

The Mortgage-backed Securities Market in Hong Kong (China) and China

Wang Kairui^{1,a,*}

¹Nanjing Baixi Culture Communication Co., Ltd., Nanjing, 210008

a. njberrryhouse2022@outlook.com

*corresponding author

Abstract: As asset-backed securitization developing not only in western countries but also in Asian countries and districts that have different capital market system and history, especially China, the mortgage backed securitization was considered as the most potential product in the ABS market, derived its own charm to attract investors because of the high yield and the policy supported. The study investigate the process of the MBS developing by comparing the history of the market under different types of capital environment and government involvement in the US, Hong Kong and China. The analysis was testified by policies and the roll up data from the market, the key points extracted from the timeline provided the different forms and potential risks of nowadays MBS. therefore, this paper overwhelmingly indicated investor's possible concerns about the MBS market after the subprime crisis and other on-going recession of the mortgage market in certain countries, and would bring radical thinking about the process of future investment decision-making.

Keywords: mortgage-backed, Securities, capital environment, potential risks, investment decision - making

1. Introduction

Domestic and international analysts believed that a bond or debt market had to take root before asset-backed securitization (ABS) took off in Asia and other countries. Thus, the process of developing the fixed-rate mortgage market required the existence of the fixed-rate debt market, which, for instance, in Hong Kong (China), was facilitated by the development of an arrangement referred to as Fixed Adjustable Rate Mortgage (FARM) introduced by The Hong Kong Mortgage Corporation Limited (HKMC) in March 1998. The model provided a fixed mortgage rate for the initial three years and gave the mortgagor a choice to either renovate the mortgage rate for another period at the preponderant rate or change it into the floating rate [1]. In the initial half-year period and immediately after the launch, a total of HK\$1 billion in FARM loans were provided, and the scheme was intended to attract home buyers through potential savings. Regrettably, as the interest rates restored to normal and the mortgage price war started, the various stakeholders lost interest in the FARM.

Correspondingly, in the U.S., the Federal National Mortgage Association (Fannie Mae) created a fixed-rate debt market that reinforced and buttressed the fixed-rate mortgage market. For instance, in the 1930s, Fannie bought mortgages from moneymaking banks. She utilized the pooled mortgages as collateral to issue new debt-based instruments in a "pass-through" model process because all expected cash flows on the mortgages passed through to the new instrument holders [2]. The expected cash

flows, the principal recompense on the loans and interest payment passed through to the new instrument holders via Fannie Mae rather than being settled to the initiating banks. This process created a fixed-rate debt market that supported fixed-rate mortgages.

Compared to Hong Kong and the U.S., China officially approved CHINA CINDA ASSET MANAGEMENT CO., LTD. (CHINA CINDA) as the first asset management company to turn the theory of asset-backed securitization into a practical scheme till 1999. Nowadays, the growth of the ABS market in China mainly owes to the high-speed development of property ABS, which includes residential mortgage-backed securities (RMBS) and commercial mortgage-backed securities (CMBS), after the booming of residential mortgage loans since 2016 and the "black swan" effect of COVID, the issuance of RMBS has reached a certain high level and was expected to be the one with the most potential in ABS market, but the bond valuation and regulation system of the first and secondary market is still at a preliminary stage.

2. International Models

The United States was a leader in developing and maintaining the mortgage-based security market through the creation of the Federal National Mortgage Association (Fannie Mae). For instance, Fannie in the U.S. started purchasing mortgages from commercial banks in the 1930s. She used the collective mortgages as security or collateral to give new debt-based instruments in a process described as a "pass-through" arrangement because all expected cash flows on the mortgages were distributed to the new instrument holders (CABC). Fannie Mae passed the principal on the bond and interest to the new instrument owners instead of the initiating commercial bank. This process created a fixed-rate debt market that supported fixed-rate mortgages. Additionally, since Fannie Mae was established, land and property were the most popular assets utilized in asset-based deals; however, in the 1970s, the U.S. asset market securitization expanded to include almost all types of assets.

