

On the Securitization of Housing Mortgage Loans

SUR LA SÉCURISATION D'EMPRUNT-LOGEMENT

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Abstract: It is important for the Chinese commercial banks to systematically identify and measure their credit risk concentrations and reduce the detected concentrations through financial innovation. This paper probes the significance and obstacles of housing mortgage loans the securitization and put forward some measures to facilitate the introduction of securitization.

Keywords: Housing mortgage loans, Securitization, Special purpose vehicle (SPV)

Résumé: Il est important pour les banques commerciales chinoises d'identifier systématiquement, de mesurer leur risque de concentration de crédit, de réduire la concentration détectée par l'innovation financière. Ce texte cherche à découvrir la signification et les obstacles d'emprunt-logement, et propose quelques mesures pour faciliter l'introduction de la sécurisation.

Mots-clés: emprunt-logement, sécurisation, véhicule à l'usage spécial

1. INTRODUCTION

Banks are financial agencies originating loans and consequently facing credit risk. Credit risk can be defined as the risk of losses caused by the default of borrowers. ^[1] Default occurs when a borrower cannot meet his key financial obligations to pay principal and interest. Credit risk is driven by both unsystematic and systematic components. Unsystematic credit risk covers the probability of a borrower's default caused by circumstances that are essentially unique to the individual, whereas systematic credit risk can be defined as the probability of a borrower's default caused by more general economic fundamentals ^[2]. For example, the Chinese real estate price has soared up during the past five years, which leads to a large amount of housing mortgage loans and accumulates huge credit risk.

In this paper we address the securitization of housing mortgage loans in China. Recent data published by S&P demonstrate the housing loans have grown only in pace with the growth of GDP in this country. The reason for the focus on the securitization of housing mortgage loans is not only its economic importance but also the kind of credit risk banks face in this area. Banks

mainly absorb the unsystematic part of credit risk because they tend to originate the housing mortgage loans to many independent borrowers while avoiding lending large sums to a single borrower. But particularly troublesome for banks is systematic credit risk. A sudden change in macro economic factors may lead to defaults on housing mortgage loans. With the accelerating development of the Chinese real estate market, concentrations of credit risk in the housing mortgage loans can consequently result in a threat of sizable losses. Hence, it is important for the Chinese commercial banks to systematically identify and measure their credit concentrations and reduce the detected concentrations through financial innovation.

2. STRUCTURE OF SECURITIZATION AND ITS APPLIED SIGNIFICANCE IN THE CHINESE HOUSING MORTGAGE LOANS MARKET

2.1 The structure of securitization

Securitization refers to the transformation of illiquid assets into liquid, marketable securities. The development of securitization market started in the

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United States with the securitization of mortgage loans in the early 1970s, and a large amount of the volume of credit securitization is still in mortgages. The first securitized mortgage transactions have been encouraged by the support of three U.S. Government-sponsored entities (GSEs) known as Fannie Mae, Freddie Mac, and Ginnie Mae that provided credit enhancement to investors. Since the mid-1980s also non-mortgage assets like consumer loans, auto loans and account receivables have been increasingly securitized. In the last years the market for asset-backed securities (ABS) has grown explosively. The following graph gives a framework of securitization.

Firstly, the originator packs a number of roughly homogeneous assets into an asset pool. Secondly, the originator sells the assets or the asset pool to a special purpose vehicle (SPV), which is a trust fund or a corporation with the sole function of holding these

assets. The SPV issues securities that are sold with the help of an investment bank in private placements or public offerings. The payment of interest and principal on the securities is directly dependent on the cash flows arising from the underlying pool of assets. A service agent who frequently is designated by the originator will be in charge of collecting and managing these cash flows and a trustee will supervise the distribution of the cash flows to the investors. The process of securitization is usually supported by some form of credit enhancement, because investors of secured securities are normally not willing to bear all the default risk associated with the asset pool. Common forms of credit enhancement includes third-party insurance and insurance by the originator. Additionally, the issuance of secured securities will generally be rated by a rating agency. The basic process of securitization is introduced in Fig 1.

