

# **The Development and Future of Securitization in Asia**

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## **I. Introduction**

### **1. Background**

The global fallout from the subprime mortgage crisis in the US has fueled a debate about the advantages and disadvantages of securitization. Our view, however, is that it would be more constructive to identify and remedy any shortcomings in the securitization process in order to make the most of its inherent advantages than to question its very existence.

The debate about securitization in the US has raised a wide range of issues. In this paper, however, we focus on two such issues: (1) those concerning securitized products and (2) those concerning the business process (and those involved in it). At the heart of the problem with securitized products, in our view, is the difficulty investors face in understanding the contents of the packaging (i.e., the underlying assets). This is particularly the case with products such as residential mortgage-backed securities (RMBS), where the underlying assets are large in number and have no credit rating.

One problem as far as the business process is concerned is that posed by the "originate-to-distribute" model. Generally speaking, the people who originate loans in the US are not the same as those who distribute securitized products. That and the fact that such products usually also contain a high-risk tranche means that there is little incentive for either originators or distributors to manage the risks posed by the underlying assets. Other issues that have been raised include whether credit ratings are adequate (as rating agencies have not always been quick to spot risks) and whether it is proper that ratings, which were originally intended purely as a reference for investors, have ended up becoming a must.

This raises the question whether such problems are part and parcel of securitization or can be overcome just like many of the crises that financial and capital markets have faced over the years, if those involved can put their heads together, so that society can continue to benefit from the advantages that securitization offers. We hope that, by analyzing the development and future of securitization in Asia, where the market for securitized products is still in its infancy compared with the US, we can find some answers to these questions.

The concept of securitization is another item that Asia has imported from the US. Our main aim in this paper is therefore to answer the question whether Asian securitized products are likely to pose similar problems to those in the US in the future or whether such problems are likely to be avoided because the methods and styles adopted in Asia are different even if the basic concept is the same.

## 2. The significance of securitization in Asia

In our view, securitization has an even more important role to play in Asia than in Europe and the US. This is because (1) Asian bond markets are still underdeveloped and (2) Asian companies still depend heavily on banks for their funds. In the next section we consider these two factors and how they relate to securitization.

### (1) Development and future of Asian bond markets

In our view, Asian bond markets (and especially the corporate bond markets where companies raise funds) are underdeveloped. We can see from Figure 1 that, although Asian bond markets have grown in size, they are still small compared with those in the US and Japan as well as in terms of their own GDP.

**Figure 1: Size of Asian bond markets**

	1997		2004	
	Outstanding amount (\$bn)	% of GDP	Outstanding amount (\$bn)	% of GDP
China	116.4	12.9	483.3	24.9
Indonesia	4.5	1.9	57.7	22.7
Korea	130.3	25.1	568.3	83.2
Malaysia	57.0	57.0	106.6	90.0
Phillipines	18.5	22.3	25.0	28.8
Thailand	10.7	7.1	66.5	41.1
Hong Kong	45.8	25.9	76.8	46.3
Singapore	23.7	24.7	78.6	73.1
Japan	4,433.6	97.6	8,866.7	197.7
US (for comparison)	12,656.9	62.9	19,186.6	161.6

Source: Asian Development Bank's *Asian Bonds Online*, World Bank.

The need for bigger and more sophisticated bond markets in Asia became apparent following the Asian currency crisis of 1997. The problem that occurred was that of a "double mismatch" (i.e., of both currency and maturity) when the local savings that European and US banks had recycled in the region on a short-term basis were invested in long-term projects but then suddenly "repatriated" when the Thai baht collapsed. The response of the finance ministers of ASEAN, Japan, China and South Korea ("ASEAN + 3") was to propose an "Asian Bond Markets Initiative" (ABMI) as a means of recycling these savings within the region as local currency.

From the outset, securitization was considered an important part of the Initiative. In the chairman's press release that followed their meeting in Manila in August 2003 the ASEAN + 3 finance ministers announced, among other things, the creation of markets for asset-backed securities, including collateralized debt obligations (CDOs), and the setting up of a working group to create new securitized debt instruments. The aim of this working group was to consider measures to encourage the use of securitization in bond issues and the issue of multicurrency bonds denominated in a

number of local currencies in order to create a more diversified bond market in the region. Among the other working groups that were set up following this meeting was a working group on credit guarantee mechanisms and one on local and regional rating agencies.

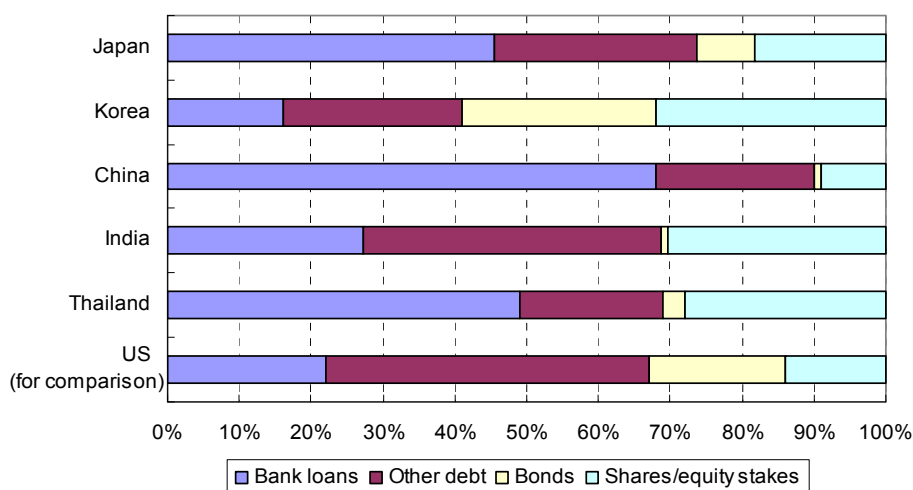
The working group set up to create new securitized debt instruments spent some time studying the possibility of issuing asset-backed securities denominated in an Asian currency basket as well as measures to encourage an Asian medium-term note program. One of the results of the Initiative was the issue of a ¥7.7 billion yen-denominated collateralized bond obligation (CBO) backed by yen-denominated bonds issued by a group of 46 Korean SMEs in 2004.<sup>1</sup>

The new ABMI Roadmap announced in May of this year focuses on four main areas: (1) promoting the issuance of local currency-denominated bonds, (2) encouraging the demand for local currency-denominated bonds; (3) improving the regulatory framework and (4) improving related infrastructure for the bond markets. We see this as indicating that the Initiative's priority has been to develop the basics of a bond market and that the development of securitization as part of what might be called an "applied market" has been considered to be of secondary importance and is therefore still at a primitive stage.

(2) Concentration of risk in the banking system

One of the distinctive features of Asian corporate finance is that companies still depend heavily on banks for their funds. As we can see from Figure 2, bank loans account for a relatively high proportion of the funds raised by Asian companies.

**Figure 2: Sources of funds for Asian companies**



Note: Data are for the five years through 2003 (FY2003, in the case of India).  
 Source: Nomura Institute of Capital Markets Research, from Japanese Ministry of Finance and Reserve Bank of India.

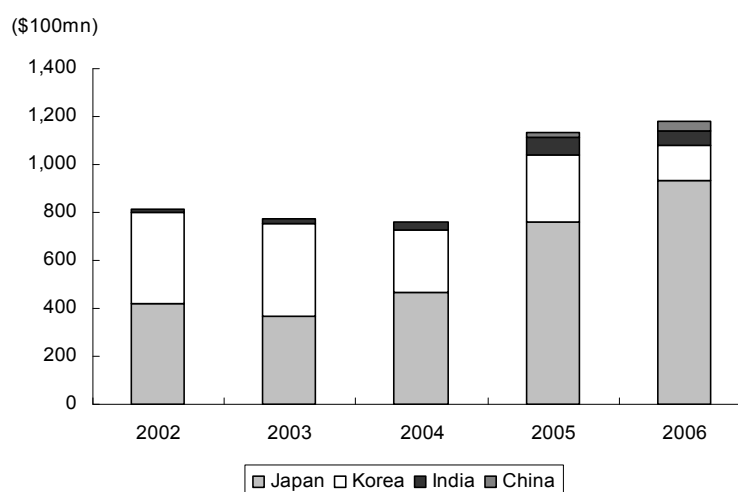
SMEs play a more important role in emerging market economies such as China and India than in Western economies. SMEs have few alternative sources of funds to bank loans and are vulnerable to loan restrictions and recalls during credit crunches. A smoothly functioning corporate bond market would therefore be an attractive option for Asian companies (and especially SMEs) looking to raise funds. However, as most SMEs have a low credit rating, only a small proportion of any bonds they issued would qualify as investment grade. Also, possible shortcomings in their disclosure and accounting standards would probably make it difficult for individual SMEs to issue bonds.<sup>2</sup> In addition, there is the problem, as we have seen, that Asian bond (and especially corporate bond) markets are underdeveloped.

The response of the Asian Development Bank and individual governments has therefore been to consider ways of originating bonds that would relieve the cash flow difficulties of Asian SMEs, on the one hand, and meet investor needs, on the other, by bundling (i.e., securitizing) small amounts of low-grade corporate debt. The aforementioned moves under the Asian Bond Markets Initiative, including the moves to establish asset-backed securities markets, are part of this response.

### 3. Current state of Asian securitization markets

Securitization in Asia has been led by Japan and Korea followed by countries such as India, China and Malaysia. The amount of securitized products issued by the main Asian countries involved in securitization (Japan, Korea, India and China) has been increasing and had reached nearly \$120 billion by the end of 2006 (Figure 3). Nevertheless, according to figures from the Bank for International Settlements, Asian markets for securitized products in 2005 were worth only as much as the US market for such products in 1995, while the US issued some \$800 billion of such products in 2005.<sup>3</sup> However, Asian securitization markets are not only relatively small in scale, they are also underdeveloped (see below).

**Figure 3: Size of main Asian securitization markets**



Source: Nomura Institute of Capital Markets Research, from Nomura Securities, Rating and Investment Information, ChinaBond, and Vinod Kothari "Indian Securitisation Market."

While it is convenient to talk about Asian securitization markets, the state of these markets varies from country to country. One example of this is the underlying assets used in these products. Whereas the main assets used in Japan and Malaysia are mortgages, the main assets used in India are auto loans, while in Korea nonperforming loans, project finance loans, mortgages and auto loans compete for first place. And even in Japan and Malaysia, where mortgages are the main underlying asset, the history that led to the current situation is completely different.

What is common to all the Asian securitization markets is that the products they offer are underdeveloped. While the issue of single-loan collateralized loan obligations (CLOs) in India (see below) is perhaps an extreme example of the use of securitization for what, to all intents and purposes, is a loan sale, it is not uncommon in South and Southeast Asia for senior and subordinated tranches not to be issued. And even if such tranches are issued, the originator usually keeps the subordinated tranche, selling only the senior tranche to investors. One example of this is Korea Asset Management Corp. (KAMCO)'s repackaging of nonperforming loans. Re-securitized products, such as are issued in the US, are also rarely seen in Asia. While these factors make it less likely that Asian countries will experience a subprime mortgage crisis, they restrict the freedom of Asian investors to choose financial products that match their own risk profile.

Another distinctive feature of Asian securitization markets is the lack of investor sophistication and a shortage of originators. Asian investors are generally considered to have a short horizon, and securitized products are no exception. One of the reasons cited for the failure of India's mortgage-backed securities (MBS) market to take off is lack of investor interest in such long-term products. Another example of this short investment horizon is Korea, where 73% of the asset-backed securities issued in 2004 had a maturity of less than two years. As for the lack of originators, Japan's MBS market has, to all intents and purposes, fewer than five originators, while in India 80% or more of securitized products are issued by top banks such as ICICI Bank, Sundaram Finance and Standard Chartered. Increasing the number and improving the quality of investors and originators is therefore one of the challenges facing the development of securitization markets in Asia.

Similarly, emerging Asian economies in particular face a number of infrastructure problems, including a shortage of credit enhancement tools (e.g., monoline insurers), underdeveloped credit rating agencies (with either none or only one in some countries), and an inadequate legal infrastructure (see below).

#### **4. Development of Asian securitization markets**

Asia's securitization markets were established to deal with the nonperforming loans left by the Asian currency crisis. In 1998, asset-backed securities were issued in those countries that had triggered the crisis (such as Korea, Malaysia, Thailand and the Philippines) in an attempt to unbundle the excessive concentration of credit risk in the banks, which found themselves saddled with a mountain of nonperforming loans. Although the asset-backed securities issued in the late 1990s were initially targeted at

foreign investors and denominated in foreign currencies, since the turn of the century most (currently about 80% of) securitized products have been denominated in their local currency. In the meantime, countries that were affected by the crisis have also established securitization markets according to their own particular needs. Now that the crisis has passed, we can see that both groups of countries have gone their separate ways.

## (1) Countries that triggered the Asian currency crisis

### 1) Korea

In Korea, the Asian country that has made the greatest use of securitization (apart from Japan), an *Asset-Backed Securities (ABS) Law* was passed in 1998 to encourage the banks to dispose of their nonperforming loans. The following year (1999), 42% of the securitizations in Korea involved such loans, but the figure declined to 5% by 2002 as the impact of the crisis faded. This was also the period when issuance of securitized products in Korea peaked, falling from KRW509 trillion in 2001 to KRW16.8 trillion in 2005.

Consumer loans and credit card receivables replaced nonperforming loans as the main underlying asset in Korean securitizations. In 2003 and the following years, however, the collapse of a number of credit card and consumer loan companies led to a decline in the issuance of such securities, while the number of CDOs issued to refinance corporate bonds and the number of securities backed by auto loans increased.

More recently, efforts have been made to create an even more diversified securitization market in Korea. In 2003, the country's first security backed by student loans was issued, while, in 2004, the country's first residential mortgage-backed security was issued by the Korean Housing Finance Corporation, which had been established the same year. This was followed, in 2005, by the issue of a synthetic CDO by Korea Development Bank (KDB) and the issue overseas of a US dollar-denominated security backed by Korean credit card receivables.

