The Securitization of the Real Estate Market in Korea:

Future Impacts to the Korean Real Estate Market

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Abstract

The real estate policy of the Korean government had until recently only focused on restraining speculative investment in the real estate market, which was the prevalent consensus in the country in the 1970's and the 1980's. These strict measures in the real estate market have been a serious obstacle to the government, in their active efforts to gain foreign capital in order to overcome the economic crisis since the International Monetary Fund $55 billion bailout to the Korean government. During the Asian crisis, both large institutional companies and small businesses went bankrupt due to financial distress caused by over-leverage. Consequently, the government has changed the paradigm of real estate policies on the basis of a free market principle, and has completely opened the real estate market to foreign investors in order to solve some of the current financial problems and to provide a momentum to redevelop the Korean economy. As part of the ongoing effort to stabilize the Korea economy, securitization in the real estate market is inevitable.

In this thesis, the securitization efforts undertaken by the government will be examined to infer their future impacts on the real estate market of Korea. With the first issuance of asset backed-securities (ABS) by the Korea Asset Management Corporation (KAMCO), a resolution trust formed by the Korean government to liquidate non-performing loans, the outlook of the Korean economy is positive yet with a degree of uncertainty. In addition, the introduction of mortgage-backed securities (MBS) and real estate investment trusts (REITs) could have a profound effect on the Korean financial markets.

Thesis Supervisor: Blake Eagle

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INTRODUCTION

Real estate securitization had never been a pressing issue in the mind of the Korean government. In the past, the Korean real estate market demonstrated a constant growth despite anti-speculative regulations imposed by the government. Households and companies in Korea often invested in real estate as a way to accumulate wealth, hoping for a sharp appreciation in real estate prices. As demand for housing, office space, and industrial land remained strong as a result of the Korean economy's solid performance, there was not a need to securitize real estate.

However, after the Asian financial crisis caused a huge devaluation of the won (Korea's monetary unit), real estate prices fell drastically in all sectors. An imbalance between demand and supply immediately surfaced in the real estate market as companies began to dispose of their real estate holdings and households refrained from buying real estate. In an effort not only to stimulate the real estate market, but also the overall Korean economy, the Korean government introduced asset-backed securities to liquidate non-performing loans which include real estate mortgages, and distressed commercial real estate properties. To further improve the stagnant real estate market, the Korean government has implemented policies to securitize real estate through vehicles such as mortgage-backed securities and real estate investment trusts. It is hoped that through these measures the Korean real estate market will recover to its prior level, and the Korean financial markets will again become a focus for international investors.

Note: All exhibits are included at the end of this thesis.

CHAPTER 1: OVERVIEW OF ECONOMIC ENVIRONMENT IN SOUTH KOREA

A. Overview of the Asian Financial Crisis

1. Weakness of Asian Economies

Like a vicious infective virus, the Asian financial crisis swept through Thailand, the Philippines, Indonesia, South Korea, and Hong Kong during the summer of 1997, leaving these countries with devastated economic conditions from which it will take years to recover. Looking back into history, implementation of the currency-pegging system by a majority of these Asian countries was one of the most critical factors which led to the downfall of their economies. The original intention of these governments was to establish a stable currency exchange rate with an economic powerhouse, the United States for an example, to retain each country's overall competitiveness in the global economy. As economic conditions often fluctuate between countries, the weakness of the pegging system was exposed. During an overheated economy, the economic powerhouse requires fiscal or monetary policies to ameliorate the threat of inflation, while the countries which implemented the pegging system called for measures to stimulate their deteriorated economic conditions.

In addition to the currency pegging system dilemma, the majority of these Asian countries also possess internal economic weaknesses in areas of government debt, short-term corporate foreign debt, trade deficits, thin foreign reserves, non-performing domestic loans, a corrupted political-business system, and a centralized economic development strategy. Aggregated effects of the above mentioned weaknesses thus created the inevitable financial crisis experienced by Thailand, the Philippines, Indonesia, Hong Kong, and South Korea.

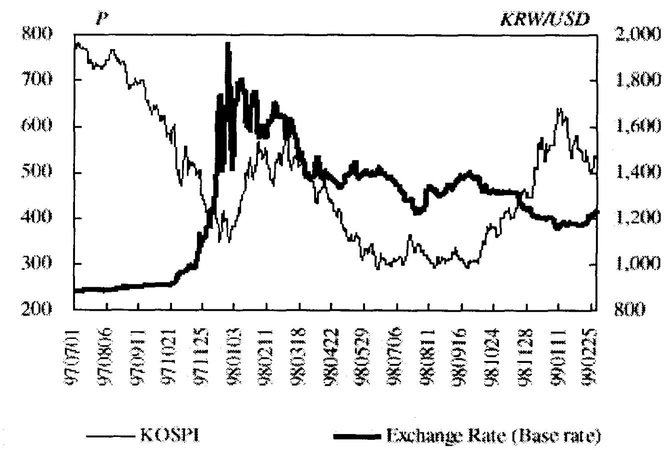
2. Factors Which Contributed to the South Korea Currency Crisis

South Korea also suffered from the currency crisis as experienced by other Asian countries during the Asian financial crisis. In a bank-centered financial system, the Korean economy relied heavily on the banking system to channel savings to industrial investments. Although Korean banks operated in the private sector, the national government had significant influence on the banking industry.

Like many other Asian countries, South Korea focused on an export intensive fiscal policy after World War II which allowed rapid expansion of family owned businesses, so called chaebols, through favored borrowing policies supported by the government. In order to continue their rapid growth, chaebols relied extensively on short-term domestic and foreign debt. While foreign investors could not invest directly in chaebols as a result of government policies wanting to keep Korean businesses in Korean hands, foreign investments were channeled through banks and financial institutions instead of the stock market. Prior to the economic crisis, the median debt-to-equity ratio of the top twenty Korean chaebols stood at 420%[1]. Non-performing loan balances stood at over 1 billion won per bank (Exhibit 1).

Figure 1:

Movement of Stock Prices and the Exchange Rate Before and After the Currency Crisis



Source: Samsung Economic Research Institute

During the crisis, foreign financial institutions in Korea started calling in their loans, afraid of financial distress in Korean firms. The abrupt outflow of foreign funds immediately created a devaluation pressure on the Korean won. In order to defend the won, the Korean government almost completely depleted its foreign reserves by the end of November 1998. On November 21, the Korean government had no choice but to request the IMF's assistance to avoid a potential default on its obligations.

Similar to many Asian countries which suffered from the Asian financial crisis, the Korean economy possessed five devastating factors which led to its currency devaluation spiral:

1. Huge trade deficits.
2. Thin foreign reserves.
3. Large amounts of non-performing domestic loans.
4. High government and corporate short-term foreign debt
5. A corrupted political-business system

[1] Korean Economic Trend, LG Economic Research Center, January 1998.

Once the Korean won began to devalue, these economic weaknesses aggregated the depreciation effect of the won from 900 won to a dollar to almost 2,000 won to a dollar within a short period of 3 months.

B. International Monetary Fund (IMF) Intervention

After frenzied negotiations, the IMF assisted Korea with a US$55 billion bailout loan package. As a condition for IMF bailout loans, receiving countries must adhere to the economic programs prescribed by the IMF. Michael Camdessus, IMF managing director, stated: "The program comprises strengthened fiscal and monetary policies, far-reaching financial reforms and further liberalization of trade and capital flows, as well as improvement in the structure and governance of Korean corporations." The IMF's program for Korea was heavily influenced by the conclusion that it was time for Korea to significantly restructure its financial and industrial sectors.

After the IMF intervention, the Korean government began to aggressively pursue financial sector reforms and a total restructuring of the chaebols. The Financial Supervisory Commission (FSC) formed on April 1, 1998 was to devote all of its efforts to overseeing bank reorganization and corporate restructuring. Simultaneously, the newly elected Korean President Kim Dae Joung announced an open-door policy to foreign investors in an effort to reestablish currency credibility and attract future foreign capital into Korea. Many legislative changes in the real estate sector also welcomed foreign ownership and investment.

C. New Financial Trends in Korea Since Currency Crisis

1. Increased Risk and Priority on Safety

Since the currency crisis, risks in the financial markets have increased. Financial indicators have displayed unstable movements, while the default rate of company notes has increased to a record high. Ailing financial institutions have been shut down, breaking the myth that banks never fail. Accordingly, market participants have begun to focus on safety or low counter-party risk rather than immediate returns when making decisions on investment.

To avoid risk, financial institutions are operating mainly with large and financially healthy companies. At the same time, money is being concentrated in healthy financial institutions or time deposits of commercial banks, which are protected by deposit insurance. Companies are trying to construct efficient control systems for possible risks as well as lessen their debt equity ratio. Companies that often conduct foreign exchange transactions are developing their own foreign exchange forecast system or strengthening the management of foreign exchange risk with the help of outside experts. Also, individuals are showing a tendency to divide large deposits into several smaller deposits to disperse the risk since there is a limit for the amount covered by deposit insurance. Money is moving from undercapitalized banks to strong ones. In the end, this will make rich banks richer and poor banks poorer, leading to a natural form of restructuring, 'survival of the fittest.'

2. Liquidity Consideration

Liquidity is considered more important as evidenced by the shortened horizon in money management by companies and individuals. This trend has resulted from severe liquidity shortages experienced by both companies and individuals as the result of the currency crisis. Money supply in the corporate sector declined from 21 trillion won ($17.5 billion) in the third quarter of 1997 to 9 trillion won ($7.5 billion) during the same period of 1998. On the other hand, excess funds held by individuals increased from 12 trillion won to 19 trillion. This is due in part to individuals' repayment of their debt, despite income reductions. Foreign currency deposits made by residents, mostly companies, in domestic banks increased from $5 billion to $10 billion.

Liquidity is also a main factor considered by financial institutions. Recently, mortgage-backed securities were introduced for commercial banks, which can now effectively increase liquidity by securitizing their fixed assets and raising funds. Some financial institutions, such as finance companies, have successfully securitized their loan portfolios and raised funds.

This trend is expected to continue as long as instability of the financial markets continues. In addition, since foreign exchange liquidity is now an important consideration for the nation as a whole to prevent another currency crisis, the government will exercise more control over the usable foreign exchange reserves.

3. Accelerated Financial Restructuring

Restructuring in the financial sector, spurred by the currency crisis, will continue and expand in 1999. Much of the non-performing loans of financial institutions, which amount to 100 trillion won ($83.3 billion), will be written off, and unhealthy banks will be merged or taken over. Acquisitions of domestic banks by foreign institutions, an occurrence which has not been observed before in the Korean financial industry, will be a usual event. For example, GE Capital from the US is exploring the possibility of acquiring the Cheil Bank, one of the largest commercial bank in Korea.

Last year, the government led the effort in the restructuring process. As a result, the government came into possession of a large amount of bank shares in the process of helping banks out of financial trouble. As government shares are sold to domestic and foreign capital, the ownership structure of banks will experience reform. This will accompany a new system in which private companies such as conglomerates take over managerial control of banks, which had been banned by law.

This trend will lead to changes in the management style of financial institutions. Growth-oriented management will be replaced by profit-oriented management, and the criteria of credit evaluation will be raised. Competition among financial institutions will be more severe than ever, and institutions will make more efforts to achieve and maintain competitiveness.

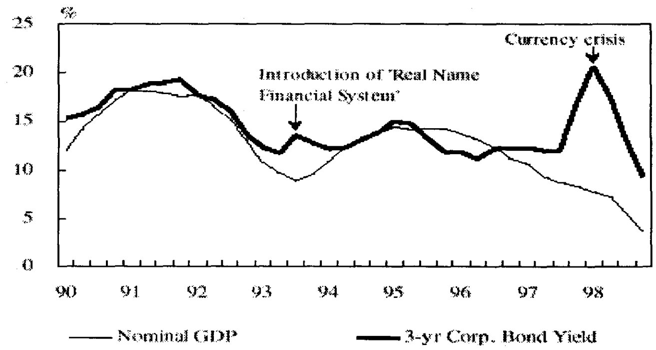
4. The Era of Low Interest Rates

The era of low interest rates has come about. Interest rates have fallen to one-digit levels for the first time in 20 years (8% as of October 1998). This low rate will remain for a period of time because the interest is determined by the economic growth rate, and Korea will likely experience low growth as a result of the massive restructuring in both the financial and corporate sectors. Indeed, as shown in the figure below, the domestic interest rate (real interest at 6.4% as of April 1999, CPI at 2.5%) has been almost consistent, except on a few occasions, with the nominal GDP growth rate, which is the real GDP plus the consumer price index increase.