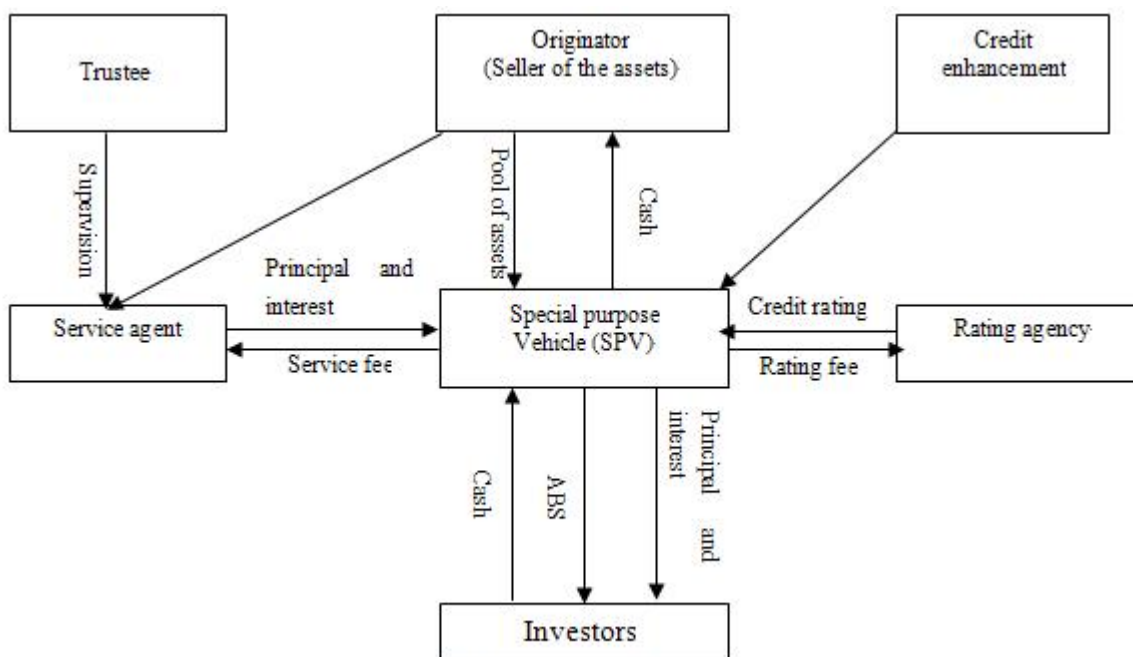


Fig1: Structure of securitization

2.2 Significances for the securitization of housing mortgage loans in China

2.2.1 Securitization can solve the asset substitution effect in housing mortgage loans.

Asset substitution problem means that risky debt may induce conflicts of interest between bondholders and shareholders and then lead to sub optimal investment decisions. Stulz and Johnson (1985) suggest that the agency costs of debt including monitoring costs and asset substitution problems may be lower for secured debt than for unsecured debt. James (1988) shows that securitization is similar to secured debt. There exist several reasons why the agency costs related with securitized debt might be lower than those with unsecured debt. Firstly, Secured debt will not require restrictive bond contracts and can be negotiated easily

because the claims are transformed out of the balance sheet and not subject to asset substitution. Secondly, secured debt holders do not share gains from the originator's future investments.

Therefore, there is no under investment problem associated with secured debt. Thirdly, since payment on secured debt comes from the assets backing the debt and not the originator, these debt holders will require less information about the issuing firm than unsecured debt holders require. These factors should lower the costs of secured debt than unsecured debt. Encouraged by the motivation for securitization, firms with high agency costs of debt should be most likely to issue asset-backed securities. So it is very easy to explain the positive meaning of using securitization to help the Chinese commercial banks to solve the serious governance problem. Besides, since agency costs of housing

mortgage loans are an increasing function of leverage, banks that have high financial leverage should be more likely to issued asset-backed debt.