### 2) Malaysia

The largest securitization market among the ASEAN countries is Malaysia's. Malaysia also created the regulatory framework for a securitization market following the Asian currency crisis in order to encourage the use of securitization. In 2001, Securities Commission of Malaysia published guidelines for the issue of asset-backed securities, and these were subsequently amended in 2003 and 2005. These amendments were designed to make the securitization process smoother and more flexible by abolishing the requirement for the issue and sale of asset-backed securities to be approved by the central bank and by allowing the use of a wider range of underlying assets.

In 2001, following the enactment of the guidelines, Malaysia's national asset management company Danaharta issued MYR310 million of securitized products backed by nonperforming loans. The range of underlying assets subsequently increased, and, in 2004, Cagamas MBS issued MYR1.56 billion of the country's first residential mortgage-backed securities.<sup>4</sup> As of 2005, commercial and residential mortgage-backed securities accounted for the largest proportion (45%) of securitized products issued in Malaysia.

Another distinctive feature of the securitized products issued in Malaysia is the development of Shariah-compliant products. In 2005, Cagamas issued the world's first Islamic residential mortgage-backed securities. As of 2007, 30% of the outstanding securitized products issued in Malaysia were Shariah-compliant (although this includes so-called sukuks (Islamic bonds) and therefore share of Shariah-compliant securitized products are well below 30%).

### 3) Other countries

Although Thailand, Indonesia and the Philippines all enacted laws and guidelines to encourage the use of securitization following the Asian currency crisis,<sup>5</sup> their securitization markets are still small. The largest issue of securitized products in these countries has been a THB24 billion deal by Thailand's Dhanarak Asset Development Co. to finance the construction of a government complex and backed by the lease payments.

## (2) Countries affected by the Asian currency crisis

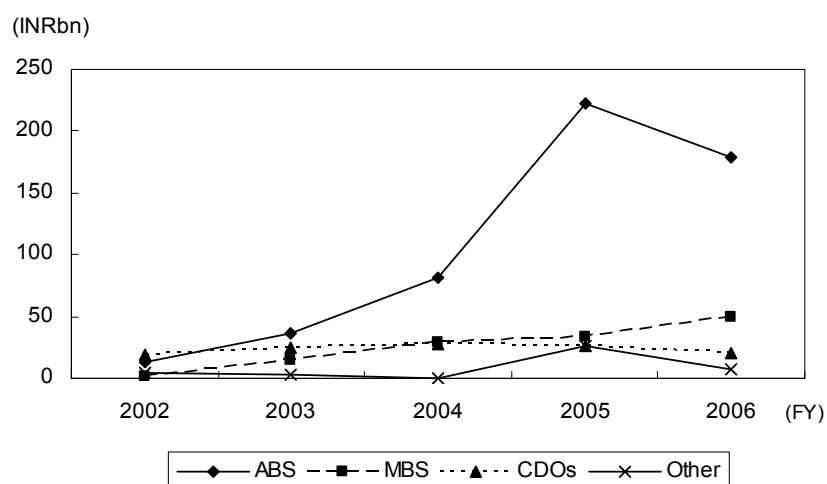
### 1) Japan, China

In Japan, securitization came into its own in 1996 following the enactment of the *Specified Credits Act* in 1993. When the asset boom of the 1980s turned to bust in the early 1990s, nonbanks found it increasingly difficult to obtain bank loans as the banks became increasingly reluctant to lend. The aim was therefore to use securitization to make it easier for the nonbanks to raise funds. Japan's securitization market expanded rapidly in 2004–2005 following the enactment of the *SPC Act* in 1998. The reason for the increase in securitization was the expansion of the Government Housing Loan Corporation's role to include assistance with the securitization of residential mortgages. In 2006, issuance of securitized products in Japan topped ¥10 trillion for the first time. Roughly half of these securities were backed by residential mortgages.

China has only very recently begun to issue securitized products. A pilot was conducted in 2005–2006 in which bank loan assets and nonperforming loan assets held by asset management companies were securitized and traded on China's interbank bond market, while specific cash flows of nonfinancial companies were securitized by securities companies and traded on the country's stock exchanges. (For further details of the securitization markets of Japan and China, see below.)



**Figure 4: Issuance of securitized products in India**



Source: Nomura Institute of Capital Markets Research, from Vinod Kothari "Indian Securitisation Market."

## 2) India

In India, securitization only came into its own earlier this decade. India's asset-backed securities market has expanded as a result of the strong domestic demand for automobiles and auto loans, and most securitized products are still backed by such loans (Figure 4). Since 2006, however, issuance of collateralized loan obligations (CLOs, not shown in Figure 4) has increased to the point where it is now neck and neck with that of asset-backed securities. However, 45% of the CLOs issued in 2007 were single-loan CLOs (simple deals involving assignment of a single corporate loan by a bank or a finance company to a special-purpose vehicle, which issues pass-through certificates against receivables). This is not exactly what securitization was developed to do.<sup>6</sup> Issuance of residential mortgage-backed securities has also increased. However, unlike the situation in Korea, the range of underlying assets (e.g., credit card receivables) remains quite limited.

## 5. Rules governing securitization

The rules governing securitization in Asian countries vary according to each country's legal system and the reasons each national market has been obliged to expand. International comparisons of legal systems often distinguish between civil law jurisdictions and common law jurisdictions. When it comes to specifics (e.g., securitization), however, we do not find this distinction very appropriate. In fact, as we can see in Figure 5, the differences between civil law jurisdictions and common law jurisdictions do not necessarily correspond to the development of rules governing securitization. Furthermore, some Asian countries that have traditionally adopted civil law systems base their financial regulations on US practice (e.g., Japan and Korea).

**Figure 5: Provisions for securitization in East Asia**

	Source of law	Sale, assignment or other conveyance of assets by originators to securitization vehicles				Creation, maintenance and operation of SPVs		Restrictions on securitization vehicles to issue multiple tranches with varying characteristics
		Legal framework for creating, transferring and perfecting ownership interests	Restrictions on types or terms of financial assets that can be transferred	Taxation and gain recognition issues	Default and foreclosure and/or repossession at level of individual assets	Legal and regulatory impediments (e.g., bankruptcy remoteness)	Taxation or licensing requirements	
China	(Civil law)	1/2	1	1	1	1	1	1
Indonesia	Civil law	2/3	2	2	2	2	2	2
Korea	Civil law	5	4	3/4	4	5	5	5
Malaysia	Common law	5	4	4	3/4	4	4	5
Philippines	Common law	2/3	2/3	1/2	2/3	2/3	2/3	2/3
Thailand	Common law	3/4	3	3/4	3/4	2/3	4/5	2/3
Hong Kong	Common law	5	5	4	5	5	5	5
Singapore	Common law	5	5	5	4	5	5	5

Note: 5 indicates the maximum degree of provision, 1 the minimum.

Source: Douglas W. Arner, Charles D. Booth, Berry F.C. Hsu, Paul Lejot, Qiao Liu & Frederick Pretorius "Property Rights, Collateral and Creditor Rights in East Asia," Asian Institute of International Financial Law, University of Hong Kong (May 15, 2006) with additions by Nomura Institute of Capital Markets Research.

Nevertheless, the distinction between civil law jurisdictions and common law jurisdictions does give a general idea of the way in which legal systems as a whole are organized, with civil law jurisdictions regulated by statutes and common law jurisdictions regulated by rules and guidelines. We now look at the rules and regulations governing securitization in Korea as an example of the former and those in India as an example of the latter, while we look at those in Japan and China below.

As we saw above, the basic rules governing securitization in Korea are contained in the *Asset-Backed Securities (ABS) Law* of 1998. This law lays down who can be involved in a securitization: namely, securitization vehicles (asset-backed security special-purpose vehicles, offshore special-purpose vehicles, and trusts) and originators (government agencies and financial institutions, and internationally known nonfinancial companies approved by Korea's Financial Supervisory Commission (FSC)). In addition, it contains rules for mitigating risks such as transfer denial risk, commingling risk and offset risk.

Also, originators have to register "securitization plan" with the FSC when securitizing. The registration involves providing details of (1) any issues of asset-backed securities, (2) the underlying assets, (3) the originator, and (4) the management and operational procedures for the securities or assets. Under the *ABS Law*, in order to possess perfection requirement, all an assignor needs to do is (1) register the transfer with the FSC and (2) inform the originator. If a transfer is conducted according to the *Civil Code*, they are required to inform each debtor in writing or to obtain its agreement, hence there is an incentive to comply with the *ABS Law*. Korea can therefore be said to have all its rules governing securitization systematically organized under one statute law. Hence, its high score in the table in Figure 5.

In contrast, India does not have any systematic rules and regulations governing securitization. Instead, it has a collection of rules in the form of guidelines and

partially amended laws going back to the early years of this decade. The *Securitisaton and Reconstruction of Financial Assets and Enforcement of Security Interests Act of 2002* sets out the rules and regulations governing the purchase of nonperforming assets by asset reconstruction companies (i.e., asset management companies) from bank balance sheets.<sup>7</sup> A document "Guidelines on Securitisation of Standard Assets" issued by the Reserve Bank of India in 2006 sets out the central bank's policies on what constitutes a true sale, a bankruptcy-remote special-purpose vehicle, credit enhancement and disclosure. Similarly, the *Securities Contracts (Regulation) Amendment Act of 2007* sets out the rules governing the listing on a stock exchange of asset-backed financial products issued by special-purpose vehicles as well as including such products in its definition of "securities." This has paved the way for the creation of a secondary market for securitized products.

The biggest challenge facing the Indian authorities in their attempts to set out rules and regulations governing securitization has been taxation (and especially stamp duty). Any transfers of assets to special-purpose vehicles have to be recorded in a document on which stamp duty is payable at different rates (ranging from 3% to 16%) in different states. While some states charged a preferential rate of tax of only 0.1% on the transfer of assets involved in a securitization, eligibility for this rate is restricted as the rate depends on where the underlying assets (and not the special-purpose vehicle) are located. This has proved an obstacle to securitizing assets (and especially credit card receivables). Enlarging India's securitization market is one of the items on the agenda of a Ministry of Finance project to develop the country's domestic bond market, and this is one of the reasons why there have been calls for the same rate of tax to be applied throughout the country.

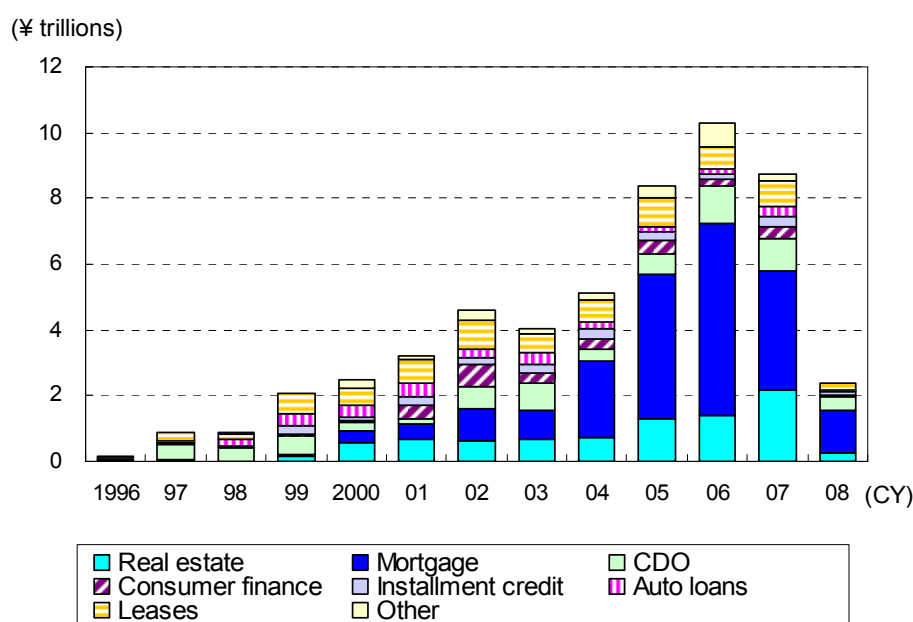
Following this overview of Asian securitization markets in terms of their size, distinctive features, and rules and regulations, we now take a more detailed look at these markets in Japan and China. After that, we compare the challenges recently faced by the US securitization market and the current state of these markets in Asia, and conclude with our personal views on what the US can learn from this experience and the prospects for Asian securitization markets.

## II. Japan's Securitization Market

### 1. Overview of Japan's Securitization Market

Japan's securitization market really took off around 1996, and in the decade until 2006 annual securitization issuance had grown to over ¥10 trillion (Figure 6). In the US, development of the securitization market was driven by the issuance of RMBS in the 1970s, but in Japan it was the issuance of ABS backed by leases and credit receivables that really started the structured finance ball rolling. Subsequently, CDOs backed by corporate loans and bonds were structured, and then even Japan got into the act of issuing RMBS as well as commercial mortgage backed securities (CMBS), which are backed by either commercial real estate or loans with commercial real estate as collateral. In 2002, RMBS overtook other structured products in total issuance. Over the past few years, RMBS have been the core product in Japan's securitization market, accounting for between 40% and 60% of issuance.

**Figure 6: Annual securitization issuance in Japan**



Note: 1. 2008 figures are total from January to June.  
 2. Does not include ABCP or ABL. CDO numbers show only funded portion.  
 3. Includes Euro bonds and foreign currency-denominated bonds. Total of rated issues, both publically and privately placed. Information on undisclosed issues only included to the extent known.

