

Analysis of the Causes of China's Real Estate Bubble

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Abstract. The real estate bubble has always been the concern of the government and scholars. Especially at the time when the COVID-19 problem is serious and the economy continues to be depressed, our research on the real estate bubble is of great significance. Based on the definition of real estate bubble by different scholars, the analysis of past real estate bubble cases, and the existing literature review, this paper analyzes the current bubble's situation of China's real estate, which has become a really serious years ago, and summarizes the possible causes of real estate bubble such as excess liquidity, the overheating economy some sort of bureaucracy problem and so on. Finally, this paper briefly describes the causes of Japan's financial crisis in the 1990s as well as the government's solutions, then analyze how China will deal with the real estate bubble at this stage and give out some possible options like methods through inflation legislation or speculation etc.

1 Introduction

Throughout the Asian financial crisis and the 2008 US subprime mortgage crisis, the causes and symptoms are the rapid and infinite expansion of the real estate bubble and the results of which, including the crisis and bubble, are always the regression of the national economy and citizens' lives. The government has canceled welfare housing distribution since 1998, when China's housing system was reformed. This, leads to the housing in China can be goods after purchase, thus, home sales started to grow continuously. Until 2003, when growth in commercial housing prices began to accelerate; meanwhile after the U.S. subprime mortgage crisis and the 08 09 Dubai's real estate bubbles, people began to realize the seriousness of the problem, so the Chinese government began to use of macroeconomic regulation to control and try to deflate the bubble. For example, the goal of the central bank has been adjusted from the original "anti-overheating and anti-inflation" to "maintaining growth and controlling inflation". The central bank began to cut the reserve requirement ratio and the benchmark interest rate of deposits and loans five times that year and the tax incentives for real estate transactions was also introduced in November. By December 17, the second set of ordinary self-employment loans for individuals was relaxed, and the business tax on housing transfer will be greatly reduced. Meanwhile, to crack down on land hoarding and curb the irrational demand for land from developers, the government required that the land that had been idle for two years should be recovered free of charge by law; as for the land had been idle for one year and less than two years, each should be charged at 20% of the land price.

Those policies indeed contributed a lot to solving the problem. However, this still can't stop the growth of housing prices. Therefore, with the COVID-19 epidemic raging and the real estate bubble reaching its peak, today, If house prices continue to rise unreasonably and are not controlled, it will bring irreversible serious consequences to society. Thus, this paper tends to explore and analyse the process of the formation and development of China's real estate bubble as well as make comparison between Japan and China in order to sum up some piece of efficacious and feasible advice so as to prepare for the coming possible problems in the future.

2 The definition and controversy of China's real estate bubble

Bubble, as it was defined in the 'The New Palgrave a dictionary of Economics', is a sharp rise in the price of an asset or a series of assets in a continuous process. The initial price rising makes people expect that the price will rise further, thus, attracting new buyers -- these people are generally speculators who make profits by buying and selling assets, they are more likely to be interested in making a profit instead of interested in the use of those assets and their intrinsic value, the theory of which is called the greater foll theory.

Another problem with housing is that even if most people are not speculators, they feel they have to buy as soon as possible. If they delay, the price will just get higher. So with the sharp rise of the prices, often comes a great reverse and surge plummet of the market, which usually leads to a great national financial crisis. Therefore, it can be seen that the real estate bubble generally refers to the rapid and abnormal growth of real estate prices in the short term, which leads to its

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deviation from the basic value and thus seriously exceeds the expectations and affordability of consumers.

In order to measure how serious the real estate bubble is, there are usually two methods: 1. Measure the degree of a bubble by using and calculating the deviation

between the real estate value and the market price; 2. Measure it by using such statistical indicators as the ratio of house price to income, the growth rate of real estate price, the growth rate of GDP as well as the vacancy rate of houses [1].

Table 1. Housing price-to-income ratio of China [2] (Hongxiang Sun and Yue Zhang. 2013. Measurements and Causes of China's Real Estate Bubble)

2000	2001	2002	2003	2004	2005	2006
6.28	6.12	6.19	6.15	6.76	7.31	7.19
2007	2008	2009	2010	2011	2012	
7.40	6.93	8.13	7.81	7.5	7.3	

As for the question of whether there is a real estate foam in China or not, Dongmei Han and others measured the house price in Shanghai with method 1 in 2008 and concluded that "the real estate bubble in Shanghai has appeared already" [3]; Coincidentally, Huang Long and Yu Wang measured China's housing prices by using

method 2 in 2011 and concluded that "China's real estate bubble is in a serious state"; Ranran Li also pointed out in 2009 that "there is a very serious bubble in China's real estate industry, especially in several typical first tier cities, including some second tier cities and even some third tier cities with unique and scarce energy" [4].

