

The Impact of Foreign Direct Investment on China's Housing Prices

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ABSTRACT

Nowadays, the real estate industry in China can be referred to as an unique economy leading industry. Due to the rapid development of our country's macroeconomic environment and urbanization process, this makes the real estate market develop very fast, apart from this, the relationship between the overheated investment in real estate market and the excessive and rapid increased price of real estate has become a hot topic of concern for all sectors of society. This article mainly conducts in-depth research on the impact of foreign direct investment on housing prices in China through theoretical and empirical analyses. Through the multiple regression method and adopted the annual data of 2010-2019, analyzed the influence of foreign real estate investment on our country's real estate prices. The results show that foreign direct investment is positively related to house prices. Finally, It can be concluded that foreign direct investment will increase our country's housing prices, and corresponding suggestions are made in three aspects: laws and regulations, regulatory mechanism, and early warning mechanism related to real estate and foreign direct investment according to China's national conditions.

Keywords: *Housing prices, Foreign Direct Investment, Multiple regression model*

1. INTRODUCTION

At present, in China, the real estate industry is the economy leading industry, and it's very important in the social economy and people's life; in addition, many industries are closely related to the real estate industry, so if there are any change in the real estate industry, it will also directly impact other industries and affect the security of the whole national economy. Therefore, the impact of various factors on the real estate industry is getting more and more attention from people inside and outside the industry.

In recent years, China's real estate industry continues to open up to foreign countries, and a large amount of foreign capital has been invested in China's real estate industry, and the foreign capital scale and influence in China's real estate sector has been gradually expanding. Meanwhile, China's real estate investment, prices, and commercial properties prices are all growing rapidly. Based on this, some real estate developers and even experts and scholars attribute this to FDI and argue that foreign investment must be regulated to promote market stability.

However, although FDI in China has taken an important place in international capital flows and more research has been done on FDI, very little research has been done on FDI in the real estate market. It can be obtained that it has great practical significance to research the impact of FDI on China's housing prices.

This paper will explore the influence of foreign direct investment on China's housing prices, in addition to, conduct an empirical analysis based on qualitative analysis with relevant data. The main content of this article includes: section2 reviews literature; section3 establishes a multiple regression model and derives the results in section4; eventually section5 draws conclusions and recommendations on this basis.

2. LITERATURE REVIEW

In general, foreign direct investment is positively correlated with house prices. With the rapid development of China's international trade, a large amount of foreign investment has been cited in China's real estate market. Therefore, based on this phenomenon, many concerned people will worry about that foreign investment may cause the consequences of China's real estate market overheating [1]. Based on industry

distribution, the real estate industry has steadily ranked as the second-largest industry attracting FDI in China, second only to manufacturing [2]. The influence of whole FDI in the real estate market and FDI utilized for real estate growth on real estate prices in China were systematically analyzed and the correlation between total FDI and the Chinese real estate prices was found to be very high [3]. By analyzing the characteristics and changing trends of foreign direct investment in China's real estate market and an empirical analysis, it can be concluded that foreign direct investment can actively and effectively promote the prices of China's real estate industry [4]. Foreign investment has played a key role in China's rising housing prices, for example, in Beijing and Shanghai, and seven areas in Eastern China [5,6]. In addition, there is a causal relationship between RMB appreciation expectations and house prices; RMB appreciation expectations are the causative factor, the massive influx of foreign real estate investment is the push, and rising house prices are the result [7]. Conversely, housing prices affected real estate investment. And real estate prices have a positive impact on foreign real estate investment in British, and it has a statistically significant correlation [8].

3. ANALYSIS MODEL

3.1. Model Establishment

This paper investigates the effect of exchange rates on house prices by developing a multiple regression model:

$$P_t = \beta_0 + \beta_1 FDI_t + \beta_2 S_t + u_t \quad (1)$$

Where t represents different year times; P_t , denotes the Chinese commercial housing's average selling price in year t , which is the explanatory variable of this study; FDI_t , denotes foreign direct investment in China in year t (in billion dollars), which is the key explanatory variable of this study; S_t , denotes the sales area of commercial housing in China in year t (in square meters), which is the other explanatory variables; and u_t , is the random error term.

The data information used in this article are all from Chinese National Bureau of Statistics' official site from 2011 to 2020; the variables are selected for the time interval from 2010 to 2019, a total of 10 years. For the reliability of the data, annual data of each variable in China will be used for this paper; due to the excessive values of each variable, the variables will be logarithmically processed. Thus, equation (1) adjusts to equation (2):

$$\ln P_t = \beta_0 + \beta_1 \ln FDI_t + \beta_2 \ln S_t + u_t \quad (2)$$

The descriptive statistics of each variable are shown in the table below.

Table 1. Descriptive statistics of all variables

Variable	Obs	Mean	Std. Dev.	Min	Max
Average sales price of commodity houses (lnP)	10	8.82	2.20	8.52	9.14
Foreign direct investment (lnFDI)	10	7.19	0.12	6.96	7.38
Sales area of commercial houses (lnS)	10	11.81	0.20	11.56	12.05

3.2. Variable Selection

In this article, the Chinese commercial housing average selling price is explanatory variable, and foreign direct investment is key explanatory variable. The profit-seeking and speculative nature of capital make foreign direct investment invest real estate, and the purchase and speculation of housing. This directly stimulates the increase of demand in the short term, which will directly trigger the rapid rise of commodity house prices and residential prices in the real estate market with little change in supply. At the same time, due to the massive influx of foreign capital, will promote the proportion of domestic consumers to purchase homes over the extraordinary growth, many domestic private funds have also followed the wind into the market, further promoting the domestic real estate

prices rising continuously and bubbles' becoming. The rise in housing prices has attracted the inflow of foreign capital, entering a cycle of foreign capital entry - rising housing prices - foreign capital entry - rising housing prices. When the price rises to a certain extent, the outflow of foreign capital will have a great impact on the real estate market, and the real estate bubble can easily burst because of this. In addition, foreign speculators selling domestic properties will intensify market panic, interfere with the intention of domestic speculators' actions, causing greatly affecting of the real estate market price. The Japanese real estate bubble's emergence and bursting inextricably linked to the inflow and withdrawal of foreign capital, which should be taken as a lesson.

