The Chinese Real Estate Asset Securitization Process: Opportunities and Challenges

by

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Submitted to the Program in Real Estate Development in Conjunction with the Center for Real Estate in Partial Fulfillment of the Requirements for the Degree of Master of Science in Real Estate Development at the
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ABSTRACT

China’s real estate market has recently experienced a down turn after decades of exponential growth. High returns on new developments used to attract large capital inflow to the real estate market. Yet as the real estate market slumps and the profit margin drops, the real estate market is now experiencing a shortage of capital.

The modern Chinese real estate market only started around the early 1990s. With just 25 years of history, it has grown to be one of the largest real estate markets in the world. Compared to the huge advancement in the development industry, the real estate investment market seems to have lagged behind. Domestic private equity investment in Real Estate only became popular around 2009. Currently, the majority of the developers in China are still relying on traditional bank loans and internal cash to finance their projects. While compared with their foreign counterparts, the Chinese developers do reserve lots of cash, the general trend is to employ less internal capital and rely more on external equity financing.

As a result, the Chinese real estate capital market welcomes and demands financial innovation, particularly on the public side. Both public equity market and the public debt market are under experiment in China. This thesis first investigates REITs and CMBS in the US from a historical perspective. Then it directs its attention to China and investigates the opportunities and challenges lying ahead for the Chinese public capital market. The thesis concludes with a prediction of the characteristics of the first Chinese REITs and CMBS. It will try to answer the following questions. Does China need a securitized public market like the US? Is China fully prepared for such a real estate financial transformation? What current securitization products are out there in China? What regulations need to be further addressed to establish the Chinese REITs and CMBS markets? What would the first Chinese REITs and CMBS be like in the near future?

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Chapter 1 Introduction

1.1 Background

As a MSRED student at the Center for Real Estate at MIT, I received the best education in Real Estate Finance. I have a passion towards real estate finance and investment. Before MIT, I would equate real estate to real estate development. I believe that’s also what the word “Real Estate” means to the great majority of the Chinese people. The Chinese real estate market is leaning heavily towards the development side while the real estate finance side is just starting to evolve. Combining real estate with finance is a recent concept for the Chinese people. There have been examples of using private equity to fund real estate developments. However, we haven’t seen many successful examples in the public capital market. The development of the public market, especially the retail market, relies heavily on the securitization of real estate assets. This is why this thesis focuses on the securitization process that is a quite popular topic in the Chinese real estate industry nowadays.

This thesis projects a bright future for the securitization of real estate assets and the opening up of the public capital market. As of June 2015, there is technically no REIT or CMBS products in China. There are however similar products which advertise themselves REIT and CMBS. Yet they differ greatly from traditional US REITs and CMBSs. I believe this is due to two reasons, the Chinese securitization products are in their infant stage and have not fully matured like their US counterparts. The other reason is that the Chinese culture is different from the US culture. I strongly believe that the financial innovation is not a matter of pure technicality but a matter of cultural evolution. The general understanding of finance and people’s risk appetite are very different between China and the US. Take the stock market as an example, the erratic
fluctuations in June of 2015 of the Chinese stock market indicates people's irrational behavior towards investment in the stock market. The US stock market on the other hand behaves differently and is relatively stable. The same products even well developed and matured in the US cannot be copied and pasted into China's context. The future Chinese REITs and CMBSs will need to evolve on their own into a somewhat unique product. It will need to match people's appetites in China.

The characteristics of future Chinese REITs and CMBSs will be presented in the conclusion part of this thesis and I will use my judgements as much as I can to arrive at a reasonable forecast of the Chinese REITs and CMBSs. The idea that REIT and CMBS products are deeply rooted in the culture and may well be different from US products is persistent throughout this thesis. I do believe that Chinese REITs and CMBSs have a long way to go but I don't think they will necessarily be and should be the same as US ones.

I will lay down the background information for the birth of Chinese securitization products from the following two different perspectives.

1.1.1 The story of the developer

First of all, from the developers' perspective, they have long adopted the merchant builder model for residential development: borrow short term debt from the bank, build, sell and quickly recoup the costs to maximize profit. When the same merchant builder model is applied to commercial retail properties, the separate selling of retail spaces rather than wholesale of the entire mall creates potential problems in property management. The most successful retail malls are almost all held long term by single owners for better management. The shift of the development model from residential to commercial real estate also demands longer term financing methods. The
public market is one of the major channels for the financing and disposition of commercial assets.

In addition, as the real estate market slumps and the development profit margin shrinks, banks and private equity money are less willing to lend to developers. The cost of capital for developers are higher than before due to higher risk in the industry. The pooling of assets via securitization tools such as REIT and CMBS and subsequently selling them to retail buyers is an effective way of getting financing at a relatively lower cost.

1.1.2 The story of the general public

From the public’s perspective, the Chinese people demand new ways of investing their savings. The Chinese have long adopted the culture of saving money but lack effective ways of investing their savings. Putting money in banks, the stock market and the housing market are ways of investing in the past. However, there are obvious shortcomings to these methods. First of all, banks are offering very low returns, probably not enough to counter the effect of inflation. Second, the Chinese stock market is not as mature as the US market and behaves quite irrationally with much uncertainty. Third, in the housing market, prices are dropping. Wealthy Chinese families used to own two or three apartments expecting the rise in their value. In fact, housing prices have risen so rapidly in the past that rents have lagged far behind. Thus, the yields on residential properties are very low. When the growth component of the return diminishes, the total return on the properties is in turn greatly reduced. The housing market suddenly becomes very unattractive to investors. As a matter of fact, housing prices have dropped in most of the second tier and third tier cities in China and many investors have lost money on their investments.
As a result of the downturn, retail investors need new ways of investing in the real estate market. Two new aspects that will be of great interest to investors are the ability to invest in stabilized commercial assets and the higher liquidity of investing. These can be achieved through securitization, breaking down a large investment to pieces for retail investors and provide liquidity at the same time.

In conclusion, from both the developer and the general public’s perspectives, public market is needed to complete the picture for real estate investment.

1.2 Basic Concepts

This thesis tackles the issues of securitization, trusts, REITs and CMBS. There are many concepts involved that need to be explained from the beginning.

1.2.1 Securitization of Assets

First of all, let’s understand what “Asset” is. The definition of “asset” can be from multiple perspectives. The Merriam-Webster dictionary defines asset as “property owned by a person or company, regarded as having value and available to meet debts, commitments, or legacies.” This is a very broad definition. When we define asset from an accounting perspective, it is simply “A balance sheet item representing what a firm owns.”

Now let’s specifically focus on the financial aspect of asset. An asset can be a real object that has value to someone, but in finance, it is simply a contract that promises a value in the future. It doesn’t necessarily need to be a real “thing”, or we just don’t care what such a “thing” that produces value is. “Every time a person or a firm makes a promise to pay, a financial asset is
born. The promise can take the form of a verbal agreement or a written contract.”¹ What we are most interested in is the future benefit or future cash flow such an asset generates, be it a piece of real estate, a factory or maybe a mortgage. In the context of this thesis, we are mostly concerned with real estate assets and commercial mortgages.

These financial promises or assets are the raw material that the securitization market is built upon. Sometimes through financial engineering, we package the assets, pass them through a variety of legal structures and ultimately sell them to hundreds and thousands of investors. “The process of packaging financial promises and transforming them into a form whereby they can be freely transferred among a multitude of investors is securitization.”²

Through securitization, we achieve two objectives. First, we can adjust the size of a transaction. Second, we can adjust the risk associated with a transaction. Securitization transforms raw assets into tradable units. A process called “Structuring” rearranges the amount of cash flow and the risk of such a cash flow.

Securitization is one of the three tools of finance, the other two being direct obligation and derivatives. These tools create the different financial products in today’s market.

1.2.2 Trust

The concept of a trust is central to the asset securitization process. Both CMBS and REITs are structured as trusts. Trusts also have many broad definitions depending on the context. I want to define “Trust” from a legal perspective. Different countries have different trust laws. For reference to the US trusts, I want to quote two different sources from the US legal system.

¹ Andrew, D., Anthony S., Lan-Ling W., Anne C. Securitization.
² Andrew, D., Anthony S., Lan-Ling W., Anne C. Securitization.
First, the Restatement of Trusts (1959) defines a trust generally as "a fiduciary relationship with respect to property, subjecting the person by whom the title to the property is held to equitable duties to deal with the property for the benefit of another person, which arises as a result of a manifestation of an intention to create it".3

Second, the Internal Revenue Code refers to "an arrangement created by will whereby trustees take title to property for the purpose of protecting and conserving it for the beneficiaries under the ordinary rules applied in chancery or probate courts. Generally speaking, an arrangement will be treated as a trust under the Internal Revenue Code if it can be shown that the purpose of the arrangement is to vest in trustees responsibility for the protection and conservation of property for beneficiaries who cannot share in the discharge of this responsibility and, therefore, are not associates in a joint enterprise for the conduct of business for profit."4

Trusts are defined in terms of parties (grantor, trustee, beneficiary) and relationships pertaining to the trust property. The grantor contributes the property to the trustee and states the term of the trust, the trustee received the property and hold it for the benefit of the beneficiaries. There is a title transfer from the grantor to the trustee. The trustee is the legal owner of the property but must use it for the benefit of the beneficiaries. As a fiduciary, he owes the beneficiaries duties of loyalty and care. The beneficiary is the beneficial or equitable owner of the property. The beneficiary is said to have the "use" of the property, and can appeal to the court for an accounting or replacement of the trustee to ensure proper use of the property.

1.2.3 REITs

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3 Restatement of the Law of Trusts
4 Internal Revenue Code, Reg. 301.7701-4(a)
REITs is one of the two most important securitization vehicles that this thesis focuses on. Real estate investment trusts are essentially closed-end funds that hold real estate in their portfolios instead of stocks and bonds. As a consequence, they represent an alternative form of securitization. REITs can hold real property and distribute the cash flows as well as capital appreciation to the shareholders. REITs are a way of securitizing real properties into securities.

1.2.4 Mortgage

Before I talk about Commercial Mortgage Backed Securities, I want to first define Mortgage. “A mortgage is an instrument in which the title to real estate is held as security against the repayment of a debt.” “A lien is a legal claim on the property that allows the lien holder to satisfy the debt through foreclosure and sale of the property.”

All mortgages are basically composed of two parts: the mortgage deed or deed of trust, and the promissory note. The mortgage deed describes the real estate to be used as collateral against the repayment of the note. A deed of trust is similar to a mortgage deed except that the borrower creates a trust and conveys the title of the property to a trustee who holds it as security for the benefit of the lender. The promissory note is a personal promise to repay the note, and even in the absence of any real estate security, the borrower would still have an obligation to repay the note. The note spells out the financial terms of repayment as well as the rights and interest of the lender and borrower.

Regarding the title of the property, there are two different approaches. One is the title theory, where the title is held by the mortgagee or lender. The other is lien theory, where the mortgagor or borrower still retains the title and the mortgagee holds a lien against the property.

1.2.5 CMBS
Commercial mortgage-backed securities is another one of the securitization products that I focus on in this thesis. CMBS is a type of mortgage-backed security backed by commercial mortgages rather than residential real estate. Thus it is very different from residential mortgage-backed securities, RMBS or just MBS. The underlying collateral is commercial properties. To be more specific, commercial properties consists of retail, office, industrial, multifamily and hotels. Except for the difference in underlying assets, CMBS has other different characteristics such as prepayment.

1.3 Methodology

This thesis is a qualitative study of the asset securitization progress in Mainland China. It draws upon the current experiments in China and some Asian examples to project the future impact of the securitization of assets to the real estate industry. A broad spectrum of literature including past research papers, market reports, company financial statements, related law and regulatory provisions as well as interviews conducted with Chinese financial institutions form the basis of this thesis’s research.

1.4 Research Basis

On the history of US securitization process, there is abundant resource on the CMBS and REIT market’s development. The book Commercial Real Estate Analysis & Investments by David Geltner, Clayton Miller, Eichholtz, P. is a comprehensive book on the finance and investment of real estate. Chapter 20 and Chapter 23 goes into depth about the CMBS and REITs. Charles Long’s Finance for real estate development published by the ULI provides an overview of the financing structures and methods for development projects in the US.
Chapter two of John A. Mullaney’s *REITs building profits with real estate investment trusts* educated us on the history of REIT booms. *Securitization* by Andrew, D., Anthony S., Lan-Ling W., Anne C. is a book focused on the structuring and investment analysis of all securitization products including MBS and CMBS. CRE Finance Council published the *CRE Finance Council CMBS E-Primer, a comprehensive overview of commercial mortgage backed securities*, which gave a comprehensive overview of the development of CMBS in the US.

For the HK REITs and CMBS, the examples are readily available. Most of the HK REITs are publicly listed and their annual reports reveal their performance. The MIT thesis by King Man Chow, “an analysis of Hong Kong REITs: current and future opportunities for investors”, has given an overview of the Hong Kong REITs market, discusses the present investment values of the REITs and their future prospects. Another MIT thesis by Denise Tan on “Corporate Governance: The Case for Asian REITs” investigates the various Asian REIT regimes and further examines corporate governance systems around the world.

