Zeppelin's

Real Estate Tech

3Q 2007: A Real Estate Newsletter by Zeppelin Real Estate Analysis Limited

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The economy continues to be strong and the Hong Kong stock market has been doing well with new highs, and so do the ones in Shenzhen and Shanghai despite brief respites. Again, the Central Government in China appears to be aware of the market conditions and various measures have been touted or put into place. On the other side of the Pacific, the USA new house demand appears to have dropped or dropping still with weaker home sales and on which we have written an article in Chinese: http://www.real-estate-tech.com/gb2312articles/hkej421_S.htm.

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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 **China Daily**, **Hong Kong Economic Journal** (a Chinese daily), **21st Century Business Herald** (China), **The Standard** (a Hong Kong English Daily), **MITCRE Alumni Newsletter**, the **Surveying Newsletter** of the Hong Kong Institute of Surveyors, **Centanet.com, Netvigator.com, Hongkong.com, E-finet.com, Red-dots.com, Realtradex.com, FrogPondGroup.com, Icfox.com**, **PacificProperties.net**, **Soufun.com** and **House18.com**. We had also been quoted in the **Asian Wall Street Journal** and interviewed by **Radio Hong Kong**. We also publish monthly articles and analyses in the months in between. This newsletter is now into its **11th year** and **44th** 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 should be of interest to people interested in China 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 assessment], project management [architectural design, cost control, and contract administration], facility management [facility utility assessment, facility strategy, and building maintenance], and marketing management [campaign coordination, leasing, and sales]. We are part of the Zeppelin Group headquartered in Hong Kong with office operations in Beijing, Shanghai, and Shenzhen and we have access to networks covering China / Asia, North America, and Europe.

Insights for a Marketable China Real Estate Fund: Continued

Real Estate Tech, 3Q 2007

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<1> Background: In the last newsletter issue dated 2Q 2007, we had written an article titled "Insights for a Marketable China Real Estate Fund" which was based on a brief survey done on MBA students enrolled at the City University of Hong Kong. Candidates were asked individually to indicate how he or she would allocate the US$1B into the various China real estate markets and real estate sectors [technically limited to 10 cities, namely Beijing, Shanghai, Guangzhou, Shenzhen, Tianjin, Chongqing, Wuhan, Nanjing, Hangzhou, and Chengdu, and 3 real estate sectors of residential, office, and retail in the survey]. They could put all US$1B into just 1 city and 1 sector, e.g. Shanghai-Office, or they could spread the US$1B evenly in all 10 cities and 3 sectors, and naturally, any combinations in between these two spectrums. They are not however allowed to put such money into non-real estate assets including cash, bonds, or stocks. Eventually, 46 responses were received and tallied. The results, observations, and insights-interpretations could be read here: http://www.real-estate-tech.com/articles/ret2Q07.pdf [see the 1st article].

<2> On an unrelated but similar occasion about a month since: your humble author has had the honor to speak to MS in Real Estate students from the University of Hong Kong. The survey was repeated with 2 additional questions relating to investment preferences and investment timeframes. Eventually, 19 responses were received and <u>here are the summarized results based on capital allocation (Respondent no. 2 and 12 allocated only to cities without specifying the sectors)</u>:

Respondents	Residential	Office	Retail
1	0%	70%	30%
2 not applied herein	0%	0%	0%
3	80%	20%	0%
4	20%	60%	20%
5	55%	0%	45%
6	25%	45%	30%
7	0%	65%	35%
8	20%	45%	35%
9	60%	25%	15%
10	30%	70%	0%
11	35%	40%	25%
12 not applied herein	0%	0%	0%
13	50%	15%	35%
14	48%	30%	23%
15	30%	30%	40%
16	60%	25%	15%
17	44%	42%	14%
18	35%	20%	45%
19	0%	70%	30%
Averages	**35%**	**40%**	**25%**
No. of Votes	**14**	**16**	**15**
% Out Of 17 Total Votes	**82%**	**94%**	**88%**

