

# Research on Market Sentiment and Housing Price Fluctuation from the Perspective of Behavioral Finance

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**Abstract:** *Academics focus on economic subjects' bounded rationality behavior owing to the 'rational man' hypothesis in traditional economics. Methodology in behavioral research helps in explaining a number of modern economic phenomena and thus research on market sentiment has been a hot topic in the economics field. From the perspective of behavioral economics, this paper builds the theoretical model of the effects of real estate sentiment on housing price fluctuation and explains the typical behaviors in the housing market, and discusses the mechanism of the impact of market sentiment on commercial housing price fluctuation.*

**Keywords:** Market Sentiment; Behavioral Economics; Commodity Housing Market

## 1. Introduction

As the highly correlated foundation industry of the national economy, and real estate is the prop and guarantee for regional economy and various social businesses. Housing prices have the large effect whether for household consumption and portfolio, or for the macroeconomic stabilization. Since the late 2016, the Chinese government has proposed a new conception: *Houses are used to live in, not to be used for speculation*. Then some relevant departments introduce a series of regulatory policies in a bid to reign in soaring housing prices. Therefore, housing prices fluctuation and its causes has becoming a core research topic in real estate economics, and is increasingly the focus of policymaker's attention as well. Other studies are heavily weighted toward macro economy and national policies when they analyze the housing prices fluctuation.

However, there's been some strange phenomenon in commercial housing market for the past few years, such as the upward trend of house prices continue in spite of insufficient effective demand, the demand of commercial housing is in sync with the amount of house price, the co-existence between the high housing price and high housing vacancy, etc. What's more, traditional economic theory has feeble explaining power to some behaviors such as over speculation, noise trading and herding. Thus, it has become one research focus in the field of market sentiment.

The facts that microcosmic subjects of real estate market, especially buyers are vulnerable to personal feelings or other's perspectives when they make the decision of home buying are easily be overlooked. When house buyer experiences uncertainty, they prefer to make judgement based on limited information. And their judgments, emotions and expectations are not the response of market, but the backbone of the construction of market sentiment and so gives rise to urban housing price fluctuation.

In view of this background and condition, this paper mainly starts with the actual situation of Chinese housing market, discusses all psychologies and behavioral biases of market subject systematically on the basis of the theory of behavioral finance, and at last draws a conclusion that the inter-dynamic relation is strong between market sentiment and commercial housing price fluctuation. The study provides insight into explain the features commercial house price fluctuation and changes in practical society.

## 2. Literature Survey

In recent studies, Salzman and Zwinkels (2013) summarized the cognitive limitations and behavioral biases of home buyers into the following types: over-optimism, over-confidence, confirmatory bias, herding behavior, irrational exuberance, regret, money illusion, mental accounting, loss aversion, home bias. Research pointed out that the viewpoint of new classicalism based on the hypothesis of perfect rationality actually is not true. DENG Guoying et al (2018) found that There is a certain extent of overreaction in the real estate market.

The results have revealed that there are lots of players who are restricted by some intrinsic factors with bounded rationality in real estate market. Besides, in recent years, many scholars have attempted to take "animal spirits" or near-rational expectation as explanatory variable of housing price volatility based on the behavioral financial theories (Case et al., 2012; Wang and Hui, 2017). That distinguishes them from rational expectation hypothesis, and build the framework of near-rational expectation of behavioral finance to explore the influencing factors of urban housing price fluctuation from the angle of the bound rationality of players. Hui et al (2017) constructed the buyer-seller sentiment indexes of Shang Hai housing market and developer sentiment indexes from 2006 to 2017, and researched the dynamic influence and the impact effect of housing market sentiment to investment returns. Zhao Wei

et al (2018) had an experimental test and analysis about dynamic trend between media coverage and house price fluctuations. The empirical results show that: media sentiment has a different mode of mechanism from media attention for housing price fluctuations. Zheng shigang (2019) using the empirical analysis, found that heterogeneous beliefs has positive impacts on the level strategic flexibility. No matter how people's expecting, heterogeneous beliefs would fuel a rapid growth in house prices.

From existing literature, research of the relationship between psychological and behavioral factors of market players and housing price fluctuation is not much. At present, China is in the period of economic transition, real estate market is undergoing profound institutional changes and government intervention. Housing market participants' psychology, feeling and decision play a very important role in housing price fluctuation. Therefore, it is necessary to do deep analysis on the relationship between market players' sentiment and the volatility of China's housing price.

### 3. The behavior analysis of commodity housing market

The paper summarizes some actual performance market sentiment affecting the commodity housing market to demonstrates the market sentiment is surely influence on real estate market.

#### 3.1 Homebuyers behavior analysis

##### 3.1.1 Buy in rising and not buy in lowering

Consumers are more likely to buy houses when house prices are going up, and stay on the sidelines when falling. But it goes against the concept of buy low sell high. In case of wiping off inflation influence, commercial housing as a commodity, its price fluctuates should remain within a reasonable range for a long time. In reality, its price fluctuates always deviates from this range, are inextricably linked with consumers behavior that they always buy when the housing prices are going up instead of going down. In commercial housing market, consumers' purchasing decisions mainly depend on their subjective judgment of housing profit and loss, so reference point for profit and loss is expectation for property prices.

