Zeppelin's Real Estate Tech

3Q 2011: A Real Estate Newsletter by Zeppelin Real Estate Analysis Limited

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The developed economies still look weak collectively with the USA likely to continue with its easy money policy, the EU to impose stricter austerity requirements on PIIGS, and Japan to struggle further with its economic and nuclear power supply problems. Meanwhile, the emerging economies look promising and in some cases overheated causing concern for bad debts, inflationary pressures, and unexplainable asset prices. In this issue:

- **Hong Kong Real Estate and Stock Markets Do Not Always March Together**
- **China's Rising Real Estate Prices: Urbanization is NOT a Cause!**
- **Kuala Lumpur: Semi-Detached > Detached > Terraced > High Rise**

We would also like to hear from prospective readers / writers who wish to share their real estate experience with us.

This quarterly (generally published in January, April, July and October) newsletter is circulated freely via email to over thousands of readers comprising real estate developers, investors, fund managers, financiers, owners, users, top executives, senior managers, prominent academics and related professionals from Hong Kong and abroad. Our content is / has also been published in newspapers and web portals such as the **South China Morning Post, China Daily**, **Hong Kong Economic Journal**, **21st Century Business Herald**, **Apple Daily**, **Quamnet Magazine**, **The Standard**, **MITCRE Alumni Newsletter**, the **Surveying Newsletter**, **Reidin.com, Centanet.com, Netvigator.com, Hongkong.com, E-finet.com, Red-dots.com, PacificProperties.net**, **Soufun.com** and **House18.com**. We had also been quoted in the **Asian Wall Street Journal** and interviewed by **i-Money**, **Radio Hong Kong**, and **Commercial Radio**. We also publish monthly articles and analyses in the months in between. This newsletter is now into its **15th year** and **60th** issue.

We also operate a website www.real-estate-tech.com through which we intend to share some of our real estate knowledge and ideas with interested parties. There are close to 1,000 content items, in English or Chinese, including analyses, articles, charts, and tables, plus spreadsheets, tutorials, e-books, and the like, the majority of which is free with some requiring a token fee. The website is regularly visited by thousands from all over the world and focuses on China / Hong Kong real estate markets.

Zeppelin Real Estate Analysis Limited is involved in real estate development, investment, and management with a focus on **independent real estate analysis**. Together with Zeppelin Property Development Consultants Limited, we offer services related to real estate asset management [analysis, investment strategy, and portfolio allocation], project management [architectural design, cost control, and contract administration], and facility management [facility utility assessment, facility strategy, and building maintenance]. We are part of the Zeppelin Group headquartered in Hong Kong with office operations in Mainland China and we also have access to networks covering Asia, North America, and Europe.

About the Author(s)

Stephen Chung
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Founder and Editor, Real Estate Tech Quarterly Newsletter
Real Estate Website Developer, www.Real-Estate-Tech.com

Stephen is an independent real estate analyst and chartered surveyor and has been involved in real estate development, investment, and management in Hong Kong / China / Asia and North America.

Stephen provides relevant real estate market insights and macro-micro assessments to real estate developers, investors, owners, financiers, funds, and civic organizations, and possesses many years of experience in building economics, project management, facility strategy, marketing, and research.

Stephen is also a real estate writer and his articles have been published in both English and Chinese media including the following:

- China Daily
- Hong Kong Economic Journal
- South China Morning Post
- Apple Daily
- Quamnet Magazine
- Real estate and finance websites such as Soufun.com, Finet.com etc
- Journals of professional institutes such as the Hong Kong Institute of Surveyors

Stephen is also an honorary adjunct professor with the University of Hong Kong and the City University of Hong Kong and has been invited to speak to audiences from:

- Universities: such as the University of Hong Kong, City University of Hong Kong, York University
- Professional Institutes: such as the Hong Kong Institute of Surveyors, Canadian Institute of Quantity Surveyors, Royal Institute of Chartered Surveyors
- Business Associations: such as the Rotary Clubs

Stephen has to date compiled 2 books; one online and one in hard copy format. Both are published in Chinese (with the titles translated into English below):

Online book = Easy Real Estate Lectures
http://www.real-estate-tech.com/eBook/zeppelin_ebook.htm

Hard Copy = Real Estate Investment Know-How above 101
http://www.edpress.com.hk/Product.asp?id=6282

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Our services can be obtained and delivered via a) tailor-made professional consultation; b) online report purchases; c) emailed discussions and advice; and / or d) phone discussions.

Hong Kong Real Estate and Stock Markets Do Not Always March Together

Real Estate Tech, 3Q 2011

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Many have the impression that the Hong Kong real estate and stock markets go hand in hand i.e. if one goes up, the other also goes up, and vice versa.

