An Investigation into the Use of REITs to Finance Affordable Housing in Mainland China

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Abstract

Mainland China’s system of affordable housing provides housing for low and medium income groups. Housing for sale and housing for rent give residents two choices and also give two choices for municipal governments to provide affordable housing. Municipal governments play a mono role in building and financing affordable housing, so they tend to build housing for sale rather than for rent to collect back investment in order to finance more housing units. However, rental housing is more affordable to residents in China. Municipal governments lack a way to liquify these rental properties and attract private investment. On one hand, municipal governments hold a lot of rental properties worth billions of money; On the other hand, they still lack funding sources to finance new affordable rental housing. No liquidity has made municipal governments stuck with holding properties, and reduced their ability to build more public rental housing for low and medium groups.

Real Estate Investment Trust (REIT) is a financial vehicle that securitizes properties and allows private sectors to invest and trade securities of real estate. Mainland China plans to use this vehicle to securitize rental-housing units owned by municipal governments and help finance affordable housing through attracting private sector's investment. It has built up its structure of bond-like REIT, which is different from traditional equity REIT in the U.S. What should policy makers keep in mind in order to successfully implement the plan?

This thesis answered this question by researching experiences from other countries and areas. It reviewed a mature market, REITs in the US, on its history and experience of REITs participating into affordable housing. It also studied a failure case from Hong Kong, which privatized its public housing properties by the Link REIT and generated social losses. This thesis also researched the bond-like REITs from the experience of Real Estate Asset Trust (REAT) in Taiwan. Based on these researches, the thesis found Mainland China’s opportunities. It suggested that debt financing instead of equity financing by public listed REITs is important to preserve the safety of affordable statue of housing units. It also found that affordable housing is attractive to REITs during recession period with it steady and low risk of income. There are also other significant implications suggested that should be kept in mind for policy makers in Mainland which are included in the last chapter of the thesis.

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Chapter 1. Background of affordable housing and REITs in Mainland China

1.1. Introduction

Real Estate Investment Trust (REIT) is a financial vehicle that allows public investors to trade securities of properties, while REITs invest, develop, manage those properties and pay out dividends to investors. This vehicle has played an important role in financing real estate industry in the US, Australia, Singapore, Hong Kong, and other 23 countries. China’s real estate market was booming during last decade, and it is advocating setting up this tool for its real estate industry. China’s first REIT is under preparation.

One launching proposal of REITs in Tianjin is to create a REIT by securitize its affordable rental housing. Through this way, municipal government wants to raise fund to finance new constructions of new affordable rental housing. In China, municipal government is the only builder and manager of affordable housing, and it lacks an effective way to finance those projects through other sources. Would REITs become a possible way to solve this problem?

This question is of great importance to municipal governments, public investors, and private developers. This thesis tried to answer this question by researching experiences from other countries and areas. It reviewed a mature market, REITs in the US, on its history and experience of REITs participating into affordable housing. Hong Kong has also privatized its public housing properties by the Link REIT. The proposal in Mainland China is to securitize the future income of property as debt instead of equity. In Taiwan, there were
several cases securitized properties in this way, and it is called Real Estate Asset Trust (REAT). Actually, it appears to be a refinancing way for the property owner. The owner withdraws future income and issue debt to investors, who are compensated with interest and can trade the debt. Using this money, the owner makes other investment and he still has the ownership of the property. This is a different way from regular REITs. The owners still kept the ownership of the property, so they can still manage the property. This thesis also researched pros and cons of this kind of REIT's structure. Based on these researches, the thesis found China's opportunities and also those considerations should be kept in mind for government and policy makers.

Graphic 1  Research structure

REITs Launch In Mainland China

Current Affordable Housing In China:
Government-oriented, No private participation,
Huge gap of financing

Lessons From Other Countries and Area

US
(history & experience)
Public listed REITs
CDT:
a REIT focused on affordable housing investment

Hong Kong
(social & economic impact)
LINK REIT: Housing Authority privatized public properties
taiwan
(bond like REITs)
Securitize the future income of property as debt instead of equity.

What can Mainland learn from these experiences related to its current situation?

Suggestions
expect to find out comprehensive suggestions that can be used by the governments, investors, developers and other players of the REITs market.
1.2. Affordable housing in Mainland China

Along with the fast development of economy, China’s real estate market has boomed in the last decade. The commodity-housing price has climbed up to an unaffordable level to low and medium income groups of residents. In these years, China started to work on building affordable housing national wide. Although different cities have different names and types of affordable housing program, the basic idea is still to build or renovate houses with a price or rent affordable targeting the low and medium income groups.

China has built up its system for supporting affordable residence houses, like in the US, with two kinds. Those low-price houses for sale are called Comfortable Housing, while those houses for rent are called Low-rent Housing and Public Housing. Comfortable Housing is built with subsidies through land leasing and construction process, and these houses are sold to those low-income groups at a lower price than the market rate. Households get the ownership of Comfortable Housing after purchasing. Government then has little control or management within these Comfortable Housing projects. Another important program is to build affordable rental housing for residents. Municipal governments would build and hold these housing and rent them to low income and medium income groups. Those houses rent to low-income groups are called Low-rent Housing, and those to medium income groups are called Public Housing. Municipal governments develop and manage these affordable rental housing. Residents pay lower rent compared with market-rate, or pay market-rate rent with monthly housing subsidies from government.

In recent years, many large cities in China started to build public rental housing in order to encourage the growth of its rental housing market. The city of Chongqing has planned
more than 20 neighborhoods for Public Housing. Five million square meters of Public Housing is under construction in 2010, and 20 million square meters of Public housing are planned for the next 10 years, which can allocate 335 thousand households in Chongqing. Tianjin built 0.7 million square meters of affordable rental housing in 2009, with 1/7 for Low-rent Housing and 6/7 as Public housing.

**Municipal governments lack an efficient way to finance affordable rental housing without the participation of other investors.**

However, drawbacks in this system prevent its development. In the past long history, municipal governments of China have built much more Comfortable Housing for sale than public rental housing. Municipal government is the only player in investing into the projects. Building houses for sale can help government collect investment back much faster than holding them as rental houses. Holding public rental properties need much longer term to collect back the investment with monthly rent. In order to build more affordable housing with limited source of funding, government tend to build and sell Comfortable Housing. In 2009, 10 out of 11 newly built affordable housing units were Comfortable Housing in Tianjin. The increased building of rental housing in recent years was largely due to the 4-trillion-investment stimulation package in financial crisis from the central government of China. Before that, municipal governments have even less incentives to build affordable rental housing.

Municipal governments need to liquefy their existing rental properties, in order to finance more new housing units. The mono-role of governments played in affordable housing makes lacking financial sources a big problem for municipal governments. There is no channel for other investors, like public investors and other institutional investors,
entering into the business and share financial burden from municipal governments. On one hand, municipal governments hold a lot of properties worth billions of money; On the other hand, they still lack funding sources to finance new affordable rental housing. No liquidity made municipal governments stuck with holding properties, and reduced their ability building more public rental housing for low and medium groups.

**Municipal government should try to build more affordable rental housing other than housing for sale, because rental housing is more affordable to low-and-medium-income residents than purchasing houses under the current housing market of China.**

The current housing market of China has very low capitalization rate in residential sectors. From the following assessment in the city of Shanghai, for a median-low income group, it is much more affordable for them to rent a house instead of purchasing. That implies municipal governments should try to build more affordable rental housing.

**Affordability assessment in Shanghai**

To assess the implication of the current housing market, a medium-low income group of Shanghai’s households was selected to assess the affordability of housing in rental and asset market.

According to an official survey in the Shanghai Year Book 2007, 1000 households were sorted into 5 groups by Average per Capita Disposable Income. The Medium-low Income group consists of the 200 households with the second lowest income level.
Table 1  Sorted Income Groups

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Low Income</th>
<th>Medium-low Income</th>
<th>Medium Income</th>
<th>Medium-high Income</th>
<th>High Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Households Surveyed (household)</td>
<td>1,000</td>
<td>200</td>
<td>200</td>
<td>200</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>Average Number of Persons Per Household (person)</td>
<td>3.01</td>
<td>3.15</td>
<td>2.97</td>
<td>3.02</td>
<td>3.01</td>
<td>2.89</td>
</tr>
<tr>
<td>Average Number of Employees Per Household (person)</td>
<td>1.64</td>
<td>1.5</td>
<td>1.49</td>
<td>1.67</td>
<td>1.72</td>
<td>1.83</td>
</tr>
<tr>
<td>Average per Capita Disposable Income (yuan)</td>
<td>23,623</td>
<td>10,297</td>
<td>15,131</td>
<td>20,249</td>
<td>27,286</td>
<td>47,149</td>
</tr>
<tr>
<td>Average per Household Disposable Income (yuan)</td>
<td>71,105</td>
<td>32,435</td>
<td>44,939</td>
<td>61,151</td>
<td>82,130</td>
<td>136,260</td>
</tr>
</tbody>
</table>

Affordability of purchasing houses

From Table 1, the Average per Household Disposable Income was 44,939 Yuan in 2007. In 2008, the average per Capita Disposable Income reached 26,675 Yuan. Assume the Medium-Low Income group has an equal income growth rate on average. In 2008, the Medium-Low Income group had a disposable income of $44,939 \times \frac{26,675}{23,623} = 50,744$ Yuan. In 2008, the average housing price in Shanghai was 8187 Yuan per square meters. Actually, the property with this price level is located in the suburban area of Shanghai, where price are much lower than in the inner-urban area. This average price level is calculated by newly developed condos, most of which are located in suburban areas like Shenzhuang. Suppose a medium-low income household purchased a condo of 80 square meters, which is among the smallest size in the asset market. The ratio between housing price and household income is $8,187 \times 80 / 50,744 = 12.9$. If the down payment is 30% (around 196,400 Yuan), over the next 20 years, the family needs to pay 2,817 Yuan per month at the interest level of Dec 23, 2008. The monthly payment is around 67% of the household income. This ratio is far

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from affordable for this income group. Regarding the trend of price increases, as a result of lower housing supply over the following years, the asset market is even less affordable for this group.

**Affordability of renting houses**

With around 1800 Yuan per month, a family can also rent an 80 square meter apartment in the suburban area (like Shenzhuang) of Shanghai. The cost is around 40% of the monthly income to a medium-low income group. Because of the lower demand from fewer floating population brought by the current crisis, the rent may even go down in the following years, which makes the space market even more competitive.

**Conclusion of affordability assessment**

To summarize, the 20 years depreciation (the regular depreciation period of residential housing is around 27.5 years), the 200,000 down payments, 27% more monthly budget for recreation, and the trends of current market all indicate that the medium-low income should rent an apartment instead of purchasing a condo. Moreover, the cap rate of this 80 square meters suburban house is around 3.8%, which reflects a very low rent to price ratio.

From the above analysis, to rent a house in Shanghai is more affordable to medium-low income groups than to purchase.

