

**CREATING TRANSPARENCY IN THE CHINESE REAL ESTATE
DEVELOPMENT INDUSTRY: A CASE STUDY**

by

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Abstract

Transparency issue remains one of the top issues that have discouraged foreign investors to invest China's real estate market. This thesis establishes a framework for Chinese developers to create transparency for their development projects. It consists of the company transparency, the country-level, region-level, city-level, and project-level analyses around a project in Chongqing, China. Many special situations in China are discussed as well in order to acknowledge the existing transparency issue in China, especially in the real estate industry.

Thesis Supervisor: Brian Anthony Ciochetti
Title: Professor of the Practice of Real Estate

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Chapter 1 Introduction

The importance of transparency is becoming increasingly recognized in almost every industry around the world. The globalization in the world's investment markets makes the transparency even more important when investors seek the international diversification. On the one hand, a more transparent industry is a better vehicle for the cross-border investments; on the other hand, the transparency of an industry essentially creates positive impact on the industry itself. In particular, the transparency in real estate industry can decrease the volatility of real estate market, and therefore leash the cyclical nature of real estate.

The transparency is not easy to achieve, especially in the industries significantly determined by the local markets, such as the real estate industry. As the economy goes global, real estate remains local. An integrated global real estate market does not exist at all, and probably will never happen. Therefore, this local nature of real estate makes the transparency in the local real estate markets critical to investors. The failure of creating transparency certainly damages the development of the real estate industry.

This thesis intends to create transparency in the Chinese real estate development industry by analyzing an on-going real estate development project, Hongensi Project, in Chongqing, China. It establishes a framework to create the transparency using the typical U.S. standard real estate investment procedures and special treatments to the China's real estate industry. The objective of this thesis is to make the project transparent enough for investors to make informed decision.

It starts to outline important information on the development company, Zhongkai Corporate Group, followed by the general investment issues and country overview, project market analysis, project capital budget, project financial analysis, and project ownership structure. This thesis concludes with a much more comprehensive framework.

Chapter 2 Company Information

2.1. Company History and Background

Zhongkai Corporate Group (ZK Group) was founded in 1994 in Hangzhou, Zhejiang Province, China. Its former company name was Zhejiang Zhongjiang Real Estate Development Co., Ltd. The company reorganized its equity capital and moved to Shanghai in 2003. Currently the total asset of ZK Group is RMB 1.8 billion and the net asset (equity) is RMB 0.8 billion. The Zhejiang Commercial Group holds 64.25% of the shares and the Zhejiang Tiandi Business Company holds 35.75%. The Zhejiang Commercial Group is a state owned enterprise belonging to the Zhejiang Province. Senior managers at the ZK Group own the Zhejiang Tiandi Business Company, and its major shareholders are a company in Shanghai and 40 individuals. Currently the ZK Group has 404 employees in China.

2.2. Company Management Team

- Mr. Huacai Bian, Chairman
- Mr. Yihua Yang, President and Vice Chairman
- Mr. Liangzu Fang, Vice President
- Mr. Chenglin Huang, Vice President
- Mr. Guangguo Zhou, Vice President
- Ms. Liming Chen, Vice President
- Ms. Yafang Zhu, Vice President

2.3. Organizational Structure



2.4. Business Model

Following the evolvement of the real estate industry in China, ZK Group has not only accumulated valuable experience in the real estate development, but also gained perspectives on the real estate market. Three strategies highlight the company's business model: spatial strategy, brand strategy, and extension strategy of industrial chains.

The spatial strategy focuses on the geographic diversification. It enhances company's sustainability. ZK Group has projects in Shanghai, Hangzhou (Zhejiang Province), Zhengzhou (He'nan Province), Haikou (Hainan Province), Nanchang (Jiangxi Province), and Chongqing. The uneven economic development in different regions and the different timing in different real estate markets create opportunities and reduce idiosyncratic risks for the company.

The brand strategy is to differentiate ZK Group from its competitors. It seeks to satisfy the material and emotional needs of its customers at different stages. ZK Group's primary products are medium to high-end residential buildings.

ZK Group has developed into a level of considerable size, with multiple projects underway at the same time. The extension strategy requires some of the overlapped functions, such as raw material procurement, marketing, and energy technology, to operate as independent companies. These professional companies are formed not only to provide services for ZK Group, but also for public and other companies. This strategy creates a group of companies with real estate development as the focus and other relevant industries as the extension.

2.5. Major Product Types and Historical Performance

ZK Group primarily focuses on medium and high-end residential products. The following are the major projects:

- **Shanghai Zhongkai Top of City**
Location: Shanghai
Type: Residential
Construction Period: July 2001 – September 2005
Gross Area: 63,000 m²
Floor Area: 245,000 m²
Development Period: 4 Years
Total Investment: RMB 2.5 Billion
Net Profit: RMB 1.5 Billion
Annualized Project-Level Expected Return on Equity: 14.9%
- **Hangzhou Zhongjiang City Garden**
Location: Hangzhou, Zhejiang Province
Type: Residential
Construction Period: July 1997 – September 2001
Gross Area: 55,924 m²
Floor Area: 105,487 m²

Development Period: 4 Years
Total Investment: RMB 0.5 Billion
Net Profit: RMB 0.315 Billion
Annualized Project-Level Return on Equity: 21%

- Zhenzhou East-west Road Project
Location: Zhenzhou, Henan Province
Type: Residential and Retail
Construction Period: June 2000 – March 2003
Gross Area: 23,198 m²
Floor Area: 56,603 m²
Development Period: 3 Years
Total Investment: RMB 0.186 Billion
Net Profit: RMB 70.46 Million
Annualized Project-Level Return on Equity: 18.9%
- Zhenzhou Zhongkai Top of City
Location: Zhenzhou, He'nan Province
Type: Residential
Construction Period: May 2003 – December 2004
Gross Area: 40,181 m²
Floor Area: 96,000 m²
Development Period: 2 Years
Total Investment: RMB 0.25 Billion
Net Profit: RMB 87.50 Million
Annualized Project-Level Expected Return on Equity: 17.5%

2.6. Recommendation for Transparency

Transparency of a company is a sensitive topic. What to disclose and how to disclose company information are critical to the image and the life of the company. Although it is not easy, it is necessary for a company to have the most possible transparency to attract outside investment. Regarding to foreign investment in China's real estate market, the largest concern for investors is how to find the right Chinese partners. In general, the more transparent a Chinese company, the more possible a successful joint venture with foreign investors.

Internet is a powerful tool for a company like ZK Group to create transparency. However, its current website does not provide enough information, such as the company's ownership, track records, management team, and business models. Many U.S. companies consider their websites the most important platform for them to gain public attention and investors' interests. A good example is the Hines website. Although Hines is a private company, it has huge amount of company level and project level materials available on its website. It is well served as a channel for people to know Hines' successful projects, and further understand the overall company.

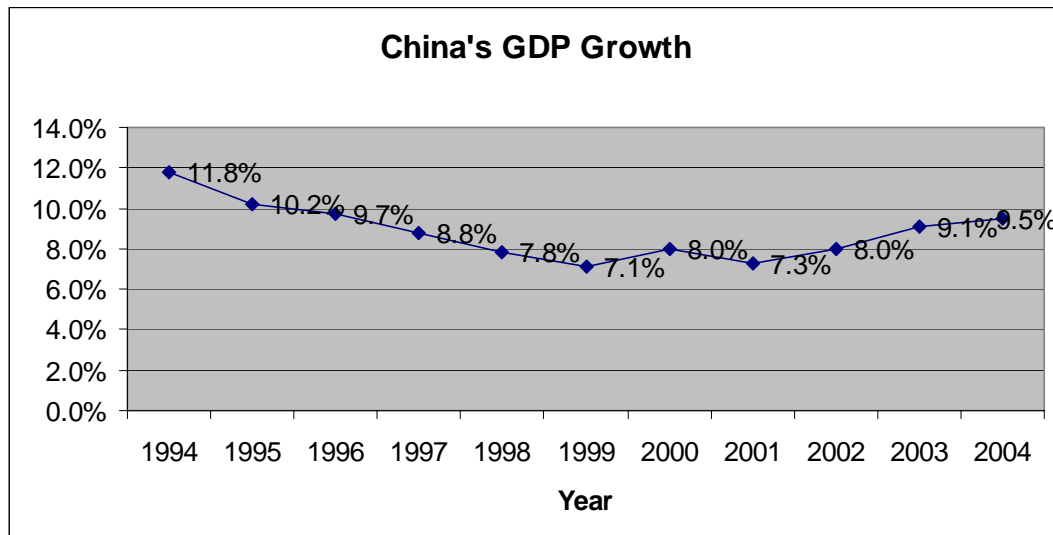
Chapter 3 General Investment Issues and Country Overview

3.1. Overview of Economy and Real Estate Market in China

3.1.1. Economic Development

Real estate is an industry that needs economic growth to sustain. Economic development in China has been growing dramatically since the open-door economic reform was introduced in 1978. The gross domestic product (GDP) has been growing in fast paces. In 2004, the GDP was RMB 13,654.5 billions with a growth rate of 9.5%, and in 2003, it was RMB 11,725.2 billions with a growth rate of 9.1%. Real estate accounted for about 7% of the country's GDP in 2003, as comparing to 5% to 6% for Hong Kong and Singapore¹. The Chart-1 illustrates the China's GDP growth over the past 11 years.

Chart-1 China's GDP Growth



Source: National Bureau of Statistics of China

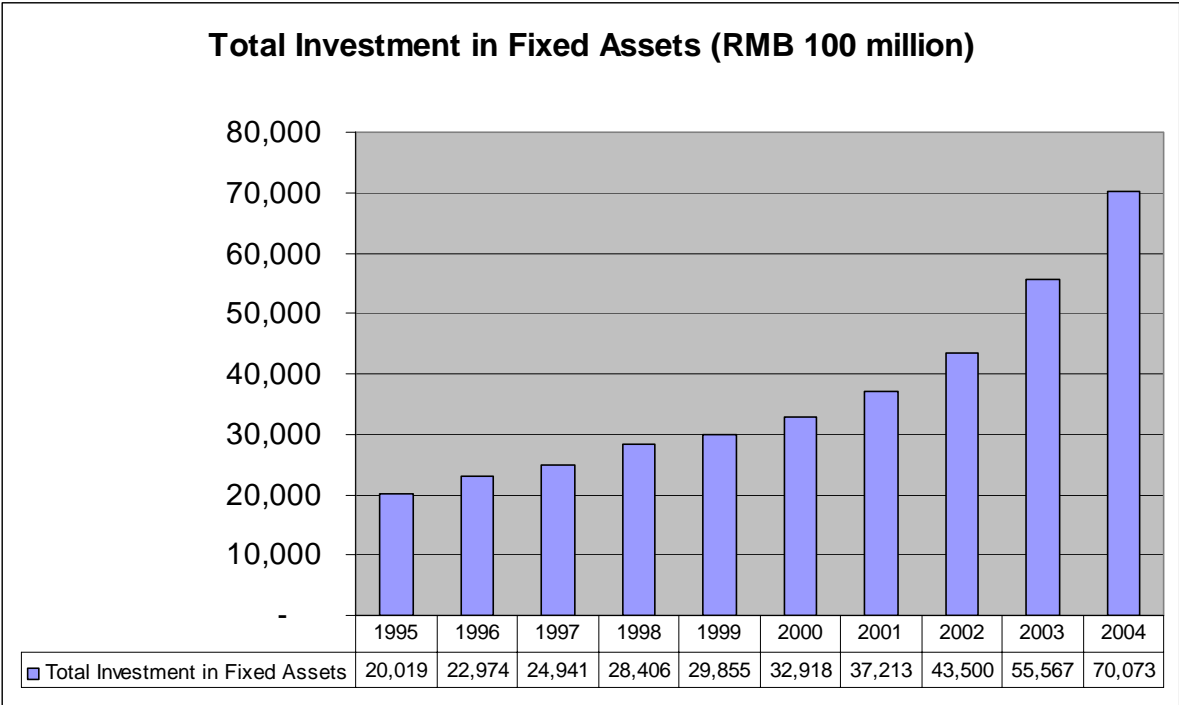
Although some of the western researchers doubted the China's GDP growth, such as Thomas Rawski's paper in 2001: "What's Happening to China's GDP Statistics?", it is inarguable that

¹ Rodman, Jack. 2005. "Growing Pains". Urban Land: February 2005. Urban Land Institute.

China’s economic growth in the last 10 years demonstrates a strong and positive economic development trend.

Investment in fixed assets, such as plant, machinery, housing, and infrastructure, is one of the major economy driving forces in China. It consists of the investment in capital construction, the investment in innovation, the investment in real estate development, the investment in other state-owned fixed assets, the investment in fixed assets by urban collective units, the investment in fixed assets by rural collective units, the housing investment by urban individuals and the investment in fixed assets by rural individuals. The investment increased by 250% from 1995 to 2003. The Chart-2 illustrates the growth trend of the total investment in fixed assets.

Chart-2 Total Investment in Fixed Assets (RMB 100 million)



Source: China Statistical Yearbook 2004

China joined the World Trade Organization (WTO) in December 2001. The commitments that the Chinese government made to the international community further boosted the economic

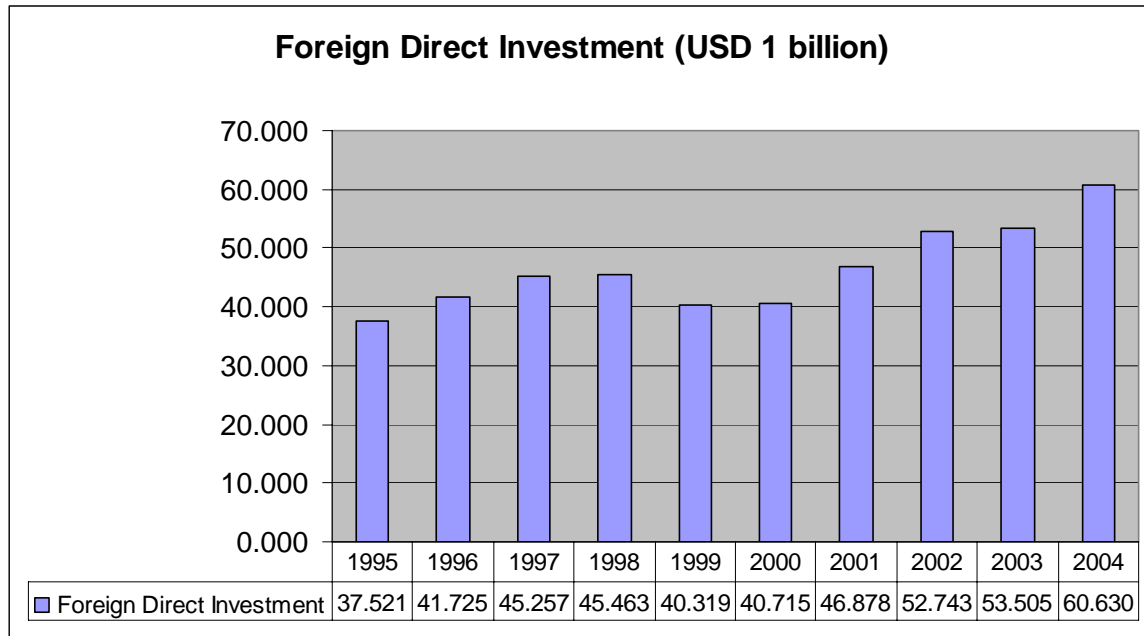
growth. Under the agreement for admission to the WTO, China will be fully opened to foreign institutions.

As the world realizes the opportunities provided by the growing China, more and more investment pours into the country. Foreign Direct Investment (FDI) is a common measurement of the foreign investment. It is usually recorded in U.S. dollars. According to the Balance of Payments Manual: Fifth Edition (Washington, D.C., International Monetary Fund, 1993), FDI refers to an investment made to acquire lasting interest in enterprises operating outside of the economy of the investor. Further, in cases of FDI, the investor's purpose is to gain an effective voice in the management of the enterprise. The foreign entity or group of associated entities that makes the investment is termed the "direct investor".

China was the largest FDI recipient in the world in 2004. It attracted USD 60.630 billion of FDI in 2004 and USD 53.505 billion in 2003. According to the International Monetary Fund, the investment return of FDI in China was about 13% - 14%. Most of the profits are reinvested in China currently; therefore, the remittance of FDI income does not bring much pressure to the current account balance in China². Besides, China had USD 609.9 billion of foreign reserve at the end of 2004. The Chart-3 demonstrates the FDI to China from 1995 to 2004. It appears that the Asian Financial Crisis in 1997 slowed down the FDI to China, but after a couple of years, it increased by higher growth rates.

² Duan, Junshan and Zhonggen Mao. 2005. "Theoretic and Empirical Analysis on the FDI Profits Remitting and Potent Balance of Payment Crisis". Paper submitted to 2005 China International Conference in Finance.

Chart-3 Foreign Direct investment (USD 1 billion)



Source: National Bureau of Statistics of China

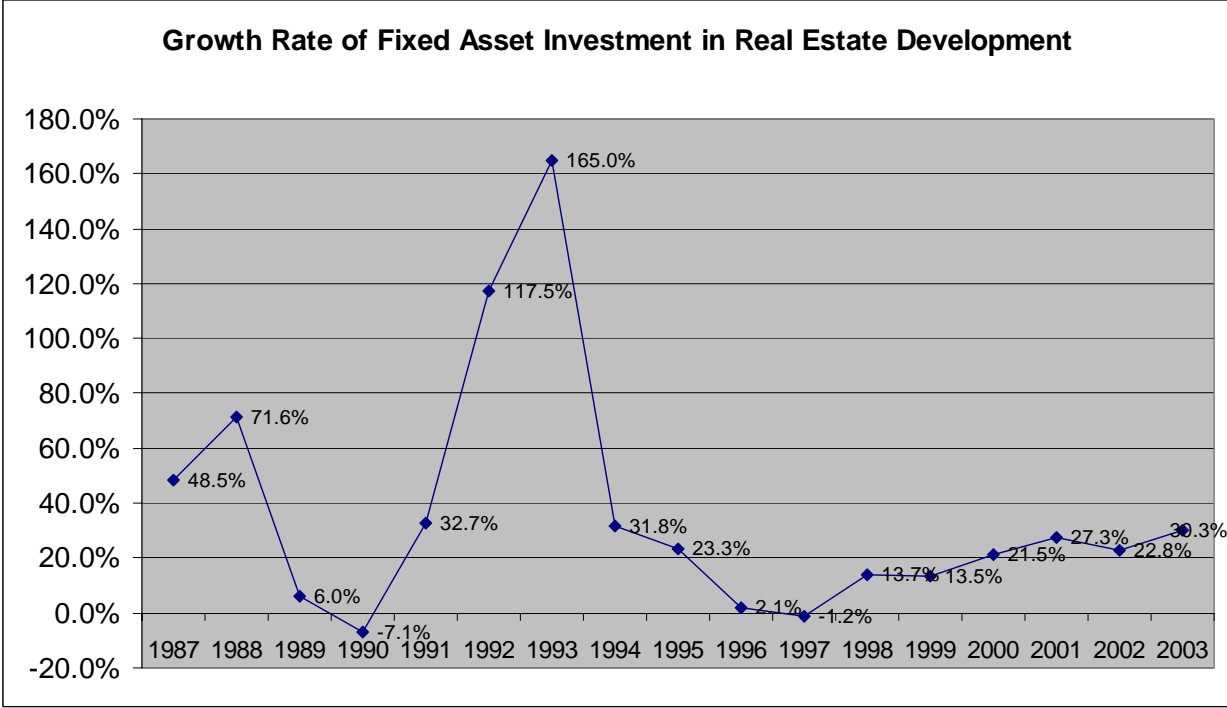
3.1.2. Real Estate Industry and Market

The China's real estate industry does not have a long history. This new industry in China's emerging economy is neither very transparent nor mature. Like many countries in their early stage of the real estate industry, the one in China has been significantly influenced by the government regulations, laws, and policies.

Milestones on the road of the China's real estate industry were marked by some important policies. In 1992, the late Chinese leader Mr. Xiaoping Deng visited the southern China, which embarked on an enormous amount of capital flow into the southern China, such as Guangdong Province, Hainan Province, and Fujian Province. The real estate industry grew tremendously over there. However, the real estate bubbles in several southern cities burst in 1993 and 1994. Following the capital outflow from the southern China, the real estate market declined. From 1994 to 1998, the lack of domestic demand posed a problem to the overall economy. The GDP

growth rate declined from 1994 to 1998 as shown in the Chart-1. Through the growth rate of fixed asset investment in the real estate development industry, the Chart-4 clearly demonstrates the volatility roller coaster of this industry in China over time. The real estate bubble burst in 1993 and 1994 decreased the investment growth rate from 165.0% to 31.8% in just one year.

Chart-4 Growth Rate of Fixed Asset Investment in Real Estate Development



Source: China Statistical Yearbook 2004

In 1998, Premier Rongji Zhu started the housing reform as part of his plan in order to stimulate the domestic economy. A series of policies made the subsidized housing system phased out, and encouraged people to buy their own houses or rent apartments. Since then the real estate industry has experienced a fast growth period, especially the housing market. The Chinese government has made housing reform a centerpiece of the country’s transformation to a market-oriented economy. It first time assured that the real estate industry is a pillar industry in the economy in 2003.

In 2004, the total investment in fixed assets overheated, especially in the steel, cement, and electrolytic aluminum industries. The country's overall adjustment to the fixed asset investment affected the real estate industry. At the same time, the overpriced housing market became one of the largest issues for the government. In Shanghai, prices rose by an average of 19% year on year in the first quarter of 2005. Prices elsewhere in the country have started to show signs of catching up: property prices in China as a whole increased by 14.4% in 2004 and by 9.8% year on year in the first quarter of 2005³. A series of policies were issued in order to dampen the price increase and to stop the speculative investment. Since June 2005, the number of housing sales transactions has been significantly reduced in the marketplace because of these policies. However, there has been no sign of real estate market crash so far, because the government does not intend to decrease prices, but to control the rise in prices.

Obviously, the government control has both positive and negative influences on the real estate market in China. It is an unavoidable situation. The immaturity is a common character of any emerging markets, which provides opportunities rather than risks as long as the risks can be identified and managed. Nonetheless, based on the high GDP growth, the rising disposable income, the increasing urbanization, the demand for improved quality of living, and more and more experienced real estate professionals, China is a land of opportunity for the real estate industry.

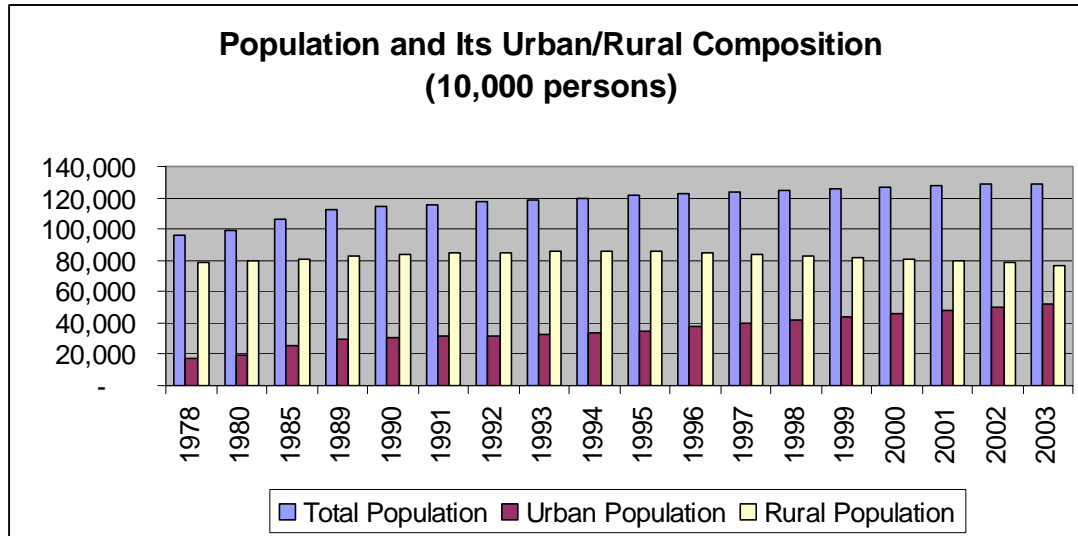
3.1.3. Demographic Trends

China has the largest population in the world. The overall Chinese population in 2003 is around 1.3 billion, consisting of 523.76 million urban people and 768.51 million rural people. The

³ _____, 2005. "Country Report: China June 2005". The Economist Intelligence Unit.

Chart-5 illustrates the population and its composition over the last 25 years. The urban population increased and the rural population decreased.

Chart-5 Population and Its Urban/Rural Composition (10,000 persons)



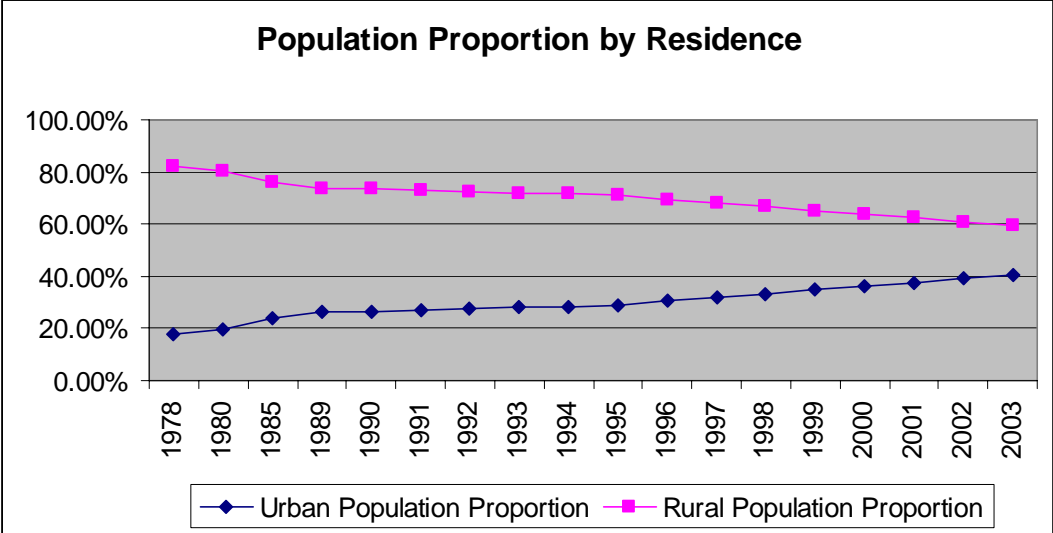
Source: China Statistical Yearbook 2004

The real estate market includes both urban and rural areas. However, it is more about city than village in China. In China's urban areas, about 80% of housing is now privately owned⁴. The improvements of productivity in agriculture, the increasing urban employment opportunities, and the urbanization have attracted more and more farmers to cities. The Chart-6 demonstrates movement from the rural to urban areas. In 1978, about 17.92% of the total population lived in cities, and 82.08% lived in villages. After 25 years, the figures were 40.53% in cities, and 59.47% in villages. Because there are also a huge amount of rural people working and living in cities, the actual urban population is higher than the statistical data. In the developed countries such as the U.S., U.K., Canada, Germany, Australia, and Netherlands, the urban population proportion is about 75% or higher. The China's urbanization level is still relatively low comparing to developed countries, therefore the urbanization trend will continue in China as long

⁴ Rodman, op. cit.

as the economy grows. This is one of the fundamental reasons for the China's booming real estate market.

Chart-6 Population Proportion by Residence



Source: China Statistical Yearbook 2004

3.1.4. Housing

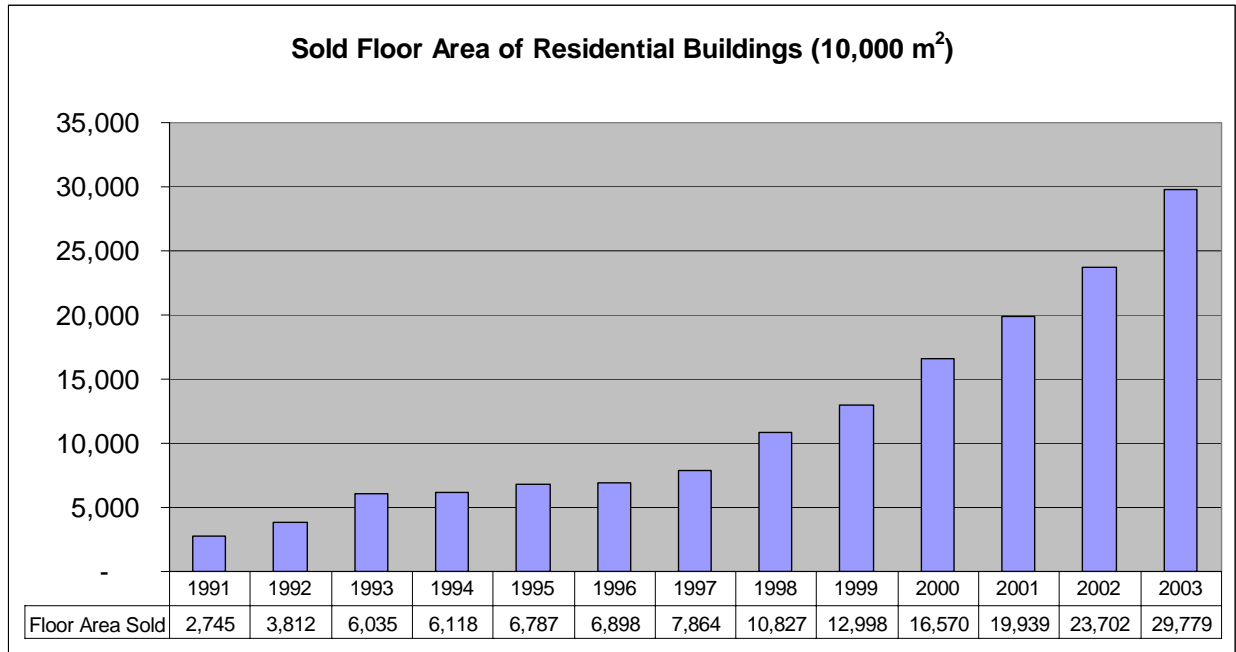
The Housing market is the most active real estate market in China. Demand and supply are far from equilibrium in most cities. Although oversupply happens sometimes in some cities, it is prevailing that demand outpaces supply. Such disequilibrium and investment speculation have driven up housing price in cities like Shanghai, Beijing, Guangzhou, and some other urban areas. In 2003, China's for-sale housing starts increased 21%, housing sales increased by 29%, and the average housing price per square foot increased (by) 26%⁵.

Except for economical (affordable) housing, the actual sold floor area of residential buildings increased by 175% from 1998 to 2003. The Chart-7 illustrates a huge volume growth of sold

⁵ Rodman, op. cit.

floor area from 1991 to 2003. It is clear that the volume growth has speeded up since 1998, when the housing reform started.

Chart-7 Sold Floor Area of Residential Buildings (10,000 m²)



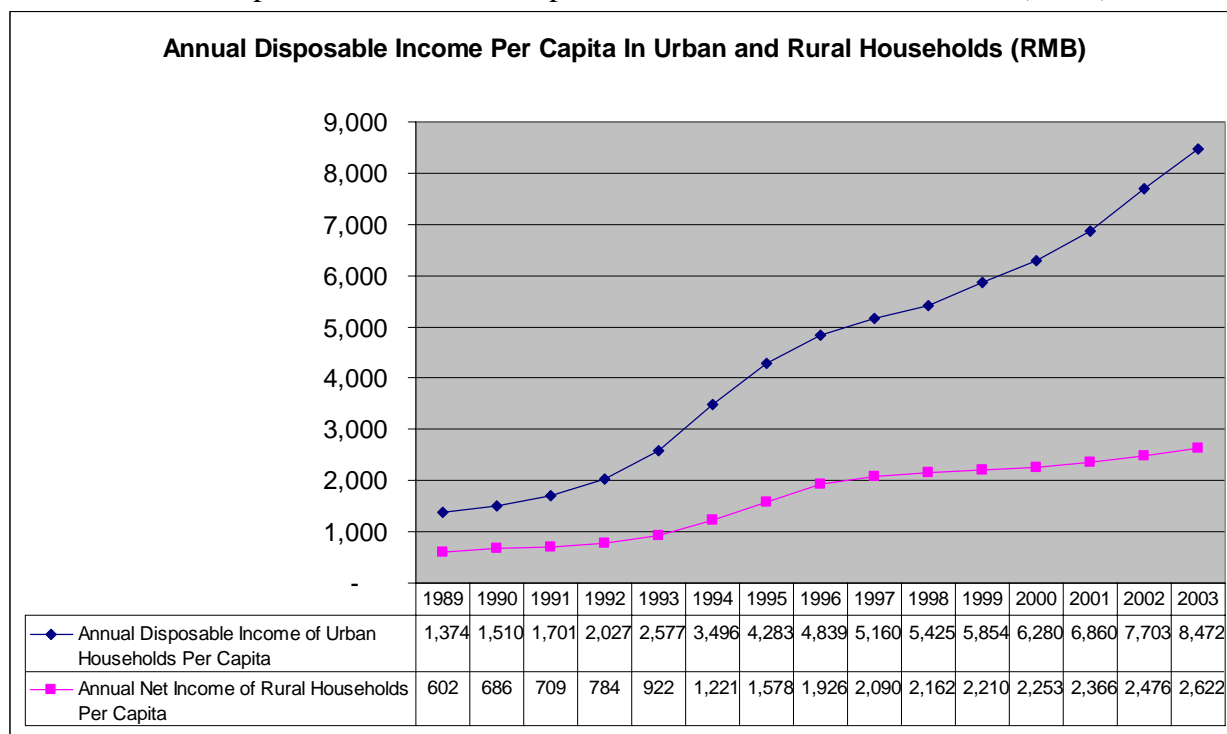
Source: China Statistical Yearbook 2004

3.1.5. Income Level

As consequences of unbalanced economic development between urban and rural areas, and between coastal and inland regions, the income inequality has been widening in these two aspects: urban vs. rural areas, and coastal vs. inland regions.

