# **Chapter 1**

#### Introduction

## 1.1 Background and significant of the study

Since the reform and opening of People's Republic of China in 1978, Chinese economy has developed dramatically. According to the report of China statistics Bureau (2009 and 2010), China's GDP has reached 34,050,687 million Yuan in 2009. In 2010, China's total GDP exceeded that of Japan and became the second biggest one in the world. China's rapid economic growth has attracted many scholars' and economists' attentions in the whole world.

Figure 1.1 and 1.2 shows the GDP growth rates and average selling prices of commercial house in People's Republic of China from 1998 to 2009 respectively. It can be seen from figure 1.1 that, there was a stable increase in China's GDP between 1998 and 2003. Since 2003, China's GDP growth rate has exceeded 10%. It then reached a peak at 14.2% in 2007, and dropped to 9.6% in 2008 due to the economic crisis in that year, which was still relatively high compared to historical levels. It shows that China has achieved a sustainable economic growth from 1998 to 2009.

Similarly, the data from China Statistics Bureau also shows that the house price has increased over the same period. Figure 1.2 shows the movements of house prices since 1998. Based on data collected by the Statistics Bureau of China, the house price has increased from 2061 Yuan / sq. m² in 1998 to 4681 Yuan / sq. m² in 2009, or in other words, has increased more than two times. Moreover, figure 1.2 also states that the house price has increased gradually until 2003 and reached the peak of 3,864 Yuan / sq. m² in 2007. Although the house price has slightly fallen to 3,800 Yuan / sq. m² in 2008, it then soars to 4681 Yuan / sq. m² meter in 2009.

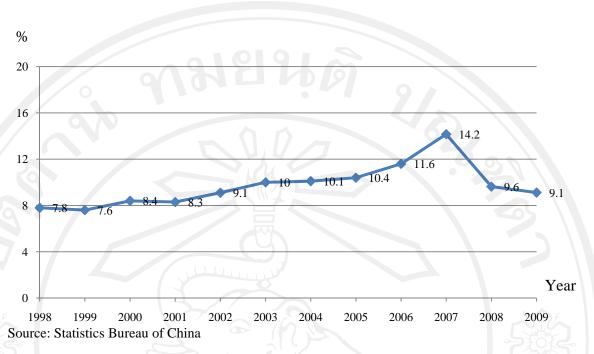
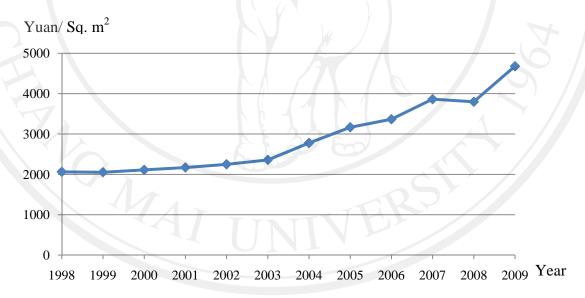


Figure 1.1 China's economic growth rates, 1998-2009



Source: Statistics Bureau of China

Figure 1.2 Average house prices of commercial building (HP), 1998-2009

This dramatic increase in the house prices has been associated with the implementation of various policies by Chinese government. In order to confine and intensify housing sector developments, the Chinese government has issued various land and credit regulatory policies since 2003. For example, in June 2003, People's Bank of China issued the "circular on further strengthening the management of real

estate credit business" (People's Bank of China, 2003, No. 121). It aimed to increase the down payment ratio of the high-end commercial houses, villas, and second or more (including second) houses. Those borrowers no longer enjoyed the preferential house loan interest rates. It showed that the central government opened a prelude to real estate sector regulations.

In August, 2003, the government issued "the notice of State Council on promotion of a sustainable and healthy development of the real estate sector" (The Center People's Government of the People's Republic of China, 2003, No. 18). It furthered deepened the urban housing system reform, clarifying the government's responsibilities in the real estate sector.

In the early of 2004, in order to confine the excessive growth of real estate investments, the central government adopted a "strict controlling of land, tight credit" macroeconomic policy to regulate the real estate sector (The Center People's Government of the People's Republic of China, 2004).

In 2005, according to some new situations and problems in the real estate market, the central government established a series of regulatory policy within three months. In March, 2005, the State Council issued the "notice to effectively stabilize house prices" (State Council of China, 2005). It stated eight issues for stabilizing the house price. In May, 2005, the government issued "suggestions on the efforts to stabilize house prices" (State Council of China, 2005). It required each region and department to take solving the problems of excessive real estate investments, rapid house price appreciations and other issues as important tasks of current macro management.

