Zeppelin's Real Estate Tech

1Q 2018: A Real Estate Newsletter by Zeppelin Real Estate Analysis Limited
Phone (852) 37576388 Fax (852) 37576399 E-mail stephenchung@zeppelin.com.hk Web: www.Real-Estate-Tech.com

2018 arrived and so has the Lunar New Year too recently. According to the Chinese Zodiac, it is the Dog's turn this year. What does this mean? Better ask an astrologist, not an analyst. The Winter Olympics in which Mr. Kim decided to participate is ongoing with lots of medals being awarded to icy and snowy sports players, while the Dow Jones (and the Hang Seng too) have taken a dive recently amid signals of rising US economic expectations and wages...go figure.

In this issue:

- Hong Kong residential real estate since 2008
- Toronto residential real estate: apartment condos performed best in 2017!
- Toronto residential versus Hong Kong residential
- Three things to bear in mind in 2018

"No confidence at all, nothing gets done; no doubt at all, trouble arises."

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 spring, summer, fall, and winter) 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, Efinet.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, Cable TV (Money Café), DBC Radio, and Commercial Radio. We also publish monthly articles and analyses in the months in between. This newsletter is now into its 22nd year and 86th 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 <u>independent real estate analysis</u>. Together with **Zeppelin Partners Limited**, we offer services related to <u>real estate asset management</u> [analysis, investment strategy, and portfolio allocation], <u>project management</u> [architectural design, cost control, and contract administration], and <u>facility management</u> [facility utility assessment, facility strategy, and building maintenance]. We are based in Hong Kong with associated operations in Mainland China and we also have access to regional and global professional networks.

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Who? Me?

Stephen Chung

Managing Director, Zeppelin Real Estate Analysis Limited Creator and Writer, Real Estate Tech Quarterly Newsletter Real Estate Website Developer, www.Real-Estate-Tech.com

Stephen is an <u>independent</u> real estate analyst – number cruncher 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 regular real estate writer - columnist 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, Sing Tao 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 an honorary adjunct professor of the 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 written 4 real estate books in Chinese to date as follows:

Online book = Easy Real Estate Lectures

Hard copy = Real Estate Investment Know-How above 101

Hard copy = The Real Estate Market Turning Point

E-Report = USA Residential Real Estate Analysis

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

Email: StephenChung@zeppelin.com.hk

Office Phone: 852-37576388 Office Fax: 825-37576399

Office Address: Unit 07, 10/F CCT Telecom Building, 11 Wo Shing Street, Fo Tan, Hong Kong

Website: www.Real-Estate-Tech.com

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Hong Kong residential real estate since 2008 Real Estate Tech, 1Q 2018

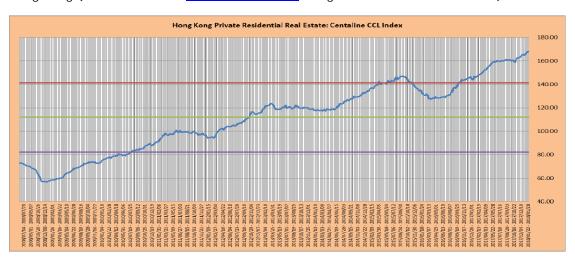
Stephen Chung BS BBldg (HKU) MS in Real Estate Development (MIT) MRICS MHKIS FPFM PQS RPS(QS) Zeppelin Real Estate Analysis Limited - Phone (852) 37576388 / Fax (852) 37576399 stephenchung@zeppelin.com.hk



Hong Kong blue skies (your humble author's)

Ten years have passed since the world experienced the Financial Tsunami and the subsequent immense QE (Quantitative Easing a.k.a. easy money) experiment which among other things appears to have buoyed up asset prices worldwide, Hong Kong real estate included.

As such, let's take a look at the price performance of the private residential real estate sector in Hong Kong (data comes from www.centanet.com using the Centaline's CCLindexes):



Briefly, aside from the 'dent' at the end of 2008, prices have been shooting upward and have risen roughly 130% from an index of around 73 to 168 today.

What are the three straight lines across the chart? They are from top to bottom a) the high standard deviation level in red color; b) the average price for the period in green color; and c) the low standard deviation level in purple color.

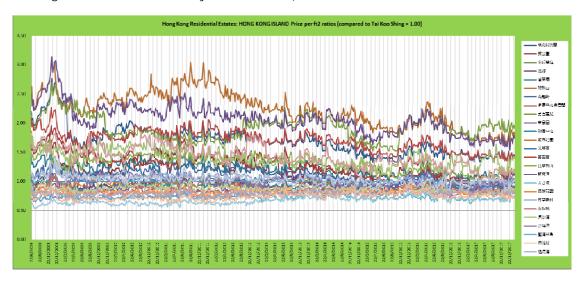
The middle green line (b) is easy to understand while the top red (a) and bottom purple (c) represent the usual range of price fluctuation observed during the period. That said, one can see recent prices are protruding above the top red line (and prices ten years ago were below the bottom purple line). This means market risks have not only been increasing but could become a concern, though technically ten years is not a sufficient timespan for ascertaining risks in detail. That is, just by looking at this 10 year chart, the market doesn't seem too alarming.