According to the China Statistical Year 2004, the annual disposable income of urban households per capita increased from RMB 1,374 in 1989 to RMB 8,472 in 2003 by 517%. The increase in annual net income of rural households per capita was 336% during the same period. The income gap between urban and rural areas has increased dramatically. The Chart-8 illustrates the trend of increasing income gap between urban and rural households.

Chart-8 Annual Disposable Income Per Capita in Urban and Rural Households (RMB)

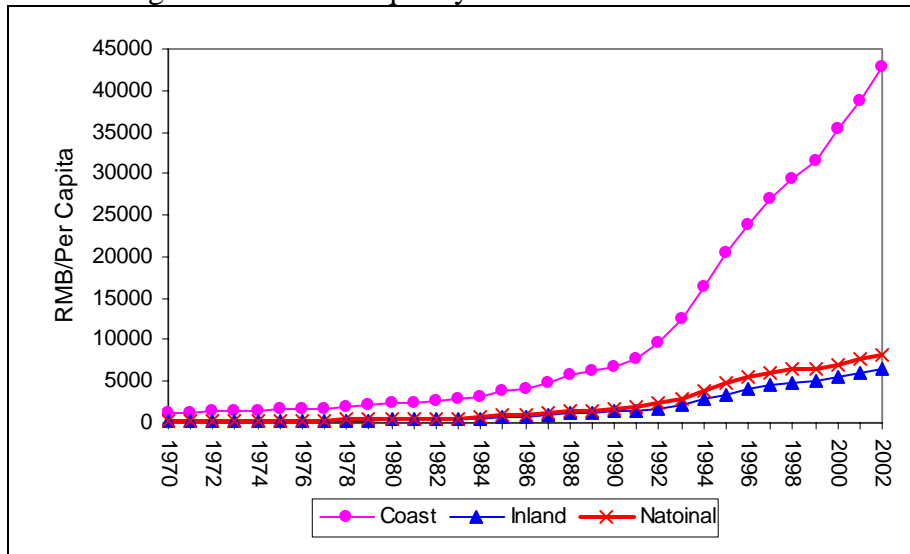


Source: China Statistical Yearbook 2004

The coastal areas in China were the experimental fields of economic and social reforms. In 1979, three Special Economic Zones (SEZs) were established in one southeast coastal province: Guangdong. One SEZ in Fujian Province was established in 1980, and twenty-seven FDI zones were established in the coastal area from 1984 to 1986. The successes of the special zones significantly increased the income level along the coastal areas. In 1992, after almost 14 years of opening up the coastal region, China extended the economic zones to some selective inland provinces, and established open cities in all capital cities of the inland region. However, the FDI created much higher average wages in all sectors in the coastal region than in the inland region.

From mid 1980s, the difference in per capita income became more and more divergent⁶. The Chart-9 demonstrates the dramatic income difference between the coastal and inland areas.

Chart-9 Regional Income Inequality in China: 1970-2002⁷



The inequality of income partially explains the strong demand in the real estate markets within the coastal urban areas, where people have a much higher income level than the overall income level in China.

Only knowing the statistical income data will not have a full understanding of the real income level in China. The so-called “grey income”, which is the money and other forms of income garnered through work units, still exists in governments and many industries. It is not recorded in the income statistics. Although it is very difficult to estimate the “grey income”, ignoring it will only underestimate the real purchasing capability.

⁶ Tang, Sumei and Saroja Selvanathan. 2005. “Foreign Direct Investment and Regional Income Inequality in China”. Griffith University, Australia.

⁷ Ibid.

3.1.6. Mortgage

Of equal importance for understanding the income level, a private mortgage market has developed since 1998 in China. First-time homebuyers now can borrow up to 80% of the value of the property. The maximum period of home loan repayment is 30 years, although, in practice, the maximum is 20 years. Banks generally will allow up to 50% of household income to service the mortgage loan payment⁸. It is not unusual to see home buyers put down as much as one-third or one-half of the cost of a new home in cash, mainly thanks to the high saving rate among the population (about 45% in 2001) and limited financing resources⁹. It is also worth to know that some parents pay the down payment for their young children (usually 25-30 years old) using their savings deposit. It is a Chinese style activity.

There are four major state owned banks in China: Industrial and Commercial Bank of China, Agricultural Bank of China, Bank of China, and Construction Bank of China. The Construction Bank of China is the largest lender of home mortgage loans. The China Banking Regulatory Commission (CBRC) estimates that real estate-related loans (to real estate developers and homebuyers) account for about 15% of outstanding loans, up from zero six years ago¹⁰.

In order to cool down the country's hot economy and the housing market, in October 2004 the People's Bank of China (PBC, the central bank) raised interest rates for the first time since 1995. In March 2005 a further step was taken to cool the housing market, and to avoid damaging the banking sector in case there is a real estate crash: the PBC prohibited banks from offering

⁸ Rodman, op. cit.

⁹ Wang, Qian. 2003. "Returns on Chinese Residential Development Projects". Massachusetts Institute of Technology, Center for Real Estate.

¹⁰ Rodman, op. cit.

interest rates on five-year home mortgages lower than 90% of the 6.12% base rate, in effect raising mortgage interest rates by 20 basis points to 5.51%¹¹. In May 2005, the PBC issued policies to levy taxes on properties sold within two years and to limit credit for property deals.

However, despite the small increase in mortgage rates, it is estimated that mortgages would remain relatively affordable. As of mid-2004, Beijing's, Shanghai's, and Guangdong's average affordability ratio (or a family's mortgage payments divided by its total income) was 40% to 60%, compared with 50% to 90% in 2001¹².

3.1.7. Employment

In 2003, the total urban and rural employed population reached 744.32 million. The urban employed population accounted for 34.4%, reaching 256.39 million. According to Economist Intelligence Unit estimates, China's unemployment rate has been declining. It was 10.3% in 2003, 9.9% in 2004, and would be 9.3% in both 2005 and 2006¹³.

From 1990 to 2003, the number of employees in state-owned entities decreased by 34.7 million, down to 68.76 million; and the number of those employed by urban individual and private economic entities increased by 35.96 million, reaching 42.67 million. It represented 46.5% of the newly employed in the urban areas in the same period¹⁴. The Chart-10 illustrates the employment trend in different types of entities in urban areas. Apparently, the state-owned and collective-

¹¹The Economist Intelligence Unit, op. cit.

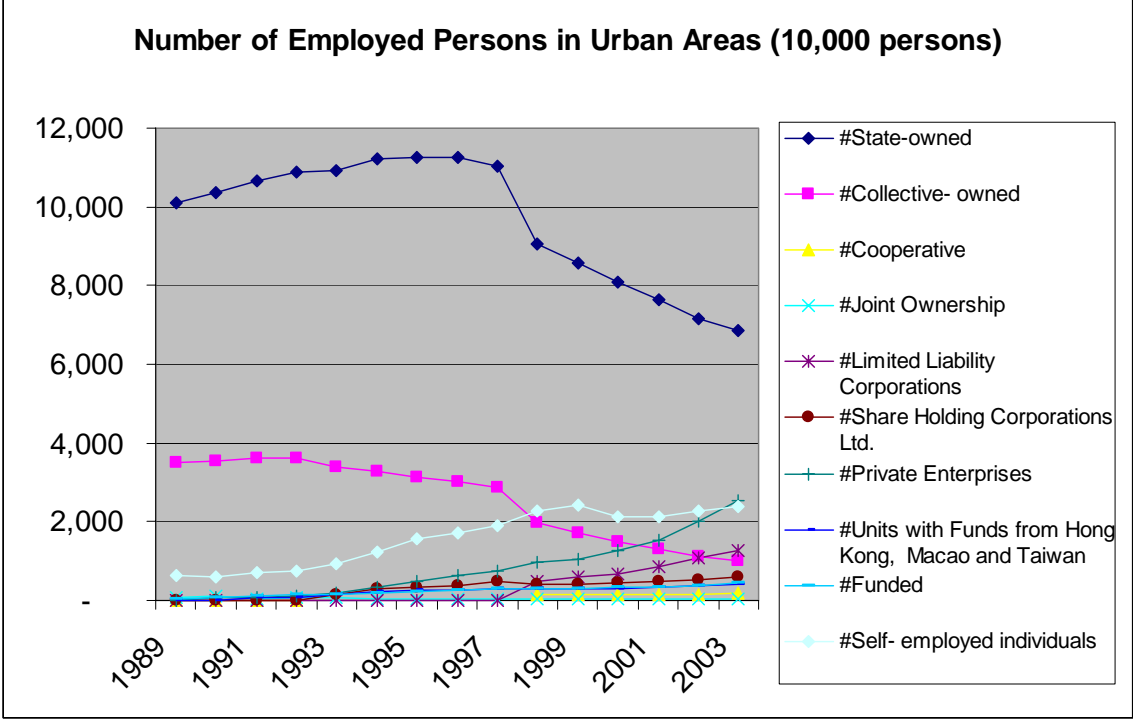
¹²Rodman, op. cit.

¹³The Economist Intelligence Unit, op. cit.

¹⁴_____. 2004. "China's Employment Situation and Policies". Information Office of the State Council of the People's Republic of China.

owned entities had significant decreases in the number of employees. Other new types of entities absorbed more and more people.

Chart-10 Number of Employed Persons in Urban Areas (10,000 persons)



Source: China Statistical Yearbook 2004

More specifically, forms of employment became more and more diverse, such as the foreign invested firms, private enterprises, and self-employed individuals. This increasing diversity not only broadened the avenues for employment, but also resulted in the increase in the income level. People working in these new forms of employment are the prime buyers of residence.

3.2. Overview of Legal Issues in Real Estate Development and Investment

3.2.1. Legal Process and Requirement for Real Estate Development

The legal process for real estate development is not always the same in different cities, however there is a common procedure in China. A typical real estate development project needs to pass the following processes or acquire the following approvals from the beginning to finish:

- Registration of real estate development company qualifications
- Site selection proposal for construction project
- Land use planning permit for construction project
- Land use right permit
- Real estate development contract
- Land transfer approvals
- Engineering planning permit for construction project
- Construction planning permit for construction project
- Pre-sales registration and permit for residential product
- Record of the inspection of individual construction completion
- Early-phase property management
- Comprehensive inspection of the overall construction completion
- Property ownership permit
- Association of property owners

In order to obtain a bank loan and proceed with a project, a developer needs to have the approval of the site selection proposal, land use planning permit, land use right permit, engineering planning permit, and construction planning permit. It is called “four-permits-and-one-approval”. The developer also needs to finance 35% of the total cost by equity capital, and the bank can only loan at most 65% of the overall cost.

The land ownership in China is vested with the state and with the collectives in the countryside. However, an amendment to Article 10 of the Constitution, adopted on April 12, 1988, states that land use rights may be transferred in accordance with the laws¹⁵. Therefore, people and

¹⁵ Wang, op. cit.

companies can own improvements on land, such as buildings and factories, but the person owning improvements must have land use rights in the underlying parcel of land.

There are two types of land use rights: allocated and granted. Usually the allocated land use rights are enjoyed by Chinese state-owned enterprises (SOE). The government allocates land to a SOE for little or no compensation, but retains the right to take the land back at any time from the SOE. Additionally, allocated land use rights cannot be transferred, leased, or mortgaged. However, the granted land use rights can be transferred, leased, or mortgaged. Real estate developers usually can obtain the granted land use rights. They must sign a land grant contract with the local land authority and pay a land grant fee up front. The grantee then can enjoy a fixed land grant term and must use the land for the purpose specified in the contract. Depending on the type and purpose of land use, the maximum term of a land grant ranges from 40 years for commercial use, to 50 years for industrial use, and to 70 years for residential use¹⁶.

The Regulations on the Grant of State-Owned Land Use Rights were issued by the Ministry of Land and Resources on May 9, 2002 and came into force on July 1, 2002. It offered real estate developers three methods to obtain the granted land use rights: tenders, auction, and listing of land. On the one hand, it improved the market's transparency so that private and state-owned developers compete openly for lands; on the other hand, the market-oriented approaches significantly increase the land price. Additionally, since the regulation was promulgated in the national level, it takes time for the local authorities to fully implement them. In some cities, the developers can still benefit from the established relations with governmental officials, and the connections will keep playing an important role for a while.

¹⁶ Ibid.

3.2.2. Taxes and Benefits

The real estate development and investment business in China is not an industry with many special policies to subsidize. Therefore, it pays typical taxes as a common business. The following is a list of the taxes that a real estate company needs to pay:

- Land transaction tax: 3% of total land cost.
- Business tax and surcharge: 5.75% of sales revenue, including 5% of sales revenue as business tax, 7% of business tax as urban maintenance tax, 3% of business tax as education surcharge fee, 5% of business tax as major transportation construction surcharge fee.
- Corporate income tax: 33% of profit earnings.
- Stamp tax: The tax rates are different among different contract types. Usually it is about 0.03% of the total contractual sales.
- Land value-added tax: 1% of sales revenue. It is charged after the completion of the overall project.
- Real estate transaction fee: RMB 3 per m² of floor area

There are some ways to avoid certain taxes. For example, if the company A owns a piece of land, the company B acquires the company A. The company B effectively owns the land and does not need to pay the land transaction tax. Another practice is to sell the project company rather than the property in order to avoid the business tax and land value-added tax. Furthermore, a foreign company can avoid certain taxes by using sophisticated legal structures both in and outside of China.

The benefits provided to real estate companies are very limited if any. However, Different cities have different policies. In some cities, a foreign company or joint venture has the benefit to pay only 15% of the corporate income tax instead of 33%, although a real estate company rarely gets this benefit. In some urban redevelopment projects, certain processing and resettlement fees can be exempted.

3.2.3. Foreign Investment Laws

Both the central and local governments issue laws to regulate foreign investment. Currently, one major rule is that the China's capital market is not opened to foreign companies. Foreign capital inflow is through the channel of FDI. The foreign capital can invest into the current account, but not the capital account. For example, a foreign investor can invest USD 100 million in a real estate development project and get profits from the sales of the project, but he cannot acquire an office building and get the rent cash flow over time, because the development is classified as current account activity, and the acquisition is classified as capital account activity. One simple difference between the current and capital accounts is that the business under the current account usually uses capital as tool to build factories or facilities; the one under the capital account usually uses money to make money.

There are securities investment funds in China, but there is no legal evidence to set up industrial investment funds, including real estate investment fund. However, there are some signals that the Chinese government will eventually open the capital market and allow the industrial investment funds. The compelling story of FDI growth in China requires the government to make regulations to facilitate the foreign investment.

Currently, there exist two ways for a foreign investor to hold an interest in Chinese commercial real estate: formation of a foreign-invested enterprise (FIE), or ownership by an offshore entity along with engagement of a Chinese property manager¹⁷. FIE must be approved by the Ministry of Foreign Trade and Economic Cooperation (MOFTEC) or its local branches. An FIE for real estate development generally must take the form of a joint venture with a

¹⁷ Chao, Howard and David Kitchen. 2005. "Investing in China". Urban Land Institute.

Chinese partner¹⁸. Engaging a Chinese property manager is another way to own commercial real estate, which is to purchase a property directly using a foreign entity, but then to hire a local Chinese company with a property management license to operate it. Therefore, the foreign owner effectively “borrows” the local company’s property management business license¹⁹.

3.2.4. Foreign Exchange Regulation

The Chinese government decided to unpeg the RMB from the USD, and to link it to a basket of currencies on July 21, 2005. This represents a significant move in the China’s market-oriented reforms. The government has been under the pressure to revalue its currency for many years. The 2.1% increase in the RMB against the USD make the exchange rate from USD 1: RMB 8.28 to USD 1: RMB 8.11.

Before the revaluation, there were some speculations on the RMB appreciation. It is believed that new speculative funds will bet on further appreciation. It is estimated that more private investors speculate on the RMB appreciation than institutional investors do. Real estate is one asset class which speculators bet on. The revaluation will certainly complicate the real estate market. The Chinese government’s efforts to stop the speculative investment in real estate will be challenged.

In the long run, a more open, mature, and sophisticated economy will be beneficial to China. However, the steps and speeds that China takes must be very cautious. The foreign exchange regulations certainly play an important role in the progress, which will influence the real estate market profoundly.

¹⁸ Ibid.

¹⁹ Ibid.

3.2.5. Accounting Challenge

The lack of transparency in accounting remains one of the major issues that have discouraged foreign investors. China has its own accounting rules, which are different from the General Accepted Accounting Principles (GAAP). It is not a problem to convert the accounting data between these two accounting systems. The problem is that some Chinese companies have different sets of accounting data, one full of losses for the government to avoid taxes, one with profits to attract investors, and one hopefully so that the people running the company will actually know what is happening. It is illegal to have different accounting books, and many companies do comply with the law. However, because the cash transactions in China are common and the amount of cash in the transactions is not a small number, some companies illegally do not record the cash inflows and outflows in the accounting books. This kind of practice becomes less and less popular because the law enforcement becomes more and more effective, and many foreign investors use international accounting firms to audit their investment. The challenge for foreign investors is not to try to correct the malpractice, but to know it and deal with it effectively.

3.2.6. Repatriation of Investment Profit

China attracted USD 60.63 billion of FDI in 2004. There is no problem to convert the RMB investment profit into USD and move it out of China. As stated in the Article 26 in the Regulations on the Foreign Exchange System of the People's Republic of China, "the currency holding denominated in RMB belonging to the foreign counterparts of foreign-funded enterprises, having been terminated in accordance with the law, can be converted into foreign exchange at the designated foreign exchange banks and then sent or taken abroad after the

liquidation and tax payments. All the foreign exchange belonging to the Chinese counterpart investors shall be sold to the designated foreign exchange banks.”

Usually foreign investors establish appropriate legal entities to facilitate the repatriation of investment profits and to avoid taxes. There are three types of entities available for foreign investors: equity joint venture (EJV), contractual joint venture (CJV), and wholly foreign only enterprise (WFOE).

The EJV company treats the equity capital invested by different investors as common equity. Investors have their shareholdings of the company proportional to their equity contributions. They share the investment returns proportionally as well. It is also known as *Pari Passu*. The foreign equity investment cannot be lower than 25% of the total registered capital of the company.

The CJV company is more flexible. Different investors will split the shares and returns according to the joint venture agreement. Usually a party can provide land, technology, or any intangibles as their contributions to the company. The CJV provides enough space for different investors to negotiate joint venture terms and promotes. For example, the definitions of preferred equity and mezz debt do not exist in any laws or regulations in China, but the nature of the preferred equity and mezz debt can be achieved through the agreement.

The WFOE company is a 100% foreign invested company, and the investors have 100% of the company's shareholdings. It is usually used in the acquisition of office and hotel properties. If a

foreign investor directly acquires a property in China, there are potential problems in terms of foreign currency regulations, because the China's capital market is not fully opened. By setting up a WFOE company in China, the investor can avoid the problems when acquiring properties.

A real estate company can select one of the entity types to facilitate the repatriation of profits and to maximize the tax benefits. For example, the WFOE entity is beneficial for foreign investors to acquire and dispose real estate assets. First, an investor can register a Special Purpose Vehicle (SPV) in the British Virgin Islands (BVI); second, the SPV as the sole shareholder can establish a WFOE in China; third, the WFOE as the purchaser can acquire real estate assets and it is the owner of the assets; and fourth, when the time comes to dispose the assets, the investor can sell the SPV outside of China to buyers. Through this procedure, the transaction of assets is very simple and the tax is minimal or free. However, the WFOE needs to pay business tax and corporate income tax during the asset-holding period.

Except for the ownership structures, foreign investors also create sophisticated capital structures to facilitate the repatriation of profits and to avoid taxes. For example, the shareholder loan is one of the methods used by foreign real estate development companies. First, a developer can establish a joint venture in China and put required registered capital; second, the developer borrows shareholder loans to develop a project at an agreed interest rate; third, the developer pays the loan interests to the shareholders outside of China, and the tax rate for the interests is 10% that is 23% less than the corporate income tax rate; fourth, the loan principal is returned to the shareholders without taxes; and fifth, when the time comes to dispose the property, the developer needs to pay 33% corporate income tax before moving the capital out of China. Of

course, the registered capital is not subject to any taxes if the joint venture, instead of the property, is liquidated. However, there is an upper limit to the loan amount. The minimal registered capital is 30% of the total required investment, and the rest 70% is the maximal loan amount.

There are no standard ways to repatriate the investment profits. Among them are the methods using the ownership and capital structures mentioned above. Under the current regulations, the creativity in this matter is critical important.

Chapter 4 Project Market Analysis

4.1. Region-Level Overview of Chongqing

In the previous chapter, the analysis of real estate and its relevant issues provides transparency of development projects in the country-level. The on-going Hongensi Project, the case in the thesis, locates in the Chongqing Municipality, China. The region-level analysis focuses on this municipality.

There are 34 administrative areas in China, including 4 municipalities, 2 special administrative regions, 5 autonomous regions, and 23 provinces. Before 1997, Chongqing was one of the cities in the Sichuan Province. In 1997, Chongqing became one of four municipalities in China. Others are Beijing, Shanghai, and Tianjin. The Chongqing Municipality is located in the middle of the China's inland as illustrated in the Map-1.

Map-1 Location of Chongqing Municipality in China



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The Chongqing Municipality consists of 15 districts, 4 cities at county level, and 21 counties. It covers an area of 82,400 square kilometers or 20.36 million acres. The Map-2 illustrates these administrative areas.

Map-2 Administrative Areas of Chongqing Municipality

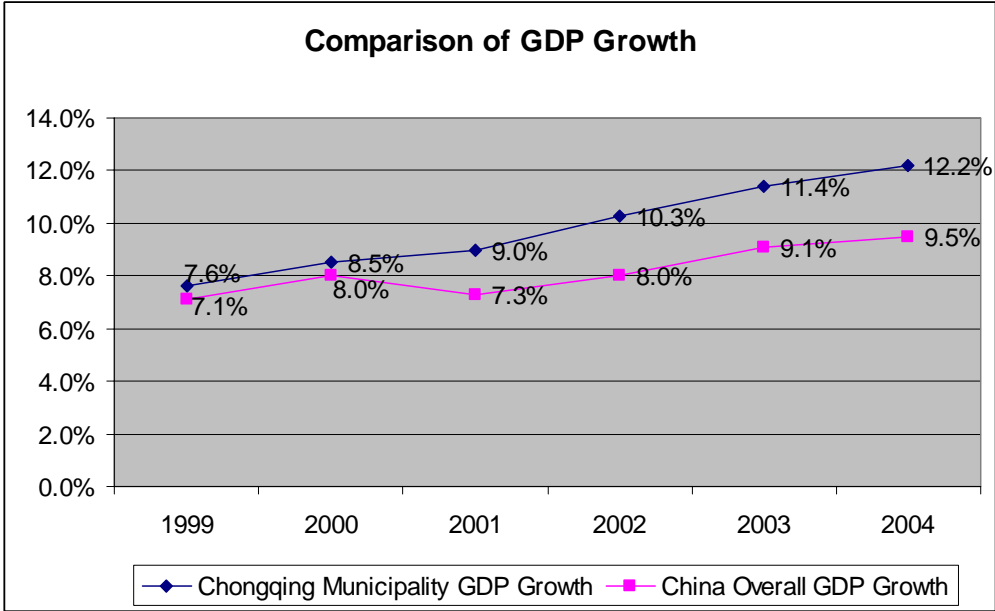


The new establishment of the municipality was one of the China’s strategies to develop the middle and west region in China. It determined Chongqing to be the major economic center in the region. Since 1997, many special policies have been issued from both the central and local governments to propel the economic development in this latest municipality. Due to these favorable policies, the municipality has been growing very fast. Its GDP was RMB 147.9 billion in 1999. After 5 years, the figure became RMB 266.5 billion in 2004. It increased by 80.17%. More specifically, the GDP of non-state-owned enterprises exceeded RMB 100 billion in 2004. The number of employees in the non-state-owned enterprises was three times more than the number of employees in the state-owned enterprises. The increases in the GDP and the number

of employees of non-state-owned companies reflect positive impact of the economic diversification and structural improvement.

The economic growth and urbanization demonstrates that Chongqing Municipality gradually became an economic magnet in the region. The Chart-11 demonstrates that the GDP growth in Chongqing Municipality has kept outpacing the overall GDP growth in China from 1999 to 2004.

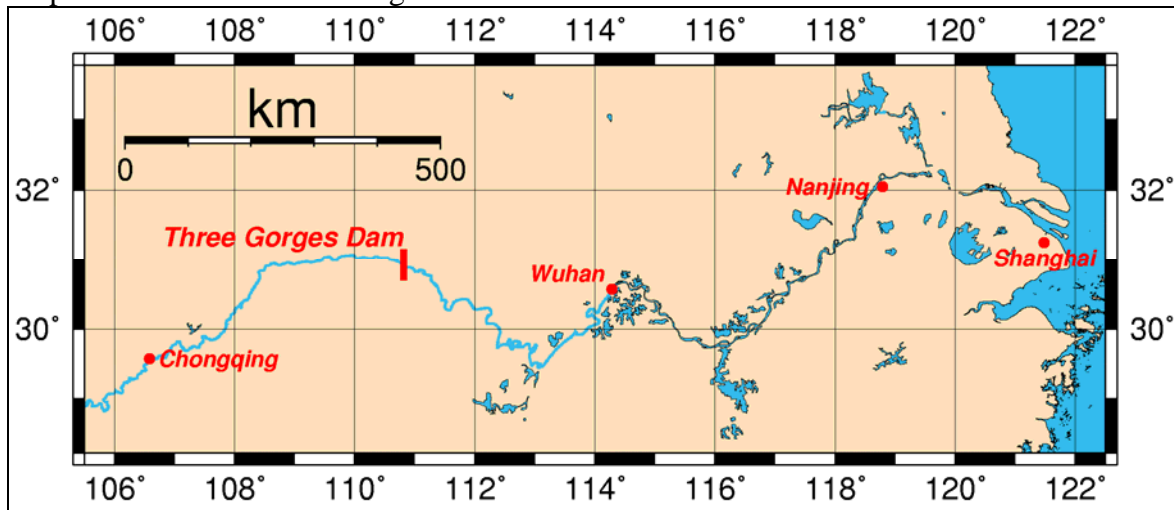
Chart-11 Comparison of GDP Growth



Source: National Bureau of Statistics of China
Chongqing Statistical Yearbook 2004

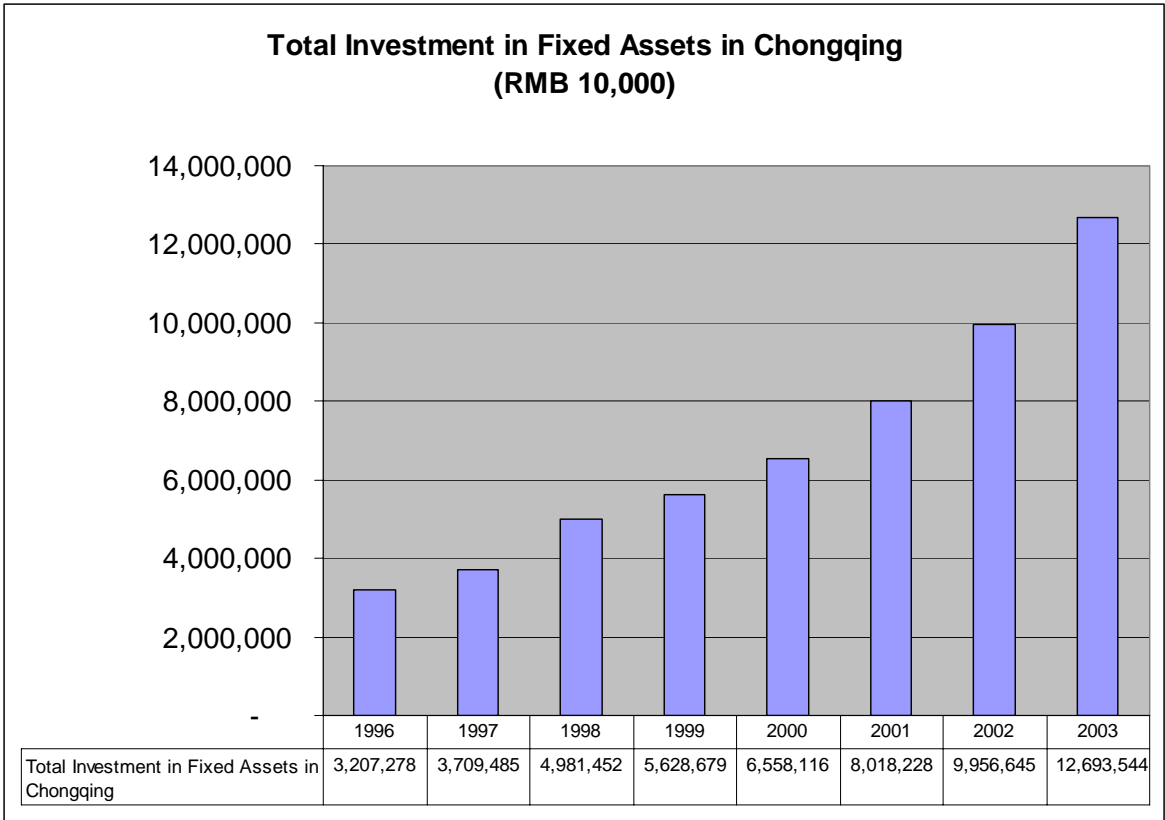
The on-going Three Gorges Dam project is one of the major reasons to establish the Chongqing Municipality. The dam is expected to be completed in 2009, and it will enable 10,000-ton ocean-going freighters to sail directly into China's interior for six months of each year. The project includes a system of locks, the largest ever built, intended to bring the ocean-going ships 1,500 miles inland to the City of Chongqing, the capital of the municipality. Additionally, the inexpensive electricity and cheap river transportation will further open the region to international investment and economic development. The Map-3 demonstrates the location of the Three Gorges Dam.

Map-3 Location of Three Gorges Dam



Investment in fixed assets, such as plant, machinery, housing, and infrastructure, is one of the major economy driving forces in Chongqing. The growing investment can also reflect the economic growth. The total fixed asset investment increased by 296% from 1996 to 2003. The investment in real estate accounted for 33.96% and 33.69% of the fixed asset investment in 2002 and 2003, respectively. The Chart-12 illustrates this dramatic increase in investment in fixed assets from 1996 to 2003.

Chart-12 Total Investment in Fixed Assets in Chongqing (RMB 10,000)

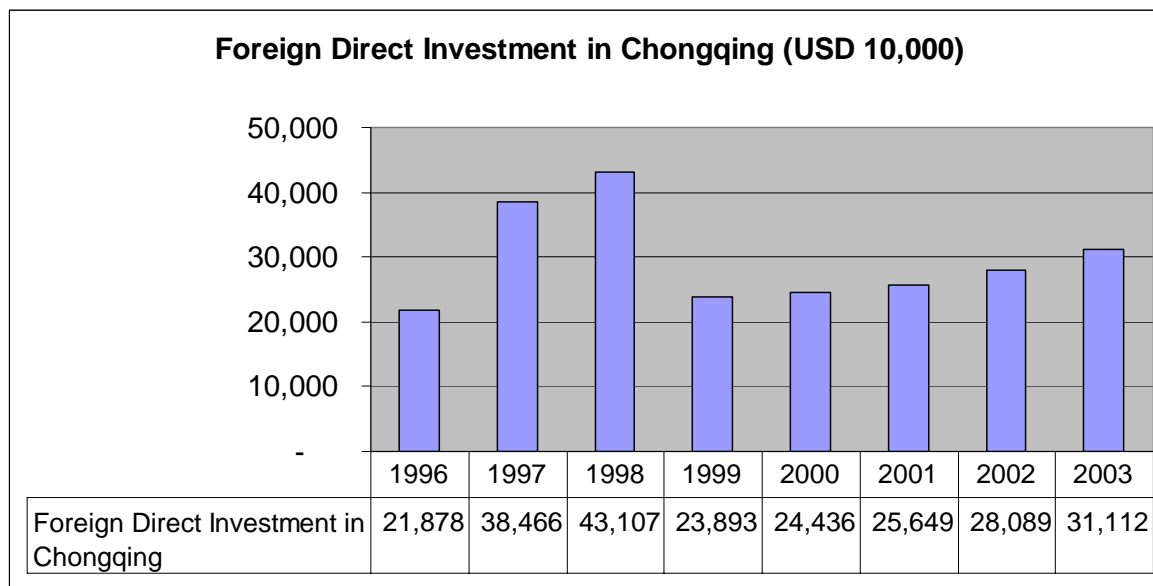


Source: Chongqing Statistical Yearbook 2004

FDI also plays an important role in the economic growth in Chongqing. It is usually recorded in U.S. dollars. From 1996 to 1998, the FDI increased rapidly and reached a peak in 1998. There seemed to be some large projects attracting FDI in 1997 and 1998. Although it decreased in

1999, the FDI has gradually grown since then. The Chart-13 demonstrates the FDI's ups and downs in Chongqing from 1996 to 2003.