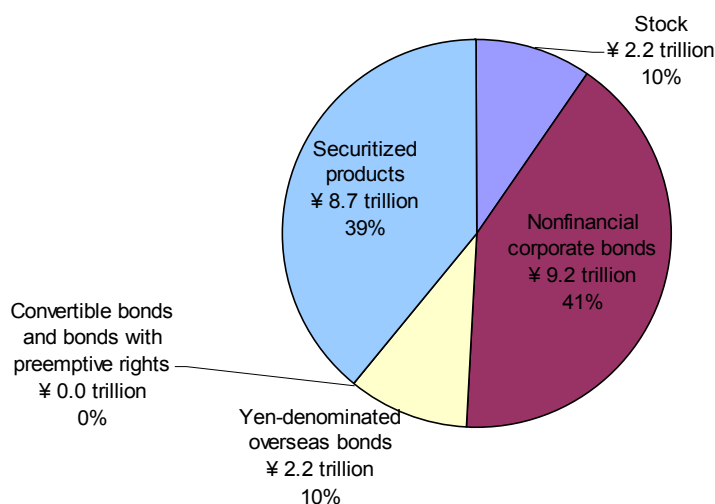
Source: Nomura Securities

Although Japan's securitization market had consistently generated solid growth, issuance has stagnated since the subprime loan mess that surfaced in the summer of 2007. The over ¥10 trillion of securitized product issuance in 2006 included a whole business securitization (WBS) backed by the future cash flow of a mobile phone business, which in part explains the 15% YoY decline to ¥8.7 trillion of securitization

issuance in 2007, only slightly higher than total issuance in 2005. Issuance has remained weak, and was down approximately 30% YoY in January-June 2008. This suggests that securitization market conditions in Japan are as weak as those in Europe and the US.

On the other hand, although the issuance of securitized products has declined, it is still fairly strong when compared with financing based on the issuance of other types of securities. Domestic issuance in 2007 only totaled ¥2.2 trillion for stocks, ¥9.1 trillion for nonfinancial corporate bonds, and ¥2.2 trillion for yen-denominated overseas bonds, and the ¥8.7 trillion of securitization issuance compares very favorably with the level of corporate bond issuance (Figure 7). Although securitization issuance has been weak recently, securitized products already play an important role in funding, and appear to have established solid footing in the Japanese market.

**Figure 7: Private sector securities issuance by type (2007)**



Source: Nomura Institute of Capital Markets Research, based on data from Tokyo Stock Exchange, Japan Securities Dealers Association, and Nomura Securities.

## 2. The history of the securitization market's development

### (1) The birth of securitization and establishment of securitization laws

The liberalization of interest rates in Japan increased the risk that financial institutions would develop mismatches between liabilities and investments, and the increased use of securities for both investing and procuring funds, as well as the sale of loan assets, led to a gradual awareness of the need for securitization. Full-scale development of securitization did not occur until the issuance of ABS backed by lease and credit receivables, which was sparked by establishment of the *Act on Regulation of Businesses Concerning Specified Credits, etc. (Specified Credits Act)*.

The *Specified Credits Act* was passed as a result of the deterioration, coincident with the collapse of Japan's economic bubble, in the funding environment for nonbanks, which had greatly expanded their businesses during the bubble of the late

1980s. At the time, nonbanks depended primarily on bank loans to obtain funding, and thus the bubble's collapse distinctly worsened their funding environment. METI (called MITI at the time), with the objective of making that funding easier, implemented the *Specified Credits Act* in 1993 in order to open another door to funding through the securitization of lease and credit receivables. [8]

The *Specified Credits Act's* introduction of simplified procedures for third parties to object to the transfer of lease and credit receivables was a pivotal moment in the development of Japan's securitization market. This is because Article 467 of the Civil Code, which governs the transfer of receivables, included as a requirement for third-party objections the administratively onerous and costly requirement to notify debtors with a fixed dated certificate, but the *Specified Credits Act* simplified the procedure and required only public notice in a daily newspaper to meet the requirement for third party objections. Because the *Specified Credits Act* was aimed at helping nonbanks obtain funding, it only covered lease and credit receivables, but by establishing exceptions to the rules in the *Civil Code* concerning the transfer of receivables, it turned out to be revolutionary legislation that established a precedent for securitization laws (Figure 8).

**Figure 8: Laws and regulations on securitization**

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1993	<i>Act on Regulation of Businesses Concerning Specified Credits, etc. (Specified Credits Act)</i> is implemented
1998	<i>Act on Liquidation of Specified Assets by Special Purpose Companies (SPC Act)</i> is implemented  <i>Act on Special Exceptions to the Civil Code Related to Objections to the Transfer of Receivables (Receivables Transfer Exceptions Act)</i> is implemented
1999	<i>Act on Special Measures Related to Debt Collection Businesses (Servicer Act)</i> is implemented
2000	<i>SPC Act</i> is revised (and its name changed to the <i>Securitization Act</i> ) <i>Securities Investment Trust Act</i> is revised (and its name changed to <i>Act on Investment Trust and Investment Corporations</i> )

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Source: Nomura Institute of Capital Markets Research

It was later realized that having a legal framework in which the rules are different depending on the business, as in the case of the *Specified Credits Act* for nonbanks, would hold up progress in the securitization market, and this led to the realization of the need for a general law on securitization without any constraints based on the type of business. In 1998, the *Act on Liquidation of Specified Assets by Special Purpose Companies (SPC Act)* was passed, which introduced the *tokutei mokuteki kaisha* (TMK) framework as a special purpose vehicle (SPV) for securitization. The new law recognized securities issued by a TMK as exchange-tradable securities and legally protected the right of investors to acquire them. To improve its usefulness to TMKs and ensure greater bankruptcy remoteness, the *SPC Act* was amended in 2000 and renamed the *Act on Securitization of Assets*. This made it possible to use a TMK scheme for securitization. The *Act on Special Exceptions to the Civil Code Related to Objections to the Transfer of Receivables*, implemented in 1998, introduced, as an

exception to the *Civil Code*, more simplified procedures for third party objections to receivables transfers.

Japan's securitization market began to grow once these securitization laws were implemented. Starting in 1997, a series of major financial institutions declaring bankruptcy amid instability in the financial system led to tighter bank lending and an overall credit crunch. This motivated nonbanks and nonfinancial corporations to concentrate on securitized products as a new way to procure funds without bank loans, and led to their participation in the securitization market as originators. The financial sector also saw securitization as a new business opportunity, and the banks and securities firms, both domestic and foreign, began participating in the market as originators and arrangers. It was at this point that Japan's securitization market really took off.

The government implemented securitization laws and other policy measures in response to the need for more diverse ways to obtain funding brought by the bursting of Japan's bubble and accompanying macroeconomic deterioration, as well as by the destabilization of Japan's financial system caused by the large level of nonperforming loans at financial institutions. This regulatory framework can probably be seen as the catalyst for full-scale development of Japan's securitization market.

## (2) Development of the securitization market and involvement of the public sector

Although securitization in Japan was initially built around ABS backed by leases and credit receivables, RMBS have been the driving force behind Japan's securitization market since 2002. In the beginning, most RMBS were originated and issued by the banks, but RMBS issued by public institutions have been playing an increasingly important role in the securitization market.

The Government Housing Loan Corporation of Japan (GHLC), a government-sponsored agency established in 1950 to assist with home loans, provided consumers with low-interest-rate home loans with a long-term, fixed rate, the type of loan that was difficult to get in the private sector. Home loans from the GHLC were seen as a key component of the government's housing policy. Because of the robust demand for funds from the corporate sector during the postwar recovery and period of high economic growth, there was no lender with enough resources to devote to home loans, and thus a public-sector provider of low-rate home loans was needed. The GHLC became the largest originator of home loans, far larger than any private-sector financial institution, and held assets of more than ¥70 trillion.

When the Koizumi administration took office in April 2001, administrative and fiscal reform became the hot topic, and as part of reforms of the Fiscal Investment and Loan Program (FILP), the rationale for the continued existence of government affiliated financial institutions (the FILP agencies) came into question. As a result of revisions to the GHLC's home loan policies, and based on Japan's policy decision that the need for home loans remains high, [9] the GHLC turned to a complementary role in housing finance and began specializing in providing assistance with the securitization of home loans written by private-sector financial institutions. As a part

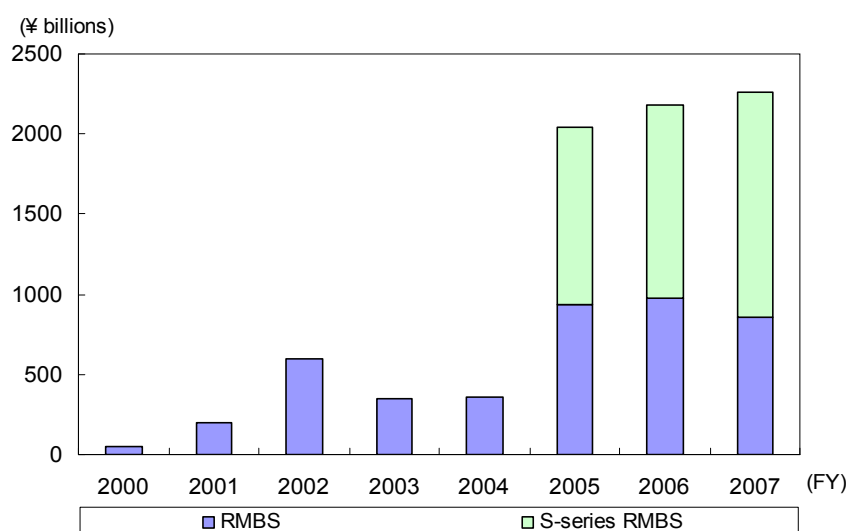
of this change, the GHLC stopped directly writing home loans. The way that the US housing GSEs operate was used as a guide when implementing these GHLC reforms.

The GHLC was dismantled in April 2007 and replaced by the Japan Housing Finance Agency (JHF), an independent administrative agency, which is expected to operate more independently. JHF's purpose is to assist with the securitization of home loans written by private-sector financial institutions. It provides this securitization assistance in two primary ways: by purchasing home loans written by private-sector financial institutions and then repackaging those loans for issuance as RMBS (the purchase program); and by providing guarantees on the principle and interest payments for RMBS issued by private-sector financial institutions (the guarantee program).

The GHLC began issuing RMBS in a pilot program in March 2001, and was fully into the securitization assistance business by October 2003, well before it was reorganized as the JHF. JHF took that business over once it was in operation and continues to issue RMBS. In addition, in order to reduce the home loan assets held by the agency, the GHLC (and then JHF) has since FY2005 been issuing S-series RMBS, which are backed by home loans issued previously by the GHLC.

Cumulative outstanding RMBS issuance from the GHLC and JHF combined was about ¥8 trillion as of end-March 2008. Including the S-series bonds that the GHLC began issuing in FY2005, annual RMBS issuance has been ¥2 trillion yen (Figure 9). Based on its FY2008 budget, JHF's funding plan included ¥900 billion in funding by issuing FILP agency bonds and by borrowing from private-sector financial institutions, and ¥2.9 trillion in financing by issuing RMBS. JHF has thus made the securitization market its base, and it is now making active use of that market.

**Figure 9: JHF's RMBS issuance**



Note: S-series bonds are securitizations of existing loans.

Source: Nomura Institute of Capital Markets Research, based on JHF materials



In addition, as a measure to stimulate public sector use of the securitization market, the Japan Finance Corporation for Small and Medium Enterprise (JASME; which is rolled into the new Japan Policy Finance Corporation [10]) began offering securitization support services. The primary business of JASME, a government-affiliated financial institution established to help SMEs obtain financing, used to be providing loans to those SMEs. Because of rising financial system instability caused by the epidemic of nonperforming loans in the banking system in the late 1990s, SMEs dependent on bank loans started having trouble getting financing. To deal with this credit crunch, the government offered a ¥20 trillion guaranteed lending facility through the credit guaranty corporations, and also provided enhancement to the lending mechanisms of JASME and other government-affiliated lenders. Based on this experience, JASME started concentrating on securitization in order to provide SMEs with a way to obtain funding other than bank loans, and in 2004 began offering securitization support for small business loans written by regional banks, the shinkin banks, and other regional financial institutions. As of March 2008, JASME had cumulative securitization issuance of approximately ¥300 billion.

In addition to government-affiliated financial institutions, the government itself is also trying to make active use of the securitization market. In order to shrink its balance sheet, which is considerably larger than that of other countries, the Japanese government, pursuant to the *Regulatory Reform Law* implemented in June 2006, announced a July 2006 cabinet decision, Basic Policies for Economic and Fiscal Management and Structural Reform 2006 (Basic Policies 2006). This included a plan for reforming the nation's balance sheet, including reducing assets by about ¥140 trillion by end-March 2015 and reducing FILP loans to government-affiliated financial institutions by over ¥130 trillion. One of the ways proposed to achieve this was through the use of securitization.

To accommodate this policy of reducing FILP loan assets, in February 2008 the Ministry of Finance began issuing securitized products in a master trust format, with FILP loans serving as the underlying. Known as fiscal loan fund ABS, two deals totaling ¥200 billion had been issued as of August 2008, and further issuance is planned.

In addition to these efforts at the central government level, local governments are also becoming quite active in the securitization market. Metro Tokyo, which has experienced periods during which banks were reluctant to lend to SMEs in the past, came up with its Tokyo financial market initiative in 1999. Aimed at helping smaller companies obtain unsecured, nonguaranteed funding, this initiative introduced a scheme for issuing CLOs and collateralized bond obligations (CBOs) backed by loans to, and privately placed corporate bonds issued by, SMEs, with Metro Tokyo as the sponsor. Then in 2005, Metro Tokyo and a number of other local governments formed an alliance to introduce a program for the issuance of CBOs backed by privately placed bonds issued by SMEs from various regions of Japan [11]. Approximately 16,000 smaller firms have obtained funding totaling over ¥700 billion under this program thus far.

The public sector has thus been trying to make active use of Japan's securitization market. The idea behind this shift in the nature of public finance is for the public sector to move away from directly providing credit to the final borrower and instead start supplementing the provision of credit by private-sector financial institutions. Another unique aspect of Japan's securitization market is that it is being used as a way to streamline the national balance sheet and reduce the amount of assets and liabilities held by the government.

### 3. Characteristics of Japan's Securitization Market

#### (1) The subprime loan problem and Japan's securitization market

Although Japan's securitization issuance has declined as a result of the subprime loan problem, this decline is not because of any direct impact on securitized products in Japan from exposure to subprime loans in the US. The amount of securitized products issued in Japan that include subprime RMBS in their loan pool is negligible.

