

# CHINA DIRECT REAL ESTATE-WHERE AND WHAT DO YOU INVEST

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## ABSTRACT

This research uses 1/2011-4/2015 monthly real estate data. China's direct housing regional markets are in general correlated with each other. However, this study indicates that there is a very large difference in potential return from investments in residential real estate depending on the city in which the investment is made, ranging from negative 24% to positive 28% over the research period. We especially caution investors about investing in south of Shanghai and in Hainan province. These are some of the most distressed areas in China. New constructions offer much higher return compares with existing constructions. However, the only way for the typical investor to invest in new construction is by investing in a development or construction company. Small to medium size residences demand much higher price increases compared with the larger residences. This is true for both new and existing construction.

## INTRODUCTION

China's real estate market is one of the biggest recipients of foreign direct investment in China [7]. Wang & Wang [19] study appreciation in housing prices in 10 major Chinese cities for the period 1999 through 2010. They find a median price appreciation rate per square meter for residential housing of 264% over the 12 year period. While they concede that they do not have China-wide data to prove the assertion, they believe that the price appreciation rate of housing in China is likely the highest in the world over this period. The high appreciation rate has generated concern about a possible bubble in the Chinese real estate market. Despite all the speculation and concern, the world is yet to see China's real estate bubble burst.

China's real estate market has unique characteristics. All real estate in China was owned and managed by the government under the central planning economic regime before 1988 [7]. The 1988 Constitutional Amendments separated land ownership and land use right. One primary difference in the definition of real estate in China from what real estate means in other developed economies is that real estate in China refers only to land use rights plus the ownership of the improvements on the land. The state is the owner of the land. The lease terms of the land range from 50 to 70 years. Here we are only referring to mainland China. Hong Kong's real estate ownership system is similar to that of the United Kingdom.

According to "People's Republic of China state-owned urban land use right transfer Provisional Regulations" Article XII, for preexisting residential properties, the transferee's land use right lease term is the original user's lease term less the time the original user has used. Due to the special nature of China's real estate market, the preexisting residential property market might act differently compared with the new built market due to shortened periods of land use rights.

If we assume land is scarcer and more valuable in more populated areas, then population and population

growth will drive up land lease prices and thus property prices. We are unsure how the increased competition of land use rights, affects potential buyers' attitudes toward preexisting properties with shortened land use rights. The interaction cannot be analyzed at this point since the exact real population and population growth at any given time is undeterminable for most cities.

For the reasons explained above, we believe regional property research which separates the preexisting and new residential markets will be more meaningful than general real estate research in China's special situation. Furthermore, the luxury homes market might be different from middle and/or bottom tier markets.

The purpose of this research is to analyze China's residential direct real estate market in order to improve decision making by potential buyers/investors. We analyze the market according to region, preexisting or new built, and by top, middle and bottom tier. We compare the returns of different direct real estate markets with average returns from Chinese stocks during the same time period. This comparison will further help potential investors' decision making.

## **LITERATURE REVIEW**

Roberts [15] reports that real estate prices fell by as much as 0.9 percent in September, 2014 for the fifth straight month in all but one of the 70 largest cities in China. Across China housing prices fell 11% for the first 9 months of 2014 even though many cities have loosened or eliminated home purchase restrictions. Fung [6] points out that real estate transaction volume continues to fall, however more slowly than earlier in the year. A recent study by China Real Estate Index System showed that 17 Chinese cities have housing inventories that could take more than five years to digest, and that property developers are in need of financial help. Davis & Fung [5] discuss whether there is a real estate bubble in China. They provide examples of oversupply of residential real estate, large reductions in selling prices for apartments, empty or near empty apartment complexes, and developers delaying planned developments. Stratfor Analysis [16] reports that the Chinese government plans to use the slowdown in housing construction, which is expected to worsen in coming months, to push through long sought reforms. The main reform is the creation of a national property registry, which is expected to provide a tool to combat corruption, which often takes the form of collusion between property owners and local authorities. The registry will also help further a plan to initiate a property tax system to provide additional funds primarily for local governments and to provide incentive for those who own multiple properties to find productive uses for their properties, which often are treated as investments, but do not generate current income.

Fung, Huang, Liu & Shen [7] give statistical support that China's residential real estate market is one of the most important driving forces behind national economic growth. Real estate development is a key factor in economic growth as real estate is an essential part of the manufacturing process of goods and services, and property rights are the foundation of a well-functioning market economy. The paper details the development of the real estate industry in China. The China Real Estate Report (2015) focuses primarily on the office, retail and industrial real estate markets. It predicts a permanent end to China's double digit annual growth rate and a slowing, but still healthy economy. Four cities are highlighted for good potential for overall economic growth. Beijing, headquarters for many large Chinese companies, has high consumer spending and rental rates are expected to increase modestly. Shanghai, China's largest city and its "powerhouse", is home to many local and international firms and is also expected to do well. Shenzhen will benefit from its IT and technology sector and its proximity to Hong Kong. Wuhan's economy will improve over the next few years as more companies take advantage of its transportation hub location on the Yangtze River. Hui & Chan [11] conclude that the most significant factors in China's foreign direct investment in real estate are the openness of China's market and China's strong economic growth. Foreign developers still invest mainly in coastal areas of China; however, the trend is to invest in the fast growing areas. The authors caution that the

Chinese government should monitor the real estate market to stabilize house prices. Adams [1] comments on primarily residential real estate and states that investment firms like investing in residential Tier 2 cities (cities of five to ten million people). Tier 2 cities and residential markets are considered safe when compared with luxury and mixed-use developments in larger cities. These investment firms believe that it is important to look at the real estate market as different markets depending on the demographics and type of development, as there are different risks associated with different real estate markets.

