Financing alternatives for small real estate developers in China: A case study of Guangzhou

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Abstract

Nowadays, the skyrocket price of residential house due to lack of houses in cities becomes a crucial problem in China. The development of commercial real estate industry is not only an emerging real estate industry, but also plays a mediating role in solving the problem of lack of houses and high-price to some extent, as a mature commercial real estate market in the city gives birth to a core business centre in the downtown and many sub-business areas in different districts in the city. It is able to create jobs in different areas and to spread the population more averagely. Instead of gathering everybody in the centre, it is going to solve the problem of imbalance of supply and demand for houses and the high price in some areas, which is especially important for the big cities in China like Beijing, Shanghai and Guangzhou.

This thesis is going to explore some new financing options for the small and medium-sized commercial real estate developers and provide some suggestions accordingly. Financing options like REITs, real estate fund, CBMS and mezzanine financing are discussed. In addition, taking Guangzhou, one of the first-tier cities in China, as a case study we have gained a further understanding of the real financing problems in commercial real estate. Some suggestions on the financing options of small and medium commercial real estate developers are proposed according to the academic and practical experiences.

Key words: China, real estate, development, finance, REITs, CMBS, mezzanine finance.
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Min Liu
August, 2011 in China
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1. Introduction

1.1 Background

1.1.1 China commercial Real Estate market

Chinese commercial real estate market

Definition of commercial real estate

There is no common definition for commercial real estate and it varies in different countries. In China, the definition in Real estate Statistic Year Book is: “The place where it is used for the extemporary trade of commercial retail and other definite objects or proving paid operation for the public. It includes shopping malls, shopping streets, specialized market, wholesale market, retail shops, entertainment and catering properties, offices and community business.” Commercial real estate has two important parts: physical properties and business operation.

Difference of commercial real estate and residential real estate

The development of commercial real estate and residential real estate is quite different in many aspects. The source of income is not the same, for residential real estate the income is sales income minus development cost; however, that of commercial real estate is from many ways, including sales income, rent income. Moreover, the development of commercial real estate is one-time investment, but that of residential real estate can be done in a staged manner. So developing commercial real estate needs large amount of capital compared to residential real estate. In addition, commercial real estate is always located at those areas with convenient transportation.
Since the reform and open-up policy adopted in 1978, the commercial real estate market has developed gradually. The development of Chinese commercial real estate can be divided into three stages.

The first stage is between 1978 and 2000 with ten years’ slow growth; however, for the next ten years (2000-2010) commercial real estate has speeded up. Before 2000, commercial real estate investment was no more than 50 billion RMB and the investment growth rate was about 10% (Sun, 2010).

The second stage is between 2000 and 2007. Starting from the year of 2000, Chinese commercial real estate investment is increased sharply. According to The National Bureau of Statistics of China (NBS), in 2003 the investment growth rate reached 39.5%, higher than that of real estate investment growth rate in the past four years. In 2007, the commercial real estate investment reached 277.56 billion RMB with the growth rate of 17.9%. Figure3 and Figure 4 show commercial real estate investment and investment growth rate.

Figure 1 Investment in commercial houses
In 2002, the commercial real estate sales area was more than 20 million square meters, however, in 2005, it is doubled. From 2005 to 2007, the commercial real estate sales area kept steady growth. In 2008, the sales of commercial real estate decrease because of the financial crisis; however, it goes up to 90 million square meters after the stimulus policies of China. Figure 5 shows the commercial real estate sales area.

The third stage is 2007-now, as the effect of the subprime crisis of America, from the second half year of 2007 on, the real estate price decreased and the credit crunch made the capital
chain of real estate in tension. Chinese commercial real estate investment rate slowed down. It can be seen in Figure 5 that Chinese commercial real estate sales space was about 66 million square meters in 2008, which was 10 million less than 2007. However, in 2009, it rose up to about 90 million square meters.

1.1.2 Commercial Real Estate financing situation

Chinese commercial real estate financing meet the same problem as that of real estate, but the problem is more complicated. As commercial real estate differentiates real estate in the characteristics that commercial real estate needs long development period, large investment, long payback time, high-stake and high-return, the financing of commercial real estate is much more difficult. Nowadays, the primary options of commercial real estate financing are bank loans and self-financing only takes a small share in contrast. However, based on risk consideration, banks stipulate strict rules of loans both in amount and time to commercial real estate developers. According to some relevant statistics, it shows that 70%-80% capital of Chinese commercial real estate developers comes from bank loans, and in some cities it even reaches 90% (Han,2007). According to an investigation of China business association in 2006, more than 80% of the investment capital of shopping mall of all whole countries comes from banks. Therefore, in development of commercial real estate, the financing channels are limited, which meanwhile results in substantial risk on banks. Now the main financing options of commercial real estate developers are as follows:

- bank loans, this is the main financing source of commercial real estate developers, however, as the government has implemented tighten monetary policy on loans to real estate industry, this option becomes more and more difficult.

- Go on listed in the stock market or issue corporate bonds. However, because of the high requirements, only a few of real estate companies are capable of adopting this choice.

- Real Estate Investment Trusts (REITs), though many researchers and articles call on the implementation of REITs, it just starts in China. As the laws and regulations have many restrictions on REITs, there is a long way to go to thoroughly implement REITs in China.

- Commercial Mortgage-based securities (CMBS), in 2006, Dalian Wanda Corporation and Macquarie Bank of Australia jointly issued 145 million US dollars of CMBS, which was the first CBMS in China. This option has great potential, however, it just started and many researches need to be done to explore a suitable way for Chinese real estate
financing.

- There are also other seldom used financing methods, such as foreign private fund, financial leasing and loans from foreign banks.

All in all, the financing channels of Chinese commercial real estate are going to be diverse, but now bank loans are still the main channel and other channels are seldom used.

### 1.2 Aim and Motives

Commercial real estate industry is an emerging industry in real estate industry. In China, it started very late but developed very fast, especially in the recent five years. With the urbanization of most cities in China, the development of commercial real estate should catch up with the development of cities. However, in China the development of commercial real estate is not mature, including developing ways, operating ways, and financing ways, especially in the second and third layer cities. The commercial real estate develops from fast to mature gradually. Moreover, since the sub-prime crisis in 2007, China’s residential house market has experienced a great boom and even become a bubble as Chinese government has taken several loose monetary policies. After three years, more and more people realize that this boom may cause a bubble in real estate market, so Chinese government starts to take strict policies on the investment and development of residential house market. Many developers and investors start to turn their attention to commercial real estate market.

In addition, the skyrocket price of residential house due to lack of houses in cities becomes a crucial problem in China. The development of commercial real estate industry is not only an emerging real estate industry, but also plays a mediating role in solving the problem of lack of houses and high-price to some extent, as a mature commercial real estate market in the city gives birth to a core business centre in the downtown and many sub-business areas in different districts in the city. It is able to create jobs in different areas and to spread the population more averagely. Instead of gathering everybody in the centre, it is going to solve the problem of imbalance of supply and demand for houses and the high price in some areas, which is especially important for the big cities in China like Beijing, Shanghai and Guangzhou.

However, with the characteristics of large-scale investment, long pay-back period and capital intensive, the financing of commercial real estate is even more difficult than residential real estate and become crucial problem for the development of commercial real estate. Nowadays
the financing options of commercial real estate in China are very limited, especially for the small and medium real estate companies, bank lending and their own funds are the main source of financing. However, considering the high risk in real estate lending, many banks have more and more strict rules for the real estate lending, especially for commercial real estate. To explore some new financing options of commercial real estate becomes an important goal to commercial real estate developers, especially small and medium developers.

The purpose of this paper is to explore some new financing options for the small and medium commercial real estate developers and suggest some good financing options for the development of commercial real estate from analyzing the financing options both in China and abroad.

1.3 Methodology

1.3.1 Literature review

The information of literature review mostly comes from E-books, E-journals and books and refers to a lot of related former studies. Many statistical figures are collected from some journals from CNKI and the homepage of China National Statistical bureau and the local government’s homepage.

1.3.2 Case study & interviews questionnaire

The case study is taking Guangzhou as an example to explore the financing situation of small and medium commercial real estate developers because Guangzhou is one of the first-layer cities in China and I can also get practical information and data in Guangzhou. I will carry out the case study through semi-structured interviews to the small and medium commercial real estate developers to know their current financing situation and their future possible options.

1.4 Disposition

The disposition of the thesis is: Chapter 1 is the introduction part, introducing Chinese real estate and commercial real estate and the financing situations as well as the purpose and
method of the thesis. Chapter 2 will discuss the financing options of commercial real estate in other countries like America, Europe, and Hongkong. Chapter 3 will introduce the financing options in China in details. Chapter 4 will discuss mezzanine financing in several aspects. Chapter 5 will have a case study on Guangzhou to know the financing options of small and medium-sized commercial real estate. Chapter 6 will discuss financing option suggestions for China’s small and medium commercial real estate companies.
2. Financing alternatives of commercial Real Estate companies

2.1 Financing options of commercial real estate in other countries and districts

2.1.1 USA

American commercial real estate market
In the 1940s, there was already commercial real estate in America. With several decades’ development, American commercial real estate has become mature in the whole process like inviting investment, financing and operating. In America, the developers of commercial real estate not only consider the sale of the properties, but also the operation of the properties, they would have detailed plan about the development, operation, management and so on. Most developers would choose to possess the properties after they develop them, which can reduce the risk of investors because the developers of commercial real estate would not only consider development of these properties, but also the operation (Jiang, 2007). This is different from China’s commercial real estate. In China, the developers usually develop to sell, not to possess because to develop commercial real estate needs large amount of money and the current financing system of China cannot let developers possess the properties too long, their 70%-80% capital come from banks and these loans are usually short-term, they need to get the funds back as soon as possible. In America, 10% of the capital for developing commercial real estate comes from banks, 90% of the capital comes from the developers’ own fund and other funds from investors. The low proportion of bank financing and high proportion of other funds financing reduce the risk of developers (Jiang, 2007).

Financing of American commercial real estate
The financing of US commercial property market is different from that of real estate market in aspects of participants, financing structure, securitization ratio or the quality of bank loans. According to Moody, up to 2007, the market value of American commercial real estate was 5.3 trillion US Dollars; the proportion of market value of commercial properties is 36.6% for offices, 24% for apartments, 22.1% for retail, 15.3% for industrial properties, 2% for hotels and so on. According to Deloitte, the financing structure of American commercial real estate is 50% for bank loans, 25% for CMBS issuing, 10% of loans from insurance companies and 15% from other sources. Figure 9 shows the structure of commercial real estate financing.
Compared to real estate financing, American commercial real estate financing has the following characteristics. Firstly, the main participants are institutional investors, the main source of capital comes from the institutional investors like banks, insurance companies, pension funds, and the borrowers are developers, builders and investors. However, for residential real estate, the borrowers are main individuals who will buy the houses. Secondly, the leverage is high. According to RREEF and ULT, up to the end of 2008, the whole leverage of commercial real estate was about 60%. Thirdly, the developers of commercial real estate would re-finance when the debt becomes due. As the development and the operation of commercial real estate need a long time, so more financing is needed to satisfy the need for capital (Ge, 2010).