Chart-13 Foreign Direct Investment in Chongqing (USD 10,000)



Source: Chongqing Statistical Yearbook 2004

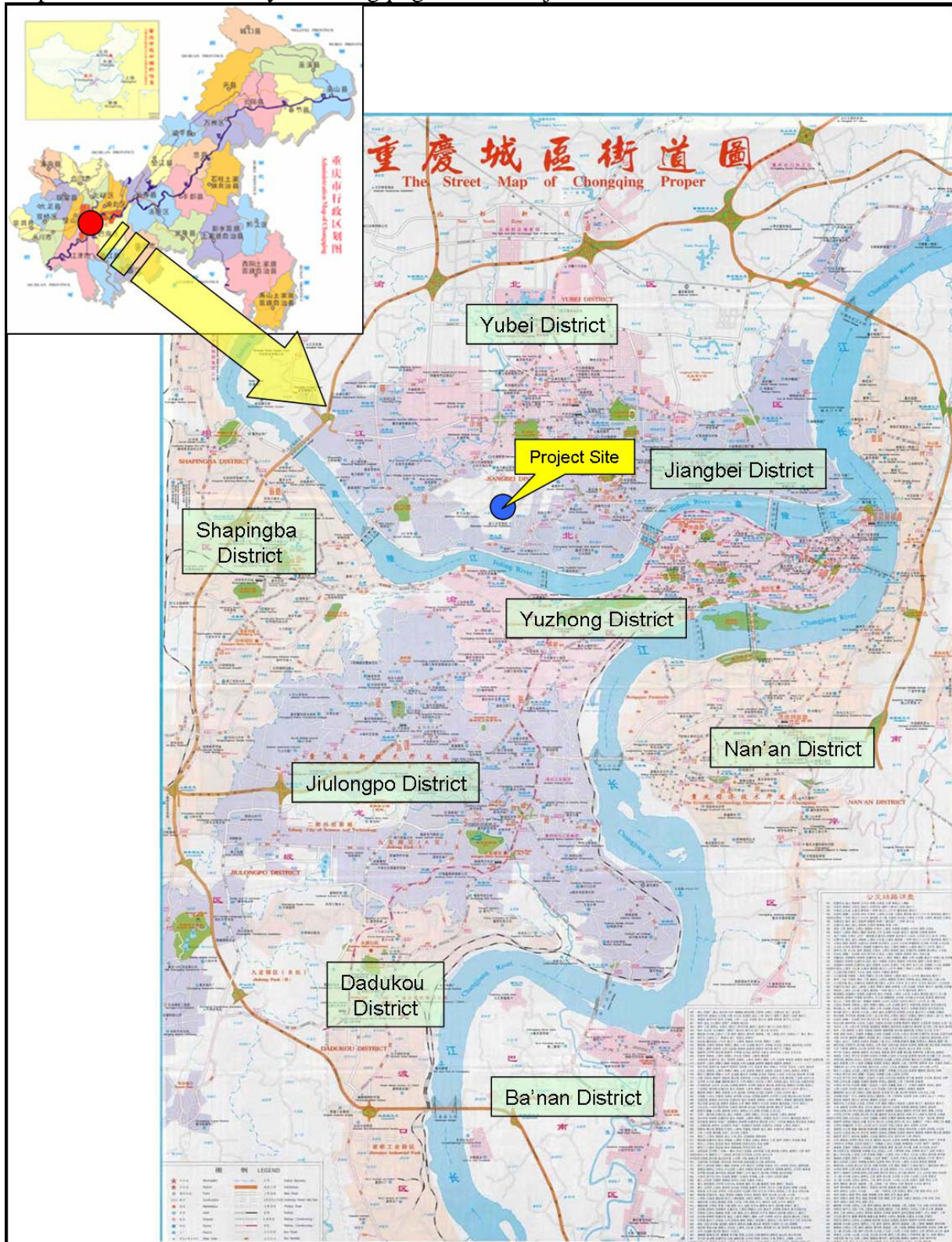
In general, the Chongqing Municipality is one of the most active areas in China. It has a higher GDP growth rate than the China's average growth rate. In 2003, the agricultural sector accounted for 14.9% of the overall GDP, the industrial sector (excluding construction industry) accounted for 34.1%, the service sector accounted for 41.6%, and the construction industry accounted for 9.3%. The manufacture of car and motorcycle is the main industry in Chongqing. Investments in manufacturing, infrastructure, and real estate development are three major drivers of the region economic growth. The Three Gorges Dam will increase the port capacity in the City of Chongqing, and will therefore improve the transportation capability in the region. The Chongqing's strategic position in China is indispensable to any foreign investors who are looking for strong economic growth.

4.2. City-Level Market Condition of Chongqing

4.2.1. Overview of the City of Chongqing

Chongqing is the largest municipality in China. From the real estate point of view, it has many rural areas. However, the land value is better reflected in the cities, especially the City of Chongqing, which is the capital of the municipality. The City of Chongqing includes nine districts: Yuzhong, Jiangbei, Shapingba, Jiulongpo, Nan'an, Dadukou, Ba'nán, Yubei, and Beibei. Among them are seven core districts in the city except for Ba'nán and Beibei districts. The Hongensi Project site locates in the Jiangbei District. The Map-4 illustrates the location of the City of Chongqing and the Hongensi Project site.

Map-4 Location of the City of Chongqing and the Project Site



Note: Beibei District is located to the far northwest of the city, and is thus out of the range of this map.

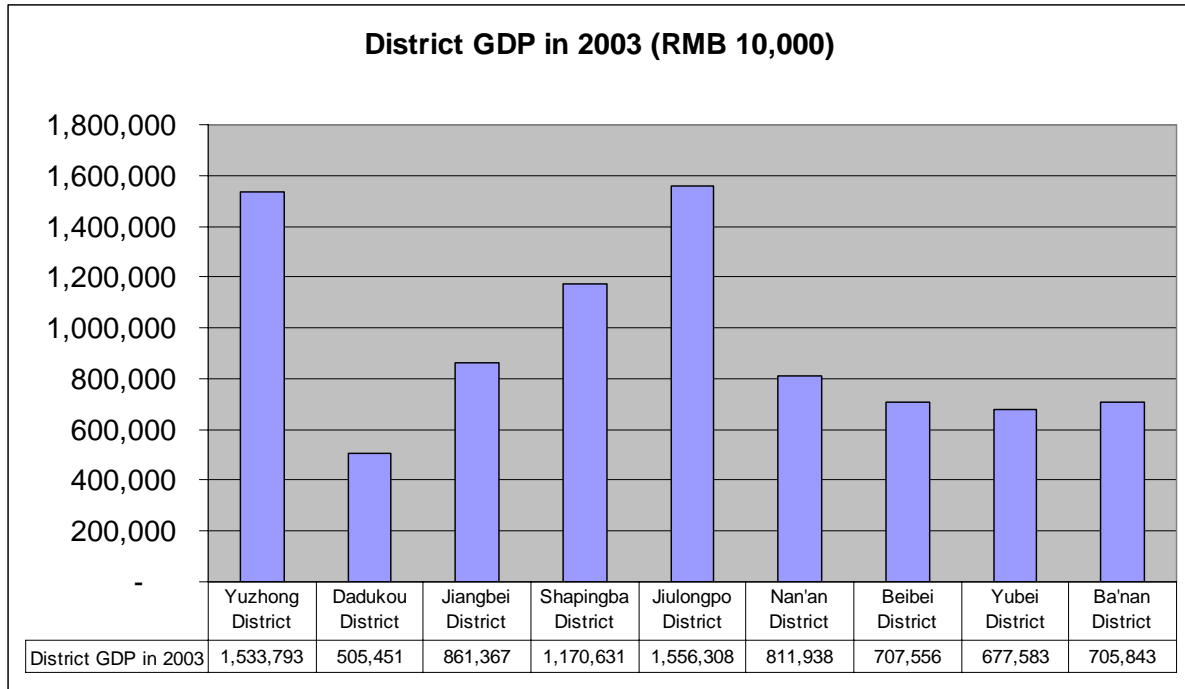
The City of Chongqing is a unique city in terms of topology. It is called “Shan Cheng” in Chinese, or “Mountain City” in English. Unlike Beijing and Shanghai, Chongqing has two mountains and two rivers across the city and the city was actually built on the mountain slopes. Because of the mountain and river barriers, the developable land in the City of Chongqing is limited, and every district has its own CBD. A simple way to describe the city is that it consists of a group of districts and CBDs with roadways connecting them.

4.2.2. Macro Market Analysis of Chongqing

4.2.2.1. Economic Development

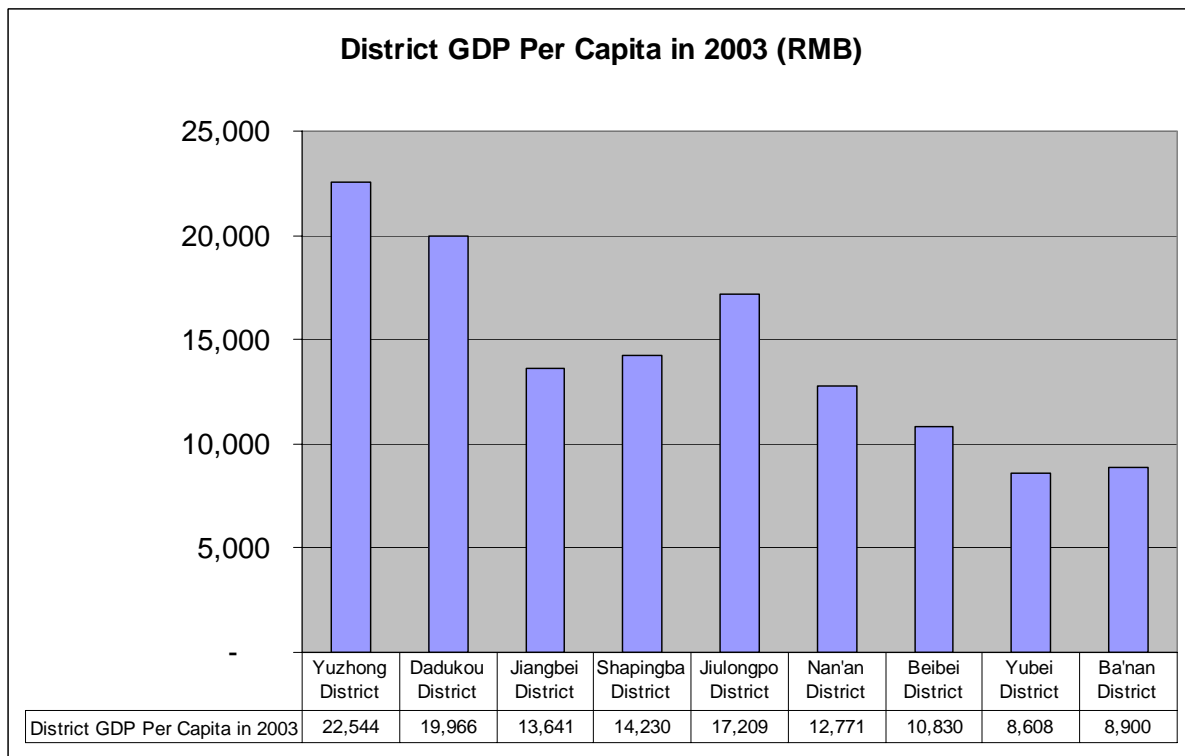
The economic development in the City of Chongqing is unbalanced. Large differences among different districts not only exist in the total GDP, but also the GDP per capita. The Chart-14 illustrates the district GDP, and the Chart-15 demonstrates the District GDP per capita in 2003. The Yuzhong District is the most developed district, and the Yubei and Ba’nan are the least developed ones. The Jiangbei District is in the middle of the spectrum. The unbalanced economy plus separated CBDs creates relatively isolated groups and large fringe areas between each other. On the one hand, any investors have to recognize the differences among different districts; on the other hand, demand to fill the gaps provides opportunities for real estate development.

Chart-14 District GDP in 2003 (RMB 10,000)



Source: Chongqing Statistical Yearbook 2004

Chart-15 District GDP Per Capita in 2003 (RMB)



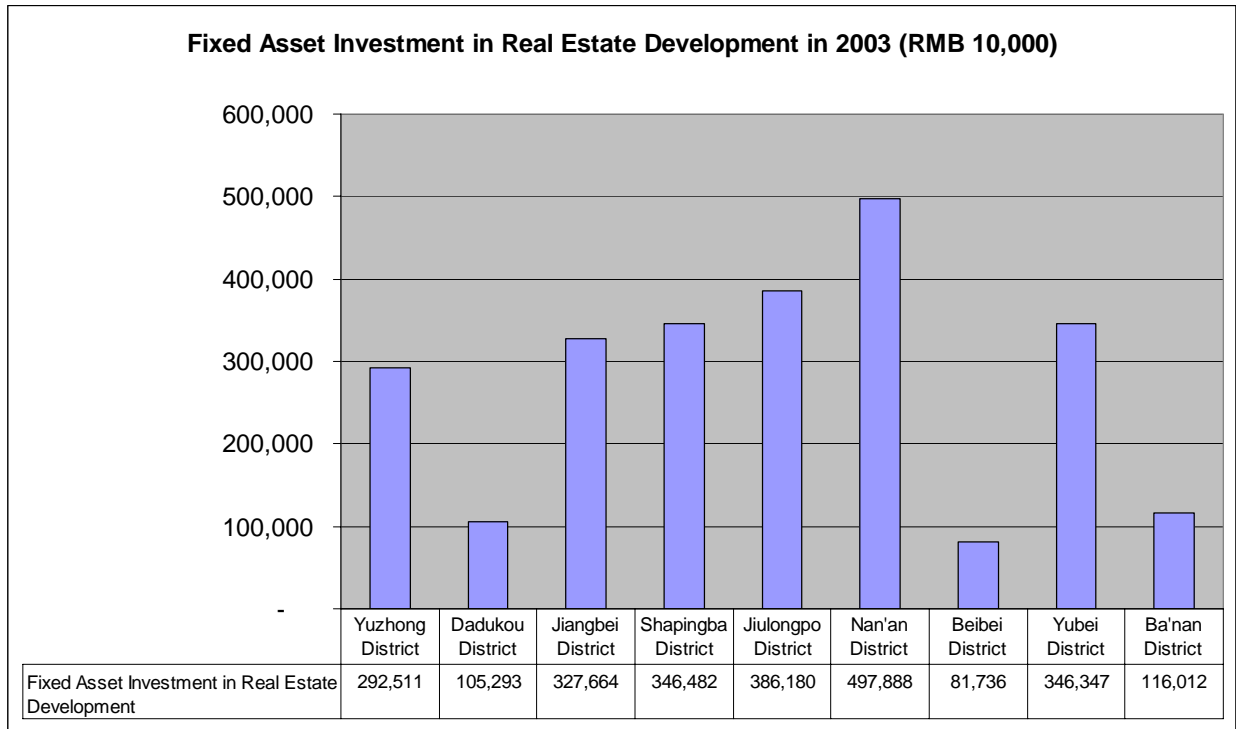
Source: Chongqing Statistical Yearbook 2004

4.2.2.2. Real Estate Market

Real estate market in China is fragmented. Different markets are not in the same level in terms of housing price, building quality, and customer preferences etc. Shanghai and Beijing are considered to be the real estate front-runners in China. They are much more modern than Chongqing. Chongqing is certainly behind them for at least 4 to 5 years. The city itself is not as modern as the front-runners are; therefore, many improvements are needed in order to meet the demand of its rapid economic growth. The establishment of the municipality stimulated the real estate market in Chongqing. The average annual growth rate of investment in real estate development has been about 31% since 1997.

The real estate market in the City of Chongqing is also fragmented. Yuzhong District is the most developed area, and it is the core of the city. Its surrounding districts are the major playgrounds of real estate development, including Jiangbei, Nan'an, Jiulongpo, and Shapingba districts. Since Yubei district has land that is more flat and it is the direction for Chongqing to go out of the mountains, it attracts many developments as well. The Chart-16 illustrates the fixed asset investment in real estate development in different districts in 2003. It reflects the fragmented real estate market in the city.

Chart-16 Fixed Asset Investment in Real Estate Development in 2003 (RMB 10,000)



Source: Chongqing Statistical Yearbook 2004

Currently, the Jiangbei and Yubei districts are the most active areas of real estate development for at least three reasons. First, the Chongqing government established new economic zones in these two districts; second, they are near the airport; and third, the topology in these two districts is more flat. Because of the favorable policy, location, and topology, large developments happen in these two districts.

The percentage of private ownership of housing in the city of Chongqing has been much higher than the country average. About 95% of the housing was privately owned in 2000 and 97.6% in 2001. In the meantime, Housing price has been gradually, but not abruptly, increasing.

Additionally, the series of policies to cool down the housing market issued recently in 2005 by the central government do not have too much impact to the real estate market in the City of

Chongqing. The policies are to strike the housing speculation, not the normal housing consumption. Shanghai and Beijing are the major impact zones. However, the current overall housing price in Chongqing is reasonable and stable, so there is not too much room for the correction if any. Therefore, the price volatility in the current Chongqing market is less than in Shanghai or Beijing markets.

4.2.2.3. Demographic Trend

Urbanization has been a strong force to increase the urban population in the Chongqing Municipality since 1997. In the City of Chongqing, the average annual growth rate of population is above 2.5%. There are more than 8 million people in the city: 6 million residents and 2 million workers but not residents. The 2 million workers live and work in the city, but do not have residency. They usually need to rent or buy housing units. It is estimated that there will be 0.5 million people becoming urban population every year in Chongqing in the next five years. The City of Chongqing will be their major destination. The Chart-17 demonstrates that the Ba'nan and Yubei districts have more people than any other districts, and the Dadukou District has the least population.

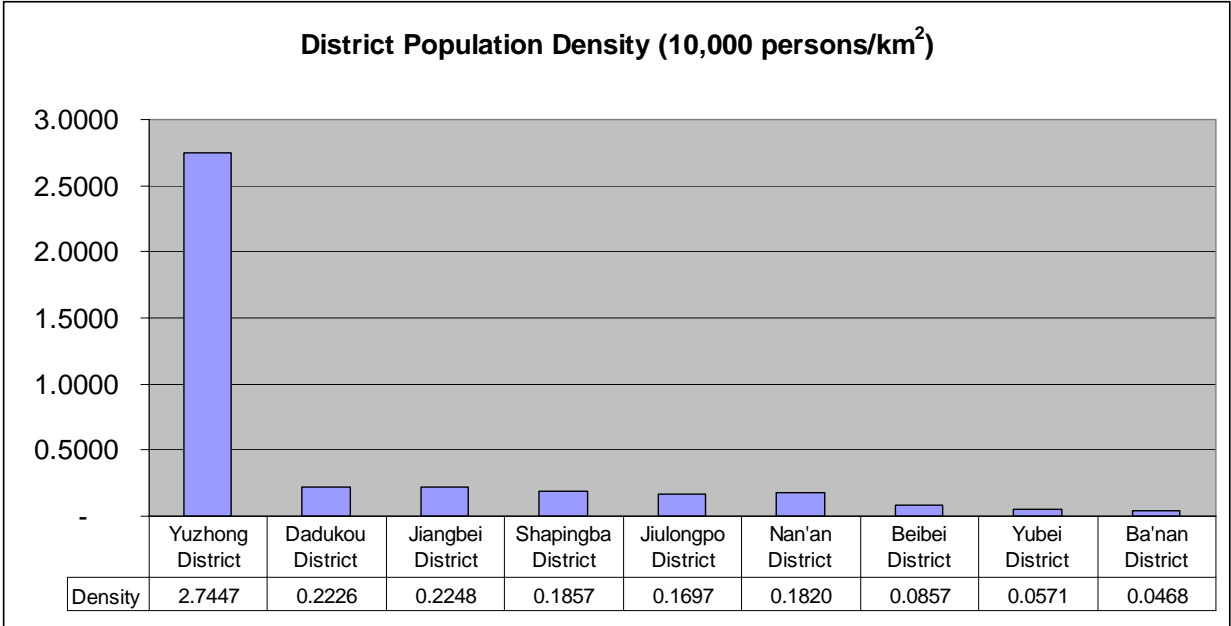
Chart-17 District Population in 2003 (10,000 persons)



Source: Chongqing Statistical Yearbook 2004

However, in terms of population density, the Chart-18 illustrates that the Yuzhong District is the most populous district in the city. The Jiangbei and Dadukou districts rank second and third, respectively. The Yuzhong District is 12 times denser than the Jiangbei District. On the one hand, it shows that the Yuzhong District is definitely the core of the city; on the other hand, it suggests that the Jiangbei, Dadukou, Shapingba, and Nan'an districts have high potential of population growth as the adjacent districts to the city core.

Chart-18 District Population Density (10,000 persons/km²)

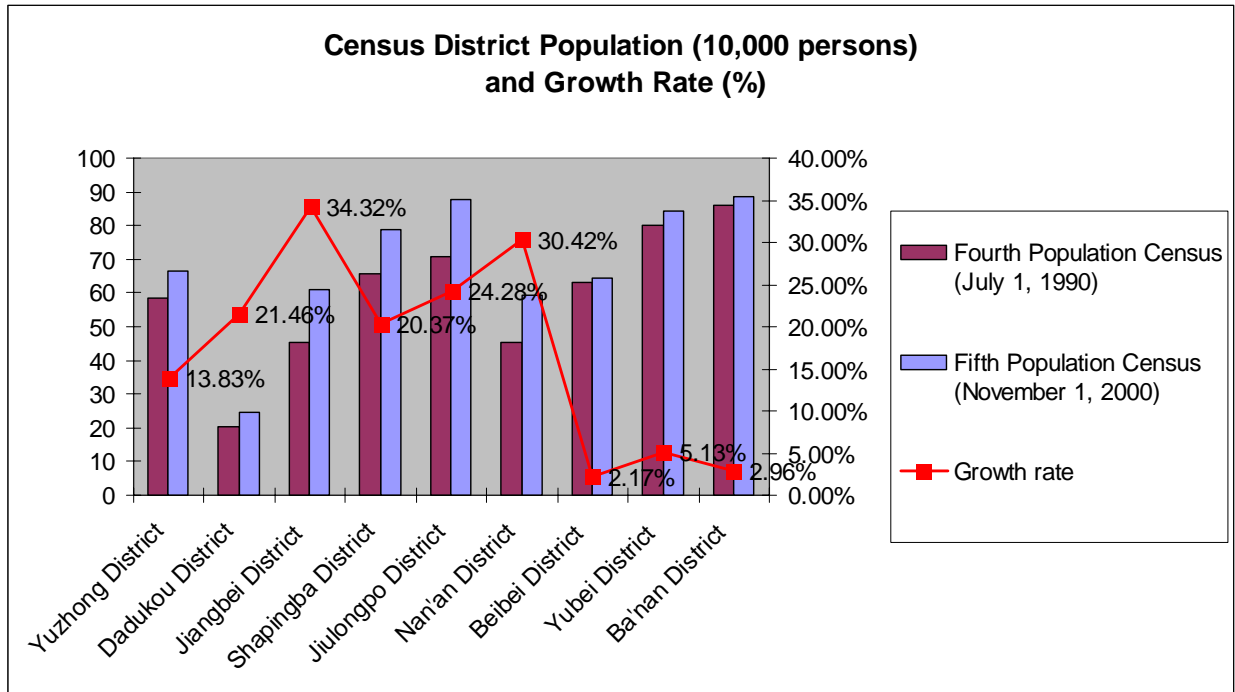


Source: Chongqing Statistical Yearbook 2004

Two national population censuses were conducted in 1990 and 2000. The Chart-19 demonstrates the growth of population in the City of Chongqing. The average growth rate of population in the city was 17.22%. The Yuzhong District, the city core, had a 13.83% growth rate, more than 3% lower than the average. The Beibei, Ba'n'an, and Yubei districts had little population growth in 10 years. Both Jiangbei and Nan'an districts had a 30% or more growth from 1990 to 2000. Unsurprisingly, these two districts have been the “hot” land of real estate development. In terms of the actual number of the population increase, the Jiulongpo District ranked first by a 171.6-

thousand-person increase, and the Jiangbei District ranked second by a 155.9-thousand-person increase. This further proved that the Jiangbei District provides the best opportunity for real estate development to meet the demand.

Chart-19 Census District Population (10,000 persons) and Growth Rate (%)

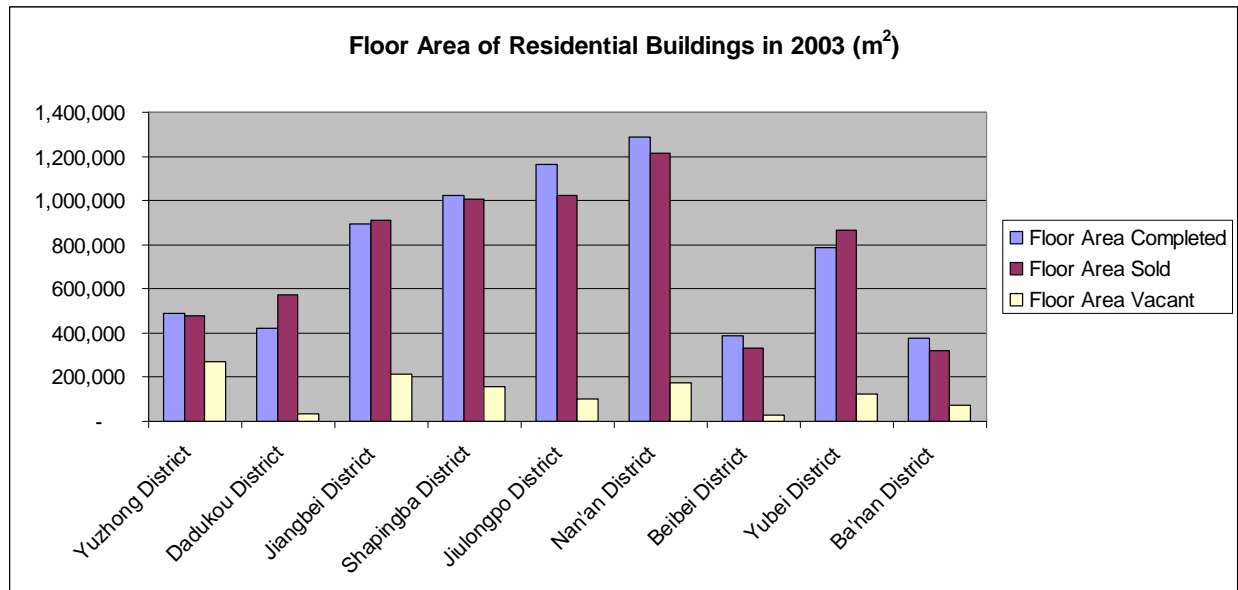


Source: Chongqing Statistical Yearbook 2004

4.2.2.4. Housing

According to the statistics, the Yuzhong District had a higher vacant rate than any other districts did in 2003. The Chart-20 illustrates the floor area completed, sold, and vacant of residential buildings in 2003. Three districts had more floor area sold than completed in 2003: Dadukou, Jiangbei, and Yubei. It could be pre-sale in 2003 or consumption of vacant areas of previous years. Nonetheless, this was a sign of strong demand of housing in these districts.

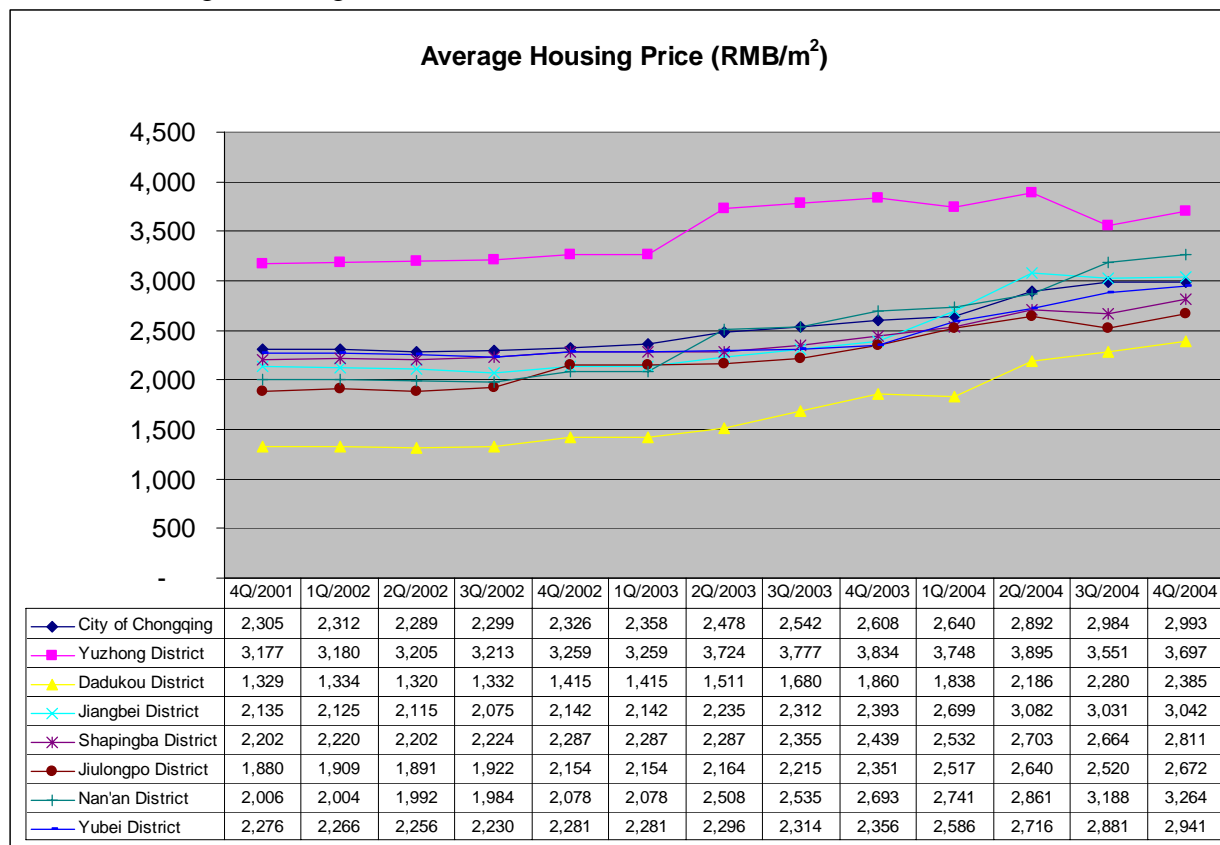
Chart-20 Floor Area of Residential Buildings in 2003 (m²)



Source: Chongqing Statistical Yearbook 2004

In China, the housing price is typically quoted in RMB per m², and the sales volume is typically recorded in m². From 2001 to 2004, the average housing prices in the city and in individual districts increased by relative steady rates. There had been no abrupt increase or decrease. The Chart-21 illustrates the stable trends of the housing prices.

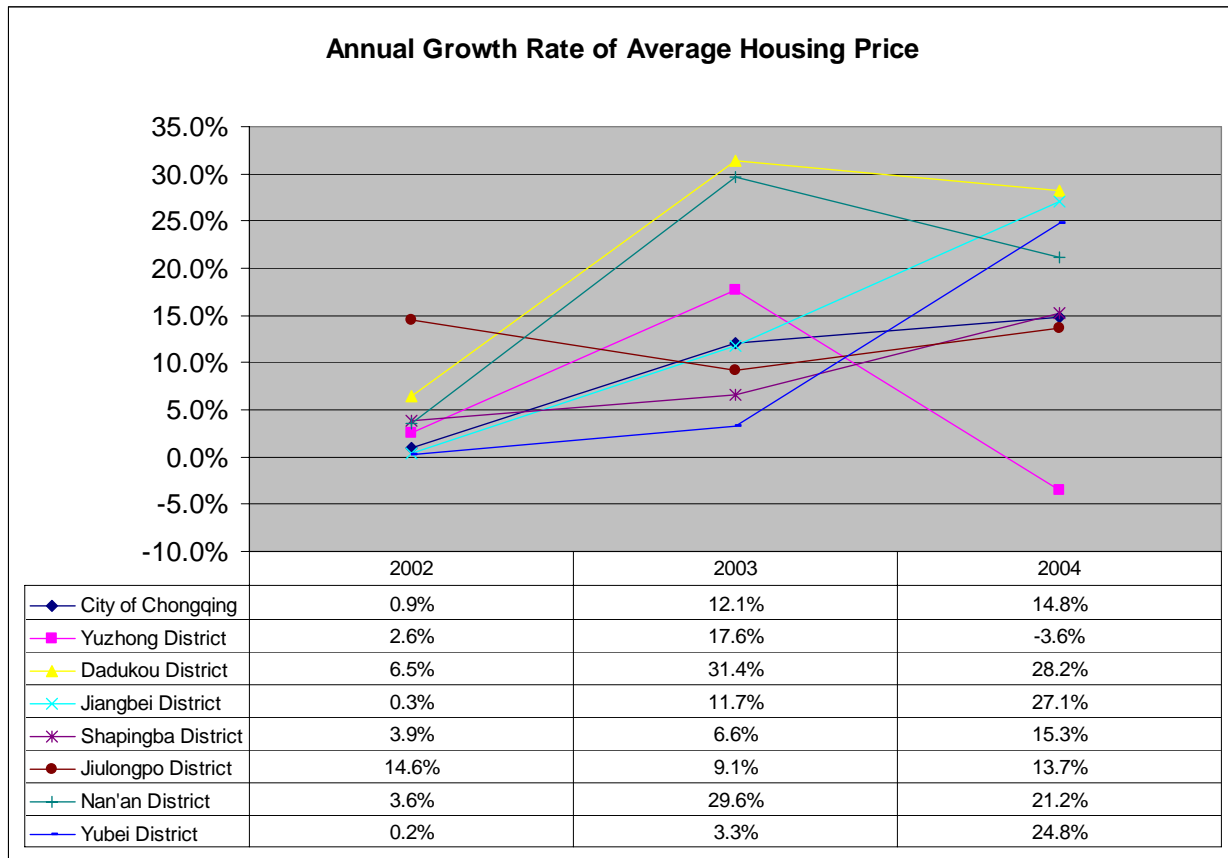
Chart-21 Average Housing Price (RMB/m²)



Source: Chongqing Real Estate Blue Book 2005

The overall average housing price in the city core districts increased by 12% in 2003, and 15% in 2004. The Chart-22 demonstrates the annual growth rates of housing prices in the city and individual districts.