Due to low interest rates and resulting lower profitability, financial institutions are trying to increase their size through mergers, specializing in specific businesses, and diversifying the products they offer. Surviving commercial banks are merging together creating larger banks to reduce their operation costs. Big securities companies are focusing more and more on underwriting businesses through their capital power. Insurance companies endeavor to develop new products to cater to the tastes of a larger spectrum of customers. At the same time, high-risk, high-return products, such as mutual funds invested in stocks, have increased to correspond to the desires of individual investors who are not satisfied with the low interest on their bank deposits and want a high return despite the higher risk.

Figure 2:

Trend of the Yields on 3-yr Corp. Bond and Nominal GDP



Note: Nominal GDP growth is the moving average of the past 4 quarters.

Source: Hyundai Economic Research Center

5. Financial Practices Based on Credibility

Since the currency crisis, financial institutions have found that the creditworthiness of their counter-parties is very important since they cannot rely on collateral, mostly real estate, whose prices have plummeted.

Financial institutions are making efforts to enhance their capability to evaluate credit. Some banks are developing their own credit scoring system while also consulting the existing domestic credit rating agencies. At the same time, credit-screening conditions of financial institutions have been tightened. Banks and credit card companies are also sharing information about the credit of individuals to prevent, in advance, deals with people with bad credit. This new trend contributed to the change in the notion of companies and individuals concerning 'credit'. In the past, individual borrowers did not have to pay much attention in maintaining their creditworthiness. Companies needed only to secure enough real estate to use as collateral. Individuals did not care so much about their own credit status since the penalty for bad credit was not that severe or effectively enforced. Now borrowers have to establish a good history in order to obtain any types of loan approval. In a tightened credit evaluation environment, investors are less likely to borrow for speculative investment purposes.

D. Foreign Capital Movement in Korea

More and more foreigners are looking positively toward the recovery of the Korean economy as displayed on 117 occasions in November 1998 by foreign direct investment into Korea, increasing the total amount of foreign investments to $1.378 billion. This is the second largest monthly increase since $1.565 billion was recorded in April 1997. The increase of foreign investment will likely continue with the rapidly changing view of foreign credit-rating agencies and investors toward Korea. Since the beginning of 1998, foreign investment through mergers and acquisitions has dramatically increased. Through November, the reported amount of foreign investment through the acquisition of existing shares was $1.11 billion on 207 occasions[2].

E. Recent International Investment Rating of Korea

Since IMF intervention, the Korean government has implemented austere policies to reinforce restructuring and increase transparency of corporations. These movements have been viewed as positive signals by international rating agencies that the overall investing environment in Korea has been steadily gaining credibility after

Figure 3:

Changes in Korea's Credit Ratings from International Credit Rating Agencies

	Moody's	S&P	Fitch IBCA
1996	A1	AA-	AA-
Oct-97		A+ (24th)	
Nov-97	A3 (28th)	A- (25th)	A+ (18th) A (26th)
Dec-97	Baa2 (11th) Ba1 Negative (21st)	BBB- (11st) B+ (23rd)	BBB- (11th) B- (23rd)
Feb-98		BB+ Stable (17th)	BB+ (2nd)
Dec-98	Ba1 Positive (19th)		BB+ Positive (22nd)
Jan-99		BB+ Positive (4th) BBB- (25th)	BBB- (19th)

Source: Samsung Economic Research Institutue

[2] Standard & Poor's Sovereign Rating Service, March 1999.

the Asian financial crisis. Also, quarterly reviews held by the IMF to evaluate Korea's macroeconomic policies will reduce the frequency to a semiannual review, giving the Korean government more autonomy in establishing and executing economic policies. As a result, international rating agencies have recently raised their investment-grade rating in Korea based on the recent movement of company restructurings and efforts to increase corporate transparency as shown in Figure 3.

F. Current Real Estate Investing Environment in Korea

Prior to the Asian financial crisis, Korea's real estate policy focused on restraining speculative investments through measures such as the Residential Land Holding Ceiling System[3], the Restriction on Lotting-Out Price of Apartments[4], and other similar anti-speculative measures. Since the crisis caused a huge depreciation in both land and building prices, the Korean government decided to implement an all-out open door policy of real estate business in order to stimulate the stagnant real estate market. Such policies included areas of building rental services, lotting-out/sale services in buildings, and land lease and land development businesses which were not allowed to be operated by foreigners in the past. In order to further attract foreign investment into the Korean real estate market, legislation of the Act Relating to Acquisition of Land by Foreigners and Control regarding foreign real estate investment were abolished or amended to induce foreign investment. Some of the most important legislative changes of the Act are compared in Exhibit 3 & 4.

In addition to the legislative reform mentioned above, the Korean government further relaxed restrictions on real estate transaction permit requirements, a drastic reduction of development, and a lowered land acquisition tax and property holding tax.

These dramatic changes in real estate legislation by the Korean government clearly demonstrate its prudent desire to restructure the overall real estate investing environment to foreign investors. It is

[3] Foreigners are allowed to acquire under 200 pyung (7,143 SF) of land for residence and under 50 pyung (1,786 SF) of land for commercial uses.
[4] Apartments can not be lot out and be sold as separate units after construction.

believed these changes will rejuvenate Korea's real estate market to the price level prior to the Asian financial crisis.

CHAPTER 2: TRENDS AND PROSPECTS OF THE KOREAN REAL ESTATE MARKET SINCE THE CURRENCY CRISIS

A. Overview of the Korean Real Estate Market

The South Korean economy has been one of the most rapidly growing economies in the world. From 1960 to 1990, South Korea's annual GNP grew at an average rate of over 9 percent in real terms. Coupled with a population of over 44 million people supported by a small landmass, demand for both commercial and residential real estate has been extraordinarily strong. As the South Korean economy has expanded, the fastest way to accumulate substantial wealth has been buying land. During the period between 1963 and 1989, the average land price for the 12 largest cities in South Korea increased 14.5% annually. The continuous increase in land value resulted in South Koreans' perception that land prices would never fall. This perception thus triggered a vicious cycle of land speculation.

In 1991, the government introduced heavy tax measures to discourage land speculation. Some of these tax measures include an acquisition tax and a registration tax on land purchases. For the first time, land values decreased 1.3 % in 1992 and 7.4 % in 1993. However, as South Korea's economy continuously demonstrated solid performance in the 90s with a real GDP growth of 7.9 % in 1996, land prices have rebounded in recent years.

The following two sections will provide an overview of the residential and the commercial market in South Korea. Emphasis will be on the real estate markets in Seoul, the capital of Korea, since this region represents approximately 60 % of the South Korean real estate market.[5]

1. The Residential Market

The stock of space of residential property in South Korea accounts for a total of over 6 billion square feet at the end of 1993. The household ownership rate in Korea in 1992 was 76 % for the nation, 69 % for major cities and 50 % for Seoul.[6] Since 1988, the housing market in Seoul has increased its housing stock by an annual average rate of 20.5 %.

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[5] Thomas Nam, The Feasibility of Foreign Investment in South Korean Real Estate, p 45.
[6] Housing Economic Statistical Year Book, Korea Housing Bank, Seoul, 1993.

The housing markets in Seoul are categorized as small apartments, medium apartments, and luxury housing and condominiums. The market segment distributions of these categories are 51%, 21% and 28%, respectively. Small apartment units measuring under 900 square feet are popular for first time home buyers, with an average selling price of $242 per square foot. Prices for medium apartments, units of 900 to 1,600 square feet, averaged $189 per square foot in 1995. As for luxury housing and condominiums in Seoul, units have been sold at $342 per square foot.

After the Asian financial crisis, an imbalance has evolved between demand and supply of residential housing in Seoul. As prices for smaller apartments increased due to popular demand, supply remained constrained due to lack of interest from housing developers. For medium and luxury apartments, demand has halted as households become more cautious on housing consumption amid unstable economic conditions.

In Korea, the purchase of homes has been limited by the absence of an adequate housing finance system. The general conditions on loans are usually unattractive. Typically, the maximum loan amount covers only a third of the apartment price with maturities of 3-5 years for first time buyers. The short maturity has resulted in difficulty for housing consumers to repay the loan. As a result of the lack of housing finance, a Chonse system has become popular with most household renters. In a Chonse system, the lessee pays the lessor a deposit (the Chonse) representing 40% to 60% of the house market value. At the end of the lease, the deposit is fully refunded without interest. The lost interest is then the imputed rent.

2. The Commercial Market

The commercial real estate market in Korea is composed mainly of retail, office, industrial and hotel spaces. Focus will be given to the office and the retail sectors since industrial properties in Korea are generally government regulated, funded and developed, which leaves no room for price speculation. In Seoul, industrial facilities are located along city borders to limit industrial activities in downtown areas. In the hotel sector of Seoul, 17,500 rooms are available which represents 40% of total hotel room supply in Korea. Average occupancy rates in Seoul have held firm at 72 % since 1988. Of Seoul's 102 hotels, about one-fourth are considered four- or five- star. The majority of the city's four- and five- star hotels are concentrated in the CBDs of Seoul.

Majority of the office space in Seoul is concentrated in five CBDs with a total of approximately 156 million square feet. About one-third of the total office space was constructed prior to 1979. In 1996, market prices for developed properties were estimated between $255 and $292 per square foot; annual office lease rates were in the average of $18.85 per square foot. During 1996, vacancy rates were at single numbers in all major markets.

In South Korea, typical lease terms are signed for a one-to-two year term with the option of renewal. Rent escalation clauses in the range of 10-12 % subject to market conditions are contracted in the lease. Free rent and tenant improvement allowances are generally not available, but recent over-supply of office space has induced owners to offer free rent. Because supply continues to increase as a result of restructuring companies disposing of their excess real estate, the office markets in Korea are believed to remain stagnant for a period of time.

As of 1995, Seoul contained approximately 18.3 million square feet of retail space. Of this amount, approximately 4.2 million square feet are department stores ranging from 68,000 to 69,000 square feet of total floor space. Among recent developments in the retail sector has been the expansion of wholesaling and discount distribution centers. The new development represents the shift away from the concentration of retail stores in the CBS to multi-modal retail districts.

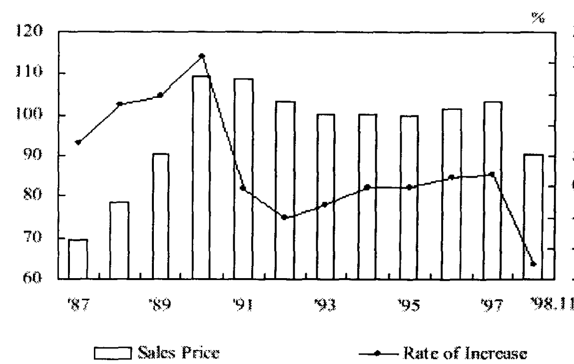
B. Recent Movement of Real Estate Prices in South Korea

Korean real estate prices have traditionally demonstrated a high rate of appreciation. During the 1980s, the price of land soared on average 14.5% per year, and household prices rose 11.6% annually. But prices began to stabilize after 1989 when the government endorsed the concept of public land ownership, and suppressed speculative activities in the real estate market. In 1997, land prices rose only 3.2%, and house prices increased by 2.0%[7].

After the currency crisis, the real estate market experienced a sharp price depreciation. The price of land decreased by 13.4%, houses by 12.7%, respectively, within a period of four months (February 1998 to May 1998). The number of real estate transactions also decreased dramatically. This decrease in real estate prices and transactions occurred because demand fell sharply due to the economic recession while supply increased due to the massive restructuring of companies. To reduce their heavy debt burden, companies sold off their unused real estate, and households delayed purchase of new houses due to unstable employment and high interest rates.

Figure 4:

Changes in House Prices



Note: 1995 = 100
Source: Housing and Commercial Bank

In spite of the government's aggressive policies to boost the Korean economy, the real estate market remains stagnant. Although the overall real estate market recovered slightly after the Korean won rebounded, it is too early to forecast the recovery of the real estate market considering that the unemployment rate is increasing and the corporate and banking sectors need to undergo restructuring.