This is NOT true. The two markets only hold hands when times are good. They break up in bad times. Here is a table documenting their relationships in various timeframes [Real estate is represented by the residential market which is categorized herein using the floor size system devised by the Ratings & Valuation Department i.e. Category A refers to units smaller than 40m2 while Category E more than 160m2 with the remaining categories in between. The Hang Seng Index represents the stock market. The data starts from January 1993 to current]:

Timeframes	Residential Categories	Stock Market	Correlation
Jan 93 to Oct 97	A	Hang Seng Index	0.81
	B	Hang Seng Index	0.83
	C	Hang Seng Index	0.81
	D	Hang Seng Index	0.83
	E	Hang Seng Index	0.83
Nov 97 to Jul 03	A	Hang Seng Index	0.02
	B	Hang Seng Index	0.04
	C	Hang Seng Index	0.03
	D	Hang Seng Index	0.04
	E	Hang Seng Index	0.10

Aug 03 to Nov 08		A	Hang Seng Index	0.78
		B	Hang Seng Index	0.77
		C	Hang Seng Index	0.78
		D	Hang Seng Index	0.81
		E	Hang Seng Index	0.84
Dec 08 to Current		A	Hang Seng Index	0.85
		B	Hang Seng Index	0.86
		C	Hang Seng Index	0.89
		D	Hang Seng Index	0.90
		E	Hang Seng Index	0.91

The closer any Correlation figure above is to 1, the stronger the correlation between the residential market and the stock market i.e. they tend to go up and down more or less together. For figures closer to 0, there is no or little correlation i.e. the movement or behavior of one has no bearing on the other and vice versa.

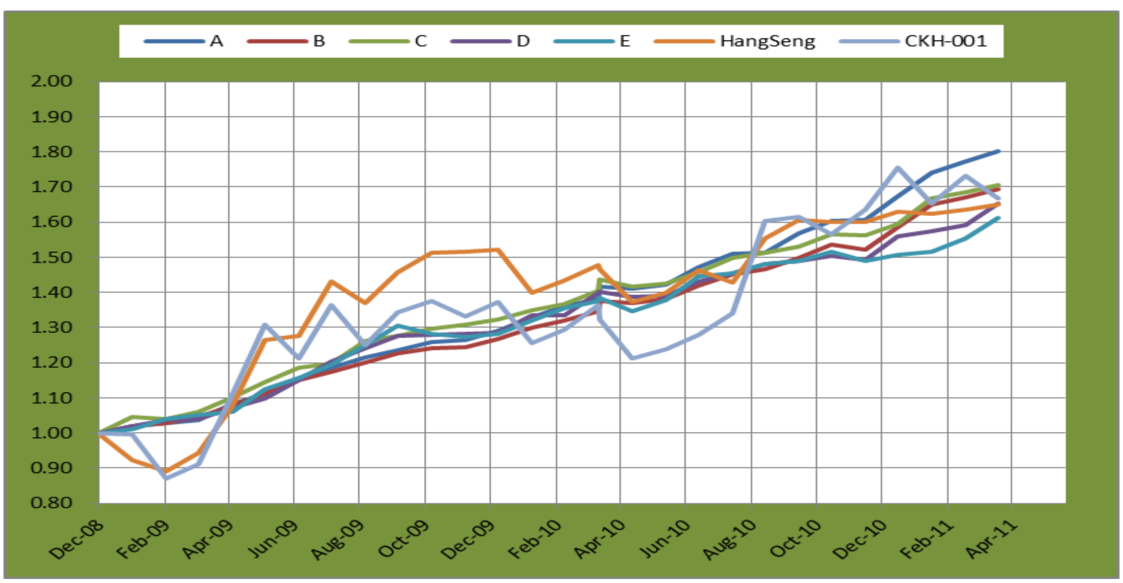
As such, it is not difficult to realize from the above table that irrespective of which (residential) real estate sector, real estate and stock tend to jive together in good times e.g. during the period leading up to 1997, the recovery from 2003 to 2008, and the latest QE round from late 2008 to date. However, they parted ways during the tough years from 1997 to 2003.

Notice also an interesting discovery. The larger residential floor size categories (D and E) tend to have slightly higher correlations with the stock market than the rest. Whether this is a coincidence or a reflection of the larger flat buyers also investing more in stocks, or even an evidence of investors preferring both larger flats and stocks, is best left to the experts.

