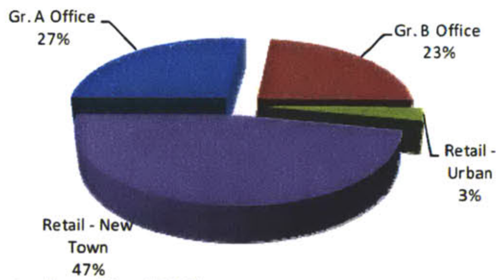
As of 31Mar11	
Share Price	4.51
52-week high	5.01
52-week low	3.40
Dividend Yield	5.28%

Source: Company data and Bloomberg.

Sunlight REIT (435.HK)

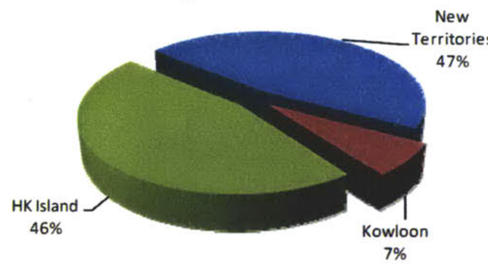
IPO Date	21-Dec-06
Market Cap:	HK$ 3,936 m (US$505m)
Asset Manager:	Henderson Sunlight Asset Management Ltd (a wholly-owned subsidiary of Henderson Land Development Company)
Sponsor:	Henderson Land Development Company Ltd.
City Exposure:	Hong Kong
Asset type:	Office / Retail
Strategy	The Manager devotes effort in asset enhancement, tenant acquisition and capital management to add value for unit-holders. The team also considers acquisition opportunities.
Portfolio:	With 1.29m sq. feet in gross rentable area with an appraised value of HK$10.72b as at June 30, 2010, the portfolio contains 12 office and 8 retail properties.

Distribution of Property Value by Types



Property value as of June 30, 2010.

Distribution of Property Value by Districts



Property value as of June 30, 2010.

Top 3 Properties by Value*

Property Name	Type	Location	GRA (Sq ft)	Car Park Spaces	Net Property Income* (HK$ mil. Per annum.)	Cap Rate*	Value* (in HK$ mil.)	% of Total Portfolio*
248 Queen's Road East	Office	HK Island	376,381	46	92.8	4.15%	2,888.0	27%
Sheung Shui Centre Shopping Arcade	Retail	New Territories	122,339	297	89.3	4.40%	2,536.0	24%
Metro City Phase I Property	Retail	New Territories	188,889	457	71.8	4.50%	1,928.0	18%

* As at 30Jun2010.

IPO Price	2.60

As of 31Mar11	
Share Price	2.46
52-week high	2.64
52-week low	1.87
Dividend Yield	6.51%

Source: Company data and Bloomberg.

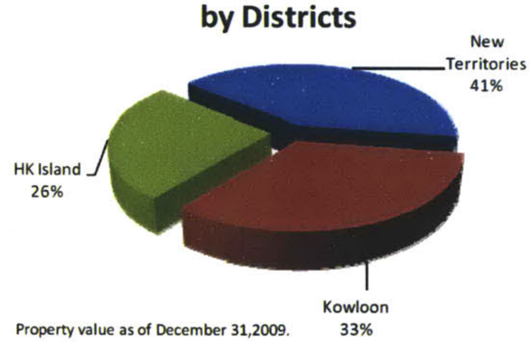
Regal REIT (1881.HK)

IPO Date	30-Mar-07
Market Cap:	HK$ 7,751m (US$994m)
Asset Manager:	Regal Portfolio Management Ltd. (a wholly-owned subsidiary of Regal Hotels International Holdings)
Sponsor:	Regal Hotels International Holdings Ltd.
City Exposure:	Hong Kong
Asset type:	Hotel
Strategy	The Manager's primary objectives are to provide stable, growing distributions and long-term capital growth for the unitholders through active ownership of hotels and strategic investments in hotels, serviced apartments or commercial properties (including office properties).
Portfolio:	With a total GFA of 2.34m sq. feet, the portfolio is comprised of 6 hotels that combined to have a value of HK$14.29b as of December 31, 2009.

Distribution of Property Value by Types

Property value as of December 31, 2009.

Distribution of Property Value by Districts



Property value as of December 31,2009.

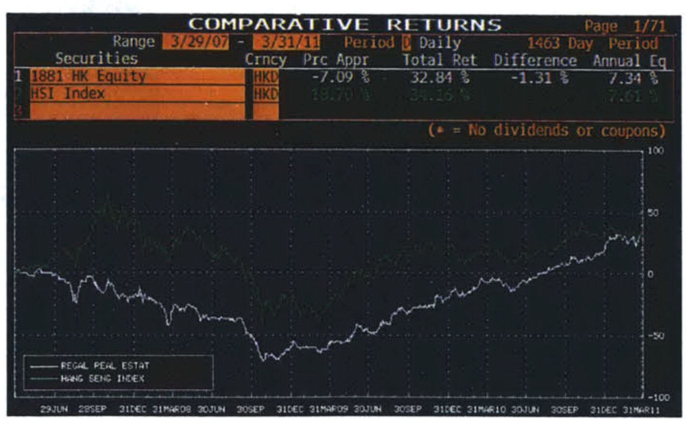
Top 3 Properties by Value*

Property Name	Type	Location	GFA (Sq ft)	Estimated Net Property	Value* (in HK$ mil.)	% of Total Portfolio*
Regal Airport Hotel	Hotel	New Territories	774,880	8.00%	3,520.0	25%
Regal Kowloon Hotel	Hotel	Kowloon	341,714	5.70%	3,470.0	24%
Regal Hongkong Hotel	Hotel	HK Island	269,988	6.00%	3,160.0	22%

*As at 31Dec2009.

IPO Price	2.68

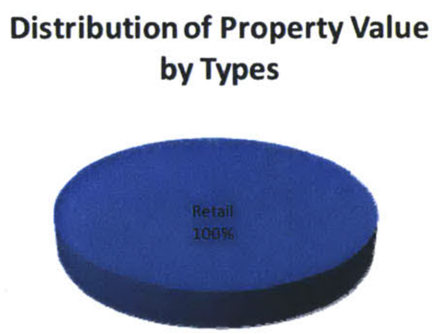
As of 31Mar11	
Share Price	2.49
52-week high	2.49
52-week low	1.67
Dividend Yield	6.87%



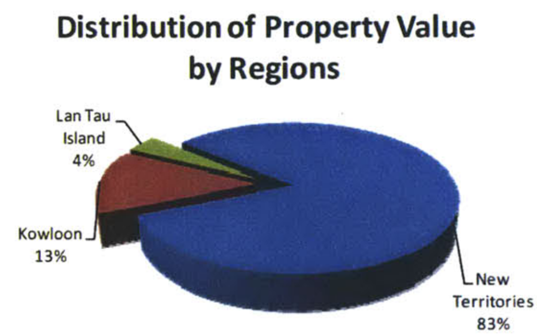
Source: Company data and Bloomberg.

Fortune REIT (778.HK)

IPO Date	20-Apr-10 (Singapore IPO Date: 12-Aug-03)
Market Cap:	HK$ 6,803 m (US$872m)
Asset Manager:	ARA Asset Management (Fortune) Ltd. (an affiliate of Cheung Kong)
Sponsor:	Cheung Kong Holding
City Exposure:	Hong Kong
Asset type:	Retail
Strategy	The main focus is to generate value through organic growth and asset enhancement initiatives while prudently approaches acquisitions and capital management.
Portfolio:	The REIT holds a portfolio of 14 retail properties, comprising approximately 2.0 m sq. feet of retail space and 1,660 car parking lots.



Property value as of December 31, 2009.



Property value as of December 31,2009.

Top 3 Properties by Value*

Property Name	Type	Location	GFA (Sq ft)	Car Park Spaces	Net Property Income** (HK$ mil. Per annum.)	Value* (in HK$ mil.)	% of Total Portfolio*
City One Shatin Property	Retail	New Territories	414,469	658	177.0	4,146.0	31%
Ma On Shan Plaza	Retail	New Territories	310,084	290	117.1	2,376.0	18%
Metro Town	Retail	Kowloon	180,822	74	133.0	1,775.0	13%

*As at 31Dec2010.

**As at 31Dec2009

IPO Price	3.84

As of 31Mar11	
Share Price	3.92
52-week high	4.20
52-week low	3.37
Dividend Yield	6.29%

Source: Company data and Bloomberg.

3.2 Cross-Analysis

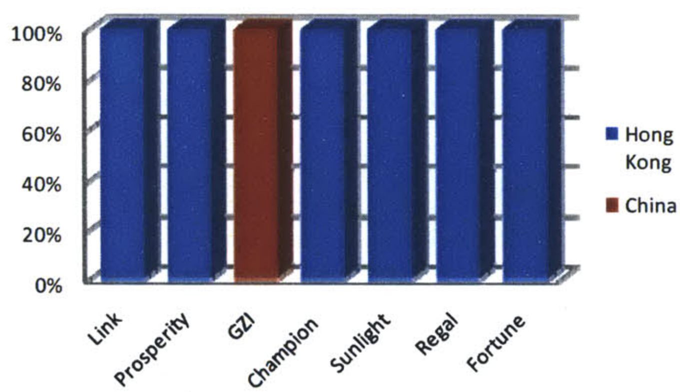
3.2.1 Summary Statistics

Geographic Exposure

All H-REITs, with the exception of GZI, are fully comprised of properties in the city of Hong Kong. The GZI REIT, on the other hand, is entirely comprised of properties in the city of Guangzhou, which is located in Southern China. In other words, every H-REIT offers geographic exposure of precisely one city. In a sense, this attribute of H-REITs would be ideal for investors who wish to gain pure real estate exposure in only Hong Kong or Guangzhou.

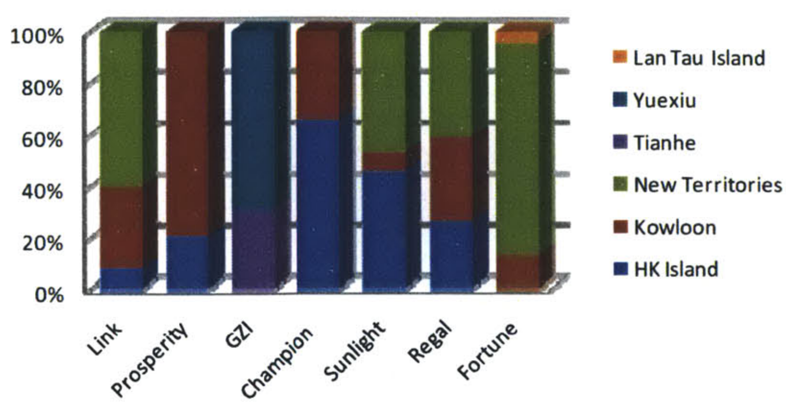
For investors who understand the respective markets well, the composition by district analysis shows some level of district specialization. Value of the properties of Champion REIT, for example, is highly concentrated in the Hong Kong Island, with about 60% of its portfolio's value coming from the district; Fortune and Link each has over 60% of concentration in New Territories; Prosperity has a 80% concentration in Kowloon.

Figure 3.1: H-REITs Composition by Region



Source: Company data.

Figure 3.2: H-REITs Composition by District

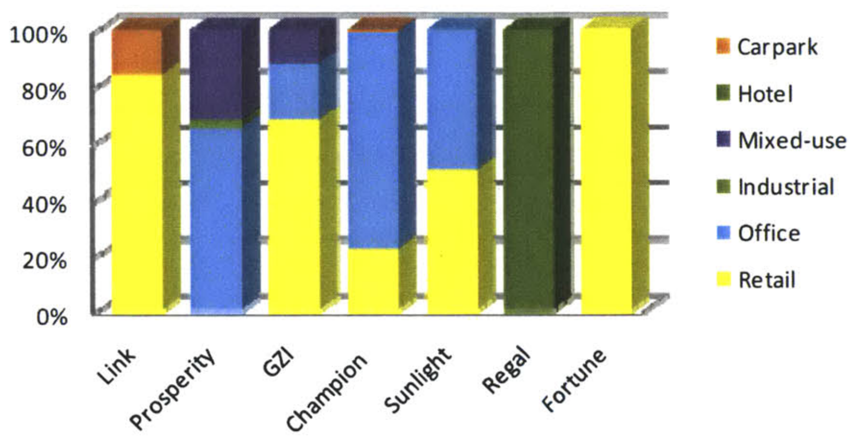


Source: Company data.

Asset Exposure

Two H-REITs are completely specialized in terms of asset type: the Regal is entirely comprised of hotels and the Fortune owns only retail properties. The Link's portfolio has a high concentration of retail properties, amounting to 80% of its portfolio. The Champion has about 80% of its portfolio in the office space.

Figure 3.3: H-REITs Composition by Asset Type



Source: Company data.

3.2.2 Yield Enhancement Mechanisms

A number of H-REITs have employed some kind of financial engineering to boost their yields for the first few years upon their listings. The main reason behind such arrangement was that the underlying properties just did not provide enough yields to make the REIT an appealing investment. Table 3.1 below has shown the implied net yield for the H-REITs' acquisitions, with the first acquisitions of the H-REITs typically being the portfolio of assets that was being offered in the IPO.