At the end of May, 2006, the Ministry of Construction, Development and Reform Commission and other nine Commissions jointly issued the "suggestions on adjusting the housing supply structure to stabilize house prices" (China State Council, 2006). It stated six issues to promote the healthy development of real estate sector.

In August 2007, the State Council issued "a solution to housing difficulties of urban low-income families" (State Council of China, 2007, No. 24). It clearly defined the government should take the low-rent housing system as the key of real estate development, using multi-channel to solve the housing difficulties of low-income urban families.

In 2008, in order to promote the healthy development of real estate sector, the People's Bank of China adjusted the deposit reserve ratio for several times. On 25<sup>th</sup>, March, 2008, the deposit reserve ratio was increased by 0.5% to 15.5%, which was the highest one in the history. Then, the People's Bank of China increased the deposit reserve ratio twice by 0.5%, which were on 16<sup>th</sup>, April, 2008 and 20<sup>th</sup>, May, 2008, respectively. Later, due to the financial crisis, the People's Bank of China gradually decreased the interest rates and deposit reserve ratio several times to stimulate the whole economy.

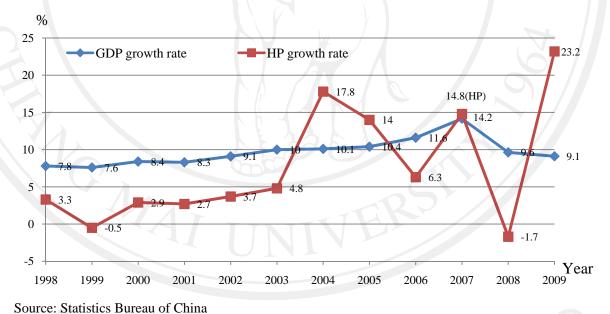
Then, in 2009, the government has repeatedly issued some related real estate policies to regulate the real estate sector, which were shown as the bellows table 1.1. It shows that the management of real estate market, especially the controlling of house prices, has become the key point of macro management.

Table 1.1 Macro-control policies for real estate sector in 2009

Date	Institution	Main content
3 <sup>rd</sup> , January, 2009	Four State-Owned Banks	The people, who have no bad-credit records, can apply a preferential loan rate.
9 <sup>th</sup> , January, 2009	Ministry of Housing and Urban-Rural Development	Comprehensively promoting the construction of affordable house, ensuring the stable development of real estate sector.
15 <sup>th</sup> , May, 2009	Ministry of Land and Resources	Speeding up the preparation, revision of land supply plans for affordable houses.
21st, May, 2009	State Administration of Taxation	Specific issues on the management and settlement of the value-added land taxes.
2 <sup>nd</sup> , June, 2009	Ministry of Housing and Urban-Rural Development	Aim at solving the housing difficulties of urban low-income families. Taking it as an important part of improving people's livelihood.
21 <sup>st</sup> , August, 2009	Ministry of Land and Resources	Urging local governments to take effective measures to promote the efficient use of land for construction.
7 <sup>th</sup> , December, 2009	Central Economic Conference	Increasing the supply of commercial houses in the next year.
13th, December, 2009	Central Economic Conference	Continue to encourage the own-residential house consumption.
14th, December, 2009	State Council	Four measures on confining house price appreciations in some cities.

Source: Official websites of each institution

As shown in figure 1.1 and 1.2, there was evidence that house prices and economic growths have increased, more or less, in the 1998 to 2009. Figure 1.3 shows the house price growth and economic growth rates, and it can be noticed that the house prices has increased roughly at the same trend as the economic growths over the same period from 1998 to 2009. It can be seen form figure 1.3 that, both the house prices and economic growths have increased smoothly until 2003. Then they increased rapidly during the period of 2003 to 2007, while the house price decreased in 2006 to some extent, but it was still higher than the history levels. Later, both of them decreased in 2008 due to the financial crisis. The house price even showed a negative growth rate in 2008. Then they increased when the economy started to recover. Furthermore, it can also be seen that house prices have fluctuated more than the economic growths, especially after 2003.



Source. Statistics Dureau of China

Figure 1.3 GDP growth rates and house price growth rates, 1998-2009

#### 1.2 Purposes of the study

From the above mentioned issues, this paper will mainly discuss two problems.

1. It will analyze whether there is a long-run relationship between house prices and economic growths in People's Republic of China using panel cointegration test.

2. It will examine the causality between house prices and economic growths using panel Granger causality test.

## 1.3 Organization of the study

This thesis has five chapters. The first chapter provides the introduction and purpose of the study. Chapter 2 presents the theories and literature reviews. Chapter 3 introduces the data and methodology for examining the relationship between house prices and economic growths. The empirical results are presented in chapter 4. Chapter 5 concludes the paper.