Shanghai represents the current housing market in major cities of China. It represents a market with larger potential in rental housing compared with commodity housing. It is easier for municipal government solving affordable housing issues by focusing on rental housing.

**1.3. Motivations of Mainland’s REITs launch**
REITs won the official support from Chinese government when real estate market is shrinking, and the need of financing affordable rental housing accelerated its approval.

The shrinking real estate market in 2008 asks for new financing tools.

Accompanying a terrible crash of its stock market, China’s real estate market is also shrinking in 2008. From the demand side, a new policy on tightening the mortgage of second house makes lending become more difficult for households. Also the rate of mortgage applications rejected and the mortgage rate both increased, while the number of applications declined markedly. Coupled with the tightening of monetary policy, local residents and investors suddenly stopped buying houses and the housing demand shrank just in several weeks. Based on a research report by Institute of Finance in Beijing Normal University, the ability of purchasing housing shrank by 3 trillion RMB. As a result, the volume of sales in 2008 has declined by more than 25%, and the price also started declining from March of 2008.

In China, developers’ financing sources are development loans, oversea capital, deposit of homebuyers and developers’ own capital. Because of the tightened monetary policy, the cost of debt financing became more expensive. The shrinking demand and declining sales and price made lending to developers more risky. Therefore, the amount of development loans shrank. Less sale and dropping price also cut the source of deposit and developers’ own capital. As a result, the total shortage of source less than use in 2008 is as much as 600 billion RMB.

REITs as a new financing ways will help developers walking out of this trouble, so real estate developers are the eager to see the launch of REITs in China.
Government needs a liquid way to finance affordable rental housing.

In Ministry of Finance's Affordable Rental Housing Financing Management Act, Affordable Rental Housing are financed by the following four sources: 10% of total land leasing fees, municipal government's financial support, central government's financial support, and the earnings from Housing Provident Fund. Basically, affordable rental Housing are mostly built and financed by the government.

Government is under a high financial pressure of financing affordable rental housing construction. The properties are public owned and cannot be pledged to get mortgage loans.

The limited sources of financing lead to a slow development of affordable rental housing in China. However, in a new housing development planning, the 2009-2011 affordable housing planning, an ambitious goal was set up as building new houses for 5.18 million low-income households by the end of 2011. Suppose the total cost for one house is 100 thousand RMB. The total cost of the project is 518 billion. In 2007 and 2008 the land-leasing fee is around 1100 billion. At the percentage 10%, in three years, land-leasing fee will provide 330 billion for low-rent housing. The earning of Housing Fund is around 35 billion in three years. There are still 150 billion shortages of sources for affordable housing, which will be a very heavy burden for municipal and central government.\(^2\)

Therefore, a creative way to liquefy existing affordable housing properties to finance new construction is of great importance to China. It will also provide a new way for private developers participating into development of affordable housing, because it will provide a quit mechanism for developers contributing development management skills with mobility

\(^2\) Jianfa Gu, *Expand Sources of Affordable Rental Housing*, Research Center for Real Estate, Shanghai
of financial quit. Xiaosu Meng, the head of China National Real Estate Development Group Corporation, said the first REIT in Mainland China should start with public rental housing

**Social Security Fund and local insurance companies need a reliable and low risk investment instruments.**

Real Estate is regarded as a reliable instrument hedging inflation. Historically, REITs performed better than the equity and fixed-income market. It has a larger sharp ratio, average return to volatility, than the latter two. For example, in the US, from 1972 to 2009, the sharp ratio of equity REITs is 0.73. In the same period, the sharp ratio of SP 500 is 0.5, while the sharp ratio of 10-year treasure bond is 0.42.³ Thus, REITs gives a higher return when undertaking the same risk, and it undertakes a lower risk when getting the same return. These benefits attract investors who are seeking a reliable and low risk investment instruments. In China, Social Security Fund and local insurance companies are quite interested in this new instrument.

National Council for Social Security Fund is the central focus of social security funds in China, and is an important national strategic reserve. Its goal is to cover the social security needs when population aging reaches the peak in the future. It manages more than 770 billion RMB of social security fund by the end of 2009, and its annual return is at around 8.98% by 2008. ⁴ Its investment strategies are value investing and long-term investing. One of its managers says we are very interested in investing real estate to benefit from its long-term appreciation.


Besides Social Security Fund, another investors group is insurance companies. Like pension fund, they are seeking safe ways to manage its capital. China’s insurance capital is growing very fast. The total applicable capital of insurance companies reaches 3.7 trillion RMB by the end of 2009, and its return in 2009 is around 6.41%.  

In order to helping found this reliable investment instrument in China, Social Security Fund invited several local investment banks working on the research of REITs, and reported to the State Council urging the launch of REITs.

**State Council set up policies to support REITs launch.**

Requested by the developers, Social Security Fund and the need of financing affordable rental housing, Chinese State Council set up a policy of using financial tools to accelerate economic development on December 4, 2008, in which REITs was recommended as a creative way for real estate financing. In April 2009, the Central Bank of China founded a regulatory group of REITs in charge of setting regulation for REITs launch. Some local investment banks are invited by different municipal government to propose REITs products. Citic Security participated into the design of REITs for affordable rental housing in the city of Tianjin.

1.4. Process of launching REITs in Mainland

**Pilot before legislation**

Because REITs launch refers to tax reform, trust regulation, investor regulation, and other complex contexts, Central Bank of China was selected as the leader of the launch

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design and implementation. Before legislation, several pilots will be put forward in Shanghai, Beijing and Tianjin, and the legislation will be adjusted after evaluating these pilots.

**Two regulators in charge of two types of products of REITs**

In China, two major regulatory commissions will become the regulators of future REITs, the China Securities Regulatory Commission and the China Banking Regulatory Commission. China Securities Regulatory Commission, a ministry-level unit directly under the State Council, regulates China’s Securities and futures markets with an aim to ensure their orderly and legitimate operation. CSRC’s responsibility is to lead the design of Equity REITs and its regulatory. China Banking Regulatory Commission is responsible for supervising the banking institutions. Why CBRC becomes to play an important role in the REITs launch is because it also regulates an inter-bank market, which is a major trading market of fixed-income securities in China. This market started in June 1997, and gradually became the largest trading market among institutional investors. It hosted 97.9% of the bond trading in 2009. A new kind of REITs will appear in this market, which is more likely to be bond instead of equity, similar to REAT in Taiwan. Therefore, CBRC plays a role in leading the design of Bond REITs and its regulatory.

**CBRC’s Bond REITs have been fully designed and will come out earlier than CSRC’s Equity REITs.**

Because Equity REITs need to transact the ownership of properties, many related laws and regulations should be formulated in order to make the transaction less costly and more attractive for liquidation. In Luo’s thesis, she mentioned both the ownership and the taxation
legislation needs adjustment to launch a similar Equity REITs with those in the US.\textsuperscript{6} Also, Shaoqun Weng, an investment banker of Citic Security working on equity REITs, said Equity REITs in China is not prepared yet for launching, because there are still a lot of problems to solve and some adjustment to make by regulators.

Another banker from Citic said, we also researched Real Estate Asset Trust (REAT) of Taiwan, and we found issuing debt with future rent guaranteed would also be a possible new way. Through this way, the ownership of property do not need to be transacted to the REITs, instead the property owner can collect funding by issuing debt, which are paid back with rents collected every period as coupon. This kind of debts will mostly be invested by institutional investors just the buyers of regular debts in China. So commercial banks would be the major player in this market and CBRC will regulate this product.

In Citic, the product for Bond REITs has already been fully designed. The affordable rental housing in Tianjin is the target of this Bond REITs proposal. Equity REITs opened to public investors are still in its process of designing and negotiating with regulators. Besides Citic, CICC, another investment bank of China has designed a similar product of Bond REITs, and the target properties are state-owned industrial buildings in Shanghai Pudong New District. The similarity of the two proposals is that both of them are proposed to help financing public facilities owned by governments. The private developers, who possess a lot of commercial properties, are also very interested in launching Bond REIT, but they are not likely to become the first pilot.

1.5. REITs Pilot Regulations Act: regulations for the pilot of Bond REITs

CBRC and Central Bank jointly drafted a REITs Pilot Regulations Act in 2009. This document clearly pointed out that REITs business would be supervised by CBRC and Central Bank, while identifying the trust units can be issued and traded in the national inter-bank market.

In the document, REITs will establish a unit trust company as trustee agencies. They will issue and sell trust units in the market. Existing trust companies can sever as trustee agencies of REITs and they are required to have more than 500 million RMB registered capital and more than 500 million RMB net asset in recent 3 years. When issuing trust units, trustee needs to apply to the CBRC and central bank. Once approved, the trust units can be traded in inter-bank market. Fund of the trust should be deposited in a qualified commercial bank.

Issuing trust units should adopt underwriting approach. Underwriting agencies should have registered capital of not less than 200 million RMB. Underwriters can also sell trust units to other investors during underwriting period. REIT units can be traded in the market, but trust unit holders cannot apply for redemption. REIT can issue new units to raise funds for investment. Trust units can also be issued to investors targeted, and those investors should commit to hold the trust units no less than 12 months.

The target properties that REITs can invest in include, properties with stable cash flow, vacant or on-construction projects, and mortgage loans. REITs are not allowed to engaging in development process, and should invest in holding properties. REITs are also not allowed to invest in properties overseas. The Regulations clearly require that REITs should hold a property no less than 2 years. The distribution of coupon should be at least as often as once a year, and should pay out no less than 90% of profit achieved.
Graphic 2  REITs Structure under CBRC's REITs Pilot Regulations Act

Properties owned and managed
by public or private sectors

Mortgage loans

Commercial Banks

Deposit

Inter-bank market:
bond market

Trustee

Holds assets

Fees

Underwriting

Sales

Interest & buy back

Trust unit holding

National Institutional Investors: commercial banks, insurance, funds

Regulatory Authorities: CBRC and Central bank

Fees
Products of Bond REITs: The Pudong REIT Pilot in Shanghai

Based on the Pudong New District REIT Issuing Prospectus, the target properties were selected as the industrial assets belonging to three state-owned enterprises, Jinqiao, Waigaoqiao and Zhangjiang. The total value is worth 4 billion RMB.

In total, the package of target properties included 105 buildings, with around 1.4 million square meters. The forecasted annual rent was 550 million RMB. Among these assets, the area of industrial properties was 1.25 million square meters and the forecasted rent of this part was 459 million RMB.

The managing structure is using trust contract instead of founding a REIT company, who manages properties, like in the US. Trustee agencies set up this product to raise fund for enterprises, which will pay out income from rents in the future 10 years as guarantee. Enterprises still have the ownership of properties. This bond-like product is divided into two levels, the senior security and the junior level. Both of the two kinds will be issued 40 millions units. The former is in the form of fixed-rate coupon payment with a face value of 100 RMB. The debt service is interest only and buy-back principal on the mature date.