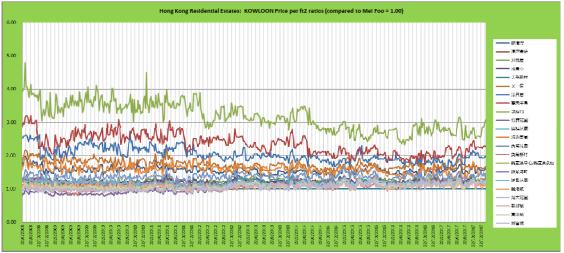
For the curious, the current price level is now roughly i) 19% more than the top red high standard deviation price level; ii) 50% more than the middle green average; and iii) 105% more than the bottom purple low standard deviation level.

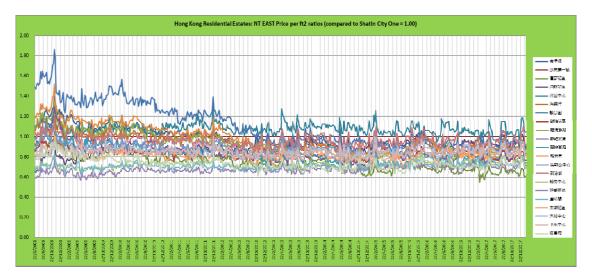
As prices go up, newly developed residential units have been getting smaller in size and many of these small units are selling like hot cakes and for unimaginably high prices. Thus, the gap between their unit prices i.e. HK\$/ft2 and those of the (really) luxurious units have become closer.

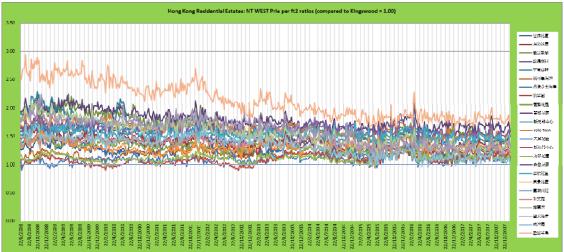
This phenomena appears to apply in the secondary market too where housing estates with smaller-sized units tend to do better, in sales terms, than ones with mostly larger units given all other factors being similar.

Well, here are four charts (Hong Kong Island, Kowloon, New Territories East, and New Territories West) which might – indirectly – attest to that (data comes from www.centanet.com using the gross price per square foot HK\$/ft2 figures from 2008 to today of sampled private housing estates in the secondary market sector):









Don't see them too clearly? Your humble author apologizes for the visual quality but there is no need to really see each and every line or curve clearly. What is important is this: in each of the chart, one popular i.e. middle class private residential housing estate is selected to be the benchmark to which all the remaining housing estates compared using their gross HK\$/ft2 data.

What is interesting is in all the four charts, **the larger-unit and / or more luxurious housing estates have diminishing price ratios over time** when being compared to the benchmark (middle class) housing estate despite rising prices for all.

The larger / luxurious estates are still selling for more and their HK\$/ft2 are still higher, just not as higher as they were before.

Toronto residential real estate: apartment condos performed best in 2017! Real Estate Tech, 1Q 2018

Stephen Chung BS BBIdg (HKU) MS in Real Estate Development (MIT) MRICS MHKIS FPFM PQS RPS(QS) Zeppelin Real Estate Analysis Limited - Phone (852) 37576388 / Fax (852) 37576399 stephenchung@zeppelin.com.hk



Better than these houses (your humble author's)

To the less initiated, Toronto can comprise the 1) City of Toronto and 2) the various suburbs (regions) nearby, forming collectively the Greater Toronto Area (GTA). The City of Toronto occupies around 10% of the GTA total area which in turn is around 7 x the land area of Hong Kong i.e. the City of Toronto is roughly 70% as big as Hong Kong. The GTA has around 6M people with roughly half living in the City.

How has the residential real estate market there performed in 2017? Let's take a look [data comes from the Toronto Real Estate Board's website www.treb.com]:

Average Prices	City of Toronto	Suburbs	City of Toronto	Suburbs
December 2017	Canadian \$	Canadian \$	vs Dec 2016	vs Dec 2016
Detached	1,250,235	910,216	(2.80%)	(2.40%)
Semi-Detached	903,658	635,999	11.50%	0.90%
Townhouse	649,294	575,894	(2.40%)	1.50%
Apartment	532,700	430,001	14.10%	14.50%

In terms of how much prices have gained in 2017, apartment condos top the performance chart with 14% plus gains, be these in the City or suburbs, followed closely by City's semi-detached homes. Detached houses fair the least although the price change downward is small. Overall, the market still made a tiny year to year price gain of around 0.70% in 2017 (data not shown above) i.e. practically none.