In big aspects, the financing of American commercial real estate is divided into debt financing and equity financing (Ge, 2010). For equity financing, there are private equity, which means that individuals have the equity of the listed real estate companies; and public equity, which is REITs. According to the estimation of ULI, up to the end of 2008, the proportion of the two equity financing is 80% and 20% separately. REITs financing develops very well in America, so far there are more than 200 trust companies trading in the exchanges. In America, there are 85% equity REITs, 15% mortgage REITs and 5% hybrid REITs (Yang, 2009). In America, REITs is always in the form of stock company, the company issue stocks to attract the money of investors and then they will hire specialized institutions to manage the products and money, the institutions will get the interest of real
estate investment indirectly and the management fee of REITs. Figure 10 shows the operation model of REITs in America.

**Figure 5** The operation model of REITs in America

For debt financing, according to the statistics of Federal Deposit Insurance Corporation, up to the end of 2009, the total amount of debt for American commercial real estate is 3.4 trillion dollars, 50.3% for commercial banks and saving institutions, 20.7% for CMBS, CDO, and the other for other institutional investors. The debt financing is divided into private debt, which is bank loans, and public debt, which is CMBS. Bank loans accounts about 50% of the debt of commercial real estate. There are some characteristics that are different from loans for residential houses. Firstly, most loans are from regional and community banks or institutions. Secondly, the rate of violation is usually lower than that of residential mortgages (Ge, 2010). The CMBS financing is frequently used in the financing of commercial real estate, the advantages of CMBS make it very popular in the commercial real estate financing. Firstly, the complexity is lower compared to RMBS, commercial real estate loan can always avoid the risk of advanced repayment (It is always about 10 years.). Secondly, the securitization rate is lower compared to residential real estate. Thirdly, the degree of scatter is lower compared to RMBS (Ge, 2010)

### 2.1.2 Europe

**European commercial real estate market**

In recent years, the retail properties have gotten great development, especially the rise of Middle and East Europe commercial property market further stimulate the development of retail properties in Europe. It is estimated that till 2007 the total area of European shopping center is 130.2 million square meter (Doc88, 2010).
However, compared to West European countries, the total number of shopping centers in East European countries is low, which means there is great development potential in East European. Figure 11 shows the space of shopping centre in the countries in Europe. It can be seen that there are most shopping space in UK, France and Germany.

![The space of shopping centers in Europe](https://www.Doc88.com)

**Figure 6:** The space of shopping centers  
Source: www.Doc88.com

Currently, in Middle and East European, big shopping centers are popular. However, in North Europe and UK, all kinds of shopping centres such as community shopping centre, convenience stores, local shopping centers are averagely distributed, the structure is very reasonable. In France, Italy and Spain, the shopping centers are also medium and large, mostly with 5000-15000 square meters supermarket (Doc88.2010).

In Europe, the biggest retail market is Germany, UK, France and Italy, relatively speaking, commercial property develops better in these countries.

**Real estate financing in Europe**

As German and UK’s commercial real estate market is comparatively active and mature, their financing methods would be taken as an example. In Germany, the main financing option for real estate developers is still bank loans, there are all kinds of banks, mortgage banks, savings and loan banks, commercial banks and state banks.

As to other innovative financing methods, a survey about innovative financing methods in German real estate industry shows that convertible and participating mortgages are seldom used, but project financing, mezzanine financing and joint venture financing are applied more
(Iblher&Lucius, 2003). Figure 12 shows the application of innovative financing options in German real estate market.

![Figure 12: The application of innovative financing options in German real estate market](image)

Source: Innovative real estate financing in Germany-a financial desert by Felix Iblher and Dominik I.Lucius

The analysis of the survey shows that project financing and joint venture financing are most popular, mezzanine financing is also popular and convertible mortgages are seldom used (Iblher&Lucius, 2003).

In German real estate market, bank loan is the main method, although some innovative financing options are seldom used now, they are getting more and more attention. Figure 13 shows the use of innovative financing in transactions.
In UK, the financing options for real estate is more diverse. Even for small real estate developers, they can finance through number of different routes. They can use bank loans or use a specialist in property finance, or cooperate with fellow developers. Among these methods, property finance brokers plays a great role. Most reputable property finance brokers are now members of the National Association of Commercial Finance Brokers (NACFB). The statistics of NACFB shows that there are 500 registered brokers, two-thirds specialize in commercial mortgages and property development finance (Dowdeswell, 2003). The loans are mainly for small and medium property finance. The broker provides market knowledge to help borrowers to easier borrow money. The lenders for property finance come from all sectors of the banking and funding industry. Firstly, commercial banks provide direct loans to borrowers. Secondly, the quoted and unquoted specialist property lenders, they have great expertise in assessing development project. Thirdly, there are some small private lenders using their own funds. Additionally, there are some private individuals specializing in providing mezzanine financing.

2.1.3 Hong Kong

Hongkong commercial real estate financing

Real estate industry plays an important role in the economy. The sound economy stimulates the development of real estate industry. The change of industrial structure in Hongkong has
changed the real estate investment. Before 1970s, the main investment was in industrial real estate. After that the service industry has developed well. Especially after 1980s, financial industry and tourism industry has had great development. During this period, commercial properties such as hotels, shopping malls and offices are the focus of real estate development. Figure 14 shows the changes of industrial structure in Hong Kong.

![Figure 14: The changes of industrial structure in Hong Kong](image)

**Sources:** Smooth transition of Hong Kong's economy and future prosperity, 1997.

As the further development of Hong Kong economy, the economic structure will change further; the proportion of service industry will increase. Therefore, commercial real estate development in Hong Kong plays a great role in real estate industry.

In Hong Kong, the financing options for real estate are various. They can finance by both direct and indirect financing methods. The direct method is bank loan, real estate companies and banks have tight relationship (Wang&Hu, 2004). The indirect methods are other innovative financing options such as REITs, CMBS, ABS and so on. After the Asian financial crisis, the innovative financing options become more and more important, up till now some innovative financing options for real estate has developed very well. As Hong Kong takes the lead in the finance innovation and it is most near to the inland China, the financing options of real estate deserves the leaning of Chinese real estate companies. There are the following indirect financing options for real estate in Hong kong.

Firstly, Asset-backed securities (ABS). Since the Asia financial crisis, ABS has had great development in some Asian countries, especially in Hong Kong. ABS can transfer the illiquid real estate to liquid securities and then sell to investors, the investors own creditors’
rights of securities instead of owning the right of real estate. This is very useful for real estate development as real estate is an illiquid, the investment is huge, the development cycle is long, the liquidity is poor, the securitization of real estate can change the situation, real estate securities can exchange in the stock market. In Hong Kong, the transformation of capital and assets is very smooth, the financial market and the real estate promote mutually (Wang&Hu, 2004).

Secondly, mortgage-backed securities (MBS). MBS is an asset-backed security that represents a claim on the cash flows from mortgage loans through a process known as securitization (Wikipedia, 2011). In Hong Kong, Hong Kong Monetary Authority found Hong Kong mortgage company to work on mortgage securitization, it purchases mortgage loans (mortgage notes) from banks and other lenders and assembles these loans into collections, or "pools", then securitizes the pools and issues mortgage-backed securities(Wang&Hu,2004). The operation process of MBS in Hong Kong is shown in Figure 14.

Undoubtedly, MBS plays an important role in the bank and real estate industry. It can promote bank stability. Moreover, it can help real estate financing, increasing financing channels. In addition, it promotes the development of first and second mortgage market and bond market.

![Figure 10](image-url) The operation process of MBS in Hong Kong

Thirdly, Real estate investment trusts (REITs). Hong Kong REITs mainly learn from that of USA. However, the difference is that Hong Kong REITs have some mandatory requirements on REITs structure, investment objectives and income distribution through special legislation, American REITs has obvious tax benefits-driven characteristics, which can be said that Hong Kong REIT development is the type of special regulation (Wang&Hu, 2004). Table 1 shows the differences.
Table 1 Differences of American REITs and Hong Kong REITs

<table>
<thead>
<tr>
<th>Law</th>
<th>America mode</th>
<th>Hong Kong mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Point of view on legislation</td>
<td>Tax</td>
<td>Special regulations</td>
</tr>
<tr>
<td>Structure of law</td>
<td>Company</td>
<td>Trust institutions</td>
</tr>
<tr>
<td>Limit on region</td>
<td>No limit</td>
<td>Only for Hongkong</td>
</tr>
<tr>
<td>Minimum holding period</td>
<td>No</td>
<td>2 years</td>
</tr>
<tr>
<td>Minimum holding period of assets</td>
<td>No</td>
<td>2 years</td>
</tr>
<tr>
<td>Limit of Stock holding</td>
<td>Maximum 5 stockholders and cannot own more than 50% of stock</td>
<td>No special limit</td>
</tr>
<tr>
<td>Proportion of real estate investment</td>
<td>At least 75%</td>
<td>At least 90%</td>
</tr>
<tr>
<td>Proportion of dividends</td>
<td>At least 90%</td>
<td>At least 90%</td>
</tr>
<tr>
<td>Maximum proportion of dividends</td>
<td>No limit</td>
<td>35% of net assets</td>
</tr>
<tr>
<td>Tax incentives</td>
<td>Tax incentive</td>
<td>No</td>
</tr>
</tbody>
</table>

2.2 Current financing options of commercial real estate in China

2.2.1 Bank loans

Introduction
Bank loans are the main source of real estate developers. In the whole capital chain, bank loan account for at least 55%, some even more than 90% (Han, 2008). Bank loans almost go through every part of the development process, including land reserve, real estate developing, selling and buying. Figure 22 shows the relationship of bank loans and the whole process of real estate developing.
Figure 11: The relationship of bank loans and the whole process of real estate developing.

Problem
To have bank loans as the main source of real estate developing has great risk to both banks and real estate companies. Firstly, to real estate companies, as real estate industry in China is a “policy” industry, the government’s policy has decisive effect on real estate developing and financing. For example, if banks implement tight credit policy, they will raise reserve rate of legal bank deposits and interest rate, which will create great risk to real estate companies, the capital chain of real estate companies may break down. Moreover, to banks, bank-oriented financing structure will threaten the safety of banks and the country’s financial system. The cycle of real estate is the same with the business cycle of macroeconomics—Expansion, Downturn, Contraction and upturn. When the real estate industry is in contraction period, unemployment will increase, income will decrease and consumption will decrease, meanwhile, house price will decrease. Table2 shows the real estate cycle and business cycle of macroeconomics. Real estate companies and house buyers will be forced to default. Banks and the whole financial system will face substantial risk if real estate industry has bankrupt.
Table 2 Business cycle and real estate cycle

<table>
<thead>
<tr>
<th>Four phases in a business cycle</th>
<th>Total trade market</th>
<th>Real estate market</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Expansion</strong></td>
<td>Employment, production inflation, interest rate up</td>
<td>Absorption strong, rent and price up, new construction</td>
</tr>
<tr>
<td><strong>Slowdown, peak, downturn</strong></td>
<td>Maximum activity in the economy</td>
<td>Good profitability, but weakening absorption, risk</td>
</tr>
<tr>
<td><strong>Contraction</strong></td>
<td>The indicators turn down, first slowly, then quickly</td>
<td>Low absorption and construction, price and rent down, completions</td>
</tr>
<tr>
<td><strong>Slowed contraction, upturn</strong></td>
<td>Stabilization, Economy heading for a new peak</td>
<td>Stop some completions large free capacity, inflation and interest rate low, time for increased activity</td>
</tr>
</tbody>
</table>


As for commercial real estate industry, according to the report of China Banking Regulatory Commission in 2005, the default rate of residential house is 1%, but the default risk of commercial real estate come up to 7%, which means that commercial real estate is more risky in the real estate industry.