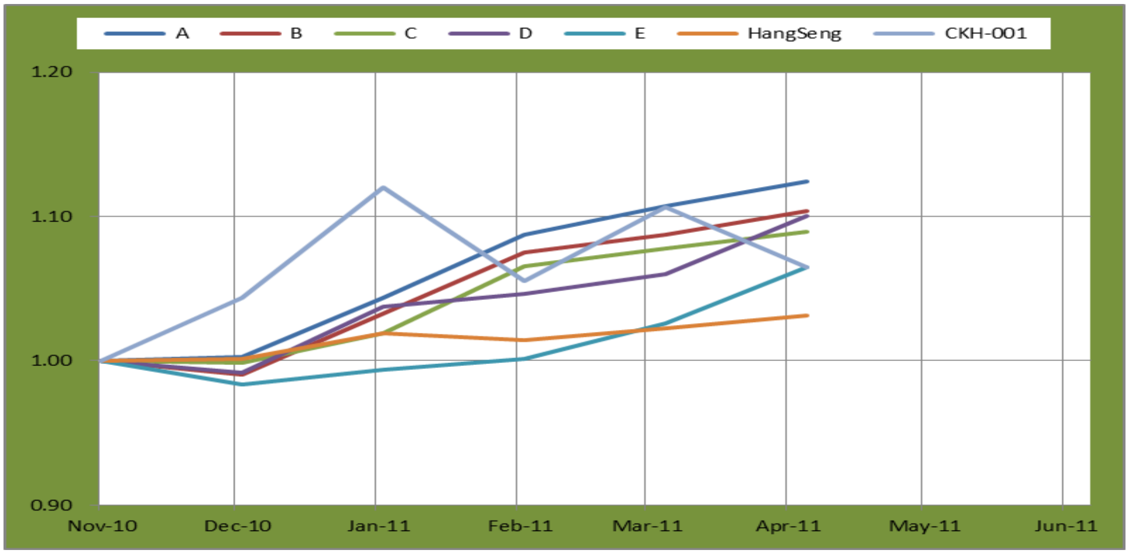
Now, one can always argue that IF there had not been a worldwide internet boom in late 1990s and early 2000s, the stock market might have dived along with real estate i.e. we would not have seen the two separating ways. Perhaps, but then the table above is based on what had actually occurred rather than would have occurred.

Has the real estate market been performing better recently than the stock market?
This depends on how one defines ‘recently’.

Put simply, if one is talking about the past 2 and 1/2 years, both real estate and stock markets have similar performances to date.



If one refers to the past 1/2 year or so, then yes, real estate does appear to have performed better.



As to why real estate appears to have the upper hand in the last 6 months or so? Your humble author has no answer but a speculation. Here is how the real estate [represented by the Shanghai residential market] and stock market [represented by the Shanghai Composite Stock Index] in Mainland China have been behaving:

As observed, the real estate market has been on an uptrend notwithstanding the tightening measures while the stock market has been flat.

Should this mean Mainland investors, who constitute a significant portion of buyers, having a preference for real estate than stocks at the moment, and assuming they adopt the same attitude toward the Hong Kong market, it may not be hard to have real estate prices going up faster and higher than stock prices in the last half year or so.

Given the above analysis, can we still use the Hang Seng Index as a lead index for real estate? This is beyond our experience as we are not facile in stock markets.

Nonetheless, a food for thought: while the Hang Seng Index may offer some hints on how real estate would turn out, it does not automatically imply there is a causality between the two. Perhaps the stock market appears to 'lead' simply because one can buy and sell stocks more instantly than bricks-and-mortar real estate.

China's Rising Real Estate Prices: Urbanization is NOT a Cause!

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In our last newsletter, we expressed that while urbanization is regarded by many as a cause for being optimistic about real estate price trends in Mainland China, it is in fact not a cause. Response from some readers led us to believe an elaboration is required.

Here we go:

1) Real estate prices are in the long term determined by and generally reflect how much money there is = or liquidity if you like. Several measures can be used to gauge the amount of liquidity and one type relates to income e.g. GDP per capita, household income etc. This is why one very seldom, if at all, finds a rich country, e.g. one with a US$30K GDP per capita, with extremely low average house prices or conversely a poor country, e.g. one earning less than US$1K GDP per capita, with unexplainably high overall house prices.

In studies we had done in years past, whether on local or overseas markets, the income factor, as a proxy for liquidity to a certain extent, is the only factor which always shows some meaningful degree of correlation with real estate prices.

Not with interest rates, not with real estate or land supply, and not even with population growth. These only correlate with real estate prices sometimes. At other times they do not.

2) **How much money there is generally depends in the long run on the productivity in the broadest sense** = if an economy (a town, a city, a metro, a province, a country) has compared to others something better to offer, whether this means a competent skills set, a useful invention, a less expensive mousetrap, a more efficient production line, a superb service network, a modern business infrastructure, and the like, then it is likely to be able to generate a certain level of income.

This generated income, where and when a certain threshold is reached, could then be used not only to buy daily necessities like food and clothing, but also big ticket items ranging from fridges via cars to homes, looking more from a consumption angle.

Naturally, there is an investment angle too as real estate (land) can also be part of the production elements e.g. offices and industrial compounds. Nonetheless, the values (prices) of such facilities also synch with the level of productivity. A city which creates and designs the i-phone, a high value-added activity, is likely to have higher real estate (office, residential, retail etc) prices than a city which produces garment, a lower value-added activity.

3) **Real estate is thus a derivative product** = it, or its value, derives from the residual productivity of other (economic) activities. One can build houses causing a fortune out in the desert where no one lives but this does not mean these houses could be sold for even break-even prices, let alone for profits. The same goes for commercial real estate.