Table 3.1: H-REITs: Implied Net Yield on Acquisition Price

H-REITs	Date	Assets	Acquisition price	Implied net yield on acquisition price
Fortune REIT	Aug-03	Basket of 5 properties	3,136	5.2%
	Aug-05	Basket of 6 properties	2,969	7.8%
	Oct-09	Basket of 3 properties	2,039	5.1%
Link REIT	Nov-05	180 properties	33,802	6.8%
Prosperity REIT	Dec-05	Basket of 7 properties (omitted small transaction in Oct06)	4,193	4.0%
GZI REIT	Dec-05	Basket of 4 properties	4,089	5.2%
	Jun-08	Yue Xiu Metropolis	677	3.3%
Champion REIT	May-06	Citibank Plaza	19,300	2.1%
	Jan-07	3 additional floors at Citibank Plaza	995	2.3%
	Jun-08	Langham Place	12,500	4.5%
Sunglight REIT	Dec-06	Basket of 20 properties	7,275	3.7%
Regal REIT	Mar-07	5 Hotels	12,500	6.0%
	Sep-09	Additional areas in the hotels	468	3.1%

Source: JP Morgan.

As Table 3.1 shows, the implied net yields on acquisition price for Prosperity, Champion and Sunlight at the time of their IPO were no more than 4.0%. Not surprisingly, these H-REITs had more yield enhancement arrangements in place at the time of their IPO, as shown in the Table 3.2. Today, most of these financial engineering arrangements had either expired or terminated. Prosperity and Champion had both terminated their yield enhancements by mid-2008. Sunlight partially unwinded the interest rate swap in the first-half of 2010. The yield enhancement arrangements still in place were the distribution waiver of Sunlight and rent guarantee of Regal. It is, therefore, fair to say that these H-REITs will provide "cleaner" yields that better reflect the fundamental performances of the underlying assets and offer more transparencies in the REITs' return components.

Table 3.2: List of Yield Enhancements Employed by H-REITs

H-REITs		IRS with "Step-up" Structure	DPU/Rent Guarantee	Distribution Waiver	Payment of Manager's Fee in Units
Link IPO Date: 25Nov05 Fiscal Year End: Mar 31		-	-	-	-
Prosperity IPO Date: 16Dec05 Fiscal Year End: Dec 31	Terms:	REIT to pay an upfront amount to enter into a pay fixed-receive floating IRS, whereby the upfront swap payments and front-end debt fee of HK$315m are funded by part of the IPO proceeds.	The sponsors agreed to guarantee the DPU for FY06 to be at least HK$0.1145.	-	Manager's management fee would be paid in a combination of units and cash.
	Amendments:	Unwinding of IRS on 8Jul08 to take advantage of the low interest rate environment.	-	-	-
GZI IPO Date: 21Dec05 Fiscal Year End: Dec 31		-	-	-	-
Champion IPO Date: 24May06 Fiscal Year End: Dec 31	Terms:	REIT to pay an upfront amount to enter into a pay fixed-receive floating IRS, whereby the upfront swap payments and front-end debt fee of HK$1.453b are funded by part of the IPO proceeds.	Great Eagle guaranteed that the DPU for FY06 will not be less than HK$0.1694 for Public Unitholder.	Great Eagle, KP and Wing Tai have agreed to waive the entitlement to distribution for 100%, 55%, 20% of its holdings in FY06-08.	Manager's management fee would be paid in a combination of units and cash.
	Amendments:	Swaps coupon was reset to market level on 24Feb08 and a sum of HK$290m was paid to the REIT by the swap counterparty.	-	Waiver terminated by Great Eagle on 23Jun08 by paying a lump sum amount of HK$80.9m in FY08 and HK$5.3m in FY09.	-
Sunlight IPO Date: 21Dec06 Fiscal Year End: Jun 30	Terms:	REIT to pay an upfront amount to enter into a pay fixed-receive floating IRS, whereby the upfront swap payments and front-end debt fee of HK$215.4m are funded by part of the IPO proceeds.	DPU is guarantee to be no less than HK$0.1161 for FY07 and no less than HK$0.2208 for FY08 and FY09.	SKFE and HLD subscribers have agreed to waive the entitlement to distribution for 100% of its holdings in FY07-09, 60% for FY10 and 50% for FY11.	Manager's management fee would be paid in a combination of units and cash.
	Amendments:	Swap was partially unwinded due to the low interest rate environment in 1H2010.	-	-	-
Regal IPO Date: 30Mar07 Fiscal Year End: Dec 31	Terms:	-	Regal REIT is guarantee to receive base rents of HK$475.9m, HK$700m, HK$750m and HK$780m for the fiscal years starting from listing date to FYE2010. Variable rents for these years in aggregate are to be at least HK$220m, subject to downward adjustments.	-	Base fee to be paid to manager in units until FYE10, upon which manager can have a choice for units and/or cash.
	Amendments:	-	-	-	-
RREEF CCT (in delisting process) IPO Date: 22Jun07 Fiscal Year End: Dec 31		-	-	-	-
Fortune IPO Date: 20Apr10 Fiscal Year End: Dec 31		-	-	-	-

Source: Companies' listing circulars and annual reports.

3.3 Comparative Analysis

In this subsection, the H-REITs will be compared with the Hong Kong property companies in the following dimensions, in an attempt to uncover the H-REITs' investment value:

- Returns and risks statistics
- Daily Share Price Return Correlations
- Dividend yield's spread over risk-free rate
- Price-to-Book
- Price-to-Forward NAV

To facilitate the comparison between the H-REITs and the local property companies, a handful of representative companies were selected. According to various local news sources as well as equity research reports by sell-side analysts, the Hong Kong property companies are generally classified to be property developers or property investors. This classification is largely based on the companies' source of profit and NAV, as well as their business strategies.

The selection rationale for the comparative analysis is to choose some of the biggest companies in terms of market cap in each group, as the bigger companies deem to better represent the group, while considering their geographic exposures and listing locations, as the majority of H-REITs have only Hong Kong exposure and they are all listed in Hong Kong.

For the group of property developers, Sun Hung Kai, Cheung Kong, and Henderson Land, have been chosen from the list as the developer samples, as they represented three of the top four companies in terms of market cap. Hang Lung Properties was not chosen to be part of the developer sample as its business operation mainly focuses on development in Mainland China.

For the group of property investors, Swire Pacific and Wharf are the two biggest landlords in Hong Kong. However, given their multiple lines of businesses and the significant portion of their income generated from non-real estate related operations, it is deemed to be more suitable to consider these two companies as the conglomerate samples. Lastly, Hysan and Great Eagle are chosen to be the investor samples, since they generate over 90% of their income in rental income from properties in Hong Kong. Hongkong Land, though with the third biggest market cap in the investors group, was not selected for this analysis since it is listed in Singapore.

The selected companies and selection universe are listed in Figure 3.4.

Figure 3.4: Company Selections for Comparative Analysis

Hong Kong Property Developers		Market Cap (HKD Bil)	Market Cap (USD Equiv. Bil)	**For the purpose of comparative anlysis**
Sun Hung Kai Properties	0016.HK	323.8	41.5	
Cheung Kong	0001.HK	281.0	36.0	Developers Samples
Hang Lung Properties	0101.HK	140.8	18.0	
Henderson Land	0012.HK	108.5	13.9	
Sino Land	0083.HK	75.4	9.7	
Hang Lung Group	0010.HK	61.1	7.8	
New World Development	0017.HK	55.6	7.1	
Kerry Prop	0683.HK	55.4	7.1	

Hong Kong Property Investors		Market Cap (HKD Bil)	Market Cap (USD Equiv. Bil)	
Swire Pacific	0019.HK	165.9	21.3	Conglomerates Samples
Wharf	0004.HK	146.4	18.8	
Hongkong Land	HKLD.SI	122.7	15.7	
Hysan	0014.HK	36.7	4.7	
Great Eagle	0041.HK	16.1	2.1	Investors Samples

Note: Data as of Feb 14, 2011
Source: Bloomberg

3.3.1 Return and Risk Statistics

Introduction and Setup

If one is to assess the performance or investment value of H-REITs based solely on their share prices, the result would most likely be disappointing. As shown in Table 3.3 below, half of the H-REITs' share prices were still below their IPO price levels. Judging from a share price's return perspective, H-REITs' performances, with the exception of the Link REIT, are less than spectacular. In fact, given the IPO fiasco in Hong Kong in recent years, some retail stock investors would judge a stock's attractiveness based on their share price performance since IPO level. "Stocks that never made their way back to IPO level", as some retail investors would label the H-REITs.

Table 3.3: H-REITs' Price Performance since IPO

	Link	Prosperity	GZI	Champion	Sunlight	Regal	RREEF CCT*	Fortune
IPO Date	25-Nov-05	16-Dec-05	21-Dec-05	24-May-06	21-Dec-06	30-Mar-07	22-Jun-07	20-Apr-10
IPO Price	10.30	2.16	3.08	5.10	2.60	2.68	5.15	3.84
Price @ 18Feb11	24.75	2.00	4.27	4.62	2.61	2.45	4.35	4.09
Ann. Price Return	18.46%	-1.49%	6.64%	-2.08%	0.09%	-2.30%	-5.88%	7.76%

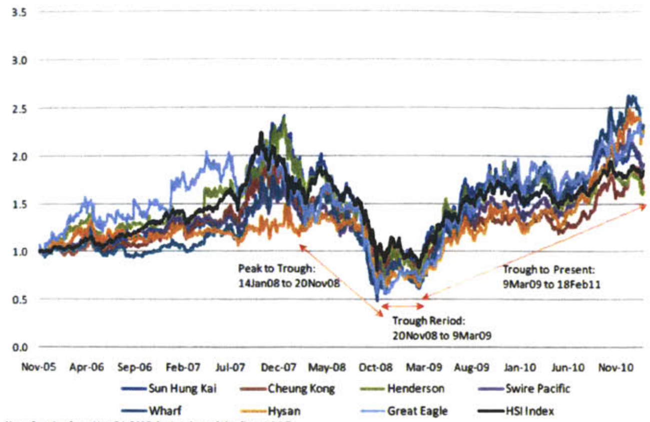
*RREEF CCT is undergoing delisting process; price on last trading day Apr 19, 2010 is shown.

Are the H-REITs therefore not worth the time of investors? One important return component of REITs that these retail investors fail to recognize, however, is their dividend payout. In order to grasp a complete picture of H-REITs' performance, the total return, meaning price appreciation plus dividend payout, should be considered. Moreover, one must also consider the risks of these return streams. In this analysis, the risk-adjusted performance of each security is measured by its Sharpe ratio, which can be computed by dividing the difference between the security's return and risk-free rate by the security's return standard deviation over the observed period. For the purpose of this analysis, the risk free rate is determined to be the Hong Kong Dollar Exchange Fund Note (HKD EFN) 10-year yield[53].

Considering that most of these H-REITs and property companies have gone through the financial crisis in 2008/09 period, a peak and trough analysis was also implemented by measuring the return and risks of these securities returns in the period of peak-to-trough and trough-to-present. According to average returns of these securities, the peak-to-trough period has been identified for these securities to be 14Jan08 to 20Nov08, the trough period was 20Nov08 to 9Mar09 and trough-to-present period was from 9Mar09 to 18Feb11. Figure 3.5 and 3.6 shows the cumulative total returns for these securities and the graphical illustrations of these periods.

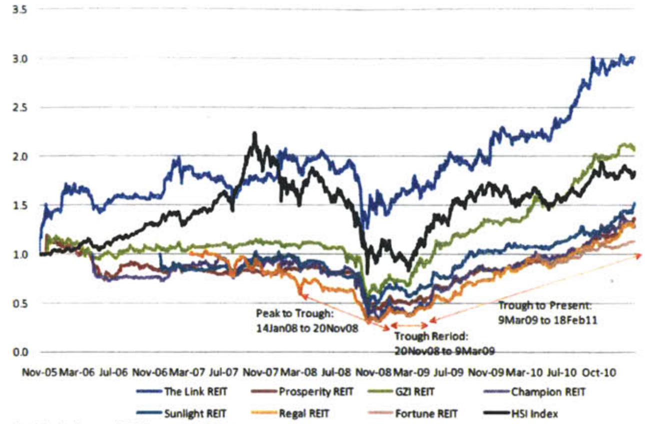
[53] The HKD EFN 10 year yield is widely regarded as the risk-free rate benchmark for HKD denominated investments.