However, the housing market has recently begun to pick up as expectations of rising prices are increasing and interest rates are stabilizing at a low level. Some analysts are forecasting that by the year 2000 house prices will recover to the level of late 1997. Still, the recovery of the land market will be delayed until companies can be relieved from the burden of restructuring and the credit crunch.

[7] Real Estate Trend & Prospect, Korea Research Institute for Human Settlements, April 1999.

C. Non-Performing Loan Balances in Korea (Exhibit 2)

According to the Financial Supervisory Services (FSS), the executive arm of the Financial Supervisory Commission, commercial banks' non-performing loans rose from 21.3 trillion won ($17.75 billion) on December 31, 1997 to 22.2 trillion won ($18.5 billion) on December 31, 1998, up by 4.3%. However, this figure actually increased by 16.7 trillion won ($13.92 billion) in 1998 when the government injected 13 trillion won ($10.83 billion) into the banking sector to lower banks' debt-to-equity ratio and permitted write-offs of 2.8 trillion won ($2.33 billion) worth of non-performing loans. In particular, Housing and Commercial Bank's non-performing loans reported the largest increase among commercial banks. The amount of non-performing loans is largest for Korea First Bank and Seoul Bank, both of which were recently sold to foreigners.

D. Observed Changes in Real Estate Policies and Market Conditions

1. Deregulation and Recovery of Market Mechanism

To revitalize the depressed real estate market, the government began to relax regulations concerning real estate transactions. At the same time, the government announced a series of policies to prevent sharp falls in prices and massive bankruptcies of construction companies. While the government's real estate market policy before the currency crisis was intended to restrain speculation by expanding supply and suppressing demand, the policy after the crisis changed to one which stimulates real estate investment.

As for the land market, regulations on transaction documentation and approval were eased and heavy taxation on land purchases over certain limits by individuals were repealed (Exhibit 3). At the same time, by opening the real estate market to foreigners and abolishing regulations that discriminate against foreign companies, the government intends to attract more foreign capital into the real estate market to avoid another currency crisis (Exhibit 4).

2. Change from a Seller's Market to a Buyer's Market

Demand will continue to be stagnant due to the decrease in household incomes and increasing company restructurings. Supply will continue to increase due to governmental deregulation measures such as the conversion of farmland to real estate development. This excess supply will change the characteristics of the market from a seller's market to a buyer's market as seen in the early 1990s. Real estate prices may polarize according to the value of their locations, which will be determined by buyers.

3. Development of New Real Estate 'Products'

Real estate, which traditionally only sold as single pieces of properties, will be developed into 'products' that have diverse features. Demand for functional housing will increase as single-person households and new business patterns develop. Furthermore, as the demand for multifunctional houses increases, the construction of intelligent buildings will increase and existing single-function buildings will undergo renovation. At the same time, opening the real estate market to foreigners will lead to the introduction of advanced techniques of real estate management, which will result in the determination of office building prices according to future cash flows and location.

In addition, the government plans to introduce mortgage-backed securities (MBS) and real estate investment trusts (REITs) by the end of 1999 in order to stimulate the depressed real estate market. Recent efforts by the Korean government to promote these two financial products will be discussed in detail in Chapters 4 & 5. It is expected that the development of the REIT and the MBS markets in Korea will take years to take root because most Koreans treat real estate more as a long-term investment rather than as a vehicle to earn dividends and capital gains. Furthermore, the current long-term interest rate of 8% is still too high for these securities to generate a yield large enough to attract investors. The complexity of related tax laws could also act as an obstacle for the introduction of these new financial products.

4. Change in Leasing Method from 'Chonse' to Monthly Payment

The development of house financing will lead to changes in the way people acquire houses. The introduction of mortgage loans will enable people to buy their own house with less money than under the traditional 'Chonse' system, the most common practice of housing rental by which a tenant rents a house by depositing a lump sum of money with the homeowner. Under the mortgage system, a consumer will be able to buy a house with a down payment as low as only 20% of the total price of the house by taking advantage of a long-term installment financing plan.

Among lower income groups, a monthly payment system with a small security deposit instead of 'Chonse,' will most likely become popular. For example, people will be able to easily lease a house if they have a three-month down payment and the capacity to pay the monthly rent. Due to the falling of interest rates, the monthly payment system which guarantees stable rent income, will become more and more attractive than the Chonse system even for landlords[8].

Meanwhile, leasing will be preferred to ownership in regards to office buildings and factory spaces. Since an increase in land prices is not expected, real estate ownership will become less and less attractive. As for land in industrial complexes, since long-term leases of more than 50 years will be commonplace, there will be no incentive for companies to own the land for their factories.

E. Conclusion

The real estate market of South Korea is experiencing unprecedented changes after the turmoil of the Asian financial crisis. After years of stable appreciation of real estate prices, the long held myth that land will never lose value suddenly shattered. With the ongoing financial structural reform enforced by the government, many Korean companies are forced to liquidate their real estate holdings at a discount in order to reduce their corporate debt level. These actions thus led to a greater depressed real estate market in Korea.

In order to liquidate non-performing assets on a fast track, the Korean government re-established one of its special finance companies under its Ministry of Finance to acquire non-performing assets from financially distressed companies. These assets include real estate, corporate loans, promissory notes, and credit card loans which are in default. To expedite the liquidation process, the Korean government

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[8] Kim/Park/Hur, Paradigm Shift in the Korean Real Estate Market, Samsung Economic Research Institute, March 1999.

adopted the usage of asset-backed securities to facilitate the disposition process of these non-performing assets.

To better understand the asset-backed security process currently being undertaken in Korea, and how such a process will affect the real estate industry in Korea, it is imperative to understand the asset-backed securities market of the U.S. which will be discussed in the next chapter.

CHAPTER 3: ASSET SECURITIZATION MARKETS IN THE UNITED STATES

A. An Introduction to the Asset-Backed Securities Market in the US

The Asset-Backed Securities (ABS) market of the United States is a $180-billion-dollar business. It is comprised of a variety of innovative financial products. These products are securitization of real estate properties, consumer credit, business loans, trade receivables, and mortgages, based on cash flows generated by these assets. Investors receive investment returns in the form of dividends, monthly interest, and principle paybacks.

Development of asset-backed securities in the United States has advanced further than that of any other country. This advancement was fostered by the separation of the banking and the securities business where different types of financial institutions (banks, thrifts, securities houses, institutional investors) often compete among themselves in devising new products. Replacement of traditional on-balance-sheet financing by depository institutions with off-balance-sheet financing in the securities market also promoted the growth of the ABS market in the US. With the introduction of asset backed securities, the disintermediation of bank mortgage financing in the housing market has never been so apparent. Specifically, the reduction of thrift institution financing can be clearly seen in Exhibit 5 which shows the long-term evolution of residential mortgage finance in the United States. As thrift institutions lost ground in the residential mortgage finance market, strong demand from institutional investors provided an alternative channel for housing finance. The rising needs for a secondary mortgage market played a pivotal role in the overall development of the ABS market in the United States.

The purpose of this chapter is to introduce the ABS market of the US, with a special focus on real estate securitization through the evolution of a secondary mortgage market. In addition, a brief discussion of Real Estate Investment Trusts (REITs) will be included to demonstrate an alternative form of real estate securitization. It is hoped that through the understanding of the real estate securitization markets in the US, insights can be gained by comparing efforts undertaken by the Korean government to securitize real estate and to promote an ABS market in Korea.

B. Rise of the Secondary Mortgage Market: Mortgage - Backed Securities (MBS)

1. Development of the Secondary Residential Mortgage Market

Many factors contributed to the evolution of the secondary home mortgage market in the United States. The need by mortgage originators to constantly replenish funds for future lending was the primary reason. There also existed a need to enhance the flow of funds between geographically separated financial institutions. Secondary mortgage markets allow loan originators in one area where the demand for mortgage financing exceeds depositories to sell mortgages to intermediaries in regions with a surplus of savings. As mentioned in the previous section, the separation between banking and securities businesses also enhanced the development of a secondary mortgage market. With the introduction of off-balance-sheet financing, financial intermediaries often compete with one another to devise new products. One of the many innovative financial products was securitizing mortgage loans and selling them into a secondary market. In addition, the federal government encourages home ownership. To provide support for a strong system of housing finance, creating a viable secondary mortgage market also contributed to promoting home ownership.

The federal government played an important role in developing the secondary market during the 1970s. Through housing programs initiated by the Federal Housing Administration (FHA) and the Veterans Administration (VA), the government protected mortgage investors from losses by providing default insurance or loan guarantees. One significant result of these programs was the development of a standardized loan underwriting system. It encouraged mortgage investors to purchase mortgage loans with ease of mind because loans were underwritten to government standards. With default insurance and loan guarantees, the government transformed mortgages into investments similar to those of a fixed-income bond.

Securitization began in the early 1970s when the Government National Mortgage Association (GNMA) and the Federal Home Loan Mortgage Corporation (FHLMC), agencies of the Federal Government, commenced programs to securitize residential mortgages originated by banks, thrifts, or mortgage companies. A third government agency, the Federal National Mortgage Association (FNMA), which was charted by Congress in 1938 to promote a secondary mortgage market, also began securitizing mortgages in the early 1980s. Although the primary duties of these three federal agencies were to enhance the development of a secondary mortgage market, the roles played by these agencies were somewhat different.

The initial establishment of the Federal National Mortgage Association (FNMA) was to promote a secondary mortgage market for government-insured residential mortgages. In 1954, Congress rechartered FNMA, assigning it three distinct and separate functions: (1) enhancement of secondary market operations in federally insured and guaranteed mortgages, (2) management of direct loans previously made and, where necessary, liquidation of properties and mortgages acquired by default, and (3) management of special assistance programs, including support for subsidized mortgage loan programs.[9] The primary role of FNMA was to raise capital by issuing debt when necessary to purchase mortgages, thereby replenishing capital to mortgage originators during periods of high interest rates to ensure a liquid secondary mortgage market. Over the years, Congress transformed FNMA into a privately owned and managed organization by requiring mortgage sellers exchange mortgages for common stocks of FNMA as a condition of sale, which provided additional capital for operations and resulted in widespread ownership of FNMA. As of today, the Federal National Mortgage Association, commonly known as "Fannie Mae", is a government-sponsored corporation owned solely by private investors.

The Government National Mortgage Association, commonly know as "Ginnie Mae", was established under the Housing and Urban Development Act of 1968. It was organized to perform three principal activities: (1) management and liquidation of mortgages previous acquired by FNMA; (2) special assistance lending in support of certain federal subsidized housing programs; and (3) provision of a guarantee for FHA-VA mortgage pools, which would provide a guarantee for mortgage-backed securities.[10] By empowering GNMA to ensure the timely payment of principal and interest on securities

[9] Bruedggeman/Fisher, Real Estate Finance and Investments, the McGraw-Hill Companies, Inc., 1997, p.586.
[10] Bruedggeman/Fisher, p.588.

backed or secured by pools of mortgages insured by the FHA and the VA, investors of mortgage securities thus avoid the problem of unpredictable cash flow and a reduction in investment yields. The mortgage guarantee program by GNMA was one of the most significant factors which contributed to the development of the secondary mortgage market.

To further promote a more liquid, efficient secondary mortgage market, in 1970 Congress established the Federal Home Loan Mortgage Corporation (FHLMC), commonly known as "Freddie Mac", for the purpose of buying and reselling of conventional residential mortgages. This gesture was the result of interest rate volatility during the mid- and late- 1970s, when thrifts were severely hampered by capital liquidity problems and a huge reduction in the flow of funds to the conventional mortgage markets. Today, Freddie Mac remains as one of the largest purchasers of conventional mortgages in the secondary market.

With the involvement of FNMA, GNMA, and FHLMC, the residential secondary mortgage market has become one of the largest asset-backed securities markets in the US. It is estimated that more than half of housing mortgages have been securitized and sold into the secondary market.

