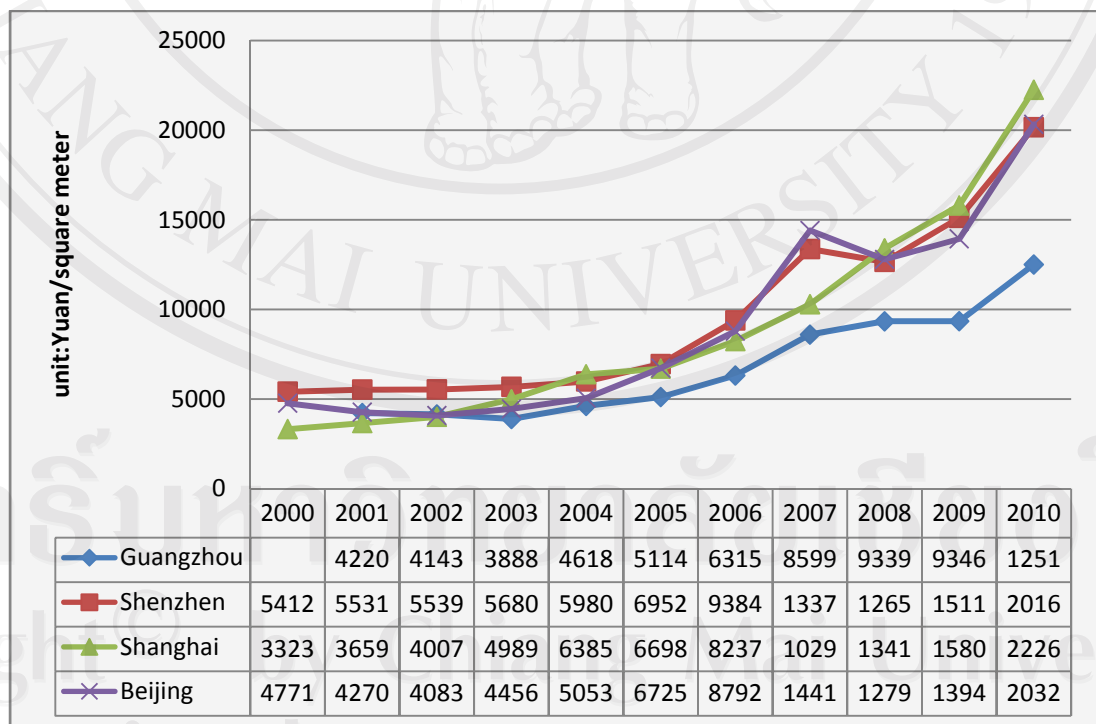


# Chapter 1

## Introduction

### 1.1 Background of Rationale

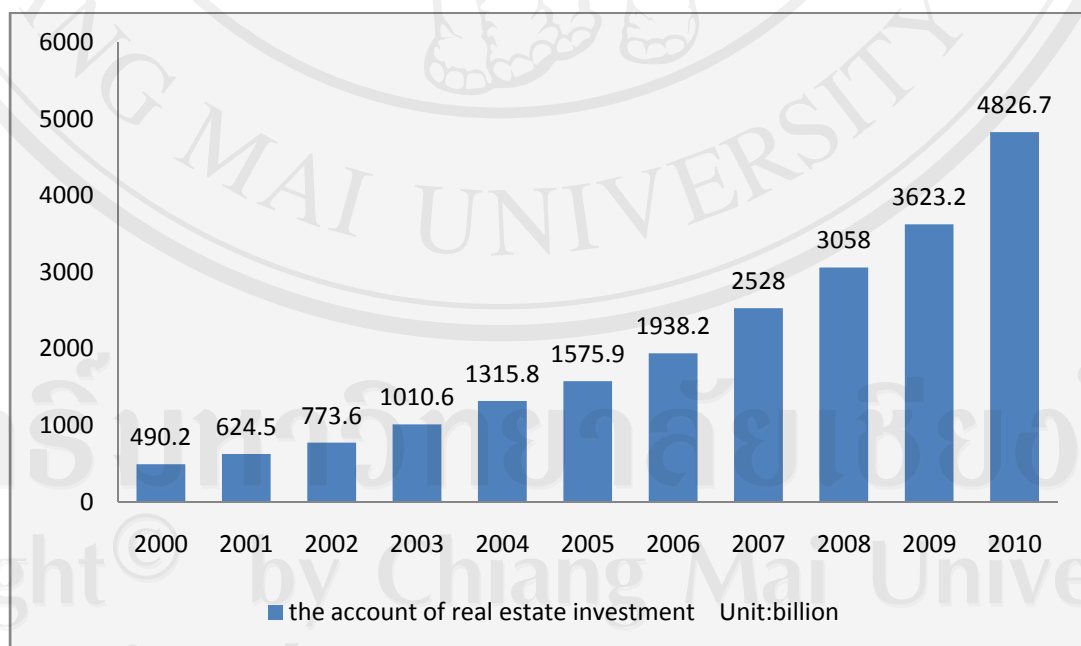
With the development of the real estate market of China, house-consumption has become a new hot spot of consumption. But in recent years, the real estate price has risen rapidly, especially in first tier cities (Figure 1.1). The too-quick rising of house prices not only extremely influences city dweller's living conditions but also is an unstable element for the smooth and sustained development of macroeconomics. At the same time, the problem of house price has become an economic as well as a social problem that has aroused universal concerns in society. It has become a very prominent question that has strengthened the research and management on the question of the real estate price changes.



