

# [Factors which affect china house prices economics essay](https://assignbuster.com/factors-which-affect-china-house-prices-economics-essay/)

## Abstract

This paper will investigate the dynamic effects of fundamental factors on china house price. Also try to examine how housing prices react to adjustment when these factors change in short term. At the beginning of 2009, in response to the global crisis, Chinese government adopted a series of new land policiesâ‘ , I want to test whether these feedbacks change after new land policies were issued. I find that the main fundamental factors which influence housing price variations still are household income, new-build supply, housing units sold, expectation price and land prices. However, interest rate which usually be considered as no explanatory power in explaining Chinese housing price variations, starting to play an important role that influences the housing demand and price in China. Among these factors, the most essential one still land prices, but the effect of house expectation prices is especially enhanced after new land policy issued in 2009.

## 1 Introduction

House price as well as other asset prices, house price usually equal the discounted stream of future housing[1]return, for instance, in the long run. Moreover, discount factors and rent price are affected by macroeconomic shock, on the contrary, the shock in diversity aspects also affect housing price in the end. However housing has many characteristics which make it different from other asset, for example, for the house owner, housing is not only an asset but also a consumer durable which takes most part of household, own a house means have a place to live and be protected by shelter. Therefore, due to special features of housing have, like immobile and value-preserved, it is usually used as collateral for loan, so that a huge of part of financial sector assets is tied to housing value (Goodhart, 2007). As a result, house price may enlarge the effects of macroeconomic shocks, such as supply, demand, or monetary policy, and bubbles, moreover, house prices may undermine the stability of the entire economy system.

Real estate market in China is consider as a “ new” market, neither transparent nor mature nowadays, it has an invisible connection with government policies and law, which have influence on supply and demand of whole property market in China. In many Chinese cities (such as Beijing, Shanghai, Hangzhou, etc.) house prices have been soared in the past few years, which has aroused wide concern. The focus of attention is nothing less than affordability of ordinary people and implied real estate market bubble. With house prices is soaring day by day, the majority of ordinary citizens are increasingly feeling that they can hardly afford the rising house prices, personal income growth rate is far less than the highly rise in housing market over the same period. These phenomenon make the government increasingly worried about, bubble of housing market will be burst in the future.

In theory, the market equilibrium prices are determined by supply and demand, and household income symbolize affordability, which is acknowledged as an important factor for housing market demand, even though there is an increase in household income of Chinese people, comparing to highly burst in housing price in China, it seems that increased income is not able to enlarge house demand. As I mentioned above, because real estate market in china neither transparent and nor mature, so there are a lot of unexpected factors would affect housing price in short term in China. In this paper, I will try to analysis reasons why housing price in China is extraordinary high from varied aspects, and attempt to find out solutions.

A number of studies, such as Case and Shiller (1990), Poterba’s (1991) prove that housing prices are affected by varies factors which include construction cost, people’s income and population growth. Potepan (1996) further test many else factors include rent, land prices and many different variables which give us many good explanation on how do these variables have an affection on house prices all around the world. Although Chinese house market as a “ new” market, some of these factors have the same explanatory power on housing prices such as disposable income, population growth, construction costs, property taxes, mortgage interest rates, land prices, vacancy, unemployment rates, however, house market in China still have its own characteristic. Recent study by Deng (2009), who use panel VAR models to test over 40 cities’ housing price (from 2000 to 2005) in China after government adopted a new competitive method to grant land rights in 2002. In that paper, they find an interesting phenomenon that land price is a key factor on housing prices, but interest rates have no impact on housing prices in China.

Recent years, many new policies had been adopted by government of China which aim to control overheated housing price, as maturate as Chinese housing market, housing market has been started to develop healthily. How does the newly adopted policy influence housing prices after 2005?

In this paper, I use a sample of provincial level data during 2005 to 2008 to answer the above question. My evidence shows that housing prices are significantly affected by household disposable income, land prices, construction costs, new-build supply, housing units sold per year, rent, unemployment rate, but population growth still cannot explain the variation of housing prices in China. More importantly, interest rates start to affect housing price due to new adopted land policies, which also have influence on the impact of these factors to housing prices.

In my paper, I use same panel VAR models as most econometrics adopted in their literatures, try to investigating the dynamic variation of housing prices. I attempt to test how the adoption of the new land policy affects this dynamic relation. Moreover, I also plan to analyze those factors which cannot be explained by economics data but remain playing an important role in housing demand in Chinese house market from aspects of socio-demographic and unique culture of China.