Pudong REIT takes the form of subscription-based product of CBRC, and utilizes the existing inter-bank trading platform for the circulation. In the Prospectus, the sale object is described as the institutional investors in inter-bank bond market.
Chapter 2. Experiences of using REITs financing affordable housing in the U.S.

2.1. What can REITs and affordable housing bring to each other?

REITs had a long history of involving into affordable housing, which carries public purpose to the community. Back to 1950’s, a REIT called The Mutual Real Estate Investment Trust (M-REIT), started by Morris Milgram, began to build communities, which are both economically and racially integrated.

The objective of M-REIT is to invest in income-producing real estate in good neighborhoods and offer housing to all. Morris Milgram realized in 1946 that there was an unwritten law in the United States, that all new housing and almost all decent housing was for whites only. He then decided to build integrated housing for all. The first integrated community, Concord Park Homes, was built in 1954 and buildings there were sold to both the white and the black. This project and the followings were successful and able to pay 7% a year to investors. Other than development, M-REIT also managed economically integrated buildings. Its first project has more than 300 apartments, with rents that range from $26 to $41 a room. 7

What advantages can REITs bring to affordable housing industry?

Liquidity is the most worthwhile benefit, which REITs can bring to affordable housing industry. It can help to create a public private partnership for the development and management of affordable housing. Real estate is a large investment. If the developer built

and held the property, it might need dozens of years to collect back the investment. REITs provide an efficient way to quit the holding of affordable housing for the developers, because developers can sell the property to REITs and use the recollected money develop new affordable units. Despite the significant financial support of affordable housing from government in the United States, limited funding continues asking for participation from private sector. This tool will fasten development of affordable housing, and introduce small private capitals into the holding and development of affordable housing.

REITs have advanced expertise in management and development of real estate. If REITs were introduced into the affordable housing industry, they may help to create extra operational benefit to the industry. Through development and management of properties, REITs earn profit from development fees and operational revenue. REITs know how to make development process more efficient and how to manage a multi-family housing with lower cost.

**Why would REITs invest in affordable housing industry?**

**Section 8 Program makes holding affordable rental housing asset attractive.**

With the help of Section 8 program, REITs holding affordable units would be able to receive market rate rent. Section 8 Program is an affordable housing program, which would subsidize both the property and the low-income tenants through monthly rent. It is created under the Housing and Community Development Act of 1974. In the Section 8 Program, tenants only need to pay about 30 percent of their income for rent, and the rest of the rent would be paid to landlord with federal funding. The Program can both be attached with low-income tenants or affordable units. If a tenant involved in to Section 8, his landlord would get paid fully market-rate rent by both the tenant’s income and the federal subsidy. If an
affordable unit attached with Section 8, the landlord would also get paid with market-rate rent whatever his tenant’s income level would be.

**Graphic 3** Subsidized housing units as a percentage of all low-cost rental units, 1975 to 1995

![Bar graph showing percentages of subsidized housing units from 1975 to 1995.]

To an apartment REITs, affordable housing units provide stable cash flow to the portfolio with low risk. As a vice president of operations for Associated Estates, an apartment REITs involving into the affordable housing business, Joann Hirsh describes Associated Estates’ affordable portfolio as low risk, with a stable, steady stream of income. Ideal assets for REITs to hold are those with good quality, well-managed, and broad base of tenants. Then REITs would have not fear of losing one or two tenants, because they can find a next easily. Affordable housing is scare social welfare and usually have a long waiting list with low-income tenants who want to rent one. Therefore, the tenant base of affordable

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housing is very large. REITs would get a stable income and market rate income with the help of Section 8 Program.

**REITs can also benefit in affordable housing development through LIHTC program**

In affordable housing development of the US, Low Income Housing Tax Credit (LIHTC) Program is the major source and also the main reason attracts private sector participating into the development of affordable housing. LIHTC program was created under the Tax Reform Act of 1986. It gives incentives for using private equity in the development of affordable housing. LIHTC accounts for nearly 90% of all affordable rental housing created in the United States today. Entitled projects would receive 4% or 9% of eligible cost of affordable units annually in ten years. The tax credit can be used to pay income tax for enterprises.

The problem is that REIT is a vehicle with tax advantage, which distributes most incomes as non-taxable dividends. As a result, REITs cannot directly use the tax credit.

However, in the real world of affordable housing development, developers, like some non-profit organization, usually cannot use or fully use the tax credit entitled to their affordable housing projects. A large market of Syndication and Partnership comes out to let developers being able to sell the tax credit to other tax-baring firms at a discount price, like 85 cents for one-dollar tax credit. Both Fannie Mae and Freddie Mac have tax credit purchasing program. The two Government-Sponsored-Enterprises (GSE) also provide loans to affordable housing. In 2000, Fannie Mae planned to invest $15 billion, 95 percent of them was for affordable housing, with about $4 billion of that total targeted to REITs.  

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10 Ibid
2.2. Evidence of REITs involving in development and management of affordable housing

Home Properties is a public traded REIT, with a subdivision focusing on affordable housing, the Conifer Realty. Home Properties was created in 1995 by the merge of Home Leasing and Conifer Development. The Conifer Development was an affordable housing developer. Five percent of Home Properties' portfolio of 45,000 units was affordable housing. Between 1995 and 1998, Home Properties development fee revenues grew by 52 percent and management fees grew by nearly 400 percent. Much of the success was due to using tax credits. 11

As mentioned before, REITs have tax benefit, and cannot directly benefit through tax credit program. Home Properties' strategy was to participate as a general partner in projects with Conifer and make loans to finance the gap between tax credit and actual cost of affordable housing project. Conifer is not a REIT, and it can still use tax credit. Through this way, Home Properties earns development fee by lending to Conifer.

Section 8 Program is also crucial to REITs holding affordable housing assets. In 2001, Associated Estates owned 15 affordable properties and manages another 17, making up less than eight percent of Associated Estates' portfolio and contributing about eight percent of Funds From Operation (FFO).

REITs are more willing to entering affordable housing business during recession period than growing period

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11 Ibid
However, affordable housing has lower growth compared with market-rate housing, since the government regulates the compensation from section 8 and specific rent levels can be charged. Joann Hirsh said, affordable housing was a good deal, especially during times of recession.

In recession, when market-rate cannot grow faster than affordable rent, the disadvantage of little growth in affordable housing does not reveal. In contrast, the advantage of stable sources of tenants and steady payments from government made affordable housing less risky and more attractive during recession.

When economy grows fast, affordable housing cannot keep the pace of market-rent growing because the requirements dictate rent level. Rent increases are outpacing inflation. Affordable housing becomes less attractive than market-rate housing. For example, in 2000, affordable housing made up five percent of Home Properties’ portfolio, but it generated just two percent in Funds From Operation (FFO). The fact is that REITs used to be actively involved into affordable housing when the start of Section 8 and LIHTC program, but more and more REITs sell out their affordable housing assets in the recent decade.

When affordable housing becomes less attractive in a growing economy, REITs with ownership of affordable units would either sell them or redevelop them. Home Properties sold its affordable housing units with book value of $6.7 million in 2000. In 2003, AMICO, a large public REIT holding affordable units and the largest player in Charlotte’s Section 8 Program, implemented a plan to sell a third of its properties and buy apartments in hot real-estate markets such as Los Angeles and New York City, where rents are very high. AMICO sold 118 apartment complexes, 47 of them are affordable housing properties. AMICO also planned to demolish one of its affordable housing property, Lincoln Place Garden
Apartments, and replace it with a mixture of expensive, high-rise condominiums and rentals in 2006. Although, low-income tenants protested the plan, AMICO forced them to leave their rental homes in October 2006, most of which are the elderly and disabled.

In conclusion, REITs are benefit oriented, and they need profitable structure in the cooperation with government. If policies and structures were designed well for REITs, they will help to preserve and develop affordable housing. Once the economic environment or policy made REITs unable to benefit, they would quit the market.

2.3. Case Study: Community Development Trust (CDT), a REIT with main investment target in affordable housing

Commitment of Community Development Trust (CDT): Preserving America’s Community

CDT was founded in 1998 with an initial capital investment from the Local Initiatives Support Corporation (LISC), a community development intermediary established through an effort of the Ford Foundation in 1979. LISC has provided grants, funds and technical assistance to nearly 2,000 community development corporations. However, there is capital constrains for nonprofit to further expand its loan purchases to provide liquidity for the affordable housing market. Nonprofit and tax-exempt status restricted its ability to raise equity capital and posed a constraint on its annual output. Therefore, LISC created CDT, a vehicle to attract private capital for financing community development. As a for-profit firm, a REIT has the ability to raise fund in the capital markets. It also permits real estate investors to diversify their investments into different properties.
This origination gives CDT a distinguishable social goal among those for-profit REITs. CDT has committed to support in community development through private placement offering with institutional investors. Its board of directors includes experts in the community development and finance industries. CDT has invested or committed approximately $720 million in debt and equity capital to properties in 39 states and regions. These investments have helped to preserve or build over 27,700 units of affordable housing.

How does CDT work to finance affordable housing and bring profit to shareholders?

CDT operates much like a mutual fund. Through the cooperation with many investors, majorly institutional investors from insurance companies to commercial banks, CDT provides an abundant capital pool for lenders to finance community development. CDT purchases, holds and securitizes mortgages from these lenders. CDT also purchases and preserves affordable rental housing. Basically, through two programs, the Debt Program and Equity Programs, CDT successfully contributed to the affordable housing filed as a for-profit REIT.

Through its Debt Program, CDT invests in long-term debt by purchasing small and fixed-rate affordable housing mortgages from community lenders. Through its Equity Program, CDT invests in equity capital through providing a tax-differed transition for existing properties to set up new structure of ownership and commit to keep long-term affordability.

Debt Program

CDT’s debt program focuses on creating a secondary market for smaller loans, under $3 million. CDT doesn’t have sufficient capital to fund the loans all by itself, so CDT organizes
other institutional investors to purchase 90 percent senior interest in each loan while CDT hold the rest 10 percent subordinate interest.

**Graphic 4  Regular Debt Program of CDT**

Affordable housing properties need long-term, fixed-rate mortgages, which are often not suitable for sale into the traditional secondary markets. Different with other investors, CDT would purchase those nonconforming loans refused by the traditional secondary markets. For example, these nonconforming loans are with characteristics like small size (less than $3 million), location (inner-city or rural), configuration (scattered site, urban rehabs), or type (assisted living). There are substantial benefits for lenders who sell their loans to CDT, as they can expand their products to offer long-term fixed-rate permanent loans, receive Community Reinvestment Act credit for loans that they originate and sell to CDT, earn origination and servicing fees, and increase their liquidity.¹² Acting as an intermediary, CDT

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can acquire these loans from qualified originators and then securitize these specialized assets for subsequent sale to institutional investors. CDT purchases small loans and aggregates these loans for subsequent syndication to institutional investors. CDT retains a subordinate interest in the loans, and provide credit enhancement to make the senior securities attractive in the market. CDT also securities these assets by Mortgage-Backed Securities (MBS) and sells them to investors (JPMorgan Chase).