That is why real estate developers are generally found in urban areas where certain economic activities being pursued are generating enough money to support in turn the real estate market.

That is also why real estate suffers when the economy is bad and thrives when it is good. And that is also why cities with declining economic advantages tend to have relatively stagnant real estate prices and vice versa.

4) **Cities take time to build** = in the initial phases, and in order to enhance the economic advantages and economic growth, there could be enormous amount of building and infrastructure construction (and thus real estate development and investment) activities which would then constitute a significant portion of the city's GDP.

This in turn might have led some to believe that real estate (alone) was sufficient to sustain the city and indeed it was not easy to notice the difference. A highly simplified process for <u>illustration</u>:

a) Say original city resident A had made some money in trading and thus wanted to build a better home for himself

b) A hired rural dweller B who came to the city looking for work to build the home

c) Home for A was built and A paid B for the construction

d) B used the money he earned from A to start a business (construction perhaps?) and got richer, so B now also wanted a home for himself

e) Former rural dweller-turned city resident B hired C, a new migrant from the rural areas, to build his home

f) B's home was completed and B paid C who then went through what B had gone through, i.e. C was now also rich enough to want a home for himself, and so he hired D, a newer migrant to the city, and the story went on and on…

g) Until one day, saturation was reached whether in terms of city sprawl, population growth, economic activities, supply of migrants, and the like

h) Urbanization as a (growth) process would also slow down: real estate activities would not go extinct although the GDP gap they leave behind would need to be filled by other activities, else the city itself would also face contraction

And this in turn is why it is vital for a city to have one or more non-real estate industries to enable it to thrive on when new real estate and construction are not as required as before in terms of volume.

Admittedly the above is a very coarse description of events yet during the time from (a) to (f), it would not be difficult for someone to think of real estate as a leading industry until (g) is reached. This is when its derivative nature would be noticed.

Put simply, urbanization is not a cause for rising real estate prices, business and economic activities with increasing productivity, thus bringing in more earning and income, are. That is to say, urbanization and rising real estate prices are NOT a cause-and-effect pair, instead BOTH reflect economically thriving and improving cities.

Few will notice the delusion until…

Despite the above, practically all cities in China are somewhere along point (a) to (f) and thus we do not expect people to realize real estate's true nature and the urbanization-will-raise-real estate-prices delusion readily at this stage.

We are optimistic of the long term real estate prospects in China, and long term here means 10 years or so (not the coming 12 to 24 months), just that we do not regard the urbanization process as a factor.

For investors, just pick cities with promising non-real estate industries to avoid being caught off guard when the time comes.

Kuala Lumpur: Semi-Detached > Detached > Terraced > High Rise

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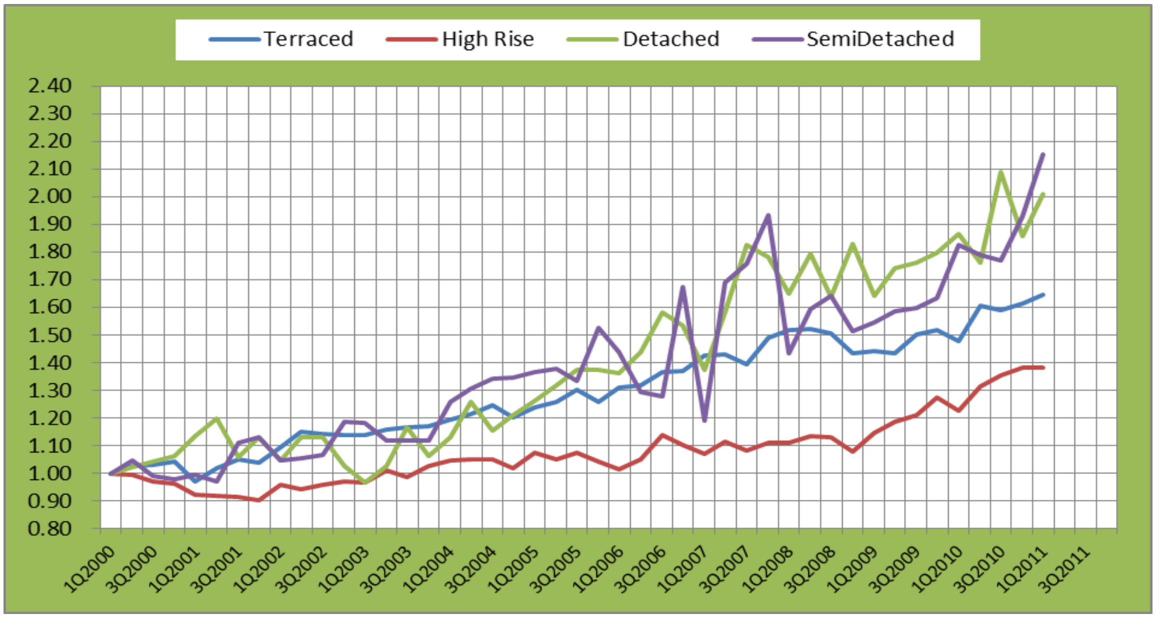
Quite a few Hong Kong investors have bought real estate in Kuala Lumpur [KL]. If one had invested 10 years or so ago, handsome profits would have been made. Still, compared to Hong Kong, the average price is still low with good properties available for a bit more than HK$1M.