Chart-22 Annual Growth Rate of Average Housing Price



Source: Chongqing Real Estate Blue Book 2005

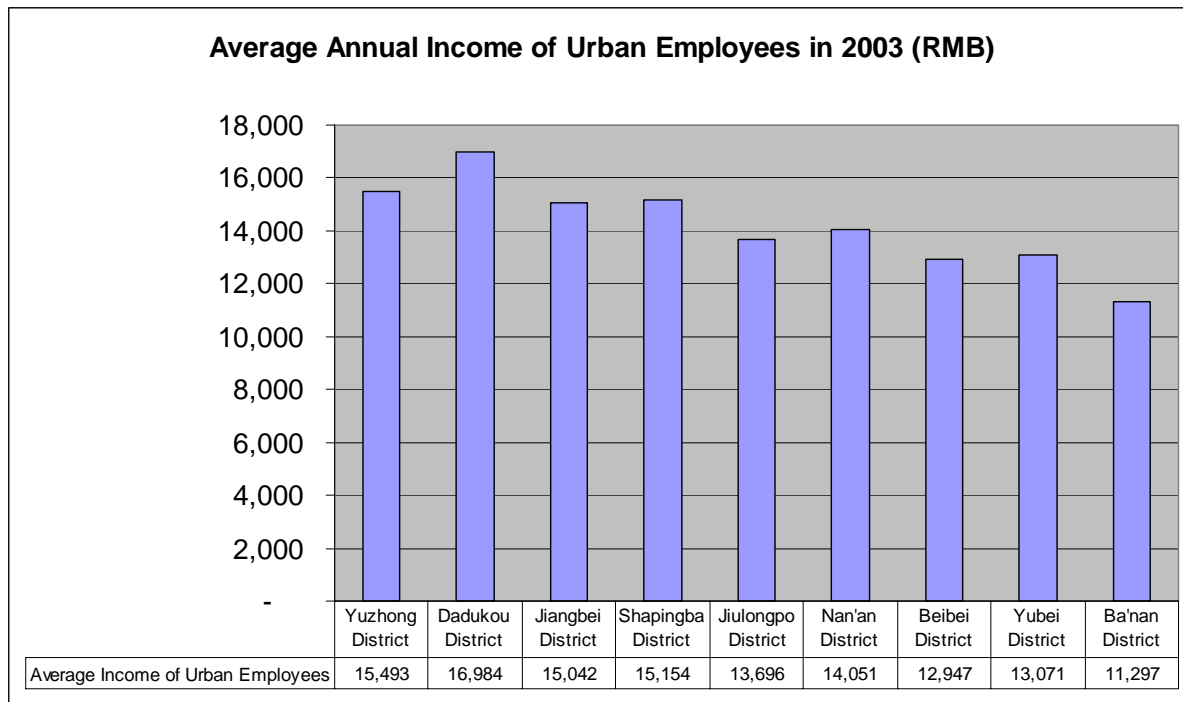
The average housing price in the Yuzhong District was much higher than in other districts, but the price growth rate declined over time. In 2004, its average housing price actually decreased by 3.6%. The Dadukou, Jiangbei, and Yubei districts had higher growth rates than any other districts. Starting from the first quarter of 2004, both the average housing price and the price growth rate in the Jiangbei District exceeded the city averages. In the first quarter of 2004, the average housing price was RMB 2,640 per m² in the city, and RMB 2,699 per m² in the Jiangbei District. In 2004, the annual price growth rate is 14.8% in the city, and 27.1% in the Jiangbei

District. In general, the Jiangbei housing market outperformed the city overall housing market in 2004.

4.2.2.5. Income Level

The average annual income of urban employees in every district in the City of Chongqing exceeded the national average in 2003. Although the income level in the city is lower than in the China's coastal areas, it is compatible with the relative low housing price in the city. The Chart-23 demonstrates that Dadukou, Yuzhong, Jiangbei and Shapingba districts had higher income levels than other districts did. People in these districts therefore had stronger buying powers.

Chart-23 Average Annual Income of Urban Employees in 2003 (RMB)

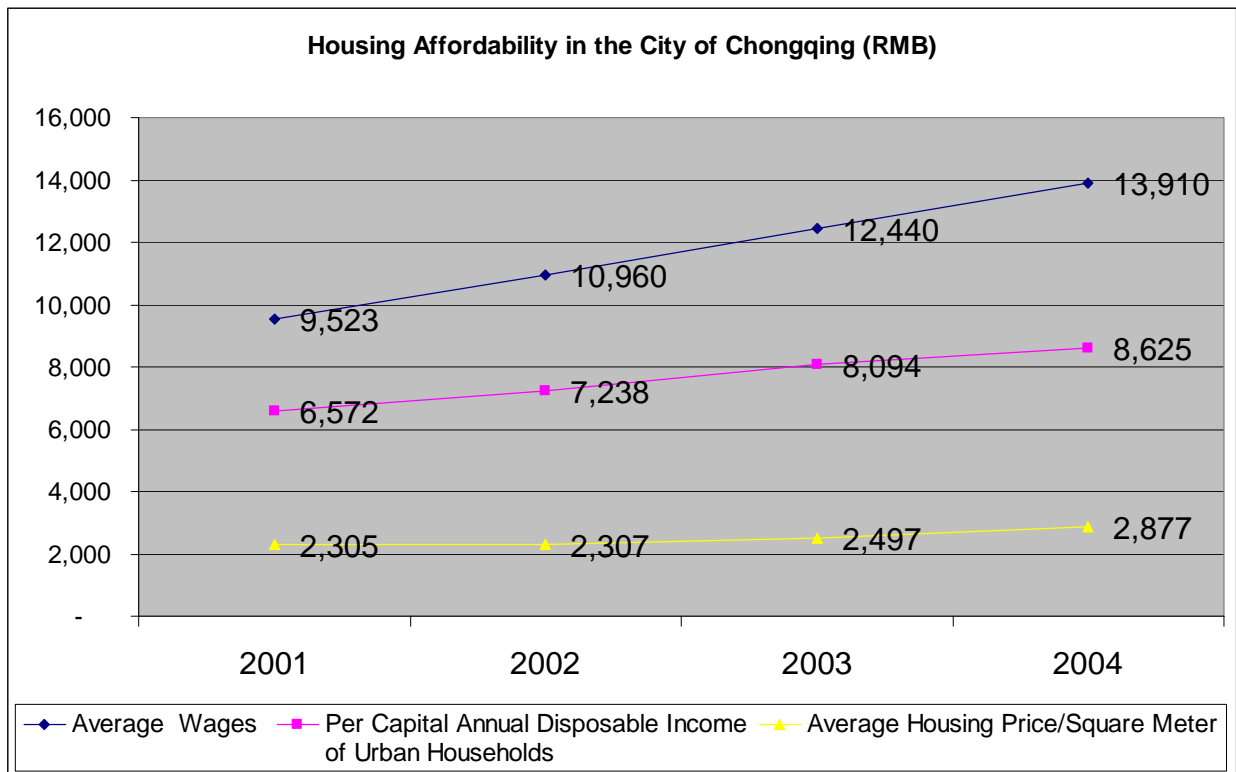


Source: Chongqing Statistical Yearbook 2004

Additionally, the housing price and annual disposable income per capita in the City of Chongqing increased at almost the same growth rate from 2001 to 2004. The average wage increased by a faster speed during the same period. This partially proved that there was no sign

of a real estate bubble in terms of the housing price appreciation in the city. The Chart-24 demonstrates that the housing price was affordable generally, because the income growth is a little quicker than the housing price increase.

Chart-24 Housing Affordability in the City of Chongqing (RMB)



Source: Chongqing Statistical Yearbook 2004²⁰
Chongqing Real Estate Blue Book 2005

Furthermore, as discussed in the previous chapter, the grey income is difficult to estimate, but ignoring it will only underestimate the real buying power. In Chongqing, a doctor after working for several years can buy a decent house and a car. If the doctor only earns the wage as listed in the income record, he or she simply cannot afford it. The extra money comes from allowance from the hospital, and income from other sources. The grey income is not an abnormal thing in China. Except for doctors, government officials, teachers, and managers of state-owned-

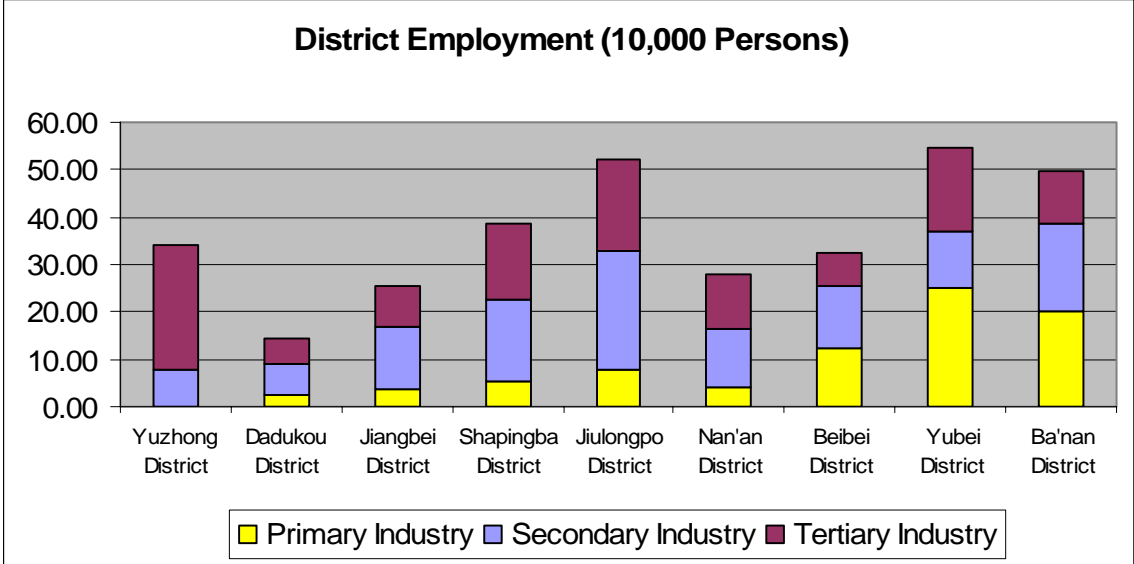
²⁰ The average wage and per capital annual disposable income of urban households in 2004 was extrapolated by the data from 2000 to 2003 using linear regression.

enterprises have more or less grey incomes. Although it is hard to estimate the exact grey income number, foreign investors should keep in mind about this special situation.

4.2.2.6. *Employment*

In the China’s statistical yearbook, the primary industry is the agricultural sector, the secondary industry refers to the industrial sector, includes mining, manufacturing, and construction etc., and the tertiary industry means the service sector, including finance, transportation, and education etc. The average wage in the secondary industry is lower than in the tertiary industry, but higher than in the primary industry. In 2003, the average annual wage in the primary industry is RMB 8,877, in the secondary industry is RMB 11,425, and in the tertiary industry is RMB 13,452 in Chongqing. Usually the more people working in the tertiary industry suggests the more developed economy, therefore the higher living standards and the stronger demand for quality housing. The Chart-25 demonstrates that Yuzhong District is the most developed district, Yubei and Ba’nan districts are the least, and all other districts are in the middle of the spectrum.

Chart-25 District Employment (10,000 persons)



Source: Chongqing Statistical Yearbook 2004

4.3. Project-Level Market Conditions

4.3.1. Micro Market Analysis of the Project in Chongqing

4.3.1.1. Location and Current Site Status

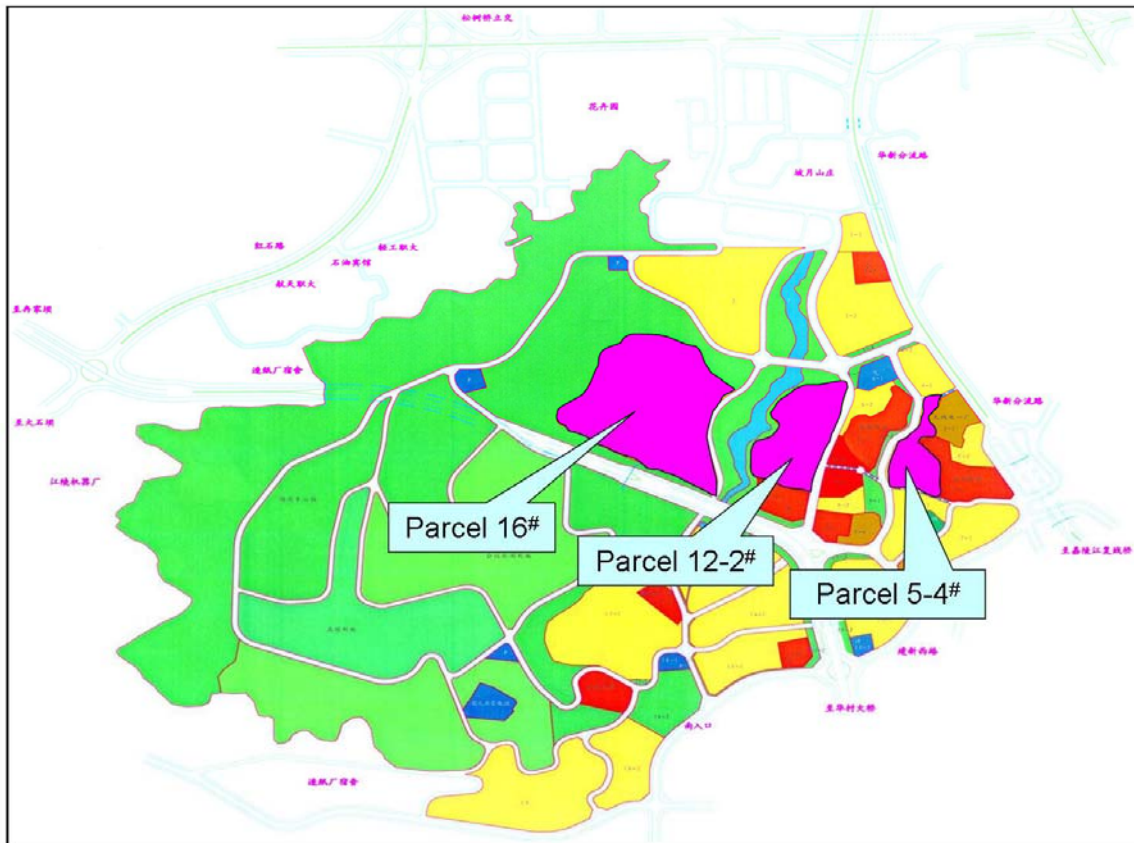
The Hongensi Project is located at the Jiangbei District in the City of Chongqing. The ZK Group is the developer. The site is adjacent to Hongensi Park, Huaxin Road, and Guanyinqiao CBD in the Jiangbei District. The Map-5 illustrates the site location and its surrounding areas.

Map-5 Hongensi Project Site Location



The site consists of three parcels (Parcel 5-4[#], 12-2[#], and 16[#]) and the total gross area is 237,921 m² or 58.77 acres of unimproved land. The gross area of Parcel 5-4[#] is 31,243 m² or 7.72 acres, the gross area of Parcel 12-2[#] is 54,876 m² or 13.55 acres, and the gross area of Parcel 16[#] is 151,802 m² or 37.50 acres. The Parcel 12-2[#] and Parcel 16[#] are adjacent to each other. Between them are open space and water. A middle school separates the Parcel 5-4[#] from them. The Map-5 illustrates these three parcels on the project site.

Map-6 Parcels on the Project Site



Parcel 5-4[#]

In order to obtain all the permits for the development, the developer needs to compensate the local residents. However, the Chongqing government is still revising the compensation regulations. How to compensate the local residents is not clear. Currently, some kind of construction is going on in the Parcel 5-4[#] by the local residents. They expect to get more compensation for the new construction than for their existing buildings. The parcel is very close to the Huaxin Road. The following pictures illustrate the parcel status.



Parcel 12-2[#]

There is no new construction in the Parcel 12-2[#] by the local residents. A new road is under construction by the government in a nearby site, which will be a major transportation improvement for the Hongensi Project. The following pictures illustrate the status of the parcel.



Parcel 16[#]

The Parcel 16[#] is a typical site in Chongqing, which has slope and water features. It increases the costs related to the site grading and improvement, but it provides opportunities to create great views and innovative architecture design. The following pictures illustrate the status of the parcel.



4.3.1.2. Market Area for Intended Product

Although the site plan and architecture design haven't been completed, the project concept is well developed. The development program of the Hongensi Project includes detached single-family, attached single-family (townhouses, duplex, triplex, and quad), mid-rise slabs, and high-rise residential towers as well as a small amount of retail spaces. The positioning of the development product is medium and high-end. There will be approximately 1,480 residential units for sales in the project.

The Parcel 5-4[#] will be mainly used to build high-rise residential towers. It is estimated that 380 residential units will be built in this parcel and the unit sizes range from 45 m² to 120 m². Since this parcel is relative small and separated from other two parcels, the high-rise buildings will not

have too much impact to other low-density parcels. It can increase the FAR of the whole site, and therefore maximize the profit. The following pictures are samples of similar products.



The Parcel 12-2[#] will be mainly used to build attached single-family (triplex and quad), mid-rise residential slabs and high-rise towers. It is estimated that 750 residential units will be built in this parcel and the unit sizes range from 50 m² to 160 m². This parcel is larger than the Parcel 5-4[#], and the larger distance between buildings can provide more open spaces and lower density. The following pictures are samples of similar products.



The Parcel 16[#] will mainly be used to build detached and attached single-family, duplex and townhouses. It is estimated that 350 houses will be built in this parcel and the sizes range from 165 m² to 220 m² or larger. This parcel is inside the Hongensi Park with water and slope

features. The view is a good selling point. The low-density and high-end products with great views will be appealing characteristics of the parcel. The following pictures are samples of similar products.



Based on the project positioning and market condition in the surrounding areas, it is estimated that the market area of the Hongensi Project is the seven core districts of the City of Chongqing: Yuzhong, Jiangbei, Yubei, Shapingba, Jiulongpo, Nan'an, and Dadukou. To be more specific, the primary market area includes the Jiangbei, Yubei, and Yuzhong districts, and the secondary market area includes the Shapingba and other districts. The primary area accounts for 60% of the sale of the development products, the secondary area accounts for 20%, and the customers outside Chongqing account for the rest 20%.

4.3.1.3. Public Infrastructure and Facilities

Since the project is in the preliminary status, the public infrastructure and facilities are not fully ready for the development. However, the electricity, water, sewer, gas, and communication service lines are fully operational in the neighborhoods. It is just a matter to connect them to the project site. Major part of the site currently is agricultural land. A public bus stop is already operational. The following picture illustrates the bus stop close to the site.



4.3.1.4. Demand Analysis

4.3.1.4.1 Demand Drivers

The demand drivers for the Hongensi Project includes professionals in manufacturing, and service industries, owners of private enterprises, and executive level officials in state owned enterprises. Their ages are between 30 and 50 years old, but people between 30 and 40 years old are the main customers. A typical household includes a couple and a child, or just a couple. Other remaining households have a couple, two parents, and a child.

As mentioned previously, the income level is very difficult to estimate in China. Based on experience, the household annual income should be above RMB 50,000. The households with annual income higher than RMB 100,000 are the major consumers. They usually pay down payments of 30% or 40% of the sales price, and take 20-year mortgages for the rest 70% or 60%. The purpose for them to buy a new house is usually to improve their living standards, but there will be some investment buyers. It is also worth to know that some buyers' parents sometimes pay the down payment for their children (usually 25-30 years old).

4.3.1.4.2. Market Absorption Rate

Every project is unique in certain perspective. The best way to estimate the absorption rate of the Hongensi Project is to refer to the comparable projects in the surrounding areas. The Map-7 illustrates the locations of 10 comparables.

Map-7 Location of Hongensi Project Comparables



The Table-1 illustrates the average absorption rate of each comparable project. Typically, the sales of residential units in a project are much quicker in the beginning of the sales than at the end of the sales. Many pre-sold units actually finish the transactions in the early months of sales, which increases the absorption rates in the early months. For example, in one project, almost 90% of the units were sold out in a couple of days, but the rest 10% took several months to sell. The absorption rate of this project was the average number of units sold per month.

Table-1 Absorption Rates of Comparables

Comparables	Location	Total Unit	Unit Completed	Unit Sold (% of Completed)	Absorption Rate (Unit/Month)
1、 Hongding Mingyuan	Guanyinqiao	1580	450	96%	60
2、 Sheng Tiandi	Guanyinqiao	818	318	90%	60
3、 Yangguang Hai'an	Guanyinqiao	580	264	92%	40
4、 Hongrui Xinjing	Guanyinqiao	300	300	NA	NA
5、 Xinyi Jindian	Guanyinqiao	525	525	99.80%	50
6、 Jinsha Shui'an	Riverside	1256	400	95%	40
7、 Shiji Jinyuan	Riverside	900	300	40%	35
8、 Longting Lantianyuan	Wulidian	274	274	99%	35
9、 Wangjiangge	Wulidian	600	380	80%	30
10、 Xincheng Lvzhou	Hongensi	817	NA	NA	NA

It is estimated that the housing units in the Hongensi Project will have an absorption rate of about 60 units/month. It means that in average about 60 units will be sold in every month after the beginning of the sales. In general, it is estimated that 80% of the units ready for sale will be sold in the first six-month, and the rest 20% will be sold in the second six-month. However, there are two construction phases with different products: the first phase has 1,130 residential units, and the second phase has only 350 units. Therefore, it is more realistic to have different absorption rates. The absorption rate in the first phase will be 151 units/month in the first six-month and 38 units/month in the second six-month. The absorption rate in the second phase will be 47 units/month in the first six-month and 12 units/month in the second six-month.

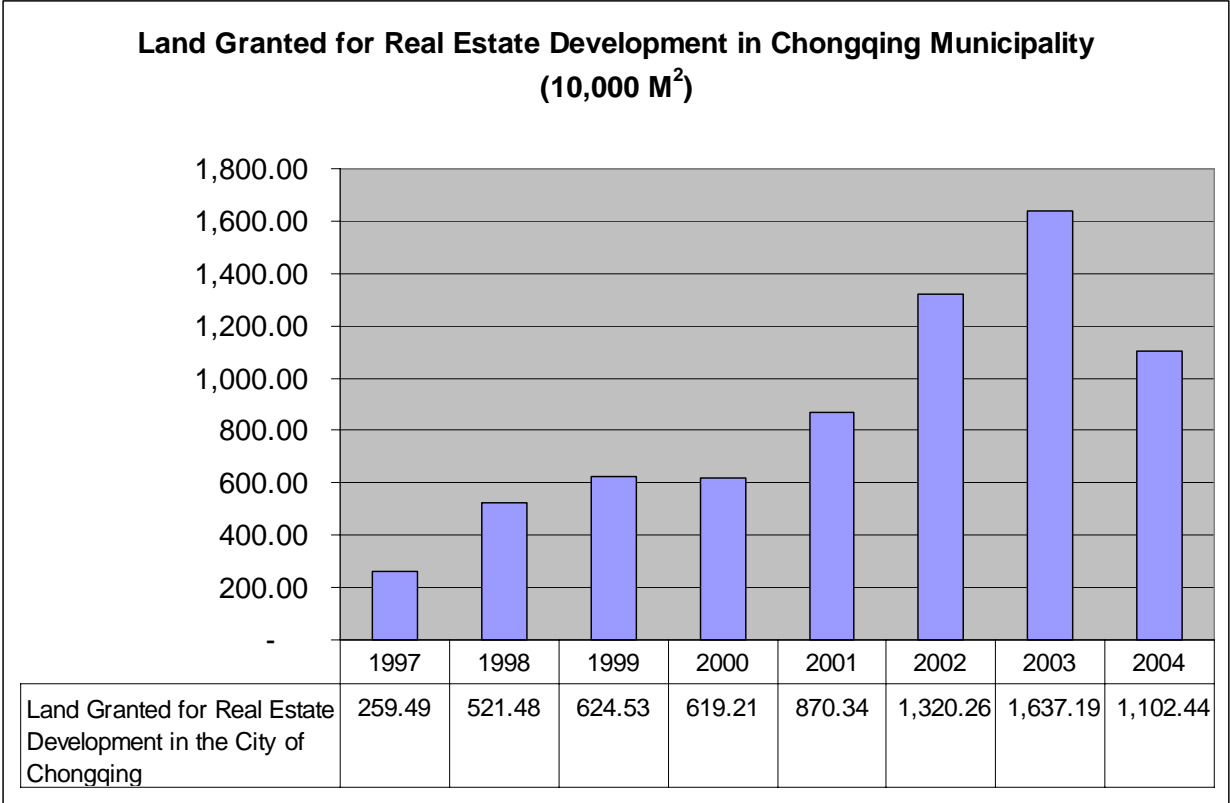
4.3.1.5. Supply Analysis

4.3.1.5.1. Existing Inventory and Near Term Projection of New Inventory

The Chongqing government granted 11.02 million m² of land for real estate development in 2004. There were 1,544 projects in the City of Chongqing in 2004. The Chart-26 demonstrates the land supplies by the Chongqing Municipality. The land supply is controlled by the

government, so that the supply was decreased in 2004 because of the policies to cool down the real estate market.

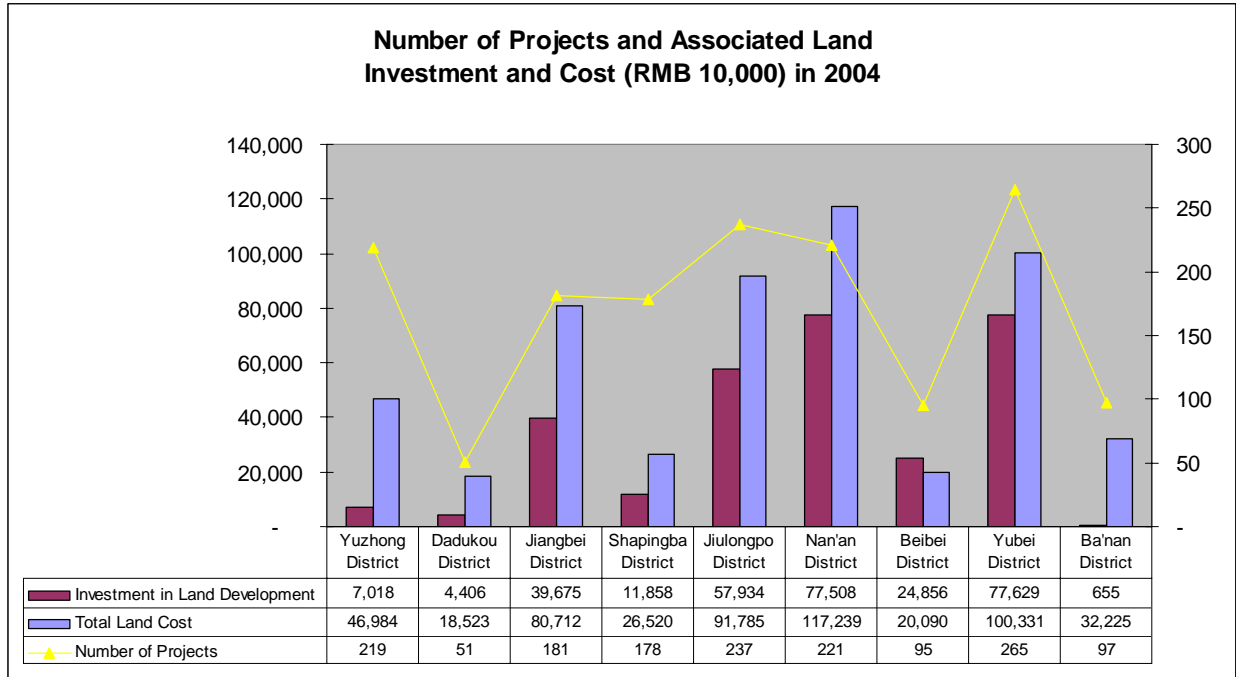
Chart-26 Land Granted for Real Estate Development in Chongqing Municipality (10,000 m²)



Source: Chongqing Real Estate Blue Book 2005

The Chart-27 demonstrates the number of projects and associated land investment and cost in 2004. The most active development areas were Yubei, Nan’an, Jiulongpo and Jiangbei districts. There were many development projects in the Yuzhong District as well, but the sizes of the projects were relatively small. In 2004, there were 181 projects in the Jiangbei Districts. It is estimated that future supply will be steady at the current level.

Chart-27 Number of Projects and Associated Land Investment and Cost (RMB 10,000) in 2004



Source: Chongqing Real Estate Blue Book 2005

However, the actual number of units supplied was not available. It is a very rough supply analysis using the supplied area of land and number of projects.

4.3.1.5.2. Competitive Supply

The following comparables in the Table-2 are samples of competitive supply to the Hongensi Project. The first ten comparables are marked in the map in the demand analysis section. The Longhu Lanhujun and Zonglvquan Garden projects are out of the range of the map.

Table-2 Major Characteristics of Comparables

Comparables	Location	Major Total Price (RMB 10,000)	Average Price (RMB/M ²)	Major Unit Size	Total Floor Area (10,000 M ²)
1、 Hongding Mingyuan	Guanyinqiao	35	4,500	2BR, 78 .65m ²	16
2、 Sheng Tiandi	Guanyinqiao	17-25	4,500	1BR, 37-55 m ²	7
3、 Yangguang Hai'an	Guanyinqiao	27	3,600	3BR, 74.23 m ²	6.9
4、 Hongrui Xinjing	Guanyinqiao	22	3,600	2BR, 60 m ²	3
5、 Xinyi Jindian	Guanyinqiao	25-28	3,900	2BR, 65-72 m ²	5
6、 Jinsha Shui'an	Riverside	47-55	3,800	4BR, 130-140 m ²	18
7、 Shiji Jinyuan	Riverside	30-37	3,400	2BR, 90-108 m ²	12
8、 Longting Lantianyuan	Wulidian	18	2,750	2BR, 64.57 m ²	5
9、 Wangjiangge	Wulidian	22-26	2,850	2BR, 3BR, 76.5-89.6 m ²	7
10、 Xincheng Lvzhou	Hongensi	NA	NA	2BR, 80 m ²	9.3
11、 Longhu Lanhujun	Yubei	NA	6,800	Townhouse, 230-280 m ²	53.36 (Land Area)
			9,000-13,000	Detached Single-family, 300-550 m ²	
12、 Zonglvquan Garden	Yubei	NA	4,300-5,300	Mid-rise	66.7 (Land Area)
			6,500	Townhouse	

Note: The average price is for the net usable floor area, not the gross floor area. A typical conversion factor is about 0.85.

The list is not a complete list of the competition and some of them are almost sold out. Nonetheless, on the one hand, it provides insight on what has been in the market and their basic information to justify the positioning of the Hongensi Project; on the other hand, the supply from their second or third phases will certainly challenge the Hongensi Project. The description about these comparables is certainly not comprehensive. It will be a better supply analysis if the building quality, amenity, access to public transit, parking facility, and location advantage/disadvantage etc. can be described and compared with the Hongensi Project.

4.3.2. Project Regulatory Process

As mentioned previously, in order to proceed with a project, a developer needs to have the approval of the site selection proposal, land use planning permit, land use right permit, engineering planning permit, and construction planning permit. It is called “four-permits-and-one-approval”. Currently the approval of the site selection proposal and the land use planning permit were obtained by the Hongensi Project. However, other three permits are delayed because

the Chongqing government is still in the process of revising the compensation regulation for resettlement of people living on developable lands. It is said that the regulation will be issued in the third or fourth quarter of 2005. The permits will be approved promptly after the regulation issuance. The project will not pursue any city planning code variances or rezoning to increase its capacity, instead it will build as-of-right. The construction work is estimated to start in the beginning of 2006.

4.3.3. Recommendation on the Project Market Condition Transparency

The project-level market condition usually includes the micro market analysis and marketability analysis. The micro market analysis provides transparency of the demand and supply conditions and forecasts. The marketability analysis specifies who the potential customers are and how to effectively target them. Because the Hongensi Project is in the preliminary stage, the marketability analysis is not available.

It is very reasonable to assume that foreign investors have concerns on the market analysis because they are not familiar with the Chinese real estate market, and they tend to try to find the equivalent data in China that are available in their own countries. However, it is frustrating to see the data quality and availability are not always good enough for them to have a transparent understanding of the market. Therefore, the due diligence is always intensive and multiple crosschecks are necessary.

It is difficult for many developers to conduct a comprehensive analysis. Usually intensive surveys are required to have reliable analyses. In China, the fact is that developers usually do not conduct the analyses and just follow other successful projects. As a result, they tend to

oversupply a certain type of product. On the one hand, it makes foreign investors perceive a very high risk and reluctant to invest; on the other hand, it creates opportunities for the Chinese developers who do reliable market analyses and creates transparency to attract investment. When more and more developers notice this transparency issue, the real estate development industry will get more and more mature.

Chapter 5 Project Capital Budget

5.1. Development Program

In the United States, the development program and sales are usually estimated in the number of units, but in China, they are always estimated in square meters. The Hongensi Project has estimates of the number of units based on the floor area estimates. Since there are three parcels, each parcel has its own permitted capacity. The table-3 shows the permitted capacity.

Table-3 Analysis of Permitted Capacity

Parcel	Gross Area (m ²)	Net Usable Area (m ²)	Floor Area (m ²)				FAR	Open Space	Coverage Ratio
			Retail	Industrial	Residential	Total			
5-4 [#]	31,243	27,758	5,274	1,057	36,650	42,981	1.55	35%	30%
12-2 [#]	54,876	50,120	6,130	2,920	89,600	98,650	1.97	40%	30%
16 [#]	151,802	141,630	130	2,218	68,689	71,037	0.5	40%	30%
Total	237,921	219,508	11,534	6,195	194,939	212,668			

Note: Industrial area consists of parking, club and common house.

Based on the market analysis, the Hongensi Project will have the following actual development program. The retail spaces in the parcel 5-4[#] and 12-2[#] are less than permitted capacity.

Table-4 Overall Development Program

Parcel	Net Usable Area (m ²)	Floor Area (m ²)					FAR
		Residential	Retail	Parking	*Club and Common House	Total	
5-4 [#]	27,758	36,650	1,774	2,896	NA	41,320	1.49
12-2 [#]	50,120	89,600	3,630	7,081	NA	100,311	2.00
First Phase Subtotal	77,878	126,250	5,404	9,977	NA	141,631	
16 [#]	141,630	68,689	130	Parking included in other uses	2,218	71,037	0.50
Second Phase Subtotal	141,630	68,689	130		2,218	71,037	
Total	219,508	194,939	5,534	9,977	2,218	212,668	0.97

*Note: Club and Common House is not for sale.

The residential products in the project will consist of the following program as shown in the Table-5. The Parcel 5-4[#] will have 380 units, the Parcel 12-2[#] will have 750 units, and the Parcel 16[#] will have 350 units. Each parcel has its own standard of unit size, and therefore targets

different customers. The Parcel 5-4[#] will have the smallest units, and the Parcel 16[#] will have the largest units.