**A Case of Debt Program**

CDT once entered into an agreement with socially motivated pension fund, the General Board of Pensions and Health Benefits of the United Methodist Church (the Board). The Board purchases a senior interest while CDT retains the subordinate interest. By 2004, the Board had increased the facility to $100 million. However, CDT had even larger need as it became more and more successful.

CDT repurchased a portion of the Board’s senior interests and combined them with the retained subordinate interests. CDT’s purpose was to securitize these loans and sell them in the open market. Some loans that were not syndicated before were also included in this plan. In total, CDT created a mortgage pool of $44.9 million guaranteed by 31 affordable multifamily housing properties and more than 2000 units of affordable housing.

The majority of the loans were with average balance $1.44 millions, which is the very common size CDT invests in. By repurchasing the senior interests from the Board, CDT demonstrated its ability to ensure the safety of the senior interests and securitize them into a liquid market. In this way, CDT enhanced the confidence of the syndicators and also illustrated the high quality of the mortgages that CDT invested in. The securitization
provided liquidity to CDT's subordinate capital and also reduced CDT's credit enhancement level, which will allow CDT to sell new senior interests to the Board.

Through the cooperation with Government-Sponsored Enterprise (GSE), CDT pooled the mortgages and issued securities with credit enhanced by Fannie Mae. In this way, CDT's securities would be attractive to a wider variety of investors in the capital market. The GSE guarantee would also allow CDT to issue AAA-rated securities without going through the rating process and paying rating fees. The AAA rating would make CDT be able to sell the securities at a higher price and also make common investors confident on the affordable housing mortgages. In exchange for Fannie Mae's credit enhancement, CDT need to provide a collateralized first-loss guarantee. The first-loss guarantee could be secured by cash, by retaining a percentage of the securities or by providing a payment guarantee backed by a letter of credit.\textsuperscript{13}

CDT chooses to cooperate with GSE because of the cost and time. Mortgage Backed Security (MBS) structure would save a cost of securing a rating from rating agencies. Also, the ten-year U.S. Treasury was trading at a relatively low level that would generate substantial value from the securitization. If the interest rate increased significantly, the transaction would be less attractive. Cooperating with GSE would shorten the time of securitization and let CDT come into the market quickly.

CDT swapped the mortgages for an equal amount of Fannie Mae Guaranteed MBS, and then they were sold to JP Morgan Chase (JPMC). To make the execution more efficient, JPMC exchanged the securities into a single bond, FNGT2004, which had two tranches

(Class A and I/O). The bond was then sold to four institutional investors including three insurance companies and a bank.¹⁴

Through securitization of mortgages, CDT successfully expanded investor group of affordable housing from socially motivated investors to a wider range of investors in Wall Street.

**Graphic 5  Securitize Mortgages of affordable housing by CDT**

- Small-Sized Affordable Housing Loans
- Small-Sized Affordable Housing Loans
- Small-Sized Affordable Housing Loans
- ...

- 90% Senior Interest
- 10% Subordinate

- Board:
  - Investors socially motivated

- Buy back some Senior Interest

- Collateralized first-loss guarantee

- GSE:
  - Fannie Mac…

- GSE guaranteed MBS

- Mortgage Pool

- MBS

- Regular Market Investors:
  - JPMorgan(FNGT 2004)…

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¹⁴ Ibid
Equity Program

The goal of CDT’s Equity Program is to preserve the affordable housing supply. Holding an expiring LIHTC property, many investors tend to convert their affordable housing properties into market-rate housing threatened by an accumulated tax liability. If not, they will continue to own a non-performing asset. CDT can provide tax benefit as a REIT, and it developed its equity program to preserve those affordable housing from being converted into market-rate housing.

As an UPREIT, CDT can offer to buy these properties with cash (which is taxable) or with shares in CDT’s Operating Partnership Units (OP Units). CDT provides certain tax deferrals to owners who can transact ownership interests of their property for an interest in CDT. The transaction is considered an exchange of partnership interests and it is tax-deferred. The equity shares of OP Units have potential to appreciate in value and also generate cash dividends. Although redemption triggers payment of the deferred tax, the timing is still under the control of the investor. The tax deferral has been used by owners of shopping centers and office buildings. Those owners who has affordable housing properties can sell them without incurring a taxable transaction. The tax benefit provides CDT an advantage of acquiring and willingness of owners to sell. The tax deferral benefit of CDT’s operating partnership units allows CDT to negotiate lower acquisition prices than in a cash transaction. As the social goal of CDT, it will preserve the units as affordable housing. The UPREIT acquisition can also be combined with other tax-exempt financing and tax credit to finance the rehabilitation. CDT relies on development and operating partners to carry out its mission of affordable housing preservation and improve the financial viability of the project.
By using a variety of preservation resources, CDT is able to structure equity investments that benefit all parties. This illustrates the use of an important institutional feature of the REIT as a vehicle suitable for affordable housing.

A Case of Equity Program: Neptune Towers

Neptune Towers is an affordable housing project with 334 units of Section 8 property in Lynn, Massachusetts. Many nonprofits would like to purchase affordable housing properties like Neptune Towers to preserve them. However, a tax problem prevents them from the transaction. Neptune Towers were originally financed by Section 8 and other programs, before the Tax Reform Act of 1986. It took an advantage of accelerated depreciation. If the properties were sold now, much of the deferred taxes will suddenly come due. According to the former owner of Neptune Towers, had the property been sold for cash, taxes would cost as much as 50% of the net cash from the sale. They are not willing to take this hit.

If CDT acquires the property, the sellers can involve an exchange of CDT’s Operating Partnership (OP) Units for the current owner’s interest in the real estate. The current partners are interested in selling the property because the taxable income of the project exceeds the allowable cash distributions to the partners. The seller can also convert OP Units into REIT common stock or cash. As a result they can sell the property without paying a large amount of taxes. The seller can also convert his units a little at a time when they can benefit based on its tax planning, and potentially save a great amount of money.

CDT has agreed to maintain Neptune Towers as affordable housing for an additional 20 years, and invested more than $1 million to make capital improvements to the property.

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The transaction benefits both the seller and the CDT. The seller exits tax liability, while CDT gains significant increase of assets. This case provides an example how REIT uses its tax advantage to help preserve affordable housing.

2.4. Implications of the United State’s experiences

In the history of REITs financing affordable housing in the US, we can see both successful cooperation and unpleasant separation. Unlike non-profit organizations, REITs need to earn profit to satisfy their shareholder. Through the study of the experiences in the US, we can find the following implications, which would reveal the relationship between REITs and affordable housing business.

Affordable housing needs REITs to bring in liquidity to attract private investment, and bring in expertise in development and management. The policy of the US government on affordable housing is base on the purpose to attract private sectors involving into the affordable housing development and preservation. Real estate needs a long term to collect initial investment. Through REITs, the benefit of properties is divided into thousands of securities. Through buying securities, private capital can participate into investment and enjoy the potential appreciation or payment of interest. Through trading securities, private capital can enter and quit the market easily. The liquidity benefit helped affordable housing raise fund from the private through REITs, and affordable housing developed very fast. Moreover, REITs are the experts in real estate development and management. They helped to build and preserve affordable housing more efficiently. Tax efficiency of REITs would provide even lower cost of resources of fund to affordable housing. Therefore, REITs would significantly improve the affordable housing and it is
worthwhile to introduce this tool into other countries that are in great need of affordable housing.

**Affordable housing is profitable and attractive to REITs under affordable housing policies.** Affordable housing is public purpose oriented, while REITs are private benefit oriented. Intuitively, REITs would not benefit from affordable housing and also with little interest in it low return. However, the US experience tells that appropriate policies support would make affordable housing attractive to REITs. Through Section 8 rental subsidies, affordable housing can provide stable market-rate income to REITs with little risk of losing tenants. REITs can preserve affordable housing as steady assets to reduce the total risk in their investment portfolio. This policy makes holding affordable housing profitable to REITs. Through the LIHTC program, REITs can obtain the tax credits through development of affordable housing and sell them through syndication or partnership to put the extra tax benefit into pocket. This policy makes develop affordable housing profitable for REITs. Therefore, under the policy support from the government, REITs would be willing to involving into the business of affordable housing, and this part would even become significant source of benefit from the example of Home Properties.

**It is good opportunity for REITs investing into affordable housing during recessions.** The character of affordable housing with stable rent payment makes the assets as very good tool to hedge the down side of the market. During recessions, when properties are in risk of high vacancy rate, affordable housing would still stay in a high demand, which keeps its income less affected by fewer tenants. In recession, interest rate is usually low. The return of affordable housing would become more attractive than the period when interest rate is high. Then it becomes easier for REITs to find investors who are willing to invest.
The business of affordable housing would also keep employees working without being layoff, and helped REITs preserve human resources.

However, equity REITs would stop preserving affordable housing or even change them into market-rate, if the growth of market-rate housing was too fast. The problem of holding affordable housing assets is that the growth of its rent is very slow. Regulated by the government policy, rents of affordable housing have threshold which landlord cannot charge higher than. When economy is growing fast resulting rent of market-rate housing growing fast, REITs would choose to focus their capital into those more profitable businesses. As private sector, REITs need to generate as much profit as possible to their shareholders. The relatively low return of affordable housing would not be attractive at all in a booming economy. In that case, equity REITs may sell their affordable units. Or even worse, like in the case of Lincoln Place, equity REITs may pull down the whole property and rebuild a more luxury buildings to make money. Affordable housing would be at risk of being replaced, and this would be the worst result when the owner is REITs.

As a unique REIT focusing on affordable housing business, CDT is an example of how to structure the investment to make affordable housing properties provide enough return to a REIT with all its businesses in this field. It approves that REIT could not only benefit from affordable housing, but also rely on the business to achieve public purposes.

REITs can amplify return on affordable housing through mortgage tranche. The mortgage program of CDT gives a good example of how to amplify returns of affordable housing. CDT works like a mortgage REIT, and invest in affordable housing by purchasing mortgages. Through the tranche of the mortgages, CDT holds the subordinate part, which would be paid out in the last place. This would amplify the risk of CDT’s investment. If the
properties default, CDT's investment would be lost at the very beginning. High risk should be compensated by high return, and the interest rate of the subordinate tranche is much higher. Through this way, CDT achieves a return level attractive enough to its shareholders.

**REITs can attract wide range of investor in Wall Street to invest in affordable housing through the sponsorship from GSE in capital market.** The securitizing of the mortgages held by CDT actually provided a good example of how REIT bring wider range of investors from Wall Street, like JPMC, into affordable housing business. A special step in this step is the sponsorship from GSE. With GSE’s credit enhancement and MBS swap, CDT can securitize its mortgage efficiently with lower cost than the common securitization. Therefore, other than policy sponsorship, government can also help REIT attract more investors by providing a shortcut in capital market.

