

# A Hidden Price Floor in the Chinese Real Estate Market

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## Abstract

**Rising prices of real estate in China has always been a social concern. The urbanization, limited investment, and an existing speculative bubble in the market boosted the demand for real estate, while the high land acquisition costs, regulative policy and tax housing property and land uses taxes shrank the supply for real estates. To compensate with the costs, real estate developers set a price that is above equilibrium, which forms a hidden price floor in the market. Possible solution will be to encourage housing rentals to lessen the burden on real estate developers as well as to reduce the huge demand for real estate purchasing.**

## Keywords

**Chinese Real Estate ;Market;Demand; Supply.**

## 1. Introduction

The rising prices of real estate have ignited a social concern in China. Key drivers to such a tendency include rapid urbanization, limited investment vehicles, restrictions on land sales, and increased land acquisition costs. On one hand, such tendency boosted the nation's GDP and promoted economic growth. On the other hand, it brought up concerns about affordability and market disequilibrium. Also, if the prices of real estate ever collapse, it will be disastrous to the nation's economy since 80% of homes in China are privately owned. (Hui & Ng, 2009)

On the demand side, the urbanization leads to a greater number of buyers for real estates. Also, the limited investment options gather more and more investors in the market of real estate. Bubbles also exist in the market and lead to a price of real estate that is unnecessarily higher than the assets' intrinsic value.

On the supply side, the huge land acquisition costs created by land auctions by local governments as well as increasing tax rates on housing properties lead to a hidden minimum price in the real estate market for real estates' developers to gain profits. Besides, the restrictive and regulative policy on real estate market set a limit on supply.

The hidden minimum price is an invisible price floor that is set on the market. Even though the demand for real estate increases due to urbanizations and investments, the high minimum price becomes a barrier for the buyers to purchase the real estate. The market is currently in a disequilibrium surplus situation.

## 2. The Demand for Real Estate

### 2.1. The Increase in the Number of Buyers

One factor that influences the demand is rapid urbanization, which refers to people moving from rural areas to the cities. By 2008, in China, there were 45.7% of people living in urban areas, compared with the percentage of 19.8% back in 1980. The number is still rising, and it is expected that by 2020 the urbanization rate will reach 60%. (Guillaume & Guillaume, 2009) Urbanization increases population in cities and the number of buyers in the real estate market, which leads to an increase in demand. Another factor is assets investment. Limited investment vehicles gather a great number of investors and thus, more buyers in the real estate market

(Gabrieli, Pilbeam & Wang, 2017). Therefore, the demand for real estate will shift to the right (outward).

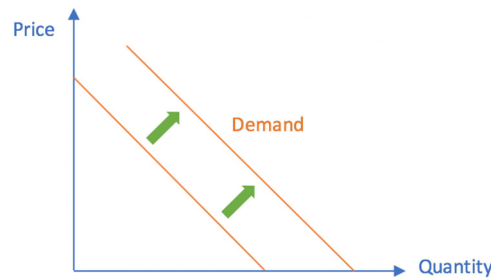


Figure 1. Effect of urbanization and investment on real estate demand curve

## 2.2. Speculative Bubble

In addition, a speculative bubble exists in the market. A speculative bubble refers to trade in assets at a price that strongly exceeds the intrinsic value of the assets. The initial increases in demand provide positive feedback to buyers and attract more investors who think the prices will rise further and stock more of the assets. This leads to further rounds of increases in demand and a price that is unnecessarily higher than the assets' intrinsic values.