2.2.2 Securitization can alleviate the problem of underinvestment in Chinese commercial banks.

Asset securitization may be a means of alleviating Myers' (1977) underinvestment problem. Stulz and Johnson (1985) show that secured debt can be used to increase firm value and that existing bondholders can be made better off if the firm is able to undertake a new project by issuing secured debt. Berkovitch and Kim (1990) and James (1988) also find that secured debt can alleviate the under investment problem. Underinvestment is more likely to be a problem for commercial banks with weak growth opportunities or very low probability of financial distress. Therefore, if avoidance of underinvestment is a motivating factor behind asset-backed security issuance, banks in financial distress and/or banks with weak growth opportunities are more likely to issue. In addition, since issuing securities allows them to undertake positive NPV investments, these banks should have an improvement in financial performance.

2.2.3 Securitization can deal with the problem of asymmetric information faced by the Chinese commercial banks.

Myers and Majluf (1984) propose a pecking order of corporate finance. In their model managers know more about the value of the firm than potential investors and managers act to maximize the value of existing shareholders. Rational potential investors will therefore discount the value of any security issue. As a result, when undertaking valuable investment projects, managers will prefer to use internal funds and if a security must be issued the firm will choose the safest claim. Secured debt may be safer than unsecured debt because there is less information asymmetry regarding the value of the collateral securing the debt than there is regarding the value of the firm. In China, commercial banks cannot grasp the comprehensive information of housing mortgage borrowers, then default of this kind of loans is increasing gradually. So commercial banks that face severe information asymmetry problems are more likely to issue secured debt.

3. CURRENT STATUS AND EXISTING OBSTACLES OF HOUSING MORTGAGE LOANS SECURITIZATION IN CHINA

3.1 Current status and existing obstacles of housing mortgage loans Securitization in China

A recent report by Standard and Poor's states that, so far, there has not been any tangible performing assets securitization deals in China. The so-called non-performing assets (NPL) securitizations are closer to asset sales than securitizations in true sense. For example, in 2004, China Cinda Asset Management Corp co-operated with Deutsche Bank to repackage 20 of its assets into a plan worth 1.6 billion Yuan (US\$193.35 million) and issued bonds designated to foreign investors. However the securitization cases in China has been more on the basis of practice rather than law due to the lack of strong legal system. Presently, not only does China lack a clear-cut set of laws (including tax laws) specifically governing securitization, it is still unclear which regulatory body would oversee securitization transactions. Furthermore, from a credit analysis perspective, the weak judiciary system and enforcement of creditors' rights mean that it is very difficult to assign recovery values to defaulted assets.

3.2 Existing obstacles of housing mortgage loans Securitization in China

3.2.1 Lack of internal rating systems

Efficient securitization of housing mortgage loans requires long time series data on the default frequency of house purchasers and loss experience in defined homogenous pools of assets. Accurate measures of default frequency are at the core of internal bank rating systems. For many banks, especially smaller ones, development of the appropriate rating tools is work in progress. Lack of complete data is not necessarily a complete obstacle to securitization, but is likely to result in less attractive pricing of securities.

3.2.2 Lack of transaction mechanism

Securitization has high set-up costs and relatively high running costs. This has generally meant that securitization is only cost effective when there can be suitable economies of scale, which are traditionally regarded as being available only when the transaction size generally exceeds €500 million.⁶⁰In the US securitization market, where a legal framework has long been constructed, banks compete to create models and techniques to calculate assets cash flows, which is the basis for determining the price of asset-backed securities. Unfortunately, Chinese banks cannot promote asset securitization due to the limit of bond market volume and transaction rules. Nowadays, so-called securitization cases are still on the level of inter-banks or issued to foreign investors directly, which has hindered the utilization of securitization in China greatly.