Figure 3.5: Cumulative Returns: HK Property Companies



Note: Starting from Nov 24, 2005, listing date of the first H-REIT.
Source: Bloomberg

Figure 3.6: Cumulative Returns: H-REITs



Note: Starting from each REIT's respecitve IPO Dates.
Source: Bloomberg

The magnitude of loss in value experienced by these securities in the peak-to-trough period, meaning from 14Jan08 to 20Nov08 in this analysis, can well be thought of as a "black swan" event. The catastrophic loss in value, meaning the negative return, incurred during this period can be interpreted as the maximum loss that the securities would experience (historically speaking) in the worst case scenario; in other words, this loss in value in the peak-to-trough period can be considered as the "fat-tail" risk. With the "fat-tail" measure, a modified Sharpe ratio for each security can be calculated with the risk measure being this "fat-tail" loss. Implementing the above set up, the following table has been yielded for the H-REITs and property companies.

Period Ending Feb 18, 2011

Total Return

	Link REIT					Prosperity REIT					GZI REIT				
	Cum.	Annualized			Modified	Cumm.	Annualized			Modified	Cumm.	Annualized			Modified
	Return	Return	Std. Dev.	Sharpe	Sharpe	Return	Return	Std. Dev.	Sharpe	Sharpe	Return	Return	Std. Dev.	Sharpe	Sharpe
1-year	37.6%	37.6%	16.1%	2.19	1.45	58.9%	43.5%	14.3%	2.86	0.92	54.1%	54.1%	14.8%	3.49	1.17
2-year	79.5%	34.0%	21.1%	1.50	1.30	164.2%	62.5%	18.2%	3.30	1.35	184.1%	68.5%	20.4%	3.25	1.50
3-year	51.6%	14.9%	27.8%	0.45	0.51	61.6%	17.3%	27.4%	0.54	0.33	88.1%	23.4%	28.0%	0.75	0.48
Since IPO	199.6%	23.6%	27.4%	0.75	0.88	37.1%	6.4%	26.5%	0.12	0.09	105.5%	15.3%	25.0%	0.48	0.29
Peak to Trough: 14Jan08 - 20Nov08	-24.3%	-28.2%	37.6%	-0.81	-1.26	-44.6%	-50.5%	42.3%	-1.25	-1.19	-44.0%	-49.9%	37.5%	-1.39	-1.19
Trough to Present: 9Mar09 - 18Feb11	83.3%	36.4%	21.3%	1.60	1.40	179.7%	69.4%	18.2%	3.67	1.50	199.2%	75.3%	20.3%	3.59	1.66

	Champion REIT					Sunlight REIT					Regal REIT				
	Cum.	Annualized			Modified	Cumm.	Annualized			Modified	Cumm.	Annualized			Modified
	Return	Return	Std. Dev.	Sharpe	Sharpe	Return	Return	Std. Dev.	Sharpe	Sharpe	Return	Return	Std. Dev.	Sharpe	Sharpe
1-year	43.5%	43.5%	20.3%	2.02	0.65	40.7%	40.7%	14.8%	2.59	0.82	53.6%	53.6%	14.8%	3.45	0.78
2-year	192.0%	70.9%	26.1%	2.62	1.08	136.2%	53.7%	18.9%	2.71	1.10	223.6%	79.9%	24.2%	3.21	1.18
3-year	43.5%	12.8%	38.3%	0.27	0.16	54.7%	15.7%	25.5%	0.52	0.28	65.5%	18.3%	31.1%	0.51	0.24
Since IPO	28.5%	5.5%	35.4%	0.06	0.05	51.7%	10.7%	24.6%	0.30	0.18	30.7%	7.2%	30.9%	0.13	0.08
Peak to Trough: 14Jan08 - 20Nov08	-63.2%	-69.5%	49.8%	-1.45	-1.14	-47.1%	-53.2%	35.4%	-1.57	-1.19	-61.0%	-67.4%	30.9%	-1.98	-1.15
Trough to Present: 9Mar09 - 18Feb11	253.8%	91.0%	25.3%	3.50	1.40	165.9%	65.0%	18.6%	3.36	1.33	253.4%	90.9%	23.9%	3.70	1.45

	Fortune REIT				
	Cum.	Annualized			Modified
	Return	Return	Std. Dev.	Sharpe	Sharpe
1-year	13.4%	16.1%	10.6%	1.28	-
2-year	-	-	-	-	-
3-year	-	-	-	-	-
Since IPO	13.4%	16.1%	10.6%	1.28	-
Peak to Trough: 14Jan08 - 20Nov08	-	-	-	-	-
Trough to Present: 9Mar09 - 18Feb11	-	-	-	-	-

	Cheung Kong					Sun Hung Kai Properties					Henderson Land				
	Cum.	Annualized			Modified	Cumm.	Annualized			Modified	Cumm.	Annualized			Modified
	Return	Return	Std. Dev.	Sharpe	Sharpe	Return	Return	Std. Dev.	Sharpe	Sharpe	Return	Return	Std. Dev.	Sharpe	Sharpe
1-year	24.0%	24.0%	24.1%	0.89	0.40	32.3%	32.3%	24.0%	1.24	0.43	0.3%	0.3%	24.8%	-0.09	-0.03
2-year	108.0%	44.2%	31.1%	1.34	0.79	92.6%	38.8%	33.3%	1.09	0.52	104.1%	42.9%	36.3%	1.11	0.58
3-year	-2.4%	-0.8%	40.3%	-0.08	-0.06	8.6%	2.8%	42.5%	0.01	0.00	-16.7%	-5.9%	44.6%	-0.19	-0.12
5-year	81.8%	12.8%	38.0%	0.28	0.20	73.8%	11.8%	39.0%	0.24	0.14	43.2%	7.5%	40.5%	0.13	0.07
Peak to Trough: 14Jan08 - 20Nov08	-53.2%	-59.0%	54.9%	-1.12	-1.16	-69.8%	-75.4%	55.2%	-1.41	-1.12	-70.0%	-75.6%	54.3%	-1.44	-1.12
Trough to Present: 9Mar09 - 18Feb11	128.2%	52.6%	30.8%	1.63	0.94	134.6%	54.8%	33.0%	1.59	0.75	115.6%	48.2%	36.0%	1.27	0.65

	Swire Pacific					Wharf					Hysan				
	Cum.	Annualized			Modified	Cumm.	Annualized			Modified	Cumm.	Annualized			Modified
	Return	Return	Std. Dev.	Sharpe	Sharpe	Return	Return	Std. Dev.	Sharpe	Sharpe	Return	Return	Std. Dev.	Sharpe	Sharpe
1-year	35.4%	35.4%	24.2%	1.36	0.56	36.9%	36.9%	29.0%	1.19	0.50	82.7%	82.7%	28.9%	2.78	1.62
2-year	157.5%	60.5%	32.0%	1.81	0.99	243.3%	85.3%	40.5%	2.05	1.21	213.0%	76.9%	34.3%	2.17	1.50
3-year	32.4%	9.8%	39.4%	0.19	0.12	40.1%	11.9%	49.9%	0.19	0.14	89.1%	23.7%	38.5%	0.55	0.43
5-year	86.8%	13.5%	35.8%	0.31	0.19	130.3%	18.3%	45.0%	0.36	0.23	116.1%	16.8%	35.9%	0.40	0.29
Peak to Trough: 14Jan08 - 20Nov08	-58.8%	-64.7%	51.0%	-1.32	-1.14	-68.2%	-73.9%	60.7%	-1.26	-1.12	-49.7%	-55.4%	48.2%	-1.20	-1.16
Trough to Present: 9Mar09 - 18Feb11	179.6%	69.3%	31.8%	2.11	1.14	277.6%	97.5%	40.0%	2.37	1.39	258.3%	92.3%	34.1%	2.63	1.81

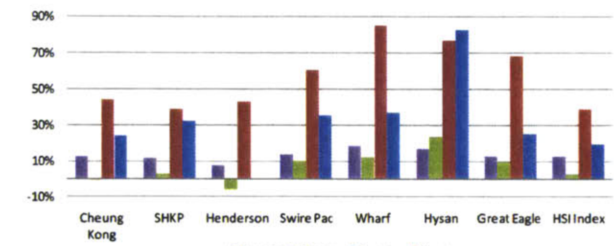
	Great Eagle					HSI Index				
	Cum.	Annualized			Modified	Cumm.	Annualized			Modified
	Return	Return	Std. Dev.	Sharpe	Sharpe	Return	Return	Std. Dev.	Sharpe	Sharpe
1-year	24.9%	24.9%	25.7%	0.87	0.33	19.1%	19.1%	17.1%	0.98	0.31
2-year	183.4%	68.3%	34.2%	1.93	0.98	92.6%	38.8%	24.7%	1.47	0.68
3-year	31.1%	9.4%	41.0%	0.17	0.10	9.3%	3.0%	34.6%	0.02	0.01
5-year	79.0%	12.5%	40.6%	0.25	0.15	78.9%	12.5%	31.3%	0.32	0.19
Peak to Trough: 14Jan08 - 20Nov08	-67.3%	-73.1%	56.5%	-1.34	-1.12	-53.1%	-58.9%	52.0%	-1.18	-1.16
Trough to Present: 9Mar09 - 18Feb11	223.3%	82.4%	34.4%	2.33	1.19	120.9%	50.1%	24.3%	1.96	0.90

Source for historical price and dividend data: Bloomberg

Annualized Returns

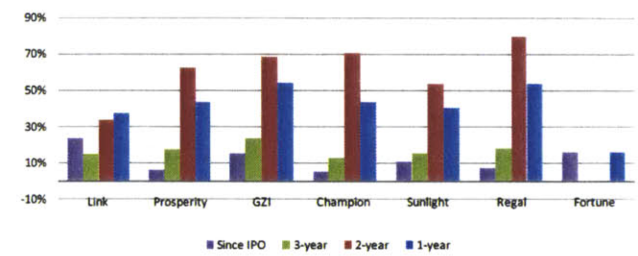
The total return performances of H-REITs have been exceptionally strong in the past two years from an annualized return perspective, as shown in Figure 3.7 and 3.8, with the majority of them achieving an annualized return over 50% on a 2-year horizon and over 40% over a 1-year horizon, outperforming the property companies. The only exception is The Link REIT, whose annualized returns in the past 2 years stayed in the 30% to 40% range.

Figure 3.7: Annualized Returns: Property Companies



Note: For period ending Feb 18, 2011

Figure 3.8: Annualized Returns: H-REITs



Note: For period ending Feb 18, 2011

The main reason behind these abnormally high annualized returns in the past 2-3 years for these stocks, however, is not improved asset-level performance or higher popularity of real estate vehicles; instead, it is due to the rapid recovery of asset prices, which plummeted violently during the financial crisis and bottomed out in around November 2008. Assessing the cumulative returns of H-REITs (in Figure 3.5 and 3.6), one can also explain why the stellar annualized returns achieved in the past two years still were not enough to lift four of the H-REITs' share prices above their respective IPO price, as most of these H-REITs, with the exception of Link, significantly underperformed the Hang Seng Index prior to mid-2008.

With the cumulative returns and annualized return data, it is still difficult to determine what impact the H-REITs' yield enhancement arrangements had on the trend of their total returns in the observed period. As mentioned in the previous section, most of these mechanisms were in place to boost the H-REITs' yields for the first few years after their IPO; however, the cumulative total returns of most H-REITs, with the exception of The Link and GZI, which have no financial engineering embedded, fell and consistently stayed below 1.00 shortly after their IPO, despite a rise in the general market as indicated by the hike of the Hang Seng Index. When these mechanisms were expired or unwinded in mid-2008, there was also no apparent change in trend for their cumulative returns or share prices. Having said that, some investors believe that the unwinding of financial engineering arrangements had actually fueled the share price rebound of H-REITs as investors then saw more transparency in H-REITs' returns which could better reflect performance of the underlying properties. While this comment may be a valid long-term view on the valuation of those H-REITs' share prices, it is particularly difficult to prove the unwinding of yield enhancements to be a short-term price-changing factor as the unwinding of swaps happened in the midst of the financial crisis, which complicated the return picture, and the return of H-REITs seemed to have ridden off the trough along with the general market, as the return correlation section would later show in this paper.

"Fat-tail" Losses, Annualized Standard Deviations and Betas

While the standard deviation returns are commonly considered to be the risk of the return streams, the magnitude of the loss during the peak-to-trough period can be thought of as the "fat-tail" risk, considering the abnormal period of time for asset prices during the financial crisis.

