

The Outlook of RMBS Market in China

—A Comparison Between RMBS Markets of China and USA

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Abstract: Since 2014, the issuance volume of Residential Mortgage Backed Securities (RMBS) has been skyrocketing. However, the RMBS market is still premature, and unfamiliar to many people. In this paper, I will give an introduction on RMBS and an overview of China's bond market. Since RMBS market is the most developed in the United States, I will use the US RMBS market as a benchmark. By comparing some market characteristics of the RMBS markets in China and the US, this paper analyzes the short-term and long-term expectations of RMBS market in China.

1. Introduction

Since 2014, with the release of filing system of ABS products by People's Bank of China (PBoC) and China Banking and Insurance Regulatory Commission (CBIRC), the issuing volume of Credit ABS in China has been increased significantly year over year. Among the Credit ABS products issued, RMBS accounts for a great proportion. In 2018, 584.26 billion RMB of RMBS were issued, accounting for 62.70% of the Credit ABS issuance in 2018. Certain originators also started to issue RMBS in a regular basis. For instance, China Construction Bank has issued 22 RMBS throughout 2018 which is unprecedented. RMBS is also the most popular ABS product among investors including international investors. In 2018, 2 RMBS originated by China Construction Bank had international ratings and had subscriptions from international investors. In sum, RMBS products in China has been developing fast, showing a great growing potential as a financial product. The goal of this research is to make a forecast on China's RMBS market. While structured financial products are still in a preliminary stage in China, this research will help investors and other interested parties better know the RMBS market in China, and have some expectations for the future trends of the market.

2. Overview of Bond Market in China

By September 2018, China's bond market had become the third largest in the world, where 39,853 bonds were in circulation and the total volume was about 83 trillion RMB. At the same time point,

China's bond market size amounts to 98% of China's GDP, while it is around 200% in the United States and in Japan. In aspect of bond issuance volume, financial bond, municipal bond and treasury bond are 3 largest types, costing proportions of 23.80%, 21.88%, 17.35% respectively. The following chart shows the distribution of bond types in percentages. We can see that ABS products only account for 2.68% of the bond market in volume, while over 25% in the United States. Look into the figures, the bond market of China is still in development comparing to countries that have a relatively matured financial market. ABS as a structured financial instrument is largely under-developed.

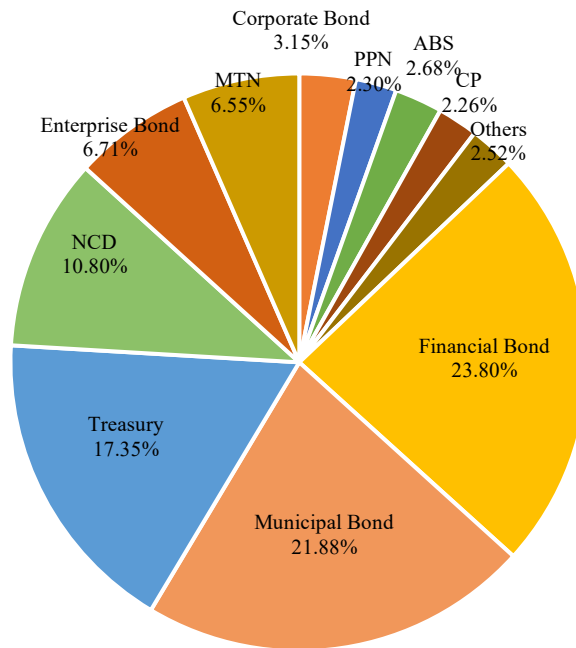


Figure 1: Bond Type Distribution in China.