**Government’s policies on real estate industry**

To have bank lending as the main source of real estate financing will have great risk on banks and the financial system, so the government has implemented several controlling measures. In 2003 People's Bank of China promulgated 'Circular on further strengthening the administration of property-related financing' ('121st' policy). Also in 2004, People’s bank of China promulgated ‘China’s real estate development and financial support. These reports
mean that the credit policy of real estate industry had changed. The government will implement tight credit policy on real estate developing. Since the subprime crisis in 2007, the Chinese government has implemented 4 trillion fiscal policies to stimulate the economy.

From the above, we can see that to have bank loans as the main source of real estate financing has great risk on real estate companies, it is necessary for the real estate industry to explore other financing alternatives.

### 2.2.2 Commercial operating property mortgages

As the government has gradually implemented several preferential policies on small and medium-sized enterprises, the banks of China also introduce new financial product. As to small and medium commercial property developers, commercial operating property mortgage is a very good alternative. However, there are several restrictions on the borrowers. It will be stated it in details.

#### Definition

Banks give commercial operating property mortgages to the owner entity of the operating property and the property as the collateral, the source of repayment include the operating income of commercial operating property mortgages and other sources. The loan period is no more than 10 years. The commercial operating property include commercial building, star hotels and integrated commercial facilities (such as shopping malls, shops), which are completed and put into commercial operation, have sufficient operating cash flow and good comprehensive income and stable source of repayment.

#### Characteristics

Firstly, the commercial operating property must be owned by the borrower and it must be located in the downtown area and rented to others and the rents as the source of repayment. Secondly, the loans can be used as the legal capital needs of the company, including but not limited to replacement liabilities

#### Advantages

- Flexible use of loans. For the self-constructed property, commercial operating property mortgages can be used to replace the liability capital and as the own funds.
- Long loan period. As common loan, the loan period is usually 1 year, however, as
commercial operating property mortgages; the loan period can be at most 10 years.

- Flexible repayment methods and reduce the cost of financial management of companies. As the rents are managed by banks, the borrower does not need to worry that the repayment cannot be on time.

- Simple loan process. The key points to get the loan are to satisfy the two requirements: the value of the collateral and the cash flow of the collateral.

**Problems**

There is market risk. As the loan period is long, there are many uncertain and unpredictable factors. If the collateral is devaluated a lot or the rent decreases a lot, these will affect safety of the loans. Moreover, there may be interest risk. The interest rate fluctuation or inflation may affect the effective interest income of the collateral. Finally, there may be management risk.

### 2.2.3 Real Estate Investment Trusts (REITs)

**Definition**

REITs is a corporation or trust that uses the pooled capital of many investors to invest or purchase and manage property and receive its income (equity REITs) or, less commonly, mortgage loans (mortgage REITs) or both(Hybrid REITs) and distribute its earnings to investors(Wang,Sun&Chen,2008). Generally, REITs are traded on the major exchanges. They are highly liquid, so that they can transfer the real estate with low liquid and large capital to securities, which is good for the small and medium real estate investors. Moreover, there is no minimum investment in REITs, which allow common investors to participate in the real estate industry. The non-listed REITs usually provide real estate mortgages and get interests and intermediary fee as income. Equity REITs can directly invest in real estate, usually income-producing properties like hotels, shopping malls and commercial or industrial properties and take the rents income and the appreciation in the properties as profits.

**Advantages of REITs for China**

REITs have many advantages both for the real estate industry and as an investment product. Firstly, REITs provide exposure to a diversified range of real estate assets either through direct ownership of physical real estate or investment in shares of listed real estate companies. It not only decrease investment risk of real estate investors but also decreases
risk of real estate industry. REITs can provide stable and comparatively higher investment income; currently the investment income is from 4% to 5%, some are even 8%, which are higher than other financial product (Peng & Fan, 2007). Moreover, it is good for the stability of financial system, especially when the real estate industry is in bad times, the banks will not bear all the risk of real estate industry.

Furthermore, it provides more suitable investment channels to common investors to invest in real estate industry; Chinese people have an extremely high saving rate, but few good investment channels for their savings. So there comes out the phenomenon of “Speculation” on houses, food and any products they can speculate, which cause the prices extremely high, impeding the normal development of market. REITs provide people with suitable investment options; people will not put all their money into real estate when the real estate price is going up. This in turn will relieve pressure on government to control high real estate prices. Also it is a good investment choice for insurance funds, pension funds and wealthy individuals. These investors would add variety and diversification to their current holdings. Mainland insurance companies alone are looking hard for areas to deploy their more than US$300 billion readily available for investment (Wang, Sun & Chen, 2008).

Moreover, according to a report by Reuters, if they follow the global industry norms of committing 10 percent to 15 percent of their portfolio to real estate, Chinese insurers will likely spend between US$30 to 40 billion on commercial real estate. For pension funds, given the preference of pension funds for low risk and stable income investments, REITs’ characteristics suit investors’ needs.

In addition, REITs provide attractive exit strategies for private equity firms interested in investing in Chinese real estate development. thus giving a huge stimulus to China’s real estate private equity industry (Wang, Sun & Chen, 2008).

Finally, REITs have preferential tax, which increases stockholders’ profit.

**REITs development in China**

Strictly speaking, there is no real REITs in China, there are some products similar to REITs, There are also types of ‘REITs’ in China—Equity REITs, Mortgage REITs and Hybrid REITs. Mortgage REITs occupy a leading position, which occupy 75% of the total projects, and 22% and 3% for Equity REITs and Hybrid REITs separately. Currently, the representative products for mortgage REITs are ‘Lianxin.Porly’ series, which are operated by Union Trust & Investment Limited; Beijing CBD land development project capital trusts, which are operated by Beijing Trusts; And ‘Beijing Third Ring New Town’ affordable housing development project capital trusts, which are issued by Beijing International Investment
China’s ‘REITs’ just started in the recent years. In the June of 2003, REITs started to become the hot spot because The People’s Bank of China promulgated the ‘121 document’ to control bank loans to real estate industry. On the 20th of September of 2003, China’s first real estate industry fund-Jing Rui Fund was set up. In 2004, the total amount of real estate trusts were 12.2 billion RMB, which was doubled compared to 2003. In 2005, the amount reached to 20 billion RMB. On the 22nd of January of 2005, the first REITs in mainland China ‘Lianxin.Porly NO.1’ (which was operated by Union Trust& Investment Limited Company) was launched according to the standard design of REITs and by learning the successful management model of Hong Kong Linghui Real Estate trusts, American REITS and some mature funds China’ securities market.

On the 25th of July of 2005, Singapore’s Capital Land and America’s Colony Fund signed a contract, planning to sell the packaged 41 hotels of Raffles, and investing the 400 million USD profits to the development of Chinese commercial real estate, this is the first REITs by foreign capital in China. On the 12th of December of 2005, the first mainland REITs which was made up of a portfolio of properties from China-Guangzhou Real Estate Investment Trusts (GZI REITs) (00405. HK), which was operated by property developer Guangzhou Investment Company Limited (GZI), was sold in the Hong Kong Exchange Union and collected 1.7 billion HKD. GZI REITs packaged four prime shopping and office buildings in Guangzhou, which are separately located in Tianhe Central Business District and Yue Xiu district.

When it was listed, it was the third REIT to be listed on the Hong Kong Stock Exchange and created a novel template for investors to tap into the value of commercial properties in China. GZI REIT was oversubscribed by 496 times in the public offering and 74 times in the institutional placement. It offered an attractive dividend yield of 6.54 per cent to unit holders, the highest among listed Hong Kong REITs back then(Quack&Ong,2007). In the January of 2007, the People’s Bank of China started to study and draw up relevant policies on REITs and planned to launch the management measures and experimental units. In the March of 2008, China Banking Regulatory Commission and other five trusts companies drafted ‘Real Estate Investment Trusts management measures (Draft)’exposure draft. On the 3rd of December of 2008, the State Council of China proposed ‘Carry out Real Estate Investment Trusts experimental units and expand financing channels of real estate companies’. Shanghai is the experimental city (Xiong & Song, 2009). Since 2008, REITs products are the hot spot of investors. From January to September in 2008, there are about 60 real estate investment
trust products, collecting about 10 billion RMB (Zhang, 2009).

Policies on REITs in China

There are no special laws and regulations for REITs in China, there are just some relevant laws on trusts in China, which are called ‘one law, two regulations and three documents’ (Li&Lu, 2009).

‘One Law’ means ‘Trusts Law’ which was promulgated in 2001 and is the basic trusts law. ‘Two regulations’ means ‘Management Measures of Trusts Company’ and ‘Management Measures on Collected Capital Trust Scheme of Trusts Company’, which were issued by China Banking Regulatory Commission in 2007. The two regulations play a driving role in REITs development.

‘Three documents’ means the ‘three notices the People’ Bank of China and China Banking Regulatory Commission issued. They are ‘Notice on further strengthening management of real estate credit business(121st Document)’ in 2003, the main content is that banks should require the real estate developer to have ‘four certificates’, which are Land Use Rights Certificate, Construction Land Using and Planning Permit, Construction Project Planning Permit and Construction Project Building Permit. The real estate developers’ own fund should account for 30% of the total capital. And ‘Notice on further strengthening the risk management of part of the business of trust and investment company(212nd document) in 2005 ’, the main content is that the Trust companies should not give loans to the real estate companies that do not have’ four certificates’; the real estate developers cannot apply for loans if their qualifications are lower than the second class qualification of real estate development which is carried out by the Administrative department for construction of China; and the capital ratio to develop real estate projects should not be lower than 35%. And’ Notice on further strengthening the credit management of real estate (54th document)’. These three documents show that the government has more and more strict policies on real estate financing. The real estate developers long for more new and suitable financing options.

Moreover, in 2004 the China Banking Regulatory Commission promulgated ‘Temporary Measures on the Management of Real Estate Investment Trusts of Trust Company( Exposure Draft)’. Though this ‘Measure’ defines real estate investment trust and regulates the operation rules, supervision and management, the ‘Chinese REITs’ is different from the standard REITs in other countries. ‘Chinese REITs’ do not have the liquidity that other REITs have because ‘Chinese REITs’ cannot be traded on the exchanges. Moreover, ‘Chinese REITs’ mainly manage trust capital by giving loans to real estate projects and not directly participate in real estate investment and management, which is different from standard REITs-investing in real estate and manage real estate. In addition, ‘Chinese REITs’ have high requirements on
investors; individual investors with less than 1 million and institution investors with less than 5 million are barred from participating (Li & Lu, 2009). Finally, ‘Chinese REITs’ do not have the tax transparency and any other special tax status. All in all, ‘Chinese REITs’ still have a long way to reach the standard REITs, many measures need to be taken to develop real Chinese REITs.

Problems of REITs development in China

As the relevant laws and regulations are not complete and REITs are still new in China, there are many problems for the REITs development in China.