Furthermore, the performance of Japan's securitized products has been stable. Of the ratings actions on Japan's securitization announced by Moody's in 2007, 104 were upgrades versus only nine downgrades (Figure 10). Compared with the structured products rated by Moody's worldwide, those issued in Japan's have on average a lower rate of downgrades and a higher rate of upgrades. Japan's securitized products have also outperformed products in the global securitization market. Securitization in Japan has been stable over a sustained period, and has not experienced a single case of default since the several defaults that occurred in 2001.

**Figure 10 Credit downgrade and upgrade rates for Japan's securitized products**

	12-month downgrade rate			12-month upgrade rate		
	2007	2006	2000-2007	2007	2006	2000-2007
Securitized products in Japan	0.4%	0.1%	0.3%	6.0%	5.7%	4.9%
ABS	0.7%	0.0%	0.1%	2.8%	2.3%	2.7%
CDOs	1.6%	0.8%	0.4%	19.0%	19.3%	14.8%
CMBS	0.0%	0.0%	0.8%	7.6%	8.4%	7.1%
RMBS	0.0%	0.0%	0.2%	5.6%	5.4%	7.6%
Securitized products worldwide	7.4%	1.2%	2.7%	2.2%	3.6%	2.6%

Source: Moody's

The recent decline in securitization issuance, despite the fact that Japan's securitization has virtually no exposure to subprime-related products and has generated a stable performance over an extended period of time, can be attributed in part to the deterioration in investment sentiment caused by the subprime crisis. Participants in Japan's securitization market include domestic insurance companies, trust banks, regional banks, shinkin banks, and megabanks, as well as the Japan operations of overseas financial institutions. Participation is thus dominated by domestic financial institutions, with little participation by nonresident investors. This

lack of a diverse investor base with a diverse risk profile may be one explanation for the recent sluggishness of Japan's securitization market.

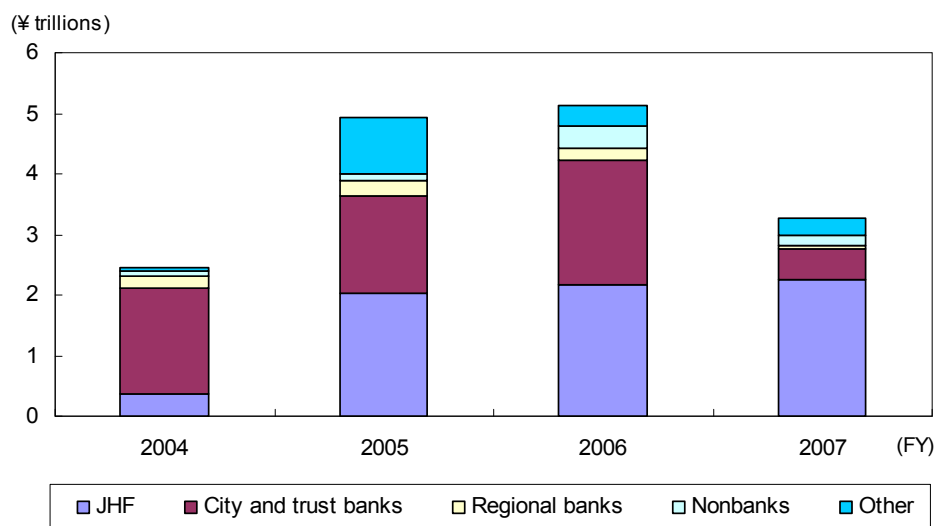
## (2) Securitized product characteristics and recent trends

Next, we summarize the characteristics and recent trends of securitized products structured and issued in Japan. There has been a substantial reduction in the size of Japan's market for certain classes of securitized products. We attribute this to worsened investment sentiment caused by the subprime crisis combined with factors specific to Japan.

### (i) RMBS

RMBS are the biggest single category within Japan's securitization market, accounting for between 40% and 60% of total issuance. JHF is the largest originator of RMBS, after which come the major banks (Figure 11). In FY2007, JHF issued over ¥2.3 trillion of RMBS, versus issuance from the major banks of only ¥0.5 trillion (down dramatically from ¥2.1 trillion in FY2006). JHF therefore accounted for roughly 70% of the total RMBS market. In the US, mortgage bankers and mortgage brokers played a major role in the origination of subprime loans, but the share of RMBS issued by mortgage companies and other nonbanks is not very large in Japan.

**Figure 11: RMBS originators**



Source: JSDA

The lending criteria used for home loans backing RMBS are generally the loan to value (LTV), the debt to income (DTI), the maximum loan amount, and the loan applicant's age, years of employment, and minimum annual income. The home loans purchased from private-sector financial institutions by JHF as part of its securitization support business are long-term, fixed-rate loans known as Flat 35 loans. The lending standards for Flat 35 loans are predefined, and if the private sector financial institution

writing the loan does not meet those standards, JHF will not purchase the loan (Exhibit 12). Meanwhile, there is no notable difference in lending standards between the home loans written by banks and other private sector financial institutions and JHF's Flat 35 loans. There is also little variation among financial institutions in the mortgage rates offered for their mortgages, nearly all of which are fully amortized with either equal principal and interest payments, or just equal principal payments. [12] There is virtually no origination in Japan of nonconforming mortgages, i.e., mortgages that do not meet the normal JHF and bank standards.

**Figure 12: Overview of Flat-35 loans**

Target borrowers	In principle, below age 70, with a stable income When annual income is less than ¥4 million, the maximum DTI is 30%, when annual income is ¥4 million and above, the maximum DTI is 35%
Use of funds	To fund the construction or purchase of a newly constructed home, to fund the purchase of an existing home
Loan amount	Up to 90% of the construction cost or purchase price, between ¥1 million and ¥80 million
Loan term	Between 15 and 35 years
Loan interest rate	Fully fixed rate (the loan interest rate varies depending on the financial institution)
Repayment method	Equal principal and interest payments or equal principal payments
Collateral	JHF is the first lien holder on the mortgaged home or land

Source: Nomura Institute of Capital Markets Research, based on JHF materials

Furthermore, the traditional lending practice in Japan is to provide credit through recourse loans. As the securitization market has developed, non-recourse loans have come to be used for loans backed by commercial real estate, but residential mortgages are still based on recourse loans. In a recourse loan, if the proceeds from the sale of the collateral property are insufficient to pay back the debt, the borrower is obligated to make repayment based on means other than the collateral property, an arrangement that probably helps to prevent moral hazard on the borrower's side. Consequently, the borrower's income is an important component of the credit approval process for a home loan, and the borrower is expected to have a stable source of income. A borrower with a past history of delinquent payments normally has a hard time getting approved for a mortgage. Japan's home loans are limited to the prime market, and thus treated as quality assets. Looked at from a different perspective, the demand for home loans from subprime borrowers is not sufficiently being met.

Recently, however, some financial institutions have been using a scoring model that takes account of the borrower's needs and risk/return in the mortgage approval process, and so far, individuals who did not meet the credit standards have also been able to take out a mortgage, and securitization of those mortgages is also being tried.

Currently, however, such nonconforming mortgages only account for a very small share of RMBS.

(ii) CDOs

CDO issuance began relatively early in Japan, around 1997, and CDOs still account for a reasonable share of the market even now. As noted earlier, CDOs structured in Japan are almost entirely primary securitized products (securitized products not re-securitized) backed by corporate credit, and there is little issuance of re-securitized products, which have securitized products as underlying. Moody's says that it only has a rating on five CDO deals backed by Japanese securitized products (ABS-CDO). [13]

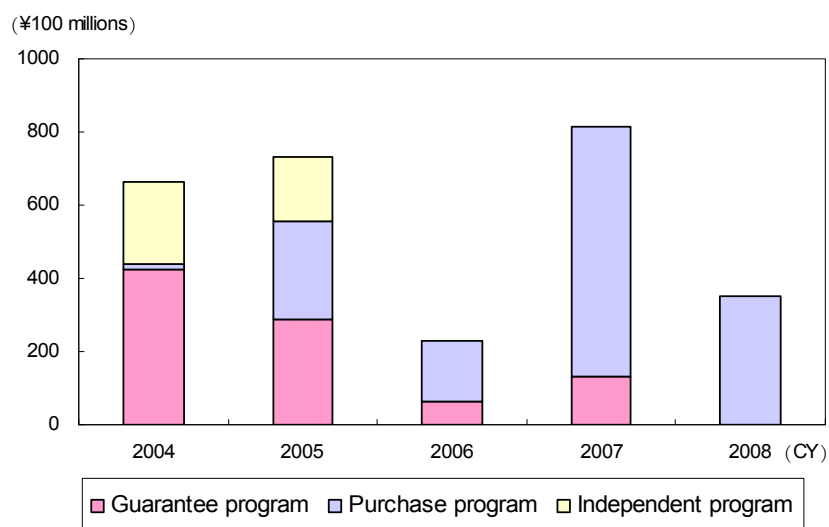
Normally, CDOs structured in Japan are synthetic CDOs, which use credit default swaps (CDS) that reference investment-grade corporate credit. The reference assets for this type of CDO are of high-quality credit, and normally comprise either subordinated debentures from the banks or the credit of international blue-chip non-financials, ranging from such infrastructure businesses as electric power companies and railroads to automobile manufacturers. Recently, because of the subprime mess, investors have become wary of the impact on valuations from correlation, and the tendency has been for the number of underlying credit issues to be reduced to five and in some cases only three. Furthermore, because of some mergers between major banks, many of the CDOs originated by those banks have been structured with the objective of adjusting balance sheets to maintain better control of ALM and credit portfolios.

One characteristic of Japan's CDO market appears to be the large number of CDO issues in which the public sector is involved as a sponsor. During the period of financial system instability that began in the late 1990s, the banks lost their ability to provide funding because of the large amount of nonperforming loans in their portfolios. This made them reluctant to lend, which in turn made access to funding considerably more difficult for those SMEs dependent on bank loans. Consequently, with the aim of assisting smaller firms and diversifying their sources of funding beyond bank loans, public sector institutions, including JASME and local governments, began sponsoring the issuance of CDOs backed by loans to, and corporate bonds issued by, SMEs.

JASME's securitization business provides securitization support to private-sector financial institutions by either providing guarantees or purchasing loan assets. The guarantee program is a securitization scheme whereby JASME provides guarantees up to a maximum of 70% of the value of CLOs backed by loans to SMEs made by multiple financial institutions spread across more than one region, thereby achieving regional diversification. JASME's purchase program is a scheme for securitizing CLOs by packaging SME loans purchased from multiple regional financial institutions that each would have trouble doing securitization deals on their own. Under the purchase scheme, JASME plays the lead role in securitization while taking on the risk of subordinated tranches jointly with multiple financial institutions. In addition to providing securitization assistance to private-sector financial institutions,

JASME also originates and issues synthetic CDOs backed by SME loans, structured as CDS agreements with special purpose companies (SPC), known as TMK in Japan (Figure 13).

**Figure 13: Securitization issuance by JASME**



Note: 2008 figures are total from January to August.  
 Source: Nomura Institute of Capital Markets Research, based on JASME materials

In addition, Metro Tokyo has also been the lead sponsor for the issuance of CBO and CLO aimed at facilitating and increasing the diversity of SME funding, and has also introduced a structure in which it jointly issues CBO and CLO with multiple other local governments. Initially, JASME provided credit guarantees, but recently it has been issuing CBO and CLO based only on credit enhancements from a senior-subordinated structure.

One of these deals has recently been at risk of default, however. The CBO All JAPAN was jointly issued by Metro Tokyo and multiple other local governments in March 2006 (Figure 14). This CBO is backed by a pool of corporate bonds issued by SMEs and underwritten by multiple banks, including some of the major banks, while the super-senior A class is offered to individuals. Under this securitization scheme, there is no external credit enhancement, and the subordinated beneficial interests are sold to investors.

The CBO All Japan was first downgraded about one year after it was issued, and has had several more credit downgrades since then. The senior B-class, which was rated AAA by S&P at issuance, has been downgraded 18 notches down to CCC-.

The CBO All Japan is backed by a pool of corporate bonds issued by 1200 SMEs diversified across regions and industries, and its potential for default was analyzed using the law of large numbers, which is typically used to analyze pools that benefit from diversification. [14] Ultimately, however, defaults have been considerably higher than expected, and the deal is at an increased risk of suffering a loss of principal by the final maturity date in July 2009 (Figure 15).

**Figure 14: Overview of CBO All Japan**

■ Overview of issuance

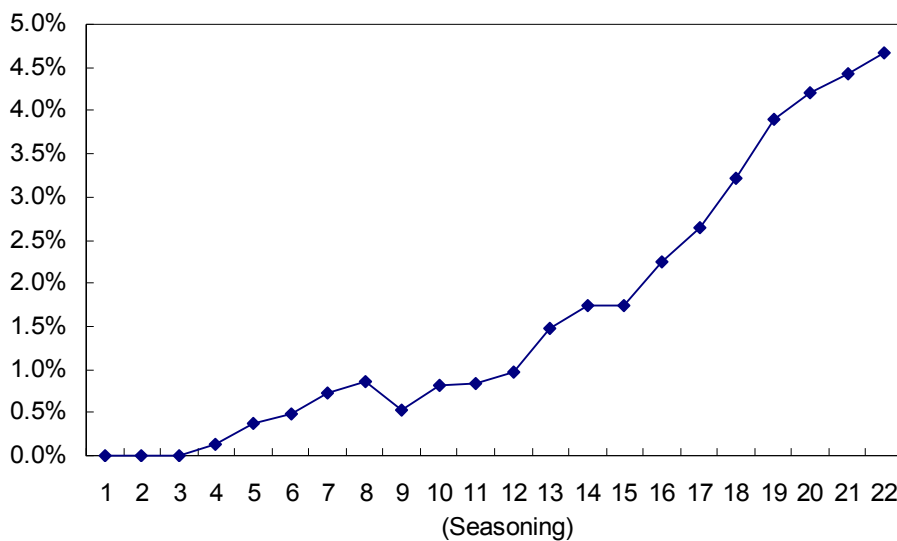
Issuance amount	¥88.1 billion			
Number of companies	1269			
Bond issuance		Issuance amount	Credit rating (S&P)	Final maturity
	Class A	¥4 billion	AAA	April 2009
	Class B	¥83.1 billion	AAA	July 2009
	Class C	¥700 million	AA	July 2009
	Class D	¥300 million	A	July 2009
SPC	CBO All Japan TMK			
Arranger	Mizuho Bank			
Originators	Mizuho Bank/Bank of Ikeda/Sumitomo Mitsui Banking Resona Bank/Shizuoka Bank/Shimizu Bank/Suruga Bank			
Interest rate	Average of 3.3% (fixed, all-in)			
Issuance format	Public ABS			
Term/Repayment	3yr/bullet repayment			
Funding amount	Maximum of ¥100 million per company			

■ Ratings history

	Class A	Class B	Class C	Class D
Initial March 2006	AAA	AAA	AA	A
July 2007	↓	AA	A-	BBB-
September 2007	↓	BB+	BB+	B
April 2008	↓	B-	CCC-	CCC-
July 2008	↓	CCC-	↓	↓

Source: Nomura Institute of Capital Markets Research, based on S&P data

**Figure 15: Delinquency rate of CBO All Japan's underlying pool**



Source: Nomura Institute of Capital Markets Research, based on CBO All Japan TMK's interim report

This situation has depressed the issuance of CDOs backed by SME credit in Japan, and there have been no such issues since the JASME CDO issued in March 2008.