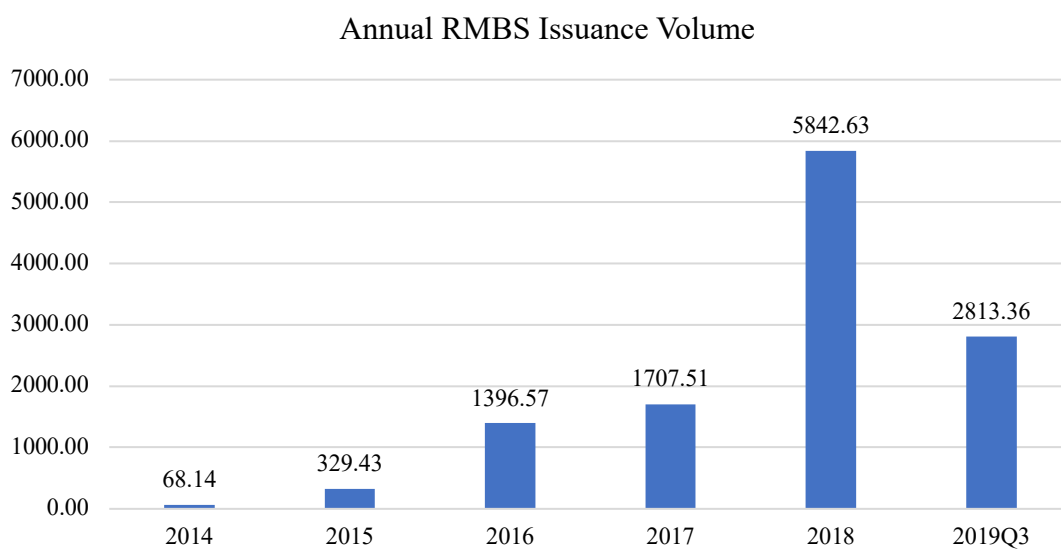


Figure 2: Annual RMBS Issuance Volume in 100 million RMB, as of September 2019.

Given the proportion of ABS products in China’s bond market, it is fair to expect that the ABS market has great upward potential in terms of volume. Leading among all types of Credit ABS, RMBS issuance in China, as stated in the previous section, is growing fast especially. The following chart summarizes the trend of RMBS issuance in China.

3. RMBS

3.1. What is RMBS

Residential Mortgage Backed Securities is a debt-based security backed by residential mortgage loans. Financial institutions select their own residential mortgage loans with future cash flows to form an asset pool. According to asset features such as interest rates, loan terms and etc., the asset pool is restructured with credit enhancement measures, making it a fixed-income type security which can be traded on the financial market.

