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A Newsletter by Zeppelin Real Estate Analysis Limited of the Zeppelin Group

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Disney is here! Hong Kong's Disneyland has just opened (in September) and it is drawing a huge crowd everyday (maximum 30,000 visitors we were told). While it is the smallest Disneyland worldwide, it does harbor expansion possibilities. Meanwhile, against such a background of fun and joy, the stock and real estate markets continue their marching trends notwithstanding some hiccups along the way. Nonetheless, we feel the potential economic-financial fallouts to come more likely from out of town e.g. certain real estate markets regionally and worldwide especially the one from which Disney hails.

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

This quarterly (generally published in January, April, July and October) newsletter is circulated freely via email to over thousands of readers including 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), 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 between. This newsletter is now into its <u>10th year</u> and <u>37th</u> issue.

We also operate a website <u>www.real-estate-tech.com</u> through which we intend to share some of our real estate knowledge and ideas with interested parties. We also make available charts, tables, spreadsheets, reports, and the like for reference, the majority of it being free with some requiring a token fee.

Zeppelin Real Estate Analysis Limited is involved in real estate development, investment, and asset management with a focus on independent analysis, investment strategy, and portfolio management. It can also assist in setting up real estate analytical systems and content development. It is part of the Zeppelin Group of Companies which collectively also offers real estate project management, facility management, marketing management, building design and architecture, and capital management services.

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China Real Estate Risk Management: Cross-Market Considered

Real Estate Tech, October 2005

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We have recently done some simple research and analytical studies on the Big 4 real estate markets in China, namely Beijing, Shanghai, Guangzhou, and Shenzhen. Real estate sectors of residential, office, and retail were involved. As a very general observation, we find that in terms of spreading and managing risks, <u>diversifying one's real estate investment portfolio among different market sectors (residential, office, retail etc) within a single market may NOT be overly meaningful as the sectors seem correlated to varying extent i.e. they tend to go up or down more or less in tandem thus offering no offsetting effect for investors. However, <u>for residential focused investors, the Guangzhou residential sector may offer some risk reduction</u> for an investment portfolio that is spanned across residential properties in the Big Four. Here are some basic observations and findings:</u>

- A) Data and information = most have been abstracted from market reports provided by the Soufun Group which is based in China. Real estate indexes on the residential, office, and retail sectors were used and while such may stretch all the way back to the 1990s, we have only used data after 2000 as it is felt the market conditions in the 21st Century are different from those in the 1990s. Also, we have left out the Shanghai retail sector as the data was not entirely complete when the study was being done. We also looked at the relationship between the Consumer Price Index (CPI) with the various real estate indexes.
- B) CPI and real estate = the study in varying degree does confirm the general belief that real estate jives with inflation (with one exception below) and CPI is considered a representative measure of inflation / deflation. However, the degree of jive is different not only for different cities, but also with different market sectors within the city. Beijing generally jive less with CPI than the other cities, and both office and retail sectors tend to jive more with CPI than residential in the Big Four, even if only by a small margin. Interestingly, the Guangzhou residential sector has a negative correlation with CPI.
- C) Cross-sectors = when comparing different sectors (residential, office, retail) within a city, Beijing overall has the weaker relationships versus the other cities, and Shanghai exhibits a high correlation between its residential and office sectors, with both sectors escalating in prices and transactions until the recent cooling measures set in. Also, residential tends to synch more with retail than it does with office overall.
- D) Cross-markets = for real estate investors focused on individual sectors, such as residential, office, or retail etc, diversifying one's portfolio across office properties in the Big 4 does little to minimize risks, nor does diversifying across retail malls in the Big 4. However, for residential focused investors, Guangzhou may offer such risk reduction opportunities as its residential sector bears no or little correlation with the residential sector in Beijing, Shanghai, or even the nearby Shenzhen. The residential sectors of the other 3 cities are highly correlated.

Please note that <u>a high correlation does not automatically imply a cause & effect relationship</u>, nor does it imply the data will continue to correlate as such in future or if other time periods of data are used. Also, correlations here are mostly city / market wide, yet individual properties or projects may or may not conform to such macro correlations. That is to say, there is always a chance that <u>a certain property can still perform quite well despite market-wide the sector / city is in a downturn, or vice versa</u>.

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Beijing: Price Differentials between Private, Assisted, and Public Housing

Real Estate Tech, October 2005

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We have recently come across some data and statistics on the Beijing residential market sector and we think they may be worth sharing with readers. Briefly, we are looking at 3 different sources of residential properties, namely 1) **Commodity housing** i.e. private market properties; 2) **Economic housing** i.e. government-assisted properties for sale that are generally priced lower than the private market properties; and 3) **Sold Public housing** i.e. former public rental properties for sale to qualified owners.

Before going further, perhaps **a bit of basic profile on Beijing** first. Beijing is a huge metropolitan with reportedly and roughly 15M give or take 1M and the GDP per capita is around US\$3,200 (2003). One may see Beijing as containing an urban-suburban core (8 administrative districts), an outer suburbia (another 8 administrative districts) of satellite towns and rural areas, and an outlying area further away (2 administrative counties). The latter two are related to it economically (or standard-metropolitan-statistically) speaking.