Based on real estate statistics published in the Malaysian government websites, the overall residential price trend has been on a steady rise since 2000, thus contrasting the vibrant fluctuations seen in Hong Kong.

Here are a few salient points on the KL market:

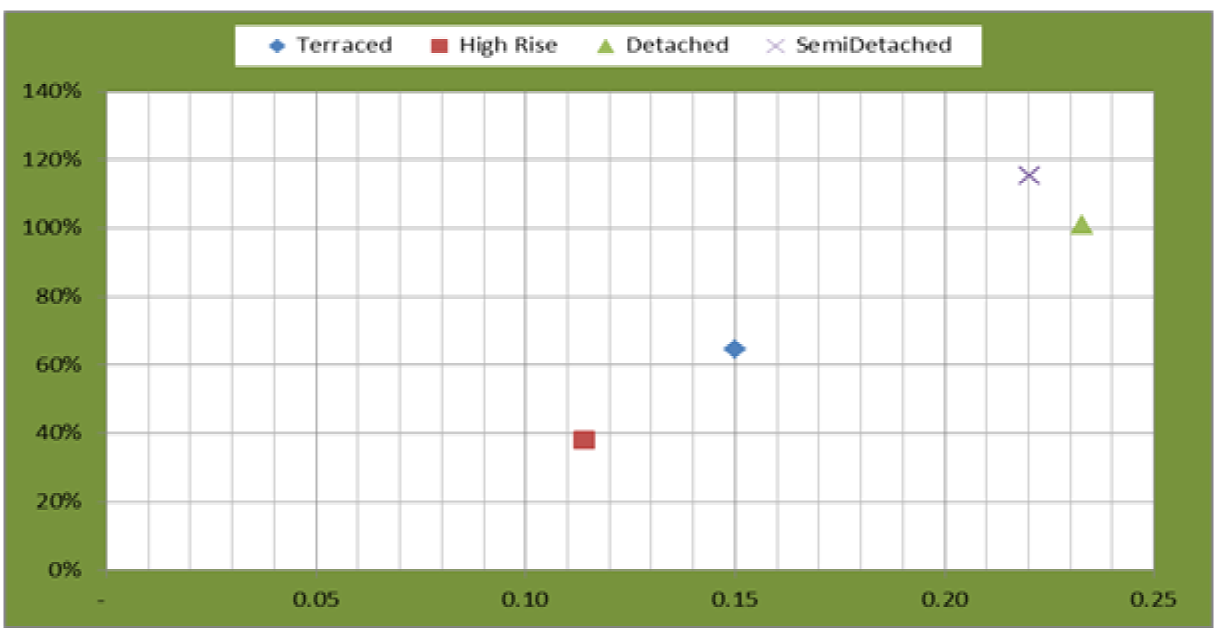
A) Counting from 2000, the average price of Semi-Detached residences has beaten the other house styles in performance having risen 122% = while Detached has gone up around 97%, Terraced (Row) 60%, and High Rise (Apartment) 40% [see chart below, 1Q 2000 = 1.00].