In China, asset securitization is a popular topic under much attention these days as the Chinese real estate market faces decline after decades of growth and expansion. There is a great deal of press focus in this area. Some of the Mainland Chinese companies such as Pingan Trust, Vanke and Wanda are now experimenting on Chinese REITs. Recent developments of these experimental REIT or CMBS products are mostly revealed through the media. Reports of *Financial Times, Wall Street Journal* and Chinese financial media sources will be valuable resources for this thesis. There are also official publications or prospectus on the issuance of these “quasi” REIT or CMBS products that are publicly available.
Chapter 2 History of US Real Estate Asset Securitization Process

2.1 An overview of US real estate financing methods

This chapter aims to give a general overview of how the US real estate finance landscape formed over history. Different real estate financing methods evolved with the real estate cycles. Two significant crashes in real estate history are worth mentioning. The first one was the 1930s Great Depression, which gave birth to Fannie Mae, Freddie Mac, Savings and Loan institutions and the modern mortgage system. The second one was the 1990s Savings and Loan Crisis, which stimulated the growth of REITs and CMBS as well as private equity investment in real estate. Both crises have greatly changed the landscape of real estate finance. This graph shows the different sources for US commercial Real Estate development in 2008.

Source: Charles Long. Finance for real estate development
**Figure 1. The capital sources for Nonresidential US real estate**

Among the different sources, banks, S&L, life insurances are the traditional sources while REIT, Pension Funds, Private Equity, CMBS are relatively new sources.

The following text arranges the different sources for funding real estate both residential and nonresidential with respect to their time periods and further explains the historical context.

*The modern day mortgage (1930s)*

The mortgage entered the English language at least as far back as 1283. It was transformed from Latin which literally meant “death pledge”. Mortgages existed for a long time as an exclusive loan given only to nobility. After the industrial revolution, however, the wealth of the world increased to the point where banks opened themselves to "higher-risk" mortgage loans to common people.

The modern day mortgage in the U.S. started only in the 1930s after the Great Depression. Before the Great Depression, existing mortgages had repayment schedules of three to five years and ended with a balloon payment. The loan to value ratio (LTV) was limited to 50%. These mortgages were also issued mostly by insurance companies rather than banks. After the Great Depression, as the unemployment rate skyrocketed, people simply don’t have money to cover the payments of these short term mortgages. In 1934, the Roosevelt Government set up the Federal Housing Administration (FHA) to save the real estate market. The FHA offered insurance to and set the standards of the mortgages. The FHA imposed a longer term mortgage with 15 years maturity and a 80% to 90% loan to value ratio. Such mortgages also did not have balloon payments but were amortized over the life of the loan. This gave birth to the modern day mortgage. Mortgage policies have remained for the most part unchanged since then. In the
1950s, however, the FHA pushed for 30 years instead of 15 years to offer people adequate time to pay off the mortgage over their entire working lifetime.

_Fannie Mae, Freddie Mac (1930s & 1970s)_

In 1938, the Roosevelt Government set up the Federal National Mortgage Association (Fannie Mae) to support the mortgage market. Initially, it was set up as a government entity. In 1968, the US Government privatized Fannie Mae. In 1970, the government established another entity called the Federal Home Loan Corporation (Freddie Mac). They were both established by the government yet later became private companies.

Fannie Mae was set up to buy the mortgages, typically FHA insured, from the banks to generate liquidity. Thus it created a liquid secondary market for home mortgages by guaranteeing the mortgage payments with insurance. Freddie Mac was later created in 1970s to compete with Fannie Mae and issued mortgage backed securities (MBS), selling them to private investors.

Technically Fannie Mae and Freddie Mac are private companies without the backing of the federal government. Yet, in 2008, the Bush government bailed out the bankrupt Fannie Mae and Freddie Mac with tax payers’ money. Ginnie Mae, a spin off from Fannie Mae in the 1968 remained a government entity and focused on government sponsored mortgages.

_Savings and Loan Institutions (1930s)_

In 1932, the US government passed the Federal Home Loan Bank Act. It established the Federal Home Loan Bank to assist other banks in providing funding for home purchases. Savings and loan institutions sprang up all across the United States because there was low-cost funding available through the Federal Home Loan Bank for the purposes of making mortgage loans on residential property. In the 1960s, Savings and Loan Institutions were given preferential
treatment by the Federal Reserve in providing 50 basis points for savings above that of the commercial banks to stimulate mortgage lending. However, Savings and Loans were not allowed to offer checking accounts until the late 1970s. This reduced the attractiveness of Savings and Loans to consumers, since it required consumers to hold accounts across multiple institutions in order to have access to both checking privileges and competitive savings rates. During the Savings and Loan Crisis, from 1986 to 1995, the number of federally insured Savings and Loans in the United States declined significantly. This was primarily caused due to unsound real estate lending. The savings from investors are usually short term while the loans to homeowners are long term. The duration mismatch combined with the rising interest rate bankrupted many of savings and loans.

Life Insurance Companies

Life Insurance Companies have traditionally provided debt to the commercial and residential real estate markets mainly because of the duration match between long term mortgage loans and their liabilities. Aside from traditional type of commercial mortgages, they also invest in CMBS debt. Their role as direct lenders declined with the growth of CMBS. On the equity side, life insurance companies also directly invest in commercial real estate and have been associated with some of the iconic real estate developments of the 20th century. Life insurance companies tend to focus on large, high-quality assets.

Real Estate Investment Trusts (1960s)

REITs were established in the 1960 by the Real Estate Investment Trust Act to encourage real estate investment. REITs were created for the general public to invest in real estate and enjoy the same tax advantage as a Direct Partnership Program (DPP). A DPP is a business venture
designed to let investors participate directly in the cash flow and tax benefits of the underlying investment. With the tax advantage, REITs are thus more strictly defined to limit unrelated businesses electing to be REITs merely for tax benefits. Although created as early as the 1960s, REITs had been a peripheral feature of the market during the early 1980s. Between 1987 and 1997, REITs increased their aggregate market capitalization more than fourteen-fold. Changes in the federal tax law in 1986 permitted the consolidated ownership and management of real estate by REITs, broadening their role from that of merely real estate lenders and investors. REITs will be discussed in detail in the later paragraphs.

Pension Funds (1970s)

Pension funds got into real estate investment beginning in the 1970s, seeking diversification, stability, and an inflation hedge for their investment portfolios. They became big investors through real estate investment managers, private equity, and hedge funds, seeking the double-digit yield that these investment vehicles seemed to promise. Gradually, real estate emerged as a legitimate part of the asset allocation model typically used by pension funds, with many pension funds targeting 5 to 15 percent of their portfolios toward real estate.

MBS and CMO (1980s)

MBSs are a type of security mostly backed by residential assets. It was first issued by Fannie Mae in 1981. The first Collateralized Mortgage Obligation (CMO) was created in 1983 by Freddie Mac.

CMBS (1990s)

The CMBS market was created as an outgrowth of the liquidation of assets from the Resolution Trust Corporation. The first CMBS was issued in January 1992, CMBS volume swelled
afterwards. The CMBS market securitized loans on commercial real estate similarly to the way residential mortgages are securitized in the residential market. Banks, life insurance companies, and loan originators would write the loan and then sell it into a pool of loans classified into rated tiers, which were securitized and sold as bonds. CMBS will be another main topic of this thesis and its history will be discussed in detail in the following sections.

*Private Equity Real Estate Funds (1990s)*

There is quite a long history of institutional investment in real estate. Initially institutional real estate investments were in core real estate. However, market conditions in the early 1990s led to the emergence of opportunistic funds that aimed to take advantage of falling property prices to acquire assets at significant discounts. Private equity real estate funds emerged around this period of time, focusing on opportunistic investments and short-term turnaround properties. Private equity real estate emerged as an independent asset class in the beginning of the 21st century and has experienced huge growth in recent years. Perhaps the most iconic example of investment by these private equity real estate funds was the February 2007 purchase, by a fund managed by the Blackstone Group, of Sam Zell’s Equity Office Properties REIT portfolio for $23 billion plus $16 billion in assumed debt\(^5\). The portfolio of 573 properties was then the largest private equity deal in history.

Nowadays, private equity real estate funds are generally classified into core, core-plus, value added, or opportunistic strategies according to their different risk profiles.

To conclude, the US real estate finance industry has evolved over the century. Real Estate has been a Mom and Pop Main Street investment vehicle until the 1970s and 80s when Wall Street

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brought institutional investors to this market. This change from Main Street to Wall Street is contributed largely by financial innovations. There certainly have been financial innovations happening gradually over time yet the major ones that disrupt the commercial real estate finance landscape that mostly focused in the 1980s and 90s, the time where securitization has greatly flourished. The securitization of real estate assets is a major event in the history of the US real estate finance. There are multiple reasons that will be discussed in detail in the following paragraphs. The underlying development in computer science technology certainly cannot be neglected.

2.2 The history of REITs in the US

REITs are essentially closed-end funds that hold real estate that parallels with mutual funds that hold stocks and bonds. They are a different form of securitization using the real properties as collateral instead of mortgages. For comparison reasons, I would like to discuss the traditional legal structure for real estate investment in the pre-REIT era.

Pre-REIT era partnership entities

The majority of real estate has been historically owned by partnerships rather than corporations due to tax purposes. The right to own real estate as partnerships are given to accredited investors defined in SEC regulations. Direct Participation Programs (DPP) are partnerships where investors participated in the business venture directly and benefit from the cash flow and tax benefits of the underlying asset. DPPs don’t get as big as a corporation. They also don’t advertise themselves. The DPP usually consists of two partners, a general partner, and a limited partner. The general partner invests his time and skills rather than a great deal of money. The limited partners provide the money and are compensated if the general manager is successful. Limited
partners have the right to vote, but the general manager makes most of the day-to-day decisions for the company. The limited partner's liability is limited to the amount of his original investment and he is not responsible for the debts of the business. Essentially, the general partner retains the responsibilities and the liabilities of the entire company.

The establishment of REITs

The disadvantage of the DPP ownership of real estate is that it is limited to institutions and wealthy individuals who are accredited investors as proved by the SEC. REITs emerged in the 1960s enabling small retail investors to invest directly in real estate without any wealth barrier. At the same time, REITs enjoys the same tax benefit as DPPs. A REIT is legally a trust entity that raises capital from investors in the form of common stock and bond issuances to buy income-producing properties or make mortgage loans.

First Wave of REITs – Mortgage REITs

In the 1960s and early 1970s, REITs flourished as mortgage REITs. Mortgage REITs were popular for a while and they employed the strategy of borrowing short term debt and lending long. When the Federal Reserve tightened the monetary policy and the oil embargo hit, the rising interest rate killed a lot of REITs because of duration mismatch.

Second Wave of REITs – Self-managed Equity REITs

The 1986 Tax Reform Act altered the fate of the REITs. The Act got rid of the tax incentives and eliminated the tax motivated investors in real estate. The act also allowed REITs to develop and manage their own properties instead of using external management. By 1992, with the market recovering from the S&L crisis, many private real estate companies had started to seriously consider going public. There existed many undervalued properties but private companies lacked
the cash to reenter the market. In 1993, fifty companies became REITs. The REIT market capitalization grew from $18 billion in 1992 to $80 billion in 1996. REITs made the transition from passive investors to fully integrated firms that acquire, actively manage or even develop the properties.

Specialization of REITs

The REIT industry became highly specialized in the 1990s. Unlike mutual funds, which hold diversified portfolio across different stocks, REITs specialize in a property type. The reason behind this is that REITs went from passive investment to active management. Active managed REITs are like corporations in a way. They need the skill and expertise in a certain area. Not only do REITs specialize in property types, they also focus on one particular geographic location.

UPREITs

UPREITs are umbrella partnership REITs. It is a legal structure under which a REIT does not own properties directly. A private sponsor joins a partnership and exchanges its real estate properties for the partnership units. At the same time, a REIT also joins the same partnership and contributes the money it raised from the public and exchanges it for the same partnership units. The result is that the private company can transfer its real estate assets to the REIT without incurring a tax liability. The UPREIT is so instrumental in the development of REITs that in 1992, 75% of the new REITs have taken this form. If there weren’t such a structure available, they would remain private.

In conclusion, there are multiple impetuses for the REIT boom in the 1990s, including active management and UPREIT structure.
2.3 US REITs’ characteristics and advantages

REITs have been a main stream investment vehicle taking up 26% of the equity market share. Multiple advantages of REITs explain why they have been successful in the US market and those might provide some hints to the Chinese experiments.

Active Management

REITs are hybrid instruments between corporations and mutual funds. The fact that they can actively manage assets give them many advantages. The REIT team consists of industry professionals that have expertise in acquiring or managing the assets.

Specialization

REITs specialize in property type and geographic location just like a corporation specializes in a certain product or service. This is a natural consequence that came out of the active management characteristic of REITs. The specialization boosts performance. It certainly doesn’t hurt to diversify but according to “Modigliani and Miller” diversification can be easily done by the investors. They can simply put money into different REITs.