Respondents	Beijing	Shanghai	Guangzhou	Shenzhen	Tianjin	Chongqing	Wuhan	Nanjing	Hangzhou	Chengdu
1	20%	40%	0%	10%	10%	0%	0%	0%	0%	20%
2	0%	0%	0%	0%	20%	0%	20%	0%	30%	30%
3	0%	20%	0%	0%	0%	30%	0%	0%	0%	50%
4	0%	70%	0%	0%	0%	20%	0%	0%	10%	0%
5	0%	0%	10%	0%	10%	15%	25%	10%	0%	30%
6	20%	35%	0%	45%	0%	0%	0%	0%	0%	0%
7	0%	40%	15%	25%	0%	0%	10%	0%	0%	10%
8	30%	30%	0%	10%	10%	0%	0%	0%	10%	10%
9	25%	30%	40%	0%	0%	0%	0%	0%	5%	0%
10	20%	35%	0%	10%	0%	10%	5%	0%	10%	10%
11	45%	45%	10%	0%	0%	0%	0%	0%	0%	0%
12	30%	40%	0%	10%	10%	10%	0%	0%	0%	0%
13	20%	25%	10%	20%	5%	5%	5%	5%	5%	0%
14	25%	30%	10%	10%	10%	5%	0%	3%	5%	3%
15	35%	35%	10%	20%	0%	0%	0%	0%	0%	0%
16	20%	30%	10%	10%	10%	10%	0%	0%	5%	5%
17	20%	17%	5%	2%	12%	15%	12%	6%	6%	5%
18	20%	20%	20%	20%	10%	0%	0%	0%	10%	0%
19	0%	0%	20%	50%	0%	0%	0%	0%	0%	30%
Mean	17%	29%	8%	13%	6%	6%	4%	1%	5%	11%
Max	45%	70%	40%	50%	20%	30%	25%	10%	30%	50%
Min	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Std. Dev.	14%	17%	10%	15%	6%	9%	7%	3%	7%	15%
Not select city =	6	3	8	6	9	10	13	15	9	8
Select city = (votes)	13	16	11	13	10	9	6	4	10	11
% Selected / total	68%	84%	58%	68%	53%	47%	32%	21%	53%	58%

A few observations can be made in terms of capital allocated:

A) **Collectively as a group, they have a slight preference for office** (40%) real estate to residential (35%) and retail (25%) real estate.

B) **Collectively as a group (19 candidates who participated in the survey), they have a preference for the Big 4** i.e. Beijing, Shanghai, Guangzhou, and Shenzhen, over the remaining six 2nd tier cities, or 67% to 33% in terms of capital allocated.

C) **Of the Big 4, Shanghai is the popular choice** having attracted 29% of the overall investment (US$1B), and 43% [29% over 67%] of the investment capital allocated for the Big 4.

D) **Of the six 2nd tier cities, Chengdu appears to have an edge** over the other 5 and Nanjing seems to be the least preferred investment destination.

We have also counted the number of “votes” each city or sector gets, i.e. as long as the survey participant allocates some investment capital into the city or sector, irrespective of the amount being only 1% of US$1B or all 100% of it, 1 vote will be counted.

Again, some observations are made:

1) **Collectively as a group, the votes confirm the affinity for office real estate,** followed closely though by residential and retail real estate with the latter having a lead over residential.

2) **Collectively as a group, the votes confirm the participants have preferences for the Big 4,** with all having more than 50% of votes, in particular Shanghai which captures more than 80%.

3) **Of the 2nd tier cities, Chengdu leads the pack followed closely by Tianjin, Chongqing, and Hangzhou.** Wuhan and Nanjing attract less than 1/3 and 1/4 respectively.

4) **Of the 19 participants, only 1 (respondent no. 2) has not chosen any of the Big 4 cities.** The remaining 18 participants have picked at least 1 of the Big 4 cities in which to invest.

We have also asked the respondents to indicate their preferences for existing properties versus development projects, or both, and the investment timeframes of short term, long term, or both. Here are the results:

	Mode of Asset Acuitistion				**Strategy**	
Total Response No.= 19	Existing Building	New Development	Both	long term	short term	both
			1	1		
		1		1		
	1				1	
			1		1	
		1				1
			1	1		
		1			1	
			1	1		
		1				1
			1			1
			1		1	
			1			1
		1				1
		1		1		

		1				1
		1			1	
		1		1		
	1					1
		1				1
No. of Respondents	2	10	7	6	5	8
% of Respondents	11%	53%	37%	32%	26%	42%

Total Response No.= 19

A) **In terms of investing in existing properties versus new development projects** = more than half opt for the latter. This holds true even if the "both" preference votes are assumed to be divided into 2 equal portions for existing properties and development projects alike.