**Tax benefit of REITs provides an opportunity to preserve those expiring affordable housing units by deferring paying tax in transaction.** Tax benefit is always a way for REIT to find opportunities. CDT’s example tells us tax benefit cannot only be used in the development and management process. REIT can also use tax benefit in the transaction step. By purchasing affordable properties with OP Units, REIT not only increases its cumulated assets but also earns transaction premium by providing tax deferring to solders. The strategy is useful to those affordable housing suffering risk of turned into market rate by former owners.

In conclusion, the US’s experience tells us affordable housing need the participation of REITs, and REITs can earn its profit from affordable housing. What a government should do is to prepare attractive policies and effective market for REITs to play into the game.
3.1. Link REIT and privatizing public property by equity REITs

Financial Deficit of Hong Kong Housing Authority generated Link REIT

In Hong Kong, Housing Authority plays the main role of developing and implementing public housing programs which seeks to achieve the objective of meeting the housing needs of people who cannot afford market rate rental housing. Around 30% of the Hong Kong population is now living in these public rental-housing units built by Housing Authority. Besides affordable housing, Housing Authority also owns and operates some factories, commercial and other facilities.

In 2003, the Housing Authority suffered a big financial deficit as much as 1.1 billion Hong Kong Dollar (HKD). In that year, due to the break out of SARS, an infectious disease, the Housing Authority had to reduce the rent for commercial tenants. A suspension of sales of unsold and returned home ownership also generated a loss of income. In order to solve the problem of financial deficit, the Housing Authority decided to divest a majority of its retail and car parking facilities that sever the public housing. The Chairman of the Finance Committee of Housing Authority said that they should be able to tide over its financial difficulties over the forecast period with sale proceeds from the divestment.\(^{16}\)

Privatizing public owned properties

Link REIT was created to meet the need of Housing Authority to divest its properties. The divestment included 180 properties of retail and parking for public housing. One

\(^{16}\) Hong Kong Housing Authority. “2004/05 Budget Endorsed.” http://www.housingauthority.gov.hk
purpose of privatizing these facilities instead of housing units was to concentrate Housing Authority’s responsibility focusing on public housing. Although, these retail and parking facilities directly severe the tenants living in the public housing.

This is the largest privatizing program of public properties in the history of Hong Kong. Housing Authority sold 149 retail-parking, 2 retail-only, and 29 parking only properties to Link REIT. Housing Authority would not hold any of the trust units from Link REIT. Measured by area, Link REIT held 950,000 square meters of retail, which were 9.1% of the total retail in Hong Kong; Link REIT also held 79,000 units of parking, which were 13.7% of the total parking slots in Hong Kong. These facilities are so important to the daily lives of millions of people in Hong Kong.

Public properties often have social responsibilities like public housing, which serves the low-income group of the city. Although, this privatizing program was not directly privatize affordable housing. These facilities severing communities also has their role of preserving affordability of community. Before the privatization, Housing Authority can charge relatively lower rent to small local business in order to maintain a low cost for this daily business to provide affordable services for customers. Also, it encourages small business, which generates more jobs for the community. So were the parking slots. However, what would happen after transact the ownership of these public properties to private sectors?

**The first Global Initial Public Offering (IPO) in 2004**

The Global Offering will comprise with two parts. In Hong Kong 197,220,000 Units will be offered to the public. Internationally, 1,774,979,000 Units will be sold to institutional, professional and other investors. The offer price was expected to be no less than 10.51
HKD and no more than 10.83 HKD. Each applicant who successfully applies units in the Hong Kong Public Offering will be entitled to receive 3% discount to the final offer price.

The policy of Link REIT management is to distribute 100% of the total distributable income for each financial year. For the year ending 31 March 2006, the Link REIT would offer a yield of 6.65%. This yield is based on an indicated distribution of 0.7204 HKD per Unit for that period divided by the Maximum Offer Price and excluding all relevant transaction costs. The indicated distribution for the period commencing 16 December 2004 to 31 March 2005 was 0.1976 HKD per Unit.17

As part of the Global offering, nine institutional cornerstone investors had agreed to invest a total of 4.446 billion HKD, which can purchase approximately 18.8% of the total Units in the Global offering based on the Maximum Offer Price.

**Judicial Review raised by tenants of public housing stopped the first launch**

A week before the proposed launching date, two tenants of the public housing sued the Housing Authority selling properties to the Link REIT. They argued, based on the Housing Ordinance of Hong Kong, that the Housing Authority has the responsibility to provide daily facilities for the public housing including retail and parking in order to maintain the affordability of the service of the community. The transaction into the Link REIT actually went against the Housing Ordinance and was illegal.

The suit was initiated with the tenants’ worry. These low-income groups felt that facilities controlled by a profit-oriented corporation would not maintain a relatively low rent

17 Hong Kong Housing Authority. “Housing Authority Announces Hong Kong’s First REIT.” http://www.housingauthority.gov.hk (accessed on March 10, 2010).
as under the management of the Housing Authority, especially those local grocery stores. There would be two bad results that go after the transaction. Residents who earn their living by doing small businesses in the communities would lose their shops if they cannot afford the rising rent of the retail facilities. Moreover, the raised management cost of the facilities would result in a higher price for the daily grocery, which would harm the life of low-income tenants by raising their life cost. The tenants used the Judicial Review to defend their benefit and prevent the transaction.

Although, the Housing Authority won the suit by claiming that every steps of the divestment were legal, and the Housing Ordinance also gave them the right to divest these properties. However, in Hong Kong's law gives plaintiff 28 days for appealing. The launching date was before that. The Housing Authority cannot guarantee that they will win again in the appealing after Link launching. If they lose, they could not divest the properties and the REIT would have no properties to invest. That would be a huge lost. As a result, the Housing Authority abandoned the proceeding plan proposed on December 20, 2004.

This failure still brought big loss to the Housing Authority and the public investors. During the application process, 510,000 accounts applied and 500 billion HKD of capital was frozen, over-subscribed 200 times. A large amount of appreciation could be expected after the IPO. The negative effects besides disappointment of public investors also includes the management lost of the Housing Authority.

The failure also caused a debate on whether the Housing Authority should privatize its properties. However, the enthusiasm of the investors and the financial need of the Housing Authority covered the debate and the Link REIT re-launched a year after.
Second Offering in 2005

After a year's preparation solving all possible legal problems, the Housing Authority started the second offering of the Link REIT on November 14, 2005 and would list on November 25, less than one year after the failure of first offering. It became the first public REIT in Hong Kong and the largest IPO in Hong Kong’s history.

Due to the suit, the interest rate change and the worse management in the last year, the Link REIT became less attractive to public investors. The total Trust Units were still with amount around 1.9 billion, but the price ranged from 9.7 to 10.3 HKD, around 50 cents less than the first time. And the discount rate was raised from 3% to 5%. Units sold to the Hong Kong public investors had been increased a lot from 10% to no less than 30%. If oversubscribed by 25 times, 50% of the Units would be distributed to the Hong Kong investors rather than foreign institutional investors.

Although the suit reflected tenants’ worry of an increasing rent of Link properties after listing, the Housing Authority still did not retain any share of the ownership of these properties, which were totally privatized after the listing. The Negative impact of this transaction revealed in the next several years.

Negative impact of the Link REIT to affordable housing became true.

A listing company has only one goal for its management, to maximize shareholders’ interest. The Link REIT inevitably walked on this direction from the day it listed. The shareholders only care about how to make more profit and how to raise its price. This goal makes the management of the Link REIT totally different from the goal of the Housing Authority, regardless the special low-income groups they will affect.
On 2006, a UK based hedge fund, The Children’s Investment Fund Management (TCI), took an 18.35 percent stake in the Link, and send representatives to sit on the board of directors of the Link REIT in a bid to strengthen its commercial operations and improve profits. TCI is famous for its Shareholder’s Activism. To raise rent up to market rate was the strategy.

In order to pursue appreciation in the stock price, Link invested 2.1 billion HKD to gentrify 26 commercial projects. After the renovation, Link added rent of this retail by a large rate. Small businesses have to move to smaller and worse position or even close, if they cannot afford the new rent. Chain stores were introduced into the market. Link also forced those small businesses to renovate the property by themselves if they want to renew the lease. As a result, a research report showed 20.11% of small businesses closed in Link’s 14 malls in 2008, 19% closed in 2007. 8 out of the 14 malls have more than half the retails newly leased to chain stores. Many small businesses lost their only way of livings. Residents living in the affordable housing have to pay higher price to purchase daily needs from these chain stores. Protests and complains from the small business and low-income residents have taken little effect on stopping Link’s management strategy, since these properties’ ownership had been transacted to a for-profit REIT.

The initial purpose of the Housing Authority was to sell properties solving financial difficulties. However, as it became more difficult for small businesses and tenants to survive in these public housing areas, the Housing Authority has to reduce some rent helping them save daily cost. Ironically, the Housing Authority has to reimburse those increased cost of low-income groups earned by the Link REIT.

18 Link Watch Website. http://www.linkwatch.hk
In order to stop those negative management strategies, the suggestion that the government should repurchase shares of Link won more and more support. Political parties also apologized for their support of listing of the Link REIT in 2004 and 2005.

3.2. Experiences from the Link REIT

To conclude the impact of the Link REIT, the private side earned profit from the appreciation, the public side met its financial need in short run but paid out cost in long run, and the low-income groups living in the affordable housing got hurt most. From the perspective of public and institutional investors, the management strategy of the Link REIT is a good choice. However, from the perspective of the low-income group, the process of ownership transaction was actually a disaster.

Affordable housing has its irreplaceable role in accommodating low-income groups and maintaining low-cost labor for the city. The social responsibility of affordable housing is much larger than its profitability to private investors. Therefore, government should stand on the side of the low-income group.

Government should firstly realize the conflicts between public and private sectors who participating into affordable housing business. The for-profit character of private sectors makes them regard return on investment above all other social goals. Only the public sectors with non-profit purpose would care social goals higher than profits. As the two sides are motivated by different goals, government should coordinate to make the affordable housing business on its correct track.

Public traded REITs always regard profits above social goals. Public traded REITs are different from private ones, which can adjust the goal of its company based on the will
of a small group of shareholders such as the CDT REIT in the US. To public REITs, financial reports should be published seasonally in order to enhance confidence of shareholders and attracts more investments. The activity of the Link REIT gentrifying properties and raising rent was generated by this request from investors. To public shareholders of Link, their strategy was exactly correct, since the performance of Link's price was very good under the strategy.

Therefore, it is not wise to let public listed REITs owning and managing affordable housing and facilities. If a public REIT have equity shares that are enough to affect the management decisions, it would probably change affordable properties into profitable ones. There was still alternative option for introducing public REIT into affordable housing business. If REITs only lend money to the affordable properties or invest into the mortgage of affordable properties, REITs would still be reimbursed with interest generated by the properties but have no control power on the management. In the language of corporation finance, that is to say Public REITs can hold debt instead of equity of affordable housing.