Chan & Chang [3] analyze the stock, bond and real estate markets in China to see whether increasing lending rates has a dampening effect on the real estate market. They find that indeed increasing the lending rate does dampen the real estate market. They also find that: the stock, bond and real estate markets exhibit different patterns of volatility and return; prices in the stock and real estate markets have significant effects on the bond market; and prices in the stock market have significant effects on the real estate market. Zhang & Fung [21] investigate reasons for the imbalance between the Chinese real estate and stock markets for the period 1997-2005 during which the real estate market was booming while the stock market was declining, especially during the last 4 years of the period. They find that the two markets are negatively related due to fund flows. The declining stock market can be explained in part by funds flowing into the booming stock market. They recognize that increasing interest rates can dampen the real estate market, but believe they will also hurt the stock market. They argue for policies that encourage the flow of funds from the housing market to the stock market, but they recommend caution so as not to overheat the stock market. Huang [10] predicts that China's housing market will drop while the stock market will rise because of lack of an alternative investment channel after the housing market bubble bursts. He believes China's housing bubble has hindered China's economy since 80% of the funds are in the housing industry. He believes the housing market bubble must burst for China to grow.

Wang and Wang [19] point out the significance of the differences in the Chinese political system, legal environment and culture when compared to the Western world. These differences make them wonder whether the current theories of economic growth can apply to all economies. Items unique to China include its extremely rapid growth during the last two decades and the rapid development of high-income groups, which could form a boom-and-bust price pattern. Also, the Chinese real estate market uses land auction and presale systems that make it difficult for developers to adjust supply of housing to fluctuating demand. While there has been a great boom in the real estate markets, Wang and Wang see signs in 2012 of a possible large correction in the housing market. Yan, Ge & Wu [20] study the effects of more stringent constraints imposed since 2004 on the conversion of rural land to urban use in 16 major Chinese cities. They find that land supply is positively related to new housing supply. The government's intervention caused a decline in land supply that caused a decrease in the supply of new housing and a significant decline in housing supply elasticity. They also believe that there is a problem with the allocation of new urban land among different uses because much of the land allowed for new urban use has been designated for industrial use rather than residential use. Yan, Ge and Wu recommend that the Chinese government seeks ways to change the land supply system to allow adequate land to meet demand for residential use and that local governments consider allocating more new urban land to residential use.

## METHODOLOGY

Monthly direct real estate price data is from the National Bureau of Statistics of China. The data range from January 2011 to April, 2015. In this study, direct real estate includes both new and existing residential properties. The data are from 70 major cities in China.

We first plot direct real estate prices for the 70 major cities by month, year-to-year and as of April, 2015 compared to the 2010 base year. We do this separately for new and existing real estate.

We next divide the 70 cities into seven groups based on each city's price index as of April, 2015 compared to the 2010 base year. Group one has the highest price increase and group seven the lowest. We create graphs for each group's price changes month-over-month, year-over-year, and as of April, 2015 compared to the 2010 base year price indexes. We show the results for groups one and seven.

China has two major stock market indexes: the Shanghai composite index and Shenzhen component index. The stock market index data is available through sohu.com. The Shanghai composite index is calculated using all listed stocks and considering total shares outstanding. The biggest drawback of this method is that total shares outstanding includes state owned shares and legal person shares. These shares are not tradable. So using total shares outstanding, instead of tradable shares, distorts the real stock market performance. The Shenzhen stock market created a different index in 1995, the Shenzhen component index, which uses 40 listed companies and tradable stocks. It gained popularity compared with the old Shenzhen composite index, which is calculated the same as the Shanghai composite index. Currently, the most quoted indexes are the Shanghai composite index and the Shenzhen component index. We will use the Shanghai Composite Index to represent the change in the general stock market.

We compare the residential direct real estate returns for the entire 4 plus year period with general stock market return over the four plus year period.

Finally, we analyze direct real estate market regional correlation, new and existing construction correlation, and the correlation of the direct real estate market with the stock market.

## **SUMMARY AND CONCLUSION**

China's direct housing regional markets are in general correlated with each other. However, this study indicates that there is a very large difference in potential return from investments in residential real estate depending on the city in which the investment is made. Over the period from January 2011 to April 2015, real estate price changes for new (existing) construction varied by city from a negative 24% (26%) to a positive 28% (27%). We especially caution investors about investing in south of Shanghai and in Hainan province. These are some of the most distressed areas in China.

The mean and median price increase is less than 2% over 4 plus years for existing construction, but about 8% for new construction. While location is something an investor can control, the investor cannot keep a residence new. Once a unit is purchased for the first time, it automatically falls into the existing building category. The only ones who can invest in new construction are the developers. Thus, the only way for the typical investor to invest in new construction is by investing in a development or construction company. Our comparison of new construction versus existing buildings in this paper is really a comparison of what a typical real estate investor can expect by investing in property that immediately becomes existing property when the purchase is made versus what a developer can expect from the initial sale of newly constructed units. From this point of view, it was the developers, not the actual property buyers that benefited most from the property market during our study period.

Small to medium size residences demand much higher price increases compared with the larger residences. This is true for both new and existing construction.

China's housing market is correlated with the stock market. The stock market has generally underperformed the real estate market until around July 2014 when the stock market started a remarkable climb from 27%

below the 2010 base period in June 2014 to 58% above the base period in April 2015. The stock market seems to have the potential for high returns, but with a great potential for volatility.

Whether investing in the direct real estate market or the equity market will yield the best return depends on several factors including the location of the real estate, the size of the residence, as well as the correct timing of the investment. Our research provides an in depth analysis of these factors.

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