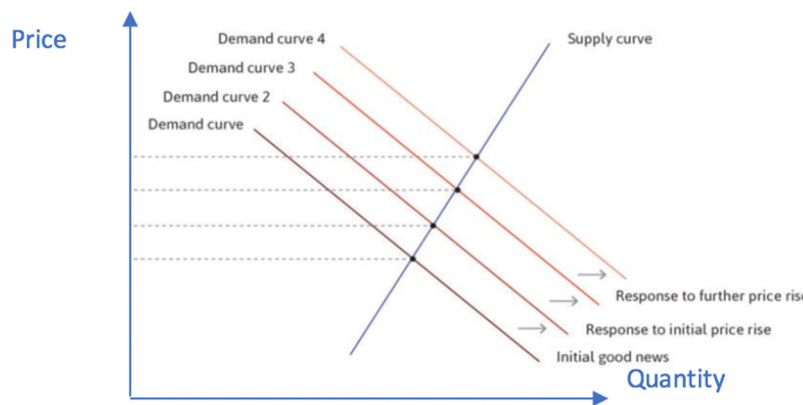
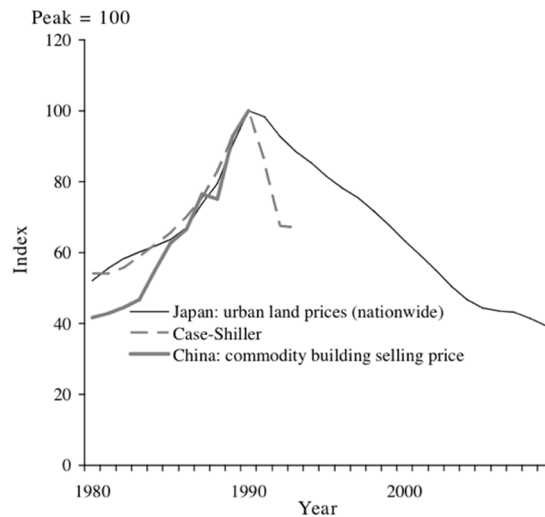
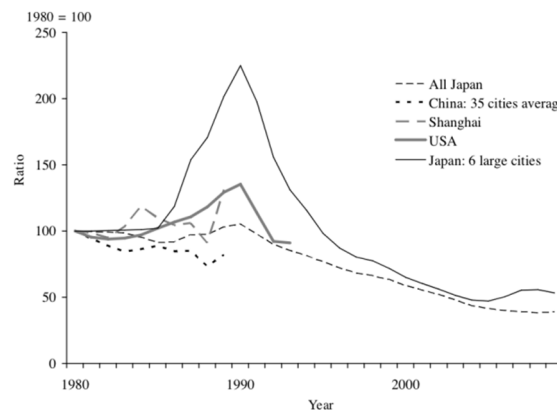


Figure 2. Effect of Speculative Bubbles on real estate demand curve

Similar speculative bubbles also existed in the market of Japan during the 1980s. The two countries' property prices had extremely similar increasing trends back to then. And the property-income ratios were high especially in the large cities for both countries, implying the urban bubble phenomenon. (Ueda, K., 2011)



**Figure 3.** Property prices index of Japan and China



**Figure 4.** Property price-income ratio in Japan and China

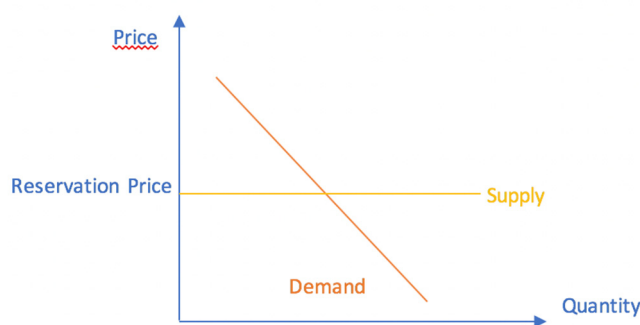
In conclusion, as the result of rapid urbanization, limited investment options, and the speculative bubble in the market, the demand for real estate displays a rising trend.

### 3. Supply of Real Estate

#### 3.1. Market of Lands

As natural scarce sources, lands are supplied constantly at a certain amount. In this case, however, the lands refer to those sources that are controlled and managed by the governments. The number of lands that the governments are willing and able to supply and sell can vary. The Central government intends to increase the supply of land and provide more low-income housings by imposing “National Six” and “National Eight”. The “National Eight” emphasized the responsibility of local governments to control the property price and increase land supply, while “National Six” focused on encouraging more supply of affordable housings and raising down payment for large-sized housings. However, the local governments have few respond to these regulations. (Li & Chiang, 2012)

To gain more income, the local governments limit the land supply, which leads to a higher price of land. Instead of offering more lands for cheaper housing, local governments auctioned some of the lands for commercial and residential usage. In the auction, a reservation price, which refers to the minimum price that a seller is willing to sell the item, needs to be attained for the sales of land.