Firstly, the laws and regulations on REITs are not complete. Currently REITs in China are operated according to ‘Trust Law’, ‘Corporation management of Trusts investments’ and ‘Temporary Measures on the Management of Real Estate Investment Trusts of Trust Company’ (Zhang, 2006). According to the laws, REITs cannot be traded on the exchanges so that REITs are not really securitized.

Secondly, there is high risk on Chinese REITs products. As there is no complete operating mode, there may be ‘green area’ between the investors and the trustee; the trustee may use the investors’ capital to use for themselves.

Thirdly, the period of Chinese REITs is very short. It is known that the period of REITs in foreign countries is about 8-15 years, however, in China, most REITs are less than three years, which means that trust companies in China do not play great role in real estate financing (Zhang, 2006).

Fourthly, the transfer mechanism is incomplete and the liquidity is poor. Nowadays, the period of Chinese REITs is usually 1-5 years, and mostly are about 1-2 years. REITs products which are short than 1 year cannot be redeemed and transferred; REITs longer than 1 year can be transferred but the investors have to find buyers by themselves and then go to the trust company to handle transferring procedure, which is very inconvenient for the investors.

Fifthly, there is a lack of mature investment projects and investment portfolio. As the Chinese commercial real estate market does not develop maturely, there are few mature projects that have stable cash flow; most commercial real estate developers sell their property to retailers to get back money. Moreover, as there are few mature projects, REITs cannot use investment portfolio fully. Since 2002, there are about 95% real estate trusts products use single project financing, which increases the risk of REITs and not good for the REITs going on listed (Zhang, 2006).

Sixthly, there is a lack of professional management team. REITs need people who know both real estate and finance. Nowadays, most trust companies are purely finance companies, which
know little about real estate and have little experience on real estate business. Finally, there is no tax preference in Chinese REITs. The investors cannot get comparatively high return of investment, not like America or other countries, REITs are exempt from profit tax, the investors can get higher return of investment (Xiong & Song, 2009). Table 3 shows differences of REITs and Real estate investment trust.

Table 3: Differences of REITs and Real estate investment trust

<table>
<thead>
<tr>
<th></th>
<th>REITs</th>
<th>Real estate investment trust in China</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relevant regulation</td>
<td>Rigorous real estate investment regulation</td>
<td>Trust Law</td>
</tr>
<tr>
<td>Investor type</td>
<td>No limit</td>
<td>Rich individuals and Eligible institution investors</td>
</tr>
<tr>
<td>Collecting method</td>
<td>Public or private collecting</td>
<td>Private collecting</td>
</tr>
<tr>
<td>Liquidity</td>
<td>Good and list in the exchanges</td>
<td>Poor liquidity and cannot list in the exchanges</td>
</tr>
<tr>
<td>Investment project</td>
<td>Mainly equity REITs by owning mature properties and get rents as income</td>
<td>To provide loans for real estate developers</td>
</tr>
<tr>
<td>Investment period</td>
<td>Long, and distribute benefits every year</td>
<td>1-3 years</td>
</tr>
<tr>
<td>Legal regulation</td>
<td>Complete laws and regulations</td>
<td>Incomplete regulations and control system</td>
</tr>
</tbody>
</table>

Source: Study on Chinese real estate investment trust, (Zhang, 2009)

2.2.4 Commercial Mortgage-Based securities (CMBS)

Mortgage-backed security is a new financial innovation which originated in America. As it has the characteristic of low financing cost, low risk and high return, it has been accepted worldwide. It is still in the primary stage in China and also less used in the commercial real estate. However, it has great development potential in China.

Definition of CMBS

Commercial mortgage-backed securities (CMBS) are a type of mortgage-backed security backed by mortgages on commercial rather than residential real estate. A mortgage-backed security (MBS) is an asset-backed security that represents a claim on the cash flows from mortgage loans through a process known as securitization (Wikipedia, 2009). In the process of securitization, there are many participants, which are shown as Table 4.
### Table 4: The participants and their functions of CMBS

<table>
<thead>
<tr>
<th>Participants</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Originator</strong></td>
<td>To choose assets which are to be securitized and form an asset pool, and then transfer it to Special Purpose Vehicle (SPV).</td>
</tr>
<tr>
<td><strong>Credit Enhancement Organization</strong></td>
<td>To give credit support to the assets in the SPV to enhance the credit class in the assets. Usually an independent third party will play this role.</td>
</tr>
<tr>
<td><strong>Credit Rating Organization</strong></td>
<td>To establish bond ratings for each bond class at the time the securitization is closed. They also monitor the pool’s performance and update ratings for investors based on performance, delinquency and potential loss events affecting the loans within the trust.</td>
</tr>
<tr>
<td><strong>Underwriter</strong></td>
<td>To sell the securities. And in the stage of security design stage, it also plays the role of financial consultant to protect the benefit of originator and also provide suitable security to investors.</td>
</tr>
<tr>
<td><strong>Servicer</strong></td>
<td>To supervise and maintain the cash flow the assets produce; to collect maturity and interests and give it to the trustee; to manage the flow of payments and information and is responsible for the ongoing interaction with the performing borrower; to provide relevant financial reports to trustees and investors.</td>
</tr>
<tr>
<td><strong>Trustee</strong></td>
<td>To hold all the loan documents and distribute payments received from the master servicer to the bondholders. Although the trustee is typically given broad authority with respect to certain aspects of the loan under the PSA [Pooling and Servicing Agreement], the trustee typically delegates its authority to either the special servicer or the master service.</td>
</tr>
</tbody>
</table>
The main process of asset securitization: The originator has ‘true sale’ of the securitized assets to the Special Purpose Vehicle (SPV), and then put all the assets in the asset pool, and take the cash flow of the asset as support, and then hire the credit enhancement organization to give credit enhancement to the issued products, and issue securities in the financial market, finally to repay the investors by using the cash flow in the asset pool (Wang, Jiao, Wu, Fang & Chen, 2009). Figure 16 shows the operation flow of securitization.

**Figure 12:** The operation flow of securitization
Advantages of CMBS

CMBS has special advantages compared to other financing methods, it has advantages of low issue price, high liquidity, diversified loan lenders, no right of recourse to the parent company, financing from outside of balance sheets (He, 2008).

For the originators, CMBS provides more efficient, low-cost and diversified financing options, meanwhile it transfers the illiquid financial assets to liquid and tradable assets. For investors, CMBS can provide higher investment income compared government bonds and flexible and diversified investment products (Baidubaike, 2009).

In China, CMBS has great potential. As international investors pay more attention to China’s market, Professor Lawrence of New York University points out that to carry out CMBS in China is more easier than REITs (He, 2008). Moreover, as the rapid increase in residential house price in China these years, there is some bubble in the residential house market (He, 2008). The Chinese government starts to take tight money policy to control the house price and reduce banks’ credit risk. CMBS can provide new financing options for commercial real estate and spread risk for banks; meanwhile, it can solve the problem of excess liquidity in the stock market and house market. It provides investment opportunities in house market for small investors.

In addition, according to the statistics of China Banking Regulatory Commission in 2005, the ratio of nonperforming loans to total lending in residential houses is 1%, however, the ratio of nonperforming loans in commercial real estate is 7%, and CMBS can be a good method to deal with the nonperforming assets. Finally, CMBS helps banks to transfer the long term loans to securities so that improve the liquidity of assets (Yang, 2006).

The development of CMBS in China

China’s commercial real estate has rapid growth these years, especially in the big cities like Beijing, Shanghai and Guangzhou, there has formed all kinds of business forms like large supermarket, shopping mall, shopping street and convenience stores.

Though China’s commercial real estate market is not mature, it is on the way and now both the government and the developers play great importance on the development of commercial real estate. CMBS in China is just in the primary stage and there is already some cases of CMBS in China. In 2005, The People’s Bank of China published ‘Administration of the pilot of Chinese Credit Assets Securitization’ and China Banking Regulatory Commission published 'Administration and supervision of the credit assets securitization in financial
institutions’, which means that the issue of CMBS in China has elementary legal framework. In 2006, with the help of Macquarie bank of Australia, Wanda Commercial Properties Company (300168) financed about 1 billion RMB through issuing CMBS. This is the first CMBS financing in China.

The problem of CMBS in China

Though CMBS has so many advantages in financing, it still has many problems, especially in the emerging markets. Nowadays, CMBS has developed very fast in Europe and Asia, but its main form is still transaction with single borrower, many experts point out that this has great risk because single transaction cannot spread risk.

Moreover, low transparency is a risk to the development of CMBS in Asia areas. Dottie Cunningham CEO of CMBS Association said that investors need to know the performance of the real estate so that CMBS can develop better in the market (Baidubaike, 2008).

In China, CMBS will encounter more problems except for the above. Firstly, it will encounter problem in the law. Though China Banking Regulatory Commission published ‘Administration and supervision of the credit assets securitization in financial institutions’ in 2005, it does not mean CMBS can go well in China. China’s ‘The General rule for providing a loan’ states that all the administrative departments, enterprises and public institutions, supply and marketing cooperatives, countryside cooperative fund and other fund can not operate deposits and loans business and enterprises can not operate loan-based financing or disguised loan-based financing. According to this law, the transaction structure of CMBS is comparatively single; the issue institutions can be just banks or trust companies. Secondly, CMBS needs good credit rating system and agencies. However, in China the credit rating system is just in the primary stage compared to developed country, which makes the issue of CMBS difficult.

Thirdly, there are few good commercial properties; many properties do not have clear property right, they are lack of transparency of business performance, banks do not have motives to carry out CMBS. Moreover, it is hard to standardize the properties (Yang, 2006).

2.2.5 Bond financing and Equity financing

Introduction

Financing through issuing stocks in the exchanges and corporate bonds is a common way to finance for many enterprises. It also can be a good choice for real estate companies. Financing through issuing stocks in the exchanges means that enterprises collect money from
stockholders. Companies usually use this method when they want to increase capital and stocks (Jin, 2007). Financing through issuing stocks has many advantages for real estate companies. Firstly, as real estate industry is a capital-intensive industry and has large demand for money, financing through issuing stocks can collect large amount of money and have low cost. Moreover, financing in the exchanges is good for the long-run development of real estate companies. As it has many high requirements for the real estate companies to go on listing, it is a good chance for real estate companies to improve themselves. And also, real estate companies can pay more attention to the long-run development of the companies, not pursuing short-run benefit, if they have enough money. In most cases, financing through issuing stocks in the exchanges suits big companies with good performances and it has high requirements; it is not suitable for most small and medium real estate companies in China. In this case, issuing corporate bonds is a good method to solve the problem of financing in small and medium real estate companies. Financing through issuing corporate bonds means that companies borrow money from creditors, it is debt of companies and companies need to pay the principal and interests when it is due. Financing through issuing corporate bonds also has many advantages. Firstly, issuing corporate bonds is more easily compared to issuing stocks and has long repayment period and lower interest rate compared to bank loans. Moreover, it has large financial leverage, especially when the rate of return on capital is higher than the interest rate (Sun, 2004). Also, financing through issuing bonds does not represent ownership of companies; it would not have the problem of control and intervention of enterprises. To choose which method to finance depends on companies’ financial leverage and capital structure (Sun, 2004). Financing through issuing stocks has low risk, but it will affect the control power and investment income of companies if the proportion is too high. Financing through issuing bonds has the pressure of paying principal and interests. So companies should have moderate debt, otherwise it will encounter high financial risk.

