Perspective on the High Housing Prices in Shenzhen from the aspect of Economic Information Management

Mengshan Zhu

Abstract — This article uses the systematic analysis method of economic information management to comprehensively analyze the event of soaring house prices in Shenzhen around the Spring Festival in 2016 from three aspects: market supply, government management, and consumers, and points out that this phenomenon is a combination of multiple factors. As a result, and to some extent, it caused the loss of talent in Shenzhen. Finally, the article proposes measures and enlightenment to solve this problem.

Index Terms — Economic Information Management; Shenzhen house prices; House price failure

I. OVERVIEW OF ECONOMIC INFORMATION MANAGEMENT

A. The concept and characteristics of economic information management

Economic information management is the scientific planning, organization, control, and coordination of various related factors (mainly refers to human, financial, material, information, and technical, etc.) of socio-economic information activities to achieve the full development and rational allocation of information resources.

Economic information management regards information as the main work object and has the following characteristics:

(1) Dispersibility. From the perspective of information sources, the collection of economic information is characterized by scattered sources and requires comprehensive statistics and analysis from different perspectives or dimensions.

(2) Diversity. From the perspective of information characteristics, economic information is characterized by a large quantity and complexity. It is necessary to remove the false truth and grasp the characteristics of the basic information in order to reach a scientific conclusion.

(3) Asymmetry. In terms of the quality and quantity of information, the information possessed by market entities is not the same, often leading to distortion of market behavior or decision-making errors.

B. Methods of Economic Information Analysis

This article uses the analysis of Shenzhen's housing prices around the Spring Festival as a case of analysis and requires the use of systematic analysis methods in economic information management. The skyrocketing housing prices in Shenzhen are not accidental. They have complex reasons. The interconnected market factors affect each other. Therefore, the method of selecting the system analysis is the basic method of interpreting the soaring house prices in Shenzhen around the Spring Festival in 2016.

The analysis method of economic information system is based on systematic ideas and methods, based on the overall situation, and understanding the object overall, in order to obtain satisfactory results of management thinking.

The system analysis content is divided into four categories: overall analysis, correlation analysis, structural analysis/level analysis, and dynamic analysis. The system analysis theory requires that the research object be recognized as an organic whole consisting of several parts that are interrelated and mutually restricted. The nature and function of the constituent elements of the system as a whole are also different from their nature and functions when they are independent. When they interact as part of the system with the surrounding environment, they do not represent the isolated elements themselves, but represent the entire system.

II. PERSPECTIVE ON THE HIGH HOUSING PRICES IN SHENZHEN FROM THE ASPECT OF ECONOMIC INFORMATION MANAGEMENT

A. Background Introduction

High housing prices have always been the frontier of the lives of the first-tier urban residents and have become the sword hanging over the first-tier cities. After the Spring Festival in 2016, housing prices in the first-tier cities and some second-tier cities have increased significantly, and the market has once again started an upsurge of home purchases. At the same time, the housing New Deal has frequently come out and the proportion of down payment for mortgages has dropped. In the first year of the "The thirteenth Five-Year Plan", the Ministry of Housing and Urban Development has paid special attention to housing issues. On the morning of March 15th, the last press conference of the “NPC &CPPCC” was held. Chen Zhenggao, minister of the Ministry of Housing and Construction, frankly stated that after the Spring Festival, housing prices in the north, Guangzhou, and Shenzhen changed greatly, and they rose too fast. The following information data can clearly reflect the price trend of first-tier cities represented by Shenzhen.

Shenzhen's property market data in January: the average transaction price of new houses was 46,515 yuan per square meter, a year-on-year increase of 74.27% and a month-on-month increase of 9.51%. In February, the property market data: The average new house transaction price reached a record high, at 48,095 yuan per square meter, an increase of 72.12% year-on-year, an increase of 3.40% from the previous quarter. In February, a total of 5,410 new commercial housing

Mengshan Zhu, College of Information and Electrical Engineering,. China Agriculture University, Beijing, Haiding, 15600929937
transactions were completed in Shenzhen, covering an area of 559,900 square meters, an increase of 172.54% and 183.24% respectively year-on-year.