2. Basic Structure of Mortgage-Backed Securities

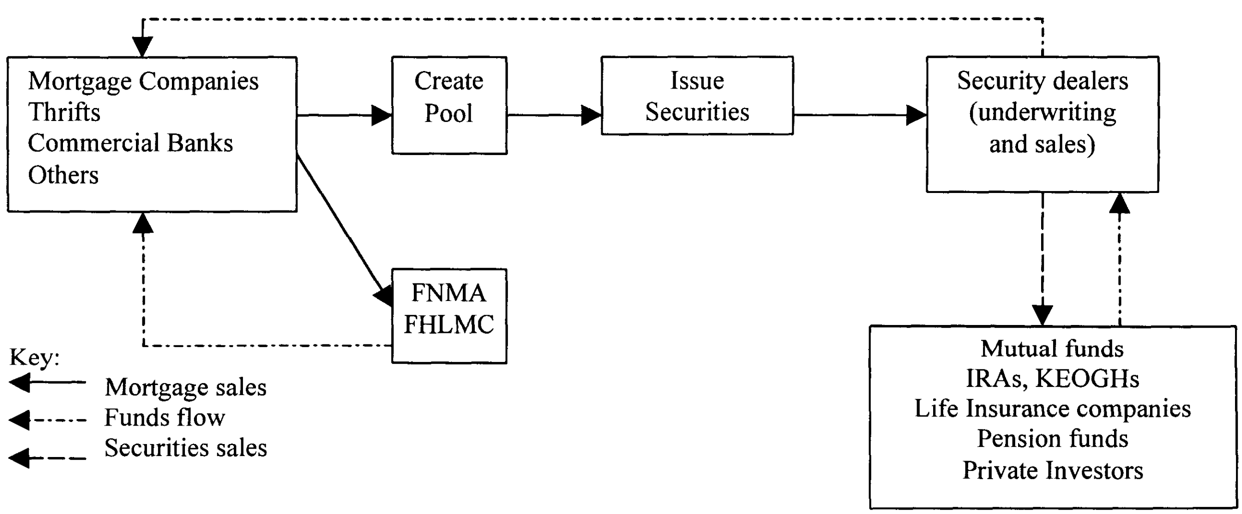
There are many types of mortgage-related securities that have been developed in recent years. With the intention to reach a broader investor base, mortgage originators, investment bankers, and the three government agencies (FNMA, FHLMC, and GNMA), continue to devise and innovate new securities products in the secondary mortgage market. Four of the most common types of mortgage-backed securities currently on the market are: (1) mortgage-backed bonds (MBBs); (2) mortgage pass-through securities (MPTs); (3) mortgage pay-through bonds (MPTBs); and (4) collaterized mortgage obligations (CMOs). Although the names of these securities vary, the principal structure of these mortgage-backed securities is very similar.

As the loan originators complete the underwriting process of residential mortgages, the originators have a choice of selling the loans directly to Fannie Mae, Freddie Mac, or other private entities, or they can establish a pool of mortgages and issue various types of mortgage securities themselves. Often if the mortgages are sold to a third party, i.e. commercial banks, investment banks, or government agencies, these mortgages will be pooled together for future issuance of mortgage securities as well. In an issuance of mortgage securities, the underlying mortgages are pledged as collateral and continue to be serviced by the originator or an approved servicer. Usually a third-party trustee is designated as the owner of the underlying mortgages, and to make certain that provisions of the mortgages are met on behalf of the security owners. In addition, the trustee is responsible for the timely payments of the mortgages. Cash flows generated from the pool, consisting of principal and interest, are distributed to security holders by the mortgage servicer.

To better understand how mortgage-backed securities originate and are sold, the diagram illustrates the issuance and funds flow of these securities:

Figure 5: Issuance and Funds Flow of MBS[11]

Mortgage loan originator



As the diagram demonstrates, the primary purpose of a secondary mortgage market is to replenish funds used by mortgage originators. Thus, even during periods of rising and falling interest rates, mortgage originators continue to have a constant flow of capital to issue additional mortgages.

[11] Diagram extracted from Real Estate Finance and Investments, p. 599.

Once a pool of mortgages is formed, cash flows collected by the servicing agency are usually divided into different levels of securities, or tranches, that have particular characteristics to attract a broad investment community. The characteristics of each tranche usually are distinguished by: (1) the quality of the mortgages in the underlying pool, which is a reflection of the types of mortgages and their loan-to-value ratios, and whether they are insured or guaranteed against default; (2) the extent of geographic diversification in the mortgage security; (3) the interest rates on mortgages in the pool; (4) the likelihood that mortgages will be prepaid before maturity; (5) the extent of overcollateralization; and (6) in the case of commercial mortgages, the appraised value and debt coverage ratio. Based on the features of the mortgages, an investment rating is given by an independent rating agency to provide a basic indication for investors. Mortgage investors thus can select a particular security tranche that caters to their specific investment preferences depending on their tolerance for risk, liquidity, and maturity.

3. Commercial Mortgage-Backed Securities (CMBS)

Prior to 1990 there had been several efforts to securitize commercial mortgages for sale in the secondary mortgage market. Although a few issuances were completed, the sale volume was relatively small compared to traditional residential mortgage securities. The lack of market activity was due to low demand by banks and insurance companies, high security underwriting costs, and marginal investor interest overall. Yet the condition for securitizing commercial mortgage-backed securities completely reversed during the economic recession period of the late 1980's and early 1990's. As the number of bankruptcies declared by commercial banks and Savings & Loan institutions continued to rise, the Resolution Trust Corporation (RTC) was created by the government to liquidate financially distressed commercial real estate loans accumulated by these financial institutions. After several experiments of various disposition approaches, securitizing commercial real estate mortgages became one of the easiest methods to liquidate non-performing loans in bulk volumes. By selling loans in bulk at a steep discount to face value of the original loan amount, and providing guarantees to investors to promote demand of the financially distressed mortgages, the RTC in essence promoted the development of the CMBS market during the recession.

At the same time, a shortage of private capital and the federal government's liquidation efforts provided investment banks on Wall Street the opportunity to engage in underwriting activities of commercial mortgage-backed securities. As private capital abandoned the commercial mortgage market fearing financial risks, the investment banks served as an intermediary channeling funds from the public capital market back into the commercial mortgage arena. Unlike CMBS originated by the RTC with a government guarantee, the mortgage loan pools created by the investment banks were often extremely risky, with little information available on the underlying mortgages. To ameliorate this problem, investment banks used a senior-subordinated structure to shift credit risk to low priority security tranches. These tranches are typically categorized as senior, mezzanine, and junior with varying subordination levels depending on their risk. Investors thus could purchase the subordinated securities according to their investment knowledge and risk preferences.

Similar to security structures of residential mortgage-backed securities, a commercial mortgage pool possesses individual characteristics based on default risk, prepayment risk, yield to maturity and geographic diversification. In addition, because typical commercial mortgages are more complex than residential mortgages, the subordination level of security tranches is determined by analyzing very specific variables in the mortgage pools. Property types, debt service coverage ratio, cross-collateralization, percent of loans in a geographic area, the number of loans, and the number of ratings are common variables to be examined prior to determination of a tranche subordination level. In the end, different tranches will receive different investment grades by a rating agency based on individual characteristics.

Since the beginning of 1994, the focus of commercial mortgage-backed securities has been on securitizing seasoned real estate loans in the secondary mortgage market by whole loan originators. Recent development has involved an alternative approach which is to originate loans with the intent of placing them directly into a pool of mortgages for securitization. This type of approach is classified as conduit lending of mortgages, creating a mass-production process of underwriting commercial real estate mortgages. It is believed this process has minimized loan origination and pooling costs, and has maximized the cumulative value of the underlying mortgages. By allowing a more flexible security structure design, the efficiency achieved by the conduit-CMBS market enables it to compete directly with whole loan originators. Recent market share increase in the overall CMBS market indicates the likelihood that conduit lending of real estate mortgages will continue to flourish.

C. Real Estate Investment Trusts (REITs) in the United States

1. Historical Development of REITs in the United States

The concept of the real estate investment trusts was originally developed in the 1880s. The initial intention of a trust was to shelter income from taxes as long as the income was distributed to beneficiaries of the trust. However, in the 1930s a Supreme Court ruling required all trusts that were formed like corporations to be taxed as corporations. This ruling also included real estate investment trusts which hampered the development of the REIT market. It was not until the 1960s that Congress passed the so-called REIT Law, which reinstated the special tax treatment of trusts. However, a REIT market did not fully develop until the late 1980s when the Tax Reform Act changed the nature of REITs from a tax shelter investment vehicle into an income generating company structure. The Tax Reform Act also decreased the limitations on REITs, allowing them not only to own real estate but also to perform any service related to the management and administration of real estate. As a result the pace of new REIT issuance rose to approximately $2 billion per year in the late 1980s. The real growth period for REITs did not start until late 1993, when a shortage of private capital existed due to overbuilding in the late 1980s. During the period from 1993 to 1996, initial offering of REIT securities surged from $2 billion to almost $30 billion at the end of 1996.

The explanation for the REIT boom is quite straightforward. By the early 1990s, many private owners and operators of commercial real estate were financially distressed as the real estate market in the US tumbled after a long period of overbuilding. Although many wanted to liquidate their assets to recapitalize their organizations, there were no buyers on the market. In addition, because most of their assets had a low tax basis, liquidation would trigger fairly large capital gains tax liabilities. As a last resort, some of the larger players turned to the public market for capital.

To address the capital gains problem, the structure of theUmbrella Partnership REIT (UPREIT) was created. Real estate owners with a low-tax basis due to years of accumulated depreciation were able to swap, on a tax-free basis, their ownership positions in exchange for illiquid partnership interests in the UPREIT. The partnership interests were economically equivalent to common shares in the REIT, and could be converted to stock or sold at any time. The creation of the UPREIT structure encouraged many real estate owners/operators to contribute their assets to a REIT, which in turn resulted in the IPO boom during 1993.

The real economic factor that contributed to the recent development of the REIT market was the lack of capital in the private market. By taking their companies or assets public, real estate property owners had access to capital at a time when no one else did. Because investors in the public market realized there were tremendous buying and growth opportunities with many financially distressed properties, public capital became relatively cheap compared to private capital. Easy access to capital was another reason behind the surge of REIT issuance.

As real estate market conditions have recovered during the past couple of years, private capital has returned to the real estate market. Once private capital returned near the end of 1996, the IPO boom of REITs ended. Diminished growth opportunities in the public market as a result of competition from private capital are reflected in the recent downward movement of REIT stock prices. Many of the REIT stocks are actually trading below their net asset values. The stock prices of REITs will not be fully recovered until investors realize that REIT stocks are income-generating stocks, not long-term growth stocks.

2. Legal Requirements of REITs

REITs are legal entities that are exempted from taxation at the corporate level. In order to maintain the status of a REIT, the trust must meet strict requirements imposed by the Internal Revenue Service as follows:

a) Organizational Requirements

- The entity must file an election form with its tax return selecting REIT status.
- Must have at least 100 or more shareholders for most of the year.
- Not more than 50 percent share ownership can be owned by five or fewer stockholders.
- Articles of incorporation often limit ownership by any individual entity to 10 percent.

b) Asset requirement

- At least 75 percent of the value of the REITs assets must consist of real estate assets, cash, and government securities.
- Not more than 5 percent of the value of the assets may consist of the securities of any one issuer if the securities are not counted under the 75 percent test.
- A REIT may not hold more than 10 percent of the outstanding voting non-real estate securities of any one issuer if those securities are not counted under the 75 percent test.

c) Income Requirements

- At least 95 percent of the entity's gross income must be from dividends, interest, rents, or gains from the sale of certain assets.
- At least 75 percent of gross income must be from rents, interest on obligations secured by mortgages, gains from the sale of certain assets, or income attributable to investments in other REITs.
- Not more than 30 percent of the entity's gross income can be from sale or disposition of stock or securities held for less than six months, or real property held less than four years other than property involuntarily converted or foreclosed.

d) Distribution requirements

- At least 95 percent of REIT taxable income must be distributed to shareholders as a dividend. Because REITs are intended to be conduits or throughways for shareholders, they cannot pursue profits for themselves[12].

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[12] Bruedggeman/Fisher, Real Estate Finance and Investments, the McGraw-Hill Companies, Inc., 1997, p.661-663.

Each year the Internal Revenue Service closely monitors REITs for any violations of these regulations. If the REIT status of an entity is revoked due to failure to meet the strict regulations, the entity cannot reinitiate its REIT status for five years beginning from the status termination date. However, if the entity can prove to the IRS that its failure to qualify was caused by a reasonable event and not willful neglect, the entity may apply for a REIT status within the five-year time period.