Shareholder Power

Shareholders of REITs have voting rights to control the REIT. In a traditional private partnership, the Limited Partner doesn’t have any say over the management of the real estate by law. They can only remove the General Partner if things go south. On the contrary, REIT shareholders are again like corporate stockholders. They have voting power over the board of directors of the company and hence have control over the company’s daily management.

Cost of Capital
The cost of capital for REITs is lower than that of their private counterparts. The reason is that REITs don’t have to expend a lot of effort in raising capital like private partnerships. There is already a market for REIT shares and REITs can collect $0.92 to $0.94 on the dollar. On the other hand, the private partnership would spend a lot of effort in marketing and commissions for investment bankers. They typically get $0.86 to $0.88 on the dollar due to the added layer of fees.⁶

Liquidity

Liquidity is central to the advantage of the Opportunity Cost of Capital (OCC). OCC is the expected return from investments missed in favor of other investments. Investors require a lower return if they can get their money out any time they want. A REIT share can be sold on the stock market almost instantaneously. While the secondary market for the partnership units do exist, significant costs are incurred when the transactions happen.

Valuation

The market itself is an efficient indicator of value since many market participants are making sure that a REIT is correctly priced. Furthermore, REITs can be evaluated through the Net Asset Value (NAV) calculation. The Net Asset Value refers to the total value of all the securities in a fund’s portfolio, less any liabilities. It usually applies to mutual funds. It also applies to REITs due to their resemblance with mutual funds. Green Street Advisors have been advising buyers of REITs of their value by accurately checking the REIT’s market value against its Net Asset Value.

In conclusion, REITs have the advantage of both public corporations and mutual funds. It enjoys the benefits of a corporation including specialized management and ease of raising capital through the public market. Yet it is not taxed like a normal corporation. REITs are taxed similarly to mutual funds, the profits are passed through to the investor without withholding of corporate tax. REITs are very unique types of investment vehicles that are unparalleled in other industries.

2.4 The history of CMBS in the US

Before the creation of the CMBS market, commercial mortgages were typically held in portfolios through maturity. Most loans were originated by life insurance companies, banks and savings institutions (many of which went out of business during the Savings and Loan crisis of the early 1990s). In the mid-1980s, lenders began to trade multi-family and commercial whole loans for the first time to support the funding of new originations, patterned off the methodologies developed in the single family sector. By the 1980s, an over-supply of real estate created by aggressive construction resulted in deteriorating real estate fundamentals (i.e., lower rents and higher vacancies) that in turn led to extraordinarily high commercial mortgage delinquency and default rates in the early 1990s. While dealing with these issues, most traditional lenders stopped making new loans and a real estate credit crunch ensued. The capital markets – CMBS – became the industry’s primary source of new funds. CMBS represented a new chapter in real estate finance—the first time that Main Street real estate owners and operators could source funds from Wall Street. New lending entities – conduits – were created solely for the purpose of securitizing the loans.

Commercial mortgaged-backed securities (CMBS) are essentially fixed income bonds whose payments derive from a loan or pool of loans on commercial real estate. CMBS deals are a
combination of public registered offerings for the investment grade securities and private offering of the below investment grade securities. The definition of “commercial real estate” encompasses almost all property types except single family residential. In order to understand the history of CMBS, we need to first understand the Savings and Loan Crisis and the Resolution Trust Corporation.

Source: Geltner, D., Miller N., Clayton, J. & Eichholtz, P. Commercial Real Estate Analysis & Investments.

Figure 2. The market capitalization of CMBS over the years

Resolution Trust Corporation and the invention of the CMBS

In 1989, after the Savings and Loan crisis, a large number of Savings and Loan Institutions failed. In order to protect the depositors’ interest, RTC was set up by the government to “resolve” the bankrupt Savings and Loan Institutions and inherited their assets. These assets primarily included real estate-related assets such as mortgage loans.
There are a few ways that RTC had used to liquidate the assets. At first, RTC engaged in outright individual and bulk sales of its asset portfolios. The sales prices to private purchasers were at significant discounts due to the uncertain future. RTC then experimented with the equity partnerships to help liquidate the real estate and financial assets. RTC established limited partnerships and selected private sector entities to be the general partner of the partnerships while itself maintained a limited partner and retained interest in the portfolio. The partnerships allowed RTC to retain skin in the game and hence profited from the strong returns realized by portfolio investors.

The most innovative method that RTC later used was the CMBS method. RTC pooled the “nonperforming” (N series) loans and conveyed them to a trust in Delaware. The trust issued class A certificates to private sector investors, class B certificates to RTC itself and finally issued CMBS bonds to the public. The private sector investors are like general partners who are responsible for improving, maintaining and liquidating the assets. The cash flow to the trust would first be used to repay the CMBS debt, then to the RTC and class A certificate holders at their respective equity percentages. The leverage of the CMBS debt was used to reduce the upfront payment of the class A certificate buyer.

As first experimented by the RTC, CMBS was created as a tool to manage seasoned distressed loans. Yet CMBS quickly evolved as a source of financing for new mortgages originated specifically for securitization.

REMIC
The development of the CMBS industry hinges on the establishment of the real estate mortgage investment conduit (REMIC) provisions in the Internal Revenue Code. REMICs were created by the Tax Reform Act of 1986 before the advent of CMBS and were previously set up for MBS.

To qualify as a REMIC, an entity or pool of assets must make a REMIC election, follow certain rules as to composition of assets (by holding qualified mortgages and permitted investments), adopt reasonable methods to prevent disqualified organizations from holding its residual interests, and structure investors’ interests as any number of classes of regular interests and only one class of residual interests.

Over 90% of CMBS transactions elect to be treated as a REMIC. A REMIC is essentially a trust that holds a pool of mortgages, issues a series of bonds, and complies with the various REMIC provisions that affect the structure, operation and income tax treatment of the trust. Basically, a REMIC is itself not subject to tax and the cash flow passes through to the investors who then pay the appropriate taxes.

*Early CMBS*

After the RTC completed its task in 1995, the market was ready for CMBS. Commercial lenders and investors who understood the portfolio benefits of RMBS began pooling seasoned, performing mortgages to be distributed through the same structure. As such, early CMBS transactions were collateralized by seasoned loans that had already been originated for commercial bank or insurance company portfolios.\(^7\) Distribution through CMBS was only an afterthought.

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\(^7\) Geltner, D., Miller N., Clayton, J. & Eichholtz, P.: Commercial Real Estate Analysis & Investments (Mason, OH: Thomson South-Western, 2007) 492.
Legacy CMBS

As the CMBS market matured during the mid- and late-1990’s, issuing investment banks began originating loans specifically for securitization. The early CMBS that were issued had included both high quality single large loans packaged into what the market calls “single-issuer transactions”, and pooled loans placed into “multi-borrower transactions”. The number of single-issuer CMBS remained steady for a long time. The multiple loan pools started to absorb some larger potential single loans and gave birth to the “fusion deals”. “Fusion deals” are loosely defined as pools of mortgages with large enough loans that could significantly affect the credit/prepayment of the underlying bonds.

CMBS Annual Issuance

Source: CMBS E-Primer, a comprehensive overview of commercial mortgage backed securities

Figure 3. The number of CMBS issuance
CMBS2.0

CMBS2.0 refers to the new breed of CMBS that were issued after the Great Recession of 2008. The new and evolving changes for CMBS include self-imposed industry standards and implementation of legislative and regulatory mandates. Lenders have imposed a greater discipline on new loan originations. Underwriting is more conservative, The Dodd-Frank Act in 2010 further emphasized on risk retention regulations to force lenders and securitizes to retain skin in the game.

DSCR and LTV are both important metrics in assessing the loan risk. CMBS 2.0 were issued with roughly 1.5-1.7 DSCR and 55%-65% LTV, compared to legacy CMBS’s 1.25 DSCR and up to 80% LTV. Because of lower LTV and higher DSCR requirements, few loans can be financed or refinanced without additional capital. Thus, mezzanine debt and B notes are prevalent in CMBS 2.0. CMBS 2.0 also feature smaller deal sizes of around $1 billion, less than half of the vintage CMBS deals, containing fewer loans with higher loan balances. Credit rating agencies are also more conservative in the subordination levels. AAA subordination levels have risen roughly 6% from pre-credit crises.

CMBS 2.0 represents an improvement over legacy CMBS by virtue of enhanced underwriting, increased transparency and development of industry standards.

2.5 US CMBS's characteristics and advantages

To invest in CMBS is not the same as investing in real estate directly. There is a process by which a loan or a group of loans are packaged and issued as CMBS. However, investing in CMBS is not that detached from real estate investment. The underwriting for a CMBS loan

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8 Patrick C. Sargent: CMBS 2.0: An Overview of Changes and Challenges, Real Estate Finance. December 2011
demands close examination at three levels: the property level, the mortgage level and the bond level. To understand CMBS, you need to give significant consideration to both the real estate characteristics of the loans and the structural characteristics of the transaction.

*CMBS structure*
Source: CMBS E-Primer, a comprehensive overview of commercial mortgage backed securities

Figure 4. The structure of CMBS in the US
The CMBS structure involves complicated financial engineering. The different parties are illustrated in the above graph. At the core of the structure, is a trust, usually organized as a REMIC. The trust acts like a conduit to collect money and pass through to the investor without generating a tax liability. The loan starts with the mortgage broker, they typically provide 3 years of financial statements for each property, rent rolls, market and demographic information along with sponsor background and business plan. They would try to get the originator to use their cash flow analysis when sizing how much debt the property could support. “Originating Banks” or “Conduit Lenders” are involved only at the beginning as the originator and underwriter. They would review the proposed financing packages by the mortgage broker, and re-underwrite the broker’s cash flow to determine what they felt they could reasonably get the rating agencies to underwrite. The rating agencies then rate the different tranches of cash flow and estimates the required rated credit enhancement based on how a specific stressed debt service coverage ratio (DSCR) or loan to value (LTV) had historically defaulted. To maintain the cash flows of the trust, the master servicer and special servicer collect money from the borrower. The master servicer collects the normal principal and interest payments while the special servicer deals with foreclosures under loan default scenarios. Historically, the special servicer has been the first loss buyer. A pooling and servicing agreement governs the relationship between the two servicers and the trust. The bank and rating agency take on a passive role and do not have stakes in the trust, at least before the 2008 financial crisis.

CMBS Lenders vs. Portfolio Lenders

In comparing CMBS loans to traditional loans, we need to understand the difference in lenders. Lenders may be characterized as portfolio lenders or securitization lenders. Portfolio lenders originate mortgages to retain on their balance sheet for current income that provides a
satisfactory risk/reward balance compared to alternative investments. Their appetite for mortgages is evaluated in the context of performance correlations with other fixed income investments (e.g., corporates, Treasuries and other asset-backed securities). Portfolio lenders generally service their own loans, and represent "one stop shopping" for their borrowers. Portfolio lenders have traditionally included life insurance companies and commercial banks. Insurance companies have seen mortgages as a long-term investment compatible with their liabilities, which have traditionally been long-term and fixed-rate. Commercial banks have looked to shorter term, floating-rate mortgages and as a result have dominated the market for construction financing.

Securitization lenders are technically not the lenders themselves but merely originators. They originate mortgages to sell for a profit. They consider mortgages as a profitable trading opportunity. Since they generally sell all the credit risk in the mortgages, they have less incentive to service them and will typically engage third parties for that purpose. Securitizers have traditionally been investment banks, which regard commercial mortgages as just another asset class to turn into investments for their investor client base.

Disadvantages of CMBS lending lie in the moral hazard of originators to responsibly underwrite and issue quality loans. As stated above, because securitization lenders are just seeking a profit, they immediately sell the loan to other investors and retain no skin in the game. Underwriting loans is certainly different from insuring the loans. The underwriters are not penalized in the event of a loan default. The result is that they tend to be overly optimistic about the credit quality of the loan and take on more risks than justified. This is part of reason that led to the financial crisis in 2008. The post crisis Dodd-Frank act required that the CMBS loan originators retain equity in the loan they issue.
**Liquidity**

The most important feature and advantage of CMBS debt compared to commercial whole loans is their liquidity. CMBS deals are a combination of public registered offerings for the investment grade securities and private offering of the below investment grade securities. One typical structure of CMBS deals is the A/B note structure, a senior “A-note” and a junior “B-note”. The A-note (having a lower LTV) is more creditworthy and securitized and the B-note is sold to different private investors who are willing to accept somewhat higher risk for a higher yield.

The liquidity comes from both public and private sources. The relatively small, homogeneous units of CMBS facilitated trading by a large potential population of investors. Many CMBS are traded as part of the bond market. As is common with bonds, the market for a given individual security is likely to be rather thin, but the similarity within classes of securities is great enough to allow relatively efficient price discovery and resulting high levels of liquidity in the market. The complex financial engineering of securitization is the practice of creating liquid, tradable instruments through the pooling of less liquid, non-tradable collateral components such as commercial mortgages.