### (iii) CMBS, ABS

Securitized products for which issuance has been declining include commercial mortgage backed securities (CMBS) and asset-backed securities (ABS) backed by lease and consumer finance receivables. This decline can be attributed to factors specific to Japan as well as to the weakening of investment sentiment caused by the subprime crisis.

CMBS issued in Japan are structured primarily by foreign capitalized securities firms and nonbanks. The CMBS structured by foreign-capitalized securities firms are normally broken down into a larger number of tranches than are those securitized products arranged by domestic firms, and their subordinated portions are also sold to investors, making them similar to securitization deals structured in the US.

The CMBS market is made up of a limited number of participants, most of which are foreign-capitalized securities firms. Because of this, the CMBS market has shrunk by a considerable margin, owing to participants affected by the subprime crisis reducing their commitment to the market, and also to the market itself having become less attractive because of increased oversight by the Financial Supervisory Agency (FSA) and a higher level of due diligence being exercised by financial institutions investing in real estate securitization products. This shrinkage in Japan's securitization market is indicative of the narrow range of investors in that market.

Also issued in Japan are ABS backed by lease, consumer loan, and automotive loan receivables. Of these, issuance of ABS backed by lease receivables has been weak owing to changes in lease accounting rules. Weak issuance of ABS backed by consumer finance loans can be attributed to changes in the law, specifically the elimination of gray zone interest rates, which arose from the gap in coverage between the Investment Deposit and Interest Rate Law and the Interest Rate Restriction Law, that have led to claims for excess interest payment reimbursements by borrowers. This is an example of an external factor, in this case legislative changes, affecting the securitization market by creating uncertainty over the cash flow from underlying assets.

### (3) Structural characteristics

The vast majority of securitized products structured in Japan are primary, with RMBS accounting for roughly half of all issuance, and CMBS and ABS accounting for most of the rest. Nearly all of the CDO issued in Japan are primary products, either backed by corporate loans or corporate bonds, or making use of CDS to reference corporate credit. In the US, the problem with subprime loans wound up having a huge impact on re-securitized products, such as ABS-CDO (SF-CDO) and CDO squared, with subprime exposure, but in Japan there is virtually no issuance of securitized products that have other securitized products as underlying.



Many securitized products use a senior-subordinated structure for credit enhancement. Generally, the senior-subordinated structure used on securitized products in Japan contains few tranches, normally only between two and five. Considerably more tranches are used on CMBS and other products structured by foreign-capitalized securities firms, and there are some products structured with as many as eight or 16 tranches, as is the case with the subprime RMBS issued in the US.

One possible reason for Japan's relatively simpler senior-subordinated structure is that investors tend to want the originators to hold the subordinated portion in order to prevent originator moral hazard. Consequently, in many of the deals in Japan it is the originators that hold the subordinated tranches, although they are not bound by restrictions on the sale of those tranches. Looked at from a different perspective, this indicates a fairly thin investment class for Japan's securitization market, i.e., there are not very many investors willing to invest in subordinated tranches or equity.

In addition, although in some cases guarantees are provided through the securitization support businesses of such public institutions as JHF and JASME, there is little resort to the private sector for external credit enhancement, such as that provided by the monoline ensures in the US, partly because re-securitization schemes are almost nonexistent in Japan.

#### (4) Characteristics of issuance types

Securitization issued in Japan for public subscription, because of its inclusion in the Nomura-BPI and other bond performance indices, winds up attracting investment from pension funds and other institutional investors using index-linked models. Nevertheless, because only a narrow class of investors invests in Japan's securitization products and the size of each deal is still small, several tens of billions of yen at the most, few of the issues are subscribed publicly. Most are placed privately and either limited to qualified investors or a small number of investors. Almost all of the securitized products issued publicly are sponsored by the public sector, such as JHF's RMBS and MOF's fiscal loan fund ABS, and tend to have large issuance amounts and participation by a relatively large number investors.

In the case of privately placed issues, although in some cases institutional investors are able to sign confidentiality agreements and obtain information on the performance of the underlying, there is normally little ongoing information that can be obtained by investors. The BOJ addressed this problem with securitized product disclosures at a forum that it held for participants in the securitization market, where it recommended a format for securitized product disclosures. [15] The recommended format for information disclosure was only voluntary, however, and never caught on. Nevertheless, one approach to improving disclosure that resulted from debate at this securitization market forum was implemented in January 2004, a BOJ survey of trends in the securitization market made available to the general public. The BOJ compiled this survey based on voluntary monthly reporting on securitized product issuance by arrangers, sponsors, and the rating agencies. This survey has since been taken over by the Japan Security Dealers Association (JSDA), and is now widely used

by market participants as a core source of data to understand trends in the securitization market.

#### **4. The Future of Japan's Securitization Market**

##### (1) Dealing with the subprime loan problem

##### (i) Securitized product disclosures

Securitized products structured in Japan have not been directly affected by the subprime crisis. Nevertheless, Japanese financial institutions have suffered considerable losses as a result of their investment in RMBS, CDO, and other structured products issued overseas. As of end-March 2008, deposit-taking financial institutions had booked total losses on their securitized product holdings of ¥1.453 trillion, and have valuation losses of ¥983 billion. To address this, the FSA asked the JSDA to look into how it can assure the traceability of information on securitized products. [16] The JSDA responded to the FSA's request by forming a working group on the distribution of securitized products, exchanged ideas with market participants, and announced an interim report in July 2008.

This interim report proposed guidelines for introducing a unified information disclosure format (UIDF) to standardize the way that information is presented on the content and risks of the assets that underlie those primary securitized products that have become common in Japan, namely RMBS, CMBS, ABS, and CLO. The JSDA plans to define this UIDF as part of its self-regulatory rules after further discussions over the specific details. To further ensure use of the UIDF for disclosures as well as the proper transmission of information on the content and risks of the underlying to distributors of securitized products, the JSDA has intensified debate over establishing new self-regulatory rules governing actions before, during, and after the sale of such products.

The basic direction this is heading toward is as follows. Prior to the sale of securitized products, distributors would be required to collect the information they deem necessary for properly transmitting information, as well as to collect analysis, including by others, on the risks of the underlying assets deemed to be material to investors. During the sale, distributors would be required to transmit to the investor on their own accord those items deemed necessary, as well as that information regarding risks that is deemed necessary but is not reflected in the credit ratings of securitized products. After the sale, if there is a request from the investor for purposes of forming an investment rating or market valuation, the distributor would be required to transmit to that investor detailed information on the underlying assets and their risks.

In Japan, therefore, the subprime problem has motivated debate in the direction of self-regulatory disclosure rules formulated by the JSDA.

## (ii) Regulating the credit rating agencies

Japan has a system of designating credit rating agencies modeled after the Nationally Recognized Statistical Rating Organization (NRSRO) designation used in the US. In the US, ratings by an agency approved as an NRSRO by the US Securities and Exchange Commission (SEC) can be used for certain regulatory purposes. Likewise in Japan, ratings issued by agencies designated by the FSA Commissioner are approved for use for various regulatory purposes. Designated credit rating agencies include the multinationals, Moody's, S&P, and Fitch, as well as the Japan-based credit rating agencies, Rating and Investment Information, Inc. (R&I) and Japan Credit Rating Agency (JCR), all of which are also designated credit rating agencies under Basel II.

Debate over how to regulate the credit rating agencies has taken center stage worldwide as a result of the subprime loan crisis. In the US, there is talk of beefing up previously introduced regulations governing the NRSRO, while in Europe the debate has been over introducing new rating agency regulations. In response to this, Japan's FSA is now trying to introduce new such regulations.

## (2) The possibility of subprime loan crisis in Japan

In the US, exposure to subprime loans is not limited to subprime RMBS, but extends to re-securitized products such as ABS-CDO and CDO squared that are structured upon mezzanine tranches of subprime RMBS. Because of this, the risks from subprime loans in the US mortgage market have spread to financial and capital markets throughout the globe.

As noted above, however, the Japanese securitization market consists almost entirely of simple structured products based on simple senior-subordinated structures, and few securitized products in Japan are highly leveraged. Another feature of Japan's securitization is that because investors tend to prefer that the originator hold the subordinated tranche, in most cases that is what happens, resulting in an alignment of incentives between investors and originators. Because of this, Japan is unlikely to suffer from a transmission of risks from primary securitized products via re-securitization, which is what occurred in the US subprime crisis.

That said, the CBO All Japan case is similar in structure to the subprime mess in that there was an error in the credit model. CBO All Japan, backed by a pool of corporate bonds issued by over 1000 SMEs, was issued with a rating based on a credit model using the law of large numbers. Defaults in the underlying pool exceeded the level assumed by the credit rating agencies based on their credit model, thereby triggering substantial credit downgrades.

The corporate bonds backing this CBO were assessed using SME scoring, but the use of scoring to assess credit does not have a very long history. An extensive database on defaults started being put together in the late 1990s, when financial institutions introduced internal mechanisms for assessing nonperforming loans, and by the early 2000s, when the quantity of data in the database had built up to critical

mass, the banks began actively using business models predicated on providing loans using scoring-based credit assessments. Credit models are generally thought to have some degree of accuracy based on statistical testing, but the possibility has been noted that not enough data was accumulated, and that there was insufficient data for tracking the model's performance.

There have been a number of specific problems identified as the cause of this. [17] To begin with, the data did not include any information on companies that did not take out loans, thereby introducing a bias in the data sample. In addition, when there are differences in economic conditions between the time the model is built and the time the model is used, the credit score could be affected. In Japan, because the data was accumulated during an economic contraction and the scoring loans were written during an economic recovery, there is a possibility that problems related to this have not yet been exposed. We think the same can be said of the problems with default data on subprime RMBS and CDO.

CBO All Japan's problems are specific to that issue, and do not appear to be at risk of spreading immediately to other securitized products, but we do see some overlap with the disputes that surfaced during the subprime crisis, including the suitability of the credit model and the ratings based on that model, as well as problems with due diligence by the originators. A thorough examination of these problems will probably be necessary for the future.

### (3) The Future of Japan's Securitization Market

Overall issuance in Japan's securitization market has slowed as a result not only of weakened investor sentiment caused by the subprime crisis but also of problems specific to Japan. At this point, we think it would be difficult to take the optimistic view that the current market conditions are only temporary and that the market will soon resume strong growth.

When contemplating the future of securitization in Japan, we think an important factor to consider is the relationship that the banks, the largest segment of Japan's financial sector, have with the securitization market. For many years following World War II, Japan's financial sector had been relatively slow to develop securities markets because of policies that promoted a pattern in which surplus funds from the household sector were accumulated in bank deposits and then lent by the banks to the corporate sector, which was short of funds. Even today, loans account for the largest share of corporate financing in Japan. In 2007, domestic banks lent a total of ¥41.6 trillion to fund business investment, versus securities issuance by the private sector of approximately ¥22.3 trillion. Because the destabilization of Japan's financial system caused by the nonperforming loan problem in the late 1990s can be seen as exposing the concentration of systemic risks in Japanese banks and the frailty of Japan's financial structure, making better use of securities markets is one of the major challenges now facing Japan. In fact, the government has been promoting a shift of household financial assets out of bank deposits and into investment products. One of Japan's specific policy challenges is to make better use of securities markets.

Under these conditions, the banks play a critical role in the securitization market as either originators or arrangers, and their participation is clearly essential to that market's future development. Nevertheless, considering the path toward development that the securitization market has taken thus far, the relationship between the banks and the securitization market has not always been marked by the healthiest of behavior. For example, there were times during Japan's period of financial system instability when the banks securitized the mortgages on their balance sheets in order to generate upfront fees to make up for losses from the disposition of nonperforming loans. In addition, leading up to the introduction of Basel II at end-March 2007, there was a rush by banks to securitize their loans for the purposes of reducing risk assets that entered into calculations of regulatory capital.

In addition, financial institutions gradually became less profitable during the extended period of low interest rates, and amid overall weak demand for business investment funding, there was a tendency for lenders to become more aggressive in offering home loans, a relatively more profitable line of business. This created intense competition among financial institutions in the home loan market. In fact, a fairly large mismatch in terms between the investment and the source of funding occurs when securing funding for long-term, fixed-rate mortgages, which creates difficulties from an ALM perspective. The concern, particularly for the regional financial institutions, which have limited means for hedging, is that the sector now finds itself with balance sheets that are quite vulnerable to an increase in interest rates.

Not until the banking sector makes its decisions based not only on profitability but also on ALM will it start looking seriously at the choice between using its own balance sheet or using the securitization market. Once this happens, the healthy growth of Japan's securitization market should follow.

The public sector has come to play a greater role in Japan's securitization. While the overall securitization market has been languishing, JHF has continued to issue RMBS, and become a key pillar of support for the market. Nevertheless, if the public sector sustains this high level of involvement for an extended period, there is a risk that the market will lose autonomy, while an even bigger danger is that the government will use the securitization market as a way to shrink its balance sheet. The public sector should take care to not focus too hard on asset reduction so as to avoid crowding out securitized products sponsored by the private sector, and probably needs to proceed in a way that is consistent with the securitization market's capacity for absorbing funds.