3. Structure of Real Estate Investment Trusts

A real estate investment trust is basically a real estate company or trust that has elected to qualify under certain tax provisions to become a pass-through entity. A REIT distributes to its shareholders substantially all of its earnings in addition to any capital gains generated from the sale or disposition of its properties. Earnings and capital gains generated by a REIT are not taxed at the corporate level as a REIT is simply a conduit to channel funds from management of real estate properties to its shareholders. But the distributed earnings do represent dividend income to its shareholders and are taxed accordingly. Similarly, any distributed capital gains are taxed at the shareholder's applicable tax rate.

In essence, a REIT is an organization that serves as a holding company of real estate properties on behalf of its shareholders. Shareholders invest in a REIT by purchasing securities issued by the holding company, in return, investors receive dividend income produced from active management of the underlying real estate properties by the REIT, or capital gains distribution resulting from disposition of properties. If the REIT is a publicly-traded company, investors can also realize potential capital gains from stock price appreciation. As with other types of financial investments, returns generated by REITs are not guaranteed, and cash flows often fluctuate depending on real estate market conditions.

Limited by strict regulations imposed by the Internal Revenue Service, the financial structure of a REIT is fairly straightforward compared to an ordinary business. One obvious characteristic of a REIT is that the majority of its assets are real estate properties or mortgages. For acquisition of real estate assets, a REIT can either raise capital through the issuance of equity shares to shareholders, or accumulate debt through borrowing. Often it is more advantageous for a REIT to issue equity shares instead of raising debt because of its tax-exempted status, since there is no interest tax shield benefit at the corporate level.

Also, a high debt-to-equity ratio might send a negative signal to investors that management performance should be closely scrutinized. If internal funding can support a REIT's acquisition activities, it is best to utilize internal funds to avoid a potential signaling effect as in the case of using debt. Unfortunately with the 95% income distribution rule, it is very unlikely any REIT will have a significant flow of funds reserved for future investments. The only alternative would be an issuance of equity shares to raise additional capital.

4. Types of REITs

The three principal types of real estate investment trusts are equity trusts, mortgage trusts, and hybrid trusts. The classification of individual REITs is usually based on its claimholder position on the owned assets. Equity REITs have a direct equity claim on the underlying real estate properties; mortgage REITs purchase all kinds of real estate mortgages and thus have a debt claim on the asset; hybrid REITs have a mixture of both equity and debt positions on the asset. The structure of all three types of REITs is identical, and they all adhere to the same REIT regulations despite differences in their classification.

Another method of classifying a REIT is by the type of property in which it invests. Common categories by property type include office, hotels, apartments, shopping centers, regional malls, or health care. Based on management expertise and specialized knowledge of real estate, a REIT may elect to acquire particular types of properties in a specific region, or a mixture of geographically diversified property categories in many different regions.

D. Incentives for Investing in Real Estate Related Securities

Traditional investments of real estate usually involved the direct purchase or development of a single piece of property. With the introduction of mortgage-backed securities and real estate investment trusts, investors now have a wider range of products when investing in real estate. Once considered as illiquid investments, real estate securities are now perceived to be liquid financial products as these securities are being traded in public capital markets. Investors can select from a variety of choices based on their own risk preferences and maturity requirements. These attractive features of real estate securities will continue to draw investors who do not usually invest in real estate to reconsider their hesitation.

In the case of REITs, investors can now enjoy the ability to indirectly invest in real estate by purchasing shares of a REIT with a minimal amount of capital. At the same time, these investors benefit from the pass-through structure without paying taxes at the corporate level. In addition, as part of the 1986 tax law reform, REITs are now encouraged to be self-managed and self-administered. REITs that are managed by a team of real estate professionals further provide assurance of property performance to REIT investors. Also, investors could obtain proper information for investing in real estate that has traditionally been unavailable.

In summary, incentives for investing in real estate related securities are as follows: 1)risk preference matching; 2)liquidity of securities; 3)an opportunity to invest in real estate without direct ownership; and 4)investment opportunities for those who are interested in real estate, but who do not possess professional knowledge, to invest in real estate.

CHAPTER 4: ASSET SECURITIZATION EFFORTS IN SOUTH KOREA

A. Debut of Asset-Backed Securities in Korea

In Korea, the importance of securitization of assets held by financial institutions is beginning to be recognized, and supervision over financial institutions has been strengthened. It has been a ongoing problem for financial institutions to know how to maintain the soundness of their assets, and how to meet the Bank for International Settlements (BIS) regulation[13]. In particular, deregulation in the financial sectors has made bankruptcy of financial institutions more likely, and financial institutions need more effective method of risk management through Asset-Liability-Management. In this respect, it is critical to dispose of bad loans accumulated in the process of restructuring firms and financial institutions.

Under the ABS scheme, even nonviable companies or undercapitalized banks can raise capital by securitizing their viable assets because the credit of the asset holder and the asset are considered as separate entities. In other worlds, because the property rights of a securitized asset are transferred to a Special Purpose Vehicle (SPV), a securitized asset can be evaluated as a worthy investment even though the credit of the original asset holder is bad. Also, because investors in ABS have exclusive rights to the securitized assets, invested capital is secure even in the case of the original asset holder's bankruptcy. Although ABS may be an attractive vehicle which can satisfy the issuer of a bond, investor and related stakeholder, only a few financial institutions have shown interest in it due to the lack of knowledge.

However, after experiencing the IMF situation, with regard to financial institution restructuring and disposal of under-performing loans, more people realize the need for ABS. Thus, the Korean government has started to set up asset-backed regulations. The preparation for the legislation on asset securitization began in April 1998, and the 'Asset Securitization Law' will be put into effect on September 16, 1999. The Financial Supervision Committee also legislated the 'Provisions on Executing Asset Securitization', to facilitate the implementation of the above law, and this provision took effect on November 14, 1998.

[13] Debt-to-equity ratio requirement imposed by the Bank for International Settlements to enhance financial stability for international trade banks. During the Asian financial crisis, the required debt-to-equity ratio was at 200%.

Not only ABS, but also Mortgage Backed Bonds (MBB), based on mortgage loans, were allowed to be issued following the 'Asset Securitization Law'. The 'Law on Mortgage Loan Securitization Companies', which regulates the establishment of firms that securitize mortgage loans, was legislated on January 29, 1999, taking into account the fact that residential mortgage loans are homogeneous and long-term.

Such a firm is established in the form of a corporation under license from the Minister of the Department of Finance and Economy in Korea, and should have a minimum equity of $22 million. Some civil law exceptions related to the transfer of mortgage loans are allowed, just as with other asset securitization companies. Currently, the Dept. of Construction and Transportation in Korea is preparing for the establishment of a firm that is based on joint capital from international financial institutions.

Also, to support the asset securitization process by special tax laws, the acquisition tax and the registration tax were completely waived by a revised 'law on regulating tax exemption'. Half of the special Value Added Tax (VAT) was waived, and the SPVs were exempted from the withholding tax by the revised 'corporate tax enforcement regulations'.

1. Enactment of Asset Securitization Law

The basic contents of the law are as follows:

a) Asset securitization is supposed to be executed by a foreign corporation specializing in asset securitization, or a trust company set up by a trust law, or a SPV.

b) SPVs that want to execute the business of asset securitization should register their plans for the asset securitization with the Financial Supervision Committee, which is a government entity established to oversee the asset securitization process.

c) The SPVs should register with the Financial Supervision Committee whenever they acquire assets from financial institutions according to asset securitization plans.

d) When the Korean Asset Management Corporation (KAMCO) or the Korean Land Corporation acquires real estate or bad loans from restructuring firms, then transfers or entrusts them to an SPV, the SPV is supposed to acquire the ownership on the day of the registration without need for an ownership transfer registration.

e) An SPV should entrust the management of the securitization assets to an asset originator or a credit information agent, and the one entrusted with the management should manage the assets separately from his own assets.

f) The SPV specializing in asset securitization should be a limited liability company, and it can not have subsidiaries or employees, nor can it merge with other firms or change its structure into another type of firm.

2. The Basic Structure of ABS in Korea

The basic structure of ABS in Korea will be exactly the same as that in the U.S. Namely, the asset originator sets up a separate corporation, an SPV, for the purpose of asset securitization, transfers the securitization assets to the corporation, and raises funds by issuing and disposing of securities based on those assets. The asset servicer carries out the task of collecting the obligation and redeeming the principal and interest of the securities. The asset originator usually plays the same role as the asset servicer.

Looking at the transaction structure figure below, the formation process of asset-backed-securities in Korea is almost identical to the process of the U.S.

1. First Step: Asset Securitization Plan

SPV submits ABS issuance plan to the Korean Financial Supervisory Committee. The plan will delineate detail information such as the issuance amount, the number of assets to be securitized, and the issuance procedure, which can be either direct sale or auction.

2. Second Step: True Asset Transfer

Asset holder transfers assets to the SPV. The value of the transferred assets is negotiated between the asset holder and the SPV based on default risk, prepayment risk, yield to maturity, and other related factors to asset performance.

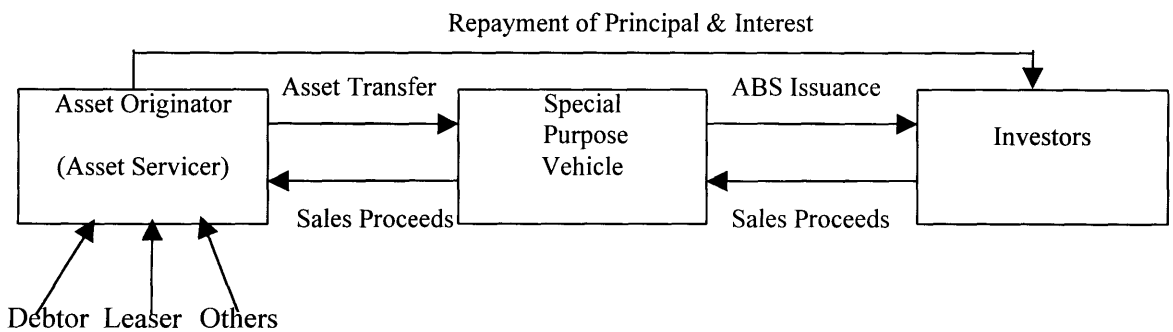
3. Third step: Credit Rating

SPV receives a credit rating on the securitized assets from a credit rating agency. Such rating will contribute to the pricing of the ABS when it is issued in the capital market. As in the case of the KAMCO issuance, the price of the ABS was determined by bids received from interested institutional investors at an auction.

4. Fourth Step: ABS Issuance

ABS issuance in the form of subscription certificates, beneficiary certificates, or private bonds.

Figure 6
The Basic Structure of Korean Asset Securitization



Source: Samsung Economic Research Institute

B. Current Performance of Asset Securitization in Korea

1. The Role of The Korea Asset Management Corporation and Its Efforts

a) The Korea Asset Management Corporation (KAMCO)

On November 24, 1997, KAMCO was established to minimize financial restructuring costs while maximizing the recovery rate of non-performing assets. As the sole government agency to manage non-performing assets, KAMCO plays a major role in increasing liquidity and restoring the financial soundness of the financial sector by acquiring and disposing of non-performing loans. Furthermore, KAMCO plays an important role in stabilizing and leading the structural reform of the Korean economy.

To understand the importance of KAMCO in the Korean government's effort to promote financial reform, it is also important to examine the major functions of KAMCO to gain a deeper perspective on the roles it plays. Below is a list of major functions performed by KAMCO:

1. Operation and management of Non-Performing Asset Funds.
2. Acquisition and disposition of non-performing loans from financial institutions and financially distressed companies under a rehabilitation plan.
3. Management of assets commissioned by Special Purpose Vehicle (SPV).
4. Development and improvement of acquired real estate properties, providing real estate consulting and a real estate security trust.
5. Public auction of confiscated properties by the government for overdue payment of local and national taxes.

Clearly delineated by the functions of KAMCO is the Korean government's desire to expedite the financial restructuring process of business sectors through the liquidation of non-performing assets. In addition to dealing with non-performing loans commissioned by SPVs, disposition of real estate assets is another major focus of KAMCO in its effort to help financially distressed companies rehabilitate by ameliorating debt payment liabilities of these companies through the purchase of company-owned real estate properties.

