Zeppelin's Real Estate Tech

4Q 2009: A Real Estate Newsletter by Zeppelin Real Estate Analysis Limited
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Recovery said the central bankers, prices are up said the real estate agents, and then there was the big magnificent parade: what, me worry? (Courtesy of Alfred E Neuman).

In this Issue, we feel extremely honored again to have Mr. Gary Carmell, President of CWS Capital Partners LLC, to share his insight on the USA economy and market. There are also analytical articles on the China residential real estate sector:

- **Is it 1932 or 1942, 1958, 1962, 1970, 1975, 1978, 1982, 2002? (By Gary Carmell, Invited Guest Writer)**
- **China Residential Real Estate: as Bubbly as a Bubble Bath?**
- **China Residential Real Estate: SZ > BJ > TJ > GZ > SH**
- **China Residential Real Estate: Shanghai Dominant, Shenzhen Mature**

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** (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, PacificProperties.net**, **Soufun.com** and **House18.com**. We had also been quoted in the **Asian Wall Street Journal** and interviewed by **Radio Hong Kong** and **Commercial Radio**. We also publish monthly articles and analyses in the months in between. This newsletter is now into its **14th year** and **53rd** 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 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.

Do you need our services? You DO when...

- **In Real Estate Development:** you encounter overestimated proceeds, cost overruns, underestimated time schedules, design and quality issues, construction contractual disputes, joint venture conflicts, or the like...you need an experienced project manager like us

- **In Real Estate Investment:** you encounter challenges in 1) Selecting which markets (cities), sectors (residential, office, retail etc), and properties-projects to invest; 2) Striving for the best possible risk-adjusted portfolio return; or 3) Sensing the volatility of a market or sector...you need an independent real estate analyst like us

- **In Real Estate Management:** you encounter questions on 1) if it is more economical to buy or rent the real estate facilities and assets, and if so where and what; 2) how best to manage and maintain such facilities and assets; 3) what level of human resources are required, all with a view to maximize their utility to help achieve the corporate objectives... you need a seasoned facility strategist like us

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For details: please download our group introduction at http://www.real-estate-tech.com/ZPG-Group%20Introduction-sOct07.pdf

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Is it 1932 or 1942, 1958, 1962, 1970, 1975, 1978, 1982, 2002?
By Gary Carmell, President, CWS Capital Partners LLC, Invited Guest Writer
Real Estate Tech, 4Q 2009
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We are glad and feel honored again to have Mr. Gary Carmell, President of CWS Capital Partners LLC, a real estate asset investment group focused on the apartment sector in the USA, to share with us his insight on the economy and real estate market.

The title of the article is listed above and in Gary's own words, if you dislike a lot of numbers, then this article is not for you. Being number crunchers, we find the article very enjoyable and easy to read and we certainly think it beats reading the noises in typical media channels.

As the article is relatively lengthy, we have decided to simply list the online link to it below:

http://cwscapital.com/UserFiles/file/qu/Gary%20Carmell's%20Articles/April09_leadstory.pdf

Hope you would have fun reading and learning from the great professionals.

Sincerely,

Stephen Chung
Managing Director, Zeppelin Real Estate Analysis Limited
Founder, Real Estate Tech Quarterly Journal
Website Developer, www.Real-Estate-Tech.com

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China Residential Real Estate: as Bubbly as a Bubble Bath?

Real Estate Tech, 4Q 2009

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Early this year, your humble author had attended a seminar where several CEOs of real estate development groups from the Mainland spoke. The all exclaimed the difficulty then of obtaining financing and participants were exploring other options.

