Zeppelin's Real Estate Tech

3Q 2012: A Real Estate Newsletter by Zeppelin Real Estate Analysis Limited

Phone (852) 2401 6613 Fax (852) 2401 3084 E-mail stephenchung@zeppelin.com.hk Web: www.Real–Estate-Tech.com

EU is still messy, the USA looks relatively finer depending on who and where you are, and China is showing signs of economic stresses. Meanwhile, in Hong Kong, real estate prices are still on an uptrend albeit transactions, especially in the residential sector, have been declining in recent months. In this issue:

- **A Typical Hong Kong Family with a Mortgaged Home Can Buy 6ft2 / month**
- **Versus Mainland Cities, Hong Kong Has Higher Price to Income Ratios**
- **Manhattan Apartment Prices Are Lower Than Tai Koo Shing's**

Quarterly Quote: "If confidence boosting is the sole objective, get a parrot!"

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**, **Sing Tao**, **Quamnet Magazine**, **The Standard**, **MITCRE Alumni Newsletter**, **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 **USA Today**, **i-Money**, **Ming Pao, Radio Hong Kong**, and **Commercial Radio**. We also publish monthly articles and analyses in the months in between. This newsletter is now into its **16th year** and **64th** 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
Managing Director, Zeppelin Real Estate Analysis Limited
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

We welcome enquiries from interested parties and could be reached as follows:

Email: StephenChung@zeppelin.com.hk
Office Phone: 852-24016613
Office Fax: 825-24013084
Office Address: 7/F, 20-24 Kwai Wing Road, Kwai Chung, NT, Hong Kong
Website: www.Real-Estate-Tech.com

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.

A Typical Hong Kong Family with a Mortgaged Home Can Buy 6ft2/month

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Stephen Chung BS BBldg(HKU) MS in Real Estate(MIT) MRICS MHKIS FPFM PQS RPS(QS)
Zeppelin Real Estate Analysis Limited - Phone (852) 24016610 / Fax (852) 2401 3084 stephenchung@zeppelin.com.hk

Roughly sitting on 6 square feet, right?

Using the income data from the latest 2011 Census and the average prices from Midland Realty, we can investigate the residential real estate market attributes for the 18 districts in Hong Kong.

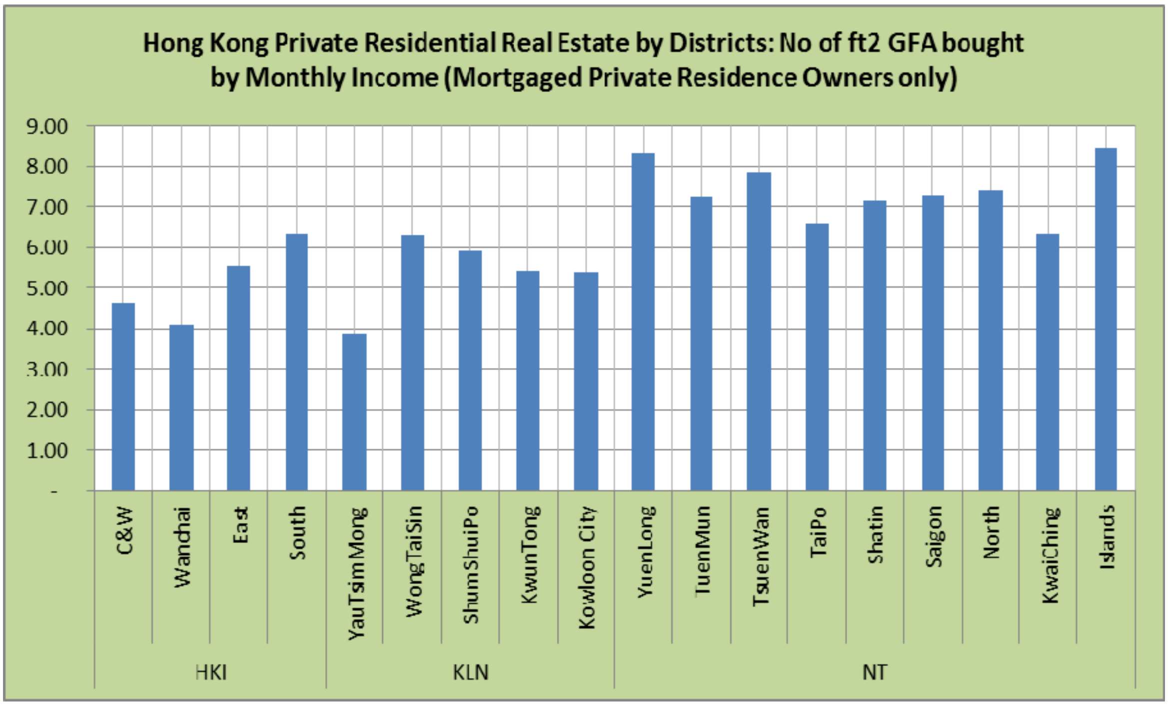
Roughly speaking, and taken as a whole, the typical monthly income of a Hong Kong household with a mortgaged home can buy around six square feet of floor area on a gross basis. Note though this is a simple average i.e. no weighting has been used to adjust for differences between districts and so on.

