# Recent Trends in the Korean Housing Finance Market

# by Jackie Blankenship

#### **OVERVIEW**

To say that the Korean housing finance market has gone through a lot of change in recent years would be an understatement. At the time when "Housing Finance in Korea: Recent Trends and Future Prospects," written by Kyung-Hwan Kim, was published on the December 1997 issue of *Housing Finance International*, it was evident that fundamental changes in the housing finance system were being made by the Korean government. Now, we can see what impact these changes have made on the Korean mortgage market with specific focus on the development of the secondary mortgage market.

Financial deregulation had been underway since the early 1990s. However, initiatives for change ignited after the Asian financial crisis in 1997, in which Korea's inefficient and undisciplined financial sector was revealed to the international financial community. The financial crisis resulted in massive depreciation of the Korean won by the end of 1997. By early 1997, a large number of non-performing loans had accumulated, causing

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many banks to become insolvent. The corporate and financial sector insolvency, combined with the loss of confidence by investors, created a mismatch of supply and demand in the domestic foreign exchange market. The Korean government turned to the International Monetary Fund to request a financial package to stabilize the won. In its agreement with the IMF, the government agreed to many economic and structural reforms to stabilize the financial and corporate sectors. To restore confidence in the financial system, actions were taken to dissolve unsound financial institutions, downsize and privatize some public enterprises, and discontinue government control of interest rates.

Interest rates were finally deregulated in July of 1997. The largest and, arguably, the only significant mortgage market participant, the Korea Housing Bank, was privatized in August of 1997 and transformed into a commercial bank called H&CB (Housing & Commercial Bank).

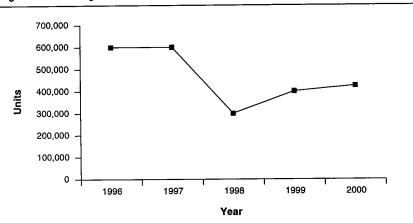
These changes have made the housing finance industry more market-driven and competitive in recent years. Commercial banks, which historically existed for the purposes of corporate lending, started to focus on retail customers. Newly created mortgage banks and other special finance companies entered into the mortgage market. Discussions on creating a secondary mortgage market in Korea culminated at the end of 1999 with the formation of the Korea Mortgage Corporation (KoMoCo).

The Korean economy has made substantial progress and is recovering from its difficulties. Gross domestic product, which dramatically decreased in 1997 and 1998, grew at a rate of 8.5% in 1999. The growth trend continued in 2000 at a rate of 9.0%. GDP growth slowed in 2001, reflecting a global economic slowdown, and is estimated at 5%<sup>1</sup>. The exchange rate has stabilized since the end of 1998 with approximately 1,300 won per US\$1 at the end of 2001<sup>2</sup>. Inflation, at 2.68% in 2000, has also fallen substantially since 1998 when it was at 7.75%, indicating a recovery for the Korean economy<sup>3</sup>.

# HOUSING MARKET

There has been a shortage in housing since the 1970s in Korea. To meet the demand, the government steadily increased the housing production for many years. Based on housing permits, the average annual housing production was about 621,000 units during the period from 1992 through 1996. This figure declined to 306,000 units in 1998, but has increased since 1999, and reached 433,488 units in 2000 (see Figure 1). The Ministry of Construction and Transportation

Figure 1. Housing Construction



Source: Ministry of Construction and Transportation

Table 1. Purchase Price Index ('95.12 = 100.0)

Location	Туре	1996	1997	1998	1999	2000
<u> </u>						04.0
All Cities	Total	101.5	103.5	90.7	93.8	94.2
	Detached	99.8	99.2	88.1	86.8	85.6
	Row Housing	100.5	101.1	89.2	87.5	88.2
	Apartment	103.5	108.4	93.7	101.7	103.1
Seoul	Total	101.5	103.5	89.8	94.8	97.7
	Detached	99.5	99.0	87.6	88.1	89.6
	Row Housing	100.6	101.9	86.8	86.4	88.3
	Apartment	104.2	109.6	93.6	105.3	109.7

Source: National Statistical Organization Note: Based on the end of December of each year.

(MoCT) has announced plans to increase production to between 500,000 and 600,000 houses annually, for three consecutive years by the year 2002. The government also abolished the greenbelt, non-construction zone in recent years.

Housing prices steadily increased in the early part of 1990s and hit their highest levels at the end of 1997. The economic and fi-

nancial crises resulted in a dramatic decline of housing prices by the end of 1998 (see Table 1).