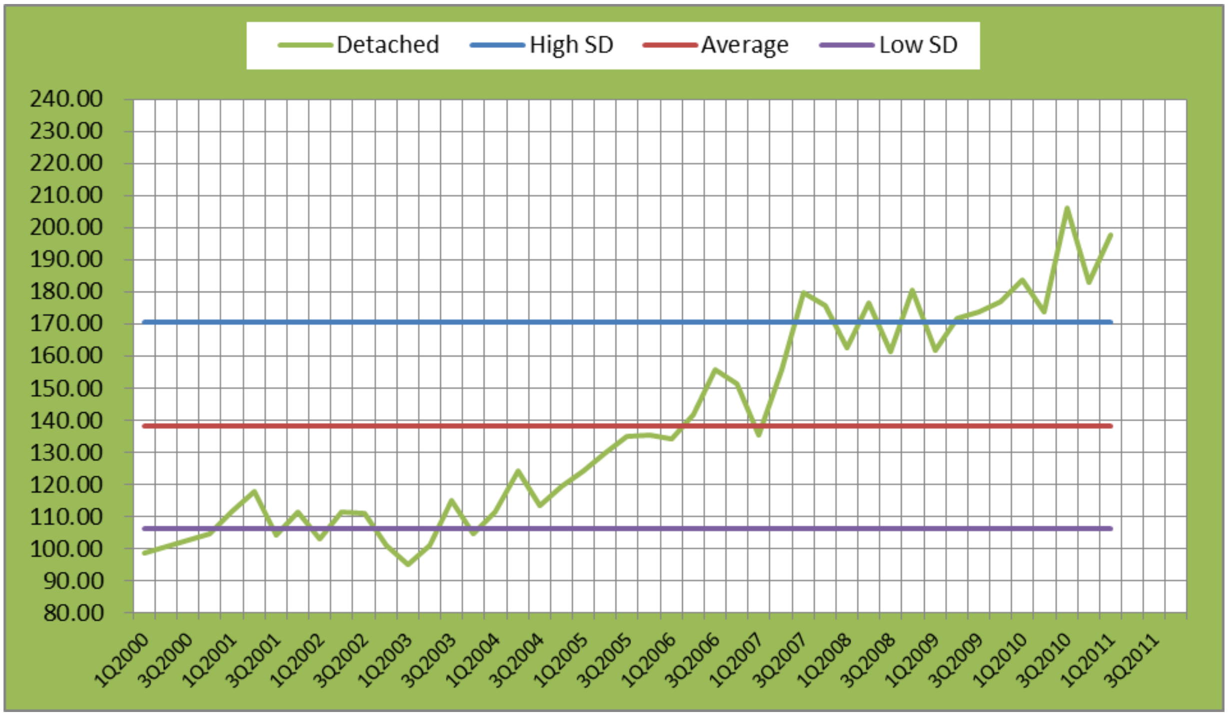
B) However, the Semi-Detached and Detached sectors also harbor the highest price volatilities (risks) = we have used simple standard deviations to ascertain the volatilities and in descending order, Detached is 0.23, Semi-Detached is 0.22, Terraced 0.15, and High rise 0.11. The higher the figure, the more volatile (thus deemed riskier) the reading is. This observation confirms the popular pattern of higher return comes with higher risk.

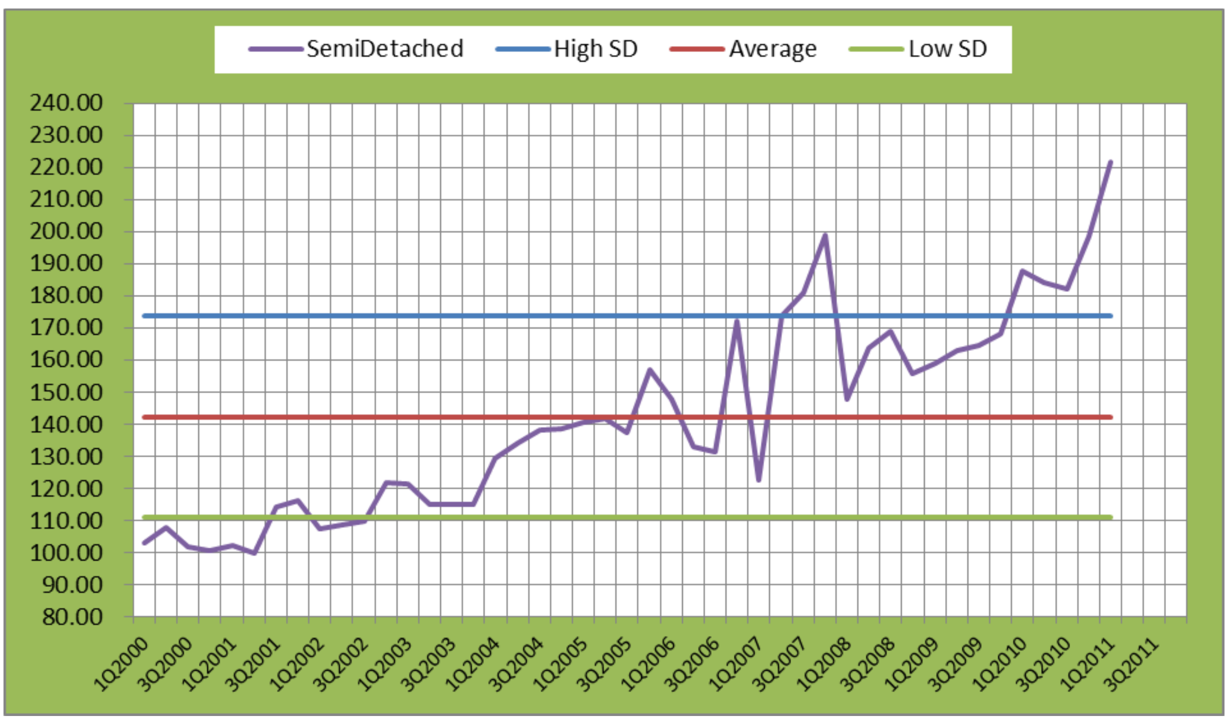
C) And Semi-Detached for the high return high risk takers = Terraced for the medium return medium risk takers, and High Rise for the low return low risk lovers.