Combining the residential price data with the above geographical divisions, **observations** can be formed:

- A) Commodity housing = on a price per floor area (Yuan / m2) basis, the average in the urban-suburban core ranges from a low of around 4,500 Yuan / m2 to almost 8,000 Yuan / m2 with the typical being roughly 6,000 Yuan / m2. The average in the outer suburbia area ranges from around 1,600 Yuan / m2 to 3,300 Yuan / m2 with the typical in and around 2,800 Yuan / m2. The average in the outlying counties is the lowest hovering a bit above 1,600 Yuan / m2. Needless to say, the above price ranges reflect a quite typical urban-suburban-rural pattern which confirms that distance to the central urban core (urban Beijing) has a negative correlation with price i.e. the shorter the distance a location is to the central core, the higher its price will be and vice versa. In this case, using the typical prices per floor area, the urban-suburban core commands roughly 3,200 Yuan / m2 more than the outer suburbia area, while the latter can sell for roughly 1,200 Yuan / m2 more than the outlying counties.
- **B)** Economic housing = on a price per floor area (Yuan / m2) basis, the average ranges from a low of around 3,000 Yuan / m2 to almost 5,000 Yuan / m2 with the typical being around 4,500 Yuan / m2. Nonetheless, data on this housing source covers only portions of the urban-suburban core and the outer suburbia area, and these show a demarcation of 4,000 Yuan / m2 i.e. economic housing within the urban-suburban core tend to sell for 4,000 Yuan and above while the same housing inside the outer suburbia area seldom exceed 4,000 Yuan / m2, being most in the 3,000+ range.
- **C)** Sold Public housing = on a price per floor area (Yuan / m2) basis, the average in the urban-suburban core ranges from 4,000 Yuan / m2 to almost 7,000 Yuan / m2 with the typical being roughly 5,500 Yuan / m2. The average in the outer suburbia area ranges from around 1,400 Yuan / m2 to almost 3,000 Yuan / m2 and the typical seems to be around 2,600 Yuan / m2. There is no data on the counties. Again, the demarcation between the urban-suburban core and the outer suburbia area seems to be 4,000 Yuan / m2 (in fact the latter area prices do not even exceed 3,000 Yuan / m2).

Please refer to the following chart showing the prices per floor area by districts and sources of housing for details.

Urban or	Districts		Price / Floor Area		
Suburban	In English	In Chinese	Yuan / m2		
			Commodity	Economic	Public Sold
			Averages	Modes / Medians	
Urban	Dongcheng	东城区	7,823		6,982
	Xicheng	西城区	7,221		6,602
	Chongwen	崇文区	6,230		5,737
	Xuanwu	宣武区	5,953	4,847	5,490
	Chaoyang	朝阳区	5,493	4,838	6,321

	Haidian	海淀区	6,386	4,474	5,253
	Fengtai	丰台区	4,832	4,473	4,542
	Shijingshan	石景山区	4,565	3,998	4,100
Suburban	Changping	昌平区	3,382	3,488	2,934
	Daxing	大兴区	3,353	3,018	2,760
	Tongzhou	通州区	2,898		2,846
	Shunyi	顺义区	2,830		2,612
	Fangshan	房山区	1,991		1,363
	Mentougou	门头沟区	2,798		2,664
	Pinggu	平谷区	1,624		
	Huairou	怀柔区	2,005		1,894
County	Miyun	密云县	1,653		
	Yanqing	延庆县	1,617		

D) Price differentials between Commodity, Economic, and Sold Public are NOT as obvious as one may expect = while there is generally a pattern that seems to conform to the expectation that Commodity housing will be more expensive than Economic housing which in turn may be more expensive than Sold Public housing, the price differences are not as obvious or significant as one may expect them to be, and in some cases, the reverse may even be true. For instance, while Commodity housing in most districts tends to have the highest price per floor area in the district, it is usually only some 10-15% higher. In a couple of districts, it is even lower than either the Economic housing (Changping) or the Sold Public housing (Chaoyang). Naturally, there is always the probable element of coincidence i.e. data relevant to the period in question just happens to be outside the norm (and that the norm will be observed if a much longer period is observed with the data averaged out), or some explainable circumstance e.g. the property qualities are almost or just as good if not better.

Please refer to the following chart showing the comparison between prices per floor area among the different housing sources by districts for details.

Urban or	Districts		Percentages		
			or		
Suburban	In English	In Chinese	Ratios		
			Commodity	Economic	Public Sold
			= 100%		
Urban	Dongcheng	东城区	100%	0%	89%
	Xicheng	西城区	100%	0%	91%
	Chongwen	崇文区	100%	0%	92%
	Xuanwu	宣武区	100%	81%	92%
	Chaoyang	朝阳区	100%	88%	115%
	Haidian	海淀区	100%	70%	82%
	Fengtai	丰台区	100%	93%	94%
	Shijingshan	石景山区	100%	88%	90%

Suburban	Changping	昌平区	100%	103%	87%
	Daxing	大兴区	100%	90%	82%
	Tongzhou	通州区	100%	0%	98%
	Shunyi	顺义区	100%	0%	92%
	Fangshan	房山区	100%	0%	68%
	Mentougou	门头沟区	100%	0%	95%
	Pinggu	平谷区	100%	0%	0%
	Huairou	怀柔区	100%	0%	94%
County	Miyun	密云县	100%	0%	0%
	Yanqing	延庆县	100%	0%	0%

In summary, as far as the Beijing residential sector is concerned, the price differentials that one would expect between different classes of housing turn out not to be overly significant (or very much different), and this contrasts with the price differentials due to geographical location, which tend to be quite significant.