What about month to month from November 2017 to December 2017? Here is a chart [again, data comes from www.treb.com, note here we only focus on the City of Toronto which has been divided into East, Central, and West]:

Metro Region	Sub-district		November 2017	December 2017	Difference C\$	Percentage +or-	November 2017	December 2017	Difference C\$	Percentage +or-
			Average C\$	Average C\$	Dec-Nov 2017		Median C\$	Median C\$		
Metro Toronto	All Home Types		802,220	741,684	(60,536)	-7.55%	630,000	590,000	(40,000)	-6.35%
	Detached		1,276,184	1,250,235	(25,949)	-2.03%	949,500	935,000	(14,500)	-1.53%
	Semi-detached		904,711	903,658	(1,053)	-0.12%		796,000	(14,000)	-1.73%
	Townhouse	Condo	632,713	577,115	(55,598)	-8.79%		520,000	(13,250)	-2.48%
	Apartment	Condo	555,396	532,700	(22,696)	-4.09%	485,000	472,500	(12,500)	-2.58%
Metro West	All Home Types		714,053	670,367	(43,686)	-6.12%	635,000	589,500	(45,500)	-7.17%
	Detached		1,016,076	1,039,022	22,946	2.26%	860,000	873,500	13,500	1.57%
	Semi-detached		771.530	797.232	25.702	3.33%	705.000	729.000	24.000	3.40%
	Townhouse	Condo	492,995	502,102	9,107	1.85%	447,500	496,750	49,250	11.01%
	Apartment	Condo	470,370	427,422	(42,948)	-9.13%	436,000	409,500	(26,500)	-6.08%
Metro Central	All Home Types		910.508	827.033	(83,475)	-9.17%	600,000	580.000	(20.000)	-3.33%
	Detached		2.109.070	2.070.131	(38.939)	-1.85%	1.799.000	1.665.000	(134,000)	-7.45%
	Semi-detached		1,205,143	1.135.632	(69,511)	-5.77%	1.133.750	1.098.000	(35,750)	-3.15%
	Townhouse	Condo	873.608	697.679	(175,929)	-20.14%	675.000	615,500	(59,500)	-8.81%
	Apartment	Condo	618,943	606,278	(12,665)	-2.05%	529,000	522,000	(7,000)	-1.32%
Metro East	All Home Types		684,784	654,693	(30,091)	-4.39%	679,000	637,750	(41,250)	-6.08%
	Detached		889,002	894,290	5,288	0.59%	790,000	785,000	(5,000)	-0.63%
	Semi-detached		845,192	826,951	(18,241)	-2.16%	818,500	741,000	(77,500)	-9.47%
	Townhouse	Condo	521.819	522.272	453	0.09%	500.000	508.000	8.000	1.60%
	Apartment	Condo	393,924	384,794	(9,130)	-2.32%	362,500	370,000	7,500	2.07%

Note overall prices, be these average or median, have lost ground ranging from 6% plus to 7% plus, notwithstanding there are pockets where prices have risen during the month. Note also December is generally a slower month in terms of sales and demand.

How about from the peak in 2017 i.e. April 2017? Here's how [data also comes from www.treb.com and only the City is involved]:

City of Toronto	Apr to Dec 2017		
All Home Types	-21.43%		
Detached	-20.80%		
Semi-detached	-18.15%		
Townhouse	-14.58%		
Apartment	-7.88%		

Put simply, if one had bought a detached home last April, \odot , though most who bought in April would have seen some losses even if it were not a detached home.

All in all, 2017 could be described as the year of the apartment condos in that they have not only offered the highest price gains for the year, they incur the least losses even if they were acquired in the peak month of April.

Why? Not sure though your humble author would speculate that a) aging baby-boomers trading down (from say a detached home to an apartment condo unit), b) first-time homebuyers who are forced to select apartment condos given the latter may still be acquired for less than half a million Canadian dollars, and c) investors – driven by almost non-existent bank deposit interest rates – wanting a steady (rental) income stream, form the bulk of the demand for apartment condos.

Toronto residential versus Hong Kong residential Real Estate Tech, 1Q 2018

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Toronto (courtesy of dreamstime.com) Hong Kong (your humble author's)

Some acquaintances are curious to know the differences between the Toronto residential real estate market and the Hong Kong residential real estate market, the private sector in both, that is. Here we go:

A) From a "how much bang you get for your buck" angle

Toronto offers a much bigger bang. For instance, the average price of a residence in Greater Toronto Area hovered around C\$750K at the end of last year, 2017. This translates roughly into HK\$4.70M. While individual cases may vary, the residence is likely to have a net floor area of 1,000 ft2 or more, and usually comes with one or more parking spaces, be these covered or open air.