3.2.3 Legal obstacles

One of the major obstacles to securitization in China has been the customary legal system, not in line with the laws prevailing in the Western world. For example, assignment of receivables requires not only the notification to the obligor, but also the obligor's approval. Equitable assignments are not recognized in law. Besides that, China's Company Law rules out the establishment of a SPV, or a pure holding company, that contracts out all of its asset-management functions to a service provider. Moreover, the issuance of a corporate bond is subject to strict requirements. The Company Law requires that net assets of the issuer must exceed 30 million Yuan (US\$3.63 million), while the total bond issuance must be limited to 40 per cent of the issuer's net asset.

4. MEASURES TO IMPROVE THE HOUSING MORTGAGE LOANS SECURITIZATION IN CHINA

4.1 Construction of a public rating system

Public rating helps to improve objectivity. Rating agency classifications play a key role in the structuring and pricing of asset-backed securities. A rating of the individual credit status in the housing mortgage loans market, however, is too costly. In this context, rating can only analyze and evaluate the process of originating loans, the credit risk management of existing loans. An essential element of bank rating is the evaluation of the credit portfolio in general.

The accumulation of statistical data is necessary for the rational pricing of ABS, and for policy making to vitalize the bond markets. Accordingly, financial institutions should utilize and consider overall data with regard to the income, employment and credit status of their borrowers. Also, they should generate basic statistical data such as the prepayment rate, default rate, recovery rate and credit loss rate, and must use this information to accurately measure and manage risks. Financial authorities should also conduct their supervisory policies in line with this direction.

4.2 Establishment of the secondary market of mortgage loans

In many countries, a form of secondary market institution exists that can help portfolio lenders manage these risks. They provide funds to primary market or retail lenders through collateralized loans or recourse purchases.

A secondary mortgage market is a market in which mortgages trade; i.e., one that involves the sale and purchase of the mortgage asset. Secondary markets can exist for both whole loans and mortgage-backed

securities. The key characteristic of second market is the standardization of mortgage loans. There can be many types of mortgages, but only those with sufficient volume are candidates for sale and securitization. In order to reduce the transaction costs of evaluating mortgage loans and the processing costs of issuing and administering ABS, the characteristics (e.g., rate adjustment features on variable-rate loans, amortization schedule, term) of the mortgages should be uniform.

4.3 Comprehensive utilization of current laws and gradual revision of legal system

A successful housing finance system is premised on a well-developed legal and regulatory structure. Although the development of the Chinese legal system is relatively backward, the comprehensive utilization of current laws and gradual revision of legal system can accelerate the introduction of securitization in China.

At first, the effectiveness of China's Trust Law in 2001 provided a line of hope for asset-management companies trying to initiate asset securitization onshore. The Trust Law could easily satisfy the risk-separation requirement for asset securitization. The securitization process requires both the originator and the SPV that it creates be unlikely to declare bankruptcy to protect investors. China's banking authorities will issue regulations on securitization, based on the Trust Law, and pilot projects are encouraged before a legal framework is finally established.

Besides, the ultimate enactment of a revamped bankruptcy law, which would strengthen creditor's rights under China's legal system, would be a major milestone on the road to reform. The increased activity by foreign investors in the NPL market bodes well as these investors contribute new skills and practices, such as credit underwriting, credit monitoring, work outs and bad loan resolution, and increased efficiency in the judiciary process.

5. CONCLUSIONS

In this study, three types of obstacles in the securitization of housing mortgage loans and the related mitigating measures are investigated. We realize that some obstacles are easier to be managed than others and therefore they may draw the more attention of financial authorities. This implies that we can conduct the utilization of securitization in lowering the credit risk of commercial banks until the influential environment of securitization improves.

Meanwhile, the market structure and institutional framework should be continuously improved to vitalize the bond market.

As for the secondary mortgage market, the legal and

regulatory framework should be reshaped. Above all, three core tasks must be targeted: Actualizing the mortgage portfolio business by SPV; improving restrictive securitization payment guarantee limits; and improving mortgage transfer procedures. In addition,

various policies should be prepared to streamline the securitization process, enhance public confidence for the low-cost funding of securitization and expand ABS investment demand, as well as work to facilitate the accumulation of statistical data.

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