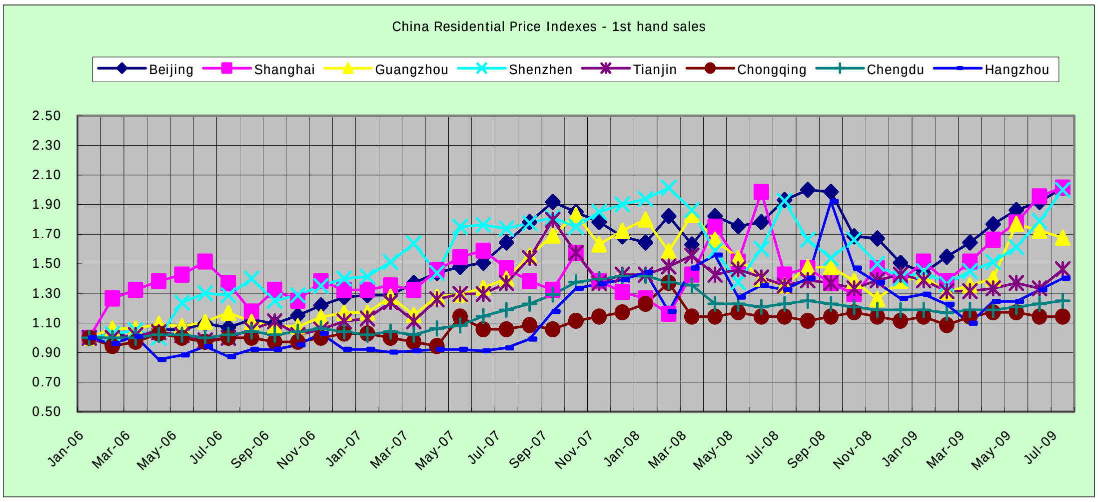
Time flew and notwithstanding the slower market as this piece is being written, residential prices and transactions have risen since the start of 2009. As such, some are now wondering if there are bubbles in at least some of the residential markets. Here we intend to do some digging into the matter:

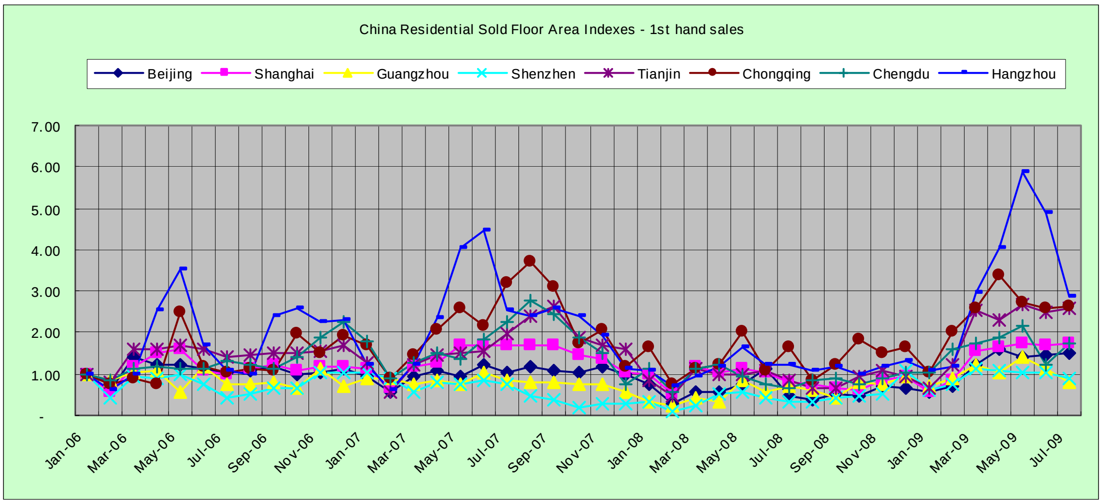
A) **Data sources** = mainly from www.centanet.com (Mainland China section) and data run from January 2006 to July 2009 comprising primary 1st hand sale prices and transaction volumes. Cities include Beijing, Shanghai, Guangzhou, Shenzhen, Tianjin, Chongqing, Chengdu, and Hangzhou.

B) **Both prices and transactions have gone up since early this year** = assuming January 2006 being 1.00, then all the markets included show varying degrees of price appreciation. As for transactions, only Guangzhou and Shenzhen exhibit lower levels [refer to table 1].

Table 1: Cities	Price Index (Jan06=1)	Transaction Index (Jan06=1)
Beijing	2.01	1.52
Shanghai	2.01	1.73
Guangzhou	1.68	0.78
Shenzhen	2.00	0.91
Tianjin	1.46	2.60
Chongqing	1.14	2.65
Chengdu	1.25	1.74
Hangzhou	1.40	2.88

C) **1st tier cities have higher price appreciation while 2nd tier cities show higher transaction growths** = and both started to climb around February 2009, thus coinciding with the launch of the stimulus package [refer to the charts below].