The development of bond financing in China

Although bond financing has many advantages and good for small real estate companies, China’s capital structure is unbalanced; the total amount of bond financing is far less than the amount of equity financing. In China the bond market is dominated by government bonds and financial bonds, the proportion of corporate bonds is less than 3% (Yang, 2009). Table 5 and Table 6 show the sizes of bond and stock in Chinese market.

Table 5 The size and structure of bond market in China (100 million RMB)

<table>
<thead>
<tr>
<th>Bond type</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>corporate</td>
<td>Balance</td>
<td>147</td>
<td>325</td>
<td>358</td>
<td>327</td>
<td>2046</td>
<td>3938</td>
</tr>
<tr>
<td>bond</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 6 The comparison of sizes of bond and stock of Chinese companies

<table>
<thead>
<tr>
<th>Year</th>
<th>Corporate bond</th>
<th>Market value of stock</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>147</td>
<td>14463.17</td>
</tr>
<tr>
<td>2002</td>
<td>325</td>
<td>12484.55</td>
</tr>
<tr>
<td>2003</td>
<td>358</td>
<td>13178.52</td>
</tr>
<tr>
<td>2004</td>
<td>327</td>
<td>11688.64</td>
</tr>
<tr>
<td>2005</td>
<td>2046</td>
<td>10630.51</td>
</tr>
<tr>
<td>2006</td>
<td>3938</td>
<td>25003.64</td>
</tr>
<tr>
<td>2007</td>
<td>4033</td>
<td>327100</td>
</tr>
</tbody>
</table>

Source: China Securities and Futures Statistical Yearbook

Table 7 shows the comparison of Chinese real estate corporate bonds and American real estate corporate bonds. We can see that China’s bond financing in real estate industry develops rather slow compared to America.

Table 7 the comparison of Chinese real estate corporate bonds and American real estate corporate bonds

<table>
<thead>
<tr>
<th>Type</th>
<th>China</th>
<th>America</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financing subject</td>
<td>Big real estate companies</td>
<td>Federal residential house</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Loan Mortgage Corporation,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Federal mortgage association,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>commercial banks and so on</td>
</tr>
<tr>
<td>Financing scale</td>
<td>The total amount is less than 1 billion RMB, which accounts for less than 1% of the total financing amount</td>
<td>The total amount of money is hundreds billion US dollars, which accounts for about 50% of the total financing amount.</td>
</tr>
<tr>
<td>Limitation</td>
<td>There are strict rules on the asset scale of the companies.</td>
<td>The bond financing is comparatively easy.</td>
</tr>
</tbody>
</table>

The earliest real estate bond in China was in 1992, one of the developers in Hainan province
issued a total amount of bond of 1.5 billion RMB. And in September of 1992, Beijing Huayuan Real Estate Company issued corporate bonds with a total amount of 29 million RMB, 10% interest rate, 3.5 years (Yang, 2009). Afterwards, as there happened some events of default for some corporate bonds, and Chinese government had taken drastic measures to control the issue of corporate bonds. So in the following five years, there was no issue of real estate corporate bonds in China. Since 1998, with the gradual loosening of policy constraint, real estate companies started to issue corporate bonds again. In 1999, the proportion of real estate corporate bonds financing to the total capital reached the highest 0.21%; in 2002, the proportion was just 0.023%; in 2003, the real estate corporate bonds financing was just 30 million RMB, which accounted almost 0 to the total amount of capital (Yang,2009). Although since 2003, some big real estate companies issued corporate bonds to finance, the proportion is very small compared to the total amount of financing capital.

The development of Equity financing in China

Equity financing is a good and efficient real estate financing tool in other developed countries, however in China, it is not so easy because the Chinese government has strict policies on the real estate financing in the stock market. For example, in 1993-2001, as there appeared some bubble in the real estate industry in China, the Chinese government prohibited real estate companies financing through listing in the stock market. Till February of 2001, equity financing just came back. However, as the Chinese laws and regulations of the Stock Supervisory Committee (SSC) have strict requirement on the asset-liability ratio and the capital scale, many Chinese real estate companies cannot reach the requirements (Yang, 2009). Till now, there are still just a few real estate companies financing through going on list in the stock market. Table 8 Shows the characteristics of real estate companies financing through going on list in the stock market.

<table>
<thead>
<tr>
<th>Type</th>
<th>China real estate listing financing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listing process</td>
<td>Strict requirement, long time, complex process</td>
</tr>
<tr>
<td>Listing place</td>
<td>List only in the Mother board, not growth enterprise board</td>
</tr>
<tr>
<td>Supervision mechanism</td>
<td>Supervision is incomplete</td>
</tr>
</tbody>
</table>

Table 8 The characteristics of listing financing of China’s real estate companies

Problems

Though looking into the development of bond financing and equity financing in China, we can see that there are several problems in bond financing and equity financing. For bond
financing, the non-market-oriented measures on corporate bond of the Chinese government hinder the development of real estate bond market. Moreover, interest rate control policy restricts the development of real estate bond. The interest rate policy sets that the real estate corporate bond rate cannot be 40% higher than the interest rate in the bank. The Chinese government also sets that corporate bond rate cannot be higher than that of national bond to ensure the issue of national bond, which violates the principle of market economy (Han&Gao, 2005). Finally, there is not complete rating system for corporate bond, which will affect the credibility and accuracy of bond rating. For equity financing, the common problem is that the Chinese government and Stock Supervisory Committee (SSC) have strict requirements on the performance of the company; they require that the companies with IPO must be profitable in the last three consecutive years, there is no false record on the accounting document in the last three consecutive years, and the expected profit cannot be lower than the interest rate of the bank in the contemporary time (Xu, 2006). However, China’s real estate companies are mainly small and medium companies, few companies can reach the requirement of going on list.

2.2.6 Private Equity financing

Definition of Private Equity (PE)
Private Equity (PE) financing is collecting money from several independent individuals or institutions privately and sign equity investment agreement and equity subscription contracts with the capital supplier(Chen&Jin,2011). According to the U.S. Federal Bank Supervision Regulations, Private equity can be defined as

- Invest in financial or non-financial companies’ equity, assets or other ownership interests and sell it in the future or dispose it in other ways.
- Not directly operate any commercial or industrial business.
- Any financial companies, CEO, managers, employers or other owners can not hold more than 25% of the stocks.
- The longest period cannot be more than 15 years.

General PE includes equity investment in all the stages before IPO, which are seed period, start-up period, development period, extended period, maturity, and Pre-IPO, the relevant investment capital can be divided into Venture Capital, development capital, buyout/buy-in fund, Mezzanine Capital, turnaround, Pre-IPO( bridge finance), private investment in public equity( PIPE), distressed debt, real estate.
Narrow PE mainly refers to the part that invests in the companies which have a certain scale and produce steady cash flow and mostly they are buyout/buy-in fund and Mezzanine Capital. In China, the PE is the narrow PE (Qiao, 2010).

Real Estate PE collects money from rich persons or institutions and invests the money in the real estate companies or projects and get investment income and capital appreciation. In detail, Real estate PE mainly provides financial support directly for the unlisted real estate companies or projects and engages in capital management and supervision (Ai, 2008).

**Advantages of Real estate PE**

There are many advantages for PE financing in real estate industry. Firstly, it can improve risk resistance capacity of real estate companies. When PE invests in real estate companies, the investors will become the partner of real estate companies, and usually do not require real estate companies to pay dividend, so that PE financing won’t create burden for real estate companies. PE financing increases companies’ equity not debt, which can improve the risk resistance capacity of real estate companies. Secondly, PE financing can provide high value-added services for real estate companies. The managers of PE fund can provide much expertise for the real estate management and help real estate companies to improve. Finally, PE can satisfy the need of investment in real estate industry of private capital. Real estate PE provides a good condition for the private capital and institution capital, such as social security fund and insurance fund, to invest in real estate industry, which is good for both real estate companies and these funds (Chen&Jin, 2011).

**Real estate PE financing in China**

In the aspect of Real estate PE financing history, it can be divided into five stages since the beginning of real estate PE in the 1990s.

The first stage is from 1990s to 2003, the main form is cooperation in the real estate project development. Foreign PE and the real estate developers of China cooperate to found a joint venture and together invest in residential and commercial real estate.

The second stage is from 2004 to 2005, it’s mainly in the form of acquisition investment. Foreign PE acquires the most mature properties in the first tier city like Beijing, Shanghai and Guangzhou, but the volume is small and the scale is limited. In the year of 2004, it mainly acquires high-class residential houses and in 2005 it mainly acquires serviced apartments and Grade A offices and commercial real estate.
The third stage is from 2005 to 2006, it is mainly large scale acquisition. In 2006, there are about 150 foreign PE coming to mainland China, such as Gateway Capital, Profogis, AMB, Simon and GE capital. The acquisition scale is large and includes more forms from high-class residential houses to industrial properties.

The fourth stages is from 2006 to 2009, as the Ministry of Construction made a new policy ‘The advice on the access and management of foreign capital to real estate market’ and ‘On the Regulations of foreign investors acquiring domestic enterprises’, which made foreign PE transfer from direct acquisition to the equity investment in real estate companies or projects. The fifth stage is from 2009 to now, many real estate PE come out, there are more and more RMB fund and venture capital fund, some first-class real estate developers are trying to found foreign capital PE to finance from investors (Chen&Jin, 2011).

There are some special characteristics of Chinese real estate PE. Not like foreign countries, the capital source mostly comes from domestic investors, most real estate PE in China comes from foreign PE investment institutions. However, domestic PE is becoming more and more mature this two years. Moreover, real estate PE in China is more like ‘debt financing’ rather than equity financing. Foreign PE usually has some special requirements on the real estate companies (Chen&Jin, 2011).

2.2.7 Others

In practice, there are some other financing options which are not so common used in the commercial real estate financing. For example, there is equity cooperation development; some real estate companies cooperate to develop big and good projects to realize win-win cooperation. Moreover, insurance fund can invest in commercial real estate. On September 5th, the China Insurance Regulatory Commission promulgated ‘Temporary measures on insurance fund investing in equity’ and ‘Temporary measures on insurance fund investing in real estate’, which means that insurance fund can invest in real estate. Though there are many limitations on insurance fund investing in real estate, and it still increases the financing sources of real estate industry (Ifeng net, 2010). In addition, to borrow money from foreign bank is also an alternative. As the Chinese bank policies do not have limitation on foreign banks, foreign banks can lend money to qualified real estate companies. However, foreign banks have strict requirements on the performance of real estate companies, so it is not easy for every real estate company. And another seldom used option is financing from pawning house, it is fast and easy and it is a good option for small and medium real estate companies.
3. Mezzanine financing

3.1 Introduction of mezzanine financing

3.1.1 The definition of mezzanine financing

The mezzanine debt is senior to the original equity but junior to the bank, hence, viewed to reside in the middle. Mezzanine financing is generally used to fill the gap between low-risk collateralized debt obtained from traditional lenders and higher-risk equity interests. Unlike a traditional bank loan, a mezzanine lender does not hold real assets of a company as collateral but instead has an indirect link to the company's equity in the case of default. In other words, mezzanine lenders most often gain an equity ownership in real estate or the financed project, if borrowers default (Bean, 2008).