The Fannie model expanded to include the MBS, the most renowned form of ABS. In addition to Fannie, the mortgage market in the U.S. expanded with the entry of two other mortgage firms: Government National Mortgage Association (Ginnie Mae) and Federal Home Loan Mortgage Corporation (Freddie Mac). The total amount of the secured instruments was US\$1,785 billion. The mortgage-based market became the second-most important debt market in the instrument after the U.S. treasury market, whose total was US\$3,126 billion. Conversely, in Hong Kong, the main form of ABS was the MBS, first introduced in 1988 by a private placement. However, individual institutions' placement proved unsuccessful for several reasons, leading to the formation of HKMC, whose function was to purchase residential mortgage loans from banks for its retained portfolio and to fund its purchases through the issue of unsecured debt securities.

3. Emerging Market Issues

Even though asset-based securities were common in the U.S. and Europe, they were not popular in Asia. Assets were not easily and readily securitized in Asian districts and countries, such as Hong Kong (China), China, Japan, Singapore, and South Korea, as they were in the U.S. and Europe, even though most transactions had been completed and finalized in these districts and countries. MBS and ABS in these emerging markets were still in their initial stages or infancy, where success was constrained. CABC identified limited market liquidity as a significant barrier to growth and advancement. Finally, the emerging markets lacked a base of financiers and funders who were extensive, active, sophisticated, and foreign.

4. Suitability

Asset-backed securities have become a critical component of the capital markets in the U.S. and other states globally. However, Pfandbriefe (developed in Prussia) and Fannie Mae (developed in the U.S.) were the predecessors in using assets as credit and income enhancements of debt instruments in the state, municipal, and corporate markets. Pfandbriefe was a prototype of ABS that Prussia's government issued in response to the effects of the seven-year war that destroyed farmland in the mid-18th century, leaving the owners in desperate need of capital. Pfandbriefe was valued at half of a property's value, and borrowers paid principal and interest to the collection, which paid the bondholders. Similarly, in the US, Fannie Mae acted as a prototype form of the ABS. Since Fannie Mae was established, land and property were the most popular asset utilized in ABS; however, in the 1970s, the asset securitization market in the U.S. advanced further to include assets of virtually every class. Like ABS, Pfandbriefe and Fannie had similar characteristics, such as ABS, since they relied on a given asset backing.

5. Mortgage Market in Hong Kong

The Government of Hong Kong was very motivated to develop the mortgage market because of its advantages to Hong Kong's economy: its benefits to the banking system's stability, consumer requirements, and the status and sophistication it will add to the capital markets. The government of Hong Kong started this process in March 1997, a few months before the outbreak of the Asian financial crisis, when it developed the Hong Kong Mortgage Corporation Limited ("HKMC") under the company's ordinance [3]. Utilizing the exchange fund, the government injected an initial paid-up capital of HK\$1 billion in HKMC and later increased the capital to HK\$2 billion in September 1998. According to Jacques, the state had planned that an extra capital of HK\$1 billion would be made available to the corporation if needed. Finally, the government anticipated that through the creation of HKMC, there would be significant benefits to Hong Kong, such as facilitating the advancement of secondary and local debt markets, promoting home ownership, and improving the country's banking and monetary stability.

6. Commercial Bank Participation

The primary potential members and participants in supplying assets for the MBS were specialized housing and commercial banks, who were to benefit significantly from their contribution to the arrangement scheme provided by HKMC. Initially, the disequilibrium and imbalance in the demand and supply of mortgage loans had stage-managed the mortgage price war among banks. Consequently, unlike corporate loans, most banks were not interested in selling mortgages to HKMC because they possessed good credit ratings. Nonetheless, HKMC's mortgage securitization plan benefitted both HKMC and the initiating bank [4]. For instance, Green established that the cash flow status of a servicing bank would not alter or transform before and after the initiative because it was entitled to purchase back the MBS converted into marketable securities. The initiating bank would also receive a servicing charge of 0.5% on the unsettled balance of the mortgage debt or bond. In essence, the initiating banks were paying HKMC a fee for enhancing their credit, i.e. since payments were guaranteed, and for converting assets and loans into marketable securities.