Figure 3.9: Fat-tail Losses and Return Standard Deviations: Property Companies

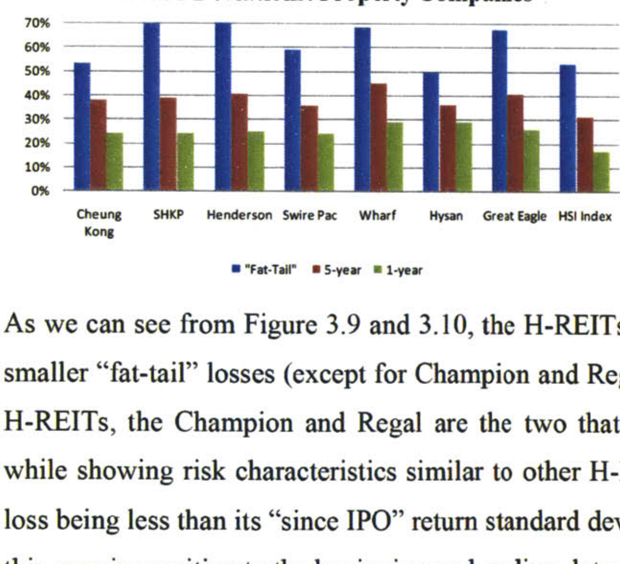
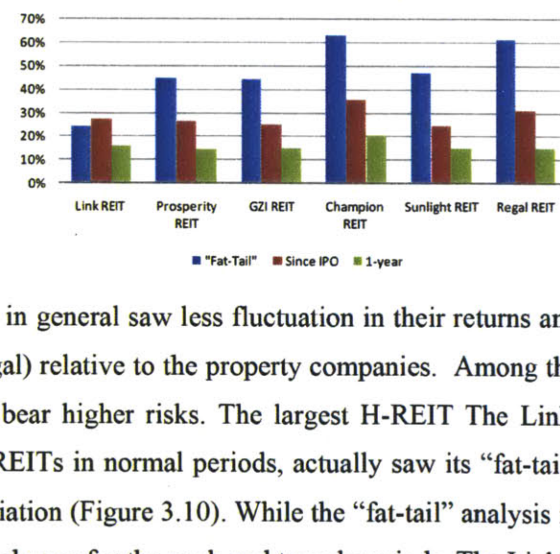


Figure 3.10: Fat-tail Losses and Return Standard Deviations: H-REITs



As we can see from Figure 3.9 and 3.10, the H-REITs in general saw less fluctuation in their returns and smaller "fat-tail" losses (except for Champion and Regal) relative to the property companies. Among the H-REITs, the Champion and Regal are the two that bear higher risks. The largest H-REIT The Link, while showing risk characteristics similar to other H-REITs in normal periods, actually saw its "fat-tail" loss being less than its "since IPO" return standard deviation (Figure 3.10). While the "fat-tail" analysis in this case is sensitive to the beginning and ending dates chosen for the peak and trough periods, The Link's relatively steady return performance nevertheless can well be represented in this finding.

Taking a closer look at the "fat-tail" risks, it is clear that property companies have a greater magnitude of losses in a "black swan" event; however, their fat tail risks are not as big in terms of their return risks, in comparison to most of the H-REITs, as shown in Table 3.5. With the exception of The Link, the H-

REITs' fat tails are showing at least a 1.7x over their "since IPO" risks and north of 3.0x over their 1-year risks. Both of these levels represent the higher ends for the property companies. This finding implies that most H-REITs tend to see their returns fall into a more depressed state, in terms of their normal level of risks, than the property companies do during a "black swan" event. Some may consider this to be a "small-cap" effect, as most H-REITs have market cap less than US$1 billion, except the Link and the Champion; however the Champion REIT, at a market cap of HK$22.8 billion (US$2.9 billion), did not seem to fair any better than other H-REITs.

Table 3.5: Fat-Tail Risk and Its Multiples of 5-year and 1-year Risk for Property Companies and H-REITs

Property Companies	Fat-tail Magnitude	Multiples of 5-year risk	Multiples of 1-year risk
Cheung Kong	53%	1.4X	2.2X
SHKP	70%	1.8X	2.9X
Henderson	70%	1.7X	2.8X
Swire Pac	59%	1.6X	2.4X
Wharf	68%	1.5X	2.4X
Hysan	50%	1.4X	1.7X
Great Eagle	67%	1.7X	2.6X
HSI Index	53%	1.7X	3.1X

H-REITs (IPO Date)	Fat-tail Magnitude	Multiples of risk since IPO	Multiples of 1-year risk
The Link (25Nov05)	24%	0.9X	1.5X
Prosperity (16Dec05)	45%	1.7X	3.1X
GZI (21Dec05)	44%	1.8X	3.0X
Champion (24May06)	63%	1.8X	3.1X
Sunlight (21Dec06)	47%	1.9X	3.2X
Regal (30Mar07)	61%	2.0X	4.1X

Note: "Fat tail" magnitude refers to the loss in value experienced by the security during the peak-to-trough period. Risk refers to the annualized standard deviation of the total return of a security. Fortune REIT is not included in this analysis since it has less than 12 months of price data.

Beta is a common measure of risk for securities in modern finance. It simply normalizes an asset's risk as a fraction of the overall average or market risk[54]. Figure 3.11 and 3.12 below have shown the beta values of the property companies and H-REITs, with the Hang Seng Index selected to be the average market portfolio in the calculations. It is apparent that the beta values of H-REITs are much lower than those of the property companies, implying that H-REITs bear less market risk than the stocks of property companies do.

[54] Geltner, D., Miller N., Clayton, J. & Eichholtz, P. (2007), Commercial Real Estate Analysis & Investments, 2nd Ed., Thomson South-Western, Mason, OH.

Figure 3.11: Beta Value: HK Property Companies (Since 1987)

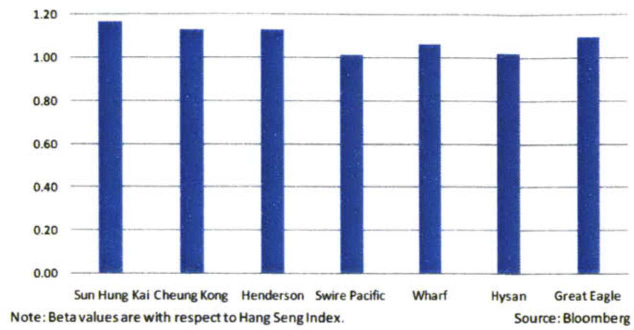
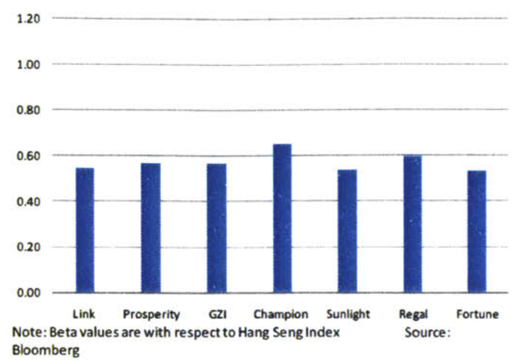


Figure 3.12: Beta Value: H-REITs (Since IPO)



Sharpe Ratios and Modified Sharpe Ratios

Figure 3.13 and 3.14 have shown the Sharpe ratios calculated for H-REITs and property companies, with the risk free rate being the 10-year HKD EFN note's average yield over the observed period. The H-REITs' Sharpe ratios are clearly higher than those of their counterparts over the 1-year, 2-year, and 3-year horizon, implying higher risk-adjusted returns in comparison to the property companies. Taking into consideration of the financial engineering arrangements that were washed out in mid-2008, the 1-year and 2-year return streams should be considered "clean" and yet they were still able to outperform the property companies. This is partially helped by H-REITs' lower risk levels, which is justified by their lower return standard deviations and lower beta values as mentioned earlier.

Figure 3.13: Sharpe Ratio: Property Companies

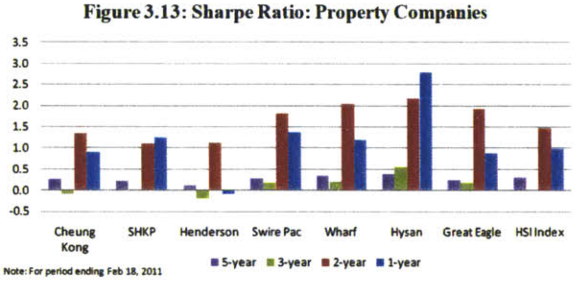
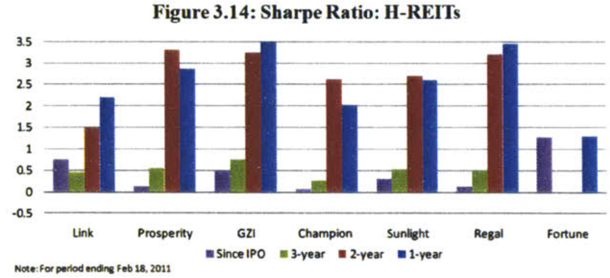


Figure 3.14: Sharpe Ratio: H-REITs



The Link REIT, the one REIT that makes up of more than half of the H-REIT market cap, once again differentiates itself from its peers, as it stacked up less spectacular Sharpe ratios in the shorter terms but outperform its peers in the "since IPO" period, thanks to its better supported share price throughout the crisis period.

Looking at the modified Sharpe ratios for these securities in Figure 3.15 and 3.16, the picture changes a little bit. The modified Sharpe ratio for this analysis is calculated in a similar way as the regular Sharpe ratio, except that the "fat-tail" loss of the security, rather than the return standard deviation, is used as the risk measure. While most property companies underperform the H-REITs on a 1-year basis, their modified Sharpe ratios are relatively stronger on a 2-year basis, possibly implying that the property companies were able to recover their returns much sooner than the H-REITs, given their respective "fat-tail" risk. The gaps between two security classes' modified Sharpe ratios are also narrower in comparison to the case for Sharpe ratios; this is consistent with the greater "fat-tail" multiples of H-REITs as discussed previously. The Link REIT has clearly demonstrated its investment value under this measure, as its modified Sharp ratio of 0.88, base on return and risk data since its IPO in November 2005, is more than double those of its peers (based on returns since IPO) and the property companies (based on 5-year return data). This is largely due to Link's relatively small "fat-tail" risk.

Figure 3.15: Modified Sharpe Ratio: Property Companies

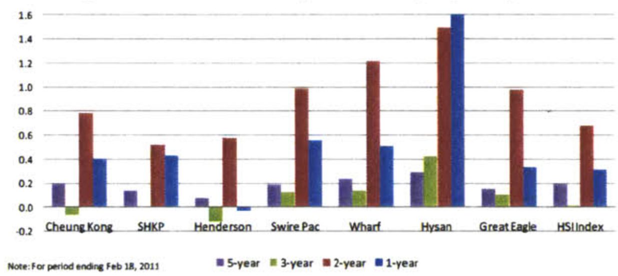
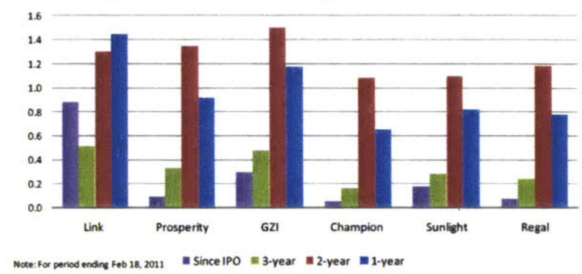


Figure 3.16: Modified Sharpe Ratio: H-REITs



3.3.2 Return Correlations

In this analysis, the correlations of daily share price return among the H-REITs, the seven property companies, the Hang Seng Index, and the yields of HKD 10-year EFN are examined on the basis of 6-month, 1-year, 3-year, 5-year, as well as the peak-to-trough, trough, and trough-to-present periods. With the help of Bloomberg, the analysis yielded the below tables with the H-REITs colored in light blue and correlation coefficients have been colored according to the strength of the correlation.

Table 3.6: 6-month and 1-year Daily Return Correlations Coefficients

6-month Daily Return Correlation (7/31/2010 - 1/31/2011)

Ticker	Link	Prosperity	GZI	Champion	Sunlight	Regal	Fortune	SHKP	CK	HLD	Swire Pac.	Wharf	Hysan	Great Eagle	HSI Index	HKD 10-year
Link	1.00	0.37	0.15	0.11	0.09	0.12	0.18	0.04	0.03	0.06	0.01	0.07	0.07	0.07	0.07	0.09
Prosperity		1.00	0.10	0.18	0.18	0.26	0.20	0.12	0.15	0.05	0.11	0.21	0.14	0.08	0.25	-0.08
GZI			1.00	0.12	0.10	0.31	0.12	0.19	0.25	0.22	0.09	0.12	0.12	0.11	0.21	-0.05
Champion				1.00	0.11	0.23	0.12	0.33	0.29	0.35	0.34	0.23	0.23	0.28	0.39	-0.01
Sunlight					1.00	0.10	0.04	0.03	0.03	0.00	0.14	0.10	0.01	0.11	0.18	-0.05
Regal						1.00	0.14	0.15	0.18	0.16	0.09	0.13	0.08	0.13	0.27	-0.02
Fortune							1.00	0.18	0.22	0.19	0.16	0.19	0.21	0.16	0.37	0.08
SHKP								1.00	0.75	0.69	0.48	0.49	0.24	0.33	0.67	0.13
CK									1.00	0.67	0.35	0.50	0.32	0.36	0.65	0.00
HLD										1.00	0.34	0.47	0.29	0.40	0.60	0.13
Swire Pac.											1.00	0.52	0.41	0.26	0.51	0.01
Wharf												1.00	0.53	0.39	0.61	0.06
Hysan													1.00	0.41	0.38	0.03
Great Eagle														1.00	0.40	0.13
HSI Index															1.00	0.06
HKD 10-yr																1.00

1-year Daily Return Correlation (2/1/2010 - 1/31/2011)

	Link	Prosperity	GZI	Champion	Sunlight	Regal	RREEF CCT	SHKP	CK	HLD	Swire Pac.	Wharf	Hysan	Great Eagle	HSI Index	HKD 10-year
Link	1.00	0.27	0.14	0.16	0.11	0.06	0.03	0.08	0.10	0.06	0.11	0.11	0.15	0.11	0.11	0.09
Prosperity		1.00	0.10	0.16	0.22	0.25	0.06	0.19	0.20	0.15	0.11	0.20	0.20	0.16	0.30	0.08
GZI			1.00	0.21	0.15	0.28	-0.07	0.29	0.32	0.26	0.26	0.23	0.20	0.15	0.34	0.09
Champion				1.00	0.13	0.23	0.04	0.46	0.38	0.42	0.39	0.35	0.34	0.36	0.47	0.10
Sunlight					1.00	0.14	0.10	0.16	0.14	0.15	0.16	0.23	0.12	0.10	0.28	0.05
Regal						1.00	0.13	0.28	0.28	0.29	0.19	0.23	0.20	0.20	0.32	0.03
RREEF CCT							1.00	0.11	0.09	0.17	0.08	0.10	0.08	0.12	0.16	-0.02
SHKP								1.00	0.75	0.73	0.52	0.56	0.39	0.36	0.75	0.18
CK									1.00	0.68	0.46	0.58	0.41	0.36	0.69	0.12
HLD										1.00	0.45	0.61	0.39	0.30	0.68	0.14
Swire Pac.											1.00	0.50	0.47	0.24	0.55	0.08
Wharf												1.00	0.47	0.33	0.66	0.16
Hysan													1.00	0.38	0.45	0.10
Great Eagle														1.00	0.40	0.19
HSI Index															1.00	0.21
HKD 10-yr																1.00

Note: Correlation figures that are between 0.40 and 0.49 inclusive are in yellow; 0.50 and 0.59 inclusive are in orange; 0.60 or above are in red.
The name of the H-REITs are highlighed in light blue.