**Risk Mitigation**

Pooling tends to mitigate the credit risk associated with individual loans. In order to pool the loans together, standardizing commercial mortgage documentation and loan terms generates obvious benefits. Commercial mortgages will always be individually negotiated business contracts, collateralized by a diverse range of property types, geographies, and borrowers. Collectively, these differences do have an impact on the economics of the overall securitization.
After the pooling of risk, the risk is then redistributed or reallocated. Different securities have different credit qualities. The unbundling and partitioning of risk created securities that better fit different appetite of different clients in the financial market. Value is created in the redistribution of risk.

Prepayment Risk and Defeasance

The majority of CMBS bonds are backed by large pools of fixed rate mortgages made to different borrowers. The fixed rate aspect of the mortgages cause potential prepayment risk. As compared to other mortgage-related securities, one of the more attractive attributes of CMBS as an asset class is the average life stability. The prepayment protection provisions present in the underlying loans prevent the dramatic shortening of average lives that can occur in the residential MBS market.

For traditional non-CMBS mortgage loans, the loan covenants often restricted borrowers’ ability to freely prepay. More often, prepays are historically permitted but with penalties. The penalties are either a fixed percent of the remaining mortgage loan balance or a yield maintenance charge equal to the present value of lost interest if the market rate was below the contract rate. For CMBS conduit loans, the repayment not only results in a loss in the loan value but also removes the underlying asset from the collateral. This can impact the credit ratings of the tranches and can also affect the tax status of the trust. In the case of prepayment, borrowers are sometimes allowed to defease, which means to replace future loan payments with a portfolio of treasury or agency securities with identical cashflows. Defeasance is not technically prepayment but a collateral substitution. The cash flow is unchanged and the substituted collateral may have higher credit
quality than the original real estate. It helps the borrower to rebalance the portfolio from a strategic perspective.9

**CMBS Borrower**

The borrower of most commercial loans that will be securitized is a special purpose entity (SPE) owning only a single asset or a portfolio of assets – the loan’s collateral – and formed to act as borrower for that specific loan. As such, the balance sheet of the borrower is comprised of one asset, the collateral, and one liability, the debt. It is therefore important to distinguish between the borrower and the sponsor. The sponsor is the individual(s) or company behind the borrower, which typically contributes the property to the borrowing entity and holds the majority of the ownership interests in that entity. Securitized loans are typically non-recourse to the borrower/sponsor.

**Conclusion**

In conclusion, CMBS debt is one of the most important forms of debt vehicles in real estate financing. It accounts for roughly ¼ of the total real estate debt source in the US. CMBS has its obvious advantages to traditional debt in terms of greater liquidity and availability to retail investors. However, its disadvantage lies in the moral hazard of originators and credit rating agencies irresponsible underwriting. I believe that this is going to be improved in the aftermath of the 2008 financial crisis.

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Chapter 3: Overview of current ways of financing Chinese real estate development

The real estate system is a combination of three different markets: (1) The space market, which is the market for the usage of real property; (2) The asset market, which is the market for the ownership of real estate assets; (3) The development industry, which converts financial capital into physical capital, governing the stock of supply in the space market. The three markets are intertwined and they keep the real estate system in equilibrium.
In the 30 year history of Chinese real estate industry, the industry has been focused mostly on doing one thing, constructing and selling of mostly residential condos. Over the last 20 years, most Chinese families have experienced one or several significant upgrades to their living conditions. The housing market is so huge and demanding that it absorbed a great deal of the capital available in China. In 2013, the real estate investment takes up 14.8% of the Chinese GDP with 70% of that investment is in residential real estate.

The simple merchant building of constructing and selling housing units is mostly a “development industry” behavior. This industry is so strong that it overwhelms the “space market” and the “asset market”. These two markets especially the asset market for real estate in China is not well developed and lags behind that of the development industry.

Real estate business in China has been so much focused on development that it is quite disconnected with finance. Real estate products themselves can be viewed as financial products. A new perception of real estate should be adopted that sees the development of real estate as the engineering, creation and sale of financial products.

3.1 A brief history of Chinese real estate market

Welfare Housing (before 1978)

The history of the Chinese real estate market can be divided into several periods between milestones. The first period was before 1978, during which the government dictated and planned the building and distribution of residential units to the general public. In this phase, there was no
real estate market. People paid very little or none for their housing. They also didn’t own their homes. The available housing units were built by the state-owned or local enterprises and distributed to their employees based on their age, family condition, level of expertise and contribution. The system is called the “welfare housing distribution” and it was officially stopped in 1998.

*Housing as Commodities (1978-1998)*

From 1978 to 1998, the government experimented with commercializing the real estate market. Although housing is still mostly sponsored by the enterprises and partially distributed to employees based on age and contribution, real estate products turned into merchandises that require a larger payment from the employees. Instead of getting the housing for free, the employees are getting paid a higher salary and stored part of the money in a housing payment plan. The payment plan is contributed by the employee and matched by the employer. Such a payment plan can only be used to purchase housing units. Housing became more of a commodity that is traded in the market rather than distributed. This phase was called the capitalization of housing distribution, essentially replaced the direct distribution of housing with distribution of capital or salary. The first group of Chinese real estate developers including Vanke started to emerge.

In 1990, the government issued the “*Interim Regulations of the People's Republic of China Concerning the Assignment and Transfer of the Right to the Use of the State-owned Land in the Urban Areas*”. This act formally regulated the procedure for selling the land usage right but not the ownership right to private developers. This is a milestone and marks the start of the modern real estate development industry in China.

From 1998 to 2003, the real estate market started taking off. In the same year, the “Procedures of the Management of Loans to Individuals for the Purchase of Housing” was issued by the central bank of China, promoting the using of mortgage debt in the purchase of housing. The prevalent use of mortgage debt in China only started after 1998. Compared to the same progress made in the US in 1932, it came late by 66 years. There was a boom in the total outstanding mortgage balance on Chinese commercial banks’ balance sheet. It grew exponentially from merely 19 billion RMB by the end of 1997 to 10.74 trillion RMB by 2014, averaging an around 45% compound annual growth.

The huge demand of the general public is released thanks to the help of the mortgage system. Real estate industry has become the economic engine of China. Real estate investment has grown significantly along with the housing price. In 2003, the housing prices have reached an unhealthy high point, strongly affecting the wealth distribution between the home-owners and non-home-owners.

Government Intervention (2003-2013)

From 2003 to 2013, the government initiated a series of macro-economic controls of the housing market. In China, the market economy is not mature and the government sometimes steps in to interfere and regulate the market through administrative power. These controls also happened in the US after the great depression and the 2008 great financial crisis, mostly by means of law enforcement. The tools that the government use is different between the US and China. In China, the new regulations can be issued rather quickly and suddenly, without the lengthy process of enacting a law. The first controls in 2004, 2005 are worth noting. In 2004, the control was on the
supply side. The government tightened the supply of land to private developers and increased the interest rate. In 2005, the control was on the demand side. It raised the mortgage down payment from 20% to 30%. The “eight regulations on housing at the national level” has been issued. In these regulations, the government vowed to stabilize the housing price, improve the affordable housing system and closely monitor the real estate market. In 2006, the “six regulations on housing at the national level” was issued. In 2011, the “eight new regulations on housing at the national level” was issued. I won’t go into the details of these regulations but the idea is that they both limited the rising price of real estate through limiting the purchase of real estate, hence the demand side. For example, in some cities, especially first tier cities like Beijing, Shanghai, only local residences are allowed to purchase the houses or apartments in that city.

Adjustment and Transformation (2014-future)

In 2014, the housing market showed signs of slowing down. We observed price drop in the majority of the secondary and tertiary cities. Kaisa Group Holdings, a real estate developer based in south China and listed on the HK stock exchange went bankrupt after it defaulted on a $51.6 million loan in 2014. There is no doubt that the Chinese market is now entering an adjustment period. Many people believed that it is not a temporary stagnation but the end of an era. The so-called golden period of Chinese real estate development has come to an end.

Conclusion

From 1990 to 2015, the Chinese real estate industry has experienced dramatic changes and advancements. In merely 25 years, the industry has gone through the different stages of its life which could easily take 70-80 years in the US. In such a short time and with continuous government interventions, we have not yet observed apparent cycles. No one can predict the
future of Chinese real estate market although it is generally agreed that it will not sustain the
growth as in the past 20 years. The industry will certainly go through a transformation.

3.2 An overview of financing tools

Real estate financing is a broad topic that encompasses different aspects of the real estate
ecosystem. The three main markets as discussed before, the space market, the asset market and
the development industry, all need financing. Here, I want to focus on the asset market and the
development industry. The asset market in China has not been fully developed except for the
individual purchasing of housing units. However, collectively, the national outstanding
individual housing mortgage balance in 2015 amounts to 12.1 trillion RMB. On the other hand,
the development industry demands construction loans and even permanent loans. The total
national construction loan outstanding balance reached 6.08 trillion RMB, half of that of the
individual mortgage loan. The total real estate outstanding loan balance is 18.41 trillion, which is
the sum of individual mortgage loans and developer construction loans. In this chapter, I will not
discuss individual housing mortgage financing but focus on the development financing tools.

In the early years of merchant building in China, you didn’t need to put up a lot of capital upfront
because the residential units could be sold even before construction began. Developers only
needed minimal capital to hire architects to design the buildings and sell the units when they
were still renderings. This is a quite chaotic period when a lot of wealthy individuals struck their
first barrel of gold.

As the market matured, developers needed to acquire the “certificate of presale” before
recouping the cost of development. Regulations stipulate that the certificate can only be issued
upon fulfillment of the following. First, they need to pay off the full land rent amount and obtain
the “land use right certificate”. Second, developers need to have “construction permits in place”. Third, upon the day of the presale, the invested capital should exceed at least 25% of the entire cost of the project. Fourth, the “certificate of presale” should be obtained from the local government. This would require that the developer put up enough money to secure the land and at least 25% of the construction cost. As land prices soared, Chinese developers thus needed to acquire significant amount of capital to start development projects. Although most of the developers have accumulated adequate amounts of internal cash, external bank financing still was the key to a developer’s success.

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*Source: Chinese Real Estate Financing Report, Aug. 2006*

*Table 1. Chinese Real Estate financing sources of funds from 1999 to 2004*

In China, development financing usually comes from three methods, the direct method, the indirect method and internal financing. The direct method involves the raising of equity through IPO, secondary offering as well as issuing bonds. The indirect method mostly refers to debt financing through banks. The internal financing tools involves employing internal cash, using trade credit from construction companies and the deposits paid by the presale homebuyers.
Although theoretically a developer has all these means of financing, the reality might be different from expected. The above graph shows the different sources of financing typically employed in the development industry from 1999 to 2004. Bond and Foreign Capital have minimal impact. Internal cash, other cash and bank loans are the major ways of financing. For internal cash, developer’s own equity takes up only 55%, the other 45% usually coming from trade credit from construction companies. For other cash, 80% comes from sales deposits and presale down payments. Thus bank financing is by far the most important source of capital for developers.

3.3 Bank loan financing

This thesis will focus on the indirect financing method, which is bank financing, in detail. Banks that lend development loans or construction loans in China are mostly the commercial banks. There are two different kinds of bank financing. The first one is borrowing from a single bank. The second one is to borrow a “Syndicated Loan”. A syndicated loan is offered by a group of lenders (called a syndicate) who work together to provide funds for a single borrower. A syndicated loan can be of larger total amount and saves time and energy compared to applying for a loan separately to each bank. The disadvantage of a syndicated loan is the rather high cost of capital and the difficulty of loan maintenance with separate banks.

The banks have high barriers for borrowers. Developers should meet development qualifications; for instance, they should have at least $30 million registered capital and have developed a gross floor area (GFA) of 200,000 square meters within the three most recent years. Usually the land usage right are used as collateral against the loan, the collateralized value being 50% of the appraised value.
The construction financing loans are usually 1-3 year term interest only loans. The interest rate is usually floating at around 5-6%. Cost of the capital on bank development loans is essential to the health of the development industry. The central bank hence adjusts the interest rate to control the macro-economics of the housing market.

The disadvantage of relying too much on indirect financing through banks is that this risk is too concentrated. If the real estate market crashes, it will inevitably bring down the whole banking system. The bright side is that Chinese banks keep the loans on their books and they tend not to do aggressive lending. As is with any other means of financing, bank financing is also discriminatory with respect to the size and reputation of the developer. The bigger developers have the advantage of getting cheaper debt. The single source bank financing model allowed the government to control the development market through the simple change of bank interest rate.