Table 2. Real estate investment growth rate/GDP growth rate of China [2] (Hongxiang Sun and Yue Zhang. 2013. Measurements and Causes of China's Real Estate Bubble)

2000	2001	2002	2003	2004	2005	2006
2.56	3.29	2.51	3.03	2.93	2.01	1.91
2007	2008	2009	2010	2011	2012	
2.32	2.60	1.92	1.88	2.01	2.08	

However, on the contrary, Professor Yining LI of Peking University explained that there is no real estate bubble in China in 2009 from the perspective of supply and demand which is house purchase is more valuable than deposit and real estate upstream price rises. Zhiqiang Ren, the chairman of Huayuan Group, said that "the general rise in house prices does not mean that there

is a bubble in real estate, but that there is an objective demand" in 2009. Although there was no consensus on whether there was a real estate bubble in China at that time or not, the price of real estate is now unreasonably high, it has been explained that the real estate market is false prosperity and the bubble is very serious.

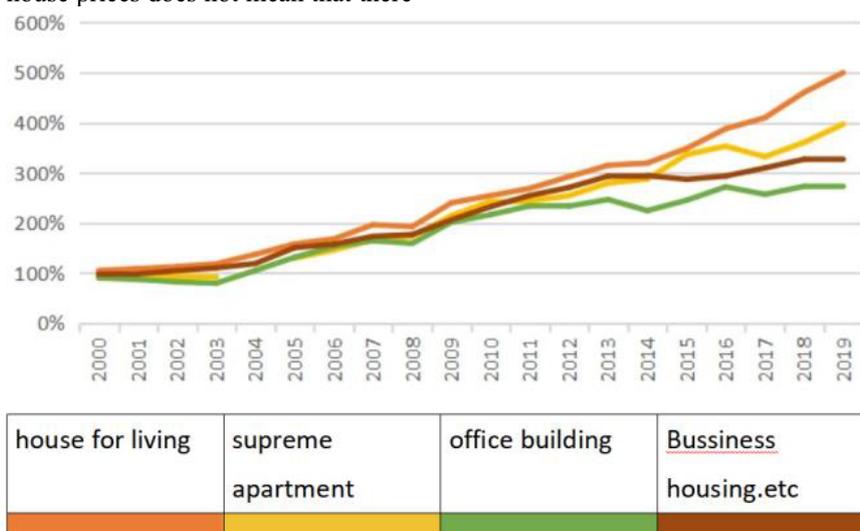


Fig. 1. China's commercial housing's average prices [5] (Anonymous, House prices from the 40-year history of house prices in 20 countries. Online: <https://new.qq.com/rain/a/20210405A091T100>)

3 The causes of real estate bubble

China's real estate bubble is mainly caused by excess liquidity, the overheating economy, as well as the expectation of RMB and real estate market appreciation has led to a large influx of speculative capital. Overall, China's economic growth depends on the "three carriages", which include consumption, export and

investment. Since domestic demand is weak all the time and exports are blocked (both by Trump government and by the COVID-19). Driven by the policy of pursuing high-speed GDP, the government can only rely on the investment to drive economic growth. However, China has been guided by the government to invest in public infrastructure for a long time, this in turn, led to a huge excess of liquidity accumulated in history.

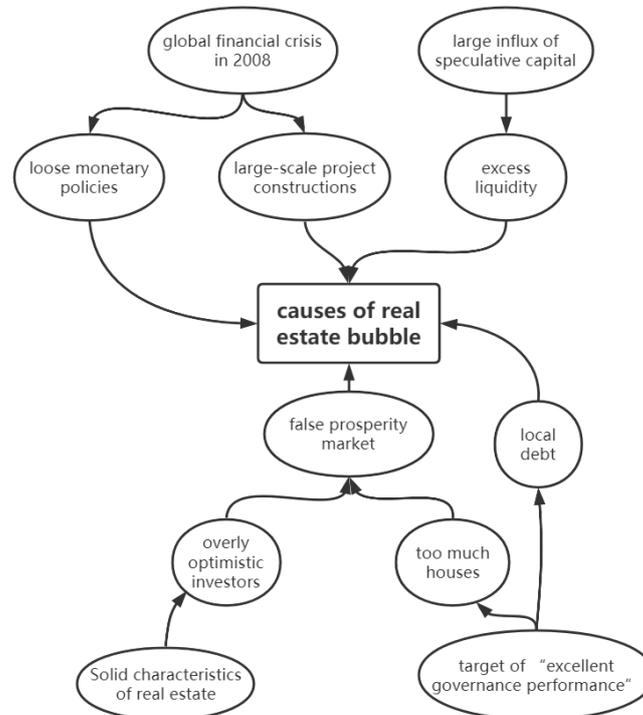


Fig. 2. Causes of Real Estate Bubble

To be specific, during the global financial crisis in 2008, in order to save the market, China first carried out the large-scale project constructions and then introduced a bunch of loose monetary policies. These measures greatly stimulated the development of China's economy and enabled China's economy to tide over the difficulties. However, these policies had also caused great sequel, such as the aggravation of the real estate bubble. Some data showed that China's cement, steel and other enterprises have serious overcapacity problems [6]. The products produced by these enterprises exceed the needs of the society, so the prices they enter the market are very low, and these materials are required for housing construction. The lower the prices are, the greater the profit space created, and the overcapacity will surly promote the development of real estate. The loose monetary policy adopted by China is to expand domestic demand and increase production. It provides a benefit for the development of most enterprises.