D) **Rough Risk Estimates** = here we calculate the standard deviations and the averages of the various price and transaction data streams for each of the cities and subsequently derive their respective high and low ranges. As such, if the most current (July 2009) data fall within these high-low ranges, probably the risk may not be overly significant. If the most current data fall outside the range and are higher than the calculated high, then there could be some risk concerns. Here are what we have gotten [refer to table 2 below]:

Table 2: Beijing	Jul-09	HighSD/Av	LowSD/Av
Price Yuan / m2	14700	13,505.18	8,773.89
Sold Floor Area x 10000m2	197	166.80	82.13
Shanghai	Jul-09	HighSD/Av	LowSD/Av
Price Yuan / m2	13700	11,238.77	8,403.09
Sold Floor Area x 10000m2	270	242.17	124.90
Guangzhou	Jul-09	HighSD/Av	LowSD/Av
Price Yuan / m2	10900	10,566.43	7,354.50
Sold Floor Area x 10000m2	69	92.08	48.67
Shenzhen	Jul-09	HighSD/Av	LowSD/Av
Price Yuan / m2	16000	14,495.93	10,122.67
Sold Floor Area x 10000m2	69	72.48	27.90
Tianjin	Jul-09	HighSD/Av	LowSD/Av
Price Yuan / m2	7900	8,000.51	5,901.82
Sold Floor Area x 10000m2	130	102.46	42.10
Chongqing	Jul-09	HighSD/Av	LowSD/Av
Price Yuan / m2	4000	4,116.23	3,483.77
Sold Floor Area x 10000m2	180	171.51	66.12
Chengdu	Jul-09	HighSD/Av	LowSD/Av
Price Yuan / m2	6000	6,203.73	4,973.01
Sold Floor Area x 10000m2	94	100.87	44.38
Hangzhou	Jul-09	HighSD/Av	LowSD/Av
Price Yuan / m2	14300	14,310.77	9,317.14
Sold Floor Area x 10000m2	49	54.92	12.67

Very briefly, the 1st tier markets seem to have some bubbly pricings and / or transactions, while most of the 2nd tier markets involved here do not appear to exhibit such tendencies (at least not yet).

So are there bubbles in the residential sector? Yes, definitely yet not too serious for now given and despite the sizable stimulus reportedly exceeding 7.60T Yuan.

The more vital question is what will happen when the $ press stops printing.

China Residential Real Estate: SZ > BJ > TJ > GZ > SH

Real Estate Tech, 4Q 2009

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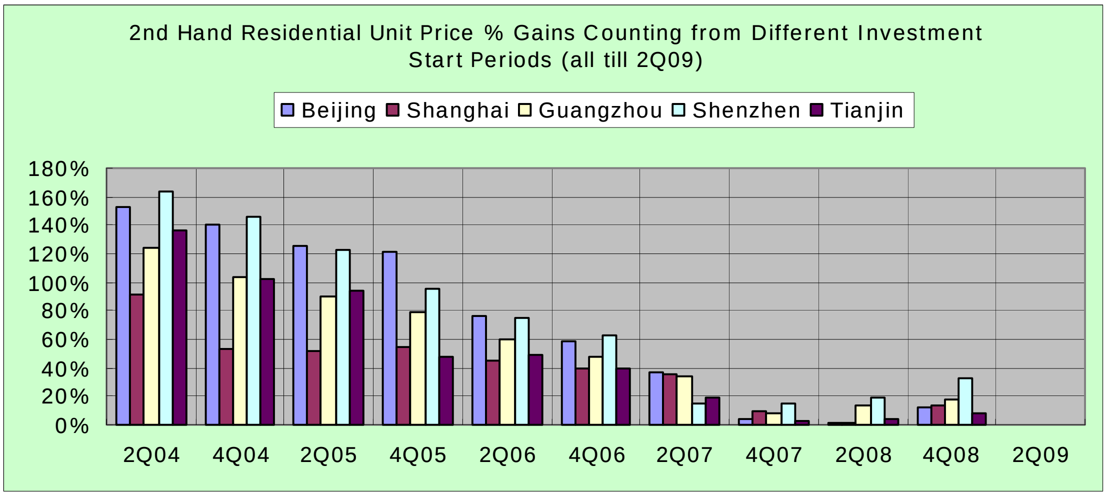
Beijing (BJ), Shanghai (SH), Guangzhou (GZ), Shenzhen (SZ), and Tianjin (TJ) are some of the more popular real estate investment markets. In recent years, secondary (2nd hand) residential sectors have also sprung up in them given their years of development.