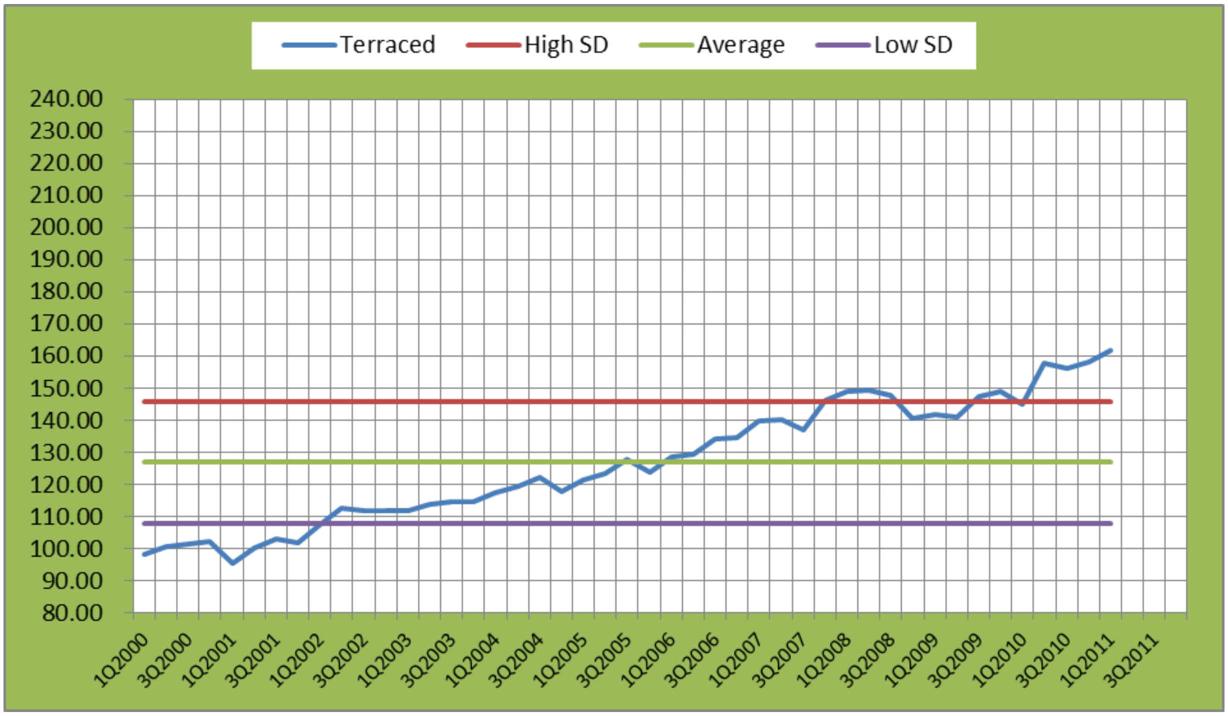
What about Detached then? Similar to Semi-Detached but based on the pattern in the past 10 years, Semi-Detached slightly outperforms Detached i.e. if you have the stomach for high risk, then Semi-Detached makes a bit more sense than Detached assuming such pattern remains intact in times to come.



D) Any bubbly signs? = yes, there are some because counting from 2000, the current prices of the 4 sectors have all exceeded their respective high standard deviation levels [note though there could be a mathematical bias here because the market has been rising since 2000, thus any current price would exceed the high standard deviation level].