In addition to foreign direct investment, this paper also needs other control variables - the area of

commercial housing sales. The sales area of commercial housing has a very direct impact on its average selling price, which means that the larger the area of houses, the higher the price of houses.

Through the above analysis, the signs of the estimated quantities of the explanatory variables are predicted: the signs of foreign direct investment and commercial house sales area are both positive, which

means that foreign direct investment and commercial house sales area increase and house prices increase.

4. EMPIRICAL RESULTS AND DISCUSSION

This article adopted Stata 16 econometric analysis application to conduct the regression analysis. The following are the results.

Table 2. Multiple regression analysis results

Variable	Coefficient	Std.error	t-Statistic
Constant	-3.90646 ^{**}	1.168786	-3.34
Foreign direct investment (lnFDI)	0.257429 ^{**}	0.1061364	2.43
Sales area of commercial houses (lnS)	0.9216687 ^{***}	0.0972598	9.48
R-squared	0.9487		
Note:(^{**}) means 5% grade of significance, (^{***}) means 1% grade of significance .			

Combining the above regression results gives an overall analysis of the model estimation results. For China, foreign direct investment (FDI) and commercial property sales area move in the same direction on house prices, as expected. And the explanatory strength of this model is very strong.

Foreign direct investment (lnFDI), as the key explanatory variable of this paper. From Table 2, the estimated amount of foreign direct investment is about 0.26. This indicates that for every 1 unit increase in foreign direct investment, the house price increases by 0.26 units. At the same time, FDI passes the 5% significance level, which indicates that the effect of FDI on the basic selling price of commercial housing is more significant.

The area of commodity house sales (lnS), is the control variable of the empirical study in this paper. From Table 2, the estimated amount of commercial house sales area is about 0.92; this indicates that when each unit of commercial house sales area increases, the house price increases by 0.92 units. At the same time, the sales area of commercial houses passed the 1% significance level, which indicates that its effect is very significant.

5. POLICY RECOMMENDATIONS FOR CHINA

Nowadays, China's economy is very prosperous, and have accelerated the pace of market opening, FDI will continue to enter China, which requires the Chinese government to further guide FDI investment to make it more conducive of Chinese real estate. This paper concludes the impact of the above-mentioned FDI - based economic indicators on housing prices, and accordingly proposes the following policy recommendations.

First, the laws, regulations and policies related to real estate should be clarified. The legislation related to China's real estate industry is still incomplete and lacks legal provisions for foreign direct investment in real estate, and this makes it easier for international investment to enter the real estate market on a large scale. Under such circumstances, the Chinese government should introduce clear policies and regulations that are in line with China's national conditions as soon as possible, so that foreign direct investment can be based on the law and guide the flow of foreign direct investment. Effectively limit the negative influence of foreign investment on Chinese real estate, and play its favorable role; speculative and investment purchases should not be confused and completely suppressed. Reasonable guidance on the direction of foreign direct investment can only make the improvement of real estate market more perfect.

Then, improve the management of foreign direct investment access to curb speculation. China should pay attention to the influence from foreign direct investment and forbid foreign direct investment enter China's real estate without restriction. The following specific measures can be taken: (1) Market access approval for foreign-owned real estate enterprises and intermediaries should be strengthened while utilizing foreign direct investment, and the proportion of registered capital of foreign-owned real estate enterprises in the total investment should be increased. (2) Increase restrictions on speculative purchases of real estate by foreign direct investment in order to encourage real demand for housing and curb speculative speculation. (3) To increase the cost of speculation by foreign funds in the real estate industry by imposing a corresponding tax on the purchase of mainland commercial properties by foreign capital that is transferred within a certain period of time.

Finally, establish a monitoring and early warning mechanism for foreign direct investment. It would be best if the relevant departments make joint efforts to effectively change the current problems of imperfect policies, inadequate management and unclear bottom line related to the inflow of FDI into the real estate market. Strengthen statistical monitoring and analysis, establish a more complete system, that is, foreign investors need to register when purchasing real estate, and can understand the specific capital flow in the system. Improve the risk indicator system and establish an early warning system for the market in all aspects from exchange to transaction.

6. CONCLUSION

The results of this paper show that foreign money invested and the selling area of commercial houses are positively proportional to the house price, and accordingly conclude that the influence of foreign money invested at average sales price of commercial houses: without considering other factors, in general, foreign direct investment has a great impact on the average selling price of commercial houses, and housing prices have a positive relationship with foreign direct investment and fall as FDI decreases. The limitation of this paper is that only one other explanatory variable, the area of commercial housing sales, is considered; in reality, there are many other factors that affect house prices. For example, the implementation of property tax should have a dampening effect on the increase of house prices, and the change of interest rate also affects the level of house prices.

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