### III. China's Securitization Market

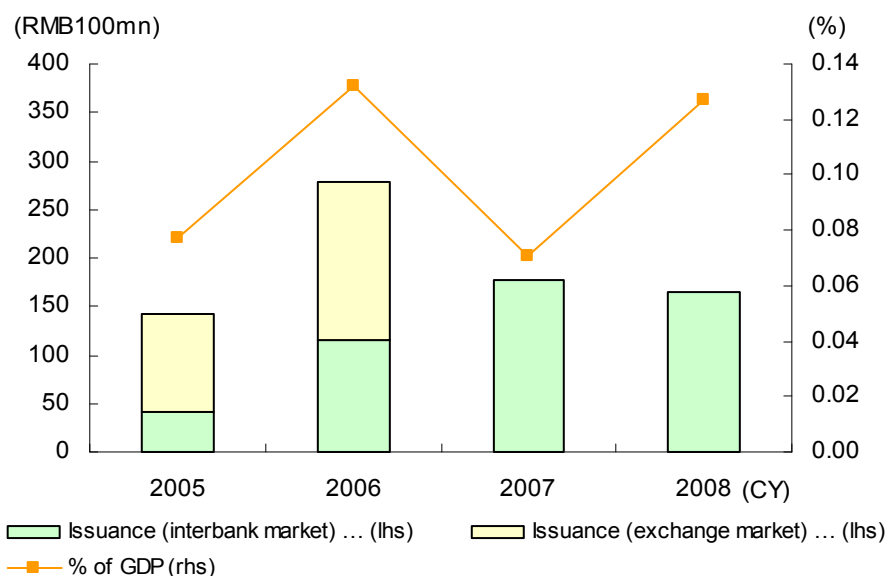
#### 1. Overview of China's securitization market

The most distinctive feature of China's securitization market, which began as a pilot in 2005, is that the securities are issued with the approval of China's financial authorities. The market is divided into two sections.

The first is the interbank bond market, which is supervised by the central bank, the People's Bank of China (PBC), and where the issuance of securitized products (in this case, by financial institutions) is subject to the approval of the China Banking Regulatory Commission (CBRC). The second is the stock exchanges, which are supervised by the China Securities Regulatory Commission (CSRC), whose approval is necessary for the issuance of securitized products (in this case, by nonfinancial companies).

Following the enactment of the necessary legislation, RMB4.2 billion of securities was issued on the interbank bond market in 2005, RMB11.6 billion in 2006, and RMB17.8 billion in 2007, while RMB16.5 billion was issued during the first six months of 2008 (Figure 16). On the stock exchange market, RMB10.1 billion of securities was issued in 2005 and RMB16.3 billion during the first nine months of 2006; but no securities have been issued since then (see below for reason).

**Figure 16: Issuance of securitized products**



Note: 2008 data as of end-June.

Source: Nomura Institute of Capital Markets Research, from ChinaBond and China National Bureau of Statistics.

China's securitization market is still in its infancy and still much smaller in relation to its economy than that of either the US or Japan. Issuance of securitized products was equivalent in value to 0.08% of GDP in 2005, 0.13% in 2006, 0.07% in 2007, and 0.127% during the first six months of 2008.

## 2. Approval procedure for issuance of securitized products

### (1) Securitization in the interbank bond market

#### 1) Relevant legal documents

On the interbank bond market financial institutions issue bonds but also participate as investors. Although the main instrument traded on this market has been bank debentures (issued by both the policy banks and the commercial banks), commercial paper (issued by nonfinancial companies and classified as "bank debentures") has been issued and traded since 2005.

The issuance of securitized products on this market is still in its infancy. On 20 April 2005, the PBC and CBRC promulgated the *Administrative Rules for Pilot Securitization of Credit Assets* ("*Administrative Rules*"), which came into effect the same day (see Figure 17 for relevant legal documents).<sup>18</sup> As a result of these rules, the regulatory authorities have to vet each loan securitization separately.

**Figure 17: Rules and regulations pertaining to interbank bond market**

Name of rule/regulation	Promulgating department	Promulgation	Implementation
(Special-purpose trusts) <i>Trust Law</i>	Standing Committee of the Ninth National People's Congress of the People's Republic of China	28 Apr 01	1 Oct 01
(Securitization of loan assets) <i>Administrative Rules for Pilot Securitization of Credit Assets</i>	PBC, CBRC	20 Apr 05	20 Apr 05
<i>Supervisory Rules for Pilot Securitization of Credit Assets of Financial Institutions</i>	CBRC	7 Nov 05	1 Dec 05
<i>Rules for the Information Disclosure of Asset-backed Securities</i>	PBC	13 Jun 05	13 Jun 05
<i>Provisions on the Accounting Treatment for Securitization of Credit Assets</i>	MOF	16 May 05	16 May 05
<i>Circular on Relevant Taxation Policy Issues Concerning the Securitization of Credit Assets</i>	MOF, State Administration of Taxation	20 Feb 06	20 Feb 06
(Trust companies) <i>Rules Governing Trust Companies</i>	CBRC	23 Jan 07	1 Mar 07
<i>Rules on Trust Schemes of Collective Funds by Trust Companies</i>	CBRC	23 Jan 07	1 Mar 07
(Auto finance companies) <i>Revised Rules Governing Auto Finance Companies</i>	CBRC	24 Jan 08	24 Jan 08
<i>Rules for Implementing the Rules Governing Auto Finance Companies</i>	CBRC	12 Nov 03	12 Nov 03
<i>Administrative Rules for Automotive Loans</i>	PBC, CBRC	16 Aug 04	1 Oct 04

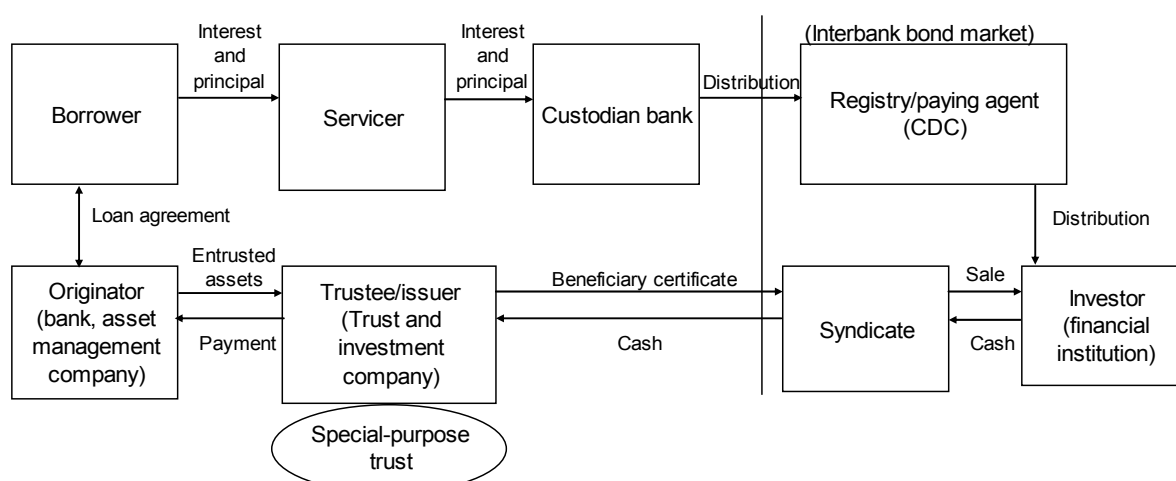
Source: Nomura Institute of Capital Markets Research, from Chinese government departments concerned.

## 2) Securitization techniques and market participants

### (i) Different types of securitization

The *Administrative Rules* apply to securitization activities within China in which financial institutions, as the originators (see below), entrust credit assets to trustees, and the trustees issue beneficiary securities in the form of asset-backed securities via special-purpose trusts (*Administrative Rules*, Articles 2 and 3, Figure 18). The aim of this is to use the bankruptcy remoteness framework, which, in turn, uses the trust function of the existing *Trust Law*.<sup>19</sup> Bankruptcy remoteness enables the securitized assets to be shielded from the risk that either the owner of the underlying assets (i.e., the originator) or the issuer go bankrupt, and the creditworthiness of the assets to be reflected directly in the securitization's credit rating.

**Figure 18: Schematic diagram of securitization of bank loans**



Source: Nomura Institute of Capital Markets Research.

Only a trust and investment company (TIC) with a track record that meets the CBRC's requirements can become a trustee. In order to ensure the smooth continuation of a trustee's securitization responsibilities, the CBRC will appoint a temporary trustee in circumstances where a trustee's qualification as a trustee is revoked according to law, or where it is dissolved, ordered to be terminated or announced to be bankrupt according to law (*Administrative Rules*, Article 20).

### (ii) Originators

The CBRC is responsible for assessing the suitability of the originator owning the underlying assets. The following financial institutions may act as originators: commercial banks, asset management companies (see below), policy banks, trust and investment companies, finance companies,<sup>20</sup> and credit cooperatives.<sup>21</sup>



### (iii) Investors

These are the financial institutions allowed to participate in the interbank bond market. They include commercial banks, trust and investment companies, finance companies, credit cooperatives, fund management companies, securities companies, and China Postal Savings Bank. While insurance companies are allowed to participate, they are not allowed to invest in securitized products. This is because the guidelines of the body administering and regulating China's insurance industry, the China Insurance Regulatory Commission (CIRC), prohibit them from doing so.<sup>22</sup>

### (iv) Market infrastructure

While securitized loans are issued and traded on the interbank bond market, bond issuance and trading has to be registered with the China Government Securities Depository Trust & Clearing Co. Ltd. (CDC).<sup>23</sup> Disclosure is via the websites designated by the regulator<sup>24</sup>. On the taxation side, double taxation on corporate income is avoided and preferential taxation on stamp duty and business tax are applied.

## (2) Securitization in the stock exchange market

### 1) Relevant legal documents

China has no special law governing the securitization of nonfinancial companies' specific cash flows. However, under the CSRC's *Pilot Rules Concerning the Business of Client Asset Management of Securities* (promulgated on 18 December 2003 and implemented on 1 February 2004), securities companies are allowed to solicit subscriptions from private investors and manage those assets under a client agreement. There are three types of asset management agreements: (1) one-to-one "predirected asset management" agreements between securities companies and their clients, (2) one-to-many "collective asset management" agreements between securities companies and their clients, and (3) "specific asset management plans" (SAMPs). Securitization of nonfinancial companies' specific cash flows falls into the third category.

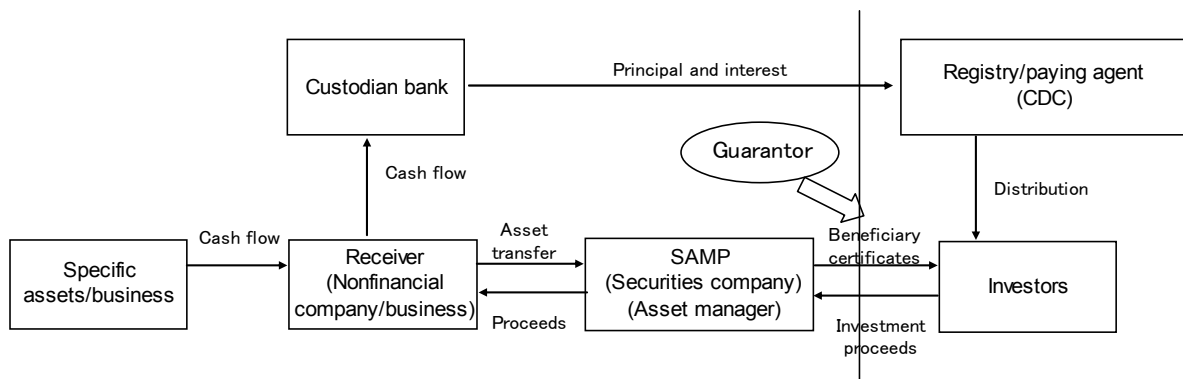
Although these *Pilot Rules* have been in force since 2004, it was not until 2005 that the first SAMPs were issued. They can therefore be said to be a relatively new product—just like the securitized products on the interbank bond market.

### 2) Securitization techniques and market participants

#### (i) Different types of securitization

SAMPs are sold by securities companies to their clients on an agency basis<sup>25</sup> and are a securitized form of the specific cash flows which nonfinancial companies transfer to the securities companies (Figure 19). Only "pilot securities companies"<sup>26</sup> authorized by the CSRC may act as asset managers and purchase and manage these assets.

**Figure 19: Schematic diagram of SAMP securitization**



Source: Nomura Institute of Capital Markets Research.

(ii) Originators

There are no particular rules stipulating who may be an originator. Nor are there any specific rules stipulating what assets may be securitized. All that is required is authorization from the CSRC. Moving assets off the balance sheet is complicated by the fact that a number of legal, tax and accounting issues have still to be resolved.

(iii) Investors

There are no particular rules governing investors. However, neither banks (because they are not members of a stock exchange) nor insurance companies (because of the aforementioned CIRC rules) may invest in SAMPs.

(iv) Market infrastructure

SAMPs are issued and traded on the stock exchange market (i.e., the Shanghai and Shenzhen stock exchanges), but registration is with China Securities Depository and Clearing Corporation Ltd. (CSDCC).<sup>27</sup> There is no requirement to disclose information to the general public—only to SAMP investors.

**3. Different types of securitized products and their issuance**

(1) Interbank bond market

(i) RMBS

There have been two issues of residential mortgage-backed securities in China to date, both by China Construction Bank (CCB): an RMB3,020 million issue in December 2005 and an RMB4,160 million issue in December 2007, giving a total issuance of RMB7,180 million.

When China was still a planned economy, the state and companies built and owned public housing that they rented to employees for a modest amount. Since China's transition to a market economy, however, housing has become a commodity that can

be bought and sold for cash. This has involved the creation of a housing market and a system to provide purchasers with the necessary cash. At the heart of this system is mortgages provided by private-sector commercial banks. However, CCB, which is one of the Big Four state-owned commercial banks, has the largest share of this market (21.7%), with RMB557.8 billion in outstanding mortgages as of 30 June 2007.

