China Real Estate Index System (CREIS) Statistical Study

China Real Estate Critical Analysis 2001 to 2006 on 9 Markets



Soufun Group & Zeppelin Group

IMPORTANT NOTES

- A) These special studies are meant to provide basic macro real estate market interpretations via simple analysis and calculation. They are a collaborative effort between 2 independent groups (Soufun and Zeppelin) and offer the following benefits:
- 1) <u>They provide an independent analytical angle</u> which may not be commonplace in the market at times thus serving as a viable alternative interpretation or 2nd opinion
- 2) <u>They help save time and effort in working out the numbers</u> thus enabling the subscribers, who may be investors, decision makers, fund managers, top executives, and the like, to focus on making decisions and investments;
- <u>They reflect our collective 20+ years of experience</u> in real estate development, investment, and management spanning from China including Hong Kong, via Asia, to North America;
- 4) <u>They are affordably priced</u> as we aim to share some of our real estate knowledge and ideas with interested parties
- B) Such interpretations can be related to monitoring continuous broad market trends or to assessing specific market opinions.
- C) Complimentary data and information, mostly of open published or publicly obtainable sources, are utilized and analyzed where and when practicable and proper. While care has been taken in selecting and compiling such data and information from 3rd party sources, we offer no guarantee whatsoever on their accuracy or applicability.
- D) These simple studies are not meant as final interpretation, conclusive advice, or suggestion and are meant more as a preliminary reference for subscribers contemplating investment. In short, whatever interpretation, advice, or suggestion that could be drawn from the special studies may or may not apply to individual subscribers and circumstances, in part because individual subscribers could have different return, risk, and resource parameters. This in turn implies the need for further tailored and detailed proper professional advice when actual investment decisions are to be made.
- E) **SUBJECT TO CHANGE WITHOUT NOTICE**: the content contained herein may apply only to the market periods, sectors, aspects, factors, or the like being studied, and in no way should this be interpreted to apply to other circumstances though similar. Also, whatever advice or suggestion which could be drawn from the special studies may become less or even un-applicable as market conditions and circumstances change.
- F) LIMITED LIABILITY: Neither Soufun nor Zeppelin nor its directors, managers, executives, staff members, associates, consultants, or the like accept any responsibility or liability, implied or otherwise, for errors, omissions, mistakes, or the like which may be contained herein, nor for losses, damages, or the like, monetary or otherwise, which may arise out of the use of and / or reference to the content contained herein. In any event, perceivable or otherwise, the liability is limited to the net actual payment which Soufun and Zeppelin has received from the subscriber(s) to date. For clarity, prospective subscribers who are not prepared to accept this and other conditions contained herein should not subscribe to our special studies or perhaps our other publications and documents too where available. This is not so much on shedding responsibility but is more a reflection of the reality that markets do change and sometimes in very volatile, unpredictable, and inconceivable manner which catch even the most seasoned, informed, and knowledgeable professionals and investors alike offhand. We would very much like to have a crystal-ball forecasting capability yet we do not. We seek only to offer the best "possible" reasoned and analyzed interpretations whenever and wherever we can subject to confining resources.
- G) For samples of our work and / or for details on Zeppelin, please visit our real estate knowledge 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.

SS10008: China Real Estate Critical Analysis 2001 to 2006 on 9 Markets (and 3 Sectors)

Content

Executive summary

1) China 9 markets of Beijing, Shanghai, Guangzhou, Shenzhen, Tianjin,

Chongqing, Wuhan, Hangzhou, and Chengdu [Basic macro real estate market data = Newly started floor areas, completed floor areas, sold floor areas, \$invested, \$sold, and cumulating prices per floor area in Yuan / m2 on each market, mainly in charts and / or tables]