B) **In terms of investment timeframes** = the split is relatively balanced, i.e. between short and long term, the votes are quite close (5 to 6) and these 2 choices together constitute the majority. If the "both" preference votes are assumed to be equally divided between short and long term scenarios, then the short versus long term are even more balanced.

<3> The survey participants and marketing insights: are MS in Real Estate students enrolled in the Department of Real Estate & Construction at the University of Hong Kong and many have prior working experience and are / are expected to be engaged in real estate managerial and professional executive positions after graduation. As such, and notwithstanding the casual nature of the survey, the results are likely to harbor some **"marketing" insight** for investment corporations and real estate groups contemplating a relatively **sizable** China real estate fund (or REIT). Some insights could be:

A) **A marketable China real estate fund needs to invest in office followed by retail and residential**, Big 4 or otherwise, else the challenge in finding sufficient investment funding and investors could be tremendous.

B) **Likewise, a marketable China real estate fund needs to invest in (1 or more of) the Big 4 cities**, i.e. it may face quite a challenge in finding sufficient investors and investment capital, retail or institutional, IF the fund only invests in 2nd tier cities and markets.

C) **Shanghai and to a lesser extent Beijing, IF excluded, may be detrimental** to raising investment funds and finding sufficient number of investors.

D) **Nanjing, IF excluded, may NOT be overly detrimental** to raising investment funds and finding sufficient number of investors.

Do NOTE the above focuses on having a "marketable" China real estate fund (or REIT), defined as one reasonably welcomed and popular among investors, retail and / or institutional. This may or may NOT have any relevance to the investment performance of the said fund because there is always the possibility that some of the most viable (and sometimes these could be aggressive or bold) investment strategies may not be (fully) appreciated by the market and the investors. For instance, a China real estate fund manager may personally wish to invest in just 1 city-sector owing to certain researched and analyzed views, yet unless he or she is willing to go with a much smaller fund, say US$100M instead of US$1B, he or she may have problems finding sufficient investment funding and investors for a US$1B fund IF he or she insists on putting US$1B or even more into the 1 city-sector. In short, the China real estate fund manager has to decide between 1) having his or her way but with very little prospect of managing a fund AND 2) modifying his or her investment strategy to suit a broader market but with better prospect of realizing the funding and setting up the fund.

<4> Comparisons with the survey done on the MBA students at the City University of Hong Kong: the surveys were carried out individually within a one-month period and notwithstanding changed market circumstances and sentiment during the period, there were no significantly different news on China real estate (both shared backdrops of continued price rises despite various market cooling measures etc). Nonetheless, the MBA program and the MS in Real Estate program might have attracted different spectrums of students in the sense the MBA program candidates were presumed to be less real estate-focused than the students in the MS in Real Estate program. The MBA students as a group could also be assumed to be less facile in real estate than the MS in Real Estate students prior to joining the program although no surveys had been done to gauge the respondents' background. In any event, here are the similarities and the differences from the 2 surveys:

A) Similarities

1) Both groups share a higher affinity to invest in 1 or more of the Big 4 cities, namely Beijing, Shanghai, Guangzhou, and Shenzhen (74% for the MBA group and 67% for MS in Real Estate group).

2) Both groups have a special affinity to Shanghai, even among the Big 4 cities (28% for the MBA group and 29% for the MS in Real Estate group).

3) Both groups allocate less capital to the 2nd tier cites (26% for MBA and 33% for MS).

4) Both groups appear to place very little emphasis on Nanjing and to a certain extent Wuhan too (both cities share the least capital allocations and investment votes).

B) Differences

1) The MBA students prefer residential (44%) to office and retail, while the MS in Real Estate students prefer office (40%) to retail and residential.

2) The MBA students place only a slight emphasis on Hangzhou (6%) among the 2nd tier cities while the MS students appear to place a heavier stress on Chengdu (11%) among the 2nd tier cities.

3) Speculatively, and assuming the MS students being more knowledgeable in real estate thus harboring a potentially higher affinity for riskier ventures, the MS group has by and large selected a more daring, in every sense of the word, portfolio over the MBA students, as they allocate a bit more to the 2nd tier cities and to the office sector instead of the residential sector.