Table-5 Residential Development Program

Parcel	Details of Residential Units (Estimates)			
	Unit Size (m ²)	Number of Unit	Percent/Parcel	Percent/Site
5-4 [#]	45-55	38	10%	2.57%
	75-85	133	35%	8.99%
	95-105	133	35%	8.99%
	110-120	76	20%	5.14%
Subtotal		380	100%	25.68%
12-2 [#]	50-60	75	10%	5.07%
	80-90	75	10%	5.07%
	100-110	150	20%	10.14%
	110-120	225	30%	15.20%
	130	150	20%	10.14%
	150	37	5%	2.50%
	160	38	5%	2.57%
Subtotal		750	100%	50.68%
16 [#]	165	157	45%	10.61%
	180	140	40%	9.46%
	200	35	10%	2.36%
	>=220	18	5%	1.22%
Subtotal		350	100%	23.65%
Total		1480		100.00%

The construction will start in January 2006 and complete in June 2008. There will be two phases: the first phase will develop the parcel 5-4[#] and 12-2[#], and the second phase will develop the parcel 16[#]. The sales will start in July 2006 and complete in December 2008.

5.2. Land Cost

The ZK Group bought the land through the acquisition of a company, Chongqing Huapu Real Estate Development Co., Ltd. The acquisition legally avoided some real estate taxes. The total land cost was RMB 212.78 million. The average land cost per mu was RMB 596.24 thousand²¹. This relatively low land price was very favorable to the Hongensi Project. The land bidding process was very complicated, and the ZK Group finally obtained the land through a huge amount of works to the land authority and the local land-bidding marketplace.

²¹ 1 mu = 667 m² and 1 m² = 10.76 sf.

Table-6 Land Cost

Parcel	Gross Area (m ² /mu)	Net Usable Area (m ² /mu)	Land Treatment Fee		Shareholding Transfer Fee		Land Grant Fee (RMB 10,000)	Total (RMB 10,000)
			Unit Price (RMB 10,000/mu)	Amount (RMB 10,000)	Unit Price (RMB 10,000/mu)	Amount (RMB 10,000)		
5-4 [#]	31,243/46.86	27,758/41.64	28	1,293	13	541	963	2,797
12-2 [#]	54,876/82.31	50,120/75.18	28	2,273	13	977	1,934	5,185
16 [#]	151,802/227.7	141,630/212.44	28	6,285	13	2,762	4,250	13,296
Total	237,921/356.87	219,508/329.26		9,851		4,280	7,147	21,278

5.3. Detailed Development Budget

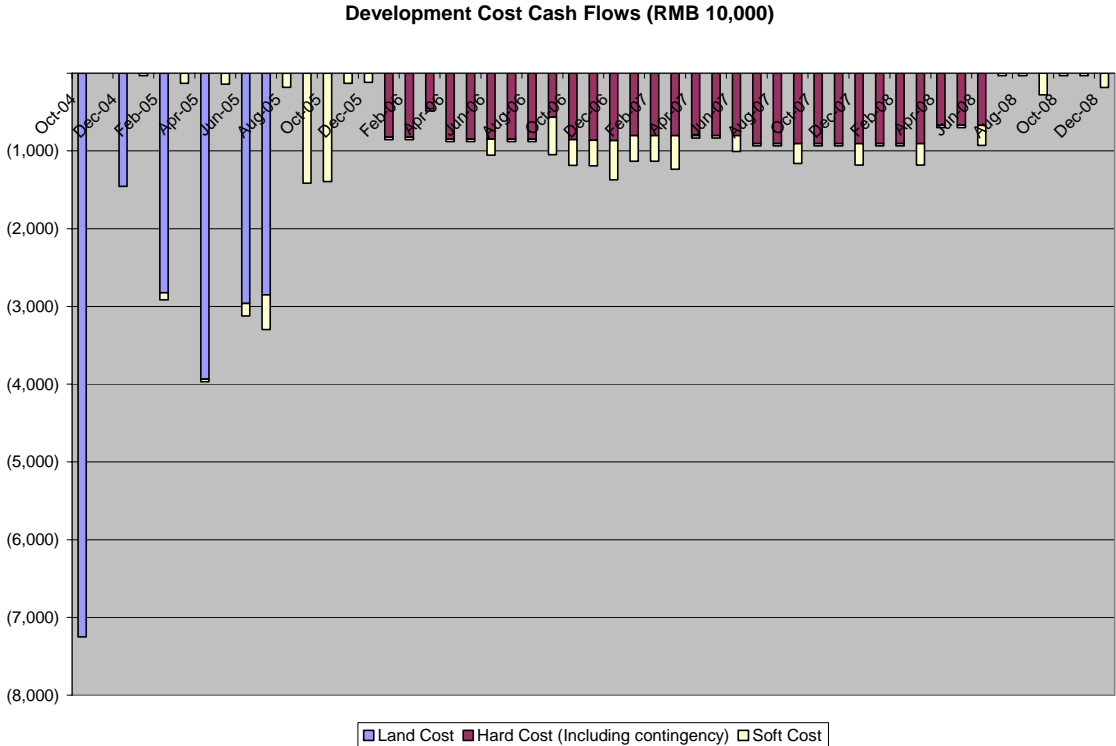
The total development cost of the project is RMB 553.34 million. Each parcel has its individual development budget. The Table-7 is the summary of the overall development budget. Detailed development budget for each parcel is available in the Appendix 1, 2, and 3.

Table-7 Development Budget Summary

Parcel	5-4 [#]	12-2 [#]	16 [#]	Total (RMB 10,000)
Land Cost	2,797	5,185	13,296	21,278
Hard Cost	4,427	10,161	9,164	23,752
Hard Cost Contingency	133	305	275	713
Total Hard Cost	4,560	10,466	9,439	24,464
Soft Cost Part 1	1,169	2,683	2,074	5,927
Soft Cost Part 2	611	1,402	1,373	3,385
Soft Cost Contingency	53	123	103	279
Total Soft Cost	1,833	4,207	3,551	9,591
TOTAL COST	9,190	19,858	26,285	55,334

The Chart-28 demonstrates the development cost cash flows of the overall Hongensi Project.

Chart-28 Development Cost Cash Flows (RMB 10,000)



5.4. Anticipated Financing Package

The ZK Group will borrow a construction loan of RMB 200 million with a simple annual interest at 5.76% from the Industrial and Commercial Bank of China. The loan will be drawn from the bank in March 2006, September 2006, September 2007, and June 2008. Each time the bank will loan RMB 50 million to the project. The rest of the construction cost, RMB 353.34 million, will be financed by equity from the ZK Group and other potential investors.

Chapter 6 Project Financial Analysis

6.1. Major Assumptions

The major assumptions are based on the market analysis and the development experience. The Table-8 lists the major assumptions in construction, sales, absorption, and construction loan.

Table-8 Major Assumptions

<u>Construction Period:</u>	01/2006 - 06/2008	
<u>Overall Sales Period:</u>	07/2006 - 12/2008	
1st Phase	07/2006 - 09/2007	
2nd Phase	01/2008 - 12/2008	
<u>Sales Price (RMB/M²):</u>		
Residential	3,000 - 6,500	
Retail	5,000	
Parking	70,000/space	
<u>Absorption Rate:</u>		
First Phase		
Residential	151 units/month	80% from 07/2006 - 12/2006
Residential	38 units/month	20% from 01/2007 - 06/2007
Retail	901 sq. meters/month	100% from 01/2007 - 06/2007
Parking	1,663 sq. meters/month	100% from 04/2007 - 09/2007
Second Phase		
Residential	47 units/month	80% from 01/2008 - 06/2008
Residential	12 units/month	20% from 07/2008 - 12/2008
Retail	130 sq. meters/month	100% in 12/2008
Parking	-	-
<u>Construction Loan:</u>		
	Loan Draws	Principal Repayments
1st RMB 50 million	03/2006	03/2008
2nd RMB 50 million	09/2006	09/2008
3rd RMB 50 million	09/2007	12/2008
4th RMB 50 million	06/2008	12/2008
Note: Simple interest and quarterly repayment		

6.2. Project Sales Projection

The ZK Group will not hold the property long term. It will sell all the residential units and retail spaces. Only the club/common house is not for sale. The total gross sales proceed is estimated to be RMB 876.21 million.

Table-9 Sales Projection

Program	Floor Area	% of Total	Unit Price	Sales Revenue	Note
	(m ²)	Floor Area	(RMB per M ²)	(RMB 10,000)	
Residential					
5-4 [#]	36,650	17.23%	3,000.00	10,995	High-rise tower
12-2 [#]	89,600	42.13%	3,000.00	26,880	High-rise tower, mid-rise slab, and attached single-family
16 [#]	68,689	32.30%	6,500.00	44,648	Detached and attached single-family
Subtotal	194,939	91.66%		82,523	
Retail		0.00%			
5-4 [#]	1,774	0.83%	5,000.00	887	
12-2 [#]	3,630	1.71%	5,000.00	1,815	
16 [#]	130	0.06%	5,000.00	65	
Subtotal	5,534	2.60%		2,767	
Parking	9,977	4.69%	RMB 70,000/space	2,331	There are 333 parking spaces; residential units include other parking spaces.
Club/Common House	2,218	1.04%	2,012.98	446	It is not for sale, not in revenue. The cost/price is based on the cost in the Parcel 12-2 [#] .
TOTAL	212,668	100.00%		87,621	

6.3. Project Capital Structure Scenarios

Capital structure includes debt and equity. There are many ways to construct capital structures for a project. The components in the capital structure usually consist of construction loan, permanent loan, mezzanine (bridge) debt, common equity, and preferred equity. The common equity typically sets up specific methods to split the investment risks and returns, such as pari passu, hurdle rates, and promotes etc.

The overall capital requirement (development cost of the Hongensi Project) is RMB 553.34 million. Currently the ZK Group is the only equity investor and the bank loan is not in place. The following represents an “all equity” capital structure:

Capital Structure Scenario 1: All ZK Equity

	Amount*	Interest Rate
Debt (China's Bank)	-	
Equity (ZK)	55,334	
Total	55,334	

*RMB 10,000

The ZK Group already had a loan agreement with Industrial and Commercial Bank of China. The Hongensi Project will have a loan of RMB 200 million with a simple annual interest rate at 5.76%. The first draw of the loan is RMB 50 million in March 2006, the second draw is RMB 50 million in September 2006, the third draw is RMB 50 million in September 2007, and the fourth draw is RMB 50 million in June 2008. The interests and principal are scheduled to be paid quarterly to the bank. The following is the capital structure consisting of the bank loan and the ZK common equity:

Capital Structure Scenario 2: Bank Loan & ZK Equity

	<u>Amount*</u>	<u>Interest Rate</u>
Debt (China's Bank)	20,000	5.76%
Equity (ZK)	35,334	
Total	55,334	

*RMB 10,000

If the project is successful enough to attract foreign capital, there are many additional ways to set up the capital structure. The following capital structures are three typical examples:

Capital Structure Scenario 3: Bank Loan & Foreign Investment & ZK Equity

Option A: Pari Passu			
	<u>Amount*</u>	<u>Interest Rate</u>	
Debt (China's Bank)	20,000	5.76%	
Equity (Joint Venture)		<u>% Eq. Contribution</u>	<u>Split %</u>
Foreign Common Equity	10,000	28%	28%
ZK Common Equity	25,334	72%	72%
Total	55,334		

Option B: Preferred Return 1				
	<u>Amount*</u>	<u>Interest Rate</u>		
Debt (China's Bank)	20,000	5.76%		
Equity (Joint Venture)		<u>% Eq. Contribution</u>	<u>Preferred Rate</u>	<u>Split % over Pref. Rate</u>
Foreign Preferred Equity	10,000	28%	12.00%	30%
ZK Common Equity	25,334	72%		70%
Total	55,334			100%

Option C: Preferred Return 2				
	<u>Amount*</u>	<u>Interest Rate</u>		
Debt (China's Bank)	20,000	5.76%		
Equity (Joint Venture)		<u>% Eq. Contribution</u>	<u>Preferred Rate</u>	<u>Split % over Pref. Rate</u>
Foreign Preferred Equity	33,500	95%	20.00%	60%
ZK Common Equity	1,834	5%		40%
Total	55,334			100%

*RMB 10,000

The Option A capital structure is called Pari Passu, which literally means “with equal step” or “without partiality”. It is used in reference to two classes of investments that have equal entitlement to payment. For example, in this case, the foreign investors contribute RMB 100 million or 28% of the equity, and the ZK Group contributes RMB 253.34 million or 72% of the equity to the project. The return of the project will be split 28% to the foreign investor and 72% to the ZK Group. However, whose equity invests first and how to schedule the investment are

upon negotiation. In this case, the foreign investors and the ZK Group contribute their capital pari passu on the same schedule.

The Option B capital structure is called Preferred Return, which is typically used in high-risk investment deals. Preferred equity, like preferred stock, is contributed to get the preferred return. Often times, the preferred equity is invested earlier than common equity, and the contributor gets the return earlier than any other equity investors do. After the contributor gets the preferred rate of return and the preferred equity back, the rest of the return is split by a pre-arranged percentage with other common equity investors. Since we have two examples of preferred return, the Option B is called Preferred Return 1. In this case, the foreign investors contribute preferred equity RMB 100 million or 28% of the equity, and the ZK Group contributes common equity RMB 253.34 million or 72% of the equity to the project. Since the preferred equity is less than the common equity, the preferred rate is just 12% IRR²², and the return over 12% is split 30% to preferred equity investors and 70% to the common equity investor: the ZK Group. While the rates and splits are subject to negotiation, they generally represent the size of the equity contribution and the risks taken by the contributors.

The Option C capital structure is a much more typical preferred return structure in the U.S. We call this case Preferred Return 2. The preferred equity investors usually invest a larger portion of the equity, such as 95% or 99% of the equity. In order to align the interest, they require the developer to invest the rest 5% or 1% of the equity. The investors contribute the preferred equity before the developer does. Since they have a higher stake in the project than the developer has, they require a higher preferred rate of return, and get the return and their equity back before any

²² IRR is the abbreviation of Internal Rate of Return.

cash inflows to the developer. In this case, the foreign investors contribute preferred equity RMB 335 million or 95% of the equity, and the ZK Group contributes RMB 18.34 million or 5% of the equity. The preferred rate is 20% to justify the investors' higher stake in the project. After the investors get the 20% return and their equity back, the rest of the profit from the project is split 60% to the investors and 40% to the developer. This demonstrates that after the project satisfies the preferred return, the investors are usually willing to give the developer a higher portion of the profit than the percentage of developer's actual equity contribution. In this case, the developer with the 5% equity contribution can get 40% of the return after the preferred return.

From the perspective of the developer, the Option C is more favorable than any other structures. A minimal investment from the developer makes the project happen, and the return on this investment is usually extremely high if the project performs well. Furthermore, the developer with less cash outflows or constraints because of this type of structure can pursue multiple projects at the same time. However, only developers with excellent track records can persuade investors to make such preferred equity investment. Additionally, the transparency issue in China makes it even harder to attract such investment.

“Rome was not built in one day”. Three steps need to be taken if the developer does not have any experience in co-investing with foreign investors. First, if the developer can make the project transparent enough for foreign investors by sound market analyses and reasonable assumptions, it is much easier to set up the pari passu capital structure (Option A) given the risks with foreign investors than directly pursue the preferred return structure (Option B and C). Second, between Option B and Option C, it is easier to set up the Option B structure if the developer's track

records do not make the foreign investors confident to put a larger portion of the equity investment upfront. Third, after establishing the track records and knowing how to create transparency, the developer can negotiate the Option C capital structure with foreign investors. This gives the developer the opportunity to use its own equity in a more leveraged fashion.

The pari passu and preferred return capital structures are commonly used in the United States. Sometimes they are jointly used in one project. Each of them has many different alternatives too. For example, in the pari passu structure, investors can set hurdle rates of return and promotes. Before the hurdle rates, investors share the profit pari passu; after the hurdle rates, passive investors give active investors or the developer promotes, such as a higher percentage split based on a pre-arranged fixed percentage, or a performance-based percentage. Here is a numeric example: on the one side, foreign investors contribute 95% of the equity and need 10% hurdle rate; on the other side, the developer contributes 5% of the equity and can get 10% promote. Within the 10% hurdle, the profit is split pari passu, which means the investors get 95% of the profit, and the developer gets 5% of the profit; beyond the 10% hurdle, the developer gets 14.5%²³ of the profit, and the investors get the rest 85.5% of the profit. The capital structure can be set up in a very complicated manner, such as several tiers of hurdle rates. Nonetheless, the main objective of such structure is to preserve the equity investments and mitigate risks. All of the hurdle rates and promotes etc. are subject to negotiation.

Besides the foreign equity investment, it is also possible to obtain foreign debt financing for a project. The most commonly used is mezz debt. Unlike a normal debt such as a construction loan or permanent loan, the mezz debt is not secured by the underlying assets, but by the equity

²³ 14.5% = 5% + 10% promote * 95%

interests of the debt borrower. However, the interest rate is usually higher in the mezz debt than in a normal loan.

6.4. Financial Analysis

Based on the assumptions, sales projections, and the capital structures, the project level cash flow projection for the Hongensi Project from October 2004 to December 2008 is presented in Appendix 4. This cash flow projection is the normative scenario.

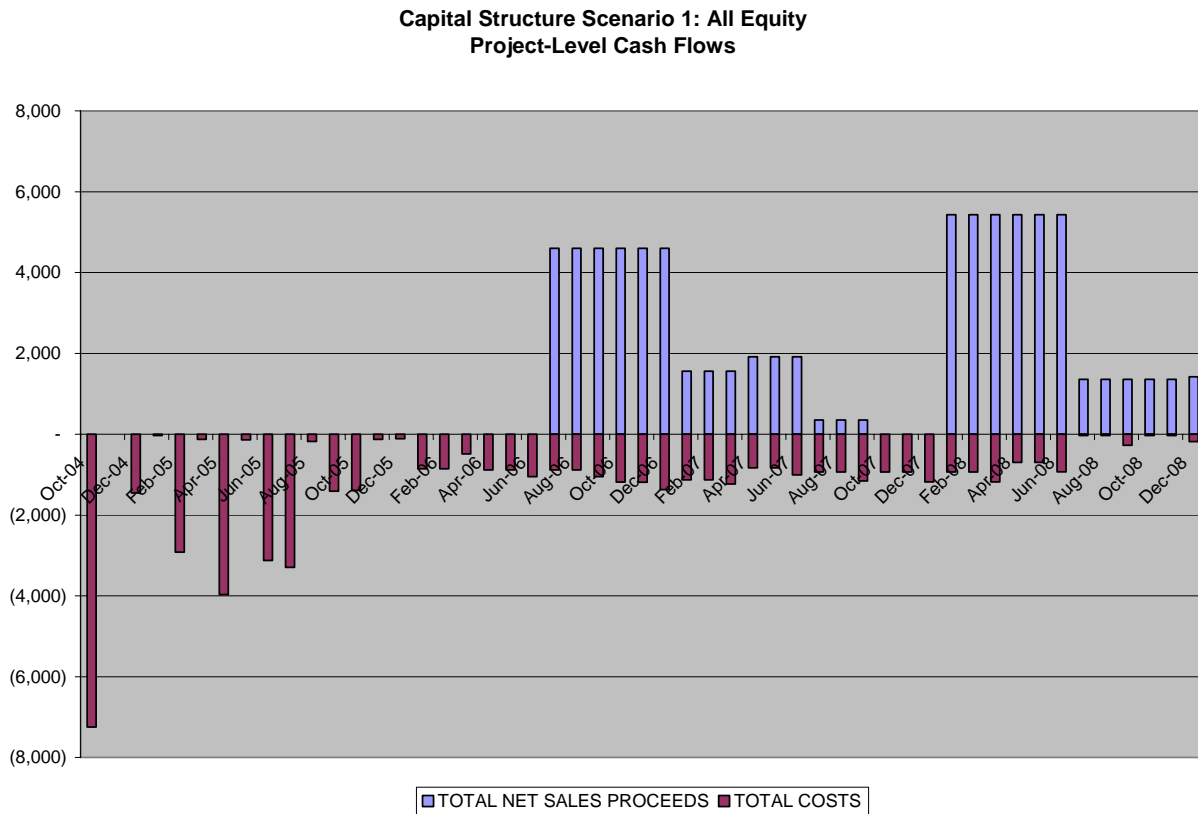
The Table-10 is the summary of the financial analysis for the foreign investors and the ZK Group in each capital structure.

Table-10 Financial Analysis Summary

	Equity Contribution (RMB 10,000)	Normative Scenario		
		Net Profit (RMB 10,000)	Return on Equity	IRR
Capital Structure Scenario 1:				
Equity (ZK)	55,334	24,557	10.44%	29.80%
Capital Structure Scenario 2:				
Equity (ZK)	35,334	22,901	15.25%	35.66%
Capital Structure Scenario 3:				
<i>Option A: Pari Passu</i>				
Foreign Common Equity	10,000	7,455	17.54%	38.36%
ZK Common Equity	25,334	18,885	17.54%	38.36%
<i>Option B: Preferred Return 1</i>				
Foreign Preferred Equity	10,000	17,044	40.10%	54.64%
ZK Common Equity	25,334	9,296	8.63%	23.69%
<i>Option C: Preferred Return 2</i>				
Foreign Preferred Equity	33,500	21,784	15.30%	33.53%
ZK Common Equity	1,834	5,783	74.20%	113639.59%

In the capital structure scenario 1, the ZK Group is the only equity investor and there is no debt financing. The IRR for the pure equity investment is 29.80% in the project level. It demonstrates that the Hongensi Project is a very attractive deal in terms of the IRR return. The Chart-29 illustrates the cash flows of this scenario.

Chart-29 Capital Structure Scenario 1 Cash Flows: All Equity



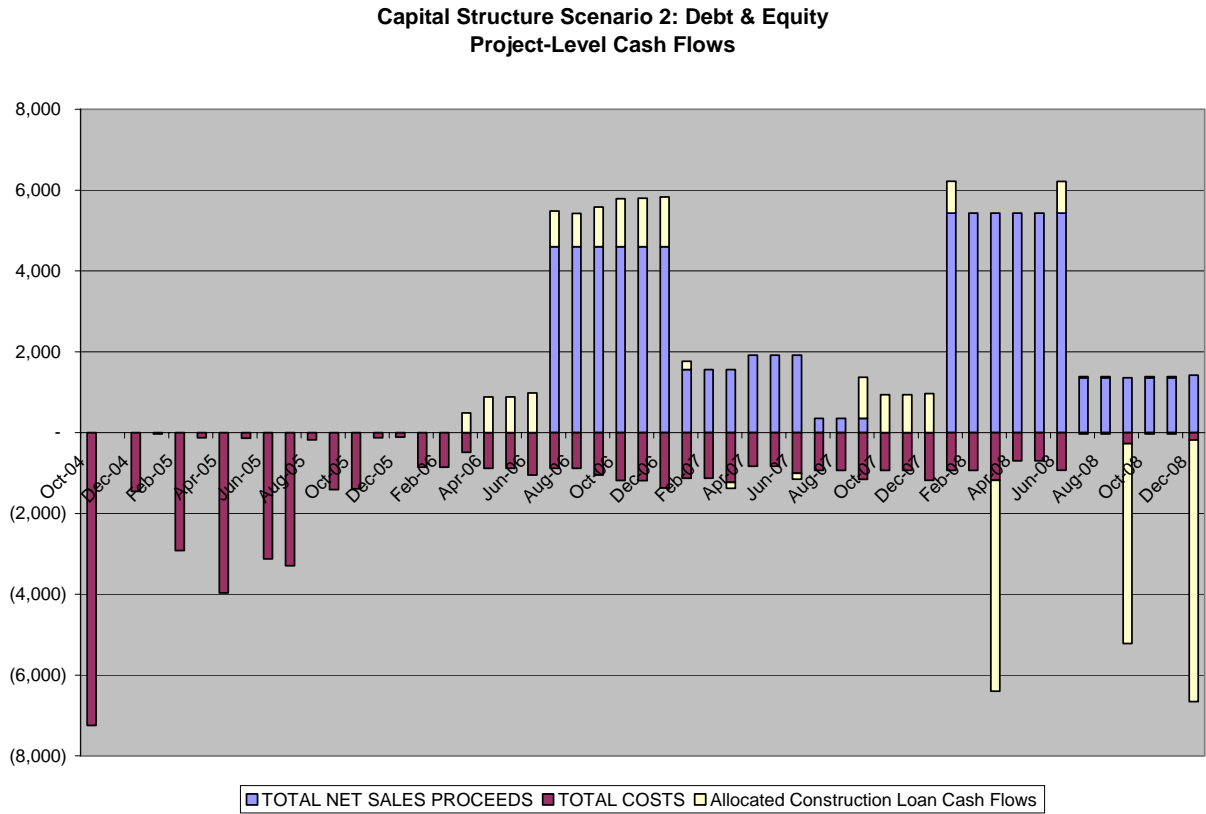
In the capital structure scenario 2, the ZK Group is still the only equity investor, but there is debt financing. The levered IRR for the ZK Group is 35.66% in the project level. The Chart-30 demonstrates the actual loan cash inflows and outflows to the project. Each inflow is RMB 50 million. It is not the project cash flows.

Chart-30 Actual Loan Cash Flows from Bank to Project



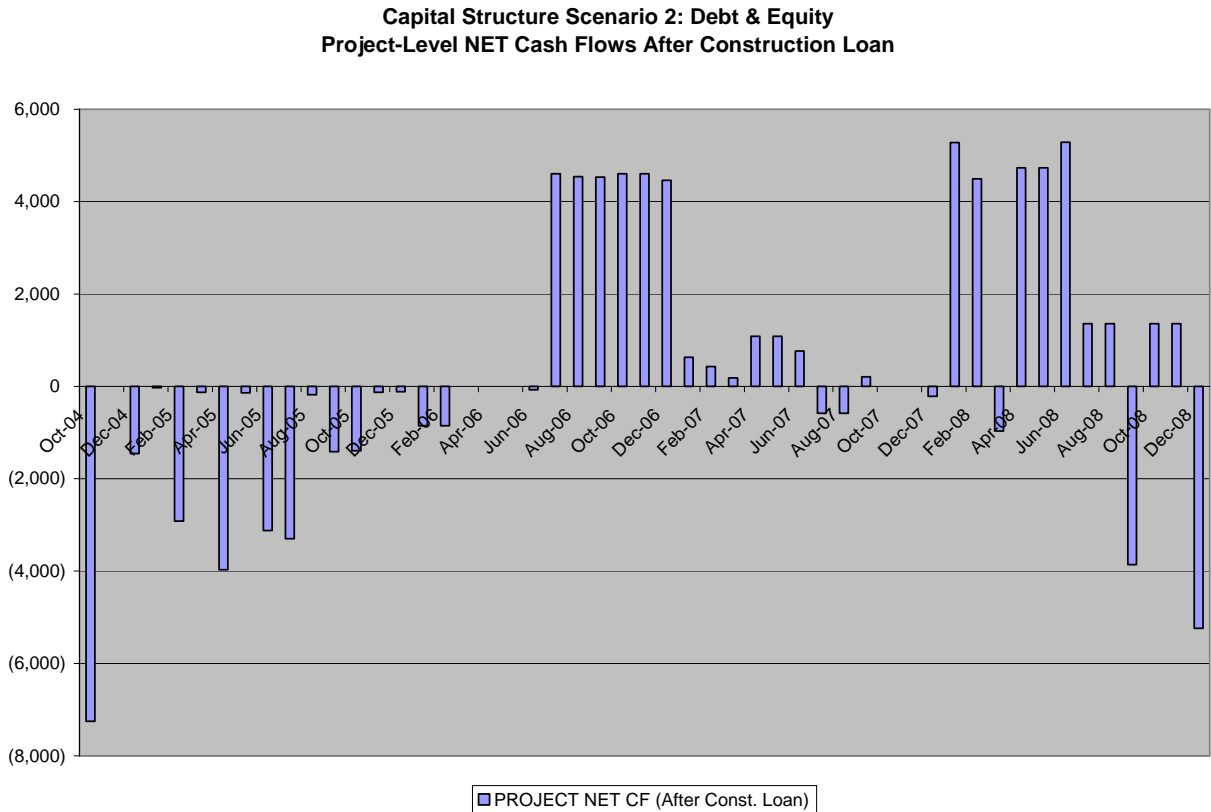
However, it is unrealistic to have a huge cash inflow to the project in one month. It is necessary to adjust and allocate the loan cash flows to cover the actual development costs. The Chart-31 demonstrates the realistic cash flows with both debt and equity financing.

Chart-31 Capital Structure Scenario 2 Cash Flows: Debt & Equity



The Chart-32 demonstrates the net cash flows after the construction loan is applied to the project. Since the ZK Group is the only equity investor, it is also the cash flows of the ZK Group. The levered 35.66% IRR is solved through this projection of cash flows.

Chart-32 Capital Structure Scenario 2 Net Cash Flows: Debt & Equity



In the capital structure scenario 3, the additional foreign equity investment makes many capital structures available. Theoretically, the alternatives are unlimited. Every alternative is designed to match the interests of both the investors and the developer.

The Chart-33, Chart-34, and Chart-35 demonstrate the cash flows of the three alternatives (Option A, B, and C) mentioned in the capital structure section, respectively.

Chart-33 Capital Structure Scenario 3 Cash Flows (Option A – Pari Passu)

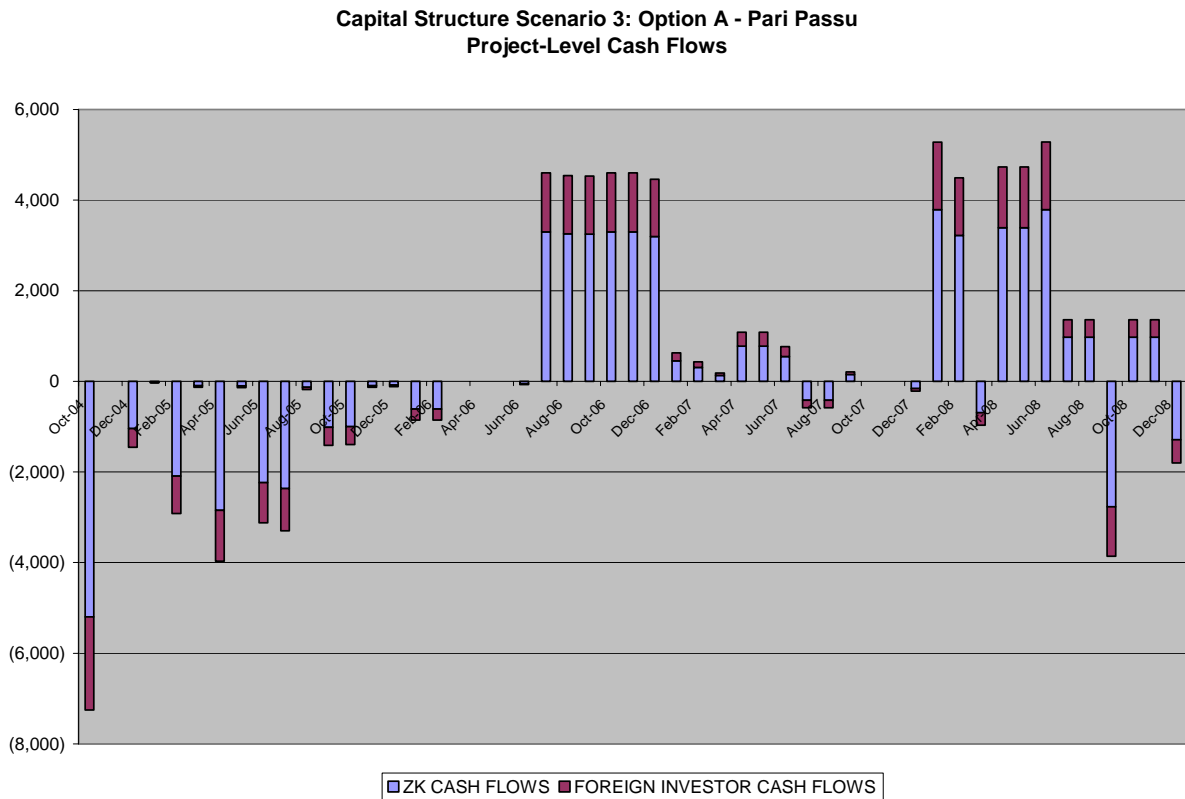


Chart-34 Capital Structure Scenario 3 Cash Flows (Option B – Preferred Return 1)

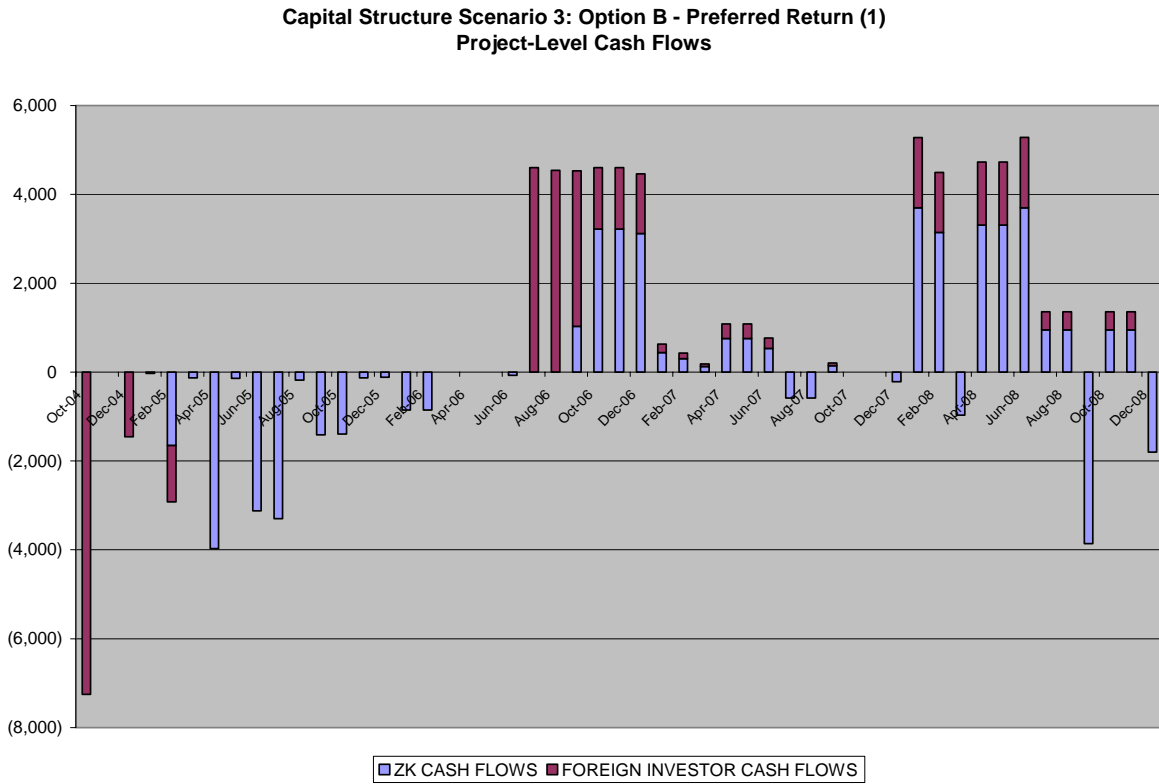
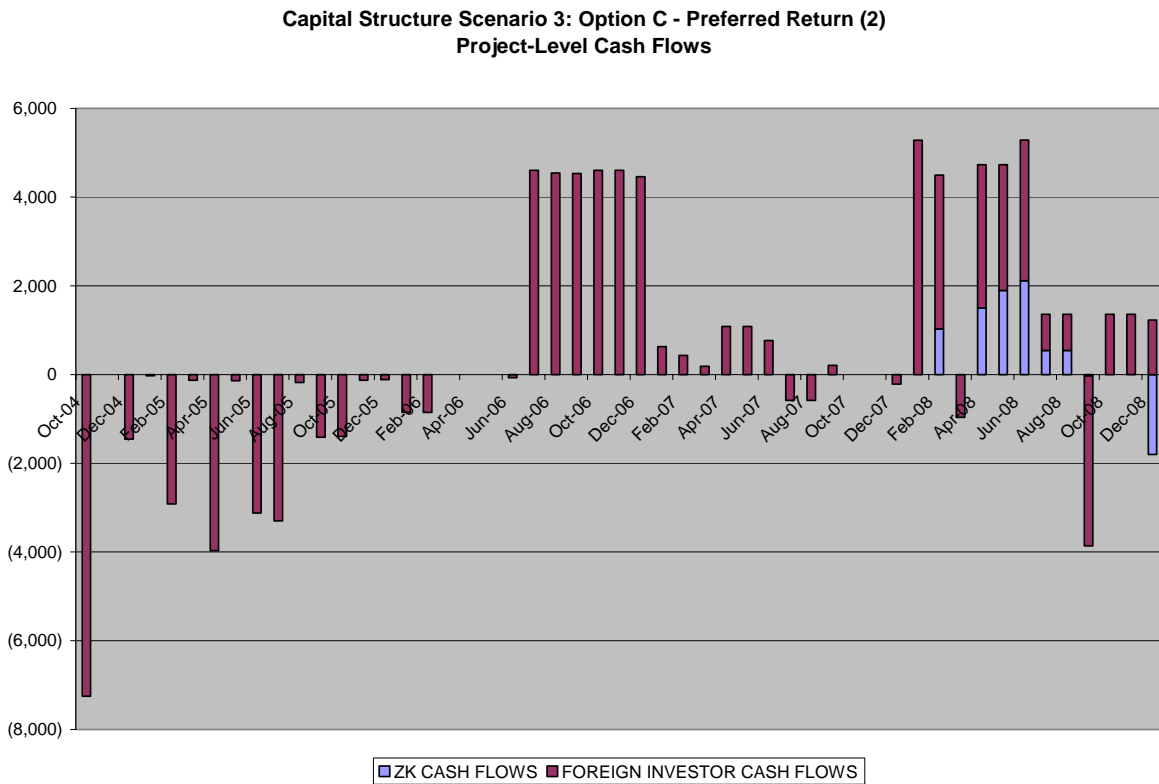


Chart-35 Capital Structure Scenario 3 Cash Flows (Option C – Preferred Return 2)



Among the three examples, the Option C capital structure apparently offers the developer the highest return, and the Option B capital structure offers the foreign investors the highest return. In the Option B capital structure, the IRR return for foreign investors is 54.64%, while in the Option C capital structure, the IRR return is 33.53%. The Option B guarantees a 12% preferred return to the foreign investors, while the Option C guarantees a 20% preferred return. This explains why the foreign investors contribute more equity but get less overall return in Option C than in Option B capital structure. However, the returns will change if the schedule and amount of equity contribution change. Nonetheless, the capital structure plays an important role in the cash flow projections, and therefore the returns to the investors and the developer.