On March 8, 2016, the National Bureau of Statistics released the changes in sales prices of various residential and commercial housings in 70 large and medium-sized cities in February this year. The data shows that prices in first-tier cities rose in line with the previous quarter. The city with the highest increase in house prices was Shenzhen, which led the nation’s housing prices for 15 months, far more than that of Beijing, Shanghai and Guangzhou, which soared 57.8% compared to the same period last year. Shanghai and Beijing followed closely with 25.1% and 14.2% respectively.

![Figure 1 Comparison of trends in house prices](image)

Judging from the price trends of the four first-tier cities listed in the above chart, Guangzhou's housing prices are relatively flat, Shenzhen's housing prices rose linearly, Shanghai is in second place, and there is a slight rise in Beijing's house prices. The general trend is that prices in first-tier cities are still rising, but the increase in house prices in cities represented by Shenzhen is clearly out of the normal market range and consumer psychology expectations. This article selects Shenzhen housing prices as an analysis case, trying to systematically analyze the internal root causes.

B. In-depth analysis - What happened to Shenzhen house prices?

Shenzhen house prices have always been at the forefront of the nation’s first-tier cities. In a sense, it reflects the conflict between the city’s talent concentration and urban space accommodation. The most direct manifestation is the tight supply of real estate. With regard to the analysis of the reasons for the skyrocketing housing prices in Shenzhen around the Spring Festival in 2016, relevant parties and the media interpreted it from different perspectives, but lacked in-depth systematic analysis. The rise in housing prices in a city is not accidental and involves many relevant factors.

a. Specific Analysis Methods - System Analysis

(1) Correlation analysis of economic information

System theory shows that the various factors of the incident are related. From the known information, according to known laws, or certain connections between things, making a logical or reasonable derivation, forming a certain analytical framework and logical path.

Judging from the relevant information published by online media and government agencies, the analysis of the reasons behind the skyrocketing housing prices in Shenzhen is "fragmented." There is no overall analysis model, and to a certain extent, it does not give people a correct response, even it will bring psychological impact for the potential housing consumers in the later period.

(2) Structural analysis of economic information

Structural analysis is an integral part of system analysis. The system structure refers to the arrangement and combination of various elements within the system. The same elements, different arrangements and combinations, may have completely different properties, characteristics and functions. For a complex system, we need to determine a reasonable structure.

(3) Dynamic Analysis of Economic Information

Market information is changing rapidly and economic analysis needs to establish a dynamic analysis perspective. Only by comparing and analyzing the dynamics of house prices in Shenzhen or the prices of cities in neighboring cities, can we find out the underlying laws and thus provide policy guidance for the government's macro management.

b. Causes of Soaring House Prices in Shenzhen

(1) Contradiction between population and land resources

As a foreign-type city with a population, the contradiction between population and land resources has caused high house prices in Shenzhen which remain high. The land area in Shenzhen is only 1/8 of that in Beijing, 1/3 in Shanghai, and 1/4 in Guangzhou. The built urban area has reached 48.6% of the city's land area. According to official statistics, the current household registration population in Shenzhen is 3.67 million, and the permanent population includes 10.77 million in household registration. In 2015, the actual population under management in Shenzhen reached 21 million, of which only 10% purchased only self-owned housing. The demand for housing is extremely urgent, resulting in a conflict between Shenzhen's population demand for housing and supply of land resources.

Shenzhen is a gathering place for "all-migrants" cities, adjacent to Hong Kong and Macao, limited land space, low self-owned housing, large industrial space, and young high-end talents. Under this background, the Shenzhen real estate market has a shortage of supply and demand and the contradiction between supply and demand in the short and medium-term. This contradiction may also intensify in the future and lead to continued rise in prices, reflecting the basic trend of market supply and demand.

(2) Speculative demand entering the market

This trend of rising housing prices has become more rapid after the introduction of measures to cut interest rates by banks. Many Shenzhen people are sighing that they can’t afford to buy real estate in the real estate market. They are being pushed up by higher and higher housing prices to participate in the cycle of buying houses and raising property prices. Shenzhen’s new home and second-hand housing prices began to show a decline on March 25, 2016. This indicates that the reason behind the rapid increase in housing prices in the previous period was that the demand for speculative housing has pushed housing prices to a certain extent. According to statistics, the proportion of investment in Shenzhen has increased from 10% in October 2014 to the current 25%. There are many real estate speculators in the Shenzhen property market, and it is not unrelated to the relatively relaxed policy of Shenzhen’s restriction of purchases. Some real estate speculators circumvent the purchase restriction policy through acts such as “false divorce” and “keeping house votes”.