Source: Bloomberg

Table 3.7: 3-year and 5-year Daily Return Correlations Coefficients

3-year Daily Return Correlation (2/1/2008 - 1/31/2011)

	Link	Prosperity	GZI	Champion	Sunlight	Regal	RREEF CCT	SHKP	CK	HLD	Swire Pac.	Wharf	Hysan	Great Eagle	HSI Index	HKD 10-year
Link	1.00	0.27	0.21	0.21	0.24	0.20	0.21	0.35	0.35	0.33	0.35	0.28	0.30	0.23	0.38	0.17
Prosperity		1.00	0.50	0.45	0.54	0.40	0.34	0.35	0.33	0.36	0.38	0.38	0.32	0.38	0.45	0.11
GZI			1.00	0.42	0.46	0.43	0.39	0.38	0.40	0.41	0.39	0.38	0.31	0.37	0.48	0.09
Champion				1.00	0.35	0.39	0.31	0.36	0.32	0.37	0.34	0.34	0.35	0.42	0.43	0.07
Sunlight					1.00	0.36	0.33	0.36	0.31	0.37	0.30	0.36	0.32	0.35	0.41	0.13
Regal						1.00	0.31	0.43	0.40	0.40	0.34	0.35	0.33	0.35	0.43	0.07
RREEF CCT							1.00	0.24	0.28	0.28	0.29	0.29	0.22	0.27	0.36	0.05
SHKP								1.00	0.84	0.83	0.71	0.69	0.54	0.46	0.82	0.14
CK									1.00	0.80	0.72	0.66	0.56	0.47	0.84	0.07
HLD										1.00	0.70	0.69	0.56	0.48	0.79	0.11
Swire Pac.											1.00	0.69	0.54	0.44	0.76	0.11
Wharf												1.00	0.49	0.44	0.73	0.12
Hysan													1.00	0.48	0.56	0.14
Great Eagle														1.00	0.53	0.15
HSI Index															1.00	0.13
HKD 10-yr																1.00

5-year Daily Return Correlation (2/1/2006 - 1/31/2011)

	Link	Prosperity	GZI	SHKP	CK	HLD	Swire Pac.	Wharf	Hysan	Great Eagle	HSI Index	HKD 10 year
Link	1.00	0.29	0.21	0.34	0.34	0.32	0.33	0.29	0.32	0.23	0.38	0.12
Prosperity		1.00	0.44	0.33	0.32	0.33	0.33	0.34	0.29	0.33	0.42	0.08
GZI			1.00	0.33	0.34	0.35	0.33	0.33	0.29	0.31	0.43	0.09
SHKP				1.00	0.84	0.80	0.68	0.68	0.53	0.46	0.80	0.11
CK					1.00	0.78	0.71	0.66	0.53	0.46	0.82	0.07
HLD						1.00	0.67	0.67	0.53	0.46	0.77	0.09
Swire Pac.							1.00	0.67	0.50	0.41	0.73	0.10
Wharf								1.00	0.50	0.42	0.73	0.09
Hysan									1.00	0.45	0.55	0.11
Great Eagle										1.00	0.51	0.11
HSI Index											1.00	0.12
HKD 10-yr												1.00

Note: Correlation figures that are between 0.40 and 0.49 inclusive are in yellow; 0.50 and 0.59 inclusive are in orange; 0.60 or above are in red.
The name of the H-REITs are highlighed in light blue.

Source: Bloomberg

While the H-REITs are positively correlated among each other, the correlations are not particularly strong. The strongest correlations among H-REITs are shown in the 3-year return correlations table, where five pairs of REITs had a correlation coefficient over 0.40, and only two pairs of them, i) Prosperity and GZI, and ii) Prosperity and Sunlight, have correlations of over 0.50. However, one has to bear in mind that the 3-year time horizon covers the extraordinary financial crisis period, meaning the peak-to-trough and trough-to-present period. In the 1-year period, the correlation was even weaker with the highest correlation coefficient among the H-REITs being only 0.28 between the Regal REIT and GZI REIT. This phenomenon is a huge contrast to the correlations among the property companies, where the companies have correlation coefficient of over 0.40 in most cases, with the exception of Great Eagle in the 1-year period. The property developers, meaning "SHKP", "CK" and "HLD", are the most positively correlated among each other, with at least a correlation coefficient of 0.70 in most cases, followed by the conglomerates Swire and Wharf.

The H-REITs' returns are apparently positively correlated with the property companies and such correlation is the strongest in the 3-year observation period, but only a few of them passed the 0.40 levels in the 3-year period.

The correlations between the H-REITs and the Hang Seng index in all three time horizons are significantly weaker than those between the property companies and the index; this is clearly justified by the H-REITs low betas relative to these companies.

Given these securities went through such an abnormal period of time in the history of financial markets, it is worthwhile to look at their correlations during the peak-to-trough, trough, and trough-to-present periods, with the dates of each period being consistent with the past sections.

Table 3.8: Daily Return Correlations Coefficients for Peak-to-Trough, Trough and Trough-to-Present Periods

Peak to Trough period: 1/14/2008 - 11/20/2008

	Link	Prosperity	GZI	Champion	Sunlight	Regal	RREEF CCT	SHKP	CK	HLD	Swire Pac.	Wharf	Hysan	Great Eagle	HSI Index	HKD 10-year
Link	1.00	0.37	0.34	0.32	0.44	0.39	0.36	0.60	0.59	0.61	0.57	0.58	0.56	0.37	0.60	0.08
Prosperity		1.00	0.64	0.54	0.64	0.41	0.47	0.36	0.33	0.42	0.45	0.43	0.36	0.41	0.49	0.00
GZI			1.00	0.45	0.59	0.43	0.53	0.36	0.36	0.39	0.44	0.44	0.37	0.41	0.49	0.08
Champion				1.00	0.37	0.39	0.32	0.34	0.29	0.32	0.37	0.38	0.37	0.41	0.44	-0.04
Sunlight					1.00	0.38	0.42	0.43	0.36	0.46	0.39	0.45	0.39	0.37	0.46	0.17
Regal						1.00	0.39	0.47	0.43	0.43	0.40	0.42	0.46	0.35	0.50	0.14
RREEF CCT							1.00	0.38	0.42	0.41	0.47	0.44	0.32	0.36	0.49	0.07
SHKP								1.00	0.87	0.90	0.76	0.76	0.64	0.48	0.85	0.20
CK									1.00	0.88	0.81	0.74	0.66	0.51	0.90	0.11
HLD										1.00	0.78	0.74	0.66	0.52	0.85	0.18
Swire Pac.											1.00	0.76	0.60	0.53	0.82	0.13
Wharf												1.00	0.60	0.53	0.81	0.10
Hysan													1.00	0.53	0.67	0.17
Great Eagle														1.00	0.58	0.16
HSI Index															1.00	0.15
HKD 10-year																1.00

Trough period: 11/20/2008 - 3/9/2009

	Link	Prosperity	GZI	Champion	Sunlight	Regal	RREEF CCT	SHKP	CK	HLD	Swire Pac.	Wharf	Hysan	Great Eagle	HSI Index	HKD 10-yr
Link	1.00	0.29	-0.02	0.20	0.13	0.01	0.11	0.09	0.12	0.15	0.26	0.10	0.12	0.22	0.25	0.35
Prosperity		1.00	0.41	0.52	0.44	0.61	0.24	0.42	0.40	0.38	0.39	0.43	0.41	0.60	0.51	0.19
GZI			1.00	0.56	0.36	0.56	0.30	0.34	0.50	0.43	0.36	0.30	0.34	0.39	0.46	0.00
Champion				1.00	0.44	0.53	0.41	0.28	0.32	0.42	0.34	0.37	0.34	0.55	0.47	0.15
Sunlight					1.00	0.40	0.32	0.26	0.19	0.29	0.21	0.37	0.25	0.45	0.35	0.08
Regal						1.00	0.37	0.37	0.39	0.42	0.32	0.42	0.28	0.49	0.47	-0.11
RREEF CCT							1.00	-0.06	0.07	0.15	0.16	0.23	0.17	0.19	0.18	-0.13
SHKP								1.00	0.82	0.82	0.75	0.73	0.62	0.52	0.79	0.03
CK									1.00	0.76	0.73	0.65	0.58	0.40	0.78	-0.02
HLD										1.00	0.74	0.69	0.59	0.50	0.78	-0.04
Swire Pac.											1.00	0.78	0.64	0.39	0.79	0.08
Wharf												1.00	0.63	0.52	0.74	0.07
Hysan													1.00	0.47	0.58	0.19
Great Eagle														1.00	0.58	0.03
HSI Index															1.00	0.02
HKD 10-yr																1.00

Trough to Present period: 3/9/2009 - 2/18/2011

	Link	Prosperity	GZI	Champion	Sunlight	Regal	RREEF CCT	SHKP	CK	HLD	Swire Pac.	Wharf	Hysan	Great Eagle	HSI Index	HKD 10-yr
Link	1.00	0.16	0.15	0.14	0.08	0.11	0.06	0.23	0.22	0.16	0.18	0.10	0.14	0.13	0.21	0.06
Prosperity		1.00	0.27	0.30	0.41	0.32	0.16	0.33	0.33	0.29	0.26	0.29	0.25	0.25	0.37	0.18
GZI			1.00	0.29	0.28	0.34	0.21	0.41	0.40	0.42	0.30	0.33	0.23	0.28	0.43	0.15
Champion				1.00	0.28	0.34	0.18	0.47	0.43	0.42	0.33	0.30	0.36	0.42	0.48	0.08
Sunlight					1.00	0.32	0.17	0.32	0.29	0.30	0.22	0.25	0.28	0.27	0.36	0.10
Regal						1.00	0.13	0.40	0.35	0.37	0.24	0.25	0.23	0.30	0.36	0.05
RREEF CCT							1.00	0.19	0.18	0.19	0.08	0.12	0.10	0.14	0.21	0.14
SHKP								1.00	0.82	0.78	0.63	0.62	0.46	0.47	0.80	0.10
CK									1.00	0.76	0.63	0.60	0.48	0.49	0.78	0.08
HLD										1.00	0.59	0.64	0.49	0.46	0.76	0.12
Swire Pac.											1.00	0.61	0.48	0.39	0.66	0.09
Wharf												1.00	0.41	0.39	0.68	0.12
Hysan													1.00	0.46	0.49	0.08
Great Eagle														1.00	0.50	0.17
HSI Index															1.00	0.14
HKD 10-yr																1.00

Note: Correlation figures that are between 0.40 and 0.49 inclusive are in yellow; 0.50 and 0.59 inclusive are in orange; 0.60 or above are in red.
The name of the H-REITs are highlighed in light blue.

Source: Bloomberg

During the peak-to-trough period, the H-REITs are much more positively correlated with each other and their correlations with the property companies and Hang Seng Index also rose. Interestingly, The Link REIT, the largest H-REIT in terms of market cap, almost doubled its correlation coefficients with the property companies during this peak-to-trough period, having at least a 0.56 correlation coefficient with six of the seven property companies in assessment. In the trough period, however, these positive correlations among H-REITs began to fade away; in the trough-to-peak period, the H-REITs' correlations with their peers and the property companies had gone significantly lower. There is some evidence suggesting that the H-REITs rid out of the trough along with the general market, as their correlations with the Hang Seng Index are higher in such period in comparison to the 6-month, 1-year period. It is also interesting to note that the yield of Hong Kong Dollar interest rate has a very low correlation with all of these securities, regardless of time periods.

