Chapter 1

Introduction

1.1 Background

Housing is considered to be a basic need of human being. It is an important determinant of quality of life as it is integral to the happiness and health of households all over the world. In a rapidly transforming commercial world, housing is not only looked upon as a place providing shelter to mankind, but also a major economic and social force that contributes to a country's macro-economy. It is both the largest expense and most important asset for many households around the world. The investment in housing involves millions of families each year in transactions which accumulates up to billions of dollars. In a rapidly altered economic scenario, housing has played ever more important roles in sustenance of entire economies.

The world housing market is considered as an indicator of the current status of national economy for each country. Even if the global housing price incurs the slightest shifts this could generate disturbances in the economic balance of many countries and cause the economic catastrophes worldwide.

The US housing market is considered as the major player in the world housing market. However, because of highly speculative condition, US had fell in the subprime crisis in 2007 which then spread worldwide. This crisis has led towards the biggest ever global economic depression which continues to present time, the international housing market is bound to suffer as a result. "The Housing Markets of Spain, Hong Kong and South Africa have experienced huge retardations alongside of

the US. Most of the developed countries have suffered a sharp and steady rise of the housing price, probably the first ever. Several European countries have showed a higher rate of house-price inflation than in the previous years. Most notable amongst these are Denmark, Belgium, Ireland, France and Sweden, where the prices are rising at double-digit rates. Countries like U.K. and Australia are not far behind in the running" (Economy Watch, 2010). It can be concluded that house prices around the world are impacted by this global financial crisis as a result of the intensified globalization of world economy, thus the housing sector is growing increasingly sensitive to various fields all over the world.

The People's Republic of China (PRC) is the third largest country in the world after Russia and Canada, of 9,596,960 square kilometers (3,705,407 square miles) by total area (Technology integration division, 2008), meanwhile, PRC is also the most populous state with over 1.3 billion of population, about one fifth of all humans in the world. However, much of land in China is uninhabitable or near uninhabitable, unfortunately. The western half of the country is mostly desert, the central and southern area of the country is covered with rugged mountains and the northeast is heavily forested and bitterly cold in winter. Most of the population in China lives in the relatively flat and fertile southeastern area which covers only one third of the country's land area. Thus, the residential land available is scarce and there is a consequent shortage of living space in China. Furthermore, the living space per capita was shrinking year by year with the population explosion in China. As a result, the land available for living is drastically becoming more precious recently. Under this condition, housing problem has becoming a big social matter of concern in China.
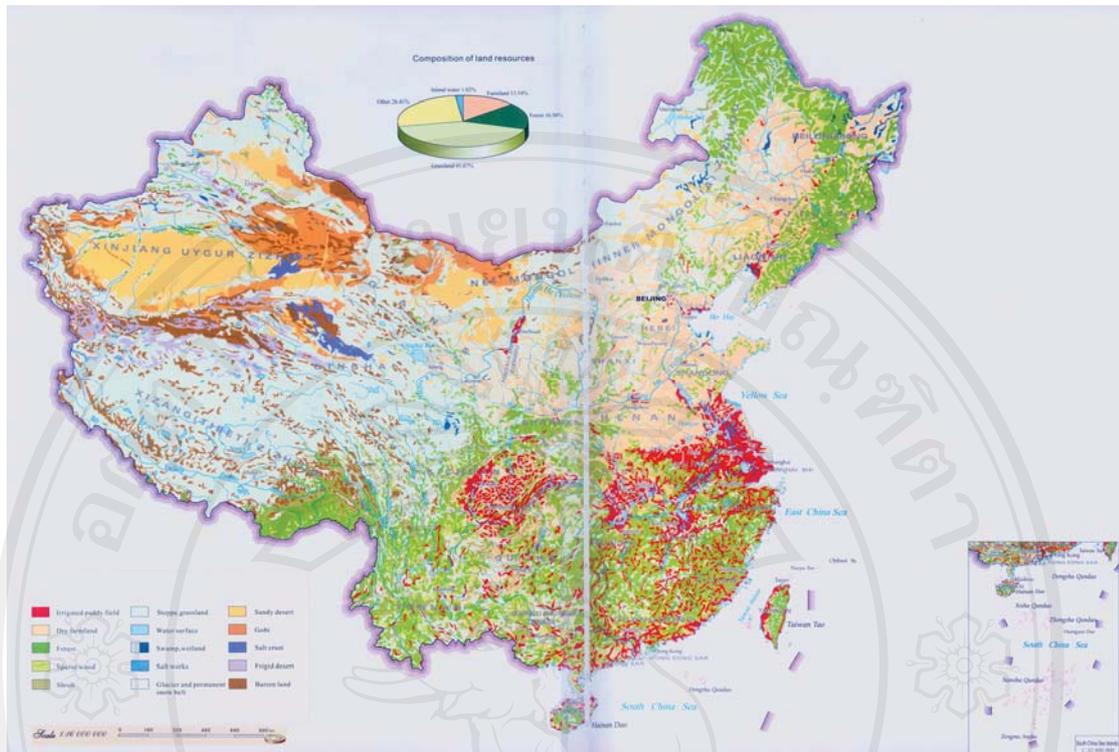
Figure 1.1 The composition of land resource in China

