

Zeppelin's

Real Estate Tech

3rd Quarter 2005

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

Phone (852) 2401 6610 Fax (852) 2401 3084 E-mail stephenchung@zeppelin.com.hk

A new Chief Executive was sworn in for Hong Kong and the macro economic cooling measures adopted in Mainland China seemed to start having some impact. Against this backdrop, Greenspan raised the rate again amid speculation that he might not and there were business reports that said real estate bubbles exist almost everywhere, from the USA to Europe. Based on such reports, it does seem eventually we shall all suffer some form of global-major-power-led economic and financial meltdown, yet the partying parties do not seem to wish to head home yet.

In this Issue:

- **China: A Highly Dominant Coastal Region Residential Sector**
- **Overstated Factors are still Factors**
- **USA: Pays 13% Tax Rate on Average**

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 [9th year](#) and [35th](#) 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.

Readers are to seek professional consultation where required and Zeppelin including its associates and consultants do not accept any responsibility for losses arising out of the usage of the newsletter. Copyrights rest with Zeppelin and/or the author(s). Opinions expressed by invited guest writer(s) do not necessarily imply consensus or agreement on our part.

China: A Highly Dominant Coastal Region Residential Sector

Real Estate Tech, July 2005

Stephen Chung BS BBldg(HKU) MS in Real Estate(MIT) MRICS AHKIS MAACE NAREIT PPFM
PQS RPS-QS

Zeppelin Real Estate Analysis Limited - Phone (852) 24016610 / Fax (852) 2401 3084 stephenchung@zeppelin.com.hk

We have come across some China real estate market data and information, mostly from published sources including market reports prepared by global and local (Mainland China) consultants that in turn are based on statistics published by relevant government bureaus, and we have compiled and assembled the following for sharing with readers. Nonetheless, a few caveats first:

- 1) While we believe such data and information are reflective by and large of the market conditions, we have not verified or reviewed their collection methods, accuracy, or applicability.
- 2) We would recommend that readers and investors seek relevant professional assistance and advice prior to making investment decisions as the content contained herein is meant for basic reference and interest only.
- 3) We focus solely on the commodity (private) real estate market sectors and only the residential, office, and retail sectors have been taken into account.
- 4) We have concentrated on the period January to April of 2005 and the data covers most if not all of China, from the coastal provinces and cities to the central and western interior ones.

Now to the observations we shall go. Based on the data and information, overall the China real estate market is very dominated by its residential sector, accounting for more than 80% of the sales proceeds and some 91% of the building floor area sold during the mentioned period. Most of this residential sector is also located along the coastal / eastern region, making the coastal region residential sector a paramount influence in China real estate market, some 64% of sales proceeds and 54% of floor area sold to be exact. Here are the details:

- A) **Sales proceeds by regions** = the total sales proceeds was RMB 211,546,000,000 (roughly RMB 8.30 = US\$1.00) and if one broadly categorizes the regions into 3 broad areas i.e. the coastal / eastern region, central region, and western region, then the distribution will be 75%, 12%, and 14% respectively. Despite the 3 regions not having overly disproportionate population levels, these distribution percentages do reflect by and large the more disproportionate economic distribution and disparity.
- B) **Sales proceeds by the top 3 provinces or cities** = the top 3 are Shanghai, Guangdong Province, and Beijing, and they occupy 17%, 14%, and 13% respectively, noting that the Guangdong figures would include the city of Guangzhou. As can be seen here, these 3 markets occupy a total of 44% of the overall private real estate market sales proceeds and thus their level of well-being, however defined, could affect the overall market and economy. None of the other provinces and cities exceeds sharing 10% of the overall sales proceeds.
- C) **Sales proceeds by real estate uses** = i.e. in terms of residential, office, and retail properties and the national distribution is roughly 84%, 4%, and 12% respectively. Even if one considers the distribution by the 3 regions as stated, the percentage allocation is very close to the national distribution.
- D) **Floor area (sold) by regions** = the overall national figure is 70,967,300 m² or thereabouts and the distribution among the 3 regions are 59%, 19%, and 22% respectively. As can be inferred, the real estate are pricier in the coastal / eastern region than in the other two regions, for while the coastal / eastern region occupies 84% of sales proceeds, its share in floor area sold is only 59%, which is still significant but is a distance from its share of sales proceeds. Also,

Guangdong leads the pack in accounting for 11% of the floor area sold, followed by Shanghai and Jiangsu with their 8% each, and Beijing and Shandong with their 7% each.