Data sources = mostly from Soufun's www.soufun.com

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Why Do Real Estate Presales?

Real Estate Tech, October 2005

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Recent news and reports from Mainland China indicated there was a proposal by relevant authorities to scrap the real estate <u>presale system</u>, perhaps in part to cool speculative activities and in view of presale projects that sometimes remain incomplete plus loss of deposit monies. There are supporters and there are those who argue the presale system should remain in place. The former consist of academics and experts while the latter are industry participants including many developers and agents.

It is not the intention here to comment on the lively debate and / or which side has the upper hand but instead to share a few points on real estate presales:

- A) Real estate presales mean selling properties that do not yet exist (or future supply) = and prospective buyers can only make reference to marketing brochures, floor plans, perspectives, models, and / or mock ups. The rest depends on the buyers' ability to imagine what the prospective home or property would look and feel like when completed.
- B) Trust is of the essence = this relates to business integrity and reputation, and to having a proper and fair legal system in addition to efficient and effective financial infrastructures. Without such elements, presales are not likely to function well.
- **C)** Real estate developers decide whether to do presales = the initiatives rest on them unless there are laws and regulations the mandate them to do so, yet such practices, if any, are rare in modern economies. Hence, exploring the reasons why developers do presales may help throw further light on the issue.
- D) Presales help reduce market risks and uncertainties = presales mean the developers would have access to further cash (in the form of deposits etc) and thus this may reduce the equity required and the pressure on seeking financing. Even if such cash deposits are held in escrow etc, the fact that such will be transferred into the developers' coffers will help obtain better lending terms from banks and financing institutions. Naturally, presales help the developers decide if certain projects could / should proceed i.e. if the market response is good, then it can mean going ahead, if not, the project can at least be postponed, shelved, or second-thought. In short, the developers need not worry about whether there will be sufficient demand (buyers) for the projects (as portions of) the projects are already sold.
- E) Developers are less than confident on future market demand = thus seeking to make as much hay as possible while the sun shines, so to speak. Even if the developers are optimistic of future market demand, from a risk reduction viewpoint, it may still make sense to do partial presales to reduce exposure to market risks. Naturally, if developers sense a good demand for presales for good prices, few of them will resist selling to these buyers.
- F) Developers are cash-tight = this is often the case with emerging markets when the real estate developers in the market are generally less than well-cashed or sizable. They need the presales to do the projects. Some are even 'single-project' companies, doing one major project at a time. Given all things being equal, the small-medium developers are most likely to be adversely affected by a ban on presales, and the larger well-to-do ones may actually welcome such policies as these help them to get rid of competitors.
- **G)** Presales attract / tempt the future buyers into taking action now = and probably speculators too, as unlike buying into existing properties, they need only to pay a deposit, which is generally no more than 30% of the purchase price. In any event, presales cannot be of much help to those buyers who really must have a property now, and they still have to compete with one another to bid for a smaller / limited supply pool of existing (new and 2nd hand) properties.
- H) Presales may or may not help reduce / control property prices or even out the supply volatility = unlike what some may think, presales in a hot market probably will not bring down the price escalation trend, and sometimes may even help perpetuate it, as market activities and thus market sentiment (atmosphere) increase. Despite likely oversupply at some future point, market participants in an exceedingly hot market are unlikely to take much notice of such potential oversupply.
- I) Supply does not always have an effect on price = this contradicts a common perspective yet supply needs to be considered alongside demand in order to properly gauge if a market is tight or has an oversupply. Also, supply is less flexible / responsive [to market changes] / 'elastic' than demand. The reason is simple, for instance, when times are good, people get married, have babies, and the like, which may invariably lead to increases in residential real estate, either in terms of floor areas or number of units, or both. When the economy gets tougher, people may postpone

marriages, change to renting instead of buying, or simply live with parents still after marrying (as can happen in Asian / Chinese families). Demand can vanish or be significantly reduced in short notice while supply of units (being built) cannot adjust as quick or as much. In short, the short term demand for real estate may be vastly different from the long term trend owing to its nimbleness, and thinking that real estate price will go up simply because of a huge reduction in supply this year (versus last) could be wishful / misleading.

<u>Presales offer an opportunity to have better planning</u>, not just for developers, but also for buyers, as they get the chance to acquire a property at today's prices should they think prices will shoot up more later, saving money in the process and making better family financial plans. Naturally, prices may go up or down, yet buyers of presales do so voluntarily, and as such should bear the consequences, irrespective of them turning out to be fruitful or fruitless.

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