Source：China Land Cover Map
www.chinamaps.org/china/china-land-cover-map.html

With the development of science and technology, some farm land is gradually being occupied by factories. This pushed on the rural population who live on the farm migrated to the city. This situation increases the demand for housing units in the city.

China's housing distribution program has been cancelled by the government since 1998. Meanwhile, the real estate market has been going through commercialized reform and is developing at a rapid pace. This plays an important role in the civil economy and has become a hot spot of consumption within the new economic boom. The rapid development of an estate industry contributes to the promotion of other related industries and to the boom of economy. There is no doubt that the housing industry is gradually becoming the precursor and mainstay industry in China. The

price of housing rises continuously with the development of the housing market in China, especially in the recent years. This attracts the attention and concern from many sectors such as government, enterprise, expertise within the field, mass media and the ordinary people of China.

Due to China's real estate market which is relatively immature, many problems are gradually being exposed, such as over-heated real estate investment, precipitate swelling of house prices, a soaring house price-income ratio and so on. A few cities have appeared such a phenomenon that the growing speed of house price is not getting along with city's economic growth and is discordant with the growth of income. In 2009, China's average residential housing price reached 4,474 Yuan per square meter, while the per capita disposable income of urban residents reached 17,175 Yuan, which respectively increased by 25.1% and 9.8% compare to the previous year. The gap between housing prices and household incomes will lead to social problems.

Compare with many capitalist countries, China's housing market situation is special and unique. China's housing market operates under a socialist land public ownership system together with the large population and scarcity of the residential land resource, the most prevalent housing type in China is the condominium which the households live together in one building by holding the self-ownership of each housing unit to share a piece of land within a community.

1.2 Significance of the study

Housing is an essential component of household wealth both in developed and developing countries. Housing has always been a major investment in people's lives. In developed countries, residents self-owned house rate reach to 80% in Spain, about 65% in America, 63% both in Japan and Canada, 67% in England, 68% in Italy, 69% in Australia, approximately 40% in German, and 30% in Swaziland. In developing countries, people have a great preference to have a self-owned housing as well. The rate of residents of self-owned housing is the highest in Bangladesh worldwide which has reached to 90% (Yuyan Chi, 1993). Obviously, this reveals how significant the housing industry is all over the world. Therefore, housing price is a determinant of a country's macroeconomic or financial stability.

With the rapid development of housing industry in China, it has become a pillar industry in the national economy, not only continuously playing an important role in national economic growth with high speed, but also greatly has influenced people's housing conditions and living standards. The real estate industry exerts great pressure on the GDP in China, in which the residential housing spending has a large contribution to the whole real estate industry. On the one hand, the improvement of city economy accelerates the growing speed of the housing price. On the other hand, if the housing price growth speed is too quick this would lean heavily on living costs, it would block the economic development of the city and lastly reduce the competitiveness of the cities. As a result, housing price is a very important indicator in estimating the health of the economic growth for every city in China.