- E) **Floor area (sold) by real estate uses** = the distribution among residential, office, and retail is 91%, 2%, and 7% respectively, and this ratio holds true even in regional distributions.
- F) **Disregarding particular real estate uses, the national average price per floor area sold (RMB / m²) is around 2,981** = and the national average prices per floor area for the 3 regions of coastal / eastern, central, and western are 3,750, 1,881, and 1,837 respectively. Naturally, it would be more useful if these averages are calculated based on different real estate uses as follows.
- G) **Residential and the national average price per floor area sold (RMB / m²) is around 2,768** = with the average price per floor area sold for the 3 regions being 3,500, 1,726, and 1,673 respectively. Of these, Shanghai and Beijing stand out among the crowd with average prices per floor area sold of around 5,700 and 5,100 respectively (note: we believe the cities of Guangzhou and Shenzhen would have comparable price levels but the data shows only the Guangdong Province, which average is much lower having included other places in the province).
- H) **Office and the national average price per floor area sold (RMB / m²) is around 6,800** = with the average price per floor area sold for the 3 regions being 8,836, 3,495, and 2,445 respectively. Again, both Shanghai and Beijing stand out by a huge margin in having very similar average prices per floor area sold of around 13,700.
- I) **Retail and the national average price per floor area sold (RMB / m²) is around 4,637** = with the average price per floor area sold for the 3 regions being 5,434, 3,386, and 3,704 respectively. Of these, Shanghai, Beijing, Tianjin, and Shanxi (in the central region) stand out in having average prices per floor area sold in excess of 8,300, followed by Guangdong and Zhejiang with their 6,400 or so price levels.
- J) **Residential versus Office and Retail average price per floor area sold ratios** = using the residential figures as base 100, the national ratio is 246% for office i.e. the office RMB / m² are almost 2 and a half times that of residential, and 167% for retail i.e. the retail RMB / m² is around 1.67 times that of residential. Similar ratios exist for the coastal / eastern region and they are 252% for office and 155% for retail. However, these ratios are different for the central and western regions. On the former (central region), both office and retail average prices per floor area sold are more or less twice that of residential, while on the latter (western region), the ratios are almost the reverses of the coastal region, in that the office average price per floor area sold is 146% of residential and the retail is 221% of residential. Notwithstanding the coincidence probability, and that not all provinces and / or cities conform with their regional ratios to the fullest, office properties in the coastal region seem to command a higher premium than retail, tie with retail in the central region, and lose out to retail properties in the western region. Perhaps this also reflects the trend that the coastal region is moving toward a more service-orientated economy with more (international) trade and export, thus requiring more office spaces than the central or western regions.

A few speculations or contemplations may be abstracted from the above:

- 1) **Residential versus Office and Retail average price per floor area sold ratios** = is residential a comparatively cheap bargain or is the residential sector a more over-supplied sector thus leading to even lower prices compared to office and retail properties? We do not know for certain (except that there have been bubble concerns recently and administrative measures have been taken to cool down the markets) though it must be stressed that different markets (economies) have different development needs, patterns, and characters, thus leading to different real estate price structures at different

periods of development, in addition to the possibility of price skews due to small pools of transacted properties etc. Nonetheless, using Hong Kong's experience in the past decades, there were periods when office and retail (commercial) properties were pricier than residential properties and periods where office and residential properties command similar price levels, though currently residential seems to command more than the office counterpart. And all these do seem in the long run to do with an economy's stage of development and demographics. Note also we are dealing here with average price levels without making reference to the range (top and bottom) of prices, thus there is always the chance that while a sector seems to demonstrate a higher average price level, it does not automatically follow that this same sector would harbor the priciest property.

- 2) **Regional disparities in terms of shares of real estate sales proceeds and floor area sold** = is the coastal / eastern region overheated or do the central and western regions offer potentials in being relatively underdeveloped? One way is to look at the relative economic performances of the regions including such data as GDP, GDP per capita, disposable income, liquidity and the like. It seems the regional real estate disparities by and large mimic the regional economic disparities. In terms of real estate opportunities, we are inclined toward thinking all 3 regions, or more narrowly the coastal / eastern region versus the central and western regions, harbor potentials, albeit different in terms of real estate types-uses, formats-designs, qualities-technologies, quantities-scales, and the like. In short, the coastal / eastern region is more proven and needs little persuasion other than say market timing and pricing considerations, while the central and western regions require a bit more vision, perseverance, and gut to participate.