**Figure 5.** Effect of auction on market of lands

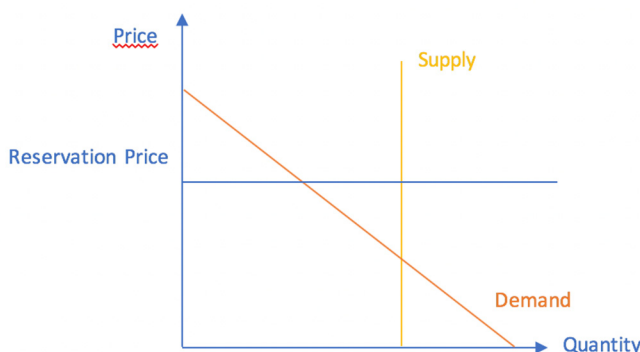
The auction increases the price for the land. In order to compensate the costs for land, real estate developers tend to stock more lands to achieve higher selling price, which increases the demand for land. Governments also have restrictive and regulative policies on land supply, which limit the supply of land further. Both factors lead to a higher price for the land. (Li & Chiang, 2012)

### 3.2. Supply of Real Estate

Due to the limit supply of lands, the supply of real estates is limited as well. To compensate with the high land acquisition costs, real estate developers need to raise the house prices, which means to set a property price that is higher than the equilibrium price.

In addition, the taxes imposed on housing properties increased from a rate of 3.24% in 2003 to a rate of 6.8% in 2008, and the taxes imposed on urban land use increased from a rate of 0.92% in 2003 to a rate of 8.17% in 2008. (Pheny & Wong, 2011) The higher tax pressures forced the real estate developers to charge more on the housing properties, and, therefore, led to higher housing prices.

## 4. The Market of Real Estate



**Figure 6.** Markets of Real Estate

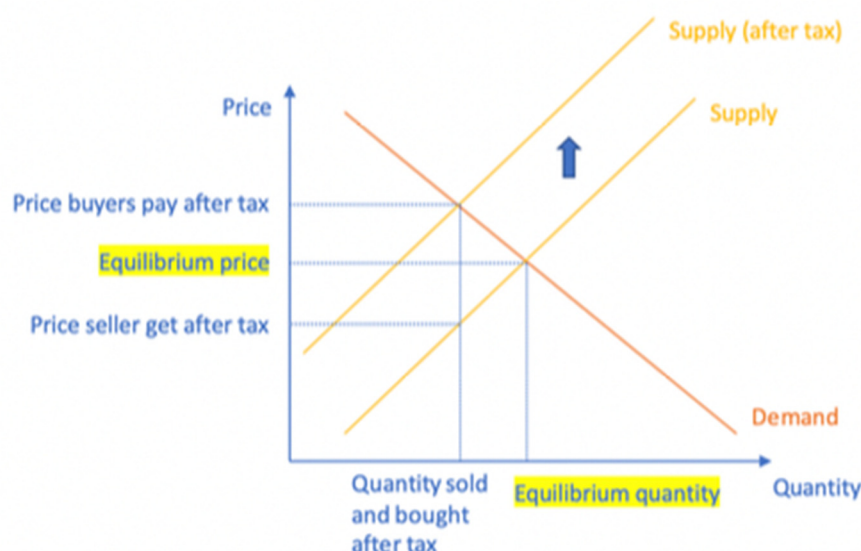
The price real estate developers set to compensate the land acquisition costs is above the equilibrium costs, which forms a hidden price floor in the market. Even though the demand increases due to several factors including urbanization, assets investment, and bubbles, the

unnecessarily high prices for housing still causes a surplus situation. The market is now in disequilibrium and optimal efficiency is not achieved.

## 5. Possible Solutions

One possible solution will be to encourage housing rentals. To conduct this solution, the governments need to create incentives for real estate buyers and sellers. Tax breaks can be offered to the real estate developers to motivate them renting out the housings instead of selling them.

When the real estate developers are taxed on housing rentals, both demand side and supply side bear the taxes. The amounts of taxes they bear are determined by the relative elasticities, and the side with relatively lower elasticity bear more taxes. When a tax is imposed on the market, either from the supply side or from the demand side, a market disequilibrium can occur. Since the government extracts part of the money from the transaction and turns it into revenue, the sellers sell the products at a lower price than the equilibrium, and the buyers buy the products at a price higher than the equilibrium.



**Figure 7.** Effect of Taxes on Market of Housing Rentals

If a tax break is offered, the disequilibrium will be remedied. The demand side can rent the housings at a lower price, and the supply side can rent out the housings at a higher price. Thus, incentives will be created toward both buyers and sellers. The higher selling price encourages real estate developer to rent out more housings instead of selling them, and the lower renting price motivates real estate buyers to rent the housings.

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