From the perspective of the cost of funds, mezzanine financing costs less than equity financing, for example, it can take fixed-rate of debt and it has the advantage of debt. From the perspective of equity, the equity of mezzanine financing is lower than debt, so in terms of the preferential creditors, it can demonstrate the advantages of equity.

3.1.2 The development of mezzanine financing in other countries

Mezzanine financing is well-developed in developed countries. It is estimated that there are more than 100 billion dollars investing in mezzanine fund (Liu&Song, 2007). The main investors were insurance companies in the early stage, and gradually mainly with fund companies and commercial banks. Fund companies account for 70% and commercial banks 20% (Sun, 2005). Many banks like Goldman, Deutsche Bank and Bank of America Merrill Lynch have set up mezzanine investment fund. As mezzanine financing products have good liquidity and low fluctuation, it has great attract for the institution investors like insurance companies, commercial banks, investment banks, hedge fund and pension fund. Mezzanine financing is a mature asset class. In the alternative assets class of institution investors, mezzanine asset accounts for 5%, and the current interest is 12%, the total annual average return rate of investment is 18-20%, the mortgage period is 5-7 years.

The default rate is low. It is estimated that the default rate is just 0.4% in the 550 mezzanine financing cases. Compared to other alternative assets, mezzanine financing has lower volatility. For the financing scale, mezzanine financing scale was 4 billion dollars in America.
In Europe, the mezzanine financing scale is from 500 million Euro in 1995 to 6 billion Euro (Sun, 2005).

Mezzanine financing has been widely used in emerging market. FMO has been providing mezzanine financing for small and medium companies for developing countries such as China, Indonesia, Thailand and Brazil. Also Value Partner has invested more than 100 small and medium enterprises in China (Liu&Song, 2007). There is great potential in Asia market. The economic development, enterprises upgrade and market reform increases the demand for venture capital, which creates a good opportunity for the development of mezzanine financing. The main demand in mezzanine financing focuses on infrastructure, industrial and commercial areas. The small and medium enterprises have great demand for mezzanine capital for the development.

3.2 Mezzanine financing in China’s real estate industry

3.2.1 The present situation of mezzanine financing in China

When direct financing and bank loans are difficult to get, mezzanine financing which is taken as the intermediate product plays great importance. As for real estate companies, when it is difficult to get bank loans and the equity financing is hard, mezzanine financing is a good financing option. Mezzanine financing is good for expanding real estate financing channels because developing real estate project needs large amount of money and mezzanine financing can provide 5-7 years’ loan, but banks always provide short-time mortgage loan. So mezzanine financing is more suitable for real estate, it can involve in different stages of the developing of real estate, for example, it can involve in the early stage to get bank loans or to be ‘bridge loan’ for other financing; it also can involve in the developing stage as developing capital. Moreover, the mode of satisfaction of mezzanine debt is flexible, which can be done according to the special financing requirement and operating conditions.

In China, there already has basic environment for developing mezzanine financing for real estate and the comparatively single financing channel promotes the development of mezzanine financing to relieve the heavy pressure of real estate companies. However, till now, there is only one case of real estate mezzanine financing in China- Lianxin. Porly NO.7’ which is the first real estate trust scheme with mezzanine financing (Yang, 2009). Lianhua Trust Company has two identities: investment subject and it also has 20% stock right of investment object which is Dalian Amber Bay real estate development company. But there is a problem of identity overlapping. There is also another case - Country Garden which is one of the biggest real estate developing companies. In 2008, Country Garden issued convertible bonds. Although the company did not need money, but issuing convertible bonds is good for
the future loan financing, buying back stocks, locking low borrowing costs and preventing the dilution of share capital (Zhang, 2008). The success issuing of convertible bond of Country Garden owes to foreign investment banks. This also shows that there is no reliable underwriting agencies and have to rely on foreign experience, but it is not a sustainable way. So the relevant institution should try to perfect the environment for mezzanine financing.

3.2.2 The feasibility of mezzanine financing in China’s real estate industry

The merits of mezzanine financing and the objective condition have determined that mezzanine financing has great potential in China.

Firstly, the internal characteristics of mezzanine financing are fit for real estate financing. Mezzanine financing can avoid policy constraint. “No 212” document made REITs in trouble, and prevent real estate companies to use REITs to finance. The requirement for mezzanine financing is low and not restricted in complete “four certifications” 35% of own fund and second-class qualification. Mezzanine financing can provide instant capital before real estate companies get “four certifications”.

Secondly, the flexible structure of mezzanine financing is suitable for real estate industry. The development period is pretty long, but the early invest is enormous. Mezzanine financing has flexible structure and the mode of repayment can be done according to the special financing arrangement and operating condition.

Thirdly, there is little limit for mezzanine financing. Compared with bank loans, mezzanine financing has limit in company control and financial restriction. Mezzanine financing seldom participate in the daily operation and the board of directors do not have voting right, which is good for the autonomous operating of real estate companies and free of investors’ control, so improving the operating efficiency of enterprises.

Fourthly, the cost of mezzanine financing is low and good for the dilution of equity (Du, 2008). The cost of mezzanine financing is lower than equity financing. As real estate is an industry with high risk, high return. Many small real estate enterprises would not like others to share their high return. Compared to equity financing, mezzanine financing suits the demand of real estate financing.

Finally, the external financial environment provides condition for the development of mezzanine financing. As the macro economy runs well and the financial system deepens
gradually, it creates a good and stable environment for real estate financing. And also diverse financing option is good for the development of real estate industry.

3.2.3 Problems of mezzanine financing in China’s real estate industry

For real estate companies, when real estate mortgage loan and equity financing becomes difficult, mezzanine financing has opened a new way for real estate financing. However, the problems of policy, law and mechanism make mezzanine financing difficult to develop. There are the following problems:

- The investment subject is single (Ye, 2010). In America, the investors of mezzanine financing are mostly investment banks, insurance companies and real estate investment trust institutions which have strong financial strength and sound risk control system. However, China’s investment banks, insurance companies and real estate investment trust institutions cannot do the work in the aspects of financial strength, risk control and financial instruments.

- The financial intermediary service system is imperfect. At present, the credit rating system is imperfect and there is a lack of professional security agencies with higher credibility. As the scale of mortgage insurance is very small, and it is difficult to form risk-sharing mechanism, which makes the risk higher of insurance.

- The legal environment is imperfect. In the order of claims, mezzanine financing is higher than equity and lower than debt. As to how to determine the borrower’s equity and how to determine the relationship of mezzanine investors and the mortgage borrower, there needs necessary complement for the laws such as ‘Company Law’ and ‘Security Law (zhang,2008)

- The risk control is imperfect. For investors, mezzanine financing has some risk. The first is exit risk. The main exit mode is Related-party repo, equity transfer and projects listed. But currently there are several problems in the three way. For example, for project listed, there is no listing channel for REITs, it is difficult to be listed for real estate companies Ye, 2010).

- Monitoring of real estate project is inadequate. The monitoring of real estate project risk is poor. According to ‘Temporary Measures for trust fund in investment and trust company’ only if trust company operates individually violating trust contracts, the
investors will be paid for loss. It means that trust company won’t pay for the loss occurring in the operation. So the inadequate monitoring for real estate project makes real estate investors facing great risk (zhang, 2008).

- Pricing and cost is not clear. As mezzanine financing has the characteristics of equity and debt, the pricing of mezzanine financing is complex. Although there is some calculation method in foreign countries, the capital market is not developed in China, we cannot copy the method. So the pricing of mezzanine financing is a big problem.
4. Case study of Guangzhou, China

4.1 The commercial real estate market in Guangzhou

Guangzhou is along the Pearl River and it is the economic, scientific and cultural centre of Guangdong.
Guangdong province which is in the southern part of China and adjacent to Hong Kong and Macao. The Guangzhou economy is China’s third largest city-level economy except Beijing and Shanghai. In 2010, Guangzhou’ GDP reached 1060.49 billion RMB, with an increase of 13%. As of the continuous increase of population increase, the solid demand for fixed asset and the high inflows of investments, these factors have combined to increase demand for commercial properties in Guangzhou and the properties are well positioned to benefit from such demand.

The development of Guangzhou’s commercial real estate is always connected with the development of business. Compared to the development of commercial real estate of Beijing, Shanghai and Hong Kong, Guangzhou is less mature and attracts less attention from investors. However, since the Asian Games in Guangzhou in 2010, more and more investors start to pay more attention to Guangzhou and discover its great business potential. Till 2011, there has added 1000,000 square meters’ commercial properties in Guangzhou, there are urban complex, commercial centre complex, small department stores, exclusive supermarket, specialized stores and so on. And there are also many international brands like H&M, Zara, Novo, Taste and so on coming into Guangzhou. There have already formed some new business districts, such as Wanda shopping mall, Zhujiang New Town, Panyu New Town.

These phenomenon shows that there will be great demand for commercial properties in Guangzhou, and Guangzhou’s commercial real estate market is going to mature.

In the past time, the business areas are relatively centralized. The main business districts are in Yuexiu district and Tianhe district, there are no mature business districts in other areas. However, in these years, Guangzhou’s business and commercial real estate develop very fast; gradually there have formed new business district in every area. Nowadays, there are five main business districts in Guangzhou, which is shown in the map.

**Tianhe business district.** It is in Tianhe District and the core business district in Guangzhou, there are several shopping malls like Teemall, Zhengjia mall, Taiku, Wanling mall and so on as well as many office buildings. Tianhe district is mainly for the middle and high class people.

**Huanshi Dong Road Business District.** It is located in Yuexiu district which is the old business centre. There are the most exclusive shopping malls here, which are positioned for the high class customers.

**China Plaza Business District.** It is located in Yuexiu district and it position in young and fashion people. There are several fashion brands here like H&M, ZVS and CMYK.
**Zhujiang New Town Business District.** It will be the new business district of Guangzhou and the government would like to make it as the most high-end business and trade centre, just like the Champs Elysees in Paris and The Fifth Avenue in America. Many famous commercial property companies have come here to share the cake.

**Baiyun New Town Business District.** It is in Baiyun district which is comparatively far away from the centre of Guangzhou. There was no big business district before, but in 2010 Wanda Plaza invested 5 billion replacing the old airport and build business area with high-grade offices, business offices, five-star hotels, shopping malls and shopping street.

### 4.2 Introduction on the interview questionnaire

There are 18 interviews which cover small and medium commercial real estate companies in 9 districts in Guangzhou, which are Baiyun, Haizhu, Tianhe, Yuexiu, Liwan, Huangpu, Luogang, Panyu, Huadu. The interview will be divided into three parts to get the detailed information to satisfy the research purpose. The first part is ‘Basic information about the company (developer)’, the second part is ‘The current and future financing options of the company (developer)’, and the third part is ‘The opinions of the developer on the future of commercial real estate financing’. The interview questionnaires were sent out by email. The total number of interview questionnaire that has been sent is 13, and 11 companies have replied. As some small commercial real estate developers just cooperate with different companies to do different projects, they still do not have their own companies. So they do not provide their company name and their position.

### 4.3 The analysis of interview questionnaire

**Basic information about these companies**

The interviewed companies mostly are small and medium real estate companies, questions 1 to question 6 in Part 1 are designed to know the scale and the structure of the companies. In the 11 interviewed commercial real estate companies, 36% of the total have 50-100 employees, 27% of the total have 101-200 employees.