As a matter of fact, too much money has poured into China, a country where financial innovation is still lacking and industrial transformation has not yet been completed. At that moment, when most industries are in the ascendant and the risk is still high, most of those hot money have chosen the real estate industry, which has

the function of maintaining value and increasing value and has a low risk and stable state. Therefore, the formation of the real estate bubble is closely linked with the real estate speculators. When investors are overly optimistic about the future trend of housing prices, the real estate speculators begin to increase the purchase and hoarding of real estate. This kind of increase in speculative demands has led to the false prosperity in the real estate market in China since the reform [7], and then, caused the expectation of the next price rise, as a result, forming a negative cycle, and eventually transformed into the current real estate bubble.

In such process above, the land price gradually deviates from the discount value of land rent, which is directly determined by the purchase and sale of land assets in the market. Land investment is only the most direct reason for the formation of China's real estate bubble. The failure of the government's policies and supervision is also the indirect reason for the formation of the bubble in China's real estate market. The failure and excessive intervention of the government in the land market indirectly promote the formation of the bubble. In particular, we often hear of "Power Rent-seeking", which is, the local governments in order to achieve some targets of local government performance, do not hesitate to borrow a large amount of debt and encourage real estate

developers to develop and invest in a disguised manner to reflect their excellent governance performance. After their promotion, local debts and excessive vacant real estate are left to the next officials, thus forming a vicious circle. This also means that the government has more influence on the housing market than the market itself which is a truly unhealthy state.

4 Possible solutions

In order to solve the real estate problem in China, we can take the policies and measures of other countries in the face of crisis as a reference. For example, we can check out Japan's 1990 real estate crisis. The crisis was mainly caused by: 1. The excessive expansion of credit debt in the real estate industry; 2. The signing of the Plaza Agreement aggravated the US trade deficit with Japan; 3. Declines in the bank risk management(financial deepening) and so on [8]. As a result, the crisis caused a series of problems like the collapse of the stock market, a sharp drop in export, low consumption, serious unemployment issue, and so on, it eventually took the Japanese government about 10 years to recover its economy. In order to eliminate the impact and get rid of the crisis, the Japanese government had taken a series of measures to restore public confidence in the Japanese financial system such as:

1. Transform to a law based administrative management mode.
2. Start to check the soundness of assets.
3. By formulating two laws.
4. Accelerate the depreciation of yen and promote inflation [9].

So as a neighbour of Japan, we ought to learn from Japan's experience and take corresponding measures to minimize the harm before the large-scale outbreak of the real estate crisis. Possible solutions are as follows:

1. Accelerate the inflation, so that the house price would go down naturally.

2. Intensify the crackdown on speculation in the real estate industry. We should conduct more detailed investigation and statistics on the actual housing situation and asset details of individuals or enterprises, limit the number of properties owned by individuals through legislation, and leave housing to people in need.

3. Careful with financial liberalization. From the experience of Japan, the excessive implementation of financial liberalization will lead to excessive credit expansion of banks and other financial institutions and become an important cause of the bubble. Driven by the interest of high-interest rates, banks, and other financial institutions will relax the necessary financial review, resulting in the lack of necessary feasibility demonstration for a large number of credits. The loan collateral procedures are very simple, and many loans are mortgaged by overvalued stocks and real estate. When the bubble bursts, the prices of stocks, real estate and other collateral mortgaged to banks and other financial institutions shrink greatly [10], resulting in a large number of bad debts on the books of banks and other financial institutions, poor quality of financial assets, and even bankruptcy of a large number of financial institutions.

4. Standardize the behavior of local governments and reduce improper intervention from the government. Once the public believes that the government will help as long as the property price drops, it is equivalent to acknowledging that there is no risk of price decline. Compared with Japan, although the Chinese government has timely introduced a series of macro-control measures to "cool down" the economy, there are also some local governments that cooperate with banks and real estate development enterprises to invest a lot of resources in the development of the real estate industry, or even actively participate in the speculation of the real estate market, in order to increase fiscal revenue and increase the GDP like mentioned above, it has contributed to the expansion of the real estate bubble. The optimistic expression of the government on the rise of house prices has given a positive signal to the market, thus raising people's expectations for the appreciation of real estate, which will objectively stimulate speculation in real estate.

5 Conclusion

There are three reasons of the China's real estate bubble: overcapacity, loose monetary policy and the excessive government intervention. Coincidentally, the Japanese real estate industry also experienced the adjustment after the rapid rise in the early 1970s, resulting in the macro background of the adjustment being very similar to that of China. So It is of great significance to analyze the formation process of Japan's real estate bubble and draw lessons from it, as to timely manage and prevent some undesirable phenomena that have appeared or may appear in China's real estate market. Especially in these days when the COVID-19 has magnified the bubble and the problem of the China financial system, we must take the bubble serious as well as find some solutions which are both efficient and harmless.

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