Correlation Analysis Housing Prices and Regions in Shanghai

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Abstract. Most existing house price index construction methods are developed mainly based on transaction data from the secondary housing market, and are not necessarily suitable for the nascent housing markets where a predominant portion of housing transactions are in new units. We evaluate and compare the performances of three most common house price measurement methods in the newly-built housing sector, including the simple average method without quality adjustment, the matching approach with the repeat sales modeling framework, and the hedonic modeling approach.

Introduction

With the rapid economic development, the real estate industry has become a pillar industry of China's national economy. Excessive growth of house prices not only affects the standard of living, but also the entire national economy sustained. Steady and rapid development has brought instability RATES livelihood a hot topic. It has great significance on the price forecast. Housing problem can be seen as a high degree of complexity, uncertainty, nonlinear, dynamic, open complex giant system, which is not only affected by economic, political, but also by people's behavior, psychology, decision-making, and many other random non-quantifiable factors related.

Shanghai real estate market supply and booming form a strong momentum, real estate development and sales hit record highs, the Shanghai housing market ushered in the "rebound." In contrast, levels of disposable income and purchasing power of urban residents did not follow "gone." Thus, prices of supply and demand have become the focus of mutual concern. On the one hand: high investment in real estate development, high-risk, forcing developers must be timely, accurate grasp of market information, grasp Rate trends, in order to make scientific decisions, benefits or reduce the risk; on the other hand: the majority of buyers can only understand the future trends in house prices. It would make a rational choice, avoid blind panic buying and developers of malicious speculation caused unnecessary economic losses. At the same time, stabilize the real estate market is the bounden duty of the government. Visible, scientific RATES forecast supply and demand sides, and government responsibility has important theoretical and practical significance.

Average House Prices in Various Regions of Shanghai Analysis

And we have made an analysis of the highest regional average price of Shanghai and the outcome (Figure 1 Average Rate Highest Value of each Area Shanghai). Pudong New Area, with 170,000 high among the best. The high price of Huangpu District with 13,500, is followed by the small gap between the back of the Jingan District, Xuhui District, Zhabei District, and Changning District.
In contrast, the lowest average price of Shanghai our team to do the analysis for each region and the outcome (Figure 2. Average Rate Lowest Value of each Area Shanghai).

We easily found that The lowest average house prices in Huangpu District ranked first with 37,500. We will compare Figure 2 and Figure 3 and conclude: Huangpu District and Jing'an District, Hongkou District, the gap between the highest housing prices in Pudong New Area and the Xuhui District and the lowest price is not, and whether it is the highest average price was the lowest average price is below the high-priced area.
K-means Clustering Method based on Analysis of the Regional Rate Shanghai

We will use a code to each district represented by k-means clustering method to data for each region based on the average price is divided into three categories (Figure 3. K-means Clustering Method).

These three types are reds, blues and greens to represent. The reds stand for high-priced category, blues represent acceptable range category, greens represent the low-cost category. This is more humane data into three categories, so we can easily identify the various regions Rate Shanghai, give us more informed purchase strategy.

Summary

Our analyses suggest that the simple average method fails to account for the substantial complex-level quality changes over time of sales during our sample period, and the matching model fails to control the effect of developers’ pricing behaviors when adopted in the newly-built sector, hence both are downward biased. Based on this finding, we apply a hedonic method, which allows us to control for both quality changes over time of sales and developers’ pricing behaviors. The new index reveals that the current Chinese housing market is facing a great risk in pricing.

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References

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