Here are the details:

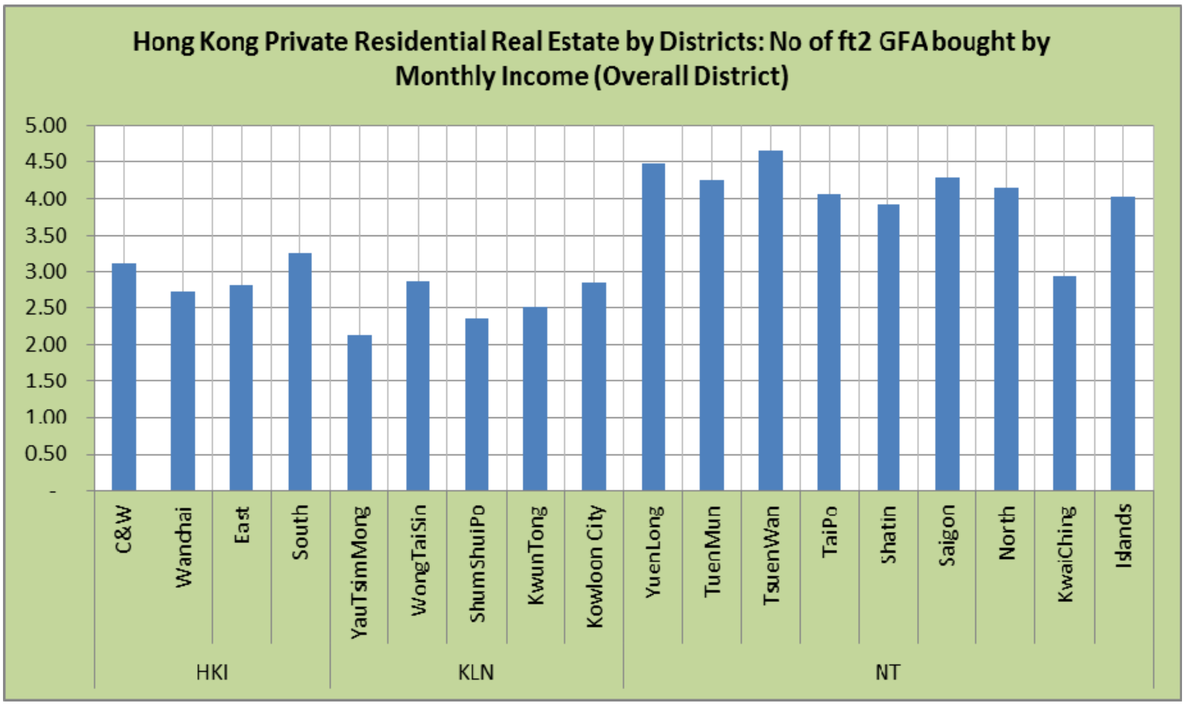
A) One can buy more floor space in the New Territories = than in Kowloon which in turn offers more than the Hong Kong Island side [refer to the chart below].

