Zeppelin's Real Estate Tech

2Q 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

The EU soap is still unfolding, the USA is taking a breather for now, and China is trying to build up some form of economic defense just in case. Meanwhile, Hong Kong overall is focused on several domestic issues from the D&G saga to insufficient hospital service for expecting mothers. The Home Ownership Scheme is revived too. In this issue:

- **Hong Kong Residential Real Estate Prices: Stress Test 1**
- **Hong Kong Residential Real Estate Prices: Stress Test 2**
- **China Real Estate: What Some Surveys Say**

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**, **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 **63rd** 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

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Hong Kong Residential Real Estate Market: Stress Test 1

Real Estate Tech, 2Q 2012

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

Really stressful to fly in such close quarters

Simply looking from a myopic angle, Hong Kong enjoys practically full employment, rising nominal household income, a fast growth China, plenty of visitors, low interest rates, and numerous other enviable conditions. Coupled with stingy real estate supply (at least up to now), there are enough reasons to be optimistic of real estate prices going forward.

Yet, viewing from a more global prism, the 2008 saga has yet to end and sequels are likely. EU seems breaking apart (although Germany is getting stronger relatively), Japan…well…sigh, and the USA appears fine but is actually sustained on plasma care (e.g. many municipalities and counties are technically and practically bankrupt and one commentator fears there will be riots, and not of the sit-in kind). Even emerging economies harbor some concerns as most still depend in part on exporting goods and stuff to the developed countries. And China, based on various economic and financial analyzes, has a daunting task of rebalancing the economic-financial system for future good and growth, not to mention somewhat bubbly real estate conditions.

So, which way prices would go, up or down? The answer depends partly on whether it is local impact > global impact OR global impact > local impact. To date, the global impact of recent money printing activities has been instrumental in enabling real estate prices to shoot up, notwithstanding the contribution too from local factors. Should this global trend be reversed, and at some point it will, many will see their investments affected adversely, and the highly leveraged will be in highly unenviable positions.

Interesting times and while there is no need to become overly panicky and sell everything and go, investment caution is advised. One way is to not only focus on returns, but also on risks, and the return to risk ratios in particular. Another would be to resist the temptation, brought about by the historically low interest rates, to leverage oneself too immensely. Naturally, such suggestions are not suited to skilled speculators or investors wishing to obtain 100 times the capital in 2 years.

Here we seek to stress test the local residential real estate market using data from the recently published 2011 Census and Midland Realty. We wish to see what impact falling residential real estate market prices would have on the percentage of mortgage principal over the market price of a typical home in each of the 18 administrative districts of Hong Kong.

The table below shows the results:

District Council District	Estimated typical home price of district HK$	Current Guessed % mortgage of home price	Guessed % mortgage of home price	Guessed % mortgage of home price	Guessed % mortgage of home price	Guessed % mortgage of home price	Guessed % mortgage of home price
Hong Kong Island		Prices drop:	10.00%	20.00%	30.00%	40.00%	50.00%
Central and Western	7,326,900	27.30%	30.33%	34.12%	39.00%	45.49%	54.59%
Wan Chai	9,371,600	29.88%	33.20%	37.35%	42.68%	49.80%	59.76%
Eastern	5,667,900	28.23%	31.37%	35.29%	40.33%	47.05%	56.46%
Southern	4,953,200	30.28%	33.65%	37.85%	43.26%	50.47%	60.57%
Kowloon	-						
Yau Tsim Mong	7,233,800	23.09%	25.65%	28.86%	32.98%	38.48%	46.17%
Sham Shui Po	4,457,600	33.65%	37.39%	42.06%	48.07%	56.08%	67.30%
Kowloon City	5,325,600	37.55%	41.73%	46.94%	53.65%	62.59%	75.11%
Wong Tai Sin	3,800,300	29.73%	33.04%	37.17%	42.48%	49.56%	59.47%
Kwun Tong	4,089,400	29.83%	33.15%	37.29%	42.62%	49.72%	59.67%
New Territories	-						
Kwai Tsing	3,760,400	32.71%	36.34%	40.89%	46.73%	54.52%	65.42%
Tsuen Wan	3,309,600	45.32%	50.36%	56.65%	64.75%	75.54%	90.65%
Tuen Mun	2,692,200	36.03%	40.03%	45.04%	51.47%	60.05%	72.06%
Yuen Long	2,537,500	41.38%	45.98%	51.72%	59.11%	68.97%	82.76%
North NT	2,982,000	35.21%	39.12%	44.01%	50.30%	58.69%	70.42%
Tai Po	3,604,300	33.29%	36.99%	41.62%	47.56%	55.49%	66.59%
Sha Tin	3,838,100	34.65%	38.50%	43.32%	49.50%	57.75%	69.31%
Sai Kung	4,029,200	33.51%	37.23%	41.88%	47.86%	55.84%	67.01%
Islands	3,514,700	45.52%	50.58%	56.90%	65.03%	75.87%	91.05%