Here your humble author intends to investigate the investment performances via investing in the above named markets at different time intervals and for different timeframes, and see what insight, if any, there is:

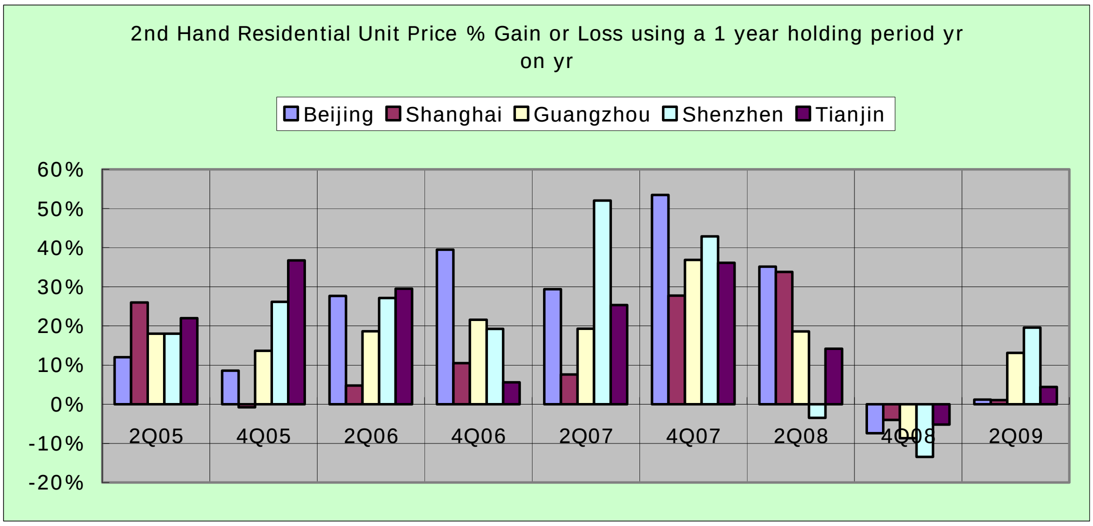
A) **Data sources** = mainly from the Mainland China section of www.centanet.com involving the 2nd hand residential sales only. Data are half yearly and run from 2Q 2004 to 2Q 2009. Investment return is based only on price appreciation and no account has been given to rentals, taxes, and transaction expenses.

B) **Overall return from 2Q04 to 2Q09** = SZ (profiting 163%) tops the league with BJ (153%) following closely which in turn is trailed by TJ (136%), GZ (124%), and SH (92%). Out of curiosity, we have also calculated the overall return for each different start time e.g. 4Q04, 2Q05, 4Q05, 2Q06 etc till 2Q09 [refer to the chart below].

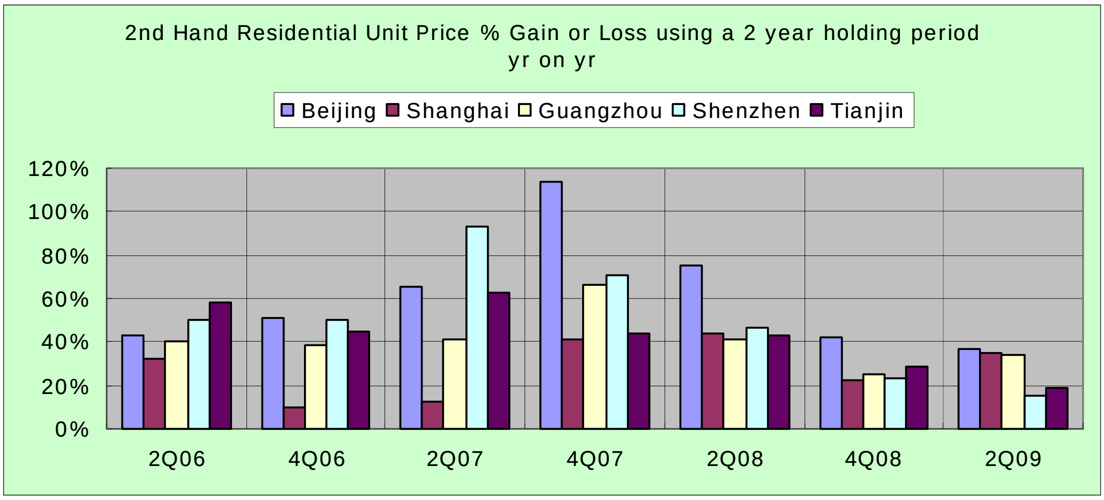


Two observations are made: 1) the longer the investment term-timeframe, the higher the overall return, except for more recent times; 2) SZ and BJ generally beat the others in these matches.