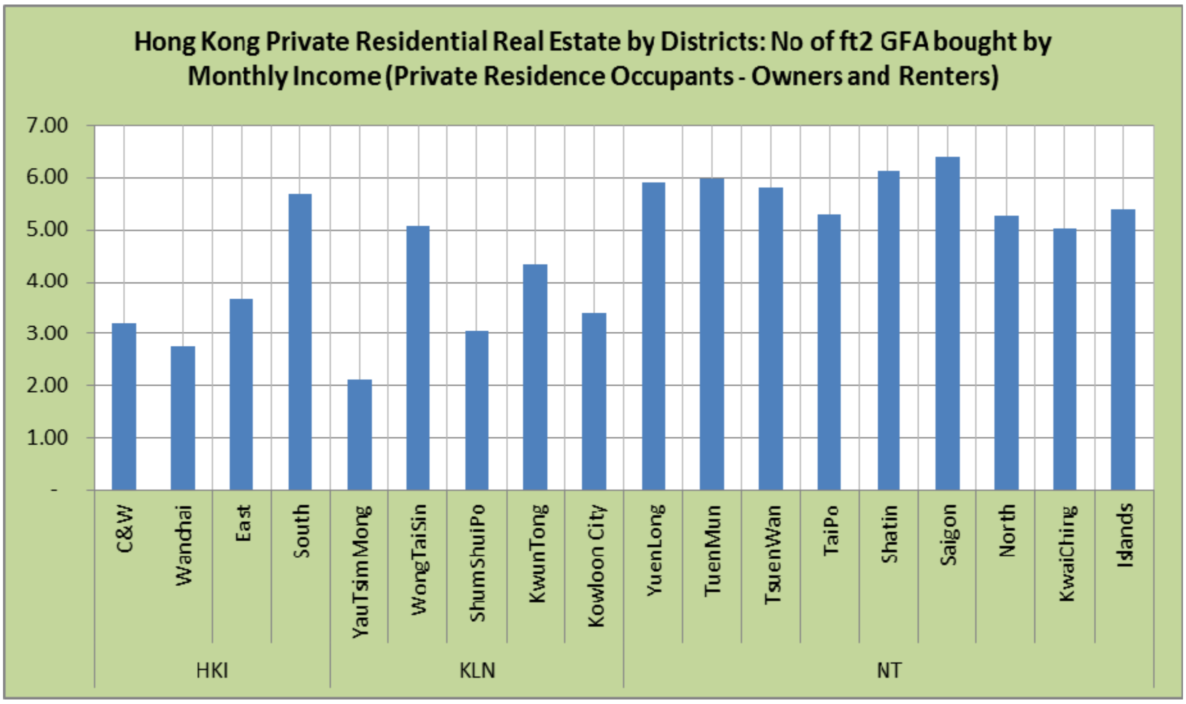
This is arrived by dividing the relevant household income, in this case the average income of home-owning yet mortgaged households, by the average price per square foot applicable to the particular district.

