

Zeppelin's

Real Estate Tech

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

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Oil, oil and oil: seems to be in the minds of most investors and business people these days and has been driving markets up and down during the period. Adding to it would be the USA presidential election, Fed interest rate trends, USA real estate prices, and China economic landing (landed? Soft? Hard? No landing?), not to mention the war in Iraq. Interesting times we have indeed. Against this backdrop, we had recently seen a vibrant government land auction where real estate developers appeared eager to acquire land and a piece of the action, and the luxury residential market sector appeared hot as ever, leading to a probable polarization of the private real estate market.

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We are very honored to have Dr. Anthony Ko, PhD, who is also our honorary advisor. Anthony has kindly led guidance on a study that we have done recently on city competitiveness and its relation to real estate prices. We would also like to hear from prospective readers / writers who wish to share their real estate knowledge and experience with us.

This quarterly (January, April, July and October) newsletter is circulated freely via email to over thousands of readers including real estate developers, investors, owners, users, financiers, 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](#), [lcofox.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 [8th year](#) and [32nd](#) 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. 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: Commodity Real Estate Correlates With City Competitiveness

Real Estate Tech, October 2004

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We have done a simple correlation study to see if commodity (private market) real estate prices have anything to do with the competitiveness of the cities the real properties are located. The overall result seems to indicate a 'yes' and the following are to be noted:

- 1) **13 Cities** = we have only selected the top 13 most competitive cities / markets and they are in descending order of competitiveness Shanghai, Beijing, Shenzhen, Guangzhou, Suzhou, Hangzhou, Tianjin, Ningbo, Nanjing, Wenzhou, Dalian, Qingdao, and Xiamen.
- 2) **City Competitiveness** = the ranking, data, information, and the like have been obtained and abstracted mainly from the 'Blue Book of City Competitiveness - Annual Report on Urban Competitiveness No.2 – Positioning: Way to Mutual Prosperity' (published by the Social Science Documentation Publishing House). The major factors of competitiveness include but are not limited to aspects and composite rates such as the city economic growth rate, productivity rate, employment rate, GDP per capita, competitiveness, and the like, and these may include other sub-factors such as city administrative quality, market niche, corporate operational efficiency, workforce skill level, creativity, law and order, and so on.
- 3) **Real Estate Prices** (expressed in terms of average price per floor area Yuan / m²) = have been obtained and abstracted from published reports and open sources. In some instances where individual city prices seem to be lacking, we have used the provincial data, and the averages were mostly obtained via dividing the reported total sales revenues by the reported floor areas sold during the same period (January – August 2004).

The following observations were made via the above study:

- a) **Real estate prices (on a per floor area basis) do seem to correlate with the overall city competitiveness ranking** and the R² is around 0.72. That is in short, the higher the overall competitiveness of a city, the higher the real estate prices. In particular, it has a strong to very strong correlation with the city composite market share (of products and services that the city produces among the cities investigated which offer similar-same products and services) (0.73), GDP per capita (0.62), and competitiveness (0.93). Employment also seems to have some bearing yet the city economic growth rate and productivity rate do not appear to be overly significant as some may think.
- b) **A city's composite economic (GDP) growth rate does not appear to be significant** in terms of leading to higher real estate prices, or for that matter, correlate much with the other factors such as the city composite productivity rate, market share, GDP per capita, or competitiveness etc.
- c) **The composite productivity rate** (representing the value added capability) does not appear overly significant though does have some bearing on GDP per capita.
- d) **The composite employment rate, market share, and GDP per capita collectively** have a significant bearing on the city composite competitiveness with the R² generally in the 0.50 – 0.60 range or thereabouts, and thus also the real estate prices to a certain extent as mentioned.

A few inferences from the foregoing can be made or hypothesized:

- I) As aspects such as the city administrative effectiveness, corporate operational efficiency, workforce education and skill levels, creativity, and the like, all in some ways relate back to having a quality population, have a significant contribution to a city's overall competitiveness, prospective real estate investors may watch out for **cities / markets that attract / can attract the better educated / trained workers** to relocate and stay there, notwithstanding that this alone may not be a sufficient factor. Given all things being equal, cities that can be home to a talented and skilled workforce have a better real estate (price appreciation) prospect.
- II) While in the initial stage of economic development it might have seemed that the skilled and talented (and the unskilled too) would flock to cities for better career or business prospects, in the long run it is mostly the cities that would need to attract and retain such talent (this has been observed in the more matured cities / markets / economies such as North America / the USA).