Due to locate at the geographical center of Yunnan Province, the city of Kunming is a main commercial hub for most of the province's vast resources. It is the

political, economic, communicates and cultural center of Yunnan province in southwestern China and the seat of the provincial government. It is also a home to several universities, museums, galleries and other important economic, cultural, and educational institutions. The headquarters of many of Yunnan's large businesses are in Kunming as well. Kunming is an important trading center between the far west, the central and the south of China. Accordingly, it has always played a pivotal role in the communications of southwestern China (Wikipedia, 2009).

Figure 1.2 The map of Kunming in Yunnan Province

Source: The seventh International Conference on Traffic & Transportation Studies
         (ICTTS) 2010, Kunming(China)
         http://www.ictts.net/My_pages/abtkunming.asp

The modern prosperity of Kunming dates from 1910, when the railroad from Hanoi (Capital of Vietnam) was built. The city has continued to develop rapidly under

China's modernization efforts. The streets have widened while office buildings and housing projects develop at a fast pace. Kunming has been designated a special tourism center and which drives the proliferation of the high-rise of restaurants and luxury hotels. Several railroads and highways have been planned to connect Kunming to areas of Thailand, Vietnam and Laos, providing Kunming transportation access to sea ports. Kunming is the leading transportation hub (air, road, rail) in Southwest of China, with a rail connection to Vietnam and road links to Myanmar (Burma) and Laos. Kunming currently has a new international airport under development, which is nominated to be the fourth largest international airport in China (The Columbia Encyclopedia, 2008).

Kunming is called "Spring City" because of the comfortable climate and the beautiful landscape. It has been awarded a place in the top-ten happiest city in China for continuous two years in 2008 and 2009. As a result of its comfortable climate and low cost of living, the increasing numbers of population in China are migrating into Kunming. With a swell in the number of residents, the raising housing price in Kunming has been drawing more and more attention in recent years.

The development of the housing industry can stimulate the consumption of the other related industries in Kunming such as the construction field which refers to steel, cement and the rubber industries; wholesale and retail trading industries, the furniture industry; banking and insurance; gas, electricity and water productions; the service and entertainment industry; transportation and communication; the postal system and telecommunications and catering industry. Additionally, the development of housing industry encourages the development of nearby educational institutions.

1.3 Objectives of the study

The main objectives of this study are as follows:

1. To find the housing characteristics that significantly impact on the housing price in city of Kunming, China.

2. To examine the relationship between these characteristics and the housing price in city of Kunming by hedonic pricing model.