Perhaps apart from looking at macro demand and supply, we think properties (buildings) that are well-designed, well-built, and well-managed of any category are not overly commonplace, thus could almost always be demanded and commanding a rental or price premium.

Provinces / Cities	Sales in Yuan
National	211,564,000,000
Coastal / Eastern Region	158,061,000,000
Beijing	26,882,000,000
Tianjin	7,289,000,000
Hebei	2,199,000,000
Liaoning	8,146,000,000
Shanghai	35,510,000,000
Jiangsu	17,927,000,000
Zhejiang	11,095,000,000
Fujian	8,261,000,000
Shandong	10,823,000,000
Guangdong	28,951,000,000
Hainan	978,000,000
Central Region	24,774,000,000
Shanxi	1,204,000,000
Jilin	886,000,000
Heilongjiang	1,980,000,000

Anhui	5,789,000,000
Jiangxi	2,189,000,000
Henan	3,646,000,000
Hubei	5,431,000,000
Hunan	3,649,000,000
Western Region	28,729,000,000
Inner Mongolia	863,000,000
Guangxi	3,474,000,000
Chongqing	8,003,000,000
Sichuan	5,796,000,000
Guizhou	2,089,000,000
Yunnan	2,232,000,000
Tibet	30,000,000
Shaanxi	2,646,000,000
Gansu	1,086,000,000
Qinghai	238,000,000
Ningxia	997,000,000
Xinjiang	1,275,000,000

Abstracted from publications distributed by Land Search

Notes: The article and/or content contained herein are for general reference only and are not meant to substitute for proper professional advice and/or due diligence. The author(s) and Zeppelin, including its staff, associates, consultants, executives and the like do not accept any responsibility or liability for losses, damages, claims and the like arising out of the use or reference to the content contained herein.

Overstated Factors are still Factors

Real Estate Tech, July 2005

Stephen Chung BS BBldg(HKU) MS in Real Estate(MIT) MRICS AHKIS MAACE NAREIT FPFM
PQS RPS-QS

Zeppelin Real Estate Analysis Limited - Phone (852) 24016610 / Fax (852) 2401 3084 stephenchung@zeppelin.com.hk

It is not uncommon for investors to feel that certain (favorable) factors (or reasons) which cause them to invest in the first place have been a letdown, or are even just a bit short of a cheat, when their investments, be such real estate, stocks, bonds, funds etc, head south (down). Normally these factors would be of an economic / social / demographics or the like nature, such as high GDP growth rates, an emerging middle class, a so many million population, hot money, low interest rates, an entrepreneurial society, or the like, depending on the actual investment item being touted.

Investors invest because they wish to see a return on investment, and most would feel dissatisfied when such investments do not work out (and even seasoned investors have such moments), which is highly empathetic, yet decrying the validity of the investment factors / reasons could be unnecessary. Notwithstanding that related investment marketing-promotional material may have overstated the influence or even power of such (favorable) investment factors, this overstatement does not invalidate the existence of such investment factors:

- A) **Investment factors are not equal in influence or significance** = Compared to the world 100 or 200 years ago, the speed and quantity of news and information has exploded to the point that now the problem seems not in having insufficient news and information, but the essential time to analyze such news and information. What is more is that certain items which might not have any bearing in the past could not be ignored anymore with such real-time news and information dissemination. Nonetheless, factors still have some form of hierarchy / packing order among them, i.e. some are more important than others, depending on the actual investment opportunities. For instance, Hong Kong is an open economy thus things which happen elsewhere may be felt here. Nonetheless, given all things being equal, the USA and China may have a more significant bearing on Hong Kong than say Europe or Japan, let alone smaller economies. Naturally, this is looking from a macro angle and a trader involved in African diamonds may think otherwise.
- B) **The influence or even validity of investment factors can change with time or changing circumstances** = for example, say an investment opportunity involves 4 factors A, B, C, and D, with the order of influence expressed in percentages of 40%, 30%, 20%, and 10% respectively. Overtime, such order of influence may change or even be reversed. To make things even more complicated, perhaps factor A becomes irrelevant after the investment commenced being replaced by a new factor E. This explains why predictions are difficult to be made fool-proof and why certain fall-back strategies are recommended to allow for unexpected events.
- C) **Marketing stresses usually the favorable factors and frequently** = thus could give an impression of imminent results, and here we are not referring to misrepresentation or fraudulent intent. For instance, during the dotcom boom, "eyeballs" or clicks (number of web-pages viewed) were used to support (what later proved to be) hugely inflated stock prices, and thus were swept aside when the boom busted. However, purely from a technical angle, eyeballs do offer some insight and reflection on the nature and operation of a website, i.e. not that eyeballs were not useful, they had just been misapplied.