Source: Sina real estate news of channel

Figure 1.1 The First-tier Cities Average House Price

As one of the pillar industries, the stability of real estate development is related to the people's livelihood. Since 1998, the real estate industry has experienced a period of rapid development. Real estate of investment maintains a high development speed (Figure 1.2). Overpriced housing and overheated investment make the economic bubble more obvious. Housing is a special type of asset in that it has a dual role as consumption and an investment good. The government and society should have paid sufficient attention to the real estate bubble since it can bring inestimable negative impact to the economy. There are two opposite views. Pessimists argue that house prices have been overvalued in many cities and will face downward corrections in the near future. At the extreme, some see evidence of new speculative housing bubbles, and call for supervisors and central banks to take active measures to contain them. By contrast, the optimists argue that China's house prices were coincident compared to their fundamental values. Moreover, the liberalization of housing markets and housing finance systems in the past decade, including a general trend towards more market-based housing markets, greater availability of mortgage products and more liquid secondary mortgage markets, have arguably improved market efficiency, stimulated demand and contributed to house price growth.



Source: China Statistical Yearbook

Figure 1.2 The Whole Nation Amount of Real Estate Investment

Due to the government gradually enhancing the efforts of national macro-control on first-tier cities, some major cities, like Guangzhou, Shenzhen, Shanghai, Beijing have suffered a small-range depression in the real estate market after 2010. One of the reasons for the rapid increase of house prices in second-and third-tier cities is that first-tier cities began to place limits on home purchases. Thus more and more medium-sized real estate companies have changed their development strategies, and are gradually increasing their investment in second-tier cities. Real estate investment companies turn to seek new profits to avoid investment risk and reduce the negative impact of macro-control.

From 2007 real estate developers, represented by Vanke, Gold and Poly, tried to seek new development in two second-tier cities. A lot of giant real estate developers grew stronger in Beijing, Shanghai, Shenzhen and other major cities. On the one hand, in first-tier cities, the early starting of real estate brings fierce competition as well as market maturity. Additionally, the scarcity of land resources raises the cost of real estate development and reduces the profit margins. On the other hand, second-tier cities attract more and more developers because of their rapid economic development and the growth stage of real estate markets. Also, there are plenty of land resources but no competition. Therefore, more and more real estate developers are beginning to seek development in second-third tier cities.

In normal conditions, the distance between real estate development in second-third tier cities and that in first-tier cities is about ten years. However, in second-third tier cities, the local governments are more conservative when implementing the control policies of the central government. Economic vitality and the accumulation of good economic factors make these second-third tier cities hotspots of investment for real estate.

Therefore, to maintain economic stability and development, the government should implement effective macro-control policies to guide our real estate development. However, our main concern about real estate development is price stability and to avoid a price bubble burst. What are the impact factors of China's real estate prices? How much do the real estate prices effect different cities which share different urban development levels and different macroeconomic fundamentals? Whether the real estate market exist the real estate bubble? How the central and local

governments coordinate the real estate development between different cities by macro-control?