6.5. Sensitivity Analysis

It is impossible to make the project cash flow projection 100% accurate. The sensitivity analysis can demonstrate how certain variables or assumptions affect the overall project profitability. This analysis can identify which variables and assumptions affect the project cash flow projection the most and which the least. The sensitivity analysis is very important because it demonstrates “what if” the optimistic or the pessimistic things happen. The investors should have plans for both cases.

However, it is difficult to estimate the probability of optimistic and pessimistic scenarios. The Real Option theory is one way to resolve this dilemma, but it also needs certain variables and assumptions, such as the volatility and the length of the project. In the United States, the Real Option theory is not commonly used because of its complication. It is much more difficult to

apply the Real Option theory in China because of the less transparent and less stable market. Therefore, it is not appropriate to use the theory without accurate data in China.

For the Hongensi Project, based on the market analysis and development experience, the optimistic and pessimistic scenarios include up-side and down-side changes in sales price, development cost, sales period, and development period. The Table-11 demonstrates the optimistic and pessimistic assumptions:

Table-11 Sensitivity Scenarios

	Sales Price		Development Cost		Sales Period		Development Period	
Optimistic Scenarios	+	5%	-	5%	-	3 months	-	3 months
Pessimistic Scenarios	-	10%	+	15%	+	6 months	+	6 months

The Table-12 is the financial analysis summary of the optimistic and pessimistic sales and costs in each capital structure. The lowest IRR for the ZK Group is 11.38% in the sales pessimistic scenario in the Option B preferred return 1 capital structure, and the lowest IRR for the foreign investors is 26.31% in the cost pessimistic scenario in the Option C preferred return 2 capital structure. These lowest IRRs are not low comparing to the stock market both in the U.S. and in China. Therefore, the Hongensi Project is quite favorable in terms of IRR returns.

Table-12 Financial Analysis Summary of Optimistic and Pessimistic Sales and Costs

	Equity Contribution (RMB 10,000)	Normative Scenario			Sales Optimistic Scenario			Sales Pessimistic Scenario			Cost Optimistic Scenario			Cost Pessimistic Scenario		
		Net Profit (RMB 10,000)	Return on Equity	IRR	Net Profit (RMB 10,000)	Return on Equity	IRR	Net Profit (RMB 10,000)	Return on Equity	IRR	Net Profit (RMB 10,000)	Return on Equity	IRR	Net Profit (RMB 10,000)	Return on Equity	IRR
Capital Structure Scenario 1:																
Equity (ZK)	55,334	24,557	10.44%	29.80%	28,555	12.14%	34.07%	16,562	7.04%	20.84%	27,324	11.62%	34.29%	16,257	6.91%	18.00%
Capital Structure Scenario 2:																
Equity (ZK)	35,334	22,901	15.25%	35.66%	26,899	17.91%	40.57%	14,906	9.93%	25.02%	25,668	17.09%	41.13%	14,601	9.72%	21.08%
Capital Structure Scenario 3:																
<i>Option A: Pari Passu</i>																
Foreign Common Equity	10,000	7,455	17.54%	38.36%	8,460	19.91%	42.71%	5,444	12.81%	29.21%	7,787	18.32%	42.54%	6,530	15.37%	28.44%
ZK Common Equity	25,334	18,885	17.54%	38.36%	21,432	19.91%	42.71%	13,792	12.81%	29.21%	19,728	18.32%	42.54%	16,544	15.37%	28.44%
<i>Option B: Preferred Return 1</i>																
Foreign Preferred Equity	10,000	17,044	40.10%	54.64%	18,105	42.60%	57.12%	14,922	35.11%	49.50%	17,382	40.90%	55.89%	16,107	37.90%	51.20%
ZK Common Equity	25,334	9,296	8.63%	23.69%	11,787	10.95%	29.57%	4,315	4.01%	11.38%	10,134	9.41%	29.08%	6,967	6.47%	13.15%
<i>Option C: Preferred Return 2</i>																
Foreign Preferred Equity	33,500	21,784	15.30%	33.53%	23,819	16.73%	36.58%	17,739	12.46%	27.36%	22,957	16.12%	37.22%	20,529	14.42%	26.31%
ZK Common Equity	1,834	5,783	74.20%	113639.59%	7,466	95.80%	221777.28%	2,359	30.27%	72383.79%	7,303	93.70%	247560.29%	2,545	32.66%	6621.39%

High risk does not mean high return, but high return usually associates with high risk. It is important for investors to know what the risk-adjusted return is. After all, the investors do not purely look for the high return, but the risk-adjusted return. However, there is no standard method to quantify the return against risk. Here is proposed a way to measure the risk premium per unit of risk. The risk premium (RP) means the return to investors that compensates the risk taken by the investors. It is quantified as the normative (expected) going-in IRR minus the risk-free interest rate. The risk is quantified by the range between the up-side possible return and the down-side possible return. Therefore, the risk premium per unit of risk is obtained by dividing the RP by the range. Theoretically, the higher the RP/Range, the better the investors get compensated for taking the risk. In order to achieve the “fairness”, the risk premium per unit of risk should be as close to the same across all the partners as possible in a joint venture in certain capital structure.

The Table-13 is the return summary and analysis for equity investors. The risk-free rate is 4.18%, which is close to the average of the U.S. 5-year T-bill rates in August 2005. Two reasons for using the T-bill rate: first, it is estimated that the Hongensi Project will last more than 4 years but less than 5 years; second, the foreign investors are expected to be U.S. investors.

Table-13 Equity Investor Return Summary and Analysis

	Normative IRR	Expected Risk Premium	Sales Optimistic IRR	Sales Pessimistic IRR	Range	*RP/Range	Cost Optimistic IRR	Cost Pessimistic IRR	Range	*RP/Range
Capital Structure Scenario 1:										
Equity (ZK)	29.80%	25.62%	34.07%	20.84%	13.23%	1.94	34.29%	18.00%	16.29%	1.57
Capital Structure Scenario 2:										
Equity (ZK)	35.66%	31.48%	40.57%	25.02%	15.54%	2.03	41.13%	21.08%	20.05%	1.57
Capital Structure Scenario 3:										
<i>Option A: Pari Passu</i>										
Foreign Common Equity	38.36%	34.18%	42.71%	29.21%	13.50%	2.53	42.54%	28.44%	14.10%	2.42
ZK Common Equity	38.36%	34.18%	42.71%	29.21%	13.50%	2.53	42.54%	28.44%	14.10%	2.42
<i>Option B: Preferred Return 1</i>										
Foreign Preferred Equity	54.64%	50.46%	57.12%	49.50%	7.61%	6.63	55.89%	51.20%	4.69%	10.76
ZK Common Equity	23.69%	19.52%	29.57%	11.38%	18.19%	1.07	29.08%	13.15%	15.93%	1.23
<i>Option C: Preferred Return 2</i>										
Foreign Preferred Equity	33.53%	29.35%	36.58%	27.36%	9.21%	3.19	37.22%	26.31%	10.91%	2.69
ZK Common Equity	113639.59%	113635.41%	221777.26%	72383.79%	149393.50%	0.76	247560.29%	6621.39%	240938.90%	0.47

Risk-free Rate = 4.18%

*Note: Risk premium per unit of risk.

The ZK Group is the only equity investor in the capital structure scenario 1 and 2, so that there are no other investors to compare the fairness with. However, it is interesting to see both the capital structures create almost the same risk premium per unit of risk in either the sales or the cost optimistic and pessimistic scenarios. It suggests that the levered IRR in the capital structure scenario 2 embeds with higher risk than the one without the construction loan in the capital structure scenario 1. It is probably because the bank loan causes additional default risk in the capital structure scenario 2. It is worth to know that the loan can not only lever up the IRR, but also create additional risk.

In the Option A of the capital structure scenario 3, the ZK Group and the foreign investors have the same risk premium per unit of risk. It is reasonable because they not only get the investment return *pari passu*, but also contribute their capital *pari passu* to the Hongensi Project.

In the Option B of the capital structure scenario 3, the foreign investors have a much higher risk premium per unit of risk than the ZK Group has. It suggests that the foreign investors can get higher compensation than the ZK Group can for taking the same amount of risk. It is not “fair” because the ZK Group invests more capital than the foreign investors do, but gets less IRR return than the foreign investors do.

In the Option C of the capital structure scenario 3, the IRR returns for the ZK Group are too high to use this RP/Range method to justify its return against risk. The returns in pessimistic scenarios are not low at all because the ZK Group only invests minimal capital to the project near to the end of the project.

There are many alternatives to conduct the sensitivity analysis. The bottom line is to see how bad if things go wrong, so that investors can make plans ahead. The risk premium per unit of risk also offers investors a clue to negotiate the fairness of a joint venture investment. In general, the Hongensi Project is a favorable project to both the foreign investors and the ZK Group in terms of the return, but not fair to the ZK Group in Option B capital structure. However, since the ZK Group does not have any experience to joint venture with foreign investors, and does not have excellent track records, the sacrifice to the fairness is a trade-off for accumulating experience and track records. It is totally up to the ZK Group's decision.

Chapter 7 Project Ownership Structure

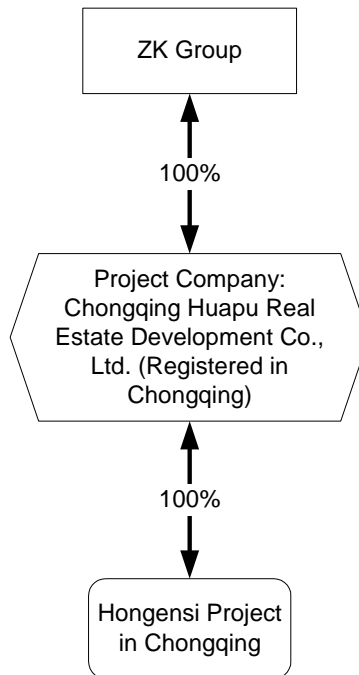
7.1. Project-Level Investment vs. Company-Level Investment

A project-level investment means that a foreign investor invests only in individual projects. The foreign capital is used to finance the individual projects, but not the development company.

A company-level investment refers to investing in the development company. The foreign capital can be used to buy the shares of the company. It is more like corporate finance than project finance. The ZK Group, the development entity of the Hongensi Project, is looking for project-level investment.

7.2. Project Ownership Structure

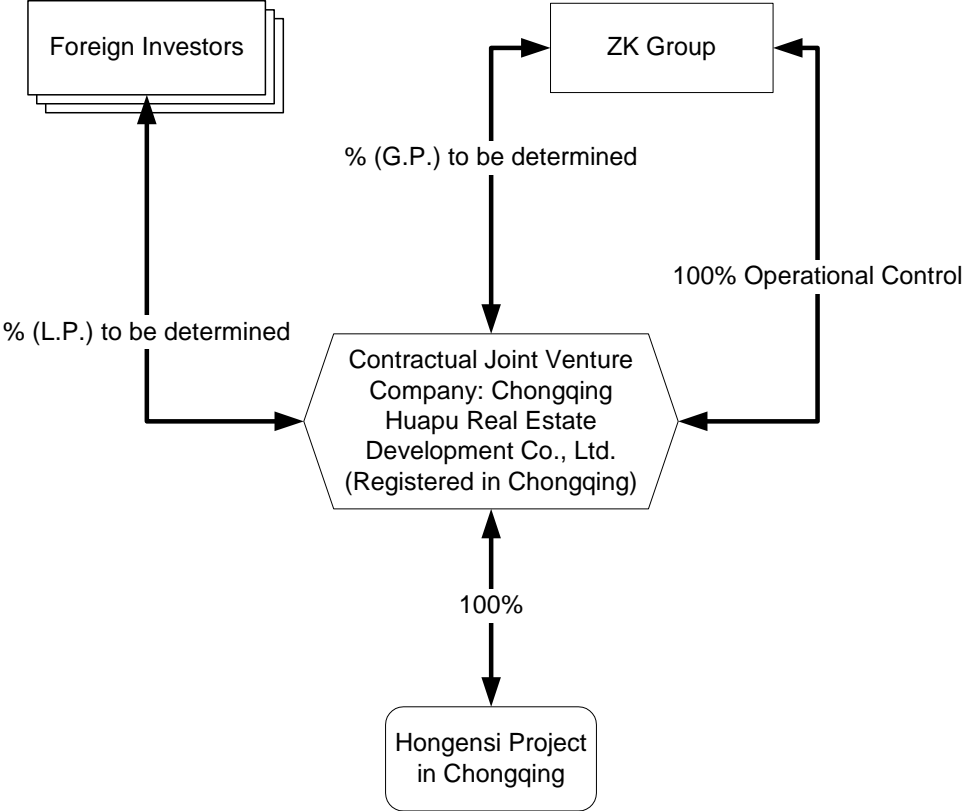
The ZK Group already has a project company for the Hongensi Project: Chongqing Huapu Real Estate Development Co., Ltd. It is a limited liability company and 100% owned by the ZK Group. The following is the current ownership structure:



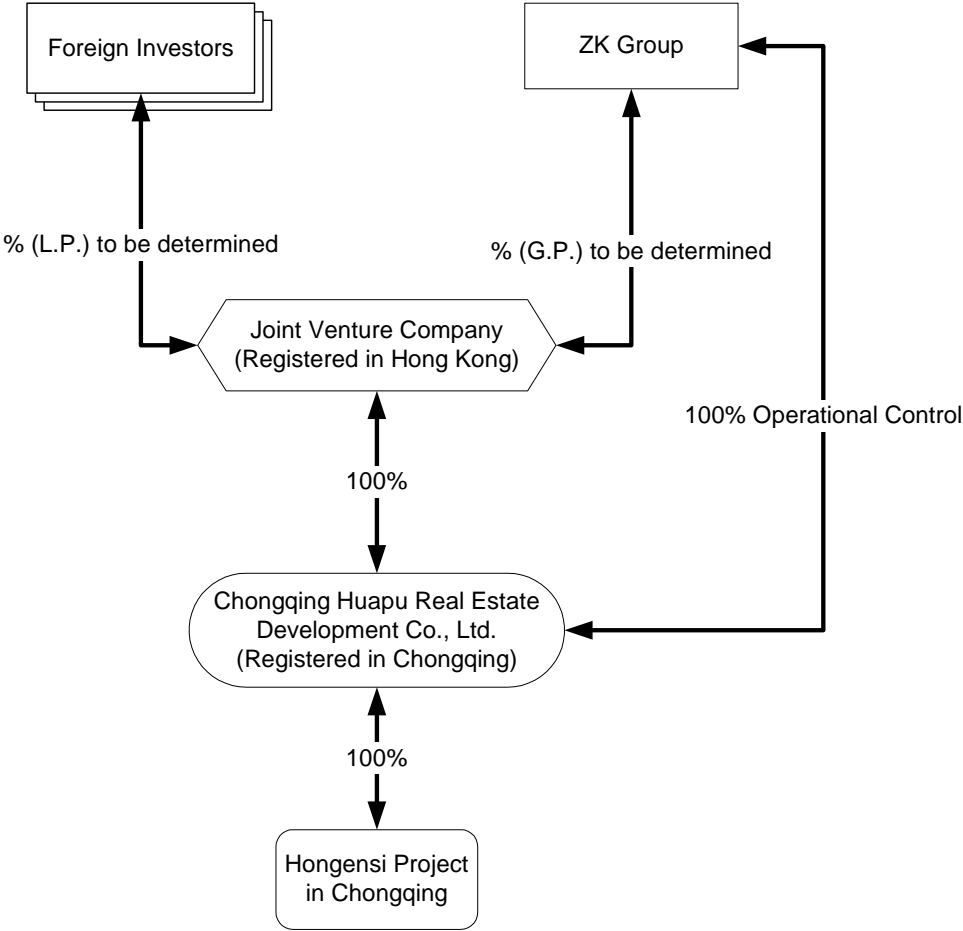
The company plans to joint venture with foreign investors to co-invest the project. As discussed previously, there are usually three types of entities available for foreign investors: Equity Joint Venture (EJV), Contractual Joint Venture (CJV), and Wholly Foreign Only Enterprise (WFOE). A CJV is suitable for investing real estate development projects.

Inside mainland of China, there are usually three ways to form the CJV joint venture: First, the foreign investors delegate the investment to a trust company in China, and the trustee deals with the ZK Group. The foreign investors need to pay fees to the trust company, but it decreases risks significantly. Second, the foreign investors acquire shares from the project company as their

investment to the Hongensi Project. Third, the foreign investors directly invest the project through the project company. The following is a typical joint venture structure using the second and the third methods.



However, it is a common practice to set up a joint venture in Hong Kong or any other suitable venues to facilitate the profit repatriation and the dispute resolution, and to maximize tax benefits. The following ownership and operational structure is an example of the joint venture established in Hong Kong:



The venture is structured to have the project company in Chongqing wholly owned by a Hong Kong entity, so as to both take advantage of certain investment incentives provided to Foreign companies operating in mainland China, and to maintain control over the project.

Capital invested by foreign investors and the ZK Group at the inception of the venture will be held in a Hong Kong account until it is required by the project company in Chongqing. This

structure will provide foreign investors better control over the flow of capital into the project than they would have if they directly invest in the project company. However, the only concern is that ZK Group is partially owned by the Zhejiang government, thus it is not easy for ZK Group to move their capital for the project to Hong Kong. One way to resolve this problem is to set up two accounts, one in the mainland of China, and the other in Hong Kong. Capital invested by ZK Group will be held in mainland, and capital invested by foreign investors will be held in Hong Kong. Any movement of the capital in these two accounts must be approved by both the ZK Group and the foreign investors.

The ZK Group as the managing party of the joint venture registered in Hong Kong will have 100% of the operational control of the project company. However, if the foreign investors wish to play an active role in the development company, it is subject to negotiation and change.

Chapter 8 Alternative Framework

A major objective of this thesis is to provide a framework for Chinese developers to create transparency for their real estate development projects, in order to attract foreign capital investment. The previous chapters demonstrate all the procedures. However, due to the data availability and suitability issue, there are gaps between this study and a high quality U.S. standard investment prospectus.

For the purpose of future study, the below is presented a much more comprehensive framework to create transparency in real estate development industry using the case of Hongensi Project.

1. PROJECT EXECUTIVE SUMMARY

2. COMPANY INFORMATION

2.1. Company History and Background

2.2. Company Management Team

2.3. Organizational Structure

2.4. Business Model

2.5. Major Product Types & Historical Performance

2.5.1. Past Projects

2.5.2. Internal Rate of Return

3. GENERAL INVESTMENT ISSUES AND COUNTRY OVERVIEW

3.1. Overview of Economy and Real Estate Market in China

3.1.1. Economic and Social Development

3.1.2. Real Estate Market

3.1.3. *Demographic Trends*

3.1.4. *Housing*

3.1.5. *Income Level*

3.1.6. *Employment*

3.1.7. *Vehicle Ownership Level*

3.2. Overview of Legal Issues in Real Estate Development and Investment

3.2.1. *Legal Process for Real Estate Development*

3.2.2. *Taxes and Benefits*

3.2.3. *Foreign Investment Laws*

3.2.4. *Foreign Exchange Regulations*

3.2.5. *Monetary and Fiscal Policy Impact on Real Estate*

3.2.6. *Repatriation of Investment Profit*

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4.1.2. *Overview of Development Program*

4.2. Project Site Plan

4.3. Project Regulatory Process

4.3.1. *City Planning Code Compliance*

5. PROJECT MARKET ANALYSIS

5.1. Region-Level Overview of Chongqing

5.2. City-Level Market Conditions of Chongqing

5.2.1. *Overview of the City of Chongqing*

5.2.2. *Macro Market Analysis of Chongqing*

- Economic and Social Development
- Real Estate Market
- Local Regulatory Environment
- Demographic Trends and Stratification
- Housing
- Income Level
- Employment
- Vehicle Ownership Level

5.3. Project-Level Market Conditions

5.3.1. *Micro Market Analysis of the Project in Chongqing*

- Location and Market Area for Intended Product
- Public Infrastructure and Facilities
- Demand Analysis
 - *Demand Drivers*
 - *Historic and Current Market Absorption and Vacancy Rate*
 - *Projected Market Absorption for Next 10 – 15 Years*
- Supply Analysis
 - *Existing Inventory and Near Term Projection of New Inventory*
 - *Future Supply for Next 10 – 15 Years*
 - *Business/Building Cycles and Regulatory Trends Affecting Development*

5.3.2. *Project Marketability Analysis*

- Segmentation
 - *Specific Market Segments Targeted*
 - *Specific Project Functions and Features Attracting Segments*
- Differentiation
 - *Competitive Supply*
 - *Specific Project Functions and Features Competing with Supply*
- Preliminary Marketing Strategies and Management Plan

5.3.3. *Overall Assessment of the Viability of the Intended Product*

6. PROJECT CAPITAL BUDGET

6.1. Development Program and Assumptions

6.1.1. *Development Program*

6.1.2. *Major Assumptions*

6.2. Development Phases and Current Status

6.2.1. *Major Components of Construction Schedule*

6.2.2. *Current Status*

6.3. Detailed Development Budgets

6.3.1. *Detailed Hard Cost*

6.3.2. *Detailed Soft Cost*

6.4. Anticipated Financing Package

6.4.1. *Anticipated Debt Funding*

6.4.2. *Anticipated Equity Funding*

7. PROJECT REVENUE AND EXPENSE

7.1. Holding Period

7.2. Sales Schedule and Sales Revenue

7.3. Operating Expenses

8. PROJECT FINANCIAL ANALYSIS

8.1. Projected Net Operating Income and Cash Flow Proformas

8.2. Present Value, Internal Rate of Return and Ratio Analysis

8.2.1. Present Value

8.2.2. Internal Rate of Return

8.2.3. Financial Ratios

- Profitability Ratios
- Risk Ratios

8.3. Sensitivity Analysis

8.3.1. Normative Capital Budget and Cash Flow

8.3.2. Optimistic/Pessimistic Budget and Cash Flow

9. PROJECT LEGAL STRUCTURE

9.1. Project-Level Investment vs. Company-Level Investment

9.2. Project Ownership Structure

9.2.1. Structure and Legal Form of Ownership

9.2.2. Distribution and Liquidation Arrangements

- Company's Share
- Equity Investors' Share

9.2.3. Regulatory Consideration

9.3. Project Capital Structure

9.3.1. Types of Equity and Debt

- Equity
- Debt

9.3.2. *Consistency Between Ownership and Financing Arrangement*

10. SUMMARY OF PERCEIVED RISKS AND OPPORTUNITIES

10.1. Risk Identification and Assessment

10.1.1. Real Estate Cycle

10.1.2. Business Risk

10.1.3. Financial Risk

10.2. Risk Management

10.2.1. Eliminating Risk

10.2.2. Shifting Risk

10.2.3. Reducing Risk

10.2.4. Hedging Risk

10.3. Exit Strategies

Appendix-1 Parcel 5-4# Development Budget

Planning Area (m ²)	31,243
Net Usable Area (m ²)	27,758
Floor Area (m ²)	42,981
Program:	High-rise Residential, Retail and Parking

	Total Cost (Ten Thous Yuan)	% of Total	Unit Price (Yuan per M ²)	Assumption Or Standard
LAND COST:	2,797	30.44%	0.09	
HARD COSTS:				
Civilwork (Foundation and Bldg Construction)	3,224	35.08%	750.00	
Facility Installation (Water, Elec., and Gas)	473	5.14%	110.00	
Elevator	258	2.81%	60.00	
Landscaping	172	1.87%	40.00	
Security and IT Equipment	86	0.94%	20.00	
Site Grading	129	1.40%	30.00	
Special Fitment (Club and Common House)	86	0.94%	20.00	
Hard Cost Contingency	133	1.45%	30.90	3% of Hard Cost
Hard Cost Total	4,560	49.62%	1,060.90	
SOFT COSTS:				
Soft Cost Part 1				
Master Planning, Arch and Engineering	172	1.87%	40.00	
Survey and Geotechnical Fee	9	0.09%	2.00	
Protection Facility Cost	129	1.40%	30.00	
City Infrastructure Fee	602	6.55%	140.00	
Temporary Water and Elec. Fee	43	0.47%	10.00	
Standard Fee and Other	215	2.34%	50.00	
Soft Cost Part 2				
Construction Admin and Development Fee	224	2.44%	52.08	4% of Direct Cost
Loan Interest and Financing Fee	387	4.21%	90.00	Estimated
Soft Cost Contingency	53	0.58%	12.42	3% of Soft Cost
Soft Cost Total	1,833	19.95%	427	
SUBTOTAL (Hard Cost + Soft Cost)	6,393	69.56%	1,487	
TOTAL COSTS:	9,190	100.00%	1,487	Land+Hard+Soft Costs

Appendix-2 Parcel 12-2# Development Budget

Planning Area (m ²)	54,876
Net Usable Area (m ²)	50,120
Floor Area (m ²)	98,650
Program:	High-rise Residential, Retail and Parking

	Total Cost (Ten Thous Yuan)	% of Total	Unit Price (Yuan per M ²)	Assumption Or Standard
LAND COST:	5,185	26.11%	0.09	
HARD COSTS:				
Civilwork (Foundation and Bldg Construction)	7,399	37.26%	750.00	
Facility Installation (Water, Elec., and Gas)	1,085	5.46%	110.00	
Elevator	592	2.98%	60.00	
Landscaping	395	1.99%	40.00	
Security and IT Equipment	197	0.99%	20.00	
Site Grading	296	1.49%	30.00	
Special Fitment (Club and Common House)	197	0.99%	20.00	
Hard Cost Contingency	305	1.54%	30.90	3% of Hard Cost
Hard Cost Total	10,466	52.70%	1,060.90	
SOFT COSTS:				
Soft Cost Part 1				
Master Planning, Arch and Engineering	395	1.99%	40.00	
Survey and Geotechnical Fee	20	0.10%	2.00	
Protection Facility Cost	296	1.49%	30.00	
City Infrastructure Fee	1,381	6.95%	140.00	
Temporary Water and Elec. Fee	99	0.50%	10.00	
Standard Fee and Other	493	2.48%	50.00	
Soft Cost Part 2				
Construction Admin and Development Fee	514	2.59%	52.08	4% of Direct Cost
Loan Interest and Financing Fee	888	4.47%	90.00	Estimated
Soft Cost Contingency	123	0.62%	12.42	3% of Soft Cost
Soft Cost Total	4,207	21.19%	427	
SUBTOTAL (Hard Cost + Soft Cost)	14,673	73.89%	1,487	
TOTAL COSTS:	19,858	100.00%	1,487	Land+Hard+Soft Costs

Appendix-3 Parcel 16[#] Development Budget

Planning Area (m ²)	151,802
Net Usable Area (m ²)	141,630
Floor Area (m ²)	71,037
Program:	Townhouse, Single-Family, Retail and Parking

	Total Cost (Ten Thous Yuan)	% of Total	Unit Price (Yuan per M ²)	Assumption Or Standard
LAND COST:	13,296	50.58%	0.09	
HARD COSTS:				
Civilwork (Foundation and Bldg Construction)	6,038	22.97%	850.00	
Facility Installation (Water, Elec., and Gas)	781	2.97%	110.00	
Elevator	710	2.70%	100.00	
Landscaping	710	2.70%	100.00	
Security and IT Equipment	355	1.35%	50.00	
Site Grading	213	0.81%	30.00	
Special Fitment (Club and Common House)	355	1.35%	50.00	
Hard Cost Contingency	275	1.05%	38.70	3% of Hard Cost
Hard Cost Total	9,439	35.91%	1,328.70	
SOFT COSTS:				
Soft Cost Part 1				
Master Planning, Arch and Engineering	426	1.62%	60.00	
Survey and Geotechnical Fee	14	0.05%	2.00	
Protection Facility Cost	213	0.81%	30.00	
City Infrastructure Fee	995	3.78%	140.00	
Temporary Water and Elec. Fee	71	0.27%	10.00	
Standard Fee and Other	355	1.35%	50.00	
Soft Cost Part 2				
Construction Admin and Development Fee	450	1.71%	63.28	4% of Direct Cost
Loan Interest and Financing Fee	923	3.51%	130.00	Estimated
Soft Cost Contingency	103	0.39%	14.56	3% of Soft Cost
Soft Cost Total	3,551	13.51%	500	
SUBTOTAL (Hard Cost + Soft Cost)	12,989	49.42%	1,829	
TOTAL COSTS:	26,285	100.00%	1,829	Land+Hard+Soft Costs

Appendix-4 Normative Project Level Cash Flows From 10/2004 to 12/2008 (RMB 10,000)

	Number of Month	1	2	3	4	5	6	7	8	9	
		Year 2004									
		Year Oct-04	Nov-04	Dec-04	Jan-05	Feb-05	Mar-05	Apr-05	May-05	Jun-05	
SALES PROCEEDS	TOTAL										
First Phase (Parcel 12-2[#] & Parcel 5-4[#])											
Gross Sales Proceeds (Ten Thousand Yuan)	42,908										
Residential	37,875										
Retail	2,702										
Parking	2,331										
Area Sold (m²)	141,631										
Residential	126,250										
Retail	5,404										
Parking	9,977										
Second Phase (Parcel 16[#])											
Gross Sales Proceeds (Ten Thousand Yuan)	44,713										
Residential	44,648										
Retail	65										
Area Sold (m²)	68,819										
Residential	68,689										
Retail	130										
Total Gross Sales Proceeds	87,621										
Less: Sales and Marketing Costs (3% of Gross Proceeds)	2,629										
Less: Transaction, Processing and Other Fees (3 Yuan/m ²)	63										
Less: Business Tax and Surcharge Fee (5.75% of Gross Proceeds)	5,038										
TOTAL NET SALES PROCEEDS	79,891	-	-	-	-	-	-	-	-	-	
DEVELOPMENT COSTS											
Land Cost	21,278	7,250		1,455		2,825		3,934		2,963	
Hard Cost (Including contingency)	24,464										
Soft Cost	9,591				31	91	131	36	140	159	
Part 1	5,927					60	100	5	109	128	
Part 2	3,385				25	25	25	25	25	25	
Construction Admin and Development Fee	1,187				25	25	25	25	25	25	
*Loan Interest and Financing Fee	2,198										
Contingency	279				6	6	6	6	6	6	
*Note: The interest and financing fee are not same with the loan scheduled interest because of some unavoidable costs related to getting the loan.											
TOTAL COSTS	55,334	7,250	-	1,455	31	2,916	131	3,970	140	3,122	
CAPITAL STRUCTURE SENARIO 1: All ZK Equity											
PROJECT NET CASH FLOWS (All Equity)	29.80% IRR	24,557	(7,250)	-	(1,455)	(31)	(2,916)	(131)	(3,970)	(140)	(3,122)
Cum Cash Flows (All Equity)			(7,250)	(7,250)	(8,705)	(8,736)	(11,652)	(11,782)	(15,752)	(15,892)	(19,014)