Shenzhen’s efforts to curb investment speculation and curb excessive housing prices following Shanghai’s follow-up
have begun to bear fruit. It is estimated that with the further withdrawal of investors, the property market in Shenzhen will take the lead to cool down, and prices may drop. After Shenzhen, Shanghai, Beijing, Guangzhou and other first-tier cities and important second-tier cities will gradually stabilize prices, part of the previous price In areas that have risen too fast, prices may drop back.

(3) Rigid demand and expected decline

Since intensive control of real estate policies began in 2011, the repressed real estate consumption just needed to be released. Zheng Shulun, general manager of Shenzhen Zhongyuan Real Estate Co., Ltd. believes that Shenzhen's housing prices rose more than North Canton in 2015, which is related to Shenzhen’s economic transformation success. The financial and high-tech industries in Shenzhen have developed rapidly in recent years. The growth rate of GDP has been higher than the national average for consecutive years, and the ranking of comprehensive competitiveness has been continuously enhanced. According to Zheng Shulun, from the perspective of population, as of the end of 2015, the proportion of Shenzhen's 25-35-year-old population was 36.85%, compared with 22.35% in Shanghai. This shows that the potential buyers in Shenzhen are huge, and the annual new population also has strong purchasing power due to the concentration of financial and other industries. From the perspective of supply and demand, the land available for development in Shenzhen in the future is limited. The population growth rate far exceeds the building volume and can only be solved by stocking houses. Therefore, Shenzhen's second-hand housing market is also active.

Out of the psychological expectations of Shenzhen's high housing prices, the vast majority of Shenzhen residents are not optimistic about Shenzhen's housing prices in the future, and tend to convert future purchases into demand for advances or advances, leading to an intensified supply and demand conflict in Shenzhen's housing market.

(4) Loan Leverage

The bull market in the stock market that was launched in mid-2015 has allowed some of the most lucrative investors to convert the floating surplus to real estate, using the leverage of the real estate to lock in and magnify the proceeds. On March 2nd, 2016, Xinhua News Agency proposed the “Leverage Pusher” behind the skyrocketing prices in Shenzhen under the heading of Shenzhen's skyrocketing house prices and the "property market on levers". It began to search for and find the real “pushing hand” behind the skyrocketing prices in Shenzhen."

In fact, according to data from the National Bureau of Statistics, Shenzhen has continued to lead nationwide housing prices since April last year. Relevant research experts believe that this long-standing contradiction is not enough to support the short-term rapid rise in housing prices. The most direct reason for this round of rising is that financial leverage is at work.

In 2015, the increase in leverage of the Shenzhen property market was significant. According to data from the Shenzhen Central Branch of the People's Bank of China, as of the end of December 2015, the balance of Shenzhen's personal housing loans was 742 billion yuan, a year-on-year increase of 40.0%. For the whole year of 2015, new personal housing loans were issued at 340.8 billion yuan, an increase of 2.1 times. What is more noteworthy is that the average number of mortgages in Shenzhen is high, reaching 65% in December 2015, which is much higher than Beijing, Shanghai and Guangzhou, which is 3.2% higher than the same period of last year and is only 50% different from the maximum loan limit of 70%. This can be said to use the leverage of the loan almost to the extreme.

In addition, the industry analysts analyze the soaring price of Shenzhen housing. There is also an important promoter, that is, speculative demand is gradually entering the market, crowdfunding, P2P, down payment, high leverage or into Shenzhen. Since 2015, many “down payment” products have appeared on the Shenzhen housing market, and related loan funds can be used as the down payment for home purchases. These products were mainly initiated by internet finance platforms, micro-credit companies established by real estate agencies, and even banks involved in them, providing disguised loans for down payments.

Take the example of “down payment loan” jointly launched by Sohu and Souyi in the context of internet finance. Under the condition of unsecured loans, the “down payment” loan can be as low as 10,000 yuan, and the maximum loan can be 20% of the total housing price. The process is, the platform will be "down payment" packaged into an annualized yield of 8% to 12% of P2P products, and then for sale. There are real estate crowdfunding platforms for real estate network, investors only need to invest 1,000 yuan, you can participate in home purchase, share the proceeds in proportion. This is a way to collect the first payment, monthly payment, taxes, and property fees of houses through crowdfunding when the sponsor's funds are insufficient. The rate of return after crowdfunding reached about 70% became a major factor in attracting market consumption.