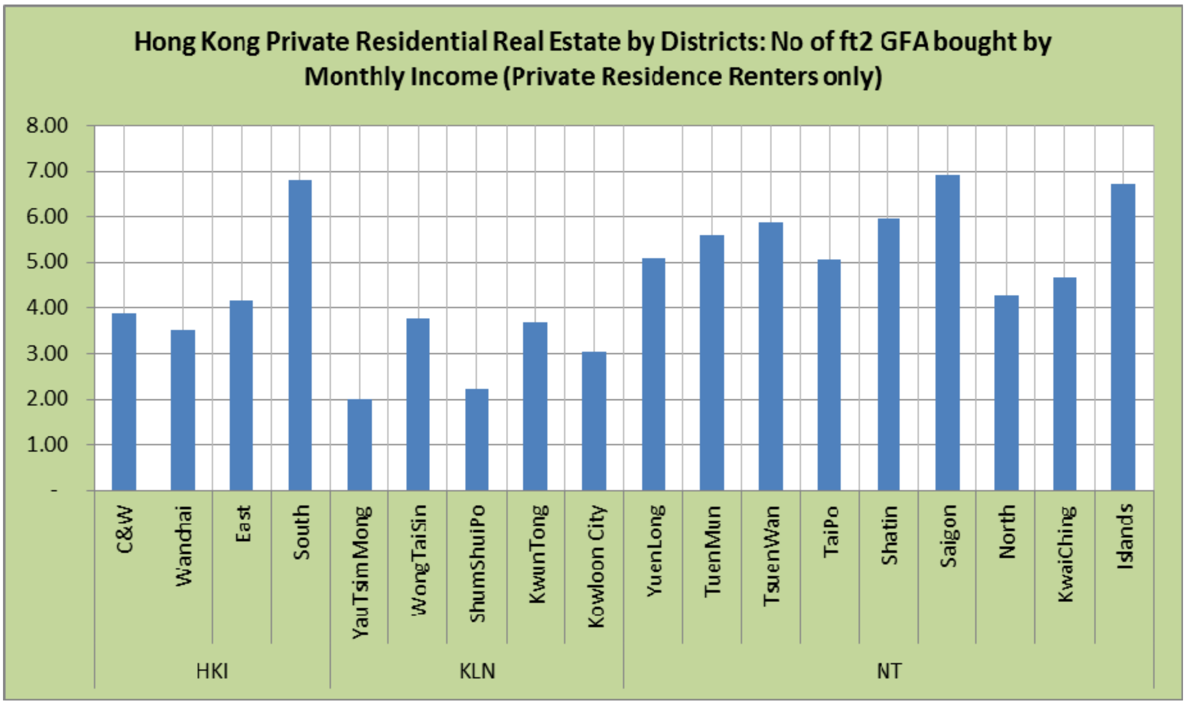
For instance, private residence homeowners with a mortgage in Yuen earn an average monthly income of HK$33,333, and the average price per square foot in the district is HK$4,016, thus the ratio of 8.30 ft2. Assuming the typical flat size being around 650 ft2, then this would imply giving up 78 months of income in return for owning a flat there. Naturally, a family needs to be fed, clothed and the like, so the actual time required would be longer, even assuming income increases over the years.



Out of curiosity, we have also calculated the number of square feet which other household types or combinations e.g. all households, renter households etc., of a particular district can buy in that district:

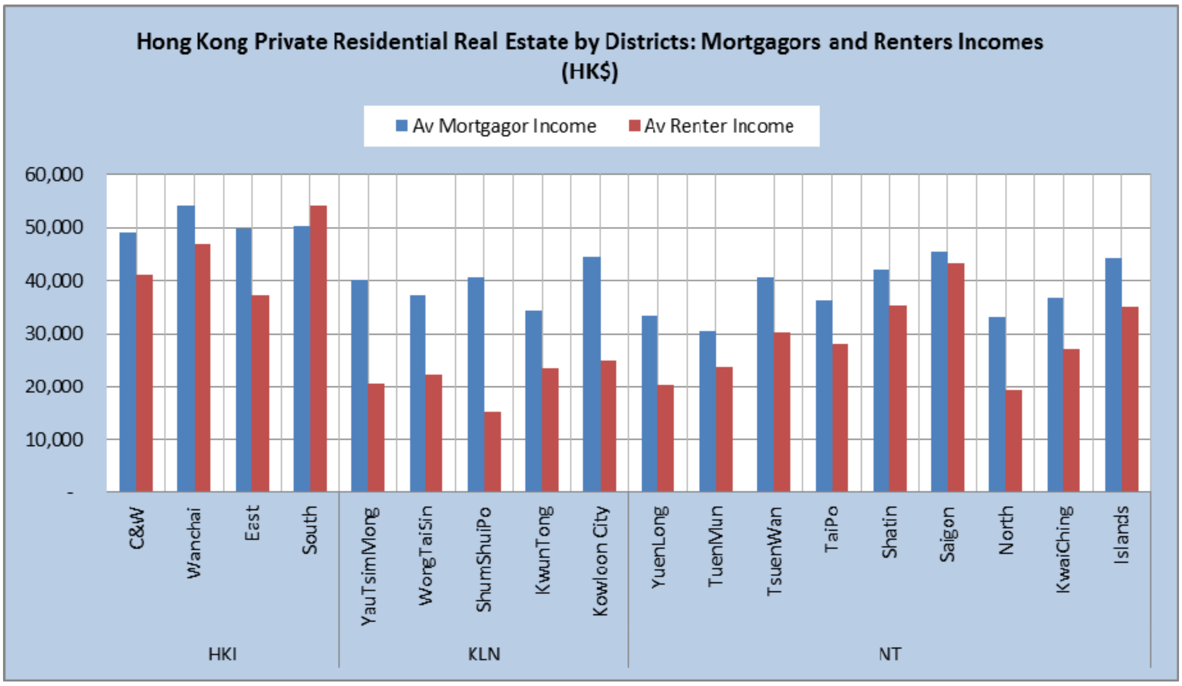




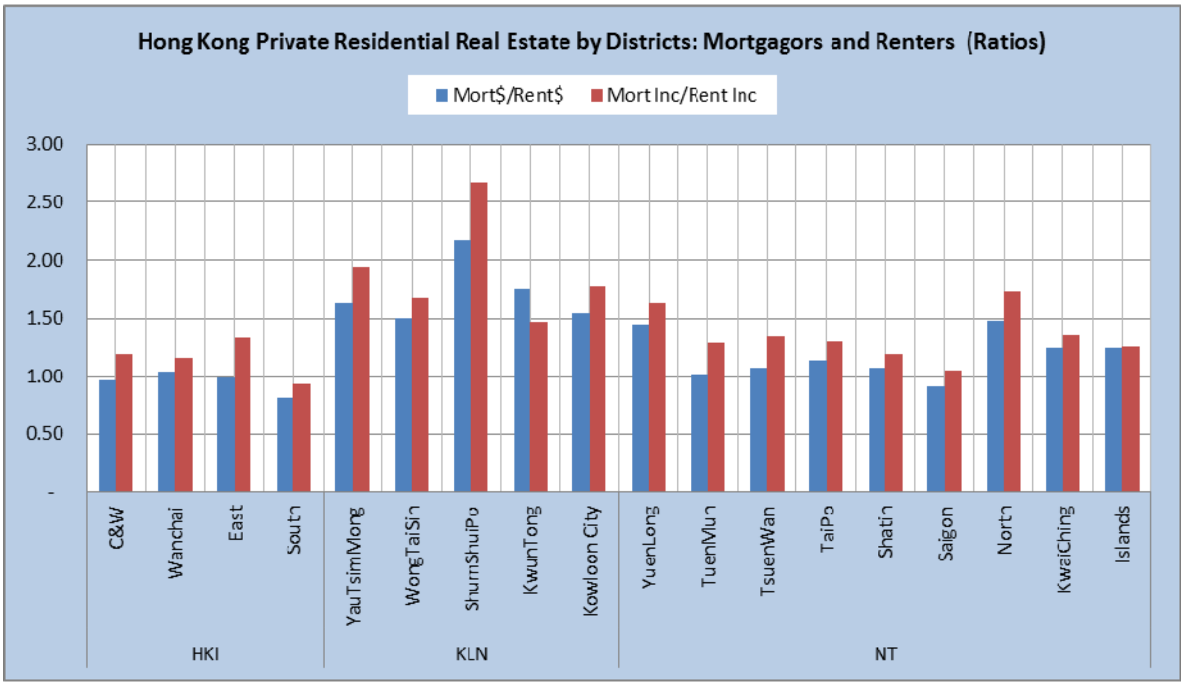


Stating the obvious, as a group, the households currently owning a home and servicing a mortgage appear to have the best purchasing power than other categories or combinations. Note the different scale in each of the above charts.

B) Generally, the home-owning and mortgaged households earn more than the renter households in the same district, with ONE exception = the Island South district. Here we have HK$50K per month for the mortgaged households and HK$55K per month for the renter households. Perhaps there are some potential buyers in the district [see chart below].



C) Generally, the mortgage payments would exceed the rentals applicable in the same district, with THREE exceptions = namely 1) the Island Central and Western district, 2) Island South, and 3) Saigon-Tseung Kwan O [see chart below].



As such, there may be some truth in that given the low mortgage rates, many renting households can afford to own a home, IF NOT for that other fact that real estate prices have been rising quicker than the deposits the households have been seeking to accumulate.