Appendix-4 Normative Project Level Cash Flows From 10/2004 to 12/2008 (RMB 10,000)

	Number of Month	1	2	3	4	5	6	7	8	9
		<u>Oct-04</u>	<u>Nov-04</u>	<u>Dec-04</u>	<u>Jan-05</u>	<u>Feb-05</u>	<u>Mar-05</u>	<u>Apr-05</u>	<u>May-05</u>	<u>Jun-05</u>
CAPITAL STRUCTURE SENARIO 2: Bank Loan & ZK Equity										
Allocated Construction Loan Cash Flows		-	-	-	-	-	-	-	-	-
PROJECT NET CF (After Const. Loan) 35.66% IRR		(7,250)	0	(1,455)	(31)	(2,916)	(131)	(3,970)	(140)	(3,122)
DETAILED BANK LOAN CALCULATIONS										
Construction Debt @ 5.76%										
Beginning Balance	Total		-	-	-	-	-	-	-	-
Advances	(20,000)	0	0	0	0	0	0	0	0	0
Interest										
Repayments										
Ending Balance		-	-	-	-	-	-	-	-	-
Loan net cash flow allocated to project	7.03% IRR	-	-	-	-	-	-	-	-	-
Loan net cash flow from bank to project	5.89% IRR	-	-	-	-	-	-	-	-	-
Loan Advance Allocation	1st Draw 100%									
	2nd 100%									
	3rd 100%									
	4th 100%									
Project CF after const loan	35.66% IRR	(7,250)	-	(1,455)	(31)	(2,916)	(131)	(3,970)	(140)	(3,122)
Note: Simple interest paid quarterly	check:	1	-	1	1	1	1	1	1	1
CAPITAL STRUCTURE SENARIO 3: Bank Loan & Foreign Investment & ZK Equity										
OPTION A: PARI PASSU										
Common Equity										
Ceiling		(35,334)	(35,334)	(35,334)	(35,334)	(35,334)	(35,334)	(35,334)	(35,334)	(35,334)
Remaining Available		(35,334)	(28,084)	(28,084)	(26,629)	(26,598)	(23,682)	(23,551)	(19,582)	(19,442)
Beginning Balance	Total		(7,250)	(7,250)	(8,705)	(8,736)	(11,652)	(11,782)	(15,752)	(15,892)
Advances	(35,334)	(7,250)	0	(1,455)	(31)	(2,916)	(131)	(3,970)	(140)	(3,122)
Repayments		0	0	0	0	0	0	0	0	0
Ending Balance		(7,250)	(7,250)	(8,705)	(8,736)	(11,652)	(11,782)	(15,752)	(15,892)	(19,014)
Common equity net CF to project		(7,250)	0	(1,455)	(31)	(2,916)	(131)	(3,970)	(140)	(3,122)
Equity Advances from ZK	(25,334)	(5,198)	0	(1,043)	(22)	(2,091)	(94)	(2,846)	(100)	(2,238)
Remaining ZK Equity		(20,136)	(20,136)	(19,092)	(19,070)	(16,980)	(16,886)	(14,040)	(13,939)	(11,701)
Equity Advances from Foreign Investors	(10,000)	(2,052)	0	(412)	(9)	(825)	(37)	(1,124)	(40)	(884)
	check:									
Pari Passu Split of Repayments										
Repayments to ZK	72%	0	0	0	0	0	0	0	0	0
Repayments to Foreign Investors	28%	0	0	0	0	0	0	0	0	0
	check:									
Project CF after const loan & common equity		0	0	0	0	0	0	0	0	0

Appendix-4 Normative Project Level Cash Flows From 10/2004 to 12/2008 (RMB 10,000)

	Number of Month	Year 2004								
		1	2	3	4	5	6	7	8	9
		Oct-04	Nov-04	Dec-04	Jan-05	Feb-05	Mar-05	Apr-05	May-05	Jun-05
ZK CASH FLOWS	38.36% IRR	(5,198)	0	(1,043)	(22)	(2,091)	(94)	(2,846)	(100)	(2,238)
FOREIGN INVESTOR CASH FLOWS	38.36% IRR	(2,052)	0	(412)	(9)	(825)	(37)	(1,124)	(40)	(884)
OPTION B: PREFERRED RETURN 1										
Foreign Preferred Equity (1) @ 12.00%										
Ceiling		(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)
Remaining Available		(10,000)	(2,750)	(2,750)	(1,295)	(1,264)	0	0	0	0
Beginning Balance	Total		(7,250)	(7,319)	(8,843)	(8,958)	(10,307)	(10,405)	(10,504)	(10,603)
Advances	(10,000)	(7,250)	0	(1,455)	(31)	(1,264)	0	0	0	0
Interest			(69)	(69)	(84)	(85)	(98)	(99)	(100)	(101)
Repayments		0	0	0	0	0	0	0	0	0
Ending Balance		(7,250)	(7,319)	(8,843)	(8,958)	(10,307)	(10,405)	(10,504)	(10,603)	(10,704)
Foreign Preferred equity (1) net CF to project	12.00% IRR	(7,250)	0	(1,455)	(31)	(1,264)	0	0	0	0
Project CF after const loan & preferred equity (1)		0	0	0	0	(1,652)	(131)	(3,970)	(140)	(3,122)
ZK Common Equity										
Ceiling		(25,334)	(25,334)	(25,334)	(25,334)	(25,334)	(25,334)	(25,334)	(25,334)	(25,334)
Remaining Available		(25,334)	(25,334)	(25,334)	(25,334)	(25,334)	(23,682)	(23,551)	(19,582)	(19,442)
Beginning Balance	Total		0	0	0	0	(1,652)	(1,782)	(5,752)	(5,892)
Advances	(25,334)	0	0	0	0	(1,652)	(131)	(3,970)	(140)	(3,122)
Repayments		0	0	0	0	0	0	0	0	0
Ending Balance		0	0	0	0	(1,652)	(1,782)	(5,752)	(5,892)	(9,014)
ZK common equity net CF to project		0	0	0	0	(1,652)	(131)	(3,970)	(140)	(3,122)
Split of Repayments over Preferred Rate										
Repayments to ZK	70%	0	0	0	0	0	0	0	0	0
Repayments to Foreign Investors	30%	0	0	0	0	0	0	0	0	0
Project CF after const loan & preferred equity (1) & common equity		0	0	0	0	0	0	0	0	0
check:										
ZK CASH FLOWS	23.69% IRR	0	0	0	0	(1,652)	(131)	(3,970)	(140)	(3,122)
FOREIGN INVESTOR CASH FLOWS	54.64% IRR	(7,250)	0	(1,455)	(31)	(1,264)	0	0	0	0
OPTION C: PREFERRED RETURN 2										
Foreign Preferred Equity (2) @ 20.00%										
Ceiling		(33,500)	(33,500)	(33,500)	(33,500)	(33,500)	(33,500)	(33,500)	(33,500)	(33,500)
Remaining Available		(33,500)	(26,250)	(26,250)	(24,795)	(24,764)	(21,848)	(21,718)	(17,748)	(17,608)
Beginning Balance	Total		(7,250)	(7,361)	(8,929)	(9,096)	(12,151)	(12,468)	(16,629)	(17,023)
Advances	(33,500)	(7,250)	0	(1,455)	(31)	(2,916)	(131)	(3,970)	(140)	(3,122)
Interest			(111)	(113)	(137)	(139)	(186)	(191)	(255)	(261)
Repayments		0	0	0	0	0	0	0	0	0
Ending Balance		(7,250)	(7,361)	(8,929)	(9,096)	(12,151)	(12,468)	(16,629)	(17,023)	(20,406)
Foreign Preferred equity (2) net CF to project	20.00% IRR	(7,250)	0	(1,455)	(31)	(2,916)	(131)	(3,970)	(140)	(3,122)

Appendix-4 Normative Project Level Cash Flows From 10/2004 to 12/2008 (RMB 10,000)

	Number of Month									
		1	2	3	4	5	6	7	8	9
		Year 2004								Year
TOTAL	Oct-04	Nov-04	Dec-04	Jan-05	Feb-05	Mar-05	Apr-05	May-05	Jun-05	
Project CF after const loan & preferred equity (2)		0	0	0	0	0	0	0	0	0
ZK Common Equity										
Ceiling		(1,834)	(1,834)	(1,834)	(1,834)	(1,834)	(1,834)	(1,834)	(1,834)	(1,834)
Remaining Available		(1,834)	(1,834)	(1,834)	(1,834)	(1,834)	(1,834)	(1,834)	(1,834)	(1,834)
Beginning Balance	Total		0	0	0	0	0	0	0	0
Advances	(1,834)	0	0	0	0	0	0	0	0	0
Repayments		0	0	0	0	0	0	0	0	0
Ending Balance		0	0	0	0	0	0	0	0	0
ZK common equity net CF to project		0	0	0	0	0	0	0	0	0
Split of Repayments over Preferred Rate										
Repayments to ZK	40%	0	0	0	0	0	0	0	0	0
Repayments to Foreign Investors	60%	0	0	0	0	0	0	0	0	0
Project CF after const loan & preferred equity (2) & common equity		0	0	0	0	0	0	0	0	0
	check:									
ZK CASH FLOWS	113640% IRR*	0	0	0	0	0	0	0	0	0
FOREIGN INVESTOR CASH FLOWS	33.53% IRR	(7,250)	0	(1,455)	(31)	(2,916)	(131)	(3,970)	(140)	(3,122)

Note: Manually calculated by searching the NPV = 0.

Appendix-4 Normative Project Level Cash Flows From 10/2004 to 12/2008 (RMB 10,000)

	Number of Month	10	11	12	13	14	15	16	17	18	
		2005									
		TOTAL	Jul-05	Aug-05	Sep-05	Oct-05	Nov-05	Dec-05	Jan-06	Feb-06	Mar-06
SALES PROCEEDS											
First Phase (Parcel 12-2[#] & Parcel 5-4[#])											
Gross Sales Proceeds (Ten Thousand Yuan)	42,908										
Residential	37,875										
Retail	2,702										
Parking	2,331										
Area Sold (m ²)	141,631										
Residential	126,250										
Retail	5,404										
Parking	9,977										
Second Phase (Parcel 16[#])											
Gross Sales Proceeds (Ten Thousand Yuan)	44,713										
Residential	44,648										
Retail	65										
Area Sold (m ²)	68,819										
Residential	68,689										
Retail	130										
Total Gross Sales Proceeds	87,621										
Less: Sales and Marketing Costs (3% of Gross Proceeds)	2,629										
Less: Transaction, Processing and Other Fees (3 Yuan/m ²)	63										
Less: Business Tax and Surcharge Fee (5.75% of Gross Proceeds)	5,038										
TOTAL NET SALES PROCEEDS	79,891	-	-	-	-	-	-	-	-	-	
DEVELOPMENT COSTS											
Land Cost	21,278	2,851									
Hard Cost (Including contingency)	24,464							824	824	456	
Soft Cost	9,591	447	181	1,414	1,393	131	116	31	31	31	
Part 1	5,927	416	150	1,383	1,362	100	85				
Part 2	3,385	25	25	25	25	25	25	25	25	25	
Construction Admin and Development Fee	1,187	25	25	25	25	25	25	25	25	25	
*Loan Interest and Financing Fee	2,198										
Contingency	279	6	6	6	6	6	6	6	6	6	
*Note: The interest and financing fee are not same with the loan scheduled interest because of some unavoidable costs related to getting the loan.											
TOTAL COSTS	55,334	3,298	181	1,414	1,393	131	116	855	855	487	
CAPITAL STRUCTURE SENARIO 1: All ZK Equity											
PROJECT NET CASH FLOWS (All Equity)	29.80% IRR	24,557	(3,298)	(181)	(1,414)	(1,393)	(131)	(116)	(855)	(855)	(487)
Cum Cash Flows (All Equity)			(22,312)	(22,493)	(23,906)	(25,299)	(25,430)	(25,546)	(26,400)	(27,255)	(27,742)

Appendix-4 Normative Project Level Cash Flows From 10/2004 to 12/2008 (RMB 10,000)

	Number of Month	2005									
		10	11	12	13	14	15	16	17	18	
		<u>Jul-05</u>	<u>Aug-05</u>	<u>Sep-05</u>	<u>Oct-05</u>	<u>Nov-05</u>	<u>Dec-05</u>	<u>Jan-06</u>	<u>Feb-06</u>	<u>Mar-06</u>	
TOTAL											
CAPITAL STRUCTURE SENARIO 2: Bank Loan & ZK Equity											
Allocated Construction Loan Cash Flows		-	-	-	-	-	-	-	-	487	
PROJECT NET CF (After Const. Loan)	35.66% IRR	(3,298)	(181)	(1,414)	(1,393)	(131)	(116)	(855)	(855)	0	
DETAILED BANK LOAN CALCULATIONS											
Construction Debt @	5.76%										
Beginning Balance	Total	-	-	-	-	-	-	-	-	-	
Advances	(20,000)	0	0	0	0	0	0	0	0	(5,000)	
Interest											
Repayments											
Ending Balance		-	-	-	-	-	-	-	-	(5,000)	
Loan net cash flow allocated to project	7.03% IRR	-	-	-	-	-	-	-	-	487	
Loan net cash flow from bank to project	5.89% IRR	-	-	-	-	-	-	-	-	5,000	
Loan Advance Allocation	1st Draw	100%								9.73%	
	2nd	100%									
	3rd	100%									
	4th	100%									
Project CF after const loan	35.66% IRR	(3,298)	(181)	(1,414)	(1,393)	(131)	(116)	(855)	(855)	-	
Note: Simple interest paid quarterly	check:	1	1	1	1	1	1	1	1	-	
CAPITAL STRUCTURE SENARIO 3: Bank Loan & Foreign Investment & ZK Equity											
OPTION A: PARI PASSU											
Common Equity											
Ceiling		(35,334)	(35,334)	(35,334)	(35,334)	(35,334)	(35,334)	(35,334)	(35,334)	(35,334)	
Remaining Available		(16,320)	(13,022)	(12,841)	(11,427)	(10,035)	(9,904)	(9,788)	(8,933)	(8,079)	
Beginning Balance	Total	(19,014)	(22,312)	(22,493)	(23,906)	(25,299)	(25,430)	(25,546)	(26,400)	(27,255)	
Advances	(35,334)	(3,298)	(181)	(1,414)	(1,393)	(131)	(116)	(855)	(855)	0	
Repayments		0	0	0	0	0	0	0	0	0	
Ending Balance		(22,312)	(22,493)	(23,906)	(25,299)	(25,430)	(25,546)	(26,400)	(27,255)	(27,255)	
Common equity net CF to project		(3,298)	(181)	(1,414)	(1,393)	(131)	(116)	(855)	(855)	0	
Equity Advances from ZK	(25,334)	(2,364)	(130)	(1,014)	(999)	(94)	(83)	(613)	(613)	0	
Remaining ZK Equity		(9,337)	(9,207)	(8,193)	(7,195)	(7,101)	(7,018)	(6,405)	(5,792)	(5,792)	
Equity Advances from Foreign Investors	(10,000)	(933)	(51)	(400)	(394)	(37)	(33)	(242)	(242)	0	
	check:										
Pari Passu Split of Repayments											
Repayments to ZK	72%	0	0	0	0	0	0	0	0	0	
Repayments to Foreign Investors	28%	0	0	0	0	0	0	0	0	0	
	check:										
Project CF after const loan & common equity		0	0	0	0	0	0	0	0	0	

Appendix-4 Normative Project Level Cash Flows From 10/2004 to 12/2008 (RMB 10,000)

	Number of Month	2005									
		10	11	12	13	14	15	16	17	18	
		Jul-05	Aug-05	Sep-05	Oct-05	Nov-05	Dec-05	Jan-06	Feb-06	Mar-06	
ZK CASH FLOWS	38.36% IRR	(2,364)	(130)	(1,014)	(999)	(94)	(83)	(613)	(613)	0	
FOREIGN INVESTOR CASH FLOWS	38.36% IRR	(933)	(51)	(400)	(394)	(37)	(33)	(242)	(242)	0	
OPTION B: PREFERRED RETURN 1											
Foreign Preferred Equity (1) @ 12.00%											
Ceiling		(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	
Remaining Available		0	0	0	0	0	0	0	0	0	
Beginning Balance	Total	(10,704)	(10,806)	(10,908)	(11,012)	(11,116)	(11,222)	(11,328)	(11,436)	(11,544)	
Advances	(10,000)	0	0	0	0	0	0	0	0	0	
Interest		(102)	(103)	(104)	(104)	(105)	(106)	(107)	(109)	(110)	
Repayments		0	0	0	0	0	0	0	0	0	
Ending Balance		(10,806)	(10,908)	(11,012)	(11,116)	(11,222)	(11,328)	(11,436)	(11,544)	(11,654)	
Foreign Preferred equity (1) net CF to project	12.00% IRR	0	0	0	0	0	0	0	0	0	
Project CF after const loan & preferred equity (1)		(3,298)	(181)	(1,414)	(1,393)	(131)	(116)	(855)	(855)	0	
ZK Common Equity											
Ceiling		(25,334)	(25,334)	(25,334)	(25,334)	(25,334)	(25,334)	(25,334)	(25,334)	(25,334)	
Remaining Available		(16,320)	(13,022)	(12,841)	(11,427)	(10,035)	(9,904)	(9,788)	(8,933)	(8,079)	
Beginning Balance	Total	(9,014)	(12,312)	(12,493)	(13,906)	(15,299)	(15,430)	(15,546)	(16,400)	(17,255)	
Advances	(25,334)	(3,298)	(181)	(1,414)	(1,393)	(131)	(116)	(855)	(855)	0	
Repayments		0	0	0	0	0	0	0	0	0	
Ending Balance		(12,312)	(12,493)	(13,906)	(15,299)	(15,430)	(15,546)	(16,400)	(17,255)	(17,255)	
ZK common equity net CF to project		(3,298)	(181)	(1,414)	(1,393)	(131)	(116)	(855)	(855)	0	
Split of Repayments over Preferred Rate											
Repayments to ZK	70%	0	0	0	0	0	0	0	0	0	
Repayments to Foreign Investors	30%	0	0	0	0	0	0	0	0	0	
Project CF after const loan & preferred equity (1) & common equity		0	0	0	0	0	0	0	0	0	
check:											
ZK CASH FLOWS	23.69% IRR	(3,298)	(181)	(1,414)	(1,393)	(131)	(116)	(855)	(855)	0	
FOREIGN INVESTOR CASH FLOWS	54.64% IRR	0	0	0	0	0	0	0	0	0	
OPTION C: PREFERRED RETURN 2											
Foreign Preferred Equity (2) @ 20.00%											
Ceiling		(33,500)	(33,500)	(33,500)	(33,500)	(33,500)	(33,500)	(33,500)	(33,500)	(33,500)	
Remaining Available		(14,486)	(11,188)	(11,007)	(9,594)	(8,201)	(8,070)	(7,954)	(7,100)	(6,245)	
Beginning Balance	Total	(20,406)	(24,016)	(24,564)	(26,354)	(28,151)	(28,712)	(29,268)	(30,570)	(31,893)	
Advances	(33,500)	(3,298)	(181)	(1,414)	(1,393)	(131)	(116)	(855)	(855)	0	
Interest		(312)	(368)	(376)	(403)	(431)	(440)	(448)	(468)	(488)	
Repayments		0	0	0	0	0	0	0	0	0	
Ending Balance		(24,016)	(24,564)	(26,354)	(28,151)	(28,712)	(29,268)	(30,570)	(31,893)	(32,381)	
Foreign Preferred equity (2) net CF to project	20.00% IRR	(3,298)	(181)	(1,414)	(1,393)	(131)	(116)	(855)	(855)	0	

Appendix-4 Normative Project Level Cash Flows From 10/2004 to 12/2008 (RMB 10,000)

	Number of Month	10	11	12	13	14	15	16	17	18	
		2005									
		TOTAL	<u>Jul-05</u>	<u>Aug-05</u>	<u>Sep-05</u>	<u>Oct-05</u>	<u>Nov-05</u>	<u>Dec-05</u>	<u>Jan-06</u>	<u>Feb-06</u>	<u>Mar-06</u>
Project CF after const loan & preferred equity (2)		0	0	0	0	0	0	0	0	0	
ZK Common Equity											
Ceiling		(1,834)	(1,834)	(1,834)	(1,834)	(1,834)	(1,834)	(1,834)	(1,834)	(1,834)	
Remaining Available		(1,834)	(1,834)	(1,834)	(1,834)	(1,834)	(1,834)	(1,834)	(1,834)	(1,834)	
Beginning Balance	Total	0	0	0	0	0	0	0	0	0	
Advances	(1,834)	0	0	0	0	0	0	0	0	0	
Repayments		0	0	0	0	0	0	0	0	0	
Ending Balance		0	0	0	0	0	0	0	0	0	
ZK common equity net CF to project		0	0	0	0	0	0	0	0	0	
Split of Repayments over Preferred Rate											
Repayments to ZK	40%	0	0	0	0	0	0	0	0	0	
Repayments to Foreign Investors	60%	0	0	0	0	0	0	0	0	0	
Project CF after const loan & preferred equity (2) & common equity		0	0	0	0	0	0	0	0	0	
	check:										
ZK CASH FLOWS	113640% IRR*	0	0	0	0	0	0	0	0	0	
FOREIGN INVESTOR CASH FLOWS	33.53% IRR	(3,298)	(181)	(1,414)	(1,393)	(131)	(116)	(855)	(855)	0	

Note: Manually calculated by searching the NPV = 0.

Appendix-4 Normative Project Level Cash Flows From 10/2004 to 12/2008 (RMB 10,000)

	Number of Month	19	20	21	22	23	24	25	26	27	
		Year 2006									
		Apr-06	May-06	Jun-06	Jul-06	Aug-06	Sep-06	Oct-06	Nov-06	Dec-06	
SALES PROCEEDS	TOTAL										
First Phase (Parcel 12-2[#] & Parcel 5-4[#])											
Gross Sales Proceeds (Ten Thousand Yuan)	42,908				5,050	5,050	5,050	5,050	5,050	5,050	
Residential	37,875				5,050	5,050	5,050	5,050	5,050	5,050	
Retail	2,702										
Parking	2,331										
Area Sold (m²)	141,631				16,833	16,833	16,833	16,833	16,833	16,833	
Residential	126,250				16,833	16,833	16,833	16,833	16,833	16,833	
Retail	5,404										
Parking	9,977										
Second Phase (Parcel 16[#])											
Gross Sales Proceeds (Ten Thousand Yuan)	44,713										
Residential	44,648										
Retail	65										
Area Sold (m²)	68,819										
Residential	68,689										
Retail	130										
Total Gross Sales Proceeds	87,621				5,050	5,050	5,050	5,050	5,050	5,050	
Less: Sales and Marketing Costs (3% of Gross Proceeds)	2,629				152	152	152	152	152	152	
Less: Transaction, Processing and Other Fees (3 Yuan/m ²)	63				5.05	5.05	5.05	5.05	5.05	5.05	
Less: Business Tax and Surcharge Fee (5.75% of Gross Proceeds)	5,038				290	290	290	290	290	290	
TOTAL NET SALES PROCEEDS	79,891	-	-	-	4,603	4,603	4,603	4,603	4,603	4,603	
DEVELOPMENT COSTS											
Land Cost	21,278										
Hard Cost (Including contingency)	24,464	850	850	850	850	850	566	855	861	867	
Soft Cost	9,591	31	31	203	31	31	483	331	331	505	
Part 1	5,927						300	300	300	300	
Part 2	3,385	25	25	197	25	25	177	25	25	199	
Construction Admin and Development Fee	1,187	25	25	25	25	25	25	25	25	25	
*Loan Interest and Financing Fee	2,198			172			152			174	
Contingency	279	6	6	6	6	6	6	6	6	6	
*Note: The interest and financing fee are not same with the loan scheduled interest because of some unavoidable costs related to getting the loan.											
TOTAL COSTS	55,334	881	881	1,053	881	881	1,049	1,186	1,192	1,372	
CAPITAL STRUCTURE SENARIO 1: All ZK Equity											
PROJECT NET CASH FLOWS (All Equity)	29.80% IRR	24,557	(881)	(881)	(1,053)	3,723	3,723	3,555	3,418	3,412	3,232
Cum Cash Flows (All Equity)			(28,622)	(29,503)	(30,555)	(26,833)	(23,110)	(19,556)	(16,138)	(12,727)	(9,495)

Appendix-4 Normative Project Level Cash Flows From 10/2004 to 12/2008 (RMB 10,000)

		Number of Month	19	20	21	22	23	24	25	26	27
		TOTAL	<u>Apr-06</u>	<u>May-06</u>	<u>Jun-06</u>	<u>Jul-06</u>	<u>Aug-06</u>	<u>Sep-06</u>	<u>Oct-06</u>	<u>Nov-06</u>	<u>Dec-06</u>
CAPITAL STRUCTURE SENARIO 2: Bank Loan & ZK Equity											
Allocated Construction Loan Cash Flows			881	881	981	881	819	977	1,186	1,192	1,228
PROJECT NET CF (After Const. Loan) 35.66% IRR			0	0	(72)	4,603	4,542	4,531	4,603	4,603	4,459
DETAILED BANK LOAN CALCULATIONS											
Construction Debt @ 5.76%											
Beginning Balance	Total		(5,000)	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)	(10,000)	(10,000)	(10,000)
Advances	(20,000)		0	0	0	0	0	(5,000)	0	0	0
Interest					(72)			(72)			(144)
Repayments					72			72			144
Ending Balance			(5,000)	(5,000)	(5,000)	(5,000)	(5,000)	(10,000)	(10,000)	(10,000)	(10,000)
Loan net cash flow allocated to project		7.03% IRR	881	881	981	881	819	977	1,186	1,192	1,228
Loan net cash flow from bank to project		5.89% IRR	-	-	(72)	-	-	4,928	-	-	(144)
Loan Advance Allocation	1st Draw	100%	17.61%	17.61%	21.05%	17.61%	16.38%				
	2nd	100%						21%	24%	24%	27%
	3rd	100%									
	4th	100%									
Project CF after const loan 35.66% IRR			-	-	(72)	4,603	4,542	4,531	4,603	4,603	4,459
Note: Simple interest paid quarterly			check: - - 1 - - - - -								
CAPITAL STRUCTURE SENARIO 3: Bank Loan & Foreign Investment & ZK Equity											
OPTION A: PARI PASSU											
Common Equity											
Ceiling			(35,334)	(35,334)	(35,334)	(35,334)	(35,334)	(35,334)	(35,334)	(35,334)	(35,334)
Remaining Available			(8,079)	(8,079)	(8,079)	(8,007)	(8,007)	(8,007)	(8,007)	(8,007)	(8,007)
Beginning Balance	Total		(27,255)	(27,255)	(27,255)	(27,327)	(22,724)	(18,182)	(13,651)	(9,048)	(4,445)
Advances	(35,334)		0	0	(72)	0	0	0	0	0	0
Repayments			0	0	0	4,603	4,542	4,531	4,603	4,603	4,459
Ending Balance			(27,255)	(27,255)	(27,327)	(22,724)	(18,182)	(13,651)	(9,048)	(4,445)	14
Common equity net CF to project			0	0	(72)	4,603	4,542	4,531	4,603	4,603	4,459
Equity Advances from ZK	(25,334)		0	0	(52)	0	0	0	0	0	0
Remaining ZK Equity			(5,792)	(5,792)	(5,741)	(5,741)	(5,741)	(5,741)	(5,741)	(5,741)	(5,741)
Equity Advances from Foreign Investors	(10,000)		0	0	(20)	0	0	0	0	0	0
check:											
Pari Passu Split of Repayments											
Repayments to ZK	72%		0	0	0	3,300	3,256	3,249	3,300	3,300	3,197
Repayments to Foreign Investors	28%		0	0	0	1,303	1,285	1,282	1,303	1,303	1,262
check:											
Project CF after const loan & common equity			0	0	0	0	0	0	0	0	0

Appendix-4 Normative Project Level Cash Flows From 10/2004 to 12/2008 (RMB 10,000)

	Number of Month	19	20	21	22	23	24	25	26	27
		Year 2006								
		Apr-06	May-06	Jun-06	Jul-06	Aug-06	Sep-06	Oct-06	Nov-06	Dec-06
ZK CASH FLOWS	38.36% IRR	0	0	(52)	3,300	3,256	3,249	3,300	3,300	3,197
FOREIGN INVESTOR CASH FLOWS	38.36% IRR	0	0	(20)	1,303	1,285	1,282	1,303	1,303	1,262
OPTION B: PREFERRED RETURN 1										
Foreign Preferred Equity (1) @ 12.00%										
Ceiling		(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)
Remaining Available		0	0	0	0	0	0	0	0	0
Beginning Balance	Total	(11,654)	(11,764)	(11,876)	(11,988)	(7,499)	(3,029)	0	0	0
Advances	(10,000)	0	0	0	0	0	0	0	0	0
Interest		(111)	(112)	(113)	(114)	(71)	(29)	0	0	0
Repayments		0	0	0	4,603	4,542	3,057	0	0	0
Ending Balance		(11,764)	(11,876)	(11,988)	(7,499)	(3,029)	0	0	0	0
Foreign Preferred equity (1) net CF to project	12.00% IRR	0	0	0	4,603	4,542	3,057	0	0	0
Project CF after const loan & preferred equity (1)		0	0	(72)	0	0	1,474	4,603	4,603	4,459
ZK Common Equity										
Ceiling		(25,334)	(25,334)	(25,334)	(25,334)	(25,334)	(25,334)	(25,334)	(25,334)	(25,334)
Remaining Available		(8,079)	(8,079)	(8,079)	(8,007)	(8,007)	(8,007)	(8,007)	(8,007)	(8,007)
Beginning Balance	Total	(17,255)	(17,255)	(17,255)	(17,327)	(17,327)	(17,327)	(15,853)	(11,250)	(6,647)
Advances	(25,334)	0	0	(72)	0	0	0	0	0	0
Repayments		0	0	0	0	0	1,474	4,603	4,603	4,459
Ending Balance		(17,255)	(17,255)	(17,327)	(17,327)	(17,327)	(15,853)	(11,250)	(6,647)	(2,188)
ZK common equity net CF to project		0	0	(72)	0	0	1,474	4,603	4,603	4,459
Split of Repayments over Preferred Rate										
Repayments to ZK	70%	0	0	0	0	0	1,032	3,222	3,222	3,121
Repayments to Foreign Investors	30%	0	0	0	0	0	442	1,381	1,381	1,338
Project CF after const loan & preferred equity (1) & common equity		0	0	0	0	0	0	0	0	0
check:										
ZK CASH FLOWS	23.69% IRR	0	0	(72)	0	0	1,032	3,222	3,222	3,121
FOREIGN INVESTOR CASH FLOWS	54.64% IRR	0	0	0	4,603	4,542	3,499	1,381	1,381	1,338
OPTION C: PREFERRED RETURN 2										
Foreign Preferred Equity (2) @ 20.00%										
Ceiling		(33,500)	(33,500)	(33,500)	(33,500)	(33,500)	(33,500)	(33,500)	(33,500)	(33,500)
Remaining Available		(6,245)	(6,245)	(6,245)	(6,173)	(6,173)	(6,173)	(6,173)	(6,173)	(6,173)
Beginning Balance	Total	(32,381)	(32,877)	(33,380)	(33,963)	(29,880)	(25,796)	(21,660)	(17,388)	(13,052)
Advances	(33,500)	0	0	(72)	0	0	0	0	0	0
Interest		(496)	(503)	(511)	(520)	(457)	(395)	(332)	(266)	(200)
Repayments		0	0	0	4,603	4,542	4,531	4,603	4,603	4,459
Ending Balance		(32,877)	(33,380)	(33,963)	(29,880)	(25,796)	(21,660)	(17,388)	(13,052)	(8,792)
Foreign Preferred equity (2) net CF to project	20.00% IRR	0	0	(72)	4,603	4,542	4,531	4,603	4,603	4,459

Appendix-4 Normative Project Level Cash Flows From 10/2004 to 12/2008 (RMB 10,000)

	Number of Month	19	20	21	22	23	24	25	26	27
		Year 2006								
TOTAL		Apr-06	May-06	Jun-06	Jul-06	Aug-06	Sep-06	Oct-06	Nov-06	Dec-06
Project CF after const loan & preferred equity (2)		0	0	0	0	0	0	0	0	0
ZK Common Equity										
Ceiling		(1,834)	(1,834)	(1,834)	(1,834)	(1,834)	(1,834)	(1,834)	(1,834)	(1,834)
Remaining Available		(1,834)	(1,834)	(1,834)	(1,834)	(1,834)	(1,834)	(1,834)	(1,834)	(1,834)
Beginning Balance	Total	0	0	0	0	0	0	0	0	0
Advances	(1,834)	0	0	0	0	0	0	0	0	0
Repayments		0	0	0	0	0	0	0	0	0
Ending Balance		0	0	0	0	0	0	0	0	0
ZK common equity net CF to project		0	0	0	0	0	0	0	0	0
Split of Repayments over Preferred Rate										
Repayments to ZK	40%	0	0	0	0	0	0	0	0	0
Repayments to Foreign Investors	60%	0	0	0	0	0	0	0	0	0
Project CF after const loan & preferred equity (2) & common equity		0	0	0	0	0	0	0	0	0
	check:									
ZK CASH FLOWS	113640% IRR*	0	0	0	0	0	0	0	0	0
FOREIGN INVESTOR CASH FLOWS	33.53% IRR	0	0	(72)	4,603	4,542	4,531	4,603	4,603	4,459

Note: Manually calculated by searching the NPV = 0.