At the same time that KAMCO was established, the Non-Performing Asset Fund was created under the management of KAMCO to acquire non-performing loans at a discount from virtually every bank in the financial sector.

b) Successful ABS Issuance of KAMCO

In December of 1998, KAMCO auctioned off 564.4 billion won ($470 million) of non-performing assets it had bought from commercial banks to Lone Star, an American real estate investment company, by issuing ABS in the form of equity participation worth 201.2 billion won ($167.67 million). Other participants in the KAMCO auction include Goldman Sachs, Morgan Stanley, and other international financial institutions. This was the first example in which non-performing assets, using real estate as collateral, were sold off to foreigners.

The success of this auction was two-fold. First, the sale attracted teams of foreign property and debt specialists who, for the first time, gained familiarity with the country's unique property infrastructure on a legal, commercial, and cultural basis. Second, it instilled confidence in the foreign investment community in Korea's determination to resolve its economic problems. This success of auction will undoubtedly motivate other foreign investors to reassess the Korean real estate industry[14].

However, domestically, there was criticism that nonviable assets were sold off at prices that were too cheap. In fact, it was a good opportunity for KAMCO to gain experience in how to use ABS through cooperative asset management with a foreign investment institution. Encouraged by the experience, KAMCO is planning to expand ABS issuance in 1999. As for Lone Star, it made a successful bid to secure a bridgehead into the Korean real estate market.

In addition to international ABS issuance underwritten by KAMCO, KAMCO is currently structuring domestic ABS by restructuring corporate loans purchased from five local banks (Shinhan, KFEB, NHB, Hana, Koram). These securities have achieved an investment grade of AAA and AA by Korean rating agencies based on cash flow guarantees by the loan originators. To promote the safety of these ABS issues, the originator banks guarantee the full principle and interest if the borrower doesn't make payments as scheduled. Similar to ABS issuance in the States, there are senior and subordinate tranches which offer different risk levels to various types of investors.

c) Future Issuance Plan of KAMCO

It is estimated that ABS will be very actively issued over the next few years even though the issuance size of this year will be very limited (6 trillion Korean won, equivalent of $5 billion). Currently, KAMCO is planning to sell a total of 42 trillion Korean won ($35 billion) of under-performing loans out of 67 trillion Korean won ($55.83 billion) by the year 2003.

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[14] Pietro A Doran, Foreign Investment In Korean Real Estate Markets: Will Capital Invest in 1999?, c1999, P5

According to the Samsung Securities Research Center, the estimate outstanding under-performing balance of KAMCO by 2003 will be 25 trillion won (See Exhibit 6).

2. The Efforts of Other Financial Institutions

a) Issuance Planning

Following the successful introduction of ABS by KAMCO, many institutions such as banks, financial companies, and credit card companies, all of which have many outstanding loans, and companies with large accounts receivables are preparing to issue and sell ABS to foreign investment banks. The first ABS plan was by Dong-Yang Credit Card, Co. It planned to set up an SPV, named Orion Securitization Limited Company, and transfer its credit card loans and installment credit to this company, while letting it issue securities based on these assets. Orion issued ABS worth 246 billion won ($205 million). Samsung Finance followed with plans for setting up First Securitization Limited, transferring its automobile loans to this company, and letting it issue securities based on these assets. The Korean ABS market is expected to expand rapidly in 1999, as many more financial institutions and companies will issue ABS this year.

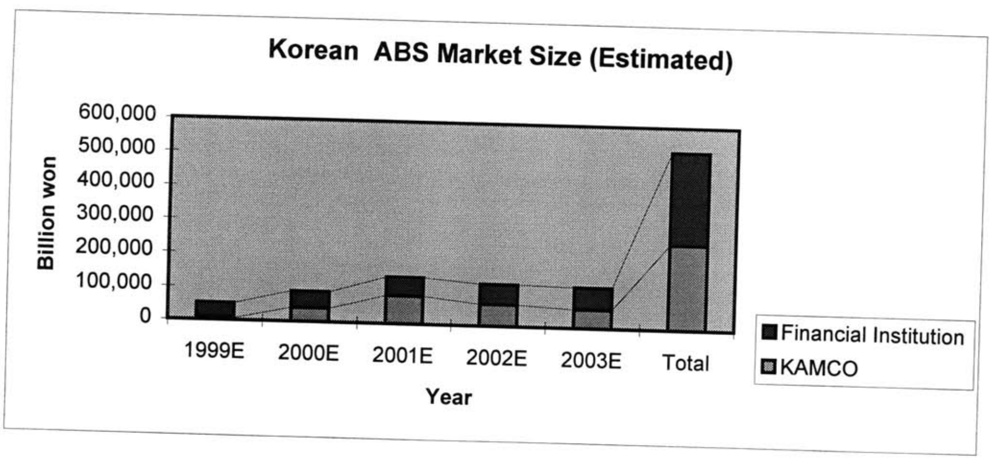
Additional ABS issuance by KAMCO signifies a strong desire of the Korean government to promote financial restructuring through the quick disposition of non-performing assets acquired from insolvent financial institutions. The effort has resulted in many successful incidences of ABS purchases by renowned international institutions such as Morgan Stanley, Goldman Sachs, and others. Participation in the ABS market by these institutional players is expected to produce profound changes in the Korean financial markets and its real estate sector. In addition to relaxation of real estate acquisition and development related legislative changes with regard to foreign investors, the real estate market of South Korea will be transformed forever.

Besides KAMCO, the expected ABS issuance scale of 1999 by Korean financial institutions accounted for about 4.2 trillion won ($3.5 billion). Based on this estimation, Samsung Securities Research Center estimated the total outstanding ABS by 2003 will be 25.5 trillion won ($21.25 billion) as shown in Exhibit 8. They also estimated that most under-performing loan dispositions will be done by institutions such as investment banking or credit card companies since they already realized that through securitization, they expect to meet the BIS Regulation and save the funding cost (Exhibit 7). In particular, ABS will be a critical tool to dispose of non-performing loans for commercial banks, whose non-performing loans represents 7% (22.2 trillion won = $18.5 billion) of total loans outstanding (300 trillion won = $250 billion).

c) Conclusion

The total Korean ABS market for 1999 is estimated to be 5 trillion Korean won ($4.17 billion). Approximately 60 trillion won ($50 billion) is the estimated total value of Korean financial institutions' under-performing loans. By 2003, KAMCO is planning to sell 42 trillion won ($35 billion) of ABS. The Korean ABS market is expected to expand in the future, accounting for some 60 trillion won ($50 billion) in the next 5 years (See figure below).

Figure 7



Source: Samsung Securities Research Center

This new ABS market represents both a new investment vehicle as well as a financing tool for investors and companies. So far it is only the beginning of the process, if the market size expands and meets expectations, it will play a very important role in the internationalization of Korea's capital markets.

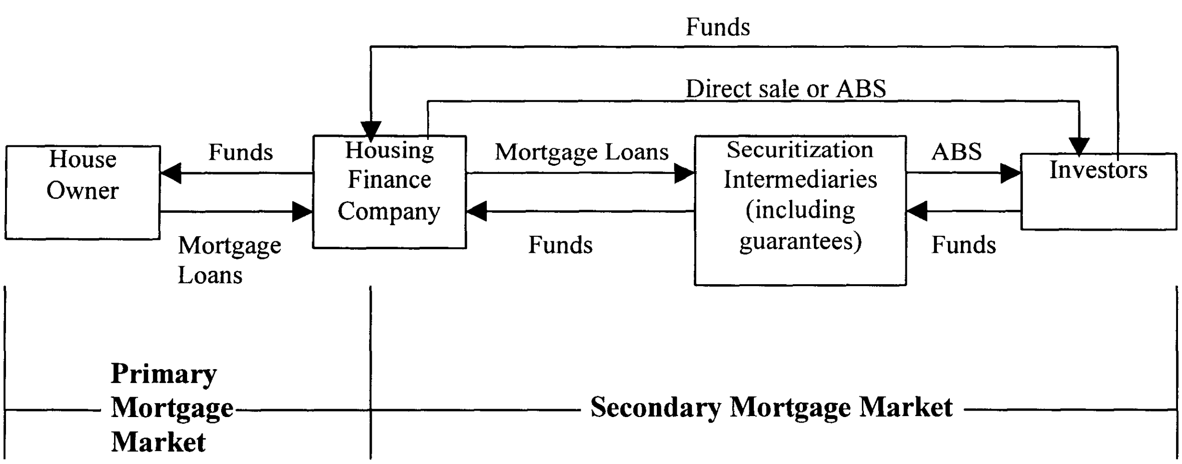
C. Introduction of MBS (Mortgage-Backed-Securities) in Korea

MBS was introduced into Korea after the 'Asset Securitization Law' was passed in September 1998. This could mark a turning point in the history of housing financing. MBS has been an object of attention of academia since the 80s, but it did not attract attention of government policy-making. The New 5-year Economic Plan considered introducing MBS between '94 and '96, but this plan was not fulfilled until the new government took over. After the new administration team was installed in 1998, the new government proposed 100 objectives to be fulfilled during the new president's term, one of them being '100% home ownership', which was the only objective in the area of housing. To this end, it planned to introduce MBS as a way to fulfill the objective.

At the same time, the Department of Finance and Economy in Korea prepared a law on the establishment of a securitization intermediary, and the 'Law on the MBS Intermediary' was passed in January 1999. Accordingly, anybody is allowed to set up an intermediary in the form of a corporation, as long as it satisfies the criteria stipulated by the law.

Below is the basic structure of mortgage securitization proposed by the government:

Figure 8 Basic Structure of Mortgage Securitization



Source: The Korean Asset Management Corporation

D. Introduction of Real Estate Investment Trust in Korea

1. Existing Real Estate Trusts in Korea

In February 1991, the Korean government decided to introduce real estate trusts in order to promote land development, and allowed the establishment of two real estate trust companies. Now there are six real estate trust companies in operation, which were established through investments by government-related entities and three life insurance companies.

Currently, the real estate trusts in Korea is suffering from a shortage of funds due to the economic crisis and insolvent operations. Some Korean real estate analysts insist that it is necessary to re-evaluate the real estate trusts and prepare ways to improve the system. Similar to the U.S., the real estate trust in Korea refers to the system whereby the trust company (trustee) is entrusted with real estate or capital by the owner (beneficiary) to invest-manage-develop-dispose of real estate on behalf of the trustee, and to return the proceeds to the beneficiary. In the process, the trust company earns a certain rate of fees.

2. A New REIT System

a) Basic Plans

As part of the 'Asset Securitization Law', the REIT Law was established to allow Real Estate Investment Trusts (REITs) to be formed. The REIT system will take the form of a mutual fund, which in turn can raise funds by issuing securities, then invest the proceeds of the securities in real estate properties and distribute the profits to the shareholders (investors) as dividends. These will be closed-end funds, which resale of real estate properties is restricted in the short-term to prevent speculation. Any company that satisfies a certain set of criteria will be allowed to become a REIT, based on the REIT Law.

b) Possible Operation Structure of REITs in Korea

REITs can be set up as a paper company under the commercial law, similar to a security investment company under the 'Security Investment Company Law'. It is prohibited from having employees. After a REIT company is established, it entrusts its operations to separate firms: property management to a real asset management firm, issuing and selling securities to an underwriting company, and administrative work to a general administration trust company, and security storage business to a security storage firm.

The real estate asset management company is entrusted with the business of management/disposal/development/investment of real estate by the REIT company, and it is a critical institution that determines the performance of the REIT. An underwriting company issues the securities of the REIT and sells them to the public. A general administration trust company performs the business of underwriting the name of issued securities, and administrative work related to the security issue, and other general duties related to the operation of the REITs. A security storage company keeps the shares of the REIT in escrow.

The existing six real estate trusts should be turned into real estate management companies which will be in charge of management/development/disposal/investment of real estate. With their experience in real estate trusts and relationships with government agencies, it will be more efficient and practical to make the transition. The existing six trusts can set up REITs as their own subsidiaries by pooling businesses with similar operations or conditions.

When the REIT system is introduced to the Korean real estate market, REIT companies should not be restricted to paper companies. It seems desirable to allow both ways: establishing a REIT company as a paper company and letting it entrust the asset management business to a special firm, or allowing a REIT company to perform the management business itself. Once the REIT market becomes more developed, the most desirable form of a REIT can be determined by factors such as property performance, not by government regulations.