In addition to private-sector mortgages, local governments have public housing reserve funds, to which employers and employees contribute every month and which provide the funds for preferential housing loans. The rate of interest on these loans is set by the PBC in consultation with the Ministry of Housing and Urban-Rural Development. As of end-2007, there was RMB507.4 billion of such housing loans outstanding.

#### (ii) CLOs

One type of product that has been used to securitize bank loan assets is CLOs. These have been issued by both policy and commercial banks. While China Development Bank (CDB), one of China's three policy banks has issued ABSs totaling RMB13.68 billion (RMB4.18 billion in December 2005, RMB5.73 billion in April 2006, and RMB3.77 billion in April 2008), Industrial Bank (CIB) and Shanghai Pudong Development Bank (SPDB), both commercial banks, have issued CLOs: the former RMB5.24 billion in December 2007, the latter RMB4.38 billion in September 2007.

One of China's three policy banks, all of which were established in 1994, CDB's role is to provide finance and financial services for China's basic infrastructure, major industries and major companies. Originally regional banks, CIB and SPDB are now commercial banks with a nationwide branch network.

#### (iii) Nonperforming loans

There have been securitizations of nonperforming loans by both asset management companies and CCB. In December 2006, Xinda Asset Management Corporation (an affiliate of CCB) issued RMB3.0 billion, and Orient Asset Management Corporation (a Bank of China (BOC) affiliate), RMB700 million of securitized nonperforming loans, while, in January 2008, CCB issued RMB2.765 billion of such loans.

Beginning in 1999, asset management companies were established for each of the Big Four state-owned commercial banks (CCB, BOC, Industrial and Commercial Bank of China (ICBC), and Agricultural Bank of China (ABC)) to dispose of their nonperforming loans. Although their initial task was to purchase nonperforming loans from their banking affiliates based on the decision of administrative authority, they have extended their operations to include investment banking, and some have even been reported to be considering becoming full-blown financial service companies.

#### (iv) Auto loans

In January 2008, GMAC-SAIC Automotive Finance issued RMB1.993 billion of securitized auto loans.

After China joined the World Trade Organization (WTO), demand for automobiles increased rapidly. In response, foreign automakers not only stepped up their exports and local production but also petitioned the Chinese authorities to allow them to offer prospective buyers auto loans. In October 2003, the CBRC promulgated *Measures for the Administration of Auto Finance Companies* followed soon afterwards by a set of implementing rules (Figure 17). In August 2004, the PBC and the CBRC promulgated *Measures for the Administration of Auto Loans*. Following these measures, GMAC-SAIC Automotive Finance was established as both China's first auto finance company and its first foreign-invested auto finance company. Since then, nine other (all Chinese-invested) auto finance companies have been established in China. Most recently, Chery Automobile Co., Ltd. has been reported to be in the process of establishing such a subsidiary.

#### (2) Stock exchange market

In August 2005, China Unicom issued China's first SAMP (RMB9.5 billion). The specific cash flows backing the securities are receivables from the lease of China Unicom's CDMA mobile telephone network for a specific period in the future, and investors can receive an expected return as well as their initial investment. Although China Unicom has to pay the receivables into its designated SAMP account every time it receives them, these payments are guaranteed by a third party (BOC).

Since this first issue, nine SAMPs (worth a total of RMB26.4 billion or ¥420 billion) have been issued. They are backed by specific cash flows in the form of receivables ranging from highway tolls, equipment lease payments, electricity charges and payback fees on build-and-transfer projects to sewage treatment charges.

However, as the relationship between investors and the securities company is that of client-agent, there is not necessarily any fiduciary duty; nor is bankruptcy remoteness guaranteed. That is why the CSRC has not approved any new SAMP issues since September 2006 and has apparently been examining these problems with a view to possibly issuing detailed guidelines.

### **4. Assessing China's securitization market**

#### (1) Background to the creation of a securitization market in China

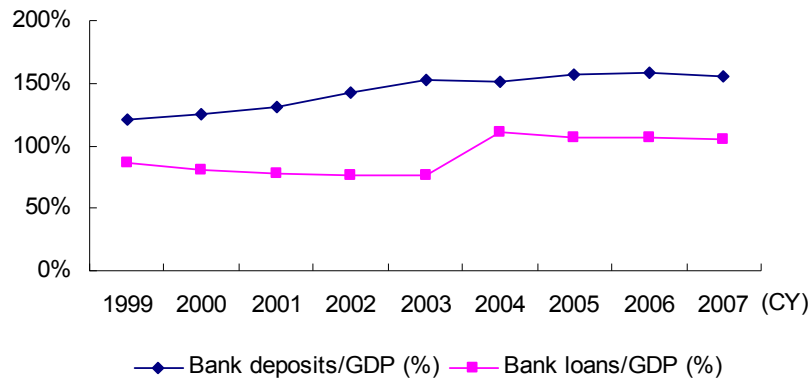
China's securitization market was established with the approval of the country's financial authorities for the following reasons: (1) to transfer and spread the risk facing banks from their loan assets; (2) to dispose of banks' nonperforming loans; (3) to make it easier for nonfinancial companies to raise funds; and (4) to give investors a greater choice of investments.

(i) Transferring and spreading the risk facing banks from their loan assets

Because of the following benefits to them as originators from securitizing their loan assets, we think that China's banks are well aware of the importance of securitization: (1) it helps them to improve their asset/liability management; (2) it reduces regional overdependence on bank loans; (3) it enables them to enhance own capital; (4) it enables them to achieve a better profit structure; and (5) it gives them an opportunity to develop new sources of funds.<sup>28</sup>

Figure 20 shows the ratio of bank deposits and loans to GDP in China in the past few years. We can see that since 2004 the gap between bank deposits/GDP and bank loans/GDP has been steadily widening. This suggests to us that banks have been taking in deposits at a faster rate than they have been able to lend. This growth in deposits has put pressure on the banks to increase their lending, and this is seen by the financial authorities as one of the factors that generate excessive liquidity in the economy.

**Figure 20: Bank deposits and loans as percentage of GDP**



Source: Nomura Institute of Capital Markets Research, from *China Statistical Yearbook* and People's Bank of China.

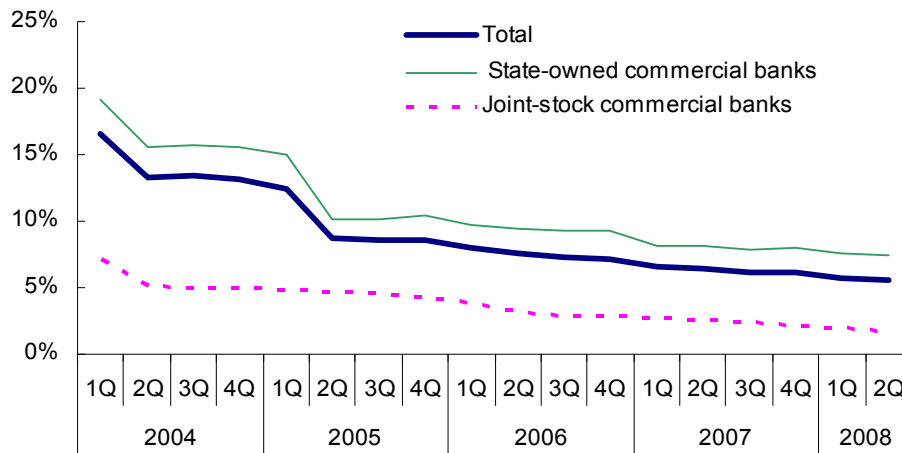
The Chinese financial authorities apparently want to encourage the banks to use sound assets when they originate new products: in order both to foster the development of a securitization market and to avoid mistakes. We assume, however, that the banks would prefer to keep sound credit assets on their balance sheets. A perception gap such as this between the financial authorities and the banks could be one of the factors inhibiting the growth of China's securitization market.

(ii) Resolving nonperforming loans

Although the nonperforming loan ratio of China's commercial banks (both state-owned and joint-stock) has been declining (Figure 21), the Big Four state-owned commercial banks have not yet repaid the capital infusions they received from government funded by issuance of special government bonds or the country's foreign

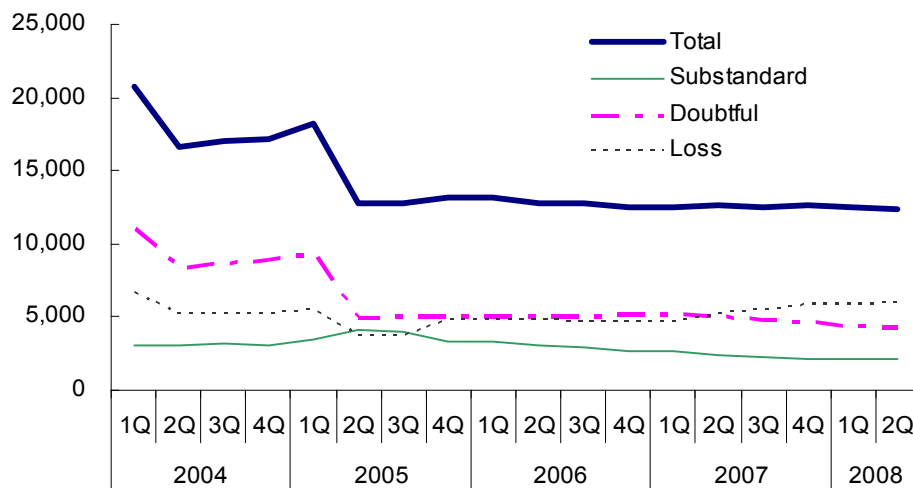
exchange reserves. Without taking this capital infusion into consideration, it is as important as ever for the banks to put their house in order. In fact, in absolute terms, the level of the banks' nonperforming loans has not declined significantly (Figure 22).

**Figure 21: Chinese banks' nonperforming loans (ratio)**



Source: Nomura Institute of Capital Markets Research, from China Banking Regulatory Commission.

**Figure 22: Chinese banks' nonperforming loans (amount)**



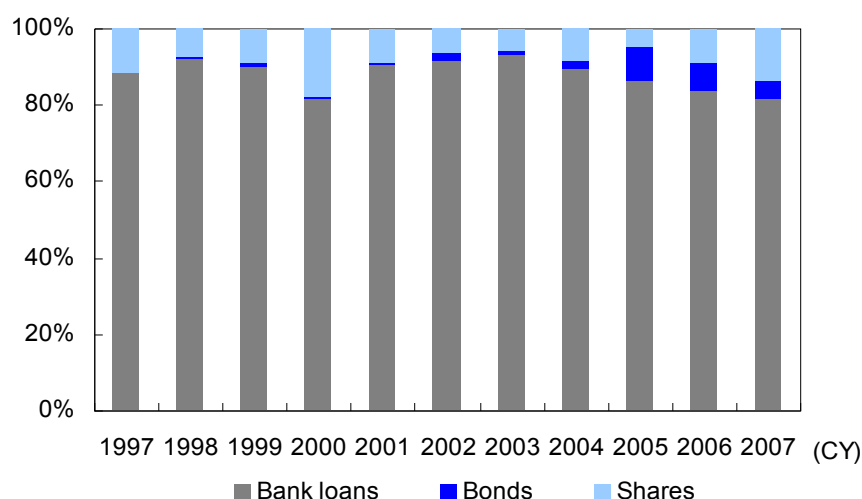
With the Chinese economy expected to slow as a result of the global economic slowdown and the central bank's tightening policy, we think China's financial authorities are probably concerned that, after declining for several years, the banks' nonperforming loan ratio could begin to rise again. If it did, it might be an incentive to the banks to dispose of these loans (including by means of securitization). However, the financial authorities would have to approve any issues of securitized products, and

disagreements with the banks over which loans to use as underlying assets could delay the launch of new products.

(iii) Nonfinancial companies' ability to raise funds

Reducing companies' dependence on indirect financing (i.e., the banking system), which was the main source of funds when China was still a planned economy, and encouraging them to make increasing use of direct financing is one of the challenges facing China's financial authorities as roughly 80% of the funds raised by nonfinancial companies is still in the form of bank loans (Figure 23). Although we can see that the proportion raised by issuing corporate bonds has increased, it is still quite small. Nonfinancial companies are therefore very interested in using securitization, as well as corporate bonds, to raise the funds they will need to keep pace with the rapid rate of economic growth. For its part, the Chinese government is also still keen to foster the development of both these markets.

**Figure 23: Sources of funds for China's nonfinancial sector (flow basis)**

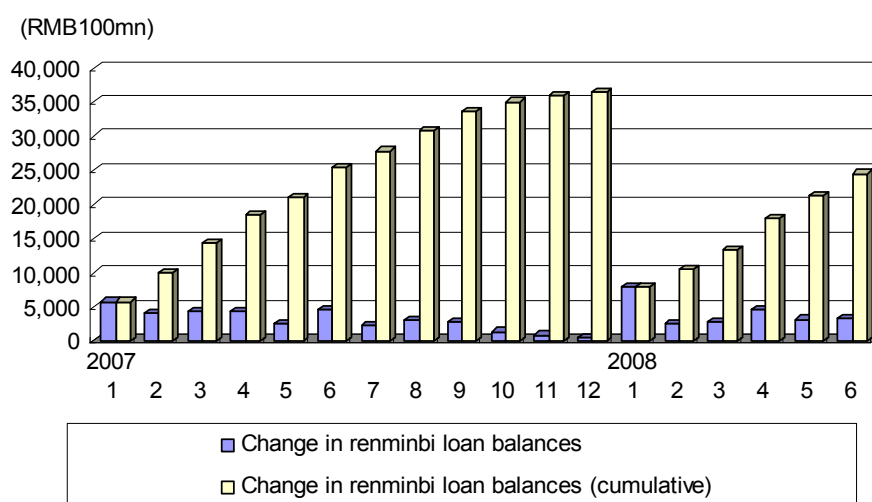


Source: Nomura Institute of Capital Markets Research, from People's Bank of China.