## 2 Literature Review

2. 1 An over view of Current real estate marker in China

China’s real estate industry has made great breakthrough from last three decades since Xiaoping Deng announced the “ open policy” from 1978. Nowadays, the progress of real estate market in China is considered as the major engine of China’s economic improvement (Fung et al., 2006; Hinton and Tao, 2006). There are a series of government policies have been established to stimulate this revolution, including abolition of the administrative housing allocation system which has been used for almost half of century since 1949 when new China is established, moreover, the government start to reform the finance environment, land supply and taxation systems, all of which have created a beneficial operating environment for new real estate development in China (Choi, 1998). Besides, the successful bid to host the 2008 Olympic Games in Beijing, and entry into the World Trade Organization (WTO) in 2001 have quicken a great deal of steady improvement of legal and regulatory systems, enhancing the real estate investment environment (Fung et al., 2006). These advances in development in Chinese property market contribute a huge of fruitful opportunity to investors who want to make profit in investing in real estate market, not only for local developer and investor, but for foreign property developer and investors. Therefore, the competition between both sides of investors will improve and boost a new round of evolution in Chinese real estate market.

With the booming market of recent years, real estate prices have constantly overgrow inflation (Fung et al., 2006). For example, housing prices steadily increased by 68% in China between 2001 and 2004 (Woods and Smith, 2005). In 2007, the sale price of houses increased by 10. 5% in main cities compared to 2006 (Xie, 2008). The phenomenon of rapidly increase in house price has gained wide attention. At the end of 2007, Chinese real estate market started to keep the house price stabilization by direct government intervention, which concerned the affordability for ordinary people and macroeconomic consequence (Peng et al., 2008). According to Zhang and Fung (2006), housing prices in China are equivalent to those of high-income nations, which the house price should be proportionate to per capital income of urban people, which is still low by international standard in China. It is undeniable that Chinese is rapidly growth during last ten years, but China remains a developing country. the overheated property market reflecting abnormal phenomenon nowadays in China, people rather keeping purchasing property than saving and other kinds of investment, which result in people who really need a house but cannot afford it, because the house price is higher than income of most people in China. For guiding a healthier development, government adopted a series of policy to restrict fast increase in investing in real estate market (Hou, 2009), moreover the Chinese authorities have implemented macroeconomic regulatory policies to adjust housing supply structure, undertake to solve lower income resident housing and lower property sale prices (Li et al., 2009). In 2005, Premier Wen Jiabao definitely stated that the healthy development of real estate was one of the seven key tasks of the Chinese central government. A tax on homes sold within two years, increased the interest rate and limited property investment borrowings were used for cooling overheat Chinese real estate market(Zhang and Fung, 2006). In 2007, the number of real estate enterprises in China decreased by

39. 8% compared to 2006 (Xie, 2008), According to date from the National Bureau of Statistics of China (NBSC), after one year relative stabilization in Chinese housing price, there is a fast recovery from fall in early 2008, housing sales and property prices in China rose in the first half of 2009 until now. In 2009, the total investment in real estate development amounted to 3, 623. 2 billion Yuan, up by 16. 1 percent year-on-year. Of which, investment in commercial residential buildings reached 2, 561. 9 billion Yuan, 14. 2 percent of increase year-on-year, occupied 70. 7 percent of the investment in real estate development (NBSC, 2009). From these data of recent house market in China has been reflected the irrational consumption of Chinese residents, house prices begin a new round of growth.

2. 2 The determinants of house prices

Housing price is affected by many kinds of factors. Generally can be divided into two aspects-he economic and the socio-demographic, in the view of econometrics, assuming consumers are economically rational, then they will consider buying a house as a kind of maximize utilities under a given budget constraint, For example, income, assets, and prices are the most important factors affecting housing behavior (Henderson and Ioannides, 1989; Plaut, 1987). However from the view of socio-demographic, house is a shelter which is one of the necessities of life, marriages, death and divorce all have an impact on house demand.( Ratcliff, 1972). For instance, there is a new family has been created when people get married, which is an important factors in increasing demand for dwelling. Furthermore, changes in economic circumstance, such as price inflation and increasing mortgage rates, can also affect residents’ tenure choice (Clark et al, 1994; Deurloo et al, 1994; Rudel, 1987).