Housing prices recovered somewhat by the end of 1999 and continued to increase in the early part of 2000. By the end of 2000, the apartment prices in Seoul reached levels to the pre-financial crisis figure in 1997.

Chonsei has been a major form of housing tenure in Korea, accounting for about 37% of the housing stock. Chonsei contracts generally require an up-front deposit amounting to approximately 50% of the house price. Landlords benefited during prosperous times by investing the deposits that generated a good return. Renters also benefited by not having to make monthly payments for the duration of the contract.

Chonsei prices also decreased in 1998 due to the economic situation, but quickly bounced back in 1999 and surpassed the 1997 levels by the end of 2000 (see Table 2). Due to the uncertain growth prospects of the current economy, many landlords are switching to a monthly rental system (Wolsei), decreasing the supply of Chonsei properties and forcing the price of these contracts to increase sharply.

As shown in Figure 2, housing prices in general are slowly recovering to pre-financial crisis levels. The prices for purchasing apartments in the Seoul area are already at the 1997 level and, in the case of Chonsei, the prices are beyond the 1997 figures for all property types.

#### MORTGAGE MARKET

The most notable development in the mortgage market is the focus on retail lending by the commercial banks. Commercial banks have shifted their focus from lending to large corporations to consumers due in part to corporate failures in recent years. The savings rate in Korea is still very strong (32.7% of gross domestic savings as a percentage of GDP in 2001)<sup>5</sup> and commercial banks have excess cash as their corporate lending has greatly diminished. With the deregulation of interest rates and highly liquid balance sheets, commercial banks are fiercely competing to provide loans to consumers.

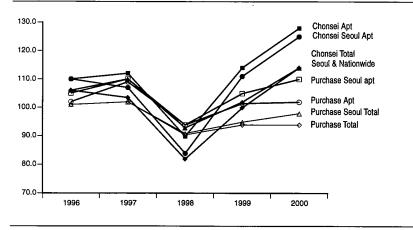
In addition to the commercial banks, mortgage banks are playing a more important

Table 2. Chonsei Price Index('95.12 = 100.0)

	•	•				
Location	Туре	1996	1997	1998	1999	2000
All Cities	Total	106.5	107.4	87.6	102.3	113.7
	Detached	103.2	103.1	86.0	89.0	96.3
	Row Housing	105.4	106.1	86.7	100.0	113.4
	Apartment	110.2	112.0	89.4	113.3	127.1
Seoul	Total	106.6	105.4	81.5	99.6	113.3
	Detached	104.0	102.4	80.1	88.7	102.0
	Row Housing	106.6	107.2	80.3	96.1	111.3
	Apartment	109.7	108.0	83.8	111.0	124.4

Source: National Statistical Organization Note: Based on the end of December of each year

Figure 2. Housing Price Index



role in the market. With the creation of Ko-MoCo and passage of the asset-backed securities (ABS) law, these nondepository institutions have greater access to capital. As of June 2000, they made up less than 2% of the market, but these companies are aggressive and are expected to make much progress in a short period of time. Due to their specialization on mortgage products, they can quickly adapt to the changing envi-

ronment, as well as implement new technologies and processes faster than the larger commercial banks with high overhead and deep-seeded culture and bureaucracy.

Many consumer loan products, such as automobile, credit card and noncollateralized loans have been available to consumers, but mortgages are a relatively new product for most commercial banks. Due to the heavy

Table 3. Percentage Market Share (Based on outstanding home mortgages) 2000

NHF	54.47%
Agricultural Corporation	3.39%
H&CB	31.23%
Kookmin Bank	2.39%
Other commercial banks	3.38%
Life insurance	2.87%
Non-bank financing	1.13%
Foreign bank	0.58%
Regional banks	0.32%
Other national banks	0.23%
NHF + H&CB + Kookmin Bank	88.09%

Source: International Finance Corporation

involvement by the government and the Korea Housing Bank, mortgages were historically provided by most commercial banks to their best customers as subsidized benefits in the past. Most of the commercial banks in Korea have less than 1% of their assets in mortgages as of 2000<sup>6</sup>.

# **CHANGES IN THE MORTGAGE MARKET**

With the increase of competition in consumer lending, however, new mortgage products are being developed and marketed. Within the last two years, the market has seen a tremendous variety of products offered by virtually all market players (see Table 4). Most of these products are shortterm, floating-rate mortgages (rates can change every three months on average, based on bank's funding cost) and some adjustable-rate mortgages (rates change on a scheduled basis from three months to one year in average, based on some index). Recently, there have been a few fixed-rate mortgage products offered with terms up to 10 years.