Few investments could prosper year after year in the long run with solid supporting / complimentary factors, which remain valid factors even if overstated or misused.

Notes: The article and/or content contained herein are for general reference only and are not meant to substitute for proper professional advice and/or due diligence. The author(s) and Zeppelin, including its staff, associates, consultants, executives and the like do not accept any responsibility or liability for losses, damages, claims and the like arising out of the use or reference to the content contained herein.

USA: Pays 13% Tax Rate on Average

Real Estate Tech, July 2005

Stephen Chung BS BBldg(HKU) MS in Real Estate(MIT) MRICS AHKIS MAACE NAREIT FPFM
PQS RPS-QS

Zeppelin Real Estate Analysis Limited - Phone (852) 24016610 / Fax (852) 2401 3084 stephenchung@zeppelin.com.hk

Your humble author has come across some USA tax data and information recently and thinks such statistics may also be of interest to readers too. On average, tax payers in the USA pay a rate of around 13%. Some of the details are as follows:

- A) **Sources** = mostly from published web resources including the New York Times www.nytimes.com and the Tax Foundation www.taxfoundation.org. The data generally covers the period of 1980 to 2002, and the overall impression is that Americans have indeed become significantly richer.
- B) **The rich still pay high tax rates** = Overall, there are around 128,000,000 taxpayers in the USA, with income totaling some US\$6,000,000,000,000 and taxes adding up to around US\$800,000,000,000, thus roughly an average tax rate of 13%. If one is to categorize these taxpayers into the following categories, their average income, tax paid, and tax rate would be:

Categories	Average AGI\$	Average Tax\$	Tax Rate
Top 1%	768,341	209,359	27.25%
Top 5%	291,114	66,814	22.95%
Top 10%	198,993	40,821	20.51%
Top 25%	122,678	20,840	16.99%
Top 50%	81,731	11,985	14.66%
Bottom 50%	13,556	435	3.21%

- C) **Yet tax rates have been declining** = the average rate during the period has dropped from 15% to the current 13%, representing a 15% or so reduction. Nonetheless, this reduction is not evenly distributed across all categories of taxpayers, and the top 1% of taxpayers enjoy the largest drop from an average of some 35% to the current 27% plus, i.e. around a 21% decrease.
- D) **The top 1% taxpayers see the largest increase in income and their share of tax revenues also increases** = in 1980, the minimum cut-off income of this top 1% category was around US\$80,000, yet this was close to US\$290,000 in 2002. When compared to the minimum cut-off income of the top 50% (note: the top 50% would include the top 1%), the minimum cut-off income of the top 1% was a bit more than 6 times as large. In 2002, this ratio had risen to being close to 10. Also, the top 1% share of tax revenues had increased from 19% in 1980 to 34% in 2002. The other top categories of 5%, 10% and 25% have also seen increases in the share of tax revenues, thus further increasing the dependence on the higher earners to contribute taxes.
- E) **1980 to 1990 saw higher increases than 1990 to 2000** = the average income of the top 1% category more than doubled during 1980 to 1990 while it went up only 87% during 1990 to 2000. We have not researched into the causes for such differences yet the difficult economy after the real estate bust in the early 1990s might have something to do with it.

- F) **The dotcom boom and bust in the early 21st century seemed to affect the most wealthy mostly** = the average income of the top 1% category saw a drop of 9% during the 2000 to 2002 period, while the remaining categories suffer little or even see a small rise.
- G) **The median house price correlates well with income** = while not being statistically perfect owing to time and data constraints, the median house price from 1980 to 2001 jives well with the average income of the top 50% category of taxpayers. The R2 is around 0.90 and this holds true even when compared to the top 1%, 5%, 10% or 25% categories. Overall, the house price seems to increase somewhat faster than the income.

Hence, based on the above, investors contemplating investment in the USA may wish to take this 'rich becoming richer' trend and formulate their strategies to suit.

Notes: The article and/or content contained herein are for general reference only and are not meant to substitute for proper professional advice and/or due diligence. The author(s) and Zeppelin, including its staff, associates, consultants, executives and the like do not accept any responsibility or liability for losses, damages, claims and the like arising out of the use or reference to the content contained herein.