In conclusion, for governments, who want to reserve affordable housing or facilities, privatizing these properties and selling to REITs would result into a social problem. Governments even need to spend more in the long run to save the mistakes like what happened in Hong Kong. Using public REITs to finance affordable housing should base on a principle that not losing the control power on the properties.
Chapter 4. Experiences from Real Estate Asset Trust (REAT) of Taiwan

As discussed in the former chapter, it is better for the government to reserve the ownership of affordable housing properties, so a better way to finance affordable housing is to use debt financing. Mainland China's bond-like REITs provide a tool of securitizing properties into bond like trust units. This is different from typical REITs around the world, which securitize the ownership of properties and traded in stock market. However, it is not unique. Taiwan also has the bond-like REITs, which are in a name of Real Estate Asset Trust (REAT). This chapter uses Taiwan's REAT as an example to address the pros and cons of a Bond REITs compared with the typical Equity REITs.

4.1. REATs and its differences with REITs in Taiwan

The securitization of real estate in Taiwan started with legislation of Real Estate Securitization Act on July 9 2003. The Act suggested two kinds of securitization tools. One is based on REITs in the United States in an asset management type, which collects capital first and then invests into real estate properties. The other tool comes from the experience of Japan in an asset liquidity type, which trusts the existing real estate first and then issues securities to raise funds. The former ends up as Taiwan REITs, and the latter ends up as REATs.

The First REAT of Taiwan launched on June 10 2004, which was also the first product of real estate securitization in Taiwan. The first REIT came out half a year after that. Since Real Estate Securitization Act passed in 2003, there are totally 9 REATs and 8 REITs issued in Taiwan. REATs have been issued with a total value of 21.682 billion Taiwan Dollars
(NTD), around 76% of which were launched between 2004 and 2005. REITs have been issued with a total value of 56.166 billion NTS, which were released after 2005.

The different purpose of REITs and REATs gives different structures of the two products. With a liquidity purpose, REATs are used to liquefy existing real estate properties held by owners, who want to raise fund from the future income generated by the property. Originated by the owner, REATs do not transfer the ownership and even management of the property from the original owners. With an investment purpose, REITs are organized to invest in properties to catch their future income and possible appreciation of asset. Originated usually by trustees, REITs need to grasp the ownership in order to control the management of the property to help maximizing profit. This is the reason why REATs reveals a fixed income nature instead of equity nature like REITs.

A REAT starts from the trust of a property, and beneficial securities would be issued after then to the investors, which is a contract ensuring interest payment each year from the revenue of the property. The owner receives the fund raised, and owns investors debt, in which they have an obligation to pay interest every year and buy back on the maturity date. Usually, owner is still chosen to be the manager of the property. A REIT starts from raising fund of the trustee, like a close end funds. Beneficial securities would be issued and purchased by investors, who would like to entrust REIT helping invest in real estate. Once a desired size of capital is collected, the REIT closes and starts investing in a selected pool of properties. Usually, REIT select professional management group to manage the property. Investors benefit from the dividends distributed every year or every half-year, and also enjoy the appreciation of the security. Most REITs in Taiwan has an infinite maturity date.
With a nature of fixed income product, REATs need a necessary step of credit rating to tranche its security, similar to the Commercial Mortgage-backed Security (CMBS). Senior debt has lower interest rate than junior level. When property defaults, the selling from foreclosure compensate senior debt holder first. The sequence of compensation makes junior level riskier than debt with higher rating, so junior level’s risk should be compensated by a higher interest rate. Usually, half of the total securities need to be retained by the property owner, which is called credit enhancement. This part of securities is with the lowest level, and in the latest position to be compensated after the loss of value of the property. According to Taiwan’s rating agencies, the credit rating of different level of securities is based on forecast of future cash flow. The basic financial rate includes the Loan to Value (LTV) rate, which reflects the percentage of debt in total value of the property. This number reflects the financial distress of management of the property. The lower LTV is, the less financial distress the property is facing, and the higher the rating would be. The other important parameter is the Debt Service Coverage Ratio (DSCR), which reflects the capacity of paying out interest from the annual income of the property. The Higher DSCR is, the less percentage of annual income needs to be paid out as interest, and the less likely property would default, which ensures a higher rating.

Table 2  REAT Rating of Taiwan Ratings

<table>
<thead>
<tr>
<th>Credit Rating</th>
<th>LTV range (%)</th>
<th>DSCR range</th>
</tr>
</thead>
<tbody>
<tr>
<td>twAAA</td>
<td>40-55</td>
<td>1.70-2.10</td>
</tr>
<tr>
<td>twAA</td>
<td>45-60</td>
<td>1.50-1.70</td>
</tr>
<tr>
<td>twA</td>
<td>50-65</td>
<td>1.40-1.60</td>
</tr>
<tr>
<td>twBBB</td>
<td>55-70</td>
<td>1.25-1.45</td>
</tr>
</tbody>
</table>
After the credit rating and enhancement, Trust Unites of REATs can be traded to investors. Usually, they are traded in Over-The-Counter (OTC) market like other fixed income products. The return of a bond is not that high, as a result, only large investors or institutional investors would be interested in purchasing the product in their portfolio as a risk diverse product. In comparison, REITs are listed in public stock market. Small investors can enter like purchasing stocks.

### Table 3  Comparison between REITs and REATs in Taiwan

<table>
<thead>
<tr>
<th></th>
<th>REITs</th>
<th>REATs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ownership</td>
<td>Change to the investors</td>
<td>Retained by property-owners</td>
</tr>
<tr>
<td>Similar Nature</td>
<td>Close end funds</td>
<td>Corporation Bond</td>
</tr>
<tr>
<td>Maturity</td>
<td>Infinite</td>
<td>5-8 years</td>
</tr>
<tr>
<td>Secondary market</td>
<td>Stock Market</td>
<td>Over-The-Counter (OTC) Market</td>
</tr>
<tr>
<td>Special Step</td>
<td>Property pool selection</td>
<td>Credit rating &amp; enhancement</td>
</tr>
<tr>
<td>Payout</td>
<td>Dividends</td>
<td>Interests</td>
</tr>
<tr>
<td></td>
<td>Appreciation</td>
<td></td>
</tr>
<tr>
<td>Way to raise funds</td>
<td>Public</td>
<td>Public and Private</td>
</tr>
<tr>
<td>Entry size of Investment</td>
<td>Small Investors</td>
<td>Institutional Investors or Large Individual Investors</td>
</tr>
<tr>
<td>Tax Benefit</td>
<td>6 Income tax of dividends (10% in other securities, 2009.1.1 changed to 10%); No Income tax for property management after dividends distributed; No transaction tax when trading securities;</td>
<td></td>
</tr>
<tr>
<td>Properties Invested in</td>
<td>Uncertain, depends on fund management</td>
<td>A certain property</td>
</tr>
<tr>
<td>Numbers</td>
<td>8</td>
<td>9 (6 public &amp; 3 private)</td>
</tr>
<tr>
<td>Total Size</td>
<td>56.2 Billion NTD</td>
<td>21.7 Billion NTD</td>
</tr>
</tbody>
</table>
Graphic 6  Structure of Taiwan REATs

Regulatory → REATs

Underwriter, attorney, accountants → Rating Agencies

Credit Rating & Credit Enhancement → Purchase Units

Funds Raised → Rent

Owner & Manager of Properties

Pay interest and buy back Units, Bond like

Investors

OTC Trade

Investors
Graphic 7 Structure of Taiwan REITs

Rating Agencies

Underwriter, attorney, accountants

Credit Rating

Investors

Listing & Trade in Stock Market

Investors

Regulatory

REITs

Pay Dividends, Stock like

Investment

Properties & property related securities

Property Management
Tax Benefit

Like REITs in other countries, Real Estate Securitization Act of Taiwan also regulates and provides tax benefit to real estate securitization products. Both REITs and REATs are under the same tax beneficial policy.

When distributing dividends or interests from the operation of underlying properties, income tax rate is as low as 6% compared with other securities with 25% tax rate. Although this rate is adjusted to 10% after January 1, 2009, it is still attractive to companies and investors baring high tax rate for their income. Moreover, when trading securities from real estate securitization or buying back, no transaction is taxable.

Table 4  TAX Benefit of REATs compared with other fixed income securities

<table>
<thead>
<tr>
<th>Income Tax Rate (ITR)</th>
<th>Deposit Corporation Bond</th>
<th>Government Bond</th>
<th>Bond Funds</th>
<th>REATs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institution</td>
<td>25%</td>
<td>25%</td>
<td>25%</td>
<td>10-20%</td>
</tr>
<tr>
<td>Individual</td>
<td>Personal ITR</td>
<td>Personal ITR</td>
<td>Personal ITR</td>
<td>Personal ITR</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>6% before 2009, 10% after 2009</td>
<td></td>
</tr>
</tbody>
</table>
4.2. A case of REAT in Taiwan

The first REAT launched on June 10, 2004 is called Jiaxin REAT. Its underlying property is a 16-floor office building, named Wanguo. This was a pioneer launch. After its first offering, other 5 public and 3 private REATs were launched based on its product structure. And all of these projects are office buildings.

Wanguo did not securitize the whole building, only from B4 to 1st floor and 6th floor to 16th floor. These assets were valued at a total price of 4.42 billion NTD with a vacancy rate at 96% when issuing. The total securities were dividend into three levels. A level has the highest rating, with total value of 1.64 billion NTD at around 37% of total securities. B level has a lower rating, with total value of 0.5 billion NTD at around 11% of total securities. The other 52% percent, around 2.28 billion NTD was forced to be retained by the owner of the property as the subordinate level. This is a credit enhancement strategy. Under this allocation, only when the price of the building fell as low as 48% of its current value, would the security holders start to suffer lost. The A level has an interest rate of 2.3% while the B level has an interest rate of 2.6%. The interest rate of 5 year Treasure Bond in Taiwan was 2.08% in June 2004. So the premium was around 0.22% to 0.52%. The denomination value of the security was 1,000,000 NTD. As a result, there is a barrier for small investors to enter into the investment of REAT.