3.3.3 Dividend Yields

The dividend yield measures the dollar amount of dividend yielded by a share of stock in the past 12 months as a percentage of the stock price of a given day. Pursuant to the REIT legislation, H-REITs have to give out at least 90% of its distributable income as dividend annually. In fact, all H-REITs have been paying over the 90% threshold, as shown in Table 3.9 below. While one can likely be certain on the occurrence of dividend distribution, the dividend yield, which will be discussed next, can be quite volatile.

Table 3.9: H-REITs' Distribution Payout Ratio

Dividend as a % of Distributable income

	Fiscal Year				
H-REITs	2006	2007	2008	2009	2010
Link	100.0%	100.0%	100.0%	100.0%	100.0%
Prosperity	100.0%	100.0%	100.0%	100.0%	100.0%
GZI	100.0%	100.0%	100.0%	100.0%	-
Champion	100.0%	100.0%	100.0%	94.6%	94.8%
Sunlight	-	100.0%	100.0%	100.0%	100.0%
Regal	-	100.0%	100.0%	95.4%	-

Source: Company data.

For dividend lovers, H-REIT are clearly the investment of choice. Figure 3.17 and 3.18 below respectively show the spread of the dividend yields of H-REITs and of the real estate companies over the yield of 10-year HKD EFN Note. For the purpose of this comparison, the dividend yields of the three categories of real estate companies are market-cap-weighted-average dividend yields. While both charts show the spreads peaked in October 2008, as their respective share prices were under stress during the financial crisis, it is apparent that most H-REITs' dividend yields have consistently beaten the 10-year EFN yields, whereas the spread of the real estate companies hovered around zero, implying dividend yields that are close to the risk-free rate.

Figure 3.17: H-REITs Dividend Yield's Spread Over HK Dollar 10-year EFN Yields

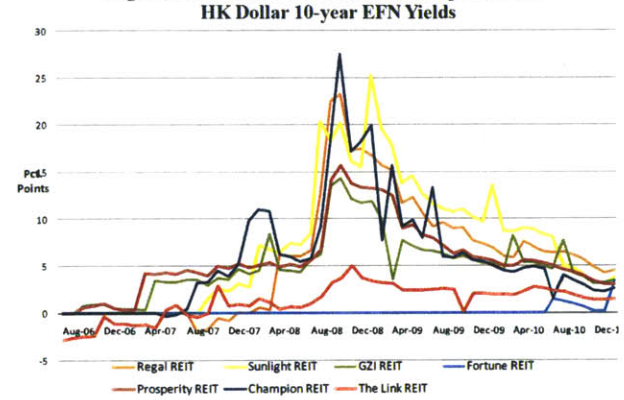
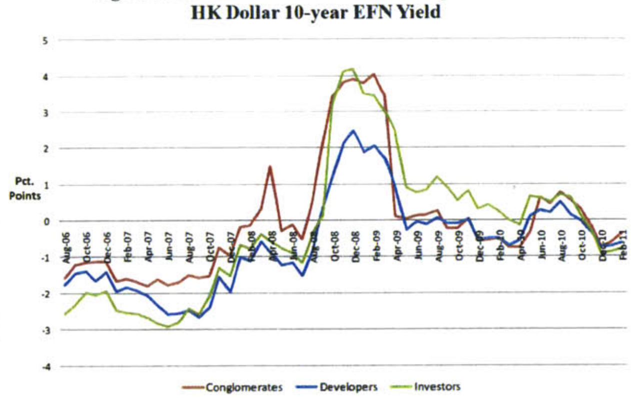


Figure 3.18: Historical Dividend Yield's Spread Over HK Dollar 10-year EFN Yield



In order to compare the yields of H-REITs and property companies, however, a different measure has to be used for the property companies, as these companies have the choice of retaining part or all of their distributable income. Hence, a more comparable measure for these companies would be the earning-per-share-to-price ratio (E/P ratio) or earnings yield. Figure 3.19 and 3.20 show the yields of the 10-year HKD EFN yields, dividend yields of each of the seven H-REITs at the year-end of 2008, 2009 and 2010, and the EPS[55]-to-price yields of the property companies at the same periods.

[55] The EPS measure being used for the property companies here is the trailing 12-month reported core EPS, which does not take into account asset value gains/losses, disposal of investment securities, and financial instrument gains/losses.

Figure 3.19: H-REITs: Historical Dividend Yield

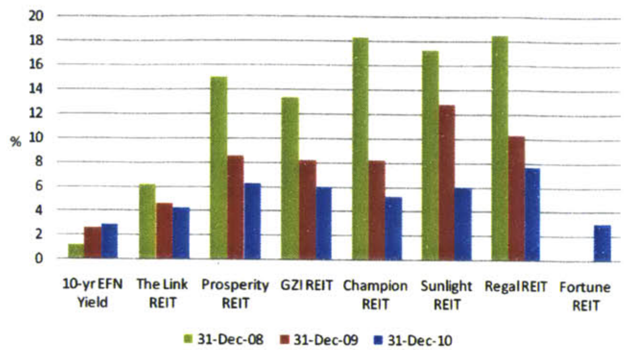
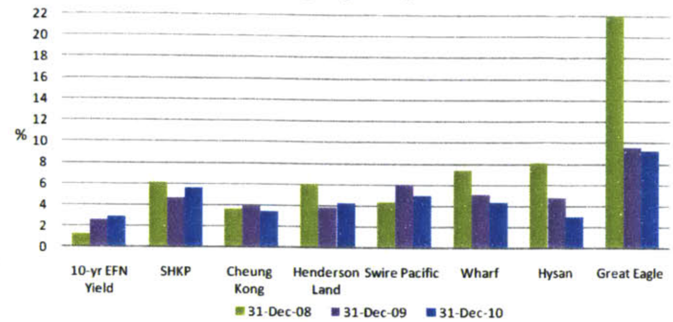


Figure 3.20: HK Property Companies: E/P Yield



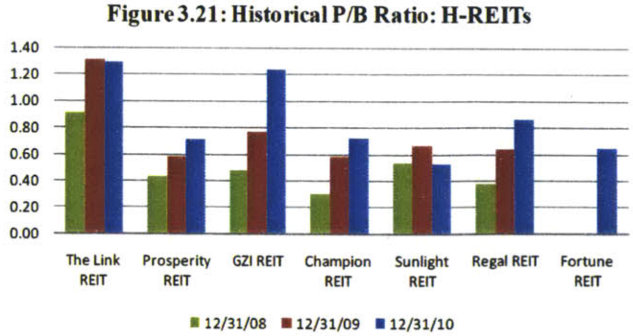
Source: Bloomberg, JP Morgan Asia Pacific Equity Research

The dividend yields of H-REITs have fallen considerably in the past 3 years, largely driven by the jump in their share prices since the trough was reached in October 2008. With the exception of The Link, whose dividend yields steadily hovered in the 4-6% range, most H-REITs have seen their dividend yields fell from the teen range at end of 2008 to the 5-8% range at end of 2010. Considering that most yield enhancement arrangements have been taken out, these "clean" dividend yields for 2009 and 2010 still beat the E/P yields of most property companies. For the property companies, Great Eagle leads its peers in E/P yield largely due to its lower valuation; its share price was particularly depressed at the end of 2008 which caused a big jump in its E/P yield.

3.3.4 Price-to-Book

The price-to-book-value (P/B) ratio is determined by market's expectation towards a particular stock's growth, payout, risk and return on equity[56]. Each industry has its own band or range of P/B ratio and some investors use this ratio as an analysis to gauge the fairness of a given stock's value relative to its peers.

Figure 3.21: Historical P/B Ratio: H-REITs



[56] Damodaran, Aswath (2001), Corporate Finance Theory and Practice, 2nd Ed., John Wiley & Sons, Inc., New York, NY.

Pursuant to Hong Kong accounting policies, the investment properties of companies have to be listed on the balance sheet at fair values, and are revalued annually by independent licensed surveyors. For H-REITs and Hong Kong property companies, the book value NAVs are revalued at the end of each fiscal year, hence reflecting the market values of the portfolios of properties, though usually subject to a 2-3 months lag since the annual reports are usually released in 2-3 months upon the books are closed for the fiscal year. This is different from the practice in the United States, where a REIT's book value NAV is an accounting measure that carries over from past years; as a result, it bears little relevancy to the market value of a REIT's underlying portfolio.

As one can see from Figure 3.21 and 3.22, The Link REIT's P/B ratio is consistently greater than its peers and in most cases almost doubles those of its peers. This is largely due to its strong corporate governance, solid turnaround asset enhancement initiative (AEI) theme, relatively large market cap, and diversified asset pool (in terms of value concentration of properties in its portfolio). As most H-REITs' P/B ratios rose in the past three years, GZI REIT's P/B ratio stood out from the crowd, given the premium that investors are willing to pay for the China retail boom theme hence the greater potential for rent growth.

In comparison with the market-cap-weighted measure of their real estate peers, the P/B ratios of most H-REITs, with the exception of Link and GZI, had behaved quite similarly as that of the property investor category, fluctuating in the range of 0.4x to 1.0x in most of the observed period, except for the volatile period between October 2008 and May 2009 (Figure 3.22 and 3.23). Interestingly, the Link commands a P/B ratio that is similar if not higher than the developers, as the REIT traded north of a 1.2x P/B in recent periods. One thing to note is that, most developers have some exposure to Mainland China, which perhaps explains the greater fluctuation seen in its P/B ratio. With same rationale, the greater volatility seen in the P/B ratio of GZI, which jumped from 0.4x to 1.2x, can perhaps be explained by its portfolio which contains only retail malls in China.

Figure 3.22: Historical P/B Ratio: H-REITs

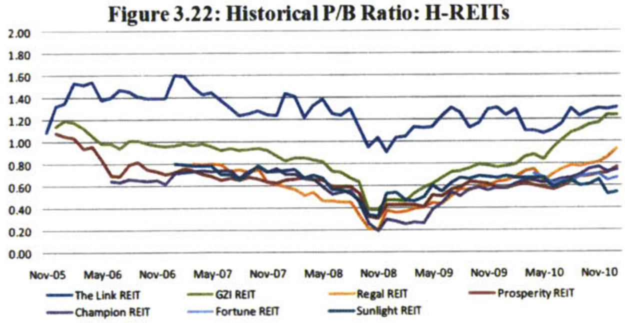


Figure 3.23: Historical P/B Ratio: Property Companies

3.3.5 Price-to-Forward-NAV

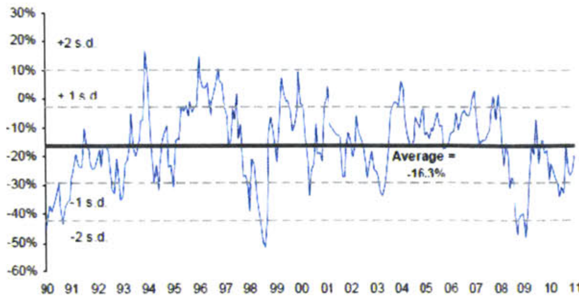
The price-to-forward-net-asset-value (P/Forward NAV) ratio is arguably the most commonly used valuation metric in valuing Hong Kong property companies, according to JPMorgan Asia Pacific Equity Research and other major securities brokerages, as these analysts believe that these companies' stock prices should be traded as a function of the company's future net asset value. Under this methodology, equity research analysts periodically publish their estimates on the future value of the stock's portfolio of properties (or assets), meaning forward NAV, based on their estimates of future cap rates and rent growth. In other words, the analysts are estimating the future private property market valuations of the company's portfolio of properties. The analysts would then be able to compute the premium or discount that the share price is trading relative to the stock's estimated forward NAV per share.

Historically, Hong Kong property companies on average have been trading at a discount to their respective forward NAVs. According to Barclays Capital[57], this largely reflects a management discount on these stocks' valuations, since most of these companies have a family ownership structure, resulting in little or no takeover threat should the managements fail to perform. Moreover, this family ownership structure could potentially creates an agency problem, as these families also own and control many other companies that may have business relationships with their property companies. In addition, there is also believed to be a conglomerate discount for the stocks of those property companies that have multiple lines of businesses, as markets view that the capital markets and investors would do a better job than the management on diversifying their investment risks and allocating capital according to their needs. Other factors that are believed to contribute to a property company's discount in valuations are small market cap, poor execution track record, unfavorable geograpfhic exposure, and high financial leverage, according to Morgan Stanley.

According to historical data captured by and estimates of JP Morgan, Hong Kong developers' share prices have been able to command a narrower discount to forward NAV comparing to those of the investors, as shown in Figure 3.24 and 3.25. This is largely due to the fact that the developers generate most of their revenue from the sale of their properties, which results in quicker asset turnover and higher visibility, transparency and certainty on NAV realization. Property investors, on the other hand, usually generate cash flows from stable rental incomes instead of property sales; hence, the realization of the future value of its properties is less certain, as rents are locked-in for a certain period of time once a lease is signed.