Now, HK\$4.70M won't buy much in Hong Kong, not even an old dilapidated tiny unit in the urban areas where there is redevelopment potential. Perhaps a unit in a village house out in the countryside at best, and a smaller and less well located one too.

B) From an investment angle

If one says Toronto residential can outsmart Hong Kong residential in terms of investment, probably eyebrows would be raised, along with suspicion. Recent few years aside, Toronto residential prices tend to climb slowly most of the time, i.e. definitely not suited for roller-coaster riders.

Yet, let's look at a few charts (sources include www.trebhome.com of the Toronto Real Estate Board and www.centanet.com of Centaline Agency in Hong Kong, and note these are yearly averages, thus some wilder short term swings, up or down, might not be reflected herein):

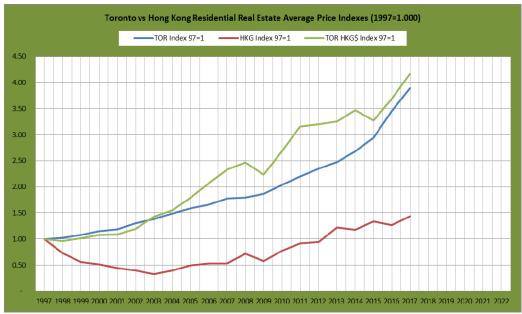


Chart 1: 1997 to 2017



Chart 2: 2007 to 2017

In both charts, we have the a) Toronto index (blue color), b) the Hong Kong index (red color), and c) the Toronto index reflecting the HK\$ values using the currency exchange rates appropriate for the year (green color).

Chart 1 compares the market price performances of Toronto and Hong Kong residential real estate in the past 20 years. Toronto won whether measured in Canadian Loonies (C\$) or the Hong Kong Dollars. As a matter of fact, when translated into HK\$, Toronto residential real estate performed even better. In 1997, Toronto was beginning to climb back up from the slump in the early 1990s while Hong Kong was peaking prior to the Asian Financial Crisis.

Chart 2 compares the two in the past 10 years. Hong Kong won. Toronto residential real estate treaded even worse when measured in HK\$ values. Hong Kong prices suffered a short downturn when the financial tsunami hit in 2007 – 2008. Toronto barely registered a dent in residential prices.

Timing is vital.

What about the past 5 years?



Chart 3: 2012 to 2017

So is the currency exchange rate.

Three things to bear in mind in 2018 Real Estate Tech, 1Q 2018

Stephen Chung BS BBIdg (HKU) MS in Real Estate Development (MIT) MRICS MHKIS FPFM PQS RPS(QS) Zeppelin Real Estate Analysis Limited - Phone (852) 37576388 / Fax (852) 37576399 stephenchung@zeppelin.com.hk



Your brain? (Courtesy of dreamstime.com)

First, investment is not just about return but risk too.

That's why there is this concept of risk-adjusted return and / or some form of return to risk ratio. Someone sells you an investment which could make you 100% in a year. Sounds terrific, you think. But if the same investment could, based on same or very similar probabilities, lose you 100% of your capital, it doesn't sound that terrific, does it?

Naturally, whether you end up investing or not also depends on the nature and the required capital amount of the investment. For instance, many people don't mind spending \$10 on a lottery ticket even if they expect practically zilch chance of winning the big prize. But most would refrain from a win 100% and lose 100% deal costing \$1,000,000.

Second, read the grade school story in the link below.

http://www.epsilontheory.com/harvey-weinstein-common-knowledge-game/

The worldwide market narrative goes something like this: "all this (recently created or easy) money has to go somewhere (invest in something) and barring humongous jumps in interest rates, which aren't likely to come, nothing bad will happen" sounds real good.

So good that it will be extremely wonderful if it turns out, ultimately, to be true. But will it? Let's say the recent Dow Jones drops might reflect a change of heart...no, not the romantic type but that of the market...no?

Third, your humble author had read an article saying that neuroscientists have discovered that the 'decision' signal fired by neurons goes nanosecond sooner than the 'analysis' signal, also fired by some neurons. In short, your brain can, putting it lightly, tease you.

This means while you might 'feel' you have just made a well-informed, balanced, logical, rational, sensible, procedural and formulated decision, you had actually done it the other way round. That is, you decided to want the chocolate ice cream, and then your brain complied and assembled all the factors to support your chocolate crave. Still, the decision may be a good one.

Now, think of a world leader with access to some nuclear weapons...Ooh oh!

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- Contact us:

Mr. Stephen Chung stephenchung@zeppelin.com.hk

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