- a) Composite
- b) Residential
- c) Office
- d) Retail
- 2) China 9 markets of Beijing, Shanghai, Guangzhou, Shenzhen, Tianjin, Chongqing, Wuhan, Hangzhou, and Chengdu [Benchmarking to Beijing to offer a basic sense of scale between markets = comparison ratios to Beijing in the various data categories for each market, mainly in charts and / or tables]
- a) Composite
- b) Residential
- c) Office
- d) Retail
- 3) China 9 markets of Beijing, Shanghai, Guangzhou, Shenzhen, Tianjin, Chongqing, Wuhan, Hangzhou, and Chengdu [Correlating to offer a sense of synchronization or the lack of it among markets = correlations among the markets in the various data categories, mainly in charts and / or tables]
- a) Composite
- b) Residential
- c) Office
- d) Retail
- 4) China 9 markets of Beijing, Shanghai, Guangzhou, Shenzhen, Tianjin, Chongqing, Wuhan, Hangzhou, and Chengdu [Comparing across markets using uniform scales = between newly started, completed, and sold floor areas, and between \$invested and \$sold on each market on each market, mainly in charts and / or tables]
- a) Residential
- b) Office
- c) Retail
- 5) China 9 markets of Beijing, Shanghai, Guangzhou, Shenzhen, Tianjin, Chongqing, Wuhan, Hangzhou, and Chengdu [Market directional gauging = between newly started, completed, and sold floor areas, and between \$invested and \$sold on each market on each market, mainly in charts and / or tables]
- a) Residential
- b) Office
- c) Retail
- 6) China 9 markets of Beijing, Shanghai, Guangzhou, Shenzhen, Tianjin, Chongqing, Wuhan, Hangzhou, and Chengdu [Comparing supply to demand = ratios of newly started to completed floor areas, newly started to sold floor areas, completed to sold floor areas, and \$invested to \$sold on each market on each market, mainly in charts and / or tables]

- a) Residential
- b) Office
- c) Retail
- 7) China 9 markets of Beijing, Shanghai, Guangzhou, Shenzhen, Tianjin, Chongqing, Wuhan, Hangzhou, and Chengdu [Gauging the market structures = in terms of percentages occupied by residential, office, and retail sectors in the various data categories in each market in 2006, mainly in charts and / or tables]
- 8) China 9 markets of Beijing, Shanghai, Guangzhou, Shenzhen, Tianjin, Chongqing, Wuhan, Hangzhou, and Chengdu [Combining and comparing Return to <u>Risk</u> = to obtain a sense of return per risk unit for each market and its sectors = using the data from 2002 to 2006 on each market, mainly in charts and / or tables]
- a) Composite
- b) Residential
- c) Office
- d) Retail
- 9) Additional market data on the Big Four = Beijing, Shanghai, Guangzhou, and Shenzhen
- 10) Additional market data on five 2nd tier markets = Tianjin, Chongqing, Wuhan, Hangzhou, and Chengdu
- 11) Market data on various other markets-cities

12) Market observations, analyses, and summaries

Charts and tables: exceeding 300

INTRODUCTION

This study aims to offer an independent and critical analysis of 9 China real estate markets of Beijing, Shanghai, Guangzhou, Shenzhen, Tianjin, Chongqing, Wuhan, Hangzhou, and Chengdu, and their 3 sectors of residential, office, and retail. The period studied starts from 2001 (and in some instances 2002) to 2006 and reviews macro market data and information on newly started floor areas, completed floor areas, sold floor areas, \$invested, \$sold, and average price per floor area Yuan / m2 etc released by Soufun-CREIS. Simple technical analyses and calculations are performed and results are presented mostly in charts and tables. A descriptive write up is available in a section toward the end.

This study offers a complimentary and supplementary reference to real estate investors interested in China real estate markets, analyzing from angles which investors may not have contemplated before. This study:

- 1) Offers basic macro real estate data and information on the markets and sectors stated
- 2) Benchmarks the markets to Beijing to offer a basic sense of scale between markets
- 3) Correlates across markets to offer a sense of synchronization or its lack among markets
- 4) Compares across markets using uniform scales
- 5) Gauges market supply and demand trends and directions (up, down, or flat)
- 6) Compares market supply to demand (ratios)
- 7) Gauges the market structures in terms of residential, office, and retail portions
- 8) Compares the return to risk profiles for each market and sector
- 9) Provides an independent market observation and critical analysis based on the findings

This study addresses the following questions or issues among many:

- a) Which market-sector has the highest average prices per floor area?
- b) Which market-sector is likely to see undersupply? Which market-sector an oversupply?
- c) Which market-sector attracts the most investment dollars? Which the least?
- d) Which market-sector sells more? In floor area terms? In monetary terms?
- e) Which market-sector has balanced supply & demand? Which do not?
- f) What are the differences between the Big 4 (major) and 2nd tier markets, if any?
- g) What are the comparative scales between the Big 4 and 2nd tier markets, if any?
- h) What are their return and risk profiles? What are their return-to-risk ratios?
- i) Which are the markets-sectors harboring better investment potentials? Which not?

Summing up, we have found that of the 27 (9 markets x 3 sectors) markets-sectors, some are performing better than others, and some are likely to offer better prospects than others in future. Readers and investors may in the process find certain popular market notions or occurrences deserving further / detail investigation and scrutiny.