Overall, there are more common grounds than gaps between the 2 groups of students in terms of portfolio allocation in the hypothetical China real estate fund: have a Big 4-focused plus a Shanghai eccentricity, forget about Nanjing or Wuhan, and concentrate on residential and office sectors with an eye on new projects. Investors appear to be relatively patient too.

Return to Risk Ratio and Risk Reduction

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Given all factors being equal, real estate development generally brings a higher return than real estate investment in existing assets which are already completed and running. For one, a real estate developer gets the chance to create value for the land via building something (new) on it, changing its allowed use (zoning etc), and / or at least renovating the existing property in a big way that its nature and use are significantly altered and upgraded. All these newly created-discovered usages lead to higher values thus better returns. Then why do we see some real estate groups invest only in existing properties, or putting in more bluntly, <u>why aren't all real estate groups developers</u>?

Naturally, real estate development involves a more complex process involving land use change application, architectural design approval, building permit, construction bid and contract, cost control, project management, engineering, interior design, landscape, and so on, not to mention acquisition, marketing, eventual disposition, financing, equity structure, taxation, and the like. Granted real estate investment also involves some of the foregoing aspects but is generally much simpler. As such, it is not surprising that not all investors are developers, as there are <u>plenty of complex issues and technical skills to master</u> (or at least manage effectively) before one could become a reasonably successful developer.

However, this does not explain the whole story. While the development process is certainly more challenging, yet if the return prospect of real estate development can more than justify the extra expenses incurred, it still makes sense for (all) real estate investors to become developers, right? Or is it? Then what else prevents some groups from becoming developers? <u>Are non-development real estate investors simply being dumb, not realizing the benefits of real estate development and value creation</u>?

Notwithstanding such possibilities, your humble author thinks it has more to do with the perceived risks involved, which are generally higher in development than investment in existing assets. That is, the reason why non-development real estate investors do not get involved in development is NOT because they are dumb, but it reflects a deliberate decision on their part having ascertained their resources and return to risk parameters. That is, non-development real estate investors decide to forego the value creation portion and focus on the income and future price appreciation prospects. As such, it is quite possible that in their investment calculations, the return to risk ratios via existing property investments are not much worse off (or even better) than those for real estate developments.

For instance, assume there are investment opportunities: a development project which can offer 100% profit prospect with an estimated downside of -50% i.e. losing half the capital invested if things go wrong, and an existing property investment which can fetch 50% profit with an estimated downside of -25% i.e. losing a quarter of the capital invested if things go wrong. Both offer the same return to risk ratio of 2 to 1 (100% to -50%, 50% to -25%). If such two opportunities are presented to investors, it is likely that the braver-aggressive would opt for the development project, while the conservative would go for the existing property. If these profit and loss percentages are equal in terms of probability, then both opportunities have no difference in terms of risk-adjusted return. In some ways, investors could be indifferent to investing in one or the other. The point here is that there are no one-size-fits-all answers in investing and different investors may have different investment fits and matches.

This brings us to the idea of risk reduction. Suppose there are 2 real estate developers A and B who both can make 100% in a good year and lose 50% in a bad year. Say for every 3 years, 2 are good years while the remaining 1 is bad. Assume however B has spent time and effort in reducing downside risk from -50% to -30%. This is how A and B would compare in years ahead (both started with the same $100, reinvestment of profit and remaining capital etc):

Developers	After year 1	2	3	4	5	6	7
	Good year	Good	Bad	Good	Good	Bad	Good
A	$200	$400	$200	$400	$800	$400	$800
% A/B	100%	100%	71%	71%	71%	51%	51%
B	$200	$400	$280	$560	$1120	$784	$1568

As illustrated, B does NOT have to be more brilliant than A in making a profit to win the game. It only has to control its risk a bit better (in the example above just 40% better) than A to win. On an accumulating and reinvesting basis, B would win by a wide margin over A in terms of asset value as time goes by. In our example above, A would only be around 1/2 of B in $ size starting from the 6th year.

To sum up, investors have no problem focusing themselves on return. Yet, the sophisticated would also consider risk.