3.2. RMBS in China

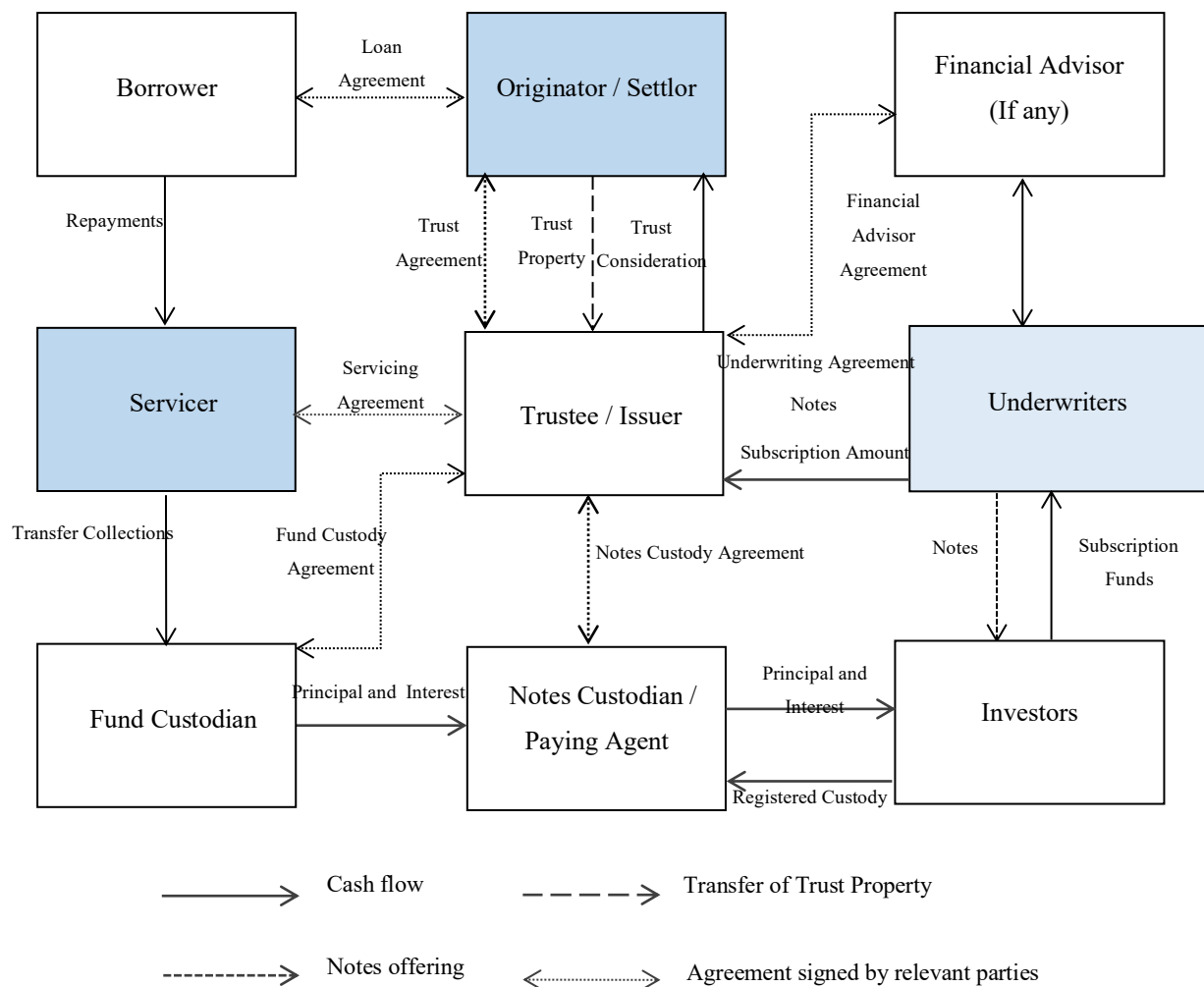


Figure 3: Transaction Structure (Wind, 2018).

The residential mortgage market in China is large in scale. By the end of 2018, the outstanding balance of individual mortgage loans was 25.75 trillion RMB, with a year-over-year growth rate of 17.80%. Compared to the residential mortgage market, the RMBS market in China is relatively small. The originators of RMBS are commercial banks, issuing RMBS using their loans as the underlying assets. The distribution of originators is relatively diverse, and most of the originators are still in the piloting stage. However, the year 2018 still marks a new phase of the market that the RMBS issuance volume in 2018 is almost four times of that in 2017.

The following diagram shows the participants in a securitization project of residential mortgages. In the actual situation, the originator chooses a trustee to establish a Special Purpose Vehicle (SPV). In the early stage of a securitization, the originator and the underwriter coordinate with other third parties to finish due diligence and structure design including tranches, repayment method and etc. Then, the offering circular and other issuance documents are reviewed and examined by PBoC and CIBRC. Originator often arrange roadshows before issuing, and set a pricing range based on the market and the investors. (Yang, p11)

It is apparent to see that the originator is the core of securitization. The originator, a commercial bank, decides whether to initiate a RMBS project according to its demand for securitization. The underlying assets are all originated from the originator and do not include any other mortgage loans from other institutions. In addition to regulation, government participation in securitization is limited.

3.3 RMBS in USA

As the birthplace of asset securitization, the United States has the largest and the most mature RMBS market in the world. A comprehensive market system, diversified market players and a relatively loose regulation environment energize the RMBS market of the United States.

As for the housing market, in the United States, not only commercial banks are eligible to issue residential mortgage loans, but other institutions such as insurance companies, pension funds and etc. are eligible if they qualify. The borrowers also have more options if their credit do not meet the standard of these commercial parties. Borrowers with less good credit are able to apply for a guarantee from institutions as Federal Housing Administration (FHA), which mainly provides guarantee on low income households. (Yang, p13)

As for the RMBS market, there are three main RMBS issuers, which are Government National Mortgage Association (Ginnie Mae), Federal National Mortgage Association (Fannie Mae) and Federal Home Loan Mortgage Corporation (Freddie Mac). The three institutions are all backed by the United States government. Ginnie Mae only buys the mortgage loans issued by FHA, and provides government guarantee on repayments of RMBS it issues. Fannie Mae and Freddie mac mainly issue RMBS with underlying loans that are not from FHA and lower than \$250,000. (Yang, p15)

In summary, the US government has been deeply involved in the housing market and the RMBS market.

4. Comparison

We can see that China's RMBS market and US RMBS market are not in common, especially in the following market characteristics.

4.1. The Issuers and the Market Model

One very notable difference between US RMBS market and China's RMBS market is the issuer, which essentially representstwo market systems and affects other market factors. The US government

plays an important role in the RMBS market. There is a great portion of agency RMBS products issued by government agencies, which are backed by the government, in US RMBS market. Therefore, the US RMBS market is more of a government intervention market model. On current stage, China's RMBS are issued by commercial banks with no government guarantee, and the issuers normally arrange roadshows to interested investors to pitch the products. Therefore, China's RMBS market is more of a market model, although the commercial banks in China are state-owned.