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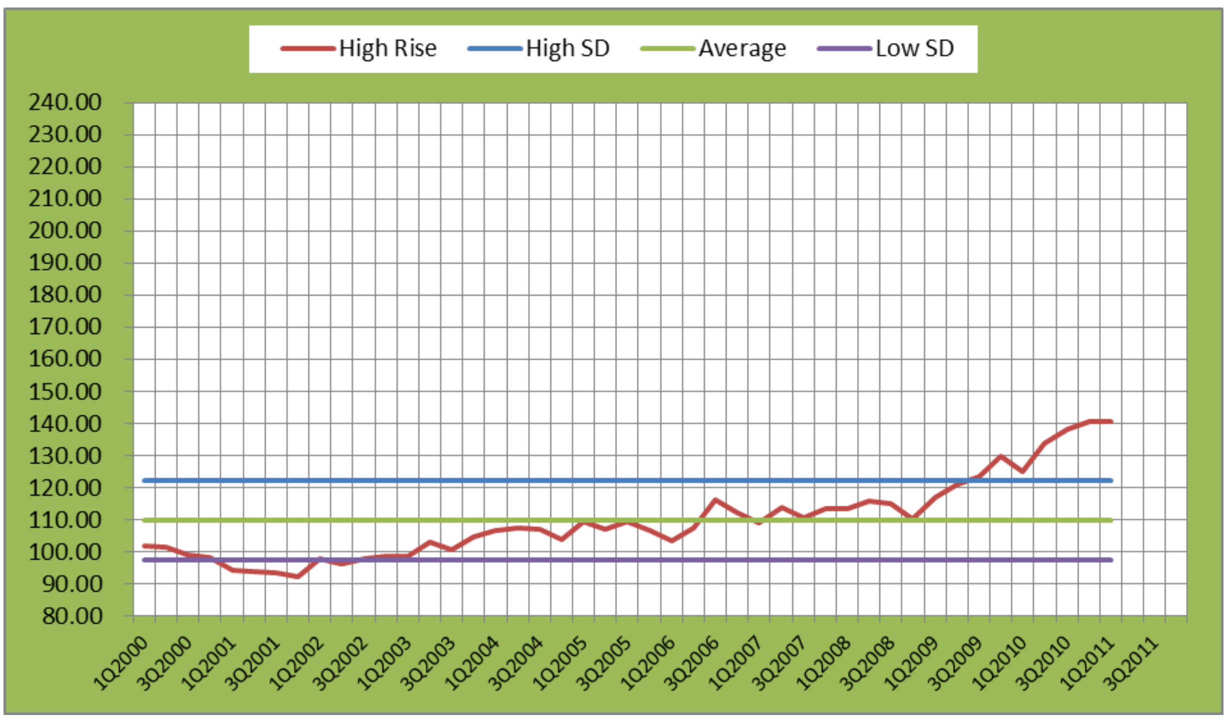
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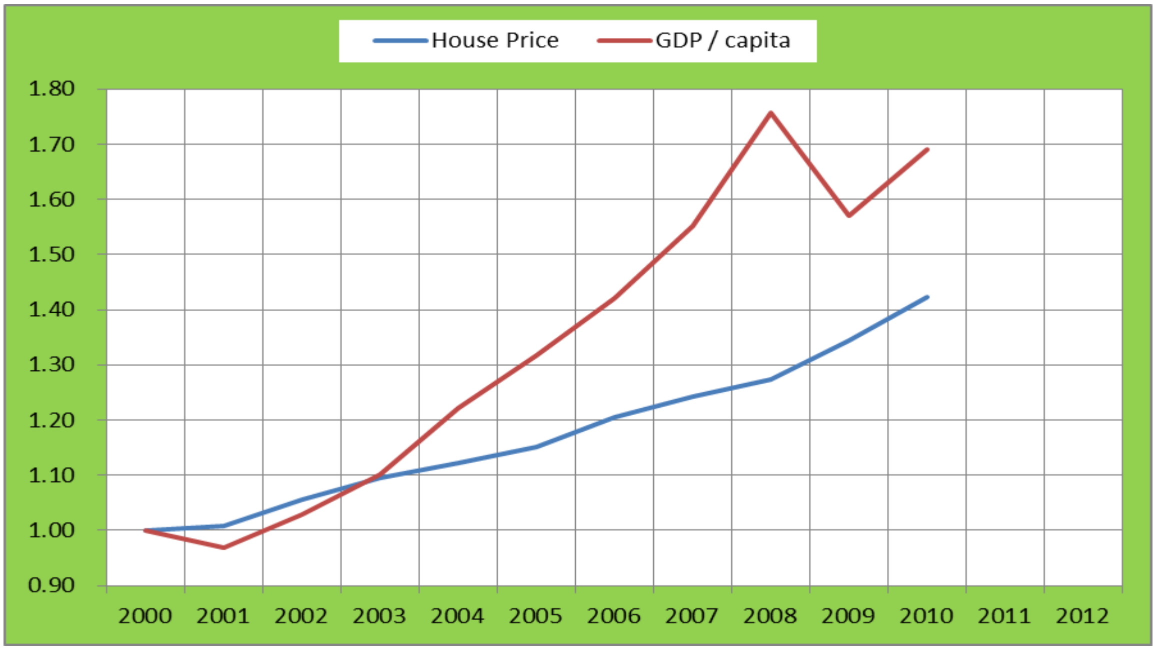
E) How risky is it then? = Probably not too risky because Malaysia as a whole, its GDP per capita has been rising faster and higher than the overall house price. Nonetheless, the foregoing has not taken into account the tax regulations and capital controls.



And unlike Hong Kong and China, Malaysia has a younger population and less burgeoning demographics in the middle.

Do you need our services? You DO when…

- **In Real Estate Development:** you encounter overestimated proceeds, cost overruns, underestimated time schedules, design and quality issues, construction contractual disputes, joint venture conflicts, or the like…you need an experienced project manager like us

- **In Real Estate Investment:** you encounter challenges in 1) Selecting which markets (cities), sectors (residential, office, retail etc), and properties-projects to invest; 2) Striving for the best possible risk-adjusted portfolio return; or 3) Sensing the volatility of a market or sector; 4) Deciding which corporate strategies, tactics, priorities, properties, and projects to pursue; 5) Getting a INDEPENDENT SECOND OPINION on which you can trust…you need an independent real estate analyst like us

- **In Real Estate Management:** you encounter questions on 1) if it is more economical to buy or rent the real estate facilities and assets, and if so where and what; 2) how best to manage and maintain such facilities and assets; 3) what level of human resources are required, all with a view to maximize their utility to help achieve the corporate objectives… you need a seasoned facility strategist like us

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Zeppelin Group

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