3. Conclusion

The REIT system provides a new way of raising funds for both ownership and development of real estate. Funds from numerous small investors and institutional investors could be raised in the capital markets, and be used for real estate investments and development, and thus could increase the demand for commercial real estate. The REIT system could also be a solution to both the problem of uneven distribution of capital gains for appreciation and the problem of how to facilitate the sale of real estate held by firms. The REIT system would also help acquire real estate disposed by firms and financial institutions that are undergoing the restructuring process.

CHAPTER 5: POSSIBLE EFFECTS OF ASSET SECURITIZATION ON THE KOREAN REAL ESTATE MARKET

A. A New Link between the Real Estate Market and the Capital Market

Real estate securitization could have a profound impact on the real estate financing sector and the overall real estate market in Korea. Traditionally, real estate financing has been heavily regulated by the government to prevent speculative investments. These strict financing regulations have limited the development of a strong mortgage market in Korea, especially in the area of residential real estate. With real estate securitization, the amount a household buyer can borrow based on the loan-to-house value ratio will be higher, and will thus reduce the financing burden for the buyer.

A connection will be established between the real estate market and the capital market through real estate securitization. As demonstrated by the U.S. market, real estate security prices are usually determined from performances of the underlying real estate. Any changes on the real estate performances will affect the prices of the securities. With the introduction of real estate securities, the commercial real estate market, especially the office leasing market, will become more transparent to the public. Currently the taxation on the Korean real estate properties is not well standardized and the reporting of rental income has been dishonest. Therefore, accurate information on rental income and expenses could not be provided to the public. As real estate securities are traded in the public capital market, information related to the underlying real estate will become public knowledge. Also, the traditional Korean valuation method which emphasizes the original purchase price of a property will change to a valuation method based on the cash flow generated by the property. At the same time, information regarding real estate transactions will be disclosed sooner, as such information disclosure is needed to price real estate securities.

As real estate related securities continue to be supplied to the capital market, the overall size of the capital market shall expand, contributing to the development of a new link between the capital market and the real estate market. In the future, price movements in one of these markets will be reflected in the other market.

B. Effects on Korean Real Estate Market Participants

1. Property Owners

a) Less Exposure in the Financial Market

Through real estate securitization, the property owner has the flexibility to raise capital without using his own credit. Since the credit history of the property owner is not disclosed in the capital market, funds can be raised at a lower cost, despite the current debt level of the property owner. In addition, asset transfers eliminate many financial risks as property ownership is transferred to a SPV. These risks, such as property performance risk, otherwise would be born by the property owner.

b) Efficient Pricing

Since real estate securities prices often reflect the performance of the securitized real estate, the property owner will be more cautious in the future purchase of real estate. If the properties to be purchased are overvalued, the property owner will experience difficulty in trying to securitize these properties. Also, the property owner will gain a good understanding of the property value through the pricing of real estate securities, and how they trade on the secondary market. Determination of real estate prices based on cash flow generated from the real estate will be more accurate than the traditional valuation system, which depends on the original purchase price.

c) Credit Maintenance

The performance of properties held by the SPV are separated from the credit status of the property owner. Therefore, losses from non-performing real estate are shifted to the investors or the credit guarantors. Through the transfer of real estate under the asset securitization structure, the credit rating of the property owner will remain unaffected despite poor asset performances.

d) Financial Structure Flexibility

Financial structure flexibility is created when the property owner retires existing debt or reinvests the funds raised from asset securitization. With a lowered debt ratio by retiring debt, the borrowing capacity of the property owner has increased. If the property owner acquires new assets with the new funds, revenues from the new assets will enhance both the return on asset and the return on equity for the asset originator. If the property owner is a financial institution, it also could enhance its BIS ratio. In addition, the property owner now has the option to decide whether to utilize real estate securitization after comparing the total costs of real estate securitization with the financing costs of debt and capital. Greater usage of the real estate securitization process by property owners to achieve flexibility in their financial structures can be expected.

2. Investors

With the introduction of real estate securities, investors in Korean real estate will have more investment options. Depending on risk and maturity preferences, investors will have the choice to invest in financial assets with long maturity, stable cash flows, or riskier high yields as in the case of ABS. At the same time, investors who have been unable to invest in real estate because of the large amount of capital required will have the opportunity to so invest with minimum capital outlays. Real estate securities also provide an investment opportunity for those who are interested in real estate, but who do not possess professional knowledge, to invest in real estate.

3. Housing Borrowers

Real estate securitization does not provide any immediate benefits to housing borrowers, but long-term effects are anticipated. First, the loan-to-value (LTV) ratio of real estate financing is expected to rise, and borrowing conditions will improve so that household buyers will only need to finance 20-30% of the house price with their own money compared to the 70% requirement under the Chonse system. Second, introduction of MBS could lower the interest rate at which the financial institutions raise funds, and therefore lower the market interest rate at which consumers borrow to finance their housing. However, the lowering of the interest rate is not likely to occur until further development of the MBS market. Last, financing costs should also decrease through more efficient channeling of funds from the private sector to the public sector.

Many housing consumers are under the impression that with the introduction of mortgage-backed securities, they will be able to purchase their own houses by paying only a 20% down payment and borrowing the other 80%, without paying interest on the loan amount borrowed. This misunderstanding is due to the exaggerated description by the media and other concerned parties in the process when introducing the MBS system into Korea. These consumers have overlooked the fact that mortgage loan payments include both the principle and interests, not just the principle alone as perceived. Moreover, unstable employment conditions will lead to a less predictable income stream for workers, which discourages the purchase of houses on credit.

In order for the MBS market to have a significant influence on the real estate market in Korea, there needs to be a strong demand for housing finance. However, in the current market, the demand for housing financing is rapidly decreasing as a result of the Asian financial crisis, while the supply of funds of financial institutions is increasing from disposition of assets.

4. Housing Financial Institutions

Mortgage-backed-securities should significantly impact housing financing institutions by providing them with a means to raise more funds in the public capital market, despite minimal activities in the current MBS market. Once the mortgages are securitized, financial institutions will be replenished with capital to issue new house loans. Additional loan issuance translates into additional profit for housing financial institutions from loan origination fees.

C. Potential Issues in the Securities Markets

1. Issues in the Asset-Backed-Securities Market

With the Asset Securitization Law firmly established in Korea, there remain many issues to be resolved for the smooth execution of asset securitization.

First, clear and unified accounting standards about financial asset transfers are needed. This issue arises from the unsolved problem of whether to regard the asset transfer as a sale or as a secured borrowing. If an asset transfer is considered a sale, the asset originator can maintain its borrowing capacity without incurring debt. On the contrary, the debt ratio of the asset originator will increase if an asset transfer is recognized as secured borrowing.

Second, although some taxes have been waived by the government for the purchase of assets, such as the registration tax and acquisition tax, other favorable tax treatment should be considered. For example, reduction in security transaction tax should be examined to further encourage the purchase of ABS. With additional tax exemptions for ABS related activities, the expansion of the ABS market can be expected.

Third, environmental liabilities of securitized assets are unclear under the current Asset Securitization Law. In order to protect the investors from environmental damages caused by the asset originator such as contamination, separation of liabilities between the asset originator and the security holder should be clearly delineated into new laws to prevent future disputes.

The Korean government is planning to continue its efforts to facilitate asset securitization by examining these issues in detail, and trying to understand the difficulties faced by institutions that are pursuing ABS issuance. It is believed that the government will impose new legislative measure to promote the development of the ABS market.

2. Issues in the Mortgage-Backed-Securities Market

There are two main issues with the newly enacted MBS regulation. First, more flexibility on the issuance and transfer of MBS should be allowed under the current regulation. Second, whether the securitization intermediary should be a public or a private corporation remains a highly debatable issue.

The primary purpose of the 'Asset Securitization Law' was to improve the financial structure of financial institutions. In the process of creating the legislation, the government and the legislature agreed to include mortgage securitization in the law as a last addition. Therefore the mortgage-backed-securities regulations were not evaluated closely. The regulation only has provisions on selling mortgages to SPVs by the financial institutions, but transfers of mortgages between financial institutions were not addressed. As a result, financial institutions can not sell their mortgages to other financial institutions if the mortgages are to be pooled for MBS issuance. In addition, at the present only SPVs are allowed to issue MBS, thus impairing the potential of a fully active secondary mortgage market if financial institutions are allowed issuing MBS themselves.

There also remains the question of what type the intermediary should be: public, private, or mixed. A public institution would have higher credibility and hence lower costs of raising capital, but could lag behind private corporations in terms of decision-making. On the other hand, a private institution will be more effective, but it would have more difficulty to establish its credibility initially. Therefore, a private institution with government support seems optimal to take advantage of both types of entities.

In conclusion, the mortgage-backed-securities market should increase financial structure flexibility for institutions as capital can be raised through the public capital market. In order to promote the expansion of the MBS market, more diversified methods of mortgage securitization should be incorporated in the 'Asset Securitization Law'. Since Korean investors prefer short-term securities over long-term securities, due to less pricing fluctuation in response to interest rate changes, the introduction of MBS should start as short-term securities backed by short-term loans in order to gain acceptance from investors.

3. Issues in the Real Estate Investment Trusts (REIT) Market

One feared side effect with the introduction of REITs in Korea is the possibility that excessive real estate speculation will take place again. Under the traditional perception that land prices never fall, capital raised by REIT companies could be used to over speculate real estate again. To prevent speculative investments, the government will only allow a minimum of short-term investments in real estate and securities by the REIT companies. The sum of proceeds from short-term security sales and short-term real estate sales is not to exceed a certain portion of the REIT companies' revenue. In addition, 'the Law on REIT Companies' should stipulate that if real estate speculation is expected to occur in the market, REIT companies should be restricted or prohibited from acquiring new real estate assets or selling their assets. In the future, the discipline and the transparency of the public capital market should mitigate this issue.

Another issue in the REIT market is that there lacks any kind of reliable information system to report real estate performances in Korea. For the successful introduction of REITs in Korea, a system that will constantly evaluate real estate performances should be established. REITs will not attract investors if investors can not determine the value of the underlying real estate properties operated by the REITs. In addition, for REITs to be an attractive investment, the profitability of real estate operation should be considered as a first priority. In this regard, the education of real estate professionals on property management skills is necessary to enhance income growth.

The focus on REITs has not been significant in Korea since the Koreans are still foreign to the concept of investing in real estate securities. To promote the future development of the REIT market, the Korean government will need to relax regulations on real estate securitization. Simultaneously, education of REITs should be emphasized to both the investors and real estate professionals.

D. An Improved Financial Market in Korea

Asset-backed-securities are issued through the complicated process of structured financing, which requires a lot of time and capital. Nevertheless, an informed financial market is evolving as financial institutions in Korea securitize assets using the ABS method.

1. Reduction in Financing Costs and Improvement of Financial Structure

Through asset securitization, companies and financial institutions can raise money with less cost compared to when capital is raised through credit. This is due to the high credit rating granted to ABS, usually AAA-rated, which carries very little spread over treasury yield. When companies and financial institutions raise capital through ABS, their capital structures can be improved through a lowered weighted average cost of capital. Through ABS issuances, companies do not raise their debt-to-equity ratio, which is different from when companies issue corporate bonds or makes use of bank loans. In addition, when companies repay their debt with the capital raised from ABS, they could decrease their debt ratios. Companies and financial institutions thus can attract future investments to enhance their credit ratings.

2. Simplification of the Contracting Procedure

Traditionally, Korean banks have been risk adverse. This has undermined the development of the asset securities market. To minimize risks, banks have required borrowers to undergo a complicated and time consuming loan underwriting process before funds can be issued. As banks and financial institutions can raise capital by issuing securities based on the securitized assets, which is guaranteed by the SPVs, loan underwriting procedures will become simpler.

3. An Increase in Numbers of Institutional Players

As ABS has been introduced in the Korean financial market, many financial institutions have begun to specialize in asset securitization. To remain competitive in the financial markets, these institutions want to offer investors a more diversified selection of investments. At the same time, these institutions also enjoy a higher borrowing capacity and a lowered debt ratio by securitizing part of their own assets. Funds raised from asset securitization can be applied toward new investments or retiring existing debt. In addition, asset credit risks originally absorbed by the financial institutions are now transferred to the SPVs. With ABS, financial institutions can diversify their ways of financing. Firms of little international reputation will achieve recognition by international investors through ABS issuance. These attractive features of ABS have promoted the number of financial institutions to be engaged in asset securitization activities.