3.4 Private equity financing

Private placement of equity is also one kind of direct financing as mentioned above. The Chinese government has certain restrictions on foreign capital’s direct acquisition of Chinese real estate assets due to the capital control for foreign exchange reasons. Private investment in real estate can be carried out in two ways. The private equity can become a shareholder of the development company. An example of this is the GIC’s (Government of Singapore Investment Corporation) investment in Beijing Capital Land, where GIC has acquired 8.14% of BCL’s share in 2003. This direct investment method is more commonly used in China. However recently the typical US joint venture partnership model has become more and more popular. In this model, the private investor forms a Joint Venture with the developer on a particular project. The Joint Venture is typically a Special Purpose Entity (SPE) with the Private Equity (PE) firm as the limited partner and the developer as the general partner.
Since the private equity business in China is under-developed, the private equity structure usually involves foreign PE firms and Chinese developers. The Chinese government has certain restrictions on foreign capital’s direct acquisition of Chinese real estate assets due to the capital control for foreign exchange reasons. As a result, foreign private capital has to invest jointly with Chinese developers. Private equity firms like Blackstone, KKR and the Carlyle Group have entered the Chinese market in the early 2000s and invested in Chinese development projects. The concept of real estate private equity investment has only came to be known to Chinese people near the end of the 2010s. In 2010, the government issued the “memorandum on the deepening of reforms of the financial system”, which clearly pushed for the private equity funding system. 2010 has marked the start of the Chinese domestic real estate private equity investment. The number of domestic Chinese real estate private equity firms has grown from 100 in 2010 to 500 in 2013. The fast growth of private equity is a result of the difficulty of achieving traditional bank loans under the government’s intense macro-economic controls. It is strongly reactionary to the drying up of capital sources for development. Private equity real estate is projected to have strong growth in the coming years.

However, the US private equity funds have rather broad sources of capital from institutional investors such as pension funds, sovereign wealth funds, foundations and insurance companies. Chinese institutional money from investment banks, insurance companies and pension plans has not fully opened up to private equity asset managers due to government regulations. Without institutional investors, the capital source is mostly coming from high-net-worth individuals. The difficulty is that high-net-worth individuals usually have different perspectives of risk and return from institutional investors and are averse to the long-term lock up of capital in private equity
funds. The short-term characteristics of this capital prompts private equity to invest in shorter
term debt or bridge loans rather than equity.

It’s customary for US private equity to also invest indirectly in real estate related financial
products and derivatives. On the other hand, except for directly investing in real estate assets,
Chinese private equity funds lack alternate investment channels via REITs and CMBS.

3.5 Life insurance companies

Insurance companies can be divided into different categories such as life insurance companies,
property and casualty, fraternal, and health. In the US, life insurance companies have the most
assets, around 65% of the industry total, followed by property and casualty companies, taking up
30% of the industry total. Life companies have longer-term liabilities than property/casualty
companies, therefore, the former invests more heavily in longer-term assets such as real estate.
However, their asset allocation is 80% in different kinds of bonds, 8.5% in commercial mortgage
loans, with only 0.5% direct investment in real estate. Within the bond category, CMBS accounts
for 5.1%, RMBS accounts for 13.5%. Thus, life insurance companies are mostly debt holders of
real estate, rather than equity holders.

The total asset of the insurance industry in China has reached 10 trillion RMB by the end of
2014. The balances on their account that can be invested are as high as 9.3 trillion. It is estimated
that 3% of the total investable asset will be engaged in real estate. The different investment
strategies include investment in stabilized real estate assets, partnering with developers in
development projects, purchasing shares in listed real estate companies and investing in
securitized assets.

10 NAIC’s Capital Markets Bureau report on insurance industry assets
In China, the life insurance companies have only started to invest in real estate after 2010. Back in 2006, the China Insurance Regulatory Commission (CIRC) issued the “Interim measures for the administration of investing insurance funds indirectly in infrastructure projects”, encouraging the investment of insurance funds in infrastructure. In 2010, The CIRC again issued the “Interim Measures for the Administration of Utilization of Insurance Fund”, stipulating that the percentage of real estate investment balance should not exceed 10% of the total asset of at the end of last quarter’s balance sheet. This 2010 regulation really released the valve on the flow of insurance capital into the real estate industry.

There are two basic ways an insurance company invests in real estate. Life insurance companies can invest in shares of listed real estate companies. Among the 133 real estate developers listed on the Shanghai stock exchange, 21 have insurance companies as one of their primary stockholders. Another common strategy is for insurance companies to invest in the equity of real estate projects as limited partners similar to private equity firms. In January 2015, a joint venture between Pingan Insurance and two developers, China Resources and Beijing Capital Development Holdings, successfully auctioned a parcel of land in Fengtai District of Beijing for 8.6 billion RMB. This event made headlines and captured public attention. Before 2015, Pingan has already invested in Shanghai, Hangzhou and other cities in China.

On October 12 of 2012, the CIRC promulgated the “Implementing Rules for the Interim Administrative Measures on the Overseas Investment of Insurance Funds”. The rules are aimed to regulate overseas investment with insurance funds, and prevent investment management risks. It never the less encouraged the insurance institutions’ investment abroad. Some examples are as follows, in June of 2013, Pingan Group acquired the Lloyds building in the bank district of London for 260 million pounds. June of 2014, China Life acquired an office building in London
canary wharf for 795 million pounds. October of 2014, Anbang Insurance acquired the Waldorf Astoria Hotel for 1.95 billion US dollars.
Chapter 4 the emerging Chinese real estate asset securitization process

At the time of this thesis, the status quo is that China doesn’t have REITs or CMBS products, yet China does have experimental products that are REIT or CMBS like. In fact, there has been much media coverage on asset securitization recently in China and it will be an inevitable progress in the near future. As the real estate market matures and achieves stable growth, new methods of financing will be necessary. The traditional development financing tools are, as mentioned above, mostly bank financing. New capital sources such as private equity and insurance funds have just been opened up and developing fast. However, almost all sources of capital come from the private market except for the listed real estate companies who can issue equity on the stock market. The general public who are small retail investors don’t have access to real estate investment due to the high entry barrier.

4.1 HK, Singapore REITs and CMBS

Before going into Chinese REITs specifically, I would like to discuss Asian REITs in general. The Asian REITs especially Hong Kong REITs can provide us with a good approximation of what the Chinese REITs would be like in the future. REITs have grown significantly as a new and popular investment class in the Asian region. With only a few exceptions, REITs have only developed in this part of the world over the last 15 years.

Although they all share the same name, the way of regulating, managing and taxing the REITs varies from country to country, sometimes considerably. For instance, in some countries, there is not a specific REIT regime despite the fact that investment entities similar to the operation of REITs are already prevalent. In Australia and New Zealand for example, the operation of REITs
falls within a broader unit trust framework. In some jurisdictions, REITs can be listed or unlisted while some require that REITs must be listed.  

Yet there are a few characteristics that most of the Asian REITs share in common. One of the striking similarities of REIT frameworks in Asia Pacific that is at odds with other parts of the world is a stronger focus on an external management model. As with early externally managed US REITs, a conflict of interest due to the fact that traditional management fee structures have been based on asset values present a major hurdle. There have been some attempts to produce greater alignment of interest between external management and investors. Another overarching consistency is a limitation of REITs undertaking property development. The general premise of REIT vehicles is that they earn “passive” investment income rather than actively trade. A universally common requirement of REIT models is the need for the bulk of profits to be distributed, while the level of distribution may vary between markets. The major reason for distribution of profit is for REITs to maintain tax advantages. However, in the great financial crisis, the distribution rules make it difficult for REITs to preserve cash in the deteriorating credit environment. REIT markets that provide some flexibility for capital management in extenuating circumstances are likely to provide a better platform for market participants to withstand severe market downturns.

Hong Kong REITs

Hong Kong has been the bridge between China and the western world. Its fully developed capitalism market has been the role model for China’s financial reforms. Hong Kong has adopted REITs since 2003. The Hong Kong Securities and Futures Commission issued the “Code on Real

Asia Pacific REITs: a comparative regulatory & tax study, APREA, June 2014
"Estate Investment Trusts". It regulated the standards for setting up REITs, the structure of REITs, the certification of REIT professionals, investment scope, profit distribution etc. Hong Kong has followed the US REIT system.

Up till now, there are over ten REITs listed on the Hong Kong stock exchange. The first three REITs represented three different prototypes among H-REITs. “The Link REIT” represented a financial tool for privatization of the Hong Kong local government housing commission’s assets. Prosperity REIT represented the transfer of large Hong Kong developers’ transfer of assets for cash. Yuexiu Real Estate Investment Trust represented the first mainland Chinese asset backed REIT.

First of all, Hong Kong only has equity REITs. The H-REITs cannot invest in debt products. Thus there is no mortgage REITs or mixed REITs. In addition, the Hong Kong REITs cannot be involved in development projects. Second, there is no tax benefit for Hong Kong REITs. The promotion of REIT product is mostly through regulations and legislature rather than tax incentives. Thus, the development of REITs lacks incentive. Third, the Hong Kong REITs exist only in the form of trusts and they are externally managed. In the US, REITs take the form of self-managed corporations. The “Code on Real Estate Investment Trusts” emphasized the qualification of the trustee and the independence of the trustee and the management company.

Fourth, the majority of the Hong Kong REITs are established by Hong Kong developers, such as Cheung Kong Holdings, Herderson Land and Regal Hotels. These REITs are utilized as vehicles for developers to transfer the ownership of properties to the public market and cash out to reduce debt. In conclusion, the Hong Kong REITs lack diversity and the legal system for REITs is not well developed.
A major characteristics of Hong Kong REITs is cross-border investment. For markets that take on the roles of hub economies, such as Singapore and Hong Kong, offshore property ownership is a natural extension of that role. The revision of the Hong Kong REIT Code in 2005 lifted the geographic limitation of assets held in REITs and brought cross-border deals into the H-REIT scene. The Yuexiu REIT and the RREEF China Commercial Trust REIT were launched in December 2005 and June 2007 respectively. At the height of the Chinese real estate market, the GZI REIT was considered an ideal solution to gain a more direct exposure to the Chinese real estate rental market, relative to indirectly investing in stocks of developers. A reason for Hong Kong REITs to be externally managed comes precisely from its cross-border and hub nature. Internally managed vehicles, may find it difficult to resource sufficient local expertise in a geographically diverse portfolio whereas a larger external fund manager may have the scale to support the local presence necessary to effectively manage such geographic diversity.

**Singapore REITs**

Singapore shares a number of similarities with Hong Kong as a hub economy. An interesting example that links the Hong Kong REITs with the Singaporean REITs is the Fortune REIT. Hong Kong developer Cheung Kong had already issued the Fortune REIT, which held a portfolio of suburban shopping malls in Hong Kong, on the Singapore Exchange in 2003, before listing it by introduction on Hong Kong Stock Exchange in April 2010. The listing of Fortune REIT in Singapore was perhaps one of the driving forces for the Hong Kong government to push for the REITs market. Fortune Real Estate Investment Trust ("Fortune REIT") is now listed both on the Singapore Exchange Securities Trading Limited and the Stock Exchange of Hong Kong Limited.
The above example showed that Singapore was one of the leaders in advancing Asian REIT and was a few years ahead of Hong Kong. Interest in REITs was ignited in late 1990s when the Monetary Authority of Singapore (MAS) revealed the guidelines for Property Funds in May 1999. The first attempt to launch a REIT was made by CapitaLand with its SingMall Property Trust (SPT) in November 2001, but the listing was aborted due to under-subscription of the new issues. Market timing and lack of tax transparency were cited by analysts as the main causes for the lukewarm response to the maiden S-REIT at the time. In July 2002, SPT was restructured with the same portfolio of three retail properties and re-launched under the new name “CapitaMall Trust” (CMT).

The re-launch of CMT was a success with 5-time oversubscription, and it marked the birth of REIT in Singapore. Singapore REITs hold a variety of properties in countries including Singapore, Japan, China, Indonesia, Europe and Hong Kong etc. S-REITs are regulated by the Monetary Authority of Singapore’s (MAS) Code of Collective Investment Schemes.

A typical S-REIT is traded on the Singapore stock exchange which ensures transparency. S-REITs share a number of the common characteristics with major REIT regimes. The S-REIT distributions are tax exempt. They also feature a mandatory and high distribution of income. REITs in Singapore are governed primarily by the Securities and Futures Act (SFA), the MAS’ Code of Collective Investment Schemes (in particular the Property Funds Guidelines) and by SGX (Singapore Stock Exchange) listing requirements. As of 2015, there are 37 REITs registered with the Singapore Stock Exchange. Mapletree Investments, an Asia-focused real estate development, investment and asset-management company, headquartered in Singapore,

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12 Singapore Real Estate Investment Trusts (S-REITs): A 10 year success story, September 2012
currently manages four Singapore-listed real estate investment trusts ("REITs"). The majority of REITs listed on the SGX invest in property assets pertaining to hotels & lodging, industrial & office, residential, retail and healthcare.

Some of the characteristics of Singapore REITs are very similar to Hong Kong REITs. At least 75% of its deposited property should be invested in income-producing real estate. It must not undertake property development activities whether on its own, in joint ventures or by investing in unlisted property development companies, unless the REIT intends to hold the developed property upon completion. The Singapore REITs are only equity REITs, they cannot invest in mortgages. S-REITs also adopt an externally managed/advised model, where a third party asset manager is appointed to provide professional asset management service.

The big difference between Hong Kong REITs and Singapore REITs is that Singapore REITs can be tax exempt. The Singapore Government announced in the 2004 Budget that distributions made by Real Estate Investment Trusts ("REITs") to Individuals - whether foreign or local - on or after 1 January 2004 will be tax exempt, provided that at least 90% of any taxable income will be distributed.