The maturity period is 7 years. The owner needs to pay back all the security issued. At the time of issuing, the REAT also announced the ways of financing pay back. Owners of Wanguo will refinance or raise fund through another securitization to financing pay back. If Wanguo cannot pay back, the property would be sold in an auction process.
<table>
<thead>
<tr>
<th>Project</th>
<th>Jiaxing</th>
<th>Hongtaij</th>
<th>Xinguangzhongshan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Property</td>
<td>Wanguo</td>
<td>Hongtaishiji</td>
<td>Zhongshan</td>
</tr>
<tr>
<td>Usage</td>
<td>(B4<del>B1 1F 6F</del>16F)</td>
<td>(B2<del>B4 4F</del>18F)</td>
<td>(B2<del>B4 4F</del>17F)</td>
</tr>
<tr>
<td>Value</td>
<td>100 Million</td>
<td>44.19/44.02</td>
<td>43.8 45.2</td>
</tr>
<tr>
<td>Rent</td>
<td>10,000/y</td>
<td>22,900</td>
<td>23,628</td>
</tr>
<tr>
<td>Vacancy when issued</td>
<td>4%</td>
<td>0%</td>
<td>2%</td>
</tr>
<tr>
<td>Rating</td>
<td>A</td>
<td>Aaa.tw</td>
<td>AAA(twn)</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>A3.tw</td>
<td>A(twn)</td>
</tr>
<tr>
<td></td>
<td>C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rating</td>
<td>Sub</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LTV</td>
<td>48%</td>
<td>53%</td>
<td>43%</td>
</tr>
<tr>
<td>Credit Enhancement</td>
<td>Sub</td>
<td>Held by Owners</td>
<td>Held by Owners</td>
</tr>
<tr>
<td>Principle pay ahead</td>
<td>60 million/6 month</td>
<td>60 million/6 month</td>
<td>60 million/6 month</td>
</tr>
<tr>
<td>Size 100 M</td>
<td>A</td>
<td>16.38(37%)</td>
<td>17.65(39%)</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>5.00(11%)</td>
<td>3.55(8%)</td>
</tr>
<tr>
<td></td>
<td>C</td>
<td>N.A.</td>
<td>2.50(6%)</td>
</tr>
<tr>
<td></td>
<td>Sub</td>
<td>22.81(52%)</td>
<td>20.70(47%)</td>
</tr>
<tr>
<td>Total</td>
<td>44.19(100%)</td>
<td>44.40(100%)</td>
<td>28.00(100%)</td>
</tr>
<tr>
<td>Maturity years</td>
<td>7+0.5</td>
<td>6+1.5</td>
<td>5+1.5</td>
</tr>
<tr>
<td>Interest Rate</td>
<td>A</td>
<td>2.30%</td>
<td>2.80%</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>2.60%</td>
<td>3.00%</td>
</tr>
<tr>
<td></td>
<td>C</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sub</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Principle payback</td>
<td>· Refinance or Auction</td>
<td>· Security finance</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fund Raising</td>
<td>A</td>
<td>Public offering</td>
<td>Public offering</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>C</td>
<td>N.A.</td>
<td>Private placement</td>
</tr>
<tr>
<td></td>
<td>Sub</td>
<td>Held by owners</td>
<td>Held by owners</td>
</tr>
<tr>
<td>Denomination</td>
<td>1,000,000</td>
<td>5,000,000</td>
<td>5,000,00</td>
</tr>
<tr>
<td>Interest period</td>
<td>6 months</td>
<td>6 months</td>
<td>6 months</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Property</th>
<th>Xinguandunnan</th>
<th>Xinguangsongjiang</th>
<th>Guotaidunnan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usage</td>
<td>office</td>
<td>office</td>
<td>office</td>
</tr>
<tr>
<td>Value</td>
<td>10 Million</td>
<td>30.8</td>
<td>30.5</td>
</tr>
<tr>
<td>Rent</td>
<td>10,000/y</td>
<td>18,434</td>
<td>7,025</td>
</tr>
<tr>
<td>Vacancy</td>
<td>4%</td>
<td>5%</td>
<td>6%</td>
</tr>
<tr>
<td>Rating</td>
<td>Aaa.tw</td>
<td>twAAA</td>
<td>AAA(twn)</td>
</tr>
<tr>
<td>LTV</td>
<td>54%</td>
<td>60%</td>
<td>51%</td>
</tr>
<tr>
<td>Credit Enhancement</td>
<td>Held by Owners</td>
<td>Held by Owners</td>
<td>Held by Owners</td>
</tr>
<tr>
<td>Principle pay ahead</td>
<td>37.5 million/6m</td>
<td>11.5 million/6m</td>
<td>27.5 million/6m</td>
</tr>
<tr>
<td>Size</td>
<td>A 11.30(37%)</td>
<td>5.300(38%)</td>
<td>13.60(36%)</td>
</tr>
<tr>
<td>Sub</td>
<td>100M</td>
<td>4.00(13%)</td>
<td>1.212(9%)</td>
</tr>
<tr>
<td>Sub</td>
<td>1.20(4%)</td>
<td>1.840(13%)</td>
<td>3.10(8%)</td>
</tr>
<tr>
<td>Sub</td>
<td>14.30(46%)</td>
<td>5.568(40%)</td>
<td>18.75(49%)</td>
</tr>
<tr>
<td>Sub</td>
<td>30.80(100%)</td>
<td>13.920(100%)</td>
<td>38.30(100%)</td>
</tr>
<tr>
<td>Maturity</td>
<td>7+ 1.5</td>
<td>5 + 1.5</td>
<td>5 + 1.5</td>
</tr>
<tr>
<td>Interest Rate</td>
<td>2.40%</td>
<td>2.213%</td>
<td>2.4588%</td>
</tr>
<tr>
<td>Sub</td>
<td>2.68%</td>
<td>2.313%</td>
<td>2.5588%</td>
</tr>
<tr>
<td>Sub</td>
<td>3.00%</td>
<td>2.313%</td>
<td>2.9588%</td>
</tr>
<tr>
<td>Principle payback</td>
<td>Auction in 7th year</td>
<td>Auction in 5th year</td>
<td>Auction in 5th year</td>
</tr>
<tr>
<td>Fund Raising</td>
<td>A Public offering</td>
<td>Public offering</td>
<td>Public offering</td>
</tr>
<tr>
<td>Sub</td>
<td>Held by Owners</td>
<td>Held by Owners</td>
<td>Held by Owners</td>
</tr>
<tr>
<td>Denomination</td>
<td>5,000,000</td>
<td>100,000</td>
<td>1,000,000</td>
</tr>
<tr>
<td>Interest Period</td>
<td>6 months</td>
<td>6 months</td>
<td>6 months</td>
</tr>
</tbody>
</table>
4.3. Implication of REAT: the advantages and disadvantages of Bond REITs

Similar to Real Estate Securitization in Mainland, Taiwan also started the bond-like REATs ahead of equity REITs. Compared with REITs, which require property transaction during its investment activity, REATs have relatively easier way to practice, and the following advantages brought by its debt nature.

**Liquidity purpose oriented REATs and met the needs of property holders better.** Unlike REITs with a purpose of benefit from investment for shareholders, REATs are initiated purely with the purpose of liquefying properties. For owners, they can finance their other investments through liquefying their existing properties. REATs provide another efficient way for this purpose, other than mortgage. The credit rating of a REAT is based on the property itself and has no relationship with owner’s credit condition. If their bank credit does not allow them to borrow from the bank at a preferable interest rate, they can turn to this way to look for a possible lower cost of financing.

**REALTs are more likely to attract properties with good quality.** There is not ownership change of property in REATs, and the owners can also have the right to manage the property. Owners with good properties would be willing to entering REALTs when they need financing through the property. The benefit is from that they will not loss the ownership and control on the property. During the operation period, they can enjoy the operational premium from the good property and still pay market cost of debt from REALTs. In another words, there is still an incentive for them to operate the property well in order to enjoy the benefit from good operation, and have no worry about REALTs investors sharing this part of premium since owners only need to pay out a fixed interest rate. For the future of a good property, owner can still enjoy the potential appreciation of the property after they
pay back principles of REATs. In contrast, REITs might have more difficulties in collecting good properties. Property owners would be more likely to keep their most beneficial part of properties and sell those unattractive parts to the market. If they entering a REITs structure with a good property, incomes from the property would be distributed evenly by the shares of holders instead of a fixed rate paying out. If the property appreciates in the future, the benefit is also distributed evenly to shareholders when it is sold.

**Tax benefit of REATs attached to the income tax of interest has its advantage than other fixed-income products.** Investors would be willing to purchase REATs bonds than other bond products with the same interest rate, when they can save nearly 20% of tax benefits. For the owners who issue bonds, they can also use the tax benefit of investors by paying out lower interest rate than other bonds and still be attractive. Through the two ways, both investors and property owners benefit from tax policy of REATs.

**Credit Enhancement program still places enough financial distress to property owners and locks credit safety for investors.** In all the cases of Taiwan REATs, property owners should hold nearly half of the securitized units in a subordinate level. This structure connects value of properties and benefit of owners or managers. If owners did not manage property well and make the total value decreasing, the owner will suffer the lost first until they lose all their benefit in the property. Investors’ benefit is then locked in a higher level, which allow them still got fully paid until owners lose everything.

However, as a bond-like tool for real estate securitization, REATs has limitation and disadvantages, which make it not as popular as equity REITs. From the scale of the two products in Taiwan, REITs have almost twice as large as REATs in total capital.
The nature as a debt make REATs largely depends on interest rate. The interest rate affects the return, the price and even the issuing of REATs. The future income of the property is used to pay out interest of REATs units held by investors and it is also the resource of pay out mortgage loan of a property. In order to avoid the competition for future income between REATs and mortgage, the Real Estate Securitization Act regulates that funds raised by REATs should first be used to pay off the entire mortgage loan of property. To the owners of property, they need to decide whether to refinance by REATs to offset former mortgage loan. If the mortgage borrowed several years ago has an even lower interest rate, the owner might choose to keep the mortgage, which is less costly. In another word, the issuing of REATs largely depends on the cost affected by current interest rate and the benefit brought by tax advantage. It can be forecasted that a period with tight monetary policy and high interest rate would prevent REATs from issuing.

The entry level for REATs is very high, which makes its scope of investors very narrow. The first Wanguo REAT has a denomination of 1,000,000 NTD, around 31,700 USD, and other REAT have denomination even high to 5,000,000 NTD, around 158,000 USD. The high entry level prevents small investors from entering the market, and also the OTC market makes REATs trading a game between institutional investors. Compared with REITs, which can collect small size capital from the public in stock market, REATs has a much narrower investors group and thus fewer liquidity channels.

The return is low and might not attractive enough for some investors. As debt with lower risk than equity, REATs would achieve lower return to investors. Only some steady investors would be interested in low return and low risk security, or those who want to keep
as a stable part of their portfolios. This nature also narrows the scope of investors for REATs.

Because the debt of REATs is allocated to a large group of investors, it would be very complicate and costly to distribute compensation if default happened. There are both institutional investors and individuals holding REAT units. When the owner defaults, the dispersed debts need to cost a lot to be clearly and equally compensated by the remaining value of a property.
Chapter 5. Suggestions of using REITs to finance affordable housing in Mainland China

From the overview analysis of REITs in the US, Hong Kong and Taiwan, introducing REITs financing affordable housing is a possible way for China. In order to make it more successful, the following implications on this topic should be kept in mind of China's regulators and policy makers.