4. Foreseeable Stabilization of Real Estate Prices

Unlike other assets such as account receivable assets, whose real value is the same as their face value, the value of real estate is determined differently according to the valuation methods that are applied. Traditionally, real estate prices in Korea have been determined based on the prices of neighboring real estate, development cost, and the owner's personal opinion. On the other hand, foreign real estate investors determine the price of real estate according to the present value of the future income stream that the underlying properties are expected to generate. According to unofficial research, when the Discounted Cash Flow Method is applied, the current prices of many real estate prices in Korea are hardly justifiable.

Since the IMF bailout, the Korean real estate market has been experiencing changes in its ideas regarding real estate. Breaking the traditional concept that real estate is to be held permanently, investors in Korea are beginning to think of real estate as another investment product. Asset securitization should accelerate this fundamental concept change. When foreign asset valuation methods are applied to Korean real estate, real estate prices will become more reasonable and will become more stabilized without the price volatility caused by speculative investments.

5. Promoting Corporate Restructuring

In the corporate sector, the introduction of ABS is anticipated to promote corporate restructuring. As corporate management strategies change from growth-oriented to profit-oriented, corporations will need to dispose of assets that do not contribute to profitability. Using ABS is an effective method for facilitating this process. For example, through ABS, large-scale corporate owned real estate, which in the past could not be sold due to its size, can now be sold for cash. In this way, companies can easily raise capital and downsize to improve their financial structures.

E. Conclusion

The Korean real estate securitization markets are still at the beginning stages. ABS, MBS, and REITs issuance and distribution methods are not yet fully developed. At this point, there is no proper institution to provide credit enhancement and collateral asset supervision. Furthermore, domestic investors' and brokers' lack of knowledge of the system also undermines development of these markets.

Currently, the Korean government is actively trying to complement related laws to develop asset securitization, and asset owners are also recognizing that the role of asset securitization is very important in order to improve their financial structures. Asset backed securitization is anticipated to exert positive influences on the Korean capital market. The linking of the real estate and capital markets will revitalize and streamline transactions of real estate. In addition, real estate prices will be more stable as the price of real estate will be determined according to the current stream of income that the real estate generates. To further promote asset securitization, efficient and fair asset valuation methods should be developed.

Through the introduction of ABS and real estate related securities, the Korean real estate market will be likely to undergo changes similar to those experienced by the U.S. real estate market in the 1970s. As market fundamentals become more transparent through improved valuation methods and unification of pricing between the public and private sectors, Korean real estate prices will be less vulnerable to speculative trading and excessive volatility. This phenomenon reflects the changes in concept about asset values in the Korean market. The preference is moving from traditional holding values to income values.

The introduction of MBS is expected to help activate the real estate market and the housing industry since mortgages will have standardized underwriting criteria, relatively stable cash flows, and will thus become easier to securitize. Specifically, if MBS are successfully introduced in 1999 as planned, monthly payments will begin to replace the existing 'Chonse' system.

With the introduction of REITs, the securitization of highly risky loans of Korean financial institutions and real estate collateral is expected. As from the U.S experience where the fast growth of REITs led to the recovery of the real estate market, the successful securitization of real estate is expected to facilitate the renovation of the financial industries in Korea. In addition, it is hoped that through the REIT market, real estate prices will be restored to levels prior to the Asian financial crisis.

With the introduction of ABS, MBS, and REITs in the Koran financial market, there will be continuous tasks for both corporations and the government to promote such products. When asset securitization is aggressively pursued, asset prices will be determined according to the anticipated income flows. Koreans need to change their concepts about real estate, which will hardly generate the windfall profits of the past. They need to consider real estate as a factor of production, not as a means to pursuing capital gains. In order to promote asset securitization, the government should further relax legislative policies, which have limited securitization in the past. Additionally, the government should encourage credit rating agencies to develop reasonable asset valuation methods.

The future of these securities is uncertain due the newness of the markets but prospects are positive. It is likely that asset securitization will continue to provide an efficient method to dispose of assets for companies, and to create additional investment opportunities for investors.

Exhibit 1

Largest Conglomerates' Bank Loan Balances in 1998

(Unit: billion won)

Ranking	Name	As of the End of 1998	Change from the End of 1997
1	Hyundai	15,807.2	-3,218.6
2	Daewoo	13,784.3	-1,320.3
3	Samsung	10,292.1	-7,033.8
4	LG	6,961.7	-3,995.4
5	Hanjin	3,900.5	-1,608.4
6	SK	3,691.0	-370.0
7	Ssangyong	3,333.4	-687.8
8	Kohap	3,222.5	800.5
9	Hanwha	2,820.3	-1,103.1
10	Kumho	2,499.0	-99.4
11	Dongah	2,033.2	144.6
12	Hyosung	1,897.4	15.9
13	Daelim	1,874.4	-1,020.0
14	Anam	1,811.3	160.6
15	Dongkuk Steel	1,523.0	-105.0
16	Doosan	1,361.3	-641.7
17	Shinho	1,252.4	60.0
18	Hansol	1,230.3	-309.7
19	Kabul	1,128.4	144.0
20	Dongbu	1,085.7	257.9

Source: Financial Supervisory Service

Ex ibit 2

Non-Performing Loans of Commercial Banks

(Unit: billion won, %)

	Extended Credits (A)	Non Performing Loans: Substandard	Doubtful	Estimated Loss	Total (B)	B/A
Chohung	28,529.7	828.0	587.2	100.3	1,515.5	5.3
Hanvit	50,484.9	1,408.0	1,178.9	131.5	2,718.1	5.4
(Commercial Bank of Korea)	22,897.6	470.9	441.3	56.4	968.6	4.2
(Hanil)	27,587.3	937.1	737.3	75.1	1,749.5	6.3
Korea First	18,791.5	2,188.5	1,522.3	121.5	3,832.3	20.4
Seoul	16,655.9	1,490.2	1,317.7	179.3	2,987.2	17.9
Korea Exchange	31,692.4	872.3	566.8	69.3	1,508.4	4.8
Kookmin	40,997.6	1,503.0	870.9	60.0	2,433.9	5.9
(Kookmin)	28,895.4	699.1	666.3	59.9	1,425.3	4.9
(Korea Long Term Credit)	12,102.2	803.9	204.6	0.1	1,008.6	8.3
Housing & Commercial	30,168.5	1,501.7	790.8	124.6	2,417.1	8.0
Shinhan	24,789.7	591.9	475.2	20.6	1,087.7	4.4
KorAm	12,478.2	158.0	212.5	2.1	372.6	3.0
Hana	10,178.9	248.2	64.2	6.0	318.4	3.1
Boram	7,214.1	115.6	186.5	0.5	302.6	4.2
Peace	4,061.1	195.6	288.0	2.2	485.8	12.0
Nationwide Commercial Banks Total	276,042.5	11,101.0	8,060.7	817.9	19,979.6	7.2
Daegu	6,412.1	257.9	212.4	10.4	480.7	7.5
Pusan	5,100.9	159.0	93.5	32.6	285.1	5.6
Kwangju	3,489.1	65.7	68.9	1.3	135.9	3.9
Cheju	872.5	37.1	154.4	2.2	193.7	22.2
Jeonbuk	1,394.2	94.8	36.4	0.2	131.4	9.4
Kangwon	1,739.4	89.3	337.2	1.9	428.4	24.6
Kyongnam	4,310.0	125.1	207.3	5.6	348.0	8.1
Chungbuk	1,246.2	60.8	179.6	1.4	241.8	19.4
Regional Commercial Banks Total	24,564.4	899.7	1,289.7	55.6	2,245.0	9.1
Total	300,606.9	12,000.7	9,350.4	873.5	22,224.6	7.4

Source: Korea Financial Supervisory Service

Exhibit 3

Comparison of Measures to Boost the Real Estate Market Before and After the Currency Crisis

	Before the Currency Crisis (80-97)	After the Currency Crisis (98-99)
Background	-Recession of the real estate market due to tough measures by the government to restrain speculation.	-Sharp decrease in real estate prices and recession of the market due to the recession of the real economy.
Focus of Policy	-To boost only the real estate market. -Revive the recessed market due to tough anti-speculation policy.	-To boost both the real estate market and the real economy. -To boost the market: Revitalization of construction and housing market. -To attract foreign capital: Opening the market to foreigners.
Major Policy Measures and Contents	-Major policy measures: Tax reduction, deregulation. Contents: -Tax reduction: Reduction of capital gains tax, registration and acquisition tax. -Deregulation: Relaxation of the regulation on construction and new apartment sales price.	-Major policy measures: Tax reduction, deregulation, financial support, introduction of mortgage loans. Contents: - Tax reduction: Reduction of capital gains tax, registration and acquisition tax. -Deregulation: Abolition of transaction permission, public ownership concept of land, regulation on construction, and regulation on new apartment sales prices. _Public financial support: Support households' house purchases and company's real estate purchases. -Securitization of real estate: Introduction of MBS.

Source: Samsung Economic Research Institution

Exhibit 4. Relaxation of Real Estate Policy to Attract Foreign Investors

	Before	Current
Foreign Individual	-Only a foreigner of more than 5 years of residence in Korea can acquire property. -Restriction on property holdings less than 200 pyung of land for residence, and under 50 pyung of land for commerce.	-All foreigners including non-residence are allowed to acquire land. -All limits of land use, land area are abrogated.
Foreign Corporation	-Land can only be acquired for business activities. -Land acquisition is allowed only for businesses such as factory, office, and etc.	-Land acquisition is allowed for non-business related purpose. -All limits of land use and area for foreigner are abrogated.
Management Procedure	-A prior approval is necessary before conclusion of a contract. -Complete process takes approximately 60 days. -Approval of Mayor and Provincial Governor	-Report after conclusion of a contract. -An immediate transaction is possible upon receipt of report. -Report to Mayor, County Chief, and Ward Chief.

Source: Investment Opportunity in Korean Real Estate market, Mail Business TV in Korea

Exhibit 5

The Asset-Backed Securities in the United States (US$ billion)

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Asset-backed securities Outstanding												
Consumer credit*							48.7	78.5	103.3	121.4	130.7	139.4
Business loans							2	5.8	8.8	11.6	21.3	23.3
Trade receivables	0.7	1.5	2.4	3.3	5.1	6.8	8	9.2	11.3	13.8	15.2	18
Total	0.7	1.5	2.4	3.3	5.1	6.8	58.7	93.5	123.4	146.8	167.2	180.7
of which:												
Asset-backed commercial paper outstanding	0.7	1.5	2.4	3.3	5.1	6.8	15.7	31.4	38.7	47.4	51.9	61.6

* Mainly automobile loans, consumer loans and credit-card receivables.

Source: Federal Reserve Board.

Exhibit 6 Estimate Issuance of KAMCO for the Next 5 Years

Estimate Issuance of KAMCO for Next 5 Years
(Unit: Korean won; $1 dollar = 1200 Korean won)

	Under-performing loan disposition scale	Securitizable under-performing loan scale	ABS issuance scale
1999E	161,400	10,000	6,000
2000E	169,000	57,600	40,560
2001E	139,000	139,700	83,820
2002E	109,700	109,700	65,820
2003E	93,000	93,000	55,800
Total	**672,800**	**420,000**	**252,000**

Source: KAMCO, Samsung Securities Co.

Exhibit 7 Under-performing Loans of Financial Institutions

Under-performing loan of financial institutions
(Unit: Korean won; $1 dollar = 1200 Korean won)

	Commercial bank	Special purpose bank	Securities	Insurance	Investment banking	Koomgo	Lease	Credit corp	Total
Total loan	300.6	142.8	7.3	38.7	28	22	25.9	11.2	576.5
Under-performing loan	22.2	11.4	2	3.4	5.6	5.3	7.8	2.5	60.2
Total loan/ Under-performing loan	7.4	8	27.4	8.8	20	24.1	30.1	22.3	10.4

Source: Financial Supervision Committee

Exhibit 8 Estimate Issuance of Financial Institutions for the Next 5 Years

Estimate Issuance of Financial Institution for the Next 5 Years
(Unit: Korean won; $1 dollar = 1200 Korean won)

	Under-performing loan disposition scale	Securitizable under-performing loan scale	ABS issuance scale
1999E	52,042	N/A	41,634
2000E	57,247	N/A	45,797
2001E	62,971	N/A	50,377
2002E	69,268	N/A	55,415
2003E	76,195	N/A	69,956
Total	**317,723**		**254,179**

Source: Samsung Securities Research Center

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