With respect to the asset scale, Answer A, B and C have the same percentage of 27%, most of the companies have asset scale less than 2,000,000,000 RMB.

As to the completed commercial real estate space in the near 3 years, 36% of the total have
completed less than 20,000 square meters. 27% of the total has 20,000 square meters – 50,000 square meters and more than 50,000 square respectively. From the answer analysis, we can see that more than 90% of the small and medium commercial real estate companies have completed commercial space more than 20,000 square meters in the near 3 years.

From the interview questionnaire we can see that 64% of the 11 interviewed companies invest in shopping malls, 45% of the total invest in offices and 27% of the total invest in shopping streets, only 18% invest in hotels. And 9% of the total invests in others; the interviewed company invests in wholesale market.

In the 11 interviewed companies, 45% of the total have invested in commercial real estate for 4 ~6 years. And as to the stockholders, 45% of the total have more than 3 stockholders, which means that most small and medium commercial real estate companies usually cooperate to develop projects. This also shows that the strength of small and medium commercial real estate companies is limited and they need to cooperate.

From the questionnaire analysis of Part 1, we can draw a conclusion that small and medium commercial real estate companies have medium strength, which includes their employee number, asset scale, completed commercial space. Moreover, most of these companies invest in shopping malls and offices. The small and medium companies usually cooperate to develop real estate projects, which is because of the strength of these companies is limited; they need to cooperate to develop.

The current and future financing options of the companies

With respect to the current main financing options of small and medium commercial real estate companies, self-funded option and native bank loans have the same percentage of 64%, 55% of the total choose stock right cooperation. There is still 27% of the interviewed companies choose other financing options, which are government investment and high interest loan in some underground organization. The answer shows that self-funded option, native bank loan and stock right cooperation are the main financing options of the small and medium commercial real estate companies.

With respect to the financing options ranking of the commercial real estate companies, 64% of the totals choose self-funded option as the first choice, and most companies have percentage of self-funded more than 50%. And 36% of the companies choose stock right cooperation as the second choice because developing commercial real estate projects needs large amount of money, small and medium developers need to cooperate to develop
commercial projects. 18% of the totals choose native bank loan and stock right cooperation as the third choice.

When asked to the other possible financing options in the future 10 years, 55% of the total companies choose answer G, which is private equity financing. Answer B and Answer I have the same percentage of 45%, which are native bank loan and stock right cooperation. 18% of the totals choose foreign bank loans, 27% of the total chooses issuing corporate bond, 9% of the total chooses issuing REITs and 18% of the total chooses to issue CMBS. From the interview questionnaire answers, we can see that private equity financing, native bank loan and stock right cooperation are the main choices of the companies; however, some companies also try to choose other new financing options such as issuing REITs and CMBS. The small and medium real estate companies want to expand the financing channels.

From the answer analysis of Part 2, it shows that most of the small and medium real estate companies have self-funded option, native bank loan and stock right cooperation as the current main financing options, and self-funded option is the first choice, stock right cooperation is the second choice, which is because the financing options are very limited, the financing cost is high, the small and medium real estate companies try to finance by themselves. However, some companies also consider using other new financing options like issuing corporate bond, issuing REITs and CMBS, private equity financing in the future 10 years.

The opinions of the developer on the future of commercial real estate financing

The third part is open questions. It is designed to know the opinions on commercial real estate financing of the developers.

When asked about the current problems of commercial real estate financing, most of the developers have the following opinions:

- The financing cost is high, the time of bank loan is short and the interest rate is high.
- The financing options are very limited and depend much on bank loan.
- The policies on real estate industry are not clear, which makes the financing of real estate more difficult.
- The operation, management and profit allocation are difficult to unify after the commercial property is completed.

With respect to the most suitable financing options of small and medium commercial real
estate companies in the future, the developers have the following opinions:

- If banks can provide long term loan for commercial real estate, bank loan is a good choice.
- Issuing corporate bond and private equity financing
- Issuing REITs and CMBS.
- Foreign bank loans and stock right cooperation

From the answers, we can see that the main problem of commercial real estate financing is single financing option and it depends much on native bank loan. Moreover, most companies expect new financing options and would like to try the new financing options, which means it is meaningful to study the financing options of commercial real estate.
5. Financing option for China’s small and medium sized commercial real estate companies

5.1 Characteristics of commercial real estate in China

Commercial real estate has the characteristics that are quite different from real estate, so the financing method for commercial real estate should also be adjusted according to its characteristics (Xi, 2007).

- Huge investment. As it is always better to both build and hold commercial property, and it is usually more costly to get land for commercial real estate, the investment is huge in the previous stage.

- Long payback time of investment. As the capital recovery of the huge investment in the previous stage depends on the operation of commercial property in the hold time, the payback time of investment is comparatively long; it is usually 8-10 years.

- Integrity of operation of commercial property. As the value of commercial Property would be realized through the success operation of commercial property. It determines that it must keep the integrity of the project if it wants to realize the largest value of commercial property. However, currently as commercial real estate is not mature in China; most developers still use the method of residential real estate of get back capital. Usually they sell commercial properties to investors, which lead to separation of property rights. However, the tendency of commercial real estate market in China is that it will become more mature and more near to international commercial property operation way.

5.2 Characteristics of commercial real estate financing

As commercial real estate realizes its value through the rent recovery produced in operating stage, it determines the financing of commercial real estate is long-time. However, for residential real estate, the capital can be recovered when the property is sold. So commercial real estate financing has its distinctive characteristics, the financing can be divided into several stages. In America, commercial real estate financing can be divided into three stages, which are Land acquisition, Development and Construction (Xi, 2007). The financing option
in different stage is different. As commercial real estate financing needs huge capital, it makes financing much easier and feasible through deploying different financing options in different stage.

5.3 Problems in commercial real estate financing in China

As commercial real estate has not developed so long time, the financing is also not mature; there are several problems in commercial real estate financing.

- Single financing option and the risk of bank is too high. The main financing channel of commercial real estate is bank loan and self-financing. The ratio of bank loan accounts for 70%-80% which increases the risk of banks.

- There is no special financing way for commercial real estate. Currently, the financing way for commercial real estate is almost the same with that of residential real estate. There is no special financing way according to the characteristics of commercial real estate, which makes small and medium commercial real estate companies difficult to finance. It is usually difficult for small and medium companies to get bank loans because banks usually provide short-time loans. Although there are already some financing options that are very good, such as equity financing, issuing REITs, CMBS and so on, it is difficult for small and medium companies to use them because these methods are imperfect in China.

- The operating way is unreasonable. As it is difficult to finance a large amount of money, most commercial real estate developers sell the properties even before they are finished. This would cause the problem of separation of property rights, which makes it difficult to realize the maximum value. And it will result in several operating problems. This problem causes that it is risky to invest in commercial real estate, making financing more difficult.

5.4 The suitable financing options for small and medium commercial real estate companies

Through the study of theory on commercial real estate financing and the interview questionnaires, it indicates that the commercial real estate market does not develop mature and the financing methods are imperfect. However, referring to the development of commercial real estate in foreign countries, the commercial real estate market will go to mature and the financing will go to diverse. So it is better to suggest some financing options
that both suit the current situation and the future situation. According to the characteristics of commercial real estate, it is better to use different financing strategy in different stage. The table below shows the financing suggestions of this article.

**Table 9 Financing options suggestions of this article**

<table>
<thead>
<tr>
<th>Stage</th>
<th>Preparation stage</th>
<th>Construction stage</th>
<th>Operating stage</th>
</tr>
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<tbody>
<tr>
<td>Stage1</td>
<td>1. Bank loan</td>
<td>1. REITs</td>
<td>1. Private equity financing</td>
</tr>
<tr>
<td></td>
<td>2. Bridge loan</td>
<td></td>
<td>2. Commercial operating property mortgages</td>
</tr>
<tr>
<td></td>
<td>3. To cooperate with big retailers</td>
<td>3. REITs</td>
<td></td>
</tr>
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</table>

In the preparation stage, the investment is huge, which almost accounts for 40% of the total investment. The investment includes land transfer payments, resettlement compensation, and architectural design fees and so on. Considering the current financing situation in China and
the characteristics of commercial real estate financing in the previous stage, Bank loan, bridge loan, mezzanine financing and cooperating with big retailer are suggested to finance in the previous stage.

**Bank loan.** Bank loan is still the main financing option for commercial real estate. It is comparatively easy and common to get and it can provide huge and short-time loans, which ensure the acquisition of land. Although it is still difficult for small and medium commercial real estate companies to get bank loans, currently it is the most efficient and suitable way.

**Bridge loan.** Bridge loan is a kind of transition loan. The characteristics of bridge loan are short time and high interest (Xue, 2008). When it is difficult to get bank loans through mortgage land, developers can finance through non-bank financial institutions. Bridge loan is a choice which can help developers to get land. Then the financing is easier.

**To cooperate big retailers.** It is a mode of renting first and building afterwards. Developers cooperate with big retailers to develop commercial property project together. The advantages are: to get margin for retailers in advance, to increase rent for individual investors through the brand effect of big retailers. Moreover, to reduce risk in the construction period. Finally, to get stable cash flows in the operating stage. However, the developers may need to make some compromise if they want to cooperate with big retailers. This kind of financing is demonstrated successful in the case of Wanda which is the biggest commercial real estate developer in China.

**Mezzanine financing.** As the biggest characteristic of mezzanine financing is high degree of flexibility. It can provide developers large amount of money in the preparation stage, which can be taken as ‘Bridge loan’ to help to get bank loans.

In the construction stage, the main cost includes construction engineering fee, supporting facilities fee and so on. The financing progress should coordinate with the developing progress.

**REITs.** Real estate investment trusts can provide personalized trust product according to the need of the project. Currently REITs in China face directly to the primary market, providing developing loans for real estate companies. REITs is in the nature of bond in China, it has fixed maturity and fixed expected rate of return. When bank loan is difficult for real estate companies, REITs is also a good choice.

**Mezzanine financing.** Mezzanine financing can be used as developing capital in the
construction stage because mezzanine financing is flexible. It can arrange financing structure and mode of repayment flexibly according to the special requirement of real estate companies. The acquisition of mezzanine capital is comparatively easy because it does not have the limit of ‘Four Certification’ and the limit of bank loans.

In the operating stage, the value is produced through the successful operating of commercial properties. The financing institutions in this stage get involved to make the safe exit of the capital in the first two stages. The characteristics of the financing in this stage are firstly long-time, secondly focusing on the operating of commercial properties. The objective of this stage is to realize the increase in value through successful operating of commercial properties and the capital operation in the capital market. In this stage, the risk is mainly operating risk; the investment institutions help the successful operation of commercial properties and get back capital stable income. Many innovative financing options can be used in this stage such as REITs, CMBS, PE and Mezzanine financing. However, they are seldom used currently in China as the commercial real estate market is not mature. Referring to the developing trend of international commercial real estate, these innovative financing methods will become popular.

**Private equity financing.** Real estate PE mainly provides financial support directly for the unlisted real estate companies or projects that have stable cash flow and engage in capital management and supervision (Ai, 2008). In this point, it suits the characteristic of the operating stage. PE financing can provide high value-added services for real estate companies. The managers of PE fund can provide much expertise for the real estate management and help real estate companies to improve.