*Hong Kong CMBS*

The development of Hong Kong CMBS market preceded that of the REIT market. I would like to illustrate two typical cases of Hong Kong CMBS issuance. The first one has to do with issuing CMBS as a last resort under financial distress. The second one is the case of issuing CMBS due to more attractive pricing in the public market.

At the end of 2000, Paliburg, a developer that has encountered liquidity problem with negative working capital since 1998, successfully raised a funding of HK$1.4bn through issuing
commercial mortgage backed securities (CMBS). At the time, many banks have stopped lending to Paliburg as it was in financial distress. Yet, when Paliburg pooled two of its commercial properties, Kowloon City Plaza and Paliburg Plaza, the strong rental incomes from both properties helped the CMBS achieve a very high rating from Moody’s. Since the default risk of the CMBS solely rests on the performance of rental incomes of the two properties. Any credit deteriorations to Paliburg would not bring any repercussion to the CMBS holders. The $1.4billion CMBS were sold off to institutional investors. Paliburg used the proceeds to pay back outstanding mortgages of the two commercial properties and the remaining surplus was used as working capital for the company. If not for the CMBS, Paliburg would have trouble in restructuring its debt with existing lenders due to high default risk. The CMBS structure was not challenged by liquidators or was it downgraded by rating agencies. The LTV on Paliburg’s CMBS was actually quite high at 68%.

A second case of CMBS is that Chinese Estates issued CMBS to raise $1.8bn with Windsor House in Causeway Bay as an underlying asset. Windsor House, a high quality investment property in the Causeway Bay retail market, had a strong cash flow. The Chinese Estates’ maiden CMBS was the first Hong Kong commercial mortgage-backed issue that was rated Aaa, even higher than the then Hong Kong’s local currency ceiling of Aa1. The top ratings from Moody’s permitted Chinese Estates to raise funding more cost effectively than a corporate loan or secured bond.

After the issuance of Paliburg CMBS in the year 2000, we have not seen great proliferation of CMBS deals in Hong Kong. The ample liquidity in the banking sector is one of the reasons. Sino Land, for example, once was an active issuer in asset securitization, has now requested for non-collateralized loan from the banks indicating intense competition of the lender for the borrower.
There is no incentive to do securitization and it is tough for securitization arrangers to compete for clients. Alternative financing instruments like CMBS will be popular only when the banks are unwilling to lend.

4.2 The early experiments in Mainland China

This chapter turns the focus to mainland China, investigating its ongoing process of asset securitization in China. There has been a great deal of media coverage and government announcements on the establishment of REITs and CMBS. On several occasions, the government encouraged the development of REITs in China. As early as December of 2008, the Chinese Central Government issued the “Notice of the General Office of the State Council on Further Strengthening Protection of the Legal Rights of Small Investors in Capital Markets”. The notice formally announced the government’s support for pilot schemes of Chinese REIT (C-REIT) products to be offered to the market. At the time, it had been reported that the Chinese central government was reviewing the draft C-REIT legislation and the first batch of C-REIT products were going to hit the market in 2010. However, the REIT issuance never came out.

Specific C-REIT legislation will need to be enacted and premised on the existing national legislation governing trust products, securities offerings, investment fund management and securitization. It is expected that China will run two different pilot schemes of C-REIT products. One is essentially a scheme of securitization of revenue streams from a pool of real estate assets that will be offered to institutional investors and traded on the inter-bank market. The other product will be offered to retail investors and will resemble the REIT products offered in Hong Kong and Singapore.
With respect to the securitization of the C-REIT product, there should not be a transfer of real estate title. There will need to be a new system for registration of trust over real estate in support of this type of C-REIT product. With respect to the securitization of a C-REIT product, it is expected that legal title of the real estate assets will not be transferred and the existing owner will continue to retain operational control over the assets. With respect to the retail C-REIT products, legal title of the real estate assets will be transferred to the C-REIT trustee and the real estate assets will be operated by an external manager.

An experimental case on REITs

A type of real estate trust in China resembles a REIT product. One of a few experimental “REIT” cases is the “Shenghong Tower Trust” case. In 2003, a local developer, Yuanhong Real Estate Development Company, transferred its 410 million RMB development project Shenghong Tower to Beijing International Trust Corporation (BITIC) for the establishment of the Shenghong Tower Trust. Shenghong Tower is located in the CBD district of Beijing, a premium location. The equity of the tower is divided between two groups, a preferred equity group and a common equity group. The preferred equity of 250 million RMB is hence sold to investors via the Trust. The BITIC collects the cash flows from the Shenghong Tower operation and deposits them into a special account. The cash flow is first returned to the preferred equity holders and residual is returned to the common equity holders. The investment period of the project is 3 years with expected annual return of 6%. Minimum investment requirement is 60,000 RMB. The dividends are distributed on an annual basis. The trust acts to isolate the default risk to that of the property. It is thus bankruptcy remote from the parent development company. The 250 million RMB preferred equity is 61% of the total asset value of 410 million RMB. The risk to the preferred equity is similar to a senior loan on the property with a LTV of 60%. The securities are sold to
the public in Beijing via four retail locations of the Minsheng Bank, one of the private commercial banks in China. The issuance achieved good results from the public.

The “Interim Measures for the Administration of Capital Trust of the Trust and Investment Companies” issued by the central bank of China in 2007 has demanded that the assets of the trust can only be sold to a maximum of 200 entities with individual contract size of no less than 50,000 RMB. This maximum investor number is to limit the financing source of the trust to the private market, mostly institutional investors. This will also minimize the risk it might bring to the public market. The “Shenghong Tower Trust” has successfully breached that limit and tapped into a larger public financing source.

In this case, trust companies like BITIC will need to resolve the conflict between the two beneficiaries namely Yuanhong Real Estate Development Company and the public security buyers, especially under the circumstance that only partial equity of the property is transferred from the developer to the public. Although theoretically, the trust company only serves its fiduciary role of distributing the cash flow, they nevertheless take on a certain reputational risk if the payments are delayed or defaulted.

The first case illustrates that commercial banks acted as intermediaries for issuing and selling securities to the public. The next step will be to trade the “real estate trust products” on the public exchange market like REITs. Yet the public securities market in China is not mature enough. There would be a great deal of uncertainty with the large scale selling of real estate trust products to the public while the banks can sell to rather mature institutional investors.

_Hong Kong REIT holding mainland assets_
Currently, China has partially relied on Hong Kong REITs as substitutes for the main land REITs. A good example of this is the Yuexiu REIT listed on the Hong Kong stock exchange. In 2005, Hong Kong lifted the ban of REIT investing in assets abroad. Yuexiu REIT was listed on the Hong Kong Stock Exchange on 21 December 2005 and was the first listed REIT only investing in properties in the People’s Republic of China (the “PRC”). The current property portfolio comprises of six high quality properties, namely White Horse Building, Fortune Plaza, City Development Plaza, Victory Plaza, Yuexiu Neo Metropolis and Guangzhou International Finance Center with a total area of ownership of approximately 680,000 square meters.

The following diagram describes the organizing structure of Yuexiu REIT.

![Diagram of Yuexiu REIT structure]

**Source:** Yuexiu REIT official website

**Figure 6. The structure of Yuexiu REIT**

The ownership of the REIT is divided between Yuexiu Enterprises at 0.33%, Yuexiu Property Company Limited at 36.45%, and Public Fund Holders at 63.22%. The public fund holders are
the public market security buyers. The asset is split into two pieces, one piece that is the Guangzhou International Finance Center is externally managed by Guangzhou Yuexiu Asset Management Company Limited, while the other piece that includes the other five properties are externally managed by Yuexiu REIT Asset Management Limited. The two asset managers both hire property managers to handle the day to day servicing of the properties.

*Fund of Funds*

Although there are no REITs in China, there are however public funds that invest mainly in foreign REITs as Qualified Domestic Institutional Investors (QDII). These are fund of funds. Due to the strict capital controls of China, an institution can only invest abroad if you are a “Qualified” investor. The two examples are Lion Global Real Estate Fund and Peng Hua US Real Estate Fund. Both funds were established in 2011 and they both invest in equity REITs. Lion Fund has not less than 60% of the assets invested in global REITs, and not less than 5% invested in money market or short term government debt. The Lion Fund follows a global benchmark of FTSE EPRA NAREIT developed REITs total return index. Penghua Fund has no less than 60% of the total asset invested in US REITs, not more than 10% in REIT ETFs and not more than 5% in money market or short term government debt. The Penghua Fund follows a benchmark of MSCI’s US REIT Index. They reflect the current ways of indirect investment in the foreign REIT market by Chinese investors.

4.3 The challenges of REITs

As China is experimenting with the new C-REIT, obstacles that lie ahead of the execution of REITs in China emerge. The challenges are two fold, one that is internal to the real estate industry, the other one comes from external sources such as the government regulations and the
general market fundamentals. I will discuss some of the threats or obstacles to the development of REITs in detail below.

**Internal Obstacles**

One of the fundamental obstacles that inhibit the issuance of REIT is the low yield of the commercial real estate, whether it is residential, office or industrial. If the rental yield on the property is not competitive to other security products on a risk adjusted basis, REITs will not gain market among the different securities. As the real estate price stabilizes, the yield component of the real estate investment will increase as the growth component diminishes. Commercial property will be the most stable assets that REITs hold in the long term. Yet the yields on the shopping malls may be negatively (?) impacted largely by online shopping. Retail will have to transform from commodity oriented to service oriented. Online to Offline (O2O) commerce is a great example of inducing more service oriented shopping experience from online searching. I believe a new type of shopping malls will arise to face the challenge and compete with online shopping. The low yield on commercial properties will need to rise to sustain its development.

Another obstacle would be the lack of knowledge of “trust” for the general public. The Chinese are accustomed to manage the assets by close friends and relatives. The securities market is not well developed and the private lending play an important role as a source for financing. The transfer from a personal relationship based “trust” system to an institutional “trust” system takes time. Since “trust” is at the core of a REIT, the lack of knowledge in which hinders the development of REIT in China.
An underdeveloped system of intermediaries including appraisal, rating agency and auditing is another obstacle for the development of REITs. REITs are built upon an ecosystem of financial intermediaries that facilitate its operation. The intermediaries in China are not so creditable and there is uncertainty with regard to the appraisal and auditing. Corruption is also a big problem when faced with conflicts of interest.

Cooperate governance is yet another major internal obstacle to C-REIT. A large obstacle that stands in front of the REITs is the agency problem. Regulatory restraints and market mechanisms need to be in place to instill financial discipline and mitigate potential conflict of interests in REITs. Such market and regulatory mechanisms may include independent boards of directors, prudent and yield-accretive acquisition strategies, a certain borrowing cap, independent valuation, and disclosure of self-dealing with sponsors.

An example of REIT agency problem occurs when REIT sponsors retained substantial control of REIT shares after IPOs, and an independent asset management subsidiary is also set up by sponsors to render fee-based management services to REITs. These REITs are known as captive REITs. In the US, the close relationship between sponsors and management companies in captive REITs creates potential sources of agency problems, which include over-paying properties unloaded by sponsors. Given the high agency costs associated with captive REITs, they were found to have significantly underperformed non-captive REITs.

Externally managed structure is also more prone to agency problem. For a third party manager that manages multiple REITs, it will be more pressing to maintain a high level of transparency and independency. Examples of potential agency conflicts that are detrimental to the long-term value of REITs include collusion between a trust manager and a vendor in a sell and leaseback arrangement that deliberately inflates asset prices and lease-back rents.
Finally, human talent for REITs provides the cornerstone for its development. The financial industry is a service industry that relies greatly on human resources. A team of well-trained, experienced REIT professionals are necessary for the development of REITs. They would need to be sensitive to real estate market conditions, making the right investment at the right time. They also need to understand the securities market as well as the trust system. The team would not only include REIT managers but also lawyers, auditors, and appraisers.

**External Obstacles**

For external obstacles, the regulatory and legal framework is probably the most important prerequisites for the set-up of the REITs. There needs to be a series of regulations that govern the REITs that sets them apart from listed entities as a separate regime. Laws that pertain to the REIT structure in particular are “Company Law” and “Trust Law”. The “Trust Law” determines the legal implication of the transfer of the title of the real estate asset and distinguishes it from normal buy-sell transactions.

Since 1979, on the “Third Plenary Session of the 16th Central Committee of the Communist Party”, the trust industry in China has taken on equal status as the banking industry, the securities industry and the insurance industry, forming one of the four important pillars of the financial industry. The “Trust Law of People’s Republic of China” was enacted in 1979, providing a basis for real estate investment trust funds to develop and operate. Yet, laws regarding trusts and companies are still too general for the establishment of REITs. More specific laws or regulations tailored to the REITs should be in place. In the case of US, the REIT Act was seminal to the creation of REITs.
Adverse taxation can be seen as the biggest threat to the development of REITs. The legal definition of a REIT is a trust that distributes most or all of its earnings as dividends and that is the essential difference between a corporation and a REIT. Hence, the trust law should define the REIT as a conduit, a pass through structure that should be tax-free. Tax laws in China are underdeveloped compared to the US. There are loop holes in the system that developers use to evade taxes. The tax advantage of REITs in China may not be obvious as compared to normal corporations, but the situation could change.