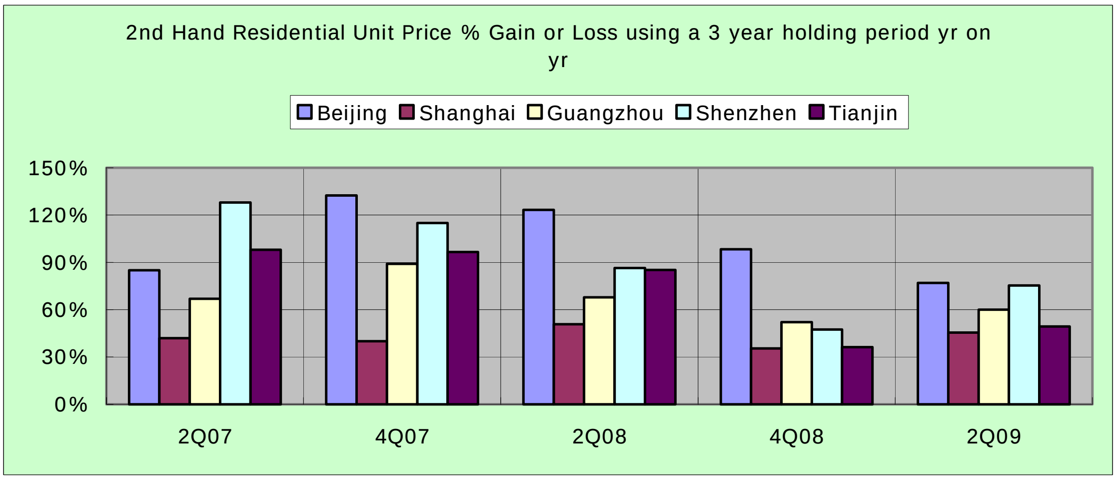
C) **1 year investment timeframe, different start times** = i.e. if bought in 2Q04, then sold in 2Q05; if bought in 4Q06, then sold in 4Q07 etc. As such, the best performing investment period is from 4Q06 to 4Q07 while the worst performing investment period is from 2Q07 to 2Q08. SZ and BJ generally outrank the others [refer to the chart below].



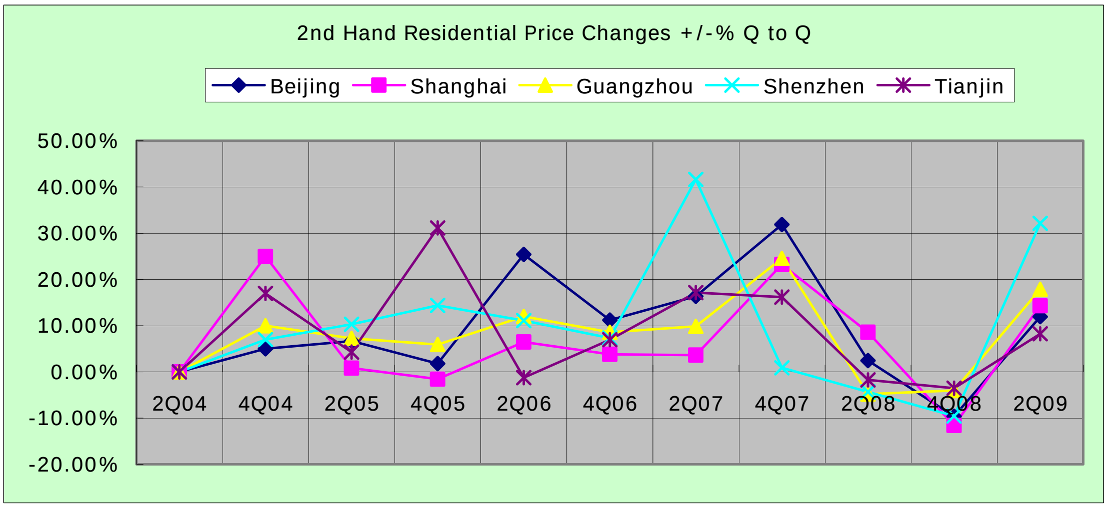
D) **2 year investment timeframe, different start times** = similar to the 1 year scenarios above, and the best performing investment period is from 4Q05 to 4Q07 [refer to the chart below].