Under the influence of the long-term uptrend of housing prices, Consumers' reference points for house prices continue to rise. They think the gains from buying now are growing so that More and more people are joining in. At this moment, those who lack of information mainly get resources from observing others behavior. When they realize more and more people join in the team of home buyers, they easily generate a kind of impatience and the mind of conformity, which cause herding. On the contrary, the reference point for people's expectations about house prices has been falling in a situation of falling prices, so their interests will be imperiled for buying into. So when real estate prices are falling, trading volume continues to decline, and then house prices fall further. Finally, more and

more people drop out of the ranks of home buyers because of "herd behavior", which is the phenomenon: *"Buy in rising and not buy in lowering"*.

##### 3.1.2 Judgment based on neighborhoods price

When consumer is buying commodity housing, they are unable to carry out a comprehensive and reasonable analysis for commercial housing price. However, they tend to refer to the transaction prices of second-hand houses or new houses in the neighborhood. If commercial housing price is lower than the surroundings, most of them will think that the price is reasonable. On the contrary, they will think the price is on the high side. Customers lack comprehensive evaluation on the quality of commercial housing, community environment and property level, so that their psychological prices do not effectively reflect the real price. From the perspective of behavioral economics, this behavior of consumers can be interpreted as "heuristic cognitive bias".

##### 3.1.3 Follow the trend to snap up commercial housing

In the sales process of commercial housing, there are often two extreme cases. One situation is, few customers go to the sales department to buy a house, another is consumers line up all night, the house sold out in a short time. These commercial properties that lead to panic buying are often not the lowest price or not of the best quality, but can sell well. This is mainly related to the developer's marketing strategy, such as keeping land unused, property hoarding, and price rigging. Real estate developers send a signal to consumers that housing is in short supply, which leads to irrational decisions of consumers.

#### 3.2 Real estate developer behavior analysis

##### 3.2.1 Property hoarding

Property hoarding is a sales strategy for developers. In an optimistically expected real estate market, many buyers are flocking. Developers use hunger marketing by reducing the number of houses being sold, so there are fewer available houses on the market than before, causing a spike in housing price.

In some areas, buyers even queue at midnight and further increase prices, further raising prices. Of course, in market transactions, developers can choose to sell or not to sell, which depends on developers' judgment and expectation of market development. But once the choice is made, the developer will bear the resulting risk independently.

##### 3.2.2 Buying land at a high premium

Driving in the massive amount of funds, the current high prices of listed companies has emerged with the irrational tendencies. From the perspective of reality, there are emotional characteristics in the behavior of housing companies. When marketing is in development, the proportion of investment speculative housing purchases expanded rapidly during the market boom. The proportion of investment property purchases expanded rapidly during the market boom. In the face of favorable policies and

rising market sentiment, real estate developers have taken up land at high premiums, and increased financial leverage to pursue scale expansion. These behaviors show people's overconfidence in the market, which has significantly promoted the short-term prosperity of the housing market. When the herd effect occurs in the commercial housing market, the market subject's cognition and decision-making are irrational. There will be a collective fallacy that buyers chase the winner cut the loser and developers slow down investment and reduce supply. As a result, the stable operation of the housing market is disrupted, and market variables such as real estate prices, transaction volume and investment amount will fluctuate violently.

### 3.3 The theoretical mechanism of market sentiment affecting commodity housing market volatility

According to the study and discussion above, this paper summarizes the path of market sentiment affecting the residential market as follows: Market sentiment is mainly affected by supply-side sentiment. Firstly, under the policy framework of the central government, local governments implement land finance. Developers make housing price expectations by judging land prices, and then make adjustments to the new home prices. Afterwards, the price of new housing will affect the individual's decision-making on house prices. And through the interactive transmission of individual emotions to affect group emotions, new housing market prices fluctuate when are affected by these factors. Finally, it affects the main buyers of second-hand housing transactions, and triggers price fluctuations in second-hand housing transactions.

In short, market sentiment affects the psychology and behavior of both sides of the supply and demand, and affect their decision-making, and then transmit to the commodity housing market through the supply and demand mechanism, affecting the fluctuation of housing prices.

## 4. Conclusion

This paper concluded that commodity housing market is not the economic sense of "effective sense of "effective market". First, the market sentiment influences the operation of commodity housing market significantly, and the demand subject's sentiment is more significant than that of the supply subject. What's more, the supply subject's sentiment shows a significant "demand-oriented" feature. Beyond that, commodity housing market and other environmental factors in turn have a significant impact on market sentiment. In the end, the paper proposes a suitable way of guidance, on the one hand, homebuyers should pay attention to the role of sentiment factors in the commodity housing market, and avoid the cognitive bias of home buyers, thereby reducing the irrational behavior for the healthy development of the real estate market. On the other hand, developers should adjust their strategic plans according to changes in market sentiment, grasp the timing of land acquisition and development, and better manage expectations, thereby reducing risks and maximizing the

return on investment.

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