### **1.2 Significance of the Study**

First of all, the main reason why real estate prices cause widespread concern in national monetary authorities is that real estate price can affect a central bank's monetary policy system through a series of mechanisms and channels. Monetary policy system effects housing price fluctuations, and the impact is comprehensive. One of the main performances is that price volatility is the first macroeconomic indicator of a country's macroeconomic. A sharp rise of housing price could indicate future price and output level rise, and a sharp decline of the housing price may indicate the future of macroeconomic tightening, or even recession. The correlation between housing price and macroeconomics has been confirmed by long history of the practices. Particularly, in the latest U.S. economic situation, the interaction real estate price and mortgage market crisis are strengthened since 2006. And the interaction triggered a new round of U.S. and global economic recession. Therefore, as maintaining price level stability is the ultimate target of monetary policy, authorities must maintain a high degree of concern about the real estate market. In addition, a real estate price bubble burst may lead to the credit crunch and instability of the financial system. This is one of the most important reasons why the central bank is concerned about the real estate market.

Secondly, the real estate boom requires more research efforts on real estate prices. This paper will try to analyze the factors affecting housing prices to find the reason why real estate prices have increased. Since housing prices are rising rapidly, this paper has important theoretical and practical significance. Real estate price and real estate investment are important indicators of real estate market development, intensity or frequency. So real estate price fluctuations would not only adversely affect the development of real estate, but also affect the macroeconomics. Many factors will affect the normal operation of the entire national economy, such as the location of resources, industrial policies, industrial structure adjustments, and interference with the government's macroeconomic regulation and control.

### 1.3 Objectives of Study

The major purposes of this paper are aimed to understand the mechanism of interaction between the real estate price fluctuations and macroeconomic fundamentals. This paper will try to detect whether a real estate bubble does exist in China's urban real estate market. For general participants and financial institutions, it can help them correctly grasp the current real estate price trends, make scientific judgments of real estate price changes and avoid blind investment. For the government, it can help them effectively intervene in the real estate market and control the total amount of the national economy. Moreover, to adapt to cities' economic development, the urban real estate sector needs to maintain its vitality and a healthy development momentum. It is conducive for the government to adjust demand and price levels in real estate market by making use of market mechanisms. This can effectively help the government intervene in the real estate market and control the total amount of the national economy. The objectives of research are as follows:

- To find possible explanatory factors of the determinants of house price fundamentals.
- To estimate the coefficient of each explanatory variable of China's urban real estate prices using economic theory.
- To detect whether the real estate bubble does exist in China's real estate market.
- To reviews policies and regulations proposed by the government according to the development of real estate.

### 1.4 Scope of the Study

The research accumulated annual data from 2000 to 2010 form the Statistical Yearbook, China City Statistical Yearbook, China Urban Life & Price Yearbook, and China Real Estate Statistics Yearbook respectively. The empirical research project is based on the real estate prices in first-tier cities and some other potential second-tier cities.

The research selected 21China's main cities. The representatives of the first tier cities are Beijing, Shanghai, Guangzhou, Shenzhen, The representatives of the second-third tier cities include Chen du, Shenyang, Changchun, Harbin, Qingdao,

Wuhan, Xian, Nanjing, Jinan, Chongqing, Xiamen, Dalian, Hangzhou, Ningbo, Shijiazhuang, Taiyuan and Tianjin.

### **1.5 Outline of the Chapters**

There are three main ideas in this research about the factors influencing of the real estate prices. There are many qualitative studies and scholars have made clear that there exists significant correlation between the real estate price fluctuations and macroeconomic fundamentals. The paper firstly illustrate how these economic factors influence real estate prices in different cities, which share different levels of economic development, land transaction, incomes and other macro-economic fundamentals. Also, the paper tries to find out how much these economic factors affect the degree under different urban real estate prices. Secondly, the paper focus on detecting a real estate bubble. Since real estate is the carrier of a bubble economy and real estate price bubble is a specific performance, the model is based on panel data of real estate in major cities. The paper will try to illustrate the existence of a real estate bubble in different cities by using panel data model. Thirdly, regarding urban real estate development under their macro-control policy, the paper discusses China's urban real estate price under macroeconomic system. Mainly based on the results of empirical research, the evidence presented in this paper may provide implications for policy reforms by the government.

The detail of the paper is organized as follows. The general introduction is explained in Chapter 1, while Chapter 2 provides an overview of the literature and the highlights of this study. Chapter 3 explains the empirical method adopted in this study, and Chapter 4 describes the data and empirical results. Finally, Chapter 5 concludes and provides some policy perspectives.