According to Case and shiller (1990) paper, they find that housing prices are emphatically correlated with the diversification of construction costs, growth of population and income. But Poterba’s (1991) investigation prove that real income and construction cost do give a good explanation on housing prices change, he also find that population growth doesn’t have explanatory power in housing prices changes sometimes when he test 39 cities from 1980 to 1990, however, from Clapp and Giccotto (1994) literature, they find even though population growth cannot explain housing prices changes, it still can forecast the trend of variations of housing price. Potepan (1996) test more variable factor which probably influence housing price such as rent, land prices, household income, crime rate, air population and a series of factor which most of them are social environmental variables, in that paper he find household income and construction costs are the most important elements effecting housing prices.

There is also a large theoretical literature showing that in the house market, demand and supply factors could be dividing into a longer-term influence and shorter-term influence. In the long run, factors that affect the demand for housing include increased household disposable income, age and family status, average level of interest rates which possibly related to behavior of inflation in the long-run. For housing supply, land cost and availability of land, improvement and investments in the existing housing stock are longer-term determinant of supply. Similar evidence has been proved this theory, Quigley (1999) uses data of 41 cities from 1986 to 1994 to find out which factors could explain the housing price variation in short run and long run, in his paper, he finds that some factors include unemployment rates, new building supply and construction cost cannot fully explain the housing variation in the short run, but in the long term, these factors could be explained very well.

In the short run, current housing stock is considered as an important factor that affects house market, for example, if there is a increase in housing stock, it will restrict current real estate development and future land schemes. Another factor affecting the housing market is particular transaction cost such as VAT, stamp and registration duties and a variety of taxes. Moreover, uncertainty about future housing prices also could affect demand and supply of housing market. For instance, if people expect housing price will decrease in the next year, most of them definite not purchase a house this year, which will lead to a oversupply of housing market this year, then, corresponding changes in prices, and vice versa. In this case, under uncertainty situation, investors and developers are cautions response of changed demand in the market, because this type of investment is irreversibility.

Also, monetary policies adopted by the government play an important role in housing changes in short term. Ahearne (2005) test date of housing prices of 11 cities and find that housing prices increase in short time when government adopted monetary policies, he also find that when there is policy for bank to shrink supply of credit to households, housing price will decrease and low the demand of household. He surmises that interest rate is the most important factors that influence housing prices. For Chinese housing market, rapidly changes in housing prices as a vivid example perfectly proved these economics theory in the past ten years, because the policies adopted by government usually as a main factor determine trend of housing price in China. But according to Deng and Ma’ paper (2009), who used panel VAR models to find which factors could influence Chinese real housing price changes, they used a sample of 30 provinces (cities) in China during the period of 2000 to 2005, and they get the conclusions that interest rates and population growth cannot explain the variation of housing price in China. I have to admit there are some differences between Chinese and western housing market.

In generally, as mentioned above, these are some kinds of aspect on housing demand that provide a good explanation of housing behavior in western countries. However, it is debatable to apply all the current theories directly to urban China where a welfare-oriented housing system was reforming in the past decade. According to comparing western housing market and Chinese housing market, there are main two differences between these two kinds of market. First, it is generally presume there is a relative freedom choice in housing market in western models, even though exist discriminations (Massey and Denton, 1993). People could choice their house relative freedom according to their preference and affordability. But in China, there was only choice for people who live in urban is public rental house, where obviously much less freedom of choice. When the reforming put in to practice in 1998, people could spend relative less money to own the house where they used to rent, therefore, housing market still lack of choice of freedom for most people in China.

Second, the macro factor is affecting private housing choice in western cities, the role of the government is underestimated. However in China, the government plays an important role in private housing provision and allocation. Furthermore, housing reform in China is a nationwide program which means local government in each province could design actual reform programs, timetable and degree of reforming (Huang, 2003), Which result in different arrangements of housing behavior. Huang and Clark (2002) argue that there are still considerable variations in tenure choice across cities. They believe that different local government behavior will lead to the intercity heterogeneity. Zhou’s (2004) paper prove this theory, he test 4 Chinese cities’ house price include Beijing, Shanghai, Tianjian and Chongqin from 2001 to 2004, he find in different city, there are different factors will influence local housing price. In Beijing, household income, bank loans, housing units sold have an important effect on housing prices, but in Shanghai and Chongqing, price expectation and construction significantly influence housing prices. China’s real estate market consistent with economic theory in a way, but it is still with Chinese characteristics.

## The Panel VAR Model and Data

To be continue…

House slave

Income and housing price relationship

Conclution