For the technically initiated, we estimated the approximate typical mortgage sum for each district by looking at the median mortgage payment made by homeowners and assuming popular amortization and a prevalent mortgage rate. With these figures, plus the estimated typical home prices for the 18 districts, we can then calculate the current approximate percentage of mortgage principal over home price for each district. As such, we can proceed to find out the percentages in various price drop scenarios. Stating the obvious, the lower the percentages, the safer the market / district are.

A few observations from the table:

1) If one deems a mortgage over home price ratio of more than 70% to be a concern = then a general home price drop up of 40% or less could be considered safe, more or less. Only 2 districts would incur a ratio higher than 70%, namely Tsuen Wan and the outlying islands (not including Hong Kong Island).

2) If the home prices drop more than 40% = then some districts, apart from the two mentioned above, could also be a concern, namely Tuen Mun, Yuen Long, and New Territories North.

Naturally, we are talking about averages, medians, and typical homes, yet individual homes could have leverages above (and below) them. To ascertain the 'distribution', we would require further data and time.

By and large, and based on these foregoing statistics, the Hong Kong residential real estate market as a whole does not appear to harbor too much risk and danger.

Supplementary notes: 1) Indeed, in terms of self-occupied homes, there are now more than 700,000 homeowners without mortgages versus less than 500,000 with mortgages; 2) While it is often said that many out-of-town investors (some of whom are from Mainland China) require no mortgages, and presumably they form part of the more than 700,000 homeowners without mortgages, it is not known if the cash used for the purchase is wholly unencumbered.

Hong Kong Residential Real Estate Market: Stress Test 2

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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

Imagine the structural stress and strain

In a way similar to what we have done in the first article above, we have also done a stress test focusing on the impact mortgage rate increases would have on the percentage of income allocated for mortgage payment by homeowners.

Here are the results: again the lower the percentages, the better and safer for the market and districts

District Council District	Mortgage Rate increased to indicated, then % of mortgagor (borrower) median income will be	Mortgage Rate increased to indicated, then % of mortgagor (borrower) median income will be	Mortgage Rate increased to indicated, then % of mortgagor (borrower) median income will be	Mortgage Rate increased to indicated, then % of mortgagor (borrower) median income will be	Mortgage Rate increased to indicated, then % of mortgagor (borrower) median income will be	Mortgage Rate increased to indicated, then % of mortgagor (borrower) median income will be	Mortgage Rate increased to indicated, then % of mortgagor (borrower) median income will be	Mortgage Rate increased to indicated, then % of mortgagor (borrower) median income will be	Mortgage Rate increased to indicated, then % of mortgagor (borrower) median income will be	Mortgage Rate increased to indicated, then % of mortgagor (borrower) median income will be
	3.00%	3.50%	4.00%	4.50%	5.00%	6.00%	7.00%	8.00%	9.00%	10.00%
Central and Western	22.85%	23.92%	25.02%	26.14%	27.28%	29.64%	32.09%	34.63%	37.25%	39.94%