According to experts, down payment and crowdfunding purchases have broken through the mortgage loan policy that the Shenzhen down payment ratio should not be lower than 30%, and at the same time aggravated the debt-paying burden on home buyers. Once housing prices fall, these investors are more likely to cut off their housing due to low investment, which further increases the risk of bank mortgage loans.

(5) Impact of High Housing Prices in Shenzhen on Talent Flow

First, living cost. High housing prices have pushed up the cost of living for residents and it is easy to reduce the residents’ happiness index.

Second, work cost. The cost of enterprise labor escalated by high house prices has also gradually increased, which has increased pressure on companies to reproduce.

Third, business space. The expansion of entrepreneurial capital of individuals and enterprises is limited, and a considerable portion of capital has to flow to real estate purchases.

Last, personal belonging. If a city does not form a sense of identity and belonging to the city because of its high housing prices, it eventually leads to a large number of elite practitioners fleeing.
(2) The impact of high house prices in Shenzhen on the flow of talent

According to data analysis, the loss of basic talents in Shenzhen is serious. There were more than 10,000 undergraduate graduates in 2010-2013. The high salary advantage of the Shenzhen Special Economic Zone has gradually lost its appeal to talents. First of all, Shenzhen’s income has been roughly the same as that of second-tier cities in the Mainland. Second, prices of housing are high, and development opportunities, employment and entrepreneurship, and supporting facilities are the main causes of brain drain.

Although some commentators believe that the loss of tens of thousands of undergraduate graduates over the past few years is not a problem for Shenzhen, because the total amount of undergraduates is still a net inflow. However, the loss of basic talents is accelerating, and how many structural problems are still hidden in the end, or whether the problems caused by high prices are worth exploring.

Beijing’s advantages are self-evident. Shanghai is an economic center that is doing its part. Although Guangzhou’s GDP is comparable to that of Shenzhen, Guangzhou’s cultural and educational atmosphere, educational standards, and medical services are slightly better than those in Shenzhen, and prices are slightly lower. Of course, Shenzhen does surpass Guangzhou in the financial and other fields, but for practitioners in other industries, life and work have always been a comprehensive cost consideration. There is no doubt that the prices of deep-marked property will continue to soar, and the cost of innovation and entrepreneurship will increase. The government will need to intensify efforts to control and reduce the threshold of innovation and entrepreneurship.

A very analytical model of analysis is the price-to-wage comparative analysis model. The 2015-2016 Guangdong Region Salary Survey Report covers 318 positions in 34 industries. In terms of salary rankings, Shenzhen has maintained the top position for three consecutive years, with an average monthly salary of 7,631 yuan. In the past three years, the average monthly salary in Shenzhen has only increased by 411 yuan, or 5.7%. In the past three years, Shenzhen’s housing prices have risen by 16,498 yuan, and house prices have risen by 13 times the increase in wages. This situation will have a great psychological impact on the flow of talent in Shenzhen, leading to the migration of talents to Shanghai and other surrounding cities.

C. Suppression measures

For the price control of first-tier cities represented by Shenzhen, there are universal policy setting and adjustment issues. However, because of the particularity of Shenzhen’s skyrocketing house prices, controlling irrational price increases in Shenzhen should start with the following aspects:

a. Implement strict purchase restriction policies

As early as September 2010, Shenzhen Municipality established a “restriction order”, and one of the three conditions must be fulfilled for the purchase of a house in Shenzhen, that is, a Shenzhen account, or a social insurance payment in Shenzhen for more than one year, or a personal income tax payment in Shenzhen for more than one year. The “tax bill” of the “business model,” which does not have the conditions to purchase homes, began to form false certificates in real estate companies and was subject to judicial penalties, but with little success. Driven by interests, a long-term operation of the black interest chain, including the registration of intermediary, local tax, and real estate rights, including social security, dismembered the government’s “order of purchase restriction”, resulting in the mere existence of a “restriction order” in many places. Therefore, controlling housing prices in Shenzhen first requires strong government supervision.