Versus Mainland Cities, Hong Kong Has Higher Price to Income Ratios

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Stephen Chung BS BBldg(HKU) MS in Real Estate(MIT) MRICS MHKIS FPFM PQS RPS(QS)
Zeppelin Real Estate Analysis Limited - Phone (852) 24016610 / Fax (852) 2401 3084 stephenchung@zeppelin.com.hk

Smoggy markets at times

We have abstracted some of the data from a recent Knight Frank market report, Greater China 2Q 2012, and made a few simple calculations focused on the luxury residential and grade A office sectors.

Observations:

A) Basic figures first = we have also collected GDP per capita figures from the web and essentially, the three Mainland cities, namely Beijing, Shanghai, and Guangzhou, included herein are considered to be 1st tier and as such, they have some of the highest GDP per capita in the country. The differences in GDP per capita (expressed in US$ term) between them are negligible.

Nonetheless, compared to Hong Kong, they are still some distance behind [see table below].

Cities:	GDP/cap US$	Luxury US$/m2	Office US$/m2	Unemployed %	Lux Vacancy%	Off Vacancy%
Beijing	12,447	6,363	5,692	1.40%	11.70%	3.30%
Guangzhou	12,860	4,759	4,931	2.60%	22.00%	18.00%
Shanghai	12,784	7,685	7,892	4.20%	8.80%	5.40%
Hong Kong	34,049	30,054	23,376	3.20%	9.70%	3.30%

B) Dividing real estate prices (US$ per square meter m2 of floor area) to the relevant GDP per capita individually for the 4 cities = and one would obtain some ratios [see table below].

For instance, in order to acquire 1 m2 of luxury residential floor space in Shanghai, it would take around 60% of the city's GDP per capita. For Hong Kong, the ratio is 88%.

To City GDP/cap:	GDP/cap US$	Luxury US$/m2	Office US$/m2
Beijing	1.00	0.51	0.46
Guangzhou	1.00	0.37	0.38
Shanghai	1.00	0.60	0.62
Hong Kong	1.00	0.88	0.69

From the table, one can see while the three Mainland cities share similar GDPs per capita, they have rather noticeable differences in real estate prices. In particular, Guangzhou offers the lowest prices among the cities. Subject to further study, perhaps the vacancy rates [refer to the first chart] may offer a clue.

C) Benchmarking to Beijing = if one benchmarks the other cities to Beijing, then one would obtain some ratios, which are in fact indexes, showing how the cities' attributes compare to Beijing.

For example, while Shanghai does not differ too much from Beijing in terms of GDP per capita, its luxury residential prices and prime office prices are 21% and 39% above those of Beijing.

Between cities:	GDP/cap US$	Luxury US$/m2	Office US$/m2
Beijing	1.00	1.00	1.00
Guangzhou	1.03	0.75	0.87
Shanghai	1.03	1.21	1.39
Hong Kong	2.74	4.72	4.11

Nonetheless, one major revelation herein is Hong Kong: while its GDP per capita is almost 3 times that of Beijing, its luxury residential prices and prime office prices are almost 5 times and 4 times that of Beijing respectively.

D) The luxury residential sector = luxury residential is part of the overall residential sector which in turn tends to jive with income data such as GDP per capita i.e. the higher the GDP per capita, the higher the residential prices tend to be, at least in the long run.

Notwithstanding there are fundamental differences between Hong Kong and the three Mainland cities e.g. in terms of stages of economic development, financial, business, and legal infrastructures, information access, low tax regime, and the like, it is not entirely clear if luxury residential does command the 'extra over' premium as shown. The rough mathematical expression can be (4.72-2.74) / 2.74 =72%. Further contemplation is required.

E) The prime office sector = GDP notwithstanding, the office sector depends on having a thriving and growing white collar business sector. The economy may be robust yet if this does not translate, for whatever reasons, into office employment growth, office landlords would be no better off. As such, we have included the unemployment figures for the cities and they are all quite low, in some ways practically non-existent.

Again, Guangzhou has the lowest prices and perhaps the office vacancy rate could explain part of that. Similarly, Hong Kong offices command an extra over premium though lower than that for luxury residential.

Gut-feeling-wise, and if one is optimistic that the vacancies in Guangzhou would one day be resolved, then perhaps Guangzhou should be in the investment radar, at least for the longer term investors.