Reportedly, many cities in China nowadays face a (skilled) labor shortage unless wages / salaries are raised to entice the workforce to stay, return, or come. In short, **competition for the desired workforce might have begun** in China and thus investors may wish to watch out for the winning cities / markets.

Please note the above observations and results are very preliminary in nature and further detail studies are warranted. Also, the data and statistics in the competitiveness report mentioned above have not been verified in depth. Nonetheless, a talented and skilled workforce + a contributory city administrative environment + effective legal / financial infrastructures and the like may work wonders at times.

Competitiveness Ranking	City	Commodity RE Average Price Yuan / m ²	Growth Rate	Production Rate	Employment	Market Share	GDP Per Capita	Competitiveness	Remarks
1	Shanghai	5,204	0.4101	1.1800	0.2700	1.0000	1.0000	330.9200	
2	Beijing	4,641	0.4074	0.4600	0.6300	0.3900	0.7600	323.3100	
3	Shenzhen	3,518	0.4473	1.6600	0.1600	0.4300	0.8300	217.6500	
4	Guangzhou	3,518	0.3754	0.8900	0.1500	0.3600	0.9100	174.0300	
5	Suzhou	2,350	0.4973	0.7000	0.1400	0.1500	0.6200	147.8700	
6	Hangzhou	2,628	0.3971	0.6800	0.1900	0.2500	0.6500	145.3000	
7	Tianjin	2,971	0.4135	0.5100	0.1300	0.4000	0.5800	142.0400	
8	Ningbo	2,628	0.3974	0.9500	0.1100	0.1100	0.8000	122.2400	
9	Nanjing	2,350	0.3948	0.4300	0.1500	0.2300	0.5800	116.9400	
10	Wenzhou	2,628	0.4225	0.5100	0.1800	0.0600	0.6000	115.6300	
11	Dalian	2,396	0.4367	0.6800	0.1400	0.1400	0.5300	114.5500	
12	Qingdao	1,990	0.4196	0.7200	0.1200	0.1900	0.5500	111.8700	
13	Xiamen	2,193	0.3791	0.8900	0.1100	0.1300	0.6700	102.9200	
Correlations R									
(0.8457)	Commodity RE	Commodity RE	Growth Rate	Production Rate	Employment	Market Share	GDP Per Capita	Competitiveness	
(0.1540)	Growth Rate	(0.1221)	0.3179	0.6819	0.8572	0.7875	0.9648		
(0.3632)	Production Rate		0.1206	(0.0664)	(0.0934)	(0.2613)	0.0181		
(0.5496)	Employment			(0.2051)	0.4244	0.6454	0.3050		
(0.7223)	Market Share				0.3454	0.2775	0.7760		
(0.7335)	GDP Per Capita					0.7099	0.8195		
(0.8533)	Competitiveness						0.7079		
Correlations R2									
0.7152	Commodity RE	Commodity RE	Growth Rate	Production Rate	Employment	Market Share	GDP Per Capita	Competitiveness	
0.0237	Growth Rate	0.0149	0.1010	0.4788	0.7347	0.6201	0.9308		
0.1319	Production Rate		0.0145	0.0044	0.0087	0.0683	0.0003		
0.3021	Employment			0.0421	0.1801	0.4166	0.0930		
0.5217	Market Share				0.1193	0.0770	0.6021		
0.5381	GDP Per Capita					0.5039	0.6716		
0.7280	Competitiveness						0.5012		

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Comparing Recent Performances: Funds, Stocks and Real Estate

Real Estate Tech, October 2004

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Many acquaintances, friends, and clients of your humble author are professionals, managerial executives, middle-upper classes, and / or business owners, and the majority of them have personal / family investments in funds, stocks, bonds, currencies, and real estate, whether local, regional, or global. Here are some very rough and limited observations on the relative performances of funds, stocks, and real estate:

- a) **Funds** = this was obtained mostly from the website of Standard & Poor, and only those that are based in the USA, Hong Kong, and the UK were included:
- 1) USA = there are some 17,000 funds from which to choose and they total around US\$7,000B, thus averaging US\$400M per fund and the average age of the funds is 5 years. If one has invested 5 years ago, only 80% of the sum invested remained, 3 years ago meant a tie, and 1 year ago implied a small profit of 7%.
 - 2) Hong Kong = there are some 1,300 funds totaling US\$400B thus averaging US\$300M per fund. The average age is 6 years. Purchased 5 years ago would mean an average cumulative profit rate of 50%, 3 years ago meant a tie, and 1 year ago meant a return of 13%.
 - 3) UK = there are around 3,000+ funds totaling 450B pound sterling thus averaging 150M pounds sterling per fund. The average age is 8 years. Irrespective of how long the funds were purchased (1, 3, or 5 years), the results were more or less the same with little profit.