E) **3 year investment period, different start times** = still SZ and BJ leading the pack, and still the best investment period involves buying in 2004 and selling in 2007 [refer to the chart below].



F) **Price Fluctuations** = readers might now be able to guess it, yes, SZ and BJ exhibit the most fluctuations in price movement thus in part explaining their overall return performances [refer to the chart below].



While market-timing is difficult to grasp and possibly impossible to grasp, it does not automatically follow that timing is not important. IF it could be grasped, the investment performance would be phenomenal.

China Residential Real Estate: Shanghai Dominant, Shenzhen Mature

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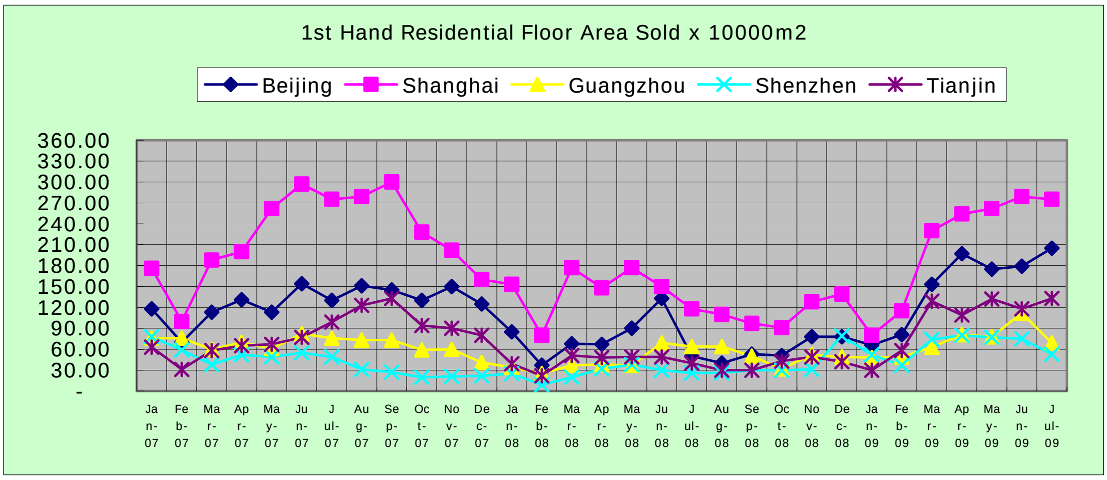
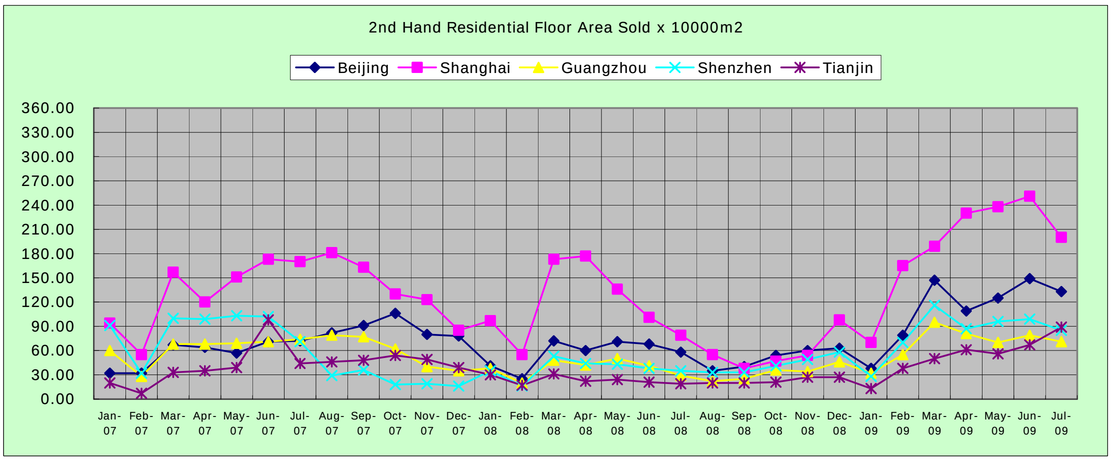
Beijing and Shanghai are metropolitans with populations hovering about or above 15,000,000 while Guangzhou and Shenzhen are still below 10M.