Appendix-4 Normative Project Level Cash Flows From 10/2004 to 12/2008 (RMB 10,000)

	Number of Month	28	29	30	31	32	33	34	35	36	
		Year 2007									
		TOTAL	Jan-07	Feb-07	Mar-07	Apr-07	May-07	Jun-07	Jul-07	Aug-07	Sep-07
SALES PROCEEDS											
First Phase (Parcel 12-2[#] & Parcel 5-4[#])											
Gross Sales Proceeds (Ten Thousand Yuan)	42,908	1,713	1,713	1,713	2,101	2,101	2,101	389	389	389	
Residential	37,875	1,263	1,263	1,263	1,263	1,263	1,263				
Retail	2,702	450	450	450	450	450	450				
Parking	2,331				389	389	389	389	389	389	
Area Sold (m ²)	141,631	5,109	5,109	5,109	6,772	6,772	6,772	1,663	1,663	1,663	
Residential	126,250	4,208	4,208	4,208	4,208	4,208	4,208				
Retail	5,404	901	901	901	901	901	901				
Parking	9,977				1,663	1,663	1,663	1,663	1,663	1,663	
Second Phase (Parcel 16[#])											
Gross Sales Proceeds (Ten Thousand Yuan)	44,713										
Residential	44,648										
Retail	65										
Area Sold (m ²)	68,819										
Residential	68,689										
Retail	130										
Total Gross Sales Proceeds	87,621	1,713	1,713	1,713	2,101	2,101	2,101	389	389	389	
Less: Sales and Marketing Costs (3% of Gross Proceeds)	2,629	51	51	51	63	63	63	12	12	12	
Less: Transaction, Processing and Other Fees (3 Yuan/m ²)	63	1.53	1.53	1.53	2.03	2.03	2.03	0.50	0.50	0.50	
Less: Business Tax and Surcharge Fee (5.75% of Gross Proceeds)	5,038	98	98	98	121	121	121	22	22	22	
TOTAL NET SALES PROCEEDS	79,891	1,561	1,561	1,561	1,915	1,915	1,915	354	354	354	
DEVELOPMENT COSTS											
Land Cost	21,278										
Hard Cost (Including contingency)	24,464	802	802	802	802	802	802	905	905	905	
Soft Cost	9,591	331	331	434	31	31	205	31	31	255	
Part 1	5,927	300	300	229							
Part 2	3,385	25	25	199	25	25	199	25	25	249	
Construction Admin and Development Fee	1,187	25	25	25	25	25	25	25	25	25	
*Loan Interest and Financing Fee	2,198			174			174			224	
Contingency	279	6	6	6	6	6	6	6	6	6	
*Note: The interest and financing fee are not same with the loan scheduled interest because of some unavoidable costs related to getting the loan.											
TOTAL COSTS	55,334	1,133	1,133	1,236	833	833	1,007	936	936	1,160	
CAPITAL STRUCTURE SENARIO 1: All ZK Equity											
PROJECT NET CASH FLOWS (All Equity)	29.80% IRR	24,557	429	429	326	1,083	1,083	909	(582)	(582)	(806)
Cum Cash Flows (All Equity)			(9,066)	(8,638)	(8,312)	(7,229)	(6,146)	(5,237)	(5,819)	(6,400)	(7,206)

Appendix-4 Normative Project Level Cash Flows From 10/2004 to 12/2008 (RMB 10,000)

	Number of Month	28	29	30	31	32	33	34	35	36
		Year 2007								
TOTAL		Jan-07	Feb-07	Mar-07	Apr-07	May-07	Jun-07	Jul-07	Aug-07	Sep-07
CAPITAL STRUCTURE SENARIO 2: Bank Loan & ZK Equity										
Allocated Construction Loan Cash Flows		203	-	(144)	-	-	(144)	-	-	1,016
PROJECT NET CF (After Const. Loan)	35.66% IRR	632	429	182	1,083	1,083	765	(582)	(582)	210
DETAILED BANK LOAN CALCULATIONS										
Construction Debt @ 5.76%										
Beginning Balance	Total	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)
Advances	(20,000)	0	0	0	0	0	0	0	0	(5,000)
Interest				(144)			(144)			(144)
Repayments				144			144			144
Ending Balance		(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(15,000)
Loan net cash flow allocated to project	7.03% IRR	203	-	(144)	-	-	(144)	-	-	1,016
Loan net cash flow from bank to project	5.89% IRR	-	-	(144)	-	-	(144)	-	-	4,856
Loan Advance Allocation	1st Draw 100%									
	2nd 100%	4%								
	3rd 100%									23%
	4th 100%									
Project CF after const loan	35.66% IRR	632	429	182	1,083	1,083	765	(582)	(582)	210
Note: Simple interest paid quarterly	check:	-	-	-	-	-	-	1	1	-
CAPITAL STRUCTURE SENARIO 3: Bank Loan & Foreign Investment & ZK Equity										
OPTION A: PARI PASSU										
Common Equity										
Ceiling		(35,334)	(35,334)	(35,334)	(35,334)	(35,334)	(35,334)	(35,334)	(35,334)	(35,334)
Remaining Available		(8,007)	(8,007)	(8,007)	(8,007)	(8,007)	(8,007)	(8,007)	(7,425)	(6,844)
Beginning Balance	Total	14	646	1,074	1,256	2,339	3,422	4,187	3,605	3,024
Advances	(35,334)	0	0	0	0	0	0	(582)	(582)	0
Repayments		632	429	182	1,083	1,083	765	0	0	210
Ending Balance		646	1,074	1,256	2,339	3,422	4,187	3,605	3,024	3,234
Common equity net CF to project		632	429	182	1,083	1,083	765	(582)	(582)	210
Equity Advances from ZK	(25,334)	0	0	0	0	0	0	(417)	(417)	0
Remaining ZK Equity		(5,741)	(5,741)	(5,741)	(5,741)	(5,741)	(5,741)	(5,324)	(4,907)	(4,907)
Equity Advances from Foreign Investors	(10,000)	0	0	0	0	0	0	(165)	(165)	0
	check:									
Pari Passu Split of Repayments										
Repayments to ZK	72%	453	307	130	776	776	548	0	0	151
Repayments to Foreign Investors	28%	179	121	51	306	306	216	0	0	59
	check:									
Project CF after const loan & common equity		0	0	0	0	0	0	0	0	0

Appendix-4 Normative Project Level Cash Flows From 10/2004 to 12/2008 (RMB 10,000)

	Number of Month	28	29	30	31	32	33	34	35	36
		Year 2007								
		Jan-07	Feb-07	Mar-07	Apr-07	May-07	Jun-07	Jul-07	Aug-07	Sep-07
ZK CASH FLOWS	38.36% IRR	453	307	130	776	776	548	(417)	(417)	151
FOREIGN INVESTOR CASH FLOWS	38.36% IRR	179	121	51	306	306	216	(165)	(165)	59
OPTION B: PREFERRED RETURN 1										
Foreign Preferred Equity (1) @ 12.00%										
Ceiling		(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)
Remaining Available		0	0	0	0	0	0	0	0	0
Beginning Balance	Total	0	0	0	0	0	0	0	0	0
Advances	(10,000)	0	0	0	0	0	0	0	0	0
Interest		0	0	0	0	0	0	0	0	0
Repayments		0	0	0	0	0	0	0	0	0
Ending Balance		0	0	0	0	0	0	0	0	0
Foreign Preferred equity (1) net CF to project	12.00% IRR	0	0	0	0	0	0	0	0	0
Project CF after const loan & preferred equity (1)		632	429	182	1,083	1,083	765	(582)	(582)	210
ZK Common Equity										
Ceiling		(25,334)	(25,334)	(25,334)	(25,334)	(25,334)	(25,334)	(25,334)	(25,334)	(25,334)
Remaining Available		(8,007)	(8,007)	(8,007)	(8,007)	(8,007)	(8,007)	(8,007)	(7,425)	(6,844)
Beginning Balance	Total	(2,188)	(1,556)	(1,128)	(946)	137	1,220	1,985	1,403	822
Advances	(25,334)	0	0	0	0	0	0	(582)	(582)	0
Repayments		632	429	182	1,083	1,083	765	0	0	210
Ending Balance		(1,556)	(1,128)	(946)	137	1,220	1,985	1,403	822	1,032
ZK common equity net CF to project		632	429	182	1,083	1,083	765	(582)	(582)	210
Split of Repayments over Preferred Rate										
Repayments to ZK	70%	442	300	127	758	758	535	0	0	147
Repayments to Foreign Investors	30%	189	129	55	325	325	229	0	0	63
Project CF after const loan & preferred equity (1) & common equity		0	0	0	0	0	0	0	0	0
check:										
ZK CASH FLOWS	23.69% IRR	442	300	127	758	758	535	(582)	(582)	147
FOREIGN INVESTOR CASH FLOWS	54.64% IRR	189	129	55	325	325	229	0	0	63
OPTION C: PREFERRED RETURN 2										
Foreign Preferred Equity (2) @ 20.00%										
Ceiling		(33,500)	(33,500)	(33,500)	(33,500)	(33,500)	(33,500)	(33,500)	(33,500)	(33,500)
Remaining Available		(6,173)	(6,173)	(6,173)	(6,173)	(6,173)	(6,173)	(6,173)	(5,591)	(5,010)
Beginning Balance	Total	(8,792)	(8,295)	(7,993)	(7,934)	(6,973)	(5,996)	(5,323)	(5,986)	(6,660)
Advances	(33,500)	0	0	0	0	0	0	(582)	(582)	0
Interest		(135)	(127)	(122)	(121)	(107)	(92)	(81)	(92)	(102)
Repayments		632	429	182	1,083	1,083	765	0	0	210
Ending Balance		(8,295)	(7,993)	(7,934)	(6,973)	(5,996)	(5,323)	(5,986)	(6,660)	(6,552)
Foreign Preferred equity (2) net CF to project	20.00% IRR	632	429	182	1,083	1,083	765	(582)	(582)	210

Appendix-4 Normative Project Level Cash Flows From 10/2004 to 12/2008 (RMB 10,000)

	Number of Month	28	29	30	31	32	33	34	35	36
		Year 2007								
TOTAL		Jan-07	Feb-07	Mar-07	Apr-07	May-07	Jun-07	Jul-07	Aug-07	Sep-07
Project CF after const loan & preferred equity (2)		0	0	0	0	0	0	0	0	0
ZK Common Equity										
Ceiling		(1,834)	(1,834)	(1,834)	(1,834)	(1,834)	(1,834)	(1,834)	(1,834)	(1,834)
Remaining Available		(1,834)	(1,834)	(1,834)	(1,834)	(1,834)	(1,834)	(1,834)	(1,834)	(1,834)
Beginning Balance	Total	0	0	0	0	0	0	0	0	0
Advances	(1,834)	0	0	0	0	0	0	0	0	0
Repayments		0	0	0	0	0	0	0	0	0
Ending Balance		0	0	0	0	0	0	0	0	0
ZK common equity net CF to project		0	0	0	0	0	0	0	0	0
Split of Repayments over Preferred Rate										
Repayments to ZK	40%	0	0	0	0	0	0	0	0	0
Repayments to Foreign Investors	60%	0	0	0	0	0	0	0	0	0
Project CF after const loan & preferred equity (2) & common equity		0	0	0	0	0	0	0	0	0
	check:									
ZK CASH FLOWS	113640% IRR*	0	0	0	0	0	0	0	0	0
FOREIGN INVESTOR CASH FLOWS	33.53% IRR	632	429	182	1,083	1,083	765	(582)	(582)	210

Note: Manually calculated by searching the NPV = 0.

Appendix-4 Normative Project Level Cash Flows From 10/2004 to 12/2008 (RMB 10,000)

	Number of Month	37	38	39	40	41	42	43	44	45	
		Year	Year	Year	Year	Year	Year	Year	Year	Year	
	TOTAL	Oct-07	Nov-07	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08	
SALES PROCEEDS											
First Phase (Parcel 12-2[#] & Parcel 5-4[#])											
Gross Sales Proceeds (Ten Thousand Yuan)	42,908										
Residential	37,875										
Retail	2,702										
Parking	2,331										
Area Sold (m ²)	141,631										
Residential	126,250										
Retail	5,404										
Parking	9,977										
Second Phase (Parcel 16[#])											
Gross Sales Proceeds (Ten Thousand Yuan)	44,713				5,953	5,953	5,953	5,953	5,953	5,953	
Residential	44,648				5,953	5,953	5,953	5,953	5,953	5,953	
Retail	65										
Area Sold (m ²)	68,819				9,159	9,159	9,159	9,159	9,159	9,159	
Residential	68,689				9,159	9,159	9,159	9,159	9,159	9,159	
Retail	130										
Total Gross Sales Proceeds	87,621				5,953	5,953	5,953	5,953	5,953	5,953	
Less: Sales and Marketing Costs (3% of Gross Proceeds)	2,629				179	179	179	179	179	179	
Less: Transaction, Processing and Other Fees (3 Yuan/m ²)	63				2.75	2.75	2.75	2.75	2.75	2.75	
Less: Business Tax and Surcharge Fee (5.75% of Gross Proceeds)	5,038				342	342	342	342	342	342	
TOTAL NET SALES PROCEEDS	79,891	-	-	-	5,429	5,429	5,429	5,429	5,429	5,429	
DEVELOPMENT COSTS											
Land Cost	21,278										
Hard Cost (Including contingency)	24,464	905	905	905	905	905	905	669	669	674	
Soft Cost	9,591	31	31	277	31	31	277	31	31	255	
Part 1	5,927										
Part 2	3,385	25	25	271	25	25	271	25	25	249	
Construction Admin and Development Fee	1,187	25	25	25	25	25	25	25	25	25	
*Loan Interest and Financing Fee	2,198			246			246			224	
Contingency	279	6	6	6	6	6	6	6	6	6	
*Note: The interest and financing fee are not same with the loan scheduled interest because of some unavoidable costs related to getting the loan.											
TOTAL COSTS	55,334	936	936	1,182	936	936	1,182	700	700	928	
CAPITAL STRUCTURE SENARIO 1: All ZK Equity											
PROJECT NET CASH FLOWS (All Equity)	29.80% IRR	24,557	(936)	(936)	(1,182)	4,494	4,494	4,248	4,730	4,730	4,501
Cum Cash Flows (All Equity)			(8,141)	(9,077)	(10,259)	(5,765)	(1,271)	2,977	7,707	12,437	16,938

Appendix-4 Normative Project Level Cash Flows From 10/2004 to 12/2008 (RMB 10,000)

	Number of Month	37	38	39	40	41	42	43	44	45	
	TOTAL	Oct-07	Nov-07	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08	
		Break Even									
CAPITAL STRUCTURE SENARIO 2: Bank Loan & ZK Equity											
Allocated Construction Loan Cash Flows											
		936	936	966	788	-	(5,216)	-	-	784	
PROJECT NET CF (After Const. Loan)	35.66% IRR	0	0	(216)	5,282	4,494	(968)	4,730	4,730	5,285	
DETAILED BANK LOAN CALCULATIONS											
Construction Debt @ 5.76%											
Beginning Balance	Total	(15,000)	(15,000)	(15,000)	(15,000)	(15,000)	(15,000)	(10,000)	(10,000)	(10,000)	
Advances	(20,000)	0	0	0	0	0	0	0	0	(5,000)	
Interest				(216)			(216)			(144)	
Repayments				216			5,216			144	
Ending Balance		(15,000)	(15,000)	(15,000)	(15,000)	(15,000)	(10,000)	(10,000)	(10,000)	(15,000)	
Loan net cash flow allocated to project	7.03% IRR	936	936	966	788	-	(5,216)	-	-	784	
Loan net cash flow from bank to project	5.89% IRR	-	-	(216)	-	-	(5,216)	-	-	4,856	
Loan Advance Allocation	1st Draw 100%										
	2nd 100%										
	3rd 100%	19%	19%	24%	16%						
	4th 100%									19%	
Project CF after const loan	35.66% IRR	-	-	(216)	5,282	4,494	(968)	4,730	4,730	5,285	
Note: Simple interest paid quarterly	check:	-	-	1	-	-	1	-	-	-	
CAPITAL STRUCTURE SENARIO 3: Bank Loan & Foreign Investment & ZK Equity											
OPTION A: PARI PASSU											
Common Equity											
Ceiling		(35,334)	(35,334)	(35,334)	(35,334)	(35,334)	(35,334)	(35,334)	(35,334)	(35,334)	
Remaining Available		(6,844)	(6,844)	(6,844)	(6,628)	(6,628)	(6,628)	(5,660)	(5,660)	(5,660)	
Beginning Balance	Total	3,234	3,234	3,234	3,018	8,299	12,793	11,825	16,555	21,285	
Advances	(35,334)	0	0	(216)	0	0	(968)	0	0	0	
Repayments		0	0	0	5,282	4,494	0	4,730	4,730	5,285	
Ending Balance		3,234	3,234	3,018	8,299	12,793	11,825	16,555	21,285	26,570	
Common equity net CF to project		0	0	(216)	5,282	4,494	(968)	4,730	4,730	5,285	
Equity Advances from ZK	(25,334)	0	0	(155)	0	0	(694)	0	0	0	
Remaining ZK Equity		(4,907)	(4,907)	(4,752)	(4,752)	(4,752)	(4,058)	(4,058)	(4,058)	(4,058)	
Equity Advances from Foreign Investors	(10,000)	0	0	(61)	0	0	(274)	0	0	0	
	check:										
Pari Passu Split of Repayments											
Repayments to ZK	72%	0	0	0	3,787	3,222	0	3,391	3,391	3,790	
Repayments to Foreign Investors	28%	0	0	0	1,495	1,272	0	1,339	1,339	1,496	
	check:										
Project CF after const loan & common equity		0	0	0	0	0	0	0	0	0	

Appendix-4 Normative Project Level Cash Flows From 10/2004 to 12/2008 (RMB 10,000)

	Number of Month	37	38	39	40	41	42	43	44	45
		Year								
	TOTAL check:	Oct-07	Nov-07	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08
ZK CASH FLOWS	38.36% IRR	0	0	(155)	3,787	3,222	(694)	3,391	3,391	3,790
FOREIGN INVESTOR CASH FLOWS	38.36% IRR	0	0	(61)	1,495	1,272	(274)	1,339	1,339	1,496
OPTION B: PREFERRED RETURN 1										
Foreign Preferred Equity (1) @ 12.00%										
Ceiling		(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)
Remaining Available		0	0	0	0	0	0	0	0	0
Beginning Balance	Total	0	0	0	0	0	0	0	0	0
Advances	(10,000)	0	0	0	0	0	0	0	0	0
Interest		0	0	0	0	0	0	0	0	0
Repayments		0	0	0	0	0	0	0	0	0
Ending Balance		0	0	0	0	0	0	0	0	0
Foreign Preferred equity (1) net CF to project	12.00% IRR	0	0	0	0	0	0	0	0	0
Project CF after const loan & preferred equity (1)		0	0	(216)	5,282	4,494	(968)	4,730	4,730	5,285
ZK Common Equity										
Ceiling		(25,334)	(25,334)	(25,334)	(25,334)	(25,334)	(25,334)	(25,334)	(25,334)	(25,334)
Remaining Available		(6,844)	(6,844)	(6,844)	(6,628)	(6,628)	(6,628)	(5,660)	(5,660)	(5,660)
Beginning Balance	Total	1,032	1,032	1,032	816	6,097	10,591	9,623	14,353	19,083
Advances	(25,334)	0	0	(216)	0	0	(968)	0	0	0
Repayments		0	0	0	5,282	4,494	0	4,730	4,730	5,285
Ending Balance		1,032	1,032	816	6,097	10,591	9,623	14,353	19,083	24,368
ZK common equity net CF to project		0	0	(216)	5,282	4,494	(968)	4,730	4,730	5,285
Split of Repayments over Preferred Rate										
Repayments to ZK	70%	0	0	0	3,697	3,146	0	3,311	3,311	3,700
Repayments to Foreign Investors	30%	0	0	0	1,584	1,348	0	1,419	1,419	1,586
Project CF after const loan & preferred equity (1) & common equity		0	0	0	0	0	0	0	0	0
	check:	0	0	(216)	3,697	3,146	(968)	3,311	3,311	3,700
ZK CASH FLOWS	23.69% IRR	0	0	(216)	3,697	3,146	(968)	3,311	3,311	3,700
FOREIGN INVESTOR CASH FLOWS	54.64% IRR	0	0	0	1,584	1,348	0	1,419	1,419	1,586
OPTION C: PREFERRED RETURN 2										
Foreign Preferred Equity (2) @ 20.00%										
Ceiling		(33,500)	(33,500)	(33,500)	(33,500)	(33,500)	(33,500)	(33,500)	(33,500)	(33,500)
Remaining Available		(5,010)	(5,010)	(5,010)	(4,794)	(4,794)	(4,794)	(3,826)	(3,826)	(3,826)
Beginning Balance	Total	(6,552)	(6,652)	(6,754)	(7,073)	(1,900)	0	(968)	0	0
Advances	(33,500)	0	0	(216)	0	0	(968)	0	0	0
Interest		(100)	(102)	(103)	(108)	(29)	0	(15)	0	0
Repayments		0	0	0	5,282	1,929	0	983	0	0
Ending Balance		(6,652)	(6,754)	(7,073)	(1,900)	0	(968)	0	0	0
Foreign Preferred equity (2) net CF to project	20.00% IRR	0	0	(216)	5,282	1,929	(968)	983	0	0

Appendix-4 Normative Project Level Cash Flows From 10/2004 to 12/2008 (RMB 10,000)

	Number of Month	37	38	39	40	41	42	43	44	45
		Year								
TOTAL		Oct-07	Nov-07	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08
Project CF after const loan & preferred equity (2)		0	0	0	0	2,565	0	3,747	4,730	5,285
ZK Common Equity										
Ceiling		(1,834)	(1,834)	(1,834)	(1,834)	(1,834)	(1,834)	(1,834)	(1,834)	(1,834)
Remaining Available		(1,834)	(1,834)	(1,834)	(1,834)	(1,834)	(1,834)	(1,834)	(1,834)	(1,834)
Beginning Balance	Total	0	0	0	0	0	2,565	2,565	6,312	11,042
Advances	(1,834)	0	0	0	0	0	0	0	0	0
Repayments		0	0	0	0	2,565	0	3,747	4,730	5,285
Ending Balance		0	0	0	0	2,565	2,565	6,312	11,042	16,327
ZK common equity net CF to project		0	0	0	0	2,565	0	3,747	4,730	5,285
Split of Repayments over Preferred Rate										
Repayments to ZK	40%	0	0	0	0	1,026	0	1,499	1,892	2,114
Repayments to Foreign Investors	60%	0	0	0	0	1,539	0	2,248	2,838	3,171
Project CF after const loan & preferred equity (2) & common equity		0	0	0	0	0	0	0	0	0
check:										
ZK CASH FLOWS	113640% IRR*	0	0	0	0	1,026	0	1,499	1,892	2,114
FOREIGN INVESTOR CASH FLOWS	33.53% IRR	0	0	(216)	5,282	3,468	(968)	3,231	2,838	3,171

Note: Manually calculated by searching the NPV = 0.

Appendix-4 Normative Project Level Cash Flows From 10/2004 to 12/2008 (RMB 10,000)

	Number of Month	46	47	48	49	50	51	
	TOTAL	2008						TOTAL
		Jul-08	Aug-08	Sep-08	Oct-08	Nov-08	Dec-08	
SALES PROCEEDS								
First Phase (Parcel 12-2[#] & Parcel 5-4[#])								
Gross Sales Proceeds (Ten Thousand Yuan)	42,908							42,908
Residential	37,875							37,875
Retail	2,702							2,702
Parking	2,331							2,331
Area Sold (m ²)	141,631							141,631
Residential	126,250							126,250
Retail	5,404							5,404
Parking	9,977							9,977
Second Phase (Parcel 16[#])								
Gross Sales Proceeds (Ten Thousand Yuan)	44,713	1,488	1,488	1,488	1,488	1,488	1,553	44,713
Residential	44,648	1,488	1,488	1,488	1,488	1,488	1,488	44,648
Retail	65						65	65
Area Sold (m ²)	68,819	2,290	2,290	2,290	2,290	2,290	2,420	68,819
Residential	68,689	2,290	2,290	2,290	2,290	2,290	2,290	68,689
Retail	130						130	130
Total Gross Sales Proceeds	87,621	1,488	1,488	1,488	1,488	1,488	1,553	87,621
Less: Sales and Marketing Costs (3% of Gross Proceeds)	2,629	45	45	45	45	45	47	2,629
Less: Transaction, Processing and Other Fees (3 Yuan/m ²)	63	0.69	0.69	0.69	0.69	0.69	0.73	63
Less: Business Tax and Surcharge Fee (5.75% of Gross Proceeds)	5,038	86	86	86	86	86	89	5,038
TOTAL NET SALES PROCEEDS	79,891	1,357	1,357	1,357	1,357	1,357	1,417	79,891
DEVELOPMENT COSTS								
Land Cost	21,278							21,278
Hard Cost (Including contingency)	24,464							24,464
Soft Cost	9,591	31	31	277	31	31	184	9,592
Part 1	5,927							5,927
Part 2	3,385	25	25	271	25	25	178	3,385
Construction Admin and Development Fee	1,187	25	25	25	25	25	12	1,187
*Loan Interest and Financing Fee	2,198			246			166	2,198
Contingency	279	6	6	6	6	6	6	279
*Note: The interest and financing fee are not same with the loan scheduled interest because of some unavoidable costs related to getting the loan.								
TOTAL COSTS	55,334	31	31	277	31	31	184	55,334
CAPITAL STRUCTURE SENARIO 1: All ZK Equity								
PROJECT NET CASH FLOWS (All Equity)	29.80% IRR	24,557	1,327	1,327	1,081	1,327	1,327	1,233
Cum Cash Flows (All Equity)			18,264	19,591	20,671	21,998	23,324	24,557

Appendix-4 Normative Project Level Cash Flows From 10/2004 to 12/2008 (RMB 10,000)

	Number of Month	46	47	48	49	50	51	TOTAL		
		2008								
		TOTAL	Jul-08	Aug-08	Sep-08	Oct-08	Nov-08		Dec-08	
CAPITAL STRUCTURE SENARIO 2: Bank Loan & ZK Equity										
Allocated Construction Loan Cash Flows										
		31	31	(4,939)	31	31	(6,472)	(1,656)		
PROJECT NET CF (After Const. Loan)		35.66% IRR		1,357	1,357	(3,859)	1,357	1,357	(5,240)	22,901
DETAILED BANK LOAN CALCULATIONS										
Construction Debt @ 5.76%										
Beginning Balance	Total	(15,000)	(15,000)	(15,000)	(10,000)	(10,000)	(10,000)	(20,000)		
Advances	(20,000)	0	0	0	0	0	0	(20,000)		
Interest				(216)			(144)	(1,656)		
Repayments		0	0	5,216	0	0	10,144			
Ending Balance		(15,000)	(15,000)	(10,000)	(10,000)	(10,000)	-			
Loan net cash flow allocated to project	7.03% IRR	31	31	(4,939)	31	31	(6,472)			
Loan net cash flow from bank to project	5.89% IRR	-	-	(5,216)	-	-	(10,144)			
Loan Advance Allocation	1st Draw 100%									
	2nd 100%									
	3rd 100%									
	4th 100%	1%	1%	6%	1%	1%	73%			
Project CF after const loan		35.66% IRR		1,357	1,357	(3,859)	1,357	1,357	(5,240)	
Note: Simple interest paid quarterly		check:		-	-	1	-	-	1	
CAPITAL STRUCTURE SENARIO 3: Bank Loan & Foreign Investment & ZK Equity										
OPTION A: PARI PASSU										
Common Equity										
Ceiling		(35,334)	(35,334)	(35,334)	(35,334)	(35,334)	(35,334)			
Remaining Available		(5,660)	(5,660)	(5,660)	(1,801)	(1,801)	(1,801)			
Beginning Balance	Total	26,570	27,927	29,285	25,426	26,783	28,141			
Advances	(35,334)	0	0	(3,859)	0	0	(1,801)	(35,334)		
Repayments		1,357	1,357	0	1,357	1,357	0	61,674		
Ending Balance		27,927	29,285	25,426	26,783	28,141	26,340			
Common equity net CF to project		1,357	1,357	(3,859)	1,357	1,357	(1,801)			
Equity Advances from ZK	(25,334)	0	0	(2,767)	0	0	(1,291)	(25,334)		
Remaining ZK Equity		(4,058)	(4,058)	(1,291)	(1,291)	(1,291)	(0)			
Equity Advances from Foreign Investors	(10,000)	0	0	(1,092)	0	0	(510)	(10,000)		
check:										
Pari Passu Split of Repayments										
Repayments to ZK	72%	973	973	0	973	973	0	44,219		
Repayments to Foreign Investors	28%	384	384	0	384	384	0	17,455		
check:										
Project CF after const loan & common equity		0	0	0	0	0	(3,439)			

Appendix-4 Normative Project Level Cash Flows From 10/2004 to 12/2008 (RMB 10,000)

	Number of Month	2008						TOTAL
		46	47	48	49	50	51	
		Jul-08	Aug-08	Sep-08	Oct-08	Nov-08	Dec-08	
ZK CASH FLOWS	38.36% IRR	973	973	(2,767)	973	973	(1,291)	18,885
FOREIGN INVESTOR CASH FLOWS	38.36% IRR	384	384	(1,092)	384	384	(510)	7,455
OPTION B: PREFERRED RETURN 1								
Foreign Preferred Equity (1) @ 12.00%								
Ceiling		(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	
Remaining Available		0	0	0	0	0	0	
Beginning Balance	Total	0	0	0	0	0	0	
Advances	(10,000)	0	0	0	0	0	0	(10,000)
Interest		0	0	0	0	0	0	
Repayments		0	0	0	0	0	0	
Ending Balance		0	0	0	0	0	0	
Foreign Preferred equity (1) net CF to project	12.00% IRR	0	0	0	0	0	0	
Project CF after const loan & preferred equity (1)		1,357	1,357	(3,859)	1,357	1,357	(5,240)	
ZK Common Equity								
Ceiling		(25,334)	(25,334)	(25,334)	(25,334)	(25,334)	(25,334)	
Remaining Available		(5,660)	(5,660)	(5,660)	(1,801)	(1,801)	(1,801)	
Beginning Balance	Total	24,368	25,725	27,083	23,224	24,581	25,939	
Advances	(25,334)	0	0	(3,859)	0	0	(1,801)	(25,334)
Repayments		1,357	1,357	0	1,357	1,357	0	49,472
Ending Balance		25,725	27,083	23,224	24,581	25,939	24,138	
ZK common equity net CF to project		1,357	1,357	(3,859)	1,357	1,357	(1,801)	
Split of Repayments over Preferred Rate								
Repayments to ZK	70%	950	950	0	950	950	0	34,630
Repayments to Foreign Investors	30%	407	407	0	407	407	0	14,842
Project CF after const loan & preferred equity (1) & common equity		0	0	0	0	0	(3,439)	
check:								
ZK CASH FLOWS	23.69% IRR	950	950	(3,859)	950	950	(1,801)	9,296
FOREIGN INVESTOR CASH FLOWS	54.64% IRR	407	407	0	407	407	0	17,044
OPTION C: PREFERRED RETURN 2								
Foreign Preferred Equity (2) @ 20.00%								
Ceiling		(33,500)	(33,500)	(33,500)	(33,500)	(33,500)	(33,500)	
Remaining Available		(3,826)	(3,826)	(3,826)	0	0	0	
Beginning Balance	Total	0	0	0	(3,826)	(2,527)	(1,208)	
Advances	(33,500)	0	0	(3,826)	0	0	0	(33,500)
Interest		0	0	0	(59)	(39)	(18)	
Repayments		0	0	0	1,357	1,357	1,227	43,859
Ending Balance		0	0	(3,826)	(2,527)	(1,208)	0	
Foreign Preferred equity (2) net CF to project	20.00% IRR	0	0	(3,826)	1,357	1,357	1,227	

Appendix-4 Normative Project Level Cash Flows From 10/2004 to 12/2008 (RMB 10,000)

	Number of Month	46	47	48	49	50	51	TOTAL
		2008						
		TOTAL	Jul-08	Aug-08	Sep-08	Oct-08	Nov-08	
Project CF after const loan & preferred equity (2)		1,357	1,357	(33)	0	0	(6,467)	
ZK Common Equity								
Ceiling		(1,834)	(1,834)	(1,834)	(1,834)	(1,834)	(1,834)	
Remaining Available		(1,834)	(1,834)	(1,834)	(1,801)	(1,801)	(1,801)	
Beginning Balance	Total	16,327	17,684	19,042	19,009	19,009	19,009	
Advances	(1,834)	0	0	(33)	0	0	(1,801)	(1,834)
Repayments		1,357	1,357	0	0	0	0	19,042
Ending Balance		17,684	19,042	19,009	19,009	19,009	17,208	
ZK common equity net CF to project		1,357	1,357	(33)	0	0	(1,801)	
Split of Repayments over Preferred Rate								
Repayments to ZK	40%	543	543	0	0	0	0	7,617
Repayments to Foreign Investors	60%	814	814	0	0	0	0	11,425
Project CF after const loan & preferred equity (2) & common equity		0	0	0	0	0	(4,666)	
	check:						1	
ZK CASH FLOWS	113640% IRR*	543	543	(33)	0	0	(1,801)	5,783
FOREIGN INVESTOR CASH FLOWS	33.53% IRR	814	814	(3,826)	1,357	1,357	1,227	21,784

Note: Manually calculated by searching the NPV = 0.

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