Please note that the above represented averages and individual fund performances might differ immensely. Also, the funds collectively may invest in any geographical region or asset class-type notwithstanding where they are listed.

- b) **Hong Kong Real Estate Stocks** = investors generally have questions of whether they should buy real estate stocks or the real estate assets direct. There are no hard or fast answers and there are pros and cons in both investment types. Nonetheless, if one has invested in some of the major publicly-listed (popular) real estate stocks in Hong Kong since 2Q 2003 (when SARS attacked), one might have made a profit of 60% (Hang Lung), 70% (Cheung Kong), or 100% (Sun Hung Kai Properties or Henderson Land) by 3Q this year.
- c) **Hong Kong Real Estate** = to enable as best a comparison as possible, we have used the Centaline's property index since 2Q 2003 to 3Q this year. Roughly, it has risen some 40-50% from an index of around 30+ to close to 45 during the period.

Based on the above (b) and (c), it seems that at least for the period in question (from 2Q 2003 to 3Q 2004), investors who purchased real estate stocks (equities) have fared a bit better than investors who bought into the direct brick and mortar assets. Nonetheless, it is suspected that if a longer comparison timeframe is to be used, this may not hold always hold true, given that the stock market has not quite recovered yet from the last tech boom in 1999 – 2000 while real estate prices have already recovered some lost ground via rising back to a 2000 price level.

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China: Observed Effects Of The Economic Measures On Real Estate

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Recently published news and discussions on the effects of the economic measures adopted (to cool the reportedly overheating economy) varied significantly, ranging from hard landing, via soft landing, to a few expecting no (need for) landing at all. In any event, the effects to date on the real estate market and sector appear light, except that reportedly some real estate developers are having a difficult time raising financing from banks etc. Here are some of the recent observations (based on published data commencing from January to around August this year):

- d) **Both real estate sales prices and volumes (in terms of gross floor areas) have risen** = this refers mainly to the private (commodity) real estate market sector. Overall sales up to August totaled some RMB 430B and the floor areas sold added up to around 160M m² (square meters, 1 m² = 10.76 ft² square feet). Thus, the average price per floor area hovered around RMB 2,600 / m² and this was about 8% higher than the same time last year.
- e) **Capital spent on real estate development projects has also risen** = compared to the same period last year, there was an increase of around 30% and the total sum invested was RMB 700B. Of these, around RMB 500B was invested in the residential sector and this represented an increase of around 28% over the same period last year.
- f) **Both the cumulative and the newly commenced (this year) construction floor areas have increased** = the cumulative construction floor area being built was around 1.1B m² and of these, some 370M m² were newly started this year, and respectively they represented an increase of 24% and 14% over the same period last year. Also, completed floor areas have also risen and totaled 140M m², an increase of around 11% over last year's figure.
- g) **The cumulative sold floor areas have exceeded the cumulative completed floor areas this year** = and this is the reverse of last year when overall the completed floor areas outnumbered the sold floor areas. The sold to completed floor area ratio this year was around 1.10, meaning that for every m² of floor area completed, 1.10 m² have been sold.

Nonetheless, one observation that might reflect in part the effects of the economic measures taken would be in the relative importance of different capital-financing sources. Both the equity portion and the cash deposits obtained via pre-sales etc (presale deposits) portion have increased by 36% and 43% respectively, while bank financing has only risen slightly.

Furthermore, there were significant differences in the percentage allocations of such capital-financing sources between the coastal region and the central-west region. In the former, the percentage distribution between bank financing and equity & presale deposits was around 21% to 30%. In the latter, this ratio became 17% and 40%. It seemed that real estate developers working on projects located in the central-west region would need a strong capability to raise their own money (via equity and / or presale deposits) as bank financing occupied a lower portion.

Perhaps the overall effects of the economic measures have yet to reveal themselves, and investors may also wish to monitor the global (USA) economy too, as both have some bearing on the economy and the real estate market in China. With such measures and a general tightening of land supply, real estate developers may face a tougher time though at the same time this may lead to a higher level of professionalism as well. The longer term prospects are good but do not expect a smooth ride all the way.

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