1.4 Scope of the study

The survey was conducted in city of Kunming in Yunnan province in China. Kunming covers an area of 21,501 square kilometers and its urban area covers 6,200 square kilometers. As of 2009, it has the population of 6,238,000, including 2,556,000 in the urban area (Kunming Statistic Bureau, 2009). The urban area of Kunming is shown as below.
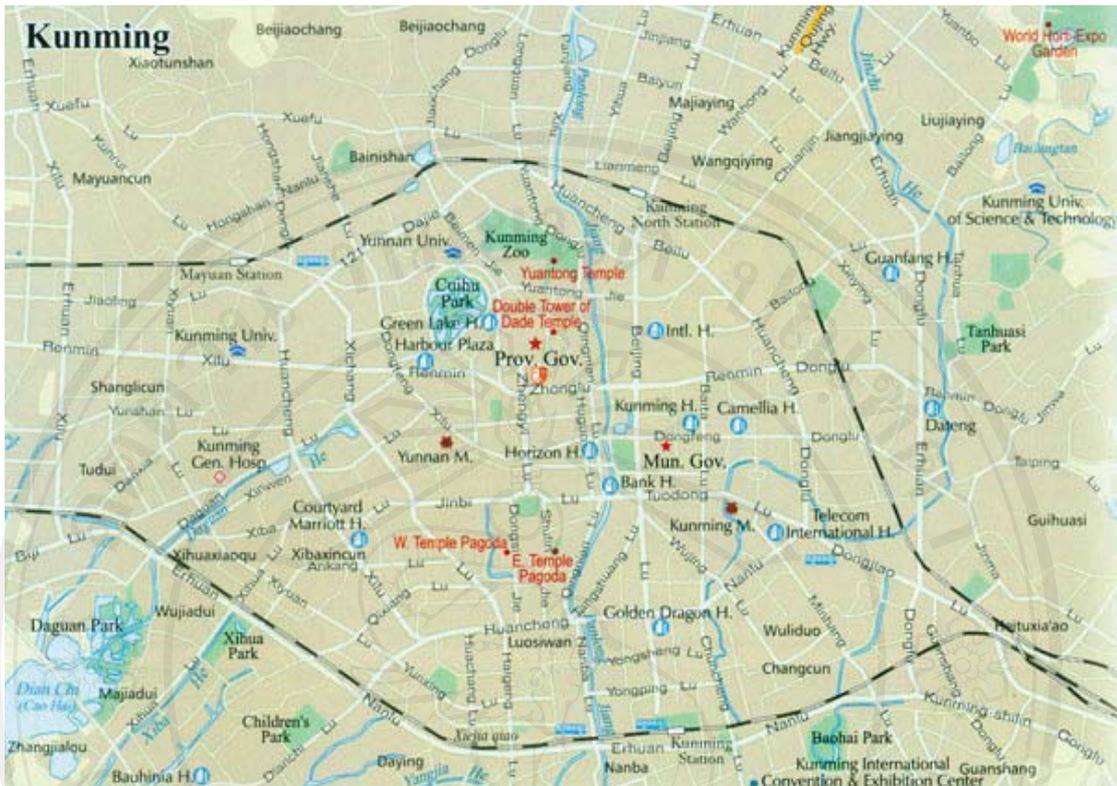
Figure 1.3 The scope of the urban area in Kunming

Source：The map of Kunming
www.chinamaps.org/china/citymaps/kunming.html

The scope of study focuses on the urban area of Kunming. The most popular housing type is the condominium where households live together in a community to share the public green space and the facilities within that community. The study selected relative large-scaled communities by random, the distribution of which ranged from the center place to the second-round road (the thick curve) of the city.

1.5 Organization of the study

The content of this study consists of six parts:

Chapter one briefly introduces the background and the significance of this study, the scope of the research focused, lists the purposes of this study and potential

benefits of the results of this study.

Chapter two consists of two parts. The first part states the theoretical foundations which can be derived from the previous conceptual frameworks and how they are related to the hedonic price model. The second part reviews the related studies by time, includes the studies applied the hedonic pricing theory on property market in different countries with the various methods in selection and measurement of variables.

Chapter three is methodology of the study. This chapter firstly presents the assumptions of hedonic pricing model and the functional forms for hedonic pricing model. Secondly, it describes the general housing characteristics in previous studies, and accordingly, specifies the selection and measurement of the variables along with the expected relationship between these characteristics and housing price. Finally, gives the explanation of data collection and the analysis tools.

Chapter four is the specification of the target housing market from the macro-level and micro-level. This chapter introduced the housing situation in China from a macro-level and the city of Kunming from a micro-level.

Chapter five refers to the empirical results approximately divide into three parts. The first part is the description of individual characteristic of sample housing units and the second part analyzes the relationship between each characteristic of the housing units and the housing price by cross tabulation. Third part refers to the results of regression by hedonic pricing model, which examined the significance and relationships between the housing characteristics and housing price by three functional forms and finally compared the difference of the regression results by these three functional forms.

Chapter six briefly concludes the study along with the limitations of this study and the recommendations to producers, consumers, the local governance and future researchers who concern the housing market in Kunming.

