

## Chapter 6

### Conclusion and Recommendation

#### 6.1 Conclusion of Research

This paper examined the determinants of house price dynamics in real estate market in China. Using panel data from 21 of China's main cities over the period from 2000 to 2010 this paper presents new empirical evidence on the role of economic fundamentals in China's urban house prices. This paper found that, in the long-run, there does exist a co-integration relationship between house price and impact factors. The elasticity of house price to per capita disposable income is 0.129 and 0.232 based on OLS estimator and DOLS estimator respectively. House prices saw a significant increase due to GDP growth. Land transaction supply index and the real mortgage interest rate have significant impacts on house prices.

Land transaction supply has a positive and significant effect on house price, but the coefficient of house price to land transaction index is smallest. This indicates that China's strict land supply policy since the macro-control on the real estate market has raised the land price in the last few years to a large extent, whereas the influence coefficient is limited. At the same time, this paper found the real mortgage rate has a positive and significant effect on house price, which indicates that China's relative loose finance credit policy also leads to the increase in house price to a certain extent.

This research study the implications of the standard present value formula for the order of integration and cointegration between sale house price and rent house price, with and without a bubble term. This paper conducts the analysis using recent advances in panel data econometrics. Over the whole sample period, the house prices and rents have a different order of integration. But they are not cointegrated. The conclusion is bubble exist in urban real estate market in China.

While accelerating house prices may indicate the presence of a bubble, its existence is rather controversial. Urbanization trends, rising incomes, and low interest rates may all have triggered the rising prices. The ongoing trend for smaller families may have created strong demand. For many Chinese, especially for young couples, renting an apartment is not very popular. The regulation system does not give tenants much protection. Renters will lose their apartments if the home owner decides they want the building for a different use. Due to fast economic growth, millions of Chinese join the middle class each year, thereby contributing to high housing demand. Because of high saving rates, many households are able to buy a house with cash and are rather independent from mortgage loans. In addition, the uneven development across the regions has enhanced the housing demand in first-tier cities where there are better living conditions, more job opportunities, and better public resources. Overall, high house prices may be in line with the fundamental socioeconomic factors (World Bank 2010).

## **6.2 Policy Recommendation**

China's real estate development is mainly restricted by three parts of the realities of the country. Firstly, the real estate market is developing during a relatively short period of time. It took only thirty years for China to transfer into a market economy from the planned economy. Correspondingly, real estate has undergone a process of transformation and development in a short time compared to the Western developed countries. Secondly, unbalanced economic development in China has greatly affected the coastal and inland areas. The real estate market also shows obvious regional differences. These differences are mainly caused by the different starting times, levels, sizes, developing rates, growth potentials and a series of regional imbalance of economic development. Lastly, under the Socialistic Market Economy, excessive government intervention, as well as the policy and institutional barriers may become obstacles to the healthy development of real estate.

From the above analysis, this paper derives the following policy implications. While there may be a bubble in China's house price. China's house price has deviated upward from the economic fundamentals, and China confronts the economic downward cycle; it is possible for the house price to go downward over the next few years. But China's industry chain of real estate is long and driving effects of real estate to the correlative industries is intensive (see the calculation result of Research Group of National Bureau of Statistics of China, 2005 and Wang & Liu, 2004). Any sudden changes in house price will bring a tremendous impact on the entire national economy. A burst of a house-price bubble can be harmful for the real economy. Due to the low leverage, the risk that people are not able to fund their mortgage commitment might not be very high. However, housing investment accounts for 10% of GDP, and is crucial for economic growth. Because of the integration of China into the world economy, a bursting bubble can cause negative spillovers to other countries, particularly in the Asian region. The challenge for the government is to scrap out speculative activities without killing an engine of GDP growth.

In order to avoid an intense fluctuation of house price, this paper considers that the Chinese government should choose flexible market-oriented policy for real estate development. At the same time, the Chinese government should enact strict laws and regulations for the real estate market and severely punish speculative actions in the market. At present, China's legal system for real estate is inadequate, and the government usually makes temporary provisions such as regulations, notices and government documents. This causes China's real estate policy to have a lacks of coherence. Hence, the Chinese government needs to enact an appropriate legal system for the real estate market, and make full use of the market mechanism rather than administrative order to modulate house price.

There are several possible extensions of the study. Firstly, due to the limitation of the data, we do not include all of China's real estate policy, such as land policy, tax policy and banking credit policy in this paper. Meanwhile the policy itself is an

important factor in explaining the changes of China's house price. Secondly, this paper only detected that the bubble exists in the urban real estate price. But how wide this bubble exist, cannot be calculated by this paper. If all these improvements come at a cost in the terms of increase cross-sectional and/or time dimension of the data, this paper shows a need to establish a more complex structural theoretical framework and a greater computational burden. This is our future research direction.