**Commercial operating property mortgages.** Banks give commercial operating property mortgages to the owner entity of the operating property and the property as the collateral, the source of repayment include the operating income of commercial operating property mortgages and other sources. As to small and medium commercial property developers, commercial operating property mortgage is a very good alternative because it is comparatively easy to get, the key points to get the loan is to satisfy the two requirements: the value of the collateral and the cash flow of the collateral. The characteristics of loans are flexible, long-time and flexible repayment methods, which suits commercial operating properties.

**REITs.** REITs investing in commercial properties is common in foreign countries. Equity REITs can directly invest in real estate, usually income-producing properties like hotels, shopping malls and commercial or industrial properties and take the rents income and the appreciation in the properties as profits. It will participate in the management of commercial
property, which helps the successful operation of commercial property. Although REITs just started in China and most REITs are mortgage REITs, the commonly used equity REITs is the trend in the commercial real estate market in China. The stable cash flow of commercial operating property makes it possible to finance huge amount of money through REITs.

**CMBS.** Commercial mortgage-backed securities (CMBS) are a type of mortgage-backed security backed by mortgages on commercial rather than residential real estate, it represents a claim on the cash flows from mortgage loans through a process known as securitization. It invests in commercial property which and produce stable cash flow. As it has the characteristic of low financing cost, low risk and high return, it has been accepted worldwide. It is still in the primary stage in China and also less used in the commercial real estate. However, it has great development potential in China. CMBS provides more efficient, low-cost and diversified financing options, meanwhile it transfers the illiquid financial assets to liquid and tradable assets. For investors, CMBS can provide higher investment income compared government bonds and flexible and diversified investment products.

**Mezzanine financing.** As it is flexible, it can also be used as flow capital in the operating stage. Mezzanine financing is long-time, which suits the characteristic of commercial property.

### 5.5 Measures for the better application of mezzanine financing in China’s real estate industry

The merits of mezzanine financing and the objective condition have determined that mezzanine financing has great potential in China. The characteristics of mezzanine financing suit the characteristics of commercial real estate.

Firstly, mezzanine financing has flexible structure and the mode of repayment can be done according to the special financing arrangement and operating condition. As the developing time of commercial property is long and the capital demand is huge, this characteristic of mezzanine financing can satisfy the need of commercial property financing. Especially for the small and medium size enterprises, it is usually difficult to finance through long-period loan or issuing bond. However, mezzanine financing can provide 5-7 years’ capital.

Secondly, mezzanine financing can avoid policy constraint. When it is difficult to get bank loans and issue REITs, mezzanine financing can provide instant capital and can be taken as
‘bridge loan’ in the early stage to get loans. This is very useful in the land acquisition stage of commercial property. Only if real estate companies have some financial and technical strength, they can use mezzanine financing. Also real estate companies can choose investment options according to their risk preference.

Thirdly, the cost of mezzanine financing is low and good for the dilution of equity (Du, 2008). The cost of mezzanine financing is lower than equity financing. As real estate is an industry with high risk, high return. Many small real estate enterprises would not like others to share their high return. Compared to equity financing, mezzanine financing suits the demand of real estate financing.

Finally, considering the current policy environment in China, it is comparatively easy to carry on mezzanine financing compared to other innovative financing options such as REITs and CMBS. For REITs, it needs to get ‘four certifications’, for CMBS, it needs a large and diverse asset pool and good rating agency. Mezzanine financing is more flexible and more suitable to the current situation in China. However, there are still some problems for mezzanine financing developing in China. Some measures are suggested for mezzanine financing in China.

1. To construct diversified mezzanine investor structure. In the early stage, the capital is not enough; the government should help the financing institutions to have financial product innovation. According to China’s current situation, commercial banks should be the first to carry on mezzanine financing innovation because it has stronger financial strength, higher technology and larger market.

2. To improve the legal system of China. Although mezzanine financing started and developed in developed countries where there has formed a perfect market in laws and regulations, systems and tools for mezzanine financing. However, it just started in China, there are no relevant laws and regulations for mezzanine financing in China, which imposes great risk for the development of mezzanine financing. So the government should try to draw up relevant laws and regulations that are good for mezzanine financing, for example, tax incentives, financial subsidy, encouraging the development of mezzanine financing.

3. To construct sound intermediary services for mezzanine financing. According to the experience of foreign countries, the development of mezzanine financing needs a series of related supporting service system. There is no credible credit rating agency, professional guarantors and risk-sharing mechanism. So the government should try to change the
current situation.

4. To strengthen risk control. As mezzanine financing is a new concept for real estate developers and investors, the relevant laws and regulations are not perfect, the risk control is important for both developers and investors. First, the investors should carefully know the invested project, and have a proper investment proportion according to their own risk tolerance and requirement of expected return. Moreover, to introduce an independent third-party to manage assets. In addition, an insurance company can be introduced as insurance institutions for guarantee of mezzanine funds, ensuring the safety of investment (Zhang, 2008)
6. Conclusions

As the characteristics of large-scale investment, long pay-back period and intensive capital requirement, the financing of commercial real estate is quite different from that of residential real estate and it is more difficult than real estate financing. Nowadays the financing options of commercial real estate in China are very limited, especially for the small and medium real estate companies.

From the literatures, it is known that bank lending and their own funds are the main sources of financing. However, as developing commercial real estate needs large amount of money, it is difficult for small and medium real estate companies to take out so much money. Moreover, considering the high risk in real estate lending, many banks have more and more strict rules for the real estate lending, especially for commercial real estate. Some other financing ways are also used, such as issuing corporate bond, REITs, CMBS and so on. However, as in the special circumstance in China, there are many limits and the laws and regulations are not complete, currently it is difficult to use these methods.

From the interview questionnaire results, it shows that native bank loans, self-funded option and stock right cooperation are the main financing options for small and medium commercial real estate companies. Most of the interviewed companies want to choose private equity and stock right cooperation in the next 10 years. Some companies also would like to choose issuing corporate bond and CMBS. It shows that the developers expect new financing options, but in practice, they still would like to use the traditional financing options such as bank loans and stock right cooperation. Although the innovative financing options such as REITs, CMBS and mezzanine financing are popular in foreign countries, it is difficult to carry out in China because the economic and politics environment in China is quite different from that of foreign countries.

According to the characteristics of commercial real estate, this article advises to use different financing strategy in different stage. In the preparation stage, the investment is huge. The investment includes land transfer payments, resettlement compensation, and architectural design fees and so on. Considering the current financing situation in China and the characteristics of commercial real estate financing in the previous stage, Bank loan, bridge loan, mezzanine financing and cooperating with big retailer are suggested to finance in the previous stage.

In the construction stage, the main cost includes construction engineering fee, supporting facilities fee and so on. The financing progress should coordinate with the developing
progress. REITs and mezzanine financing are advised to use.

In the operating stage, the value is produced through the successful operating of commercial properties. The financing institutions in this stage get involved to make the safe exit of the capital in the first two stages. Many innovative financing options can be used in this stage such as REITs, CMBS, PE and Mezzanine financing.

As the merits of mezzanine financing and the objective condition of China has determined that mezzanine financing has great potential in China. The characteristics of mezzanine financing suit the characteristics of commercial real estate. It is suggested in the article mezzanine financing is a good choice for commercial real estate financing.
Appendix

1. Questionnaire

Introduction
The research purpose of the interview is to get practical information on the financing situation of small and medium commercial real estate developers in Guangzhou. The interviews cover 9 districts in Guangzhou, which are Baiyun, Haizhu, Tianhe, Yuexiu, Liwan, Huangpu, Luogang, Panyu, Huadu. The interview will be divided into three parts to get the detailed information to satisfy the research purpose. The first part is ‘Basic information about the company(developer)’, the second part is ‘The current and future financing options of the company(developer)’, the third part is ‘The opinions of the developer on the future of commercial real estate financing’. The questions of the interview are both closed and open questions.

Part 1 Basic information of the company/developer

Name of your Company: _________________
When is your company founded? __________
Position of the Responder: _______________

1. How many employees do you have in your company?
   (Single choice, please fills the answer in blank space.)____
   A. Less than 50
   B. 50-100
   C. 101-200
   D. More than 200

2. What is your company’s asset scale?
   (Single choice, please fills the answer in blank space.)____
   A. Less than 500,000,000 RMB
   B. 500,000,000-1,000,000,000
   C. 1,000,000,001-2,000,000,000
   D. More than 2,000,000,000

3. What is your company’s main investment field in commercial real estate?
   (More than one choice, please fills the answer in blank space.)____
   A. Offices
   B. Industrial real estate
   C. Shopping mall
   D. Shopping street
   E. Hotels
   F. Others (Please specify___________)

4. How much commercial space have you completed in the recent 3 years?
   (Single choice, please fills the answer in blank space.)____
   A. No completed commercial space in the recent 3 years
   B. Less than 20,000 square meters
5. How long has your company engaged in commercial real estate investment?
   (Single choice, please fills the answer in blank space.)____
   A. 1-3 years
   B. 4-6 years
   C. 7-9 years
   D. 10+ years

6. How many stockholders in your company?
   (Single choice, please fills the answer in blank space.)____
   A. One
   B. Two
   C. Three
   D. More than three

Part 2 The current and future financial options
1. Till now what is your main sources of financing in your company’s development of commercial real estate?
   (You can choose more than one choice, please fills the answer in blank space.)_________________
   A. Self-funded
   B. Bank loan from domestic banks
   C. Bank loan from foreign banks
   D. Issue corporate bond
   E. Issue REITs
   F. Issue CMBS
   G. Private Equity financing
   H. Mezzanine financing
   I. Cooperation with others
   J. Others (Please specify)___________

2. Please rank the financing options of your company (If you do not have the options, you do not need to rank.) .
   □ Self-funded
   □ Bank loan from domestic banks
   □ Bank loan from foreign banks
   □ Issue corporate bond
   □ Issue REITs
   □ Issue CMBS
   □ Private Equity financing
   □ Mezzanine financing
   □ Cooperation with others
   □ Others

3. What is the percentage of your first three sources of financing?
   (Please fills the the financing sources and its percentage in the following blank space.)
1. ,
2. ,
3. ,

4. In the next 10 years, which financing options is your company plan to use except the current financing options?
   (You can choose more than one choice, please fills the answer in blank space.)
   A. Self-funded
   B. Bank loan from domestic banks
   C. Bank loan from foreign banks
   D. Issue corporate bond
   E. Issue REITs
   F. Issue CMBS
   G. Private Equity financing
   H. Mezzanine financing
   I. Cooperation with others
   J. Others (Please specify)

Part 3 Opinions of the developers on the financing options in the future
1. Which financing options do you think is the most suitable one for small commercial real estate companies in China?
   (Please write your answer in the following blank)

   _____________________________________________________________
   _____________________________________________________________

2. What problems do you think exist in the current financing option system?
   (Please write your answer in the following blank)

   _____________________________________________________________
   _____________________________________________________________

Thanks very much for answering this questionnaire. I will carry on the statistics research of the whole document after gathering all the answers of questionnaire. If you want the feedback of the statistics information, please write your email address:______________________________________________________________________________________________

Please remember to save and sent the answers to: minliu@kth.se Min Liu
   Thank you very much!
2. Questionnaire analysis

### Part1 & Part2 - close end questions

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<td>Others</td>
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