Here your humble author investigates the city scales and the sizes of their respective residential real estate markets, largely by their transaction volumes, to see if the two, as intuitively expected, synch with one another.

A) **Data sources** = mainly from the Mainland China section of www.centanet.com and the data run from January 2007 to July 2009. Both 1st hand (primary sales) and 2nd hand (secondary sales) residential sectors are included.

B) **Shanghai leads the pack** = in both 1st hand and 2nd hand sales, followed by Beijing, Tianjin, Guangzhou, and Shenzhen. Note that Shanghai leads by a wide margin in many instances, even when compared to Beijing. This may mean Shanghai not only enjoys the patronage of her locals, but also investors from other parts of China and abroad [refer to the charts below].



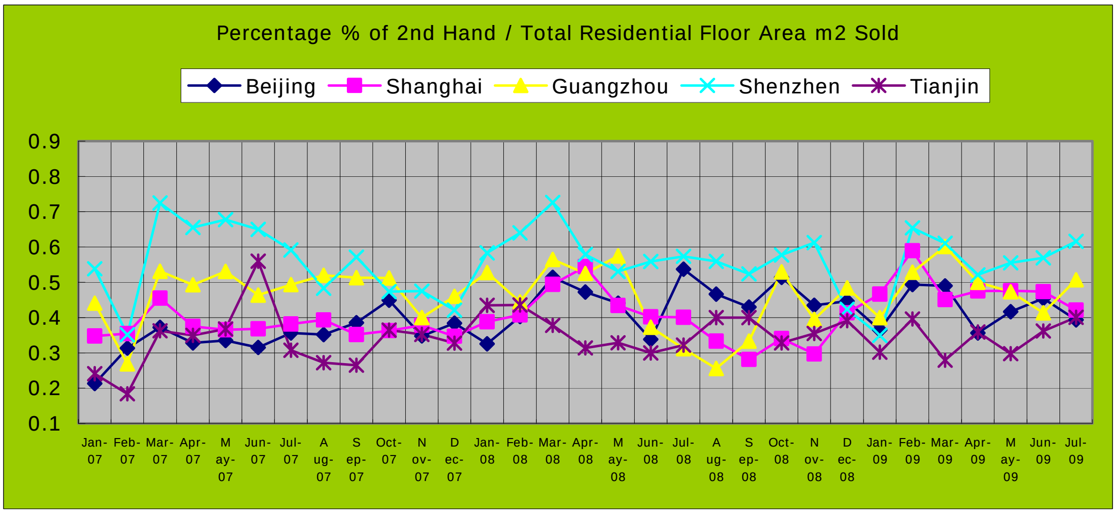


Benchmarking the sales volume of Beijing to 100%, then Shanghai is 177% of Beijing, Guangzhou is 66%, and both Shenzhen and Tianjin are 58%. Do note Shanghai does not lead by a wide margin ALL the time and very roughly, those instances where Shanghai did not exhibit a wide margin seem to jive with the implementation of austerity measures.

C) **The 1st hand and 2nd hand sectors synch with one another** = i.e. both 1st and 2nd hand sales tend to go up and down more or less similarly, as shown by the following correlations [refer to the table below].

1st and 2nd hand correlations	R	R2
Beijing	0.79	0.63
Shanghai	0.81	0.66
Guangzhou	0.60	0.36
Shenzhen	0.73	0.53
Tianjin	0.77	0.59

D) **Shenzhen is the most mature of the 5 cities** = and this is ranked according to the percentage of 2nd hand transactions out of total residential transactions. The higher the percentage, the higher the ranking, and the more mature the market is. Using Hong Kong as a benchmark which is 77%, Shenzhen is 56%, Guangzhou 46%, Shanghai 41%, Beijing 40%, and Tianjin 35% [refer to the chart below].



E) **IF one multiplies the transaction volume (in sold floor areas m2) by the price (Yuan / m2), then Shanghai is even more dominant** = the figures themselves are of less importance, the vital aspects are in the ratios between these cities [refer to the table below].

Cities:	Yuan x 1,000,000
Beijing	45,901
Shanghai	94,614
Guangzhou	16,533
Shenzhen	19,499
Tianjin	15,067

When contemplating Shanghai, one needs to look beyond its city scale, population, and GDP, and into its national status and geo-economic position.