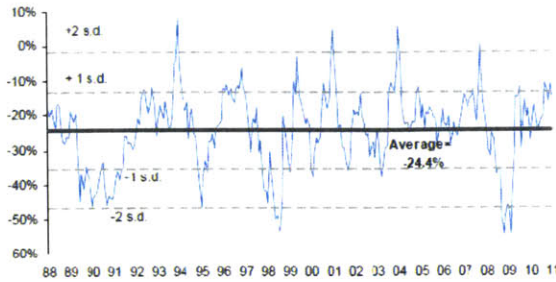
[57] Lawrence, Andrew. *"Hong Kong Property Investors: Initiation of coverage."* Barclays Capital (October 12, 2010)

Figure 3.24: HK Prop. Developers' Historical NAV Discount



Source: JP Morgan

Figure 3.25: HK Prop. Investors' Historical NAV Discount



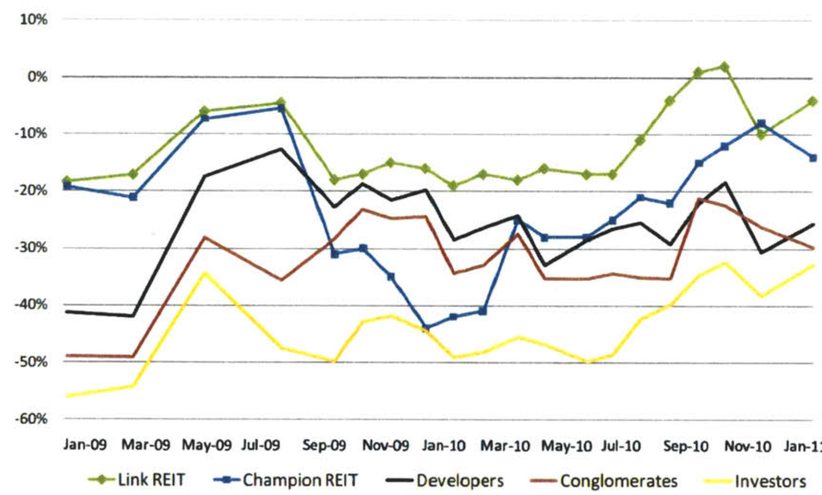
Source: JP Morgan

Much like a stock's earning estimates predicted by sell-side analysts, there are multiple estimates for a stock's forward NAV based on different analysts' views on future cap rates and rent growth. Complicating the matter, different analysts would compute the P/Forward NAV based on forward NAV at different points in the future, such as at the end of this/next fiscal/calendar year. For the purpose of gauging only a comparative analysis between H-REITs and Hong Kong property companies, as well as observing the trend of such ratio, in addition to considering the consistency in methodology (meaning the consistency in referencing the stocks' forward NAVs of the same points in the future), only the statistics of JP Morgan Asia Pacific Research are used in this analysis. It is worth noting that the Link REIT and the Champion REIT are the only H-REITs included in this analysis due to the lack of coverage for the other H-REITs.

Figure 3.26 at the bottom has shown the premium/discount of share prices to forward NAV for the two H-REITs and the market-cap-weighted measure of the three categories of property companies in the 24 months ending January 31, 2011. Among the three categories of property companies, it is apparent that the discount to NAV for the Developers is the narrowest, followed by those of the Conglomerates and Investors, consistent with the explanation provided by JP Morgan and Barclays Capital. Comparing to these companies, Link REIT has achieved an average of 12% discount to NAV over the observed period, consistently narrower than that of the Developers. This can probably be explained by the fact that the Link, as well as all other H-REITs, is not a conglomerate nor managed by families. The Link's AEI element as well as its independent management and large market cap, comparing to other H-REITs, probably further contribute to its narrower discount to NAV valuation. The Link's higher P/NAV valuation relative to its H-REIT peers and property companies is also consistent with its relatively high P/B ratio. The Champion REIT, though has been trading at a narrow discount comparing to the developers since March 2010, has experienced huge swings, as it once dropped to as wide as a 43%

discount, before bouncing back to the teen range and achieving an average of 24% discount to NAV over the period. This phenomenon highlights that the H-REITs cannot be simply viewed as a group of stocks that have the same level of relative valuation. Factors like the expectations of asset-level performance and the quality of the portfolio also play important roles. The Champion REIT commanded a narrower discount to NAV than the property companies since around March 2010. Some attributed this premium over property companies to Champion's specialization in grade-A prime office portfolio. As office rents in Central CBD grew to second most expensive in the world, Champion became an "office play" for some investors.

Figure 3.26: Share Price Premium / (Discount) to Forward NAV



Source: JP Morgan Asia Pacific Equity Research

3.4 Key Findings from the Comparative Analysis

Key findings on H-REITs as an investment relative to Hong Kong property stocks:

- H-REITs are significantly less risky than the stocks of property: The standard deviation of H-REITs' total returns and the betas of H-REITs are significantly lower than those of the property companies, implying that it is less risky to invest in H-REITs.

- The "fat-tail" risks of H-REITs, with the exception of Link, in proportion to their risks at normal periods are greater: In a "black swan" event, H-REITs, with the exception of Link, experienced a greater drop in value relative to their risks than the property companies did.

- H-REITs can be a useful vehicle in gaining real estate exposure yet achieving diversification in a portfolio of local real estate stocks: Given their low correlations with the index as well as the property companies, the H-REITs can provide diversification to a portfolio of real estate stocks while offering direct real estate exposure.

- H-REITs provide attractive dividend yields with low correlations to interest rate movements: H-REITs' returns have shown dividend yields that consistently outperformed the risk free 10-year HKD EFN yield and has very little correlations with the change in interest rates. Their dividend yields also outperformed the earning yields of property companies in recent years.

Key findings on comparison of individual H-REITs:

- Diversified asset portfolio, asset enhancement initiatives, strong corporate governance, and large market cap provide strong support on H-REIT's share price: The Link REIT, with the biggest and most diversified asset portfolio in terms of number of properties, a solid turnaround story, an independent asset manager internally-owned by the REIT, and the largest market cap amongst H-REITs, has shown a very steady return streams and a relatively small "fat-tail" risk.

- Strong asset enhancement initiatives and China retail element and are being priced as a premium in H-REITs' valuations: The Link's valuation has consistently been higher than other H-REITs, thanks to the solid growth potential in its asset enhancement initiatives. The GZI REIT has also been able to demand a premium on its valuation comparing to most of other H-REITs as its properties located in Guangzhou, China offers exposure to the growing consuming power in China.

- Careful assessment must be made on individual H-REIT in forming investment decisions: Each H-REIT has a property portfolio with unique attributes and a structure with different yield enhancement mechanisms in place. Investors must carefully assess the impact of each before making an investment decision.

One must be mindful that the above findings are based upon analysis of a short series of historical data since the H-REITs are only present for less than six years. Further analysis and testing should be conducted to verify the above should more data become available.

Chapter 4. The Future of the H-REIT Market and Its Opportunities for Investors

In an attempt to understand what the future of the H-REIT market has to offer, interviews had been conducted with three real estate practitioners in Hong Kong to obtain their views on current hurdles for growth, future growth drivers, future trend and the opportunities for investors, with respect to the H-REIT market. The following discussion in this paper is largely based on the comments of the interviewees as well as information of industry publications. As the interviewees' comments reflect personal views, their identities will be remained confidential.

4.1 The Future of H-REIT Market

What keeps the H-REIT market from growing?

On the supply side for H-REITs, given that most investment grade properties in Hong Kong are already listed on the Hong Kong Stock Exchange[58], meaning belonging to the listed property companies, the growth of H-REIT market is therefore greatly dependent on the willingness of the local property companies to spin off their properties into H-REITs. The interviewers have expressed three main reasons that discourage property companies from sponsoring H-REITs:

i) The property companies have an abundance of liquidity: With strong liquidity positions and other means of financing such as bank loans readily available, Hong Kong property companies have little incentive to raise cash by spinning off their trophy assets into H-REITs. In fact, "developers might not have injected their property into related REITs had it not been for tight lending among banks a few years ago[59]", wrote Siu Sai-wo, former member of the SFC Investor Education Advisory Committee and current chief editor of Sing Tao Daily.

ii) Hong Kong properties yields are too low and financial engineering in H-REITs are not well-received: As the dividend of REITs are largely coming from the streams of rental income generated from the portfolio of properties, the rental yields of these underlying properties largely determines the yields of the REITs. Looking at the fundamental of the Hong Kong property markets, the commercial properties in prime area bear only 2-4% yields, as shown in Table 4.1. Without incorporating financial engineering to boost up the yields, it is particularly difficult to make the H-REITs to become an attractive investment for investors[60]. However, a heavy dose of financial engineering would only shun investors away as the dividends would

[58] Wheatley, Martin. "Enabling the Growth of REITs and CMBS in Hong Kong: The Role of the Regulators." Securities and Futures Commission (September 2006)
[59] Siu, Sai-wo. "Shopping center on REIT lines." The Standard (January 21, 2011)
[60] Whiting, Dominic (2006) Playing the REITs Game: Asia's New Real Estate Investment Trusts, John Wiley & Sons (Asia) Pte. Ltd., Singapore.

provide little transparency and such yield enhancement mechanisms would last for only 2-3 years. The poor share price performance of some of the H-REITs, which many believed to be associated with their financial engineering, are not especially encouraging for companies to sponsor H-REITs.

Table 4.1: Estimated Initial Yields for Properties of Asian Cities at the End of 2010

ESTIMATED INITIAL YIELDS

City	Prime Office	Luxury Residential	Retail	Industrial
Greater China				
Beijing*	5.0–8.0%	3.0–5.0%	6.0–11.0%	9.5–11.5%
Shanghai*	4.5–5.5%	4.5–5.0%	4.5–5.0%	6.0–7.0%
Guangzhou*	5.3–7.2%	2.3–3.6%	6.0–8.0%	na
Hong Kong ^	2.9%	2.9%	3.6%	4.9%
Taipei	2.6–3.5%*	na	3.5–4.0% ^	3.0–3.8*
Tokyo ^	3.5–4.0%	5.5–6.5%	3.8–4.3%	5.5–6.0%
Seoul	5.5–6.8%*	1.9–2.0% ^	6.0–7.0%*	9.0–10.0%*
India*				
New Delhi	7.0–8.0%	2.0–3.0%	8.8–9.5%	11.0–12.0%
Mumbai	10.0–12.0%	3.5–5.0%	12.0–14.0%	13.0–14.0%
Singapore ^	3.3%	1.9%	5.7%	5.5%
Kuala Lumpur	6.0–7.0% ^	5.3–6.7%*	7.0–7.5% ^	na
Bangkok ^	5.8–7.5%	3.5–8.6%	5.8–7.5%	8.0–10.5%
Manila*	6.5–9.5%	7.0–10.0%	na	na

Reported initial yields for different cities are based on individual city's market practice and may be gross or net yields.
The reported estimated initial yields for office and retail in Beijing refers to estimated achievable yield, which replaced the previously reported buyer's expected entry yield.
* Gross yields - defined as the ratio of gross income (i.e. income before non-recoverable costs are allowed for) over purchase price.
^ Net yields - defined as the ratio of net income (i.e. income after allowing for non-recoverable costs of ownership) over purchase price.

Source: CBRE Research Asia Investment Market View 2H 2010

iii) Lack of tax incentive for sponsors: As the H-REITs are not exempted from paying corporate tax, there is no cost saving benefits for property companies to turn themselves into H-REITs.

The last point above begs two fundamental questions that are critical to understand H-REIT market: i) what is the rationale behind the no-tax-benefit status of REIT vehicles set out by Hong Kong regulators (and related government parties who contributed to the REIT Code)? ii) why would the developers sponsor a REIT without tax benefits (at the corporate level) and yet be willing to have the REIT's investment and distributions be constrained by the REIT Code?

In response to the first question, the interviewees expressed that the intention of the regulators and government setting the H-REITs to be non-tax-exempted was not clear. However, interviewees speculated that the decision could possibly be based on the following reasons:

- The tendency of government bureaucrats to play safe. Offering no tax incentive brings fewer changes to the overall competitive landscape of the real estate industry, hence lower chance for conflicts or mistakes.
- If the H-REITs are to be tax-free, there would be pressure (from investors) for the existing listed real estate companies to be turned into REITs; these companies (who likely were consulted during the drafting of REIT Code) probably would not want to have such pressure as they enjoy the discretion of using the cash generated from properties to fund some other businesses.
- If the H-REITs are to be tax-free, any company that owns properties may also apply to become a REIT. While the number of REITs would be greater, it is not a certainty that better REIT would arise. Although it is best left to the market to decide which REIT is good or bad, the regulators/government might want to protect the REIT market, at least at the beginning of the period.
- Having the H-REITs tax-exempted may not necessarily help grow the REIT market in Hong Kong, given the short-term speculation mentality of the many general investors in Hong Kong.