Table 4. Various Products Offered by Major Players in the Market

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	Rate	Terms			
Kookmin Bank					
Adjustable-rate	8.75-10.2%	30 years			
3-year fixed bullet	8.7-8.95%	3 years			
Floating-rate	6.60%	30 years			
H&CB					
3-month adjustable	6.31%	3 years			
6-month adjustable	7.75%	10 years			
1-year adjustable	7.95%	35 years			
NSC					
Best 20	6.75-7.49%	3 years			
GPM	10.5-10.9%	10 years			
Star65	10-11%	10 years			
Combi Loans	10.25-11.25%	10 years			

Source: eMoney, Kookmin Bank, H&CB, NewState Capital

By contrast, the products offered by the National Housing Fund (NHF) are basically long-term, fixed-rate mortgages up to 30 years. The rates can be changed at NHF's discretion. However, NHF has made only three rate changes in the last 30 years to be closer to the market rate. Its current (early 2002) rate is 9%.

Historically, the housing finance market has been largely dominated by the public sector (NHF loans) for low- and lower-middle-income buyers with up to 40% of loan-to-value (LTV) ratios. However, some of the recent mortgage products offered by commercial banks and other private sector lenders include LTV of up to 100% of the appraised price.

This increase in LTV is very important in expanding the mortgage market in any country, but has greater impact in Korea due to its rental market. The Chonsei system, Korea's alternative to monthly rental programs is facing new challenges. As indicated earlier,

supply is diminishing, causing the prices to increase dramatically. As such, there are more incentives for renters to use the deposit as a downpayment and purchase apartments instead of paying the high Chonsei prices. This change in the market, combined with the increase in LTV for mortgage loans, creates a real and immediate prospect for significant expansion in the mortgage market.

The Korean government has made significant policy changes with the goal to revitalize the real estate and housing finance industries since 1997:

- Privatization of the Korea Housing Bank. Initially set up by the government in 1967 to provide a stable source of funds for housing, the Korea Housing Bank held over 75% market share of new housing loans in 1995. As a result of the government's commitment for a more efficient financial sector, KHB was privatized under the new name of Housing & Commercial Bank (H&CB). In November 2001, H&CB and Kookmin Bank (the largest consumer bank in Korea) merged to create the new Kookmin Bank.
- ABS and MBS Laws. The ABS law was developed to support all asset-backed securities, including mortgages. The MBS law was specifically drafted for mortgage-backed securities. These laws permit securitization of mortgages for the first time in Korea.
- MBS Company Act 1999. A recently passed law allows for an establishment of special purpose corporations to issue MBS in Korea.
- MBS Tax Reduction Plan. The Ministry of Finance and Economy has plans to deduct a portion of the tax rate for smallsum purchasers of MBS to attract institu-

tional, as well as retail, investors to the MBS market.

- Non-construction Zone Deregulation Plan. The government has plans to loosen the restrictions placed on nonconstruction zones to support the construction and real estate industries.
- New Housing Plan. The Ministry of Construction and Transportation has announced its plans to finance new construction of 500,000 to 600,000 houses for three consecutive years to assist low-income buyers or renters.

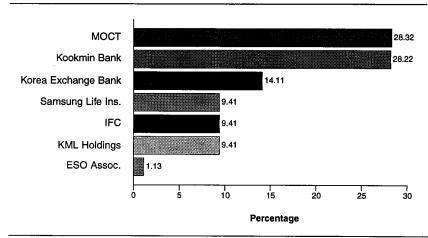
#### SECONDARY MORTGAGE MARKET

Probably the single most important change made to further develop the Korean mortgage was the creation of a secondary mortgage corporation. In an effort to inject additional funds into the housing market, the Korean government passed several laws starting in 1997, allowing for an establishment of the secondary mortgage market. A newly created conduit, Korea Mortgage Corporation (KoMoCo), was set up as a joint venture by the Ministry of Construction and Transportation (MOCT), H&CB, Kookmin Bank, Korea Exchange Bank and Samsung Life Insurance Co. at the end of 1999 (see Figure 3).

In 2000, International Finance Corporation (IFC) and Merrill Lynch became foreign investors of KoMoCo. Along with the equity investment, these foreign investors brought technical assistance to KoMoCo from Countrywide International Consulting Services (CICS), a subsidiary of Countrywide Credit Industries, and Fannie Mae (FNMA) in the areas of business, operations and technology development.