Public listed REITs should not hold ownership of affordable housing. Otherwise affordable statue might be changed by the request of shareholders of REITs. Public listed REITs need a beautiful performance of financial report to attract public investors. And every shareholder of a public listed REIT pursues maximized profit. Whenever affordable housing is not an optimal business choice, a public listed REIT would be required to switch to other investment opportunities. The former affordable housing would face a danger of being replaced by other more profitable business. Both example of the US and Hong Kong tells us that it is not a good idea for a public listed REIT become the owner of affordable properties. In the US, AMICO demolished one of its owned affordable housing property, Lincoln Place Garden Apartments, and replace it with a mixture of expensive, high-rise condominiums and rentals. In Hong Kong, the first REIT, Link REIT, was set up with a purpose of raising funds to finance more affordable housing. However, the shareholders make its properties not affordable any more by gentrifying and raising rents. The key problem is that the purpose of a public listed REIT is to maximize profit. Affordable housing is always not a very profitable business. Once REIT have the ownership of affordable housing, and have other way to make more money on the properties, they would abandon the social purpose and turn affordable properties into a money machine. Losing
affordable housing would hurt social welfare. Therefore, government and regulators in China should keep in mind that ownership of affordable housing should not be transferred to a public listed REIT.

**Encourage private REIT with a social responsibility or public purpose to keep the ownership of affordable housing.** CDT is a good example of private REIT holding affordable housing properties. CDT is organized with a social responsibility of preserving affordable housing in the US. The shareholders of CDT earn profit based on this large social goal, so there is no need to worry CDT abandon affordable statue of its properties. CDT also indicated its purpose of investment to its investors, which make their investors less likely to pursue high profit instead of preserving affordable properties. Therefore, this kind of private REIT is safe to affordable housing stock and China’s government should encourage this kind of private REIT to use the advantage of REIT, like tax benefit, to help preserving and holding affordable housing.

**It is a good idea to have REITs involved into a debt investment instead of equity investment of affordable housing, and REITs can amplify return through special design of investment structures.** Other than equity investment, debt investment is another way of involving REITs into the affordable housing business. This is a much safer way for maintaining affordable housing to a government. They do not need to worry that REIT might change the affordable statue, because the ownership is still kept in hand by the public sectors. CDT provides a good example of how a REIT would benefit through the lending investment. REITs can amplify return on affordable housing through design of investment structures. A problem preventing investors lending to affordable housing is that the return of the debt is low and might not attract enough interest for investors. CDT’s experience of
holding the last tranche of the loan solves the problem. Through mortgage-backed security, CDT also successfully attracts Wall Street partners contributing into the investment of affordable housing. The experience of CDT should be applied to China’s exploration of financing affordable housing. China can encourage its REIT to design and lead such kind of investment structure in order to connect the regular investment market and affordable housing business. In its capital market, China can provide short cut for this kind of investment products, such as the issuing of mortgage-backed security of affordable housing by REITs.

**Affordable housing can provide a stable and steady cash flow to REITs, so it has low risk. For Social Security Fund and insurance companies of China, it is a good investment instrument.** From the experience of the US, affordable housing can provide a stable and steady cash flow to REITs, because demand of affordable housing is usually sufficient to maintain affordable housing at a very low vacancy rate. That is to say affordable housing has a relatively lower risk than other property types. Investors like Social Security Fund and insurance companies in China prefer a low risk investment tool. Affordable housing would be a good investment instrument and provide such an opportunity to meet their investment needs.

**It is easier to attract REITs financing affordable housing in recession period, because it is a good investment for REITs, while affordable housing would be unattractive to REITs when the market grows fast.** One character of business of affordable housing is that the growth is relatively low to other properties. In recession period, affordable housing can still provide stable cash flow that is good for REITs maintaining necessary operational profit. When market grows fast, affordable housing would
still maintain a stable level of cash flow, which might be slower in growth than other properties. REITs tend to go for business that is more profitable. Therefore, the best time for government in China to introduce affordable housing REITs should be during a recession period when the real estate market is shrinking, in order to attract enough investors and funds for affordable housing.

**Government should subsidize the development and holding of affordable housing in order to attract participation of private sectors.** Experience from the US tells us a key role of the policies of government played in affordable housing. The active participation of REITs happened during the period when Section 8 Program and LIHTC Program were largely used. Section 8 Program helps the holding of affordable housing through rent subsidy. LIHTC Program helps the development of affordable housing through subsidy of tax waiving. Even though REITs might have difficulties in using tax subsidy directly, they are still willing to entering into complicate transaction of tax credits to enjoy the benefit and make the business happen. When the subsidy programs expired or became less subsidized, REITs tend to quit affordable housing. What China can learn from this experience is that long-term subsidy policies should be designed to help REITs enter and build the market. China currently has no policies encouraging private sectors building affordable housing, and municipal governments build all existing affordable housing. REITs are only a way to help liquefy properties, and have limited power in attracting a lot of private sectors without using advantages of policies. Therefore, government should keep in mind that REITs still need other policy supports to become a real active role in affordable housing.

**The existing Bond REITs would be an effective way to finance affordable housing.** Two products in Mainland applied experience from Taiwan, with both Bond
REITs and Equity REITs. The structure of Bond REITs in Mainland also applied Taiwan’s structure. As mentioned above, debt financing through REITs for affordable housing is safer and still productive. The proposed Bond REITs structure would provide a possible vehicle for Chinese government raising fund. It can introduce liquidity to China’s affordable housing stock. For management and development of affordable housing, as experts in real estate, Bond REITs can provide their experiences and expertise to help government preserving and developing affordable housing properties better. Therefore, Bond REITs are a way to solve the current problem of lacking financial sources and bring operational benefit for affordable housing in China.

**Bond REITs are with the main purpose of liquidity instead of investment purpose.** In China liquidity, instead of investment, is also the main purpose of government involving REITs into affordable housing. Why Taiwan implemented two types of REITs, the REATs and the Equity REITs, is based on two different purposes from different groups. In the perspective of property owners who want to raise fund by their property, the main purpose would be liquefy the real estate. In the perspective of investors who want to enter real estate market to catch the appreciation of properties with limited capital, the main purpose would be investment. The problem in China of affordable housing is that the government lacks source of fund to build more affordable housing and they already hold some housing in hand. What the government wants to achieve is to raise fund for new affordable housing by liquefying existing ones. Therefore, Bond REITs rather than Equity REITs are more suitable for China’s issue from the start point of motivate purpose.

**Cost of financing through Bond REITs is low, so it is an economical way for the municipal governments raising funds.** Like in Taiwan, the premium of REATs is around
0.5%, partly resulted by the tax benefit from REATs and the credit enhancement program. Therefore, to the Chinese government, they can also pay out premium at a low level, in order to cut financing cost raise fund for affordable housing economically.

**Bond REITs are more likely to attract properties with good quality. These good properties would help affordable housing being a safe part in a REIT’s portfolio.** In Taiwan’s case, REATs also have another advantage over Equity REITs that it can attract properties with good quality, in both lower risk and potential of appreciation. Owners of good properties would share the same purpose with government holding affordable housing. That is to raise fund by liquefying existing real estate. With good properties in a REIT’s portfolio less likely to default, Bond REITs would be able to lend more to affordable housing with a safe property pool in hand.

**Tax benefit of a Bond REITs focusing on affordable housing should be awarded in order to attract investors, among fixed-income products.** One advantage of Bond REITs attract both investors and property owners in Taiwan is the tax benefit which makes Bond REITs out-performed than other fixed-income products. Through a lower income tax rate of Bond REITs, the property owner can pay lower interest than financing through regular mortgages, and the investors can receive more through paying less tax. Both investors and owners share the benefit together. In China, a clear tax rate of Bond REITs is not regulated yet and still under pilot. A suggestion is to set a lower income tax rate for investors in order to make the product more attractive among other fixed-income products in its return and issuing process. For public purpose, it is worthwhile to award REITs holding affordable housing units with even lower tax rate in order to make it more attractive. Taiwan has raised its tax rate for office REATs, and there is an intention that REATs for
regular properties should not be taxed at a lower rate if there is no public purpose for it. In order to make Bond REITs successfully finance affordable housing, it is helpful to set specific tax benefit to REIT’s holding affordable housing.

**Credit Enhancement is a necessary step for issuing Bond REITs. Government needs to set up credit enhancement program for its affordable housing properties in China.** Both cases in Taiwan and the US suggest credit enhancement programs for a Bond REIT. In the case of CDT, government-sponsored enterprises plays a role of insure the credit for CDT’s property. GSE exchanged their mortgage-backed securities with CDT’s Bond Trust Units. In Taiwan, owners need to reserve nearly half of the securities issued as subordinate tranche, so that investors can still prevent losses even if the underlying property value fall down to half of its previous value. Affordable housing held by government in China has an advantage for the credit, because the owner is municipal government with lowest possibility of default. Therefore, under a certain program of credit enhancement, Chinese government do not need to work like the owners in Taiwan, who can only liquefy half of the property value. Instead, China can apply experiences of GSE by securing affordable housing with government credit.

**As a bond-like tool for real estate securitization, limitation and disadvantages of Bond REITs can be expected to happen in Mainland China, as proved in Taiwan’s real estate capital market.** First, the cost of financing through Bond REITs and the sale and trading of the security largely depends on market interest rate change. From the perspective of Chinese government, they would like to issue them at a time when interest rate is low so as to reduce financing cost. So during a period with high market interest rate, it is not economical to finance through Bond REITs. Also, the sale and trading of the security
would also be affected by the change of market interest rate. Second, The entry level for Bond REITs is very high, which makes its scope of investors very narrow. In Taiwan, REATs have denomination value of 1,000,000 NTD. In Mainland China, the bond market is even narrowed down to an inter-bank market with player of only institutional investors. So the product is not fully liquefied as in stock market.

Special regulation and structure for municipal government should be designed to prevent the bankruptcy of government, because the lending through Bond REITs would bring high financial distress and risk to the municipal governments. As a way of leverage financing, Bond REITs provide municipal governments to lend through an easy way. If municipal governments lends too much, they might default and even bankrupt when the real estate market suffered big shrinking. As a result, not only the capital market but also the public finance would be affected if that happens. If certain entities or regulations were design to prevent the bankruptcy of municipal governments, it would be helpful to avoid potential risks to amplify the failure of affordable housing market.

There are also challenges for Bond REITs that implied by current financial crisis that should be carefully addressed by regulators in China. Current financial crisis started by the default in housing market. Rating agencies and regulators failed to realize the risk of housing assets. The default triggered a large collapse of the whole capital market, and brought crisis of the whole economy of the US. China should learn from the bloody experience of current crisis. The rating agencies should carefully rate the underlying asset and be responsible to prevent toxic asset into the asset pool. As the owner and initiator of affordable housing assets, municipal government should keep their government moral to
prevent default. Regulators like the CBRC and CSRC should also prevent risky derivatives, which may cause big losses to investors, from accompanying this beneficial product.
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