Manhattan Apartment Prices Are Lower Than Tai Koo Shing's

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Battery Park: a bargain for Hong Kong investors?

For the benefit of readers who are not familiar with Hong Kong, or for that matter, Tai Koo Shing, it is the Chinese name for a well-known and established middle class residential 'estate'.

Tai Koo is the Chinese name of the developer group Swire Properties (belonging to the same British conglomerate which runs the airline Cathy Pacific) which built it from the 1970s to 1990s, and Shing means city, which is not exactly an exaggeration. It has over 12,000 units plus related office towers and retail malls, rather self-contained.

It is so well known that you can find it in Wikipedia:
http://en.wikipedia.org/wiki/Tai_Koo_Shing

At the time of writing this piece, the average price per gross square foot ft2 (gross implying not only the space within your own apartment – by the way, we like to call it a flat in Hong Kong – but also your share of the common lobby, machinery rooms, elevator shafts, gardens, roofs, parking, and the like) for Tai Koo Shing is around HK$10,000 = US$1,282 per ft2.

Given that many apartments in the Big Apple work on a net floor area basis (or similar to one), this US$1,282 / ft2 would roughly translate into US$1,602 assuming the net to gross ratio being 80%.

Now, how does this compare with Manhattan? We have dug up some information from the website of Miller Samuel Appraisers:

A) The average price was US$800,000 in 2002 = rising to a high of US$1,800,000 plus in 2008 and now it is around US$1,400,000, just a drop of 22%.

B) The average transacted price per ft2 is US$1,065 = implying an average floor size of 1,322 ft2 on a net basis. Translating this square footage to a gross basis, the size would be approximately 1,654 ft2.

C) But the median price is only around US$830,000 = thus implying there are some very high priced transactions which pull the average figure to US$1.40M. This is of course expected given that New York City attracts worldwide investment interest plus being an open economy.

D) The rental yield is low at 3.20% = and this seems to be pre-tax (including municipal taxes) and pre-fees (management fees, maintenance fees etc) which perhaps would mean just two point something percent for net rental yield. Investors appear to be going for price appreciation rather than rental income.

E) Average and median prices of coops and condos = there are very few cooperative properties in Hong Kong and condominium apartments are much more common. Selling and renting out cooperatives would likely involve the approval of the other owners of the cooperative property (or its designated committee etc) plus certain legal and liability implications too. As such, given all things being equal, coops generally sell for less than condos of similar caliber.

Ownership format:	**Coops**	**Condos**
Average price	US$1,191,992	US$1,699,144
Median price	US$665,000	US$1,100,000

F) Lofts could be expensive while newly built units may be more affordable = refer to the typical prices below.

Unit categories:	**Lofts**	**Luxury**	**New**
Average price	US$2,076,115	US$5,726,086	US$1,547,083
Median price	US$1,749,000	US$4,075,000	US$1,025,000

Broadly speaking, in terms of pricings, downtown > uptown, and West Side > East Side. Nonetheless, if one is not choosey at all, there are units going for a quarter of a million US$.

No wonder some investors are finding Manhattan appealing still.

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- **Contact us:**

Hong Kong Office: Mr. Stephen Chung stephenchung@zeppelin.com.hk
Address: 7/F, 20-24 Kwai Wing Road, Kwai Chung, NT, Hong Kong
Phone: 852-24016610 Fax: 852-24013084 Web: www.Real-Estate-Tech.com

Shenzhen Office: Mr. K K Wong kkwong@zeppelin.com.hk
Address: Unit 1203, Shenhua Commercial Building, 2018 Jia Bin Road, Shenzhen
Phone: 755-28627707 Fax: 755-28687727

Beijing Office: Mr. Tomman Kwan tommankwan@zeppelin.com.hk
Address: Suite 2001, Tower G, City One, No. 48 Wang Jing Xi Road, Chaoyang District, Beijing 100102
Phone: 10-65011565 Fax: 10-65527129

For details: please download our group introduction at http://www.real-estate-tech.com/ZPG-Group%20Introduction-sOct07.pdf

Zeppelin Group

Zeppelin Property Development Consultants Limited

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