Another issue is the obstacle for foreign investment in REITs. China has restrictions on foreign investment in real estate. In fact, China has strict exchange controls over all foreign direct investment transactions. Foreign companies are not allowed to directly acquire and hold investment property in China. Foreign investment in China-incorporated real estate companies is also subject to many regulatory restrictions. The level of restriction on foreign ownership of REITs varies from country to country and will be an interesting question for regulators. On the one hand attracting foreign capital to help support urban development is a priority for a number of economies in Asia Pacific, but the REIT model, with a requirement for substantial profit distribution, can represent a substantial capital outflow. The question remains that can foreign investors invest in Chinese REITs in the future and do they also enjoy the same tax benefits as domestic investors.

### 4.4 The opportunities of REITs

Despite the different challenges that REIT regimes face in China, there are obvious advantages that it can bring to the Chinese real estate market. The basic need is that this financial product established the missing link between the developer and the public. I will analyze it from both the sellers’ and the buyers’ perspective.
From the sellers’ perspective, REITs are necessary tools for developers to finance development projects and dispose of real estate assets. In September of 2005, China’s Banking Regulatory Commission issued document 212, “Notice on Strengthening Risk Disclosure of Partial Business of Trust Investment Companies”. The notice stipulated that the newly established real estate businesses should comply with the macro-economic control measures of the government. Strict due diligence should be carried out toward these businesses regarding the four required permits of development before the bank loans can be issued. The four different permits include the certificate for the land use right, the land use permit, the building permit and the building construction permit. The requirements made the traditional bank financing to be much more difficult than before. This regulation necessitated the development of REITs due to the shortage of financing means for the developers.

The Chinese real estate industry is currently experiencing a severe slowdown that will be accompanied with a shortage of capital. Looking ahead from 2015, there will be still be ten to fifteen years of urbanization process. The number of real estate developers will dramatically decrease in the next ten years from over ten thousand to within a hundred through mergers and acquisitions. The industry will be consolidated into a limited number of brand companies that have the expertise and knowledge in development. A large number of inexperienced developers will be eliminated and the ultimate competition will be for capital. REITs will be essential to the survival of real estate companies. We see the same condition in the US, where a few powerful REITs dominate the real estate development market.

From the buyers’ perspective, both the general public and the institutional investors lack ways of investing their cash. Aside from the fact that there is large amount of cash reserve on the hands of the Chinese people who have the tradition of saving money, a large number of institutional
investors such as social security, medical insurance, life insurance and pension funds are just under development in China. These institutional investors hold significant amount of cash and have not yet fully engaged in more aggressive investment activities other than putting the money in banks. At the same time, foreign institutional investors have also set foot in the Asian market especially Chinese market. Foreign money will be also looking to invest in Chinese REITs because the liquidity and transparency of REITs.

4.5 The challenges and opportunities of CMBS

Compared with REITs, the CMBS market in China has actually undergone a few experiments so far. A few CMBS has been issued. The structure of CMBS in China might be different than that of the CMBS in the US, yet we do observe products that are similar to CMBS or CMBS like. These CMBS issuances are mostly examples of stabilized commercial property holders that transfer the titles to the public market in exchange for cash. CMBS is, of course, a different industry than RMBS, despite some similarities in terminology and financial structure. Unlike most residential borrowers, commercial borrowers tend to be real estate professionals and their project financing rests on an assessment of property income rather than on personal income.

China has also experimented with RMBS at an earlier stage.

China has started to experiment with asset-backed securities since the end of 1990s. The process became more standardized in 2005. There are four different asset backed security products that are being issued, they are “China Unicom’s CDMA network rental profit plan”, China Development Bank’s “Kaiyuan Credit Asset Backed Securities”, China construction bank’s “Jianyuan Individual Housing Mortgage backed securities” and Dongguan holdings’ “Guangshen Highway Toll Income Equity Asset Management Plan”. The four different asset backed
securities range across different industry sectors such as telecommunication, credit debt, housing and infrastructure.

Some of the obstacles for the development of CMBS and MBS in China are as follows. First, there's a shortage of institutional investors like pension funds or insurance companies that would want a fixed income product like MBS. The opening up of the investment channels for institutional investors such as insurance companies in China will inevitably contribute to the bourgeoning of the securities market including the CMBS or MBS market. Second, for residential mortgages, there's no government sponsored enterprise (GSE) like Freddie or Fannie in China. You can view the big banks as GSE's that do the same thing, but that means that there is no need for something like Freddie/Fannie. Thirdly, China doesn’t have a systematic personal credit system, hence banks cannot assess the credit quality of the borrower and their loans. Hence, there are a lot of unknowns for the efficient pricing of the risk. This limits the development of MBS, but not CMBS. CMBS is backed by the risk of the property itself rather than the individual borrower and hence doesn’t require the Chinese equivalent of FICO score system.

Here I would like to investigate two cases in China, one is an MBS, and the other is similar to CMBS. The two cases exhibit what the closest products to CMBS are in current day China. However, I do have to note here that neither of them are technically CMBS cases, yet I am trying to arrive at the future possible CMBS through examining these scenarios.

_Suning Yunchuang_

On Feb 6th of 2015, Suning Yunchuang, was listed on the Shenzhen stock exchange. This is alleged to be a REIT but in fact share many traits with CMBS. The security’s cash flow was
backed by the income of 11 Suning retail stores all over China. Suning Appliance Company Limited is one of the largest privately owned retailers in China, headquartered in Nanjing, Jiangsu. Suning has more than 1600 stores covering over 700 cities of Mainland China, Hong Kong and Japan. Recently, Suning is trying to focus more on its e-commerce platform. One of the efforts is for Suning is to sell its real estate assets for cash. Suning Yunchuang attempts to accomplish the goal by issuing asset backed securities to the public. In September 2014, the Suning company board has approved the decision to set up 11 wholly owned subsidiaries. In October of 2014, the titles of the 11 retail property and their land use right are transferred to the corresponding subsidiaries. These real estate assets are then transferred yet again to a private equity fund set up by CITIC Gold Stone Asset Management. After the title of the properties are transferred, Suning continues to occupy the stores paying market rent. CITIC Securities, a prominent investment bank linked to CITIC Gold Stone, promoted issued and underwrote the securities.\[13\]

The securities are backed by the rental income of 11 Suning retail stores. The total asset value was appraised at 4.3 billion RMB, equal to the total value of securities issued. The securities included an A piece of 2 billion RMB and a B piece of 2.3 billion RMB. The A piece has a maturity time of less than 18 years with 6.17% expected annual return. The B piece has a maturity time of less than 4 years with undefined expected annual return. The credit rating is AAA for A piece and AA for B piece. The credit rating agency for this issue is the China Cheng Xin Securities Rating Co. (CCXR). The security is sold to institutional investors with minimum value of 1 million RMB. The IPO was issued on the Shenzhen Stock Exchange platform.

\[13\] Notice on the innovative asset management of the real estate assets of some retail shops of the Suning Yunshang group
Another example is not a CMBS but rather a MBS issue. This example is the only securitization example for mortgages that I can find in China while the previous one is the securitization of assets themselves. September of 2014, the central bank and the China Banking Regulatory Commission jointly issued the “the notice regarding further improving the financial service for housing”. It encouraged financial institutions such as banks to issue mortgage backed securities to expand sources of funding, which will in turn increase the loans that banks make to first residences and improvement residences for families.

For the purpose of increasing liquidity, China Construction Bank, one of the four large state owned banks in China issued the “Jianyuan Individual Housing Mortgage Backed Securities” in December of 2005. China Construction Bank’s four branches in Shanghai, Wuxi, Fuzhou and Quanzhou were the first to issue RMBS in China. The RMBS has a trust structure set up by CITIC Trust. The originating bank is China Construction Bank. The loan servicer is China Construction Bank itself. The underwriters (book keepers) are China Construction Bank and China International Capital Corporation Limited.

The asset pool is a collection of 15,162 individual housing mortgages totaling a principle value of 3 billion RMB. The weighted average remaining maturity of the loans is 172 months, weighted average interest is 5.31%. The securities are divided into two pieces, a preferred piece and a subordinate piece. The securities are divided into preferred piece and subordinate piece. China Construction Bank will buy the subordinate piece itself. The preferred piece is again divided into A, B, C three tranches. A tranche has a total value of 2.6 billion RMB, B tranche has a total value of 200 million RMB and C tranche has a total value of 52 million RMB. The interest on these securities are floating, with the base rate plus a spread. The base rate is the 20
day average of 7 day repo agreement rates announced by the China Foreign Exchange Trading System & National Interbank Funding Center (CFETS). The spread for A, B and C tranches are 1.1%, 1.7% and 2.8% separately above the base rate. The credit rating for A, B and C tranches are AAA, A and BBB by China Cheng Xin Securities Rating Co. (CCXR). The analysis of China Construction Bank MBS phase 1 structure and risks

Source: China Construction Bank MBS phase 1 structure and risks

Figure 7. Structure of Jianyuan Individual Housing Mortgage Backed Securities

In China, the prepayment risk is different from the US. US borrowers tends to prepay when interest rates drop by refinancing. In China, due to the lack of refinancing methods, borrowers don’t prepay as much, while they tend to prepay when interest rate rise.

14 The analysis of China Construction Bank MBS phase 1 structure and risks
Over the ten years from 2005 to 2014, there are only three issuances of MBS in China. In 2007, China Construction Bank issued another MBS product. In 2014, Postal Savings Bank of China issued its RMBS product. China’s MBS has experienced a steady and slow growth. There has been a lack of incentive to issue RMBS. One of the reasons is the cost of capital for RMBS is pretty high. Although MBS expands the bank’s individual housing loan capacity. The cost is still pretty high for banks. The return on the MBS market is relatively low on a risk adjusted basis and it has a long maturity period so it is not very attractive to investors.

4.6 Conclusion

*The first Chinese REIT like products*

Projecting into the future, REITs in China will certainly be a necessary trend for the future Chinese real estate financial market. Based on the investigations of the current market status, I am highly optimistic that the first batch of Chinese REITs will be issued within one or two years. It may take several years however for the Chinese REIT regimes to mature.

In fact, as this thesis is being written, news came out regarding the first “REIT” in China. On June 8, 2015, Vanke, one of China’s leading developers, in cooperation with Penghua Fund, has announced the official authorization of “Penghua Qianhai Vanke REITs closed end fund” by the China Securities Regulatory Commission. The application for this REIT has been put forward by Vanke and Penghua Fund on April 22nd. Before this REIT issue with Vanke, Penghua fund has a track record of investing in foreign REITs as a fund of funds. This “Qianhai REITs” is fully supported by the Qianhai Authority, a government branch in charge of the Qianhai Special District’s development. The Qianhai REITs will invest less than 50% of the funds into the Vanke Qianhai Corporate Headquarters Complex. The total rentable area for the whole corporate
complex is around 55,000 square meters including 36 corporate office buildings ranging from 200 to 1600 square meters in area and a 3300 square meters business center, 3000 square meters of retail and 6000 square meters of parking. The space has been 100% fully leased at 250 RMB per square meter monthly rent at the time the REIT structure was set up. The expected return for this investment is 8% at 165 million income on an annual basis. The REIT will also invest not less than 50% of the funds into public stocks, bonds and money market tools. The REIT’s birth was pushed by the Qianhai Authority as a financial innovation for the district. Qianhai Authority has decided to use a BOT (Build Operate Transfer) project delivery method for the Qianhai Corporate Headquarters Complex. The construction budget is around 800 million RMB and the operation period is 8 years. Vanke, being the most experienced developer in China, won the bid for this project. In this setting, Vanke is the developer who builds, operates and maintains the complex for an 8 year concession period from 1/1/2015 to 7/24/2023. The full rental income goes to the REIT fund after deducting the property management fees.¹⁵

The “Vanke Penghua” Issue is dubbed by the media as the first “Public” REIT in mainland China, while the above mentioned “Suning Yunchuang” and another “China CITIC Qihang” has been dubbed as the two first “Private” REIT. This issue is public because it is listed on the Shenzhen Stock Exchange and the minimum purchasing amount is 100,000 RMB at IPO and 10,000 on the secondary market. Liquidity is higher for this product since it can be traded on the secondary market not only limited to accredited investors.

It is still in question whether the “Vanke Penghua” issue could actually be officially labeled as the first Chinese “REIT”. There is inevitably confusion as to what REIT is and the nomenclature

¹⁵ Prospectus of the Penghua Qianhai Vanke REITs closed end fund initial public offering
has been used in confusing ways. REITs shouldn’t be private in the first place. The “REIT” brand has been so much reported in the media these days that there is competition among issuers to issue the first REIT in China, regardless whether it fits the definition strictly. Yet one needs little effort to examine further on these “REITs” to find out that they are still far from the standard REIT structures in the US market today. On the other hand, the definition for REITs is quite vague given different countries have different policies towards REITs. It is difficult to define REITs just based on the US standard. In the following section, I try to define Chinese REITs more strictly and construct an identity for it.