b. Increase land supply area

In view of the hard constraints on land supply in Shenzhen, the Central Government and Guangdong Province are very much in favor of the expansion of Shenzhen's development space, including 55 square kilometers of land reclamation and about 50 square kilometers of land preparation, which will provide Shenzhen with space for development and real estate development. Moreover, these supply areas must promptly release information to the community in order to stabilize market confidence and stabilize the people. This should be an important task that the Shenzhen government should embark on in the coming years.

c. Increase the supply of small and medium-sized products

"Destocking" and market differentiation constitute a unique and puzzling landscape for the 2016 real estate market. As far as Shenzhen is concerned, the supply of affordable housing for talent is far from meeting market demand. The government needs to provide more small and medium-sized housing for Shenzhen's talents in the coming years to ease the contradiction between supply and demand.

d. Implementing Classification Control

In order to crack down on illegal and irregular behaviors in various trading processes and correctly guide public opinion, the government must take the initiative to speak out to curb the housing bubble. The “325 New Deal” and second-hand housing prices were raised and other measures were taken. The municipal government's primary measures for classified control have gradually emerged. These macro policies have increased the threshold for home buyers, and have also imposed strict restrictions on foreign investors, and their regulatory role is obvious. What echoes this is that the volume of new homes in Shenzhen fell for 5 consecutive weeks. The industry believes that after the various regulatory policies have been landed, the skyrocketing house prices will be curbed in the short term.

Analysis of the Central Plains Research Center in Shenzhen said that since the “325 New Deal,” the speed and volume of new housing entering the market have fallen more than before, and the market has cooled significantly. “Predicting that the first-line property market will enter the adjustment stage in the future, the new housing market volume and trading volume will continue to be low.”

III. EXPERIENCE AND INSPIRATION

In the Spring Festival of 2016, house prices in Shenzhen soared. In the same period, Hong Kong's housing prices plummeted by 30%, forming the main topic of talks. Although there is a lack of comparability with the situation in Hong Kong, the cooling of the market after the “New Deal of 325”
left people with many thoughts. Is it market failure or government failure? Or is the irrationality of residents expanding overnight? This article summarizes the following three dimensions.

A. Government
In response to the skyrocketing housing prices in Shenzhen, the Shenzhen government's supervision has lagged behind, but the changes in the market after the 325 New Deal show that the government should intervene in time when the market is out of order, and that it can help the market. Such as strengthening financial supervision, strictly controlling the scale of credit, expanding land space, expanding the protection of housing, combating speculation in real estate, repairing market failures, and cracking down on investment in real estate. The government should understand the scope and boundaries of its own functions and maintain Shenzhen's house prices in a reasonable range.

B. Market
The market is not everything. The skyrocketing housing prices in Shenzhen have apparently escaped the normal track of market operations and require government intervention to maintain a normal market order. On the other hand, housing prices are determined by the market's supply and demand. In this sense, housing prices in Shenzhen must ultimately be determined by the supply and demand of the market, but not by the government, causing government failure.

C. Residents
Residents are the main body of real estate consumption. Residents' consumer preferences, spending power and consumer expectations have a certain impact on a local real estate market. Under the background of tighter land supply and population resources in Shenzhen, it is crucial for residents to rationally consume or hold good social and psychological expectations. However, in terms of the talent itself, the development of Shenzhen is based on high technology, finance, logistics, and cultural industries as the pillar industries, of which high-tech focuses on new energy, biomedicine, and the Internet industry. These industries are all technology-intensive, creative-intensive and highly innovative industries. They need to absorb a large number of innovative talents, especially a large number of young talents. If house prices are too high, they will directly push up the cost of living for these talented people to stay in Shenzhen and innovate. They will also greatly increase the cost of doing business for entrepreneurial companies. They are not conducive to attracting talented people to innovate in deep entrepreneurial ventures, and are not conducive to the settlement of innovative start-up companies. Shenzhen.

The main body of Shenzhen's social innovation is enterprises and individual entrepreneurs, but in the end it is innovative talents, and high house prices are a major obstacle to retaining innovative talents. Too high house prices make the process of profiting capital too simple, attracting a large influx of speculative capital, and rushing to eat the funds of industry, thus diverting the funds of innovative enterprises and influencing the competitiveness of cities.

REFERENCES

Mengshan Zhu College of Information and Electrical Engineering,. China Agriculture University, Beijing, Haiding, 15600929937