The government agencies in US RMBS market helps the standardization of residential mortgages. In the US, there are various financial institutions in the banking industry. They may have very different operation and management methods, and more importantly, they most certainly have different loan standards. However, when government agencies purchase the mortgages from financial institutions, they set loan standards including loan limit, down payment, loan term, credit score and etc. To purchase mortgages from financial institutions, government agencies ensure that the mortgages being purchased meet the standards they set. When government agencies issue RMBS, the public acknowledge that the underlying mortgages are grounded by a set of standards. Such mechanism also promotes standardizing development of the mortgage business.

In China, since there is no such government agency, commercial banks typically find a trust to establish a SPV and select underlying mortgages from the bank's mortgage pool. Commercial banks have different credit standards for residential mortgage business so that the underlying assets of RMBS products issued by different commercial banks may have different features. It makes the RMBS market in China more market-oriented. For example, in real situations, a less scaled commercial bank may be more selective on underlying mortgages to compensate the investors, because the investors normally prefer RMBS issued by larger scaled commercial banks.

4.2. The Liquidity in Secondary Market

Liquidity refers to trading activities in the secondary market.. Because of the long-term nature of mortgages, the secondary market is an essential factor in maintaining lender liquidity. The US RMBS market is obviously a lot more liquid than China's RMBS market. In United States, TBAs—short for "to-be-announced" securities—involve a special type of trading of mortgage-backed securities. TBAs are the most liquid and important secondary mortgage market, with volume in the trillions of dollars annually. (Wikipedia, TBA)

Currently, China's RMBS do not have a mature secondary market. Investors are mainly commercial banks, and most of them are held until mature. Some underwriters may provide two-way market making after issuance, but that does not have a major impact on liquidity of the whole market. In 2018, China's RMBS products' annual trading volume in secondary market was 28.9 billion RMB.

4.3. The Regulation System

In development of US RMBS market, on the one hand, the federal government regulates the market by enactments of bills according to market situations and demands. On the other hand, government agencies (Freddie Mac, Fannie Mae and Ginnie Mae) participate largely in the market, controlling most RMBS businesses. RMBS, as a type of ABS, is applicable as 'securities' under Securities Law. Issuance of RMBS should be registered to SEC.

While the regulation system is different in China, RMBS issuance is regulated by CBIRC and PBoC. The two institutions are responsible to review and examine the issuance of a RMBS product. Financial institutions apply to CBIRC for the qualification for issuing RMBS. They bring filings of RMBS products to CBIRC before issuance. The originator and the trustee can apply to PBoC for

RMBS registration. They bring filings of RMBS products to PBoC before issuance. In aspects of information disclosure and accounting measures, the regulations in China are not as comprehensive as that in US, for the market is still premature in China.

4.4. Discussion

The difference between RMBS markets in China and US is clearly systematic. Although China's RMBS market has been growing for the past few years, the market scale will never be comparable to that of US if the market system does not evolve. China's RMBS market heavily relies on commercial banks' demand on current stage. Commercial banks may consider profit, capital structure, finance efficiency and etc. This is a cost to commercial banks, and it also makes the RMBS market not too stable because the decision making of commercial banks usually depends on various factors which is uncertain. For example, a shift of business focus may directly affect their RMBS issuance plan.

1) Short Run

In the short run, China's RMBS market will progressively improve on some early stage problems.

The Product

The valuation of RMBS products depends on factors such as remaining terms, yield, the behavior of underlying assets and so on. There is not yet a valuation system based on China's RMBS products. With more researches on fundamental factors such as prepayment rate and default rate in China, the valuation system will be more comprehensive and referable. (Huang & Zhang)

Information Disclosure

The information disclosure of RMBS products in China will be further improved. Now, there is no information disclosure on every single underlying asset. The information disclosure is also not standardized and well e-enabled.

Secondary Market

A well functioning secondary market like that in the US will not emerge if the primary market does not experience a systematic evolution. In the short run, to stimulate the liquidity in the secondary market, more active market making and repurchase mechanism construction are more realistic. These will somewhat improve liquidity in the secondary market.

2) Long Run

For long term growth of the RMBS market, China is very likely to adopt the system of US RMBS market. Establishing a China version of Freddie Mac and Fannie Mae will help enhance the liquidity and market efficiencies in both primary and secondary market.

5. Conclusion

Although China's RMBS market is a premature market, the fast-growing market capacity indicates huge upward potential. Currently, RMBS products are no longer a brand new financial tool that is poorly known on the market. Therefore, in the short run, the market is expected to be more mature in terms of valuation and information disclosure. However, the current system clearly has a ceiling. For the long run, the market is expected to adopt the US system.

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