Wan Chai	28.86%	30.21%	31.59%	33.01%	34.45%	37.43%	40.53%	43.73%	47.03%	50.43%
Eastern	21.30%	22.30%	23.32%	24.37%	25.43%	27.63%	29.92%	32.28%	34.72%	37.23%
Southern	20.58%	21.55%	22.53%	23.54%	24.57%	26.70%	28.91%	31.19%	33.55%	35.97%
Kowloon										
Yau Tsim Mong	23.81%	24.92%	26.06%	27.23%	28.42%	30.88%	33.44%	36.08%	38.80%	41.61%
Sham Shui Po	21.74%	22.76%	23.80%	24.86%	25.95%	28.20%	30.53%	32.94%	35.43%	37.99%
Kowloon City	25.09%	26.27%	27.47%	28.70%	29.96%	32.55%	35.24%	38.02%	40.90%	43.85%
Wong Tai Sin	19.94%	20.87%	21.83%	22.80%	23.80%	25.86%	28.00%	30.21%	32.49%	34.84%
Kwun Tong	20.87%	21.85%	22.85%	23.87%	24.92%	27.07%	29.31%	31.63%	34.02%	36.47%
New Territories										
Kwai Tsing	19.61%	20.53%	21.47%	22.43%	23.41%	25.43%	27.54%	29.71%	31.96%	34.27%
Tsuen Wan	20.69%	21.66%	22.65%	23.66%	24.70%	26.84%	29.06%	31.35%	33.72%	36.16%
Tuen Mun	19.03%	19.92%	20.83%	21.77%	22.72%	24.69%	26.73%	28.84%	31.02%	33.26%
Yuen Long	19.99%	20.93%	21.88%	22.86%	23.86%	25.93%	28.07%	30.29%	32.58%	34.93%
North	19.43%	20.34%	21.27%	22.22%	23.20%	25.20%	27.29%	29.44%	31.67%	33.95%
Tai Po	19.19%	20.09%	21.01%	21.95%	22.91%	24.89%	26.95%	29.08%	31.27%	33.53%
Sha Tin	20.75%	21.72%	22.72%	23.74%	24.77%	26.92%	29.14%	31.45%	33.82%	36.27%
Sai Kung	20.45%	21.41%	22.39%	23.39%	24.41%	26.52%	28.72%	30.99%	33.33%	35.73%
Islands	21.30%	22.29%	23.32%	24.36%	25.43%	27.63%	29.91%	32.27%	34.71%	37.22%

Currently, mortgage rates may hover in and around 2.50% and reportedly, based on the 2011 Census, the typical homeowner with a mortgage spends around 20% of his / her household income on mortgage payments.

At a glance, even in the (now felt to be) unlikely scenario of a 10% mortgage rate, only a few districts have mortgage payment to income ratios of more than 40%, and only in one instance where it had exceeded 50%, which is Wan Chai. Such ratios were more commonplace in the late 1990s.

As such, while a mortgage payment to income ratio of 30% or more may start to feel burdensome, and by no means are we belittling homeowners spending less than 30% of their income on mortgages, mortgages are now comparatively easier to afford due to the historically low rates. In turn, this is made possible in part by the hefty money printing in recent years.

Nonetheless, the question is not whether this would end, but just when, in what way, and how, although one may wish to take the chance to tan a bit more with the sun still shining.

China Real Estate: What Some Surveys Say

Real Estate Tech, 2Q 2012

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

To build or not to build, that is the question?

Sometimes we would surf the web for online surveys on China real estate. Admittedly, while such surveys may not offer a preferred degree of accuracy, they may throw a rough hint or two on how the interested public may think.

The following is abstracted from recently completed online surveys (1Q 2012) in www.soufun.com:

1) Overwhelmingly the survey respondents prefer brand new 1st hand properties [close to 99% of respondents] = perhaps this tells us something about the level of property management and maintenance, or even built quality in some cases

2) Over half the respondents say they intend to make a purchase within a year [more than 52%] = note there may be, not must be though, a bias here as the respondents may tend to be people who are likely purchasers

3) More than 1/3 of the respondents think a 'reasonable' home price should be within 3 to 6 times of annual household income = and 86% of the respondents, including this 1/3 opting for 3 to 6 times, say home price should be within 1 to 10 times annual household income

4) 90% of the respondents think current home prices are either high or too high = again caution is sounded here as there could quite a significant portion of intended purchasers among the respondent pool and if so, it is not surprising they would deem the prices to be on the high side

5) Close to 60% of the respondents think the prices should drop by 30% or more before they could be seen as 'reasonable'

6) More than 40% of the respondents have no concrete expectation of when or if home prices would adjust (downward), but those who think prices would drop generally see such adjustments taking place in 1 year to over 2 years' time

7) When asked what concerns the respondents may have in the event home prices do adjust downward to a 'reasonable' level, the 3 most cited items are: a) lower construction qualities; b) less than fair contractual traps and conditions in the sale and purchase agreements; c) unrealized project amenities and green areas = globally real estate developers appear to suffer from some image and reputational problems, ditto those in China

Based on the information shown, the respondents tend to come from Beijing and nearby regions-provinces (as Soufun is based there), in their 20s and 30s, and earn no more than 200,000 Yuan per annum. Most have yet to own their first homes.

It seems the young, while keen to become homeowners, find it difficult to enter the market thus wishing prices would drop drastically to a more affordable range.

Hmm…does this ring a bell somewhere too?

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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**

Zeppelin **Real Estate Analysis Limited**

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