Other benefits to the participating banks include reducing credit risk exposure because HKMC guaranteed the MBS. Also, HKMC warranted MBS under the capital sufficiency arrangement by transforming the 50% risk-weighting mortgage debt into a 20% risk-weighting loan. Finally, the HKMC arrangement in Hong Kong supplied a valuable statement of financial position management techniques for banks because the MBS issued under the regime was a liquefiable asset under the Banking Act.

7. Mortgage Market in China

Due to the variance between Hong Kong's and mainland China's economic policies, the primary share of mortgage loans and the MBS market are controlled by four state-owned commercial banks, China Construction Bank, ICBC, Bank of China and Agricultural Bank of China in mainland China.

The pilot of China Construction Bank was set up in the Shenzhen, Fuzhou branch in 2007 and issued "Jianyuan 2007-1 individual housing mortgage-backed security". In 2007, the subprime mortgage crisis in the United States led to suspending the pilot process of MBS. The related products were in the stagnation period. On July 22, 2014, the Postal Savings Bank of China issued "Youyuan, the first phase of individual housing mortgage-backed securities in 2014" [5]. Through years of adjustment and development, "Jianyuan 2021-1" has reached a significant scale with 5.14 billion CNY, and "Nongyinhuayu 2021", which was issued by the Agricultural Bank of China, has reached 20.015 billion CNY and became the most extensive MBS product at the same year. Although the mortgage policy has been through tightening and easing multiple times, while the commercial banks are seeking a way to free up the balance sheet to ease the pressure on mortgage volume indicators, MBS seems the optimal solution.

8. Alternativesfiliations

Hong Kong's MBS and ABS are likened to one in which commercial banks directly sold mortgages to financiers and funders. For instance, in September 2001, several corporations had been contracted by HKMC to become official and approved sellers or service providers of MBS and ABS. Additionally, several commercial banks had actively participated in endorsing and guaranteeing the HKMC notes or marketing the issuance of MBS. HKMC purchased mortgages from banks and issued them to new owners and securities. According to CABC, private placement of mortgage securities by individual institutions could have been more successful due to a lack of conformity for the underlying pool of mortgages.

Additionally, the heterogeneity of issues had prevented many players from entering the market. Also, since most MBS were not listed on the stock exchange, the market faced some liquidity problems. Nonetheless, the private placement approach was considered more efficient than the tender approach.

On the other hand, along with the "black swan" effect of COVID-19 fading and citizens' enthusiasm for buying residential properties subsided, the data showed that the sales of MBS in China also decreased sharply, over 92%, in 2022. Even though a series of new policies came out early in 2023 to stimulate the mortgage market, the cases of lenders' late payments to mortgage loans have been accepted. Although the ABS market seems been evolved for over 20 years in China, the corresponding regulation system still could not be described as "well-functioning" to the whole asset securitization market; the CSRC, PBC and CBIRC set the existing regulations, the organizations that have a significant impact on the securitization market in China.

9. Capital Markets Functions

Market trading was key in developing, advancing, and expanding mortgage undertakings in Hong Kong's capital markets. For instance, market traders initiated and established a liquid market and ensured the NIP notes were compatible with the exchange fund notes and bills. This aspect implies that when a market maker ended short of a note under the NIP, they were allowed to compensate and recover their short position by acquiring similar exchange fund bills or notes. Additionally, a secondary market would be established through the prices offered and quoting of bids by the market makers. Finally, to attain this goal, HKMC selected and appointed four major market makers for the MBS: Merrill Lynch (Asia Pacific), Deutsche Bank, Dao Heng Bank, and JP Morgan.

10. Economic Conditions

The Asian economic turmoil of 1997 had a grave effect on the economic performance of Hong Kong. There were critical fluctuations and alterations in the construction and development of new houses, the availability of rental residences, the rate of interest and currency exchange, and the overall economic environment. For instance, before the Asian economic downturn from mid-1997 to mid-1998, the mortgage rate was between 1% and 1.5% compared to the prime rate. After the crisis, the standard deviation rose to 2.5% in mid-1998. In addition, the interest rates became highly volatile. In addition, the commercial banks reduced their corporate lending and focused on mortgage loans since they were less risky and guaranteed. As a result, competition for mortgages increased, and banks were forced to offer low mortgage rates, as little as 2.5% by 2001, and high proportions of cash rebates.