The structure of the study can be shows as follows:
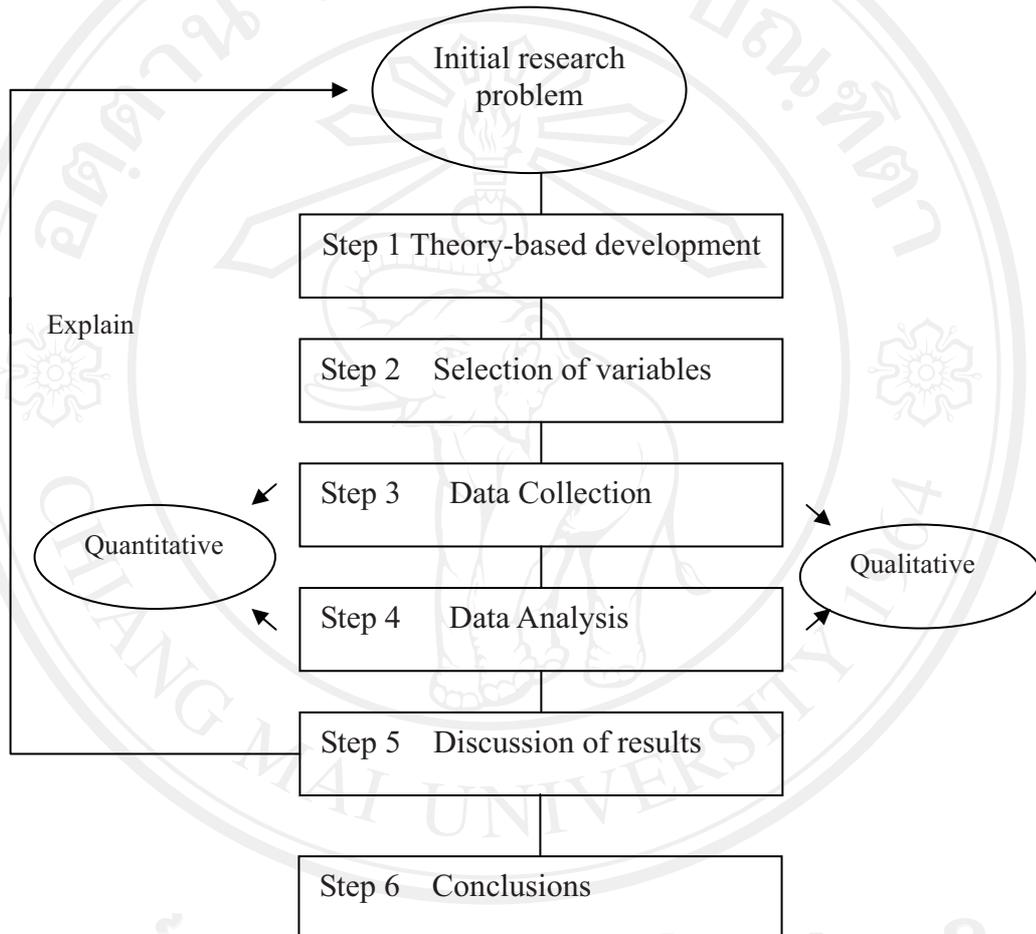
Figure 1.4 The Structure of the Study

Source: Create by author

1.6 Benefit of the Study

The application of hedonic pricing model has a long history, which is widely used in western countries to estimate the value of properties. However, there is few research work on the housing market in city of Kunming utilizing the hedonic pricing

model. This study would like to fill this gap by focusing on housing price with hedonic pricing model in city of Kunming.

The results of this study would help consumers to evaluate the price of the housing unit when they have a plan to invest or sell a housing unit, the results also acts as a guide for producers to improve the characteristics of new built housing unit with a better condition to be more profitable. It also can provide some suggestions for the local governance in Kunming to improve the macro-controlling on the housing market and assist in future city planning to offer more benefits to residents in Kunming. Accordingly, the results can give some indicators to housing appraisal agencies when they estimate the price of the housing units. Furthermore, it is a reference of the researchers for their future studies.