Important notes: This study applies a simple technical analytical angle to gauge the potentials and / or probable pitfalls, if any and where observed, in the 9 markets selected for reference. Market observations, insights, opinions, commentaries, analyses, summaries, and the like thus drawn may not explain the full phenomena or encompass the overall situation. As such, this study does not preclude, and in fact encourages, the application of other relevant methodologies and / or data and information for cross-reference. Also, the reader and investor should read this study in whole and as one whole, in part the reason being a point expressed may only be valid under the particular heading or section and thus may or may not automatically lead to the same observation elsewhere in the study. Moreover, the data and information used herein involve mostly, even if not fully, new real estate development projects i.e. the 1st hand transactions (from real estate developers to the first buyers). This study is meant only as a rough and basic analytical study with no specific investor or investment criteria in mind. Individual investors and readers are recommended to obtain proper and professional tailor-made advice prior to making investments and decisions.

About Soufun: The Soufun Group (SFG) is one of the, if not the, most prominent real estate news, data, and information service groups in China and provides real estate intelligence services to real estate developers, investors, corporations, multinationals, and related professionals. SFG also operates the very popular real estate news, data, and information website <u>www.soufun.com</u> which covers over dozens of real estate cities and markets in China and also manages and operates the China Real Estate Index System (CREIS), which is one of the most authoritative real estate indexes in China. SFG provides the bulk of the data and information contained in this study.

About Zeppelin: Zeppelin Real Estate Analysis Limited focuses independent real estate analysis, investment strategy, and portfolio allocation.

Together with Zeppelin Property Development Consultants Limited, the Zeppelin Group (ZPG) is involved in real estate development, investment, and management in China including Hong Kong, and offers services related to asset, project, facility, and marketing management.

Properties and projects handled include residences, offices, retail complexes, industrial facilities, and hotels / resorts.

Clients and customers include real estate developers, investors, funds, financiers, multinationals, public listed companies, corporate occupants, and civic organizations from local and abroad.

Apart from offering professional services, the Zeppelin Group also develops and operates a real estate knowledge website <u>www.real-estate-tech.com</u> through which it intends to share real estate knowledge and ideas with interested parties. There are now close to 1,000 content items including research articles, investment analyses, market commentaries, technical passages, charts, and tables, written in English and / or Chinese, and are read by tens of thousands worldwide, and some of these content items have been / are published in other media including prominent newspapers and websites from local and abroad. Much of the content contained can be accessed freely without registration. We also welcome enquiries from related media sources in terms of content usage, publication, cooperation, and / or subscription, and we also welcome enquiries from potential corporations and businesses in terms of website sponsorships. Some of the pertinent web-pages are listed as follows:

 Ouarterly Newsletters = http://www.real-estate-tech.com/zeppelin real estate tech.htm

 Simple to Read Articles = http://www.real-estate-tech.com/zeppelin simple read stuffs.htm

 Challenging Articles = http://www.real-estate-tech.com/zeppelin challenging stuff.htm

 Chinese Articles = http://www.real-estate-tech.com/kej enter_page_s.htm

 Use of Web Content = http://www.real-estate-tech.com/copyright_and_use_of_our_content.htm

 Web Sponsorships = http://www.real-estate-tech.com/zeppelin_standard_rates.htm

In addition, we also produce the following types of publication which may be obtained via fee subscription through our e-commerce facility at PayPal:

- 1) Real estate research and analytical reports, with a China focus, ad hoc or regular basis
- 2) Real estate financial spreadsheets, easy to apply and time and effort-saving
- 3) Real estate technical tutorials, explaining complex concepts in a digestible format
- 4) Real estate e-books, compliment to academic text

http://www.real-estate-tech.com/zeppelin_to_order.htm http://www.real-estate-tech.com/creis/

Special to news media = our Managing Director Mr. Stephen Chung has years of experience and track record as a prominent real estate writer contributing independent-angle, critical, professional, yet interesting and easy to read articles to various media sources, reflecting his 20 years+ real estate development, investment, and management experience in China, USA, and Canada, professional attribute, academic excellence, and wit. He has also delivered lectures and talks to universities and business associations and had been interviewed by the Asian Wall Street Journal and Radio Hong Kong. Stephen would be happy to contribute his writings, analyses, articles, and other works for publication subject to mutual agreement.

For detail, please visit these web-pages or contact:

http://www.real-estate-tech.com/zeppelin_about_us.htm http://www.real-estate-tech.com/zeppelin_key_executives.htm

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