With no tax-benefits being offered to H-REITs, developers' motivation of sponsoring H-REITs must have come from other sources. Indeed, the interviewees believed that the sponsors' main motivation was the higher valuations achieved by spinning off these assets into a REIT vehicle, in comparison to the valuations obtained by selling the properties via other means. This only held true, however, when the H-REIT was a "hot product" that saw its IPO subscriptions being multiple times covered. As some H-REITs lost favor due to financial engineering and poor corporate governance (both of which to be discussed next), declines in H-REITs' valuations have discouraged the developers to sponsor H-REITs, hence the drought in H-REIT issuance in the recent years.

On the demand side, the below are several reasons that keep investors away from the H-REITs:

i) Financial engineering and the associated bad reputation: The complicated yield enhancement mechanisms, which some investors may even refer to as financial tricks, had caused some investors to lose confidence in H-REITs as an investment vehicle. The poor price performances of some of these H-REITs, for those that have not made their way back to the IPO levels, have further discouraged investors from investing in them.

ii) Agency problem: Some investors would consider the H-REITs to be an asset dump for property companies as investors question the sponsors' incentive of spinning out their quality assets into H-REITs. In fact, many investors view the underlying properties of H-REITs, except Champion, to be far from trophy assets. Moreover, the sponsor's ownership of the asset manager, close business relationships with and substantial ownership in the H-REITs further raise concerns in the corporate governance and independence of the H-REITs. The poor governance of some H-REITs is believed to be the main source of their valuation discounts.

What will be the growth driver for H-REIT market?

The future H-REITs will certainly have to address the investors concerns above in order to attract investors' interests. Minimal sponsors' ownership of H-REITs and independent asset managers are some examples that could help to address the corporate governance concern. With the unwinding and expiry of most of these yield enhancement mechanisms in H-REITs, the clean yields and the hike in share prices are certainly providing comfort for investors. However, it is difficult to address the structural problem that hinders the growth of H-REITs: the prime properties are offering unattractively low yields of 2-3% for investors. As the interviewees have expressed, the cross-border H-REITs with oversea underlying assets will likely to be the future of the H-REIT market. However, Hong Kong faces fierce competition with another established financial hub in the region—Singapore.

The success of Singapore REIT market

Hong Kong and Singapore are widely considered by the global investment community to be the two cities with the most established and efficient capital markets in the Asia ex-Japan region; hence the stock exchanges of these two cities are in direct competition for IPOs and listings of cross-border REITs.

Singapore had its first REIT listed on the Singapore Exchange in July 2002, about three and a half years earlier than the birth of the first H-REIT. Singapore's REIT market rapidly grew from having two REITs at the end of 2002 to a total of 24 REITs and a market cap of US$29.3 billion at the end of 2010, placing Singapore to be the second largest REIT market in Asia behind Japan, which has a total of 35 REITs and a market cap of US$45.6 billion.

Table 4.2: List of Singapore REITs as of Mar 31, 2011

Name of S-REIT	IPO Date	Type	Geographic Exposure
CapitaMall Trust	22-Jul-02	Retail	Singapore
Ascendas REIT	19-Nov-02	IT Parks & Industrial	Singapore
Fortune REIT	12-Aug-03	Retail	Hong Kong
CapitaCommercial Trust	11-May-04	Office	Singapore
Suntec REIT	9-Dec-04	Office / Retail	Singapore
Mapletree Logistics Trust	28-Jul-05	Logistics	Singapore & Asia
Starhill Global REIT	20-Sep-05	Retail	Singapore & Overseas
Frasers Commercial Trust	30-Mar-06	Office	Asia Pacific
Ascott Residence Trust	31-Mar-06	Service Apartment	Asia Pacific / Europe
K-REIT Asia	28-Apr-06	Office	Pan Asia
Frasers Centrepoint Trust	5-Jul-06	Retail	Singapore
CDL Hospitality Trust	19-Jul-06	Hotel	Singapore/Australia/New Zealand
Cambridge Industrial Trust	25-Jul-06	Industrial	Singapore
CapitaRetail China Trust	8-Dec-06	Retail	China
First Real Estate Investment Trust	11-Dec-06	Healthcare	Singapore
AIMS AMP Capital Industrial REIT	19-Apr-07	Logistics	Asia
Ascendas India Trust	1-Aug-07	IT Parks	India
Parkway Life REIT	23-Aug-07	Healthcare	Singapore
Saizen REIT	9-Nov-07	Residential	Japan
Lippo-Mapletree Indonesia Retail Trust	19-Nov-07	Retail	Indonesia
Indiabulls Properties Investment Trust	11-Jun-08	Office / IT Parks	India
Cache Logistics Trust	12-Apr-10	Industrial	Singapore
Mapletree Industrial Trust	21-Oct-10	Industrial	Singapore
Sabana Shari'ah Compliant Industrial REIT	26-Nov-10	Industrial	Singapore

Source: CBRE, Company Data.

Apparently, the S-REITs have more diversity in terms of their types of underlying properties and a number of them are specialized in one particular type of asset. In 2003, Hong Kong property developer Cheung Kong sponsored the listing of Fortune REIT in Singapore (and was later listed by introduction on the Hong Kong Stock Exchange in April 2010), which became the first cross-border REIT listed in Singapore and the first REIT that has an underlying portfolio of properties in Hong Kong. Later in 2005, a number of cross-border REITs began to emerge with assets located in countries across Asia Pacific and Europe. While some cross-border S-REITs were sponsored by oversea property companies, the cross-border REIT backed by Mainland China asset, that is the CapitaRetail China Trust, was sponsored by Singapore-based CapitaLand.

According to the research paper of Luo[61], Singapore's REIT regulatory policy has more restrictions in place to ensure highest level of financial discipline and to mitigate potential conflict of interests in the S-

[61] Luo, Tianjin. "*Is China Ready For REITs"—An examination of challenges and opportunities.*" Massachusetts Institute of Technology, Center for Real Estate (2008)

REITs; as a result, the S-REIT market was able to gain investors trust since the beginning, which in turn helped to attract foreign sponsors and fuel the S-REIT market's boom in the 2005-2007 period.

Will there be more cross-border H-REITs in HK?

While Singapore has been beating Hong Kong on winning cross-border REIT deals, there is one single dimension on which Singapore cannot compete with Hong Kong: the close-tie with China. There had been two cross-border H-REITs, both with Mainland China properties as the underlying assets: the GZI REIT which was sponsored by Guangzhou-based Yue Xiu and was listed in December 2005, and RREEF CCT REIT which was sponsored by RREEF, the alternative investment arm of Deutsche Bank, and was listed in June 2007 and later applied for delisting in April 2010. Although the RREEF CCT REIT was later discovered to be the victim of a lease fraud, this isolated incident did not affect the investors' eagerness in gaining exposure to the China real estate market, as evident in the GZI REIT's strong share price performance and its premium in valuation. However, Mainland property companies who hold investment properties are with amble liquidity and still prefer the traditional means of financing through bank loan, equity and debt; yet those Mainland developers who are often in need of funds are residential developers whose inventories may not be optimal for securitization. As a result, there does not seem to be a particular incentive for these companies to sponsor a REIT at the moment. Moreover, there is yet a clear incentive for Chinese companies to sponsor a H-REIT instead of S-REIT. However, this situation may soon be changed.

A recent development in the H-REIT market is the announcement of the plan for Cheung Kong, the Hong Kong property developer who has sponsored two H-REITs previously, to raise at least US$1 billion by spinning off a portfolio of assets in China into a Chinese Yuan-denominated H-REIT, which would be the first Yuan-IPO outside of Mainland China. The proposed H-REIT, called Hui Xian[62], would be backed by the Oriental Plaza, which has a valuation of up to US$5.01 billion[63] and is 33.4% owned by Cheung Kong and 18% owned by its direct-controlled company Hutchison Whampoa[64].

[62] Wu, Zijing and Hu, Fox. "*Li Ka-Shing's REIT May Start First Hong Kong Yuan IPO Today.*" Bloomberg (March 22, 2011)
[63] Leung, Alison. "*HK plans yuan IPO trial run ahead of Cheung Kong REIT.*" Reuters (February 10, 2011
[64] Ho, Prudence. "*Firms Press On with Hong Kong IPO Plans.*" The Wall Street Journal (March 24, 2011)

While Hui Xian's IPO is still pending approval from the Hong Kong's securities regulator and bourse operation at the time of writing[65], the market's response has generally been positive. Many investors find this H-REIT to be attractive for the following reasons:

i) The appreciation potential of Chinese Yuan is attractive given the lack of Yuan-denominated investment products and its potential of enhancing the yields in Hong Kong dollars term (since Hong Kong Dollar is pegged to the US Dollar).

ii) The trophy asset is situated in the prime area of Beijing and consists of eight grade-A office towers, a shopping mall, a hotel and serviced apartments[66] .

iii) The H-REIT offers China retail properties exposure, which has demonstrated to be popular amongst investors.

iv) Hui Xian has no yield enhancements in place thanks to the higher yields offers by the underlying properties in Beijing.

While it is apparent that the demand is definitely there for Yuan-denominated H-REITs, industry professionals think that this may also help to spur the ongoing supply of REITs, as this IPO "may pave the way for other Hong Kong developers to follow with similar offerings"[67]. In the long run, it may also lead Chinese property companies to follow suit and spin off their assets in Hong Kong, as the city's sound regulatory system and efficient capital market continue to meet foreign investors' need of China exposure and Chinese companies' need of foreign capital.

4.2 Future Opportunities for Investors

Investors can likely be benefitted from the potential flood of Yuan-denominated cross-border deals with Chinese underlying assets in the following ways:

i) <u>Ease of access to direct Chinese real estate exposure</u>: currently, the only financial products that offer direct real estate exposure is private equity real estate fund which typically is exclusively available to high net-worth individuals and institutional investors only. While it is not in the interest of this paper to compare and contrast the pros and cons of investing in private equity vis-à-vis REITs, there is no doubt that the future H-REITs can offer this type of exposure to a wider variety of investors with much higher liquidity.

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[65] Ho, Prudence. "Cheung Kong Still Awaiting Regulatory Approval To List Yuan-Denominated REIT - Sources." The Wall Street Journal (March 23, 2011)

[66] Wu, Zijing and Hu, Fox. "Li Ka-Shing's REIT May Start First Hong Kong Yuan IPO Today." Bloomberg (March 22, 2011)

[67] Ibid.

ii) An increase in Yuan-denominated investment alternatives: Since the Chinese Yuan is a restricted currency that is not freely convertible outside of Mainland China, there is a lack of investment products available for Yuan holders outside the country. The emergence of Yuan-denominated H-REITs would be an invaluable investment product for the Yuan holders reside in Hong Kong.

iii) Greater potential for the emergence of specialized REITs: Given the size of China and the larger investible stock of commercial properties relative to Hong Kong, there is a greater potential for emergence of specialized H-REITs that own one particular asset class of properties.

4.3 Summary

The H-REIT market did not get off to a good start and had developed a poor reputation as investors lost faith in a number of H-REITs that were embedded with complex financial engineering and deemed to have poor governance, as evident in these H-REITs' poor share prices performances. Challenged by the low yields offered by prime properties and the small size of the city, the future of the H-REIT market may well be depended on the pipeline of cross-border REIT deals, and especially the Yuan-denominated REITs. With the lessons learned from the previous wave of H-REITs offering, securities regulator should enforce stricter regulations to prevent conflict of interest in H-REITs and the sponsors should allow greater transparency on the structures of the H-REITs, in order to revive investors' confidence in the H-REIT market.

Chapter 5. Conclusion

The H-REITs clearly offer values to investors as they possess higher dividend yields with lower risks in comparison to the stocks of property companies in normal circumstances. While H-REITs provide investors with real estate exposure, they also add diversification to a portfolio of local property stocks given the low correlations between the two classes of securities. In addition to the above benefits, the limited real estate investment alternatives in Hong Kong as well as the city's well-developed capital market seem to make a great case for rapid growth in the H-REIT market. However, the low properties yields, the abundance of liquidity available to developers, the poor reception of H-REIT's yield enhancement alternatives, and the poor governance of some H-REITs are among a number of reasons that the supply and demand for H-REITs remain minimal.

REIT has been an efficient financing vehicle for property developers and a valuable investment alternative for investors in many markets. Is this just not the case for Hong Kong? Or is it too early to conclude, given the H-REIT market is still young and data of H-REIT is limited? Would amendments to the REIT Code, other than that proposed in the previous section, be a key to fuel the growth of the H-REIT market? If so, what should be changed? These are some of the questions to ponder in further study of H-REITs.

Looking into the future, it is apparent that China will play an even more important role in shaping Hong Kong's economy and capital market. Cross-border deals, especially the Yuan-denominated REITs like Hui Xian, will likely be an important growth driver to the H-REIT market. Nevertheless, one should be mindful that trust is the fundamental building block to a functioning market; soon, we shall see from the reception of Hui Xian REIT to tell whether REIT is sweet enough in Hong Kong for the market participants to keep it from becoming the market of lemons.

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