The Chinese government intervened in the mortgage market through administrative measures and monetary policies using multiple tools and policies. All residential mortgages in China are adjustable rate mortgages, following the baseline set by the central bank. Once the central bank announces a rate adjustment, it is applied to all existing mortgage loans with maturity greater than one year starting from the beginning of the following year. Since 2005, commercial banks have been allowed to adjust the mortgage rates for their business operations. As of December 2014, the market shares of domestic bank loans with interest rates at lower, flat, and over the baseline were 13.10%, 19.64% and 67.26% respectively [6]. When taking a broad view of the correlation between the mortgage market and the economic growth all over the world, which is also applied to China, relaxing lending standards as part of the stimulus package in 2008 initiated by the government to cope with the GFC, resulted in a big housing boom around 2010—credit restrictions imposed in 2011 exceptionally constrained housing transactions in the next couple of years. The recent housing downturn in 2014 was mainly a result of the capital shortage in the banking system. As housing served as a pillar industry since the end of the 1990s, fluctuations in the housing market inevitably affected overall economic growth. The overall rise in the housing sector in the 1990s and 2000s contributed considerably to prosperous economic growth; the downturn in the housing market in 2014 was the main reason for the declining GDP in 2014. The Chinese mortgage market is relatively underdeveloped, mainly because of the rudimentary development of the housing and financial sectors during its market transition [6].

11. Conclusion

My concerns as an investor in the participation of asset-backed securitization would be the inherent risks involved, the prevailing economic environment in different countries and districts, and the conditions in the property and debt market. According to CABC, MBS were guaranteed using mortgages and required a liquid secondary market; therefore, there had to be plenty of mortgages in the future. However, the economic trend has been counterproductive since the post-pandemic era. Especially in China, despite the series of policies, the residential property market is not showing any signs of recovery; in other words, the market bubbles are disappearing after the boom. Thus, the supply of mortgages would not meet the expectation in China. The market experiences in Western were helpful in both Hong Kong and mainland China; on the other hand, the economic regime difference also referred to China; its ABS market is less well-functioning than in Hong Kong.

In conclusion, venturing into the Hong Kong MBS market would be a better option since this project will provide a competitive edge to the bank, given that most of its competitors are already established in the market. Also, the advantages of the MBS market, as discussed above, outweigh the costs and risks of the venture compared to the MBS market in China, which HKMC guarantees in Hong Kong. Last but not least, the Asian investor should have faith in a mature China ABS market in the future since the strong government involvement in the capital market and the macro-control policies will be effective when complying with the economic cycle. China should refrain from

adopting finance innovations developed in the Western systems wholesale; it needs to develop its model for developing the mortgage market based on international experiences and its unique background [6].

References

- [1] Centre for Asian Business Cases (CABC). *Mortgage Securitization in Hong Kong and Asia*. School of Business, the University of Hong Kong, 2001.
- [2] LaCour-Little, Michael, and Jing Yang. "Pay Me Now or Pay Me Later: Alternative Mortgage Products and the Mortgage Crisis." *Real Estate Economics*, vol. 38, no. 4, October 5 2010, pp. 687–732, <https://doi.org/10.1111/j.1540-6229.2010.00280.x>. Accessed September 15 2019.
- [3] Jacques, Stephen. "Securitization in Hong Kong". *Global Securitization and Structured Finance*, vol 1, no. 1, 2008, pp. 99–104.
- [4] Green, Richard et al. "Mortgage Securitization in Asia: Gains and Barriers." *8th Annual East Asian Seminar on Economics Financial Sector Development in the Pacific Rim, June 12 2006 and Hong Kong*, Publisher, 2007.
- [5] Chen, Shalin. "Chinese Mortgage Backed Security Pricing Model." *Dspace.mit.edu*, 2017, dspace.mit.edu/handle/1721.1/113484. Chapter 5, 5.1.2. Accessed August 23 2023.
- [6] Zhou, Zhihua. "The Development of Mortgage Finance in China." *China Perspectives*, vol. 2015, no. 4, December 1 2015, pp. 51–61. Accessed October 30 2019.