As for the level of bank lending, still the main source of funds for nonfinancial companies, the CBRC is reported to have been instructing commercial banks not to increase their loan balances ever since the Communist Party Congress in mid-October 2007.<sup>29</sup> An analysis of month-end renminbi loan balances in 2007 reveals that the net increase declined as the year-end approached. Similarly, an analysis of the cumulative change in loan balances in the same year reveals that the net annual increase was more or less unchanged at about RMB3,500 billion from end-October, indicating that the net annual increase in loan balances was, to all intents and purposes, capped at the equivalent of a 10-month increase as a result of the ceiling (Figure 24). In 2008, however, loan balances increased by a net RMB800 billion in January alone and by a cumulative RMB2,450 billion in January-June. This means that, if the same ceiling is applied as in 2007 (RMB3,500 billion), 70% of this year's ceiling had already been

used as of end-June and that, in the second half of the year, financial institutions are likely to become increasingly reluctant to lend. While nonfinancial companies are therefore probably considering making greater use of direct financing, the fact that bond issues (as an alternative to securitization) also require the approval of the financial authorities means that they are unlikely to be a flexible alternative. Furthermore, it has been reported that the financial authorities are concerned that nonfinancial companies might try to use bond issues as a way of getting round the cap on bank lending. The outlook for issuance of securitized products is therefore likely to continue to be dominated by the stance of the financial authorities.

**Figure 24: Change in renminbi loan balances (January 2007 – June 2008)**



(iv) Giving investors a greater choice of investments

Expanding China's securitization market would also give investors a greater choice of investments. For example, China's National Social Security Fund (NSSF), which is responsible for provisioning for future social security payments, has invested in securitized products since these were first issued in 2005. Although the return from these investments accounts for less than 1% of its total investment return, the actual numbers (RMB1.97 million in 2005, RMB28.8 million in 2006 and RMB282 million in 2007) represent a steady source of income.

However, critics point to a lack of liquidity in the securitization market. While the lack of liquidity is partly the result of the low volume of issuance, it is partly also the result of the restrictions on who may invest in such products. For example, insurance companies are not allowed to invest in securities backed by bank loans.



(2) Impact of subprime mortgage crisis on China's securitization market

Although securitized products continued to be issued in China even after the subprime mortgage crisis erupted in the summer of 2007, China's financial authorities began a careful and rigorous assessment of the damage in 2008. On 4 February 2008, the CBRC issued a notice to the banks to tighten up their controls on securities backed by loan assets (*Notice of China Banking Regulatory Commission on Further Improving the Management of Credit Assets Securitization Business*, see Figure 25). The notice covers eight "needs": (1) to pay attention to asset quality and to steadily promote securitization; (2) to control credit risk and ensure that sales are "true"; (3) to accurately judge transfer risk and strictly comply with capital requirements; (4) to improve risk management and internal controls; (5) to work out a proper mechanism for assessing loan service performance in order to prevent moral hazard; (6) to standardize the procedures for transferring creditors' rights in order to mitigate legal risk; (7) to improve disclosure; and (8) to improve investor education. As can be seen from Article 1 of the *Administrative Rules for Pilot Securitization of Credit Assets* promulgated by the PBC and CBRC on 20 April 2005, which states that "These rules are formulated ... so as to regulate the pilot securitization of credit assets, protect legitimate interests of investors and relevant involved parties, improve the liquidity of credit assets and enrich securities products," the aim of the financial authorities has always been to allow the gradual introduction of securitized products.

**Figure 25: Notice of China Banking Regulatory Commission on Further Improving the Management of Credit Assets Securitization Business (4 February 2008)**

Banks to which it applies	China Development Bank, Industrial and Commercial Bank of China, Agricultural Bank of China, Bank of China, China Construction Bank, Bank of Communications, joint-stock commercial banks
①	Pay attention to asset quality and steadily promote securitization
②	Control credit risk and ensure that sales are "true"
③	Accurately judge transfer risk and strictly comply with capital requirements
④	Improve risk management and internal controls to prevent operational risk
⑤	Work out a proper mechanism for assessing loan service performance in order to prevent moral hazard
⑥	Standardize the procedures for transferring creditors' rights in order to mitigate legal risk
⑦	Improve disclosure and protect investors' legitimate interests
⑧	Improve investor education

Source: Nomura Institute of Capital Markets Research, from China Banking Regulatory Commission.

Thus far, the underlying assets used to back securitized products in the interbank bond market have ranged from loan assets and nonperforming loans to auto loans. However, our interviews with market participants in China indicate that they do not expect the financial authorities to approve more complicated securitized products that use assets such as leasing and credit card receivables in the near future. Some

suggested that the volume of leasing and credit card receivables was still too small to allow their use in securitized products. A further consideration in the case of credit card receivables is that the use of such assets for securitization would require access to and the sharing of credit data on individuals. At the moment, however, China does not have the necessary infrastructure for this. We therefore expect China's securitization market to continue to depend mainly on loan assets, nonperforming loans, and auto loans.

Whether or not approval is granted to specific issues is likely to depend, in our opinion, on factors such as whether they use a senior-subordinated structure, whether the originator retains the subordinated tranche, and whether there is any (internal) credit enhancement in the form of a cash reserve. As far as the possibility of re-securitization issues in the aftermath of the subprime mortgage crisis is concerned, we see little prospect of such issues as the securitization in China is still in its pilot stage, although there have been no official statements on this by the financial authorities. We conclude from all this that, while China's securitization market may not expand rapidly, major problems are unlikely to occur so long as the current system, where issuers, investors and intermediaries are all located in China, continues to operate and the issue of securitized products remains under the control of the financial authorities.

## IV. Conclusion

As we have shown in this report, Asia's securitization markets are still in their infancy stage relative to the US, and because of this, there is little risk that Asia will experience an event similar to the subprime crisis that occurred in the US.

One characteristic of securitization markets in Asia is that they are in principle comprised of primary securitized products, and the concept of re-securitized products has yet to take hold. Consequently, the risk in Asia that originators of, and investors in, re-securitized products will become unable to determine what their underlying assets are, as occurred in the US, is fairly low, at least from the standpoint of product design.

A second characteristic is that the senior-subordinated structures in Asia are built such that the originator holds the subordinated portion in most cases. That is, Asian securitization does not normally follow the US-style business model of originating to distribute, and this is one reason why the moral hazard of the originator not monitoring the underlying assets is less likely to be an issue. From the investors' side, this implies a narrow range of investments to choose from. Consequently, we see a need to implement rules and design products in a way that minimizes the risk of moral hazard, regardless of whether the originator continues to hold the securitized product.

A third characteristic is that, in contrast with the US, where the originator is often a mortgage bank or mortgage broker, in Asia the banks play a critical role as originators and arrangers. Domestic financial institutions also play an important role as investors. We attribute this to the fact that the banks have played the central role of financial systems in Asia for many years. Although a concentration of risks in the banking system is not desirable, we think that banks, provided that they are listed and have a diverse base of stakeholders, have a greater incentive to conduct strict due diligence than do mortgage brokers, particularly when taking reputational risk into account.

On the other hand, Asian securitization markets have some of the same problems found in the US. For example, just as the government-sponsored Fannie Mae and Freddie Mac have become key players in the US securitization market, the public sector plays an important role in securitization markets in Asia, as well. JHF in Japan, Cagamas in Malaysia, and state-owned banks in China are all public or quasi-public institutions that play an important role in Asian securitization markets. There is a risk, however, that this large public sector presence will destroy the market's autonomy and wind up crowding out the private sector. For example, Cagamas in Malaysia which is 20% owned by the central bank, dismisses the indication that they have a "implicit guarantee" by the government (according to our interview), although the market defines the Cagamas bonds as "quasi government" bonds.

In addition, the percentage of total outstanding loans owned by JHF in Japan that are classified as non-performing loans has been in a rising trend, and was at 3.58% in FY2007. Thus there are signs even in Japan that a portion of the mortgage pool is becoming nonperforming.

In overall terms, however, the special characteristics described above make it unlikely that Asian securitization markets will experience an event similar to the subprime crisis that occurred in the US. Hence, there are some elements in Asian securitization market that the U.S. and Europe can learn from. If we are to paraphrase, it would be “back to basics”.

On the other hand, this can be interpreted as a mere consequence of Asian securitization markets being undeveloped, and securitization regulations and products in Asia have thus far not been designed in a way that will avoid the types of problems that have occurred in the US. Many of the regulatory reforms and product innovations occurring in the US in response to the subprime crisis are worth considering in Asia, even though Asia has yet to experience the same sort of crisis.

1. The CBO consisted of senior and subordinated tranches. The senior tranche was guaranteed by Industrial Bank of Korea (IBK) and Japan Bank for International Cooperation (JBIC), while the subordinated tranche was underwritten by Korea's Small Business Corporation.
2. This section is based on *(Zaimushou Ishoku) Ajia ni okeru Saikenshijou Kenkyuukai* (??Asian Bond Markets Study Group (commissioned by Japanese Ministry of Finance)??), Institute for International Monetary Affairs, March 2005.
3. "Securitisation in Asia and the Pacific: implications for liquidity and credit risks," *BIS Quarterly Review*, June 2006.
4. Cagamas was established in 1986 to securitize property loans from Malaysian banks. To begin with, it enjoyed certain privileges (e.g. a credit line from the central bank and exemption from stamp duty), but these privileges were abolished in 2004.
5. For example, in Thailand, a *Securitization Law* was enacted in 1992, an *ABS Law* in 2003, and an *SPV Law* in 2004; in Indonesia, guidelines were issued by the Capital Market Supervisory Agency in 2002–2003; and, in the Philippines, a *Special Purpose Vehicle (SPV) Act* was enacted in 2002 and a *Securitization Act* in 2004.
6. The reasons given for issuing single-loan CLOs are that this enables issuers to avoid the disclosure and onerous paperwork required when issuing bonds, and originators to transfer credit risk despite the underdeveloped state of India's credit derivatives market.
7. Following the Act, the Asset Reconstruction Company of India was established as part of the infrastructure of the banking industry. As of March 2006, it had purchased INR211,440 million of assets from 31 banks.
8. The *Specified Credits Act* was repealed in 2004, because development of the securitization market made the procedures stipulated in that law more complicated, and eventually rendered the law ineffective. The repealed law's functions are now covered by the revised *Trust Act*.
9. Report from the Ministry of Land Infrastructure, Transport and Tourism, *Shijyoukinou wo Sekkyokuteki ni Ikashita Jyutaku Kinyu no Arikata Kondankai Houkokusho* (the report of a working group on how to make housing finance function more on market principles), April 2002.
10. On 1 October 2008, JASME was dismantled and merged with three other government-affiliated financial institutions, the National Life Finance Corporation (NLFC), the Agriculture, Forestry and Fisheries Finance Corporation of Japan (AFC), and the Japan Bank for International Cooperation (JBIC), to form a new organization, the Japan Policy Finance Corporation.

11. As part of the Tokyo financial market initiative, Metro Tokyo formed an alliance with Osaka Prefecture, and the cities of Kawasaki, Yokohama, Shizuoka, Osaka, Kobe, Chiba, and Sakai to issue CBO and CLO backed by loans to, and privately placed bonds from, SMEs.
12. A special report on RMBS in Japan from Fitch Ratings entitled "Japanese Nonconforming Mortgage Loan Spotlight," 27 April 2007.
13. A special report on international structured finance from Moody's entitled US Subprime Crisis: Impact - or Lack of - on Japanese Structured Finance Market, September 2007.
14. Default analysis of the CBO All Japan is based on the SME credit model developed jointly by the Risk Data Bank of Japan and S&P, a model used by the major banks as well as the regional banks.
15. *Shokenka Shijou Fooramu - Houkokusho* (Securitization Forum Report), Bank of Japan's Financial Markets Department, 22 April 2004 (in Japanese).
16. To ensure food safety, the Ministry of Agriculture, Forestry and Fisheries had instituted a "traceability mechanism" to track food and information on that food at every level of the food chain, including production, pre-processing, processing, distribution, and sales. The debate over how to ensure traceability in the sale of securitized products was based on that mechanism.
17. Hideaki Hirata, *Chuushou Kigyuu Muke Sukoaringu Kashidashi no Shippai ni Manabu* (Learning from mistakes in scoring-based lending to SMEs), Kinzai Institute for Financial Affairs, July 2008 (in Japanese).
18. Even before the *Administrative Rules* of 2005 were enacted, two packages of nonperforming loans were securitized: a package belonging to Huarong Asset Management Company (an affiliate of Industrial and Commercial Bank of China (ICBC) in 2003, and a package belonging to the Ningbo branch of ICBC in 2004.
19. Article 15 of the *Trust Law* states that "The trust shall be differentiated from other property that is not put under trust by the settler." Similarly, Article 16 states that "The trust property shall be segregated from the property owned by the trustee (hereinafter referred to as his "own property", in short), and may not [be] included in, or made part of his own property of the trustee. Where the trustee dies or the trustee as a body corporate is dissolved, removed or is declared bankrupt according to the law, and the trusteeship is thus terminated, the trust property shall not be deemed his legacy or liquidation property."
20. Financial subsidiaries of nonfinancial companies.
21. There are two types: urban and rural.

22. However, insurance companies have been calling for the rules to be relaxed to allow them to invest in securitized products.
23. The designated clearing system for the interbank bond market.
24. Namely, <http://www.chinamoney.com.cn> and <http://www.chinabond.com.cn>.
25. Not on a trust basis.
26. These are one of the categories of blue chip securities companies to emerge from the CSRC's reorganization of China's securities industry. They also receive the most operational and financial support. The next-highest category is "standard securities company." As of 16 January 2007, there were 19 pilot and 30 standard securities companies. For further details, see Nomura Institute of Capital Markets Research, *Chuugoku Shouken Shijou Handobukku 2007* (Nomura Institute of Capital Markets Research Handbook of Chinese Securities Markets 2007).
27. The designated clearing system for the stock exchange market.
28. Comments of the Deputy Director of the People's Bank of China's Financial Market Division, Shen Bingxi, at the China Securitization 2007 symposium held in Beijing in March 2007.
29. *Nihon Keizai Shimbun*, 2 December 2007.