*The Chinese REIT identity*

To conclude, based on the previous broad investigation of US, Hong Kong and Singapore REITs, a few of the potential characteristics of the news Chinese REITs as compared to US REITs can be summarized as follows. The thesis strives to construct an identity for future Chinese REITs. In order to do so, I need to define what strictly speaking a Chinese REIT is. There are certain aspects of Chinese REITs that can be stricter than other aspects. Some characteristics are hard standards that must be followed strictly in order to be called a REIT while others can vary from one another.

1. **Equity vs. Mortgage.** Although US REITs started with the mortgage REITs, the more prevalent type of REITs are equity REITs. I believe the transition from mortgage to equity is a natural process in the evolvement of REIT structures. When people first invest in something new, they usually want to start safe. Investing on the debt side might fit the risk appetite of most individual retail investors in China. As the REIT regime gets more and more mature, there will eventually be a shift from the debt to the equity side. In the case of “Suning Yunchuang”, there
are news articles that label it under REITs yet I would still categorize it as CMBS due to its resemblance with the CMBS structure in the US. The Chinese media sometimes mixes up REITs with CMBS and use them interchangeably. The media and the public need to be more educated on the concept of REITs. In reference to Hong Kong REITs which are only equity REITs, I would consider equity REITs to be a strict standard for Chinese REITs. There are too many CMBS in China that abuse the “REIT” name and call themselves REITs.

2. Externally Managed. I predict that the main land Chinese REITs will be in large part resembling the Hong Kong REITs. As the “Vanke Penghua” has exemplified, the REIT is externally managed by Penghua Fund. The Penghua Fund has accumulated experience in Real Estate asset management. As mentioned in Chapter 3, Chinese developers are almost exclusively merchant builders, they currently do not possess the professional skills to manage their commercial properties, let alone the financial skills to do asset management. Externally management will be a characteristic but not a defining standard for C-REITs.

3. Listed vs. Non-listed. The first experiments for REITs in China start with private placed REIT shares instead of publicly listed and traded shares. This is again a natural evolution for the people to familiarize themselves with this financial product. The institutional investors with more experience and expertise would start to invest in REITs ahead of the general public. Although there still exist legal and regulatory obstacles, the greatest challenge is to build up people’s awareness and trust in this investment vehicle. I consider “Public Placement” to be a necessary criteria for the C-REIT.

4. Development vs. Long term hold. The REITs would first start off as vehicles for non-development long term holder of assets. The risk appetite again dictates that REITs will be
mostly used to hold long term assets that developers disposed of at the end of their profitable development phase. Since developers don't like to hold long term real estate assets on their balance sheets, they want to only reap the profit of development and use REITs as a way of exiting. Yet due to the much higher profit in development and very low yield from stabilized commercial properties in China, it might still be debatable as to which type of REIT fit China the best.

5. Tax benefits. As the “Vanke Penghua” example has shown, there is currently no tax benefits to the REIT regimes in China. This is quite similar to Hong Kong REITs yet different from Singapore REITs. There is currently no tax laws defining benefits for REITs in China. Although tax exemption is a standard criteria for US REITs, I don’t think it is going to be the case for Chinese REITs in the near future. The tax laws have yet a long way to go to fulfill this requirement.

6. Product Line. As US REITs are diversified into different product lines and types such as residential, office, healthcare and logistics, Chinese REITs will almost exclusively focus on the office and retail properties. Evident in the experiments so far, Wanda and Vanke are both securitizing their commercial properties. For commercial development projects, successful developers in commercial real estate is rare in mainland China while Hong Kong developers do exceptionally well and dominate the commercial real estate market in China. One of the reasons is that Chinese commercial developers don’t possess the skills to engage in long term commercial property management. REITs will be a great exit strategy for them to dump assets. On the other hand, residential properties in China are mostly sold rather than rented out. I am almost certain that REIT structures will not exist for residential properties for a long time in China.
7. Cross Border Investment. Most of the REIT regimes in the world invest in domestic real estate assets except for hub economies like Hong Kong and Singapore. US REITs mostly focus on US assets but are still allowed to invest in foreign assets as long as the REIT meet the income and asset tests. On the other hand, the most likely scenario for C-REITs is that the investment will be focused on domestic Chinese real estate assets. After all, it is the Chinese asset that makes a REIT distinctively Chinese.

8. Foreign Investment in Chinese REITs. As compared to US REITs that have no restrictions on foreign ownership, Chinese REITs will likely not be open to foreign investors in the beginning due to the strict capital control of the government. However, recently in 2014, the Chinese stock market started to open up for investors in the world through the “Shanghai-Hong Kong Stock Connect Program”. A typical American can only buy shares in Shanghai by first going through a broker in Hong Kong who then must go through the Hong Kong Stock Exchange, which is linked to the Shanghai Exchange. By loosening up the capital control, the Chinese central government essentially is taking a first step in loosening up the grip on the currency exchange rate. It seems that in the future, foreign investment in Chinese REITs can be processed via the Hong Kong Stock Exchange as with any other stocks listed on the domestic Shanghai or Shenzhen Stock Exchange.

9. The Legal Form of REITs. US REITs may be formed as a corporation, a trust or an association taxed as a corporation. These different entity share the same tax filing status by electing to be a REIT. The Hong Kong REITs are only in the trust form rather than in a corporation form. I predict the Chinese REITs will utilize the same trust structure as the Hong Kong REITs. It might then slowly transition into the corporate form of REITs.
10. Income, asset and ownership tests. US REITs have different tests regarding its income, asset and ownership. For example, for ownership, at least 75% of the taxable income should be real estate related. This rule doesn’t apply to the “Qianhai REIT” mentioned above since more than 50% of the fund is invested in fixed income securities which may or may not be related to real estate. For the asset test, 75% of a REIT’s total assets must be real estate, mortgages, cash, or federal government securities. For distribution, at least 90% of a REIT’s annual taxable net income must be distributed to shareholders as dividends each year. For ownership, REITs cannot be a closely held corporation: no five or fewer individuals may own more than 50% of REIT’s stock, and there must be at least 100 different shareholders. There must also be a specific requirement for the number of investors in a Chinese REITs. There needs to be a series of specific tests to legally qualify REITs in China. Even though the “Vanke Penghua” Issue has been promoted as the first REIT, there is no definitive legal and regulatory documents that set the standards for REITs. Thus, strictly speaking, there is not a single legal REIT in China yet as there exist no official legal definition for REITs. At some point, the legal documents will catch up with what the public are experimenting and lay down the rules for C-REITs.

In general, I predict that there will be quite a few characteristics of the Chinese REIT that resemble the Hong Kong REIT. The Chinese REIT will be born out of an Asian financial environment in general yet geographically it will have close ties to Hong Kong REITs since Hong Kong has always been at the forefront of China’s financial innovations and reforms.

CMBS

At the time of this essay, CMBS that resembles the US model has not strictly existed in China. The case of “Suning Yunchuang” described in the above paragraphs is also not strictly a CMBS
issue, yet it shares so many traits with the CMBS structure. The A/B piece structure, the private placement with institutional investors. The major difference between this securitization is that the entire asset is securitized instead of only the mortgages. In other words, there isn’t an equity piece holder. The reality is that a lot of Chinese debt securities pretend to be equity securities and there is no clear line between the two.

Very similar to “Suning Yunchuang”, a securitization case that is sort of a hybrid of REIT and CMBS is the “CITIC Qihang Securities Plan”. Interestingly, they are called “Private REITs” by the media. This might be a misuse of nomenclature. I will analyze the “CITIC Qihang” as a case study and follow up with the different characteristics of CMBS issues in China.

The “CITIC Qihang” was listed on the Shenzhen stock exchange on May 21st of 2014. This financial product was established on April 25th of 2014 with assets worth over 5 billion RMB. The assets include Beijing CITIC Securities Tower and Shenzhen CITIC Securities Tower. Both are commercial office properties in prime locations. The securities are divided into two tranches, an A tranche with 70% of the total assets and a B tranche with 30%. The A piece get the basic dividends and 10% of the appreciation in the asset value while the B piece get the residual benefits and 90% of the appreciation in asset value. A piece has a duration of 3 years with an expected return of 7%-9%. The B piece has a duration of 4 years with expected return of 12%-42%. The securities are sold to accredited institutional investors. CITIC Goldstone Fund Management Company is the external asset manager for the fund. To be private, the number of investors should be less than 200. 16

16 Prospectus of the CITIC Qihang asset management plan securities public offering
The conclusion is that technically, CMBS doesn't exist in China. In reference to the above case, I think it will take some time for the CMBS to be fully established and matured. However, the process might be easier for CMBS as compared to REITs, due to people's risk appetite toward safer debt instruments than equity products. I will also lay down some characters that I predict for the future CMBS in China and construct its identity.

*The Chinese CMBS Identity*

1. A/B piece structure. In reference to the “Suning Yunchuang” and “CITIC Qihang”, the two have similar and simple A/B piece structures. There won't be a complicated layering of tranches for the Chinese CMBS at the beginning. The likely scenario is that it will inherit the two tranche character initially. It is not unlike the first US CMBSs invented by the RTC. US CMBS today have become so evolved that they could have 20-30 tranches.

2. Asset Pool. The first Chinese CMBS would be backed by only a single or just a few number of buildings. The less number of buildings, the easier it is to securitize. The difficulty of resolving the differences between mortgages is bypassed.

3. Investor Profile. Similar to the US CMBS, the different pieces are sold to accredited institutional investors. The transactions in IPOs and on secondary markets are carried out in bulk sizes. For example, “CITIC Qihang” has a minimum transaction requirement of 100,000 shares. The large sum of money involved is prohibitive to individual retail investors except high net worth individuals.

4. Private Placement. Although the financial product is listed on the Shenzhen or Shanghai stock exchange and sold to investors with registered accounts on the Shenzhen and
Shanghai stock exchange. It is almost exclusively privately placed to institutions due to its large transaction size.

5. Maturity. The maturity of the Chinese CMBS should be in line with the duration of the mortgage. The only reference at this point is the MBS issued by China Construction Bank, the “Jianyuan Individual Housing Mortgage Backed Securities”, which has a maturity of 172 months. Both the “Suning Yunchuang” and the “CITIC Qihang” are closed end funds with maturities of less than 5 years. They are certainly not backed by mortgages but by the asset itself. I believe the maturity of the first CMBS in China will have a relatively shorter term as compared with its US counterpart. The shorter the maturity, the less is the inherent risk.

6. Tax implication. The core of CMBS is a trust that has a pass through structure which is tax exempt. In the above cases, neither “Suning Yunchuang” nor “CITIC Qihang” enjoy tax benefits. The current MBS issue of “Jianyuan Individual Housing Mortgage Backed Securities” does have tax benefits. However, this tax benefit is limited to the bank issued securities not the investment banks. The tax benefits needs to be more regulated and standardized.

The idea of CMBS seemed to be more easily promoted as compared to REITs in China. As long as the property has a stable cash flow, there is an opportunity to securitize it. Since the first issue of MBS in 2005, the second issue in 2007, the MBS market in China has remained quite inactive until 2014. The 7 year halt of MBS development in China bears its roots in the great financial crisis mainly caused by sub-prime mortgage backed securities. Through securitization, issuers can expand their ways of financing and adjust their balance sheet. It never the less has a positive
effect on the development of the financial market by generating more liquidity. However, if the risk of the securitization is not adequately controlled, such as in the case of the “sub-prime mortgage crises”, it could cause disastrous results. Asset securitization is a double edged sword. The Chinese CMBS are going to be originated as vehicles to dump assets for developers.

*A REIT CMBS hybrid*

To conclude, Neither REIT nor CMBS have not technically existed in China although MBS have been officially issued. There allegedly exist a hybrid between the REIT and the CMBS. A few cases described above have exemplified this hybrid product unique to the current day China. “Suning Yunchuang”, “CITIC Qihang” are very similar in their nature. They are called “private REITs” in the Chinese media while “Vanke Penghua” on the other hand is called a “public REIT”. One thing that I can say for sure is that they all fall under the general rubric of “Asset Securitization”. This is why this essay is titled “Asset Securitization” instead of focusing on either REITs or CMBS only. These products have the characteristics of REIT in that they are not backed by mortgages but by the income of the asset directly. They exhibit characters of CMBS by the fact that they are divided into different tranches, most are privately placed to institutional investors. In addition, they have unique characteristics themselves as they are rather short term and closed end. To some extent, they have characteristics of a closed-end private equity fund. This hybrid have simple structures and are not complicated. I believe they are the first step of the evolution of Chinese REITs or CMBS. Although US and some other countries have highly evolved mature REIT and CMBS systems, it doesn’t make sense to copy everything and recreate a mature securitization system all of sudden. The Chinese securitization system still needs to experiment and evolve on its own. The securitization of real estate assets in China is a necessary financial progress and will mature within the decade.
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