Hong Kong Residential Real Estate: Past, Present, and Future

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Your humble author was recently interviewed by a radio station which essentially asked a few questions on the residential sector during the past decade. Most of the following reflects the conversation we had:

A) **What caused the residential real estate prices up (1997) and down (2003) during the past 10 years? = IF only 1 reason is to be given, it will have to be GDP (Gross Domestic Product) per capita (income).** While not being a perfect measure, the GDP / capita does indicate the income generating ability of an economy. In various studies we had done in the past on Hong Kong and other real estate markets, the GDP / capita (or similar income measure) would usually explained close to 80% of the observed residential price performance (up, down, or flat). Briefly, the Hong Kong GDP / capita growth and residential real estate price were more or less in synch in the 1980s up till early 1990s when they departed. In 1997, the GDP / capita had only grown around 5x nominally of its 1984 level, yet the average residential price had gone up 9x. Clearly, this was a significant gap and something needed to give i.e. either the GDP / capita increased quickly to catch up with the residential price or the latter dropping to a level more in synch with the GDP / capita. We knew what happened after 1997. By the same token, in 2003, the residential price had dropped almost BY 70% and thus was only 3x of its 1984 level with the GDP / capita, although having dropped a bit too, still hanging more or less on the 5x level. Naturally, liquidity (and sentiment) acted its (their) part, being in abundance in 1997 and much less than abundant in 2003, notwithstanding the overall bank deposits had not really changed much during the period (in fact these had grown). Thus, it came as no surprise that residential prices improved on average some 70% (from 3x to 5x) since 2003 based on the Centaline's residential indexes.

Readers interested further on the above can read an earlier article published in 2003 when we suggested prices would recover lost ground = http://www.real-estate-tech.com/articles/SRS110302.htm. Also, perhaps surprising to some, the best return opportunity occurred not prior to 1994 but from 2003 to 2006 when the average gain in price would be 70% = http://www.real-estate-tech.com/articles/SRS060705.htm.

B) **Would the residential market behaved as it had IF there were no "85,000" residential unit supply policy? = <u>Yes BUT</u> prices would still have come down,** EVEN IF one assumes there were no Asian Financial Crisis, tech stock bust, and / or the SARS episode, given the GDP / capita to residential price ratio being 5 to 9 was already a sufficient reason for adjustment at some point in time. Naturally, it is highly probable that if there had been no supply policy, or any one of the foregoing events, the price drops after 1997 might have been different in terms of degree, volatility, or length of time, or for that matter, in the timing of the occurrence. Yet, unlike a science like Physics, there is no way to recreate the situation and test it with different hypotheses and factors.

C) **The price recovery after 2003 appeared to be different than what was seen in 1997 or prior, i.e. while the mass private housing sector has only recovered on average some 70% of the lost ground, the luxury sector gained more than it lost, or at least treaded very close to its former peak** = real estate is a derivative industry reflecting on the economy and residential real estate in particular is closely tied to income. The more widespread gain seen in 1997 was reflective of the broader economic condition then i.e. the benefits were more evenly spread, whereas the gain seen since 2003 was also reflective of current economic condition i.e. one which is somewhat different from the 1990s and the benefits appear not to be as evenly distributed. Subject to further monitoring, of the various residential segments, the luxury segment appears still to hold some unrealized or promising demand though a word of caution is needed here = make sure it is ‘real’ luxury and not just being expensive, which is not quite the same as luxury.

D) **Will the increasing trend to purchase and invest in properties in Mainland China affect Hong Kong residential prices? = the simple reply is NO.** First, many of these buyers are acquiring the Mainland properties for investment, retirement, recreation, or as second homes in the Mainland where they have work or business. No doubt there were total relocations of households yet some / many of these households may still be keeping their Hong Kong properties. Second, buyers who buy Mainland residences because they cannot afford the ones in Hong Kong are not immediate / imminent buyers for Hong Kong properties. At worst one can only say Hong Kong might have lost some future potential buyers. Third, and this is vital, it is quite common for people in a country, especially big and populous ones like China or the USA, to move around, i.e. y number of people leaving city D does not necessarily spell the demise of D, because z number of people may be moving to it at the same time. Households move in and out of New York City all the time, do we see the Big Apple being decimated? No, on the contrary, it harbors the priciest real estate in the USA and the world and despite many such NYC households own resorts and investment assets elsewhere too.

As long as Hong Kong treasures and nourishes its advantages and offers business and career opportunities, people will come and the city shall flourish. A city degenerates NOT because its people are leaving it, which is only a symptom, but because it has become unattractive in the broadest sense of the word. It also depends on which groups of people (who) have left rather than just so many people (a nameless statistics) have left.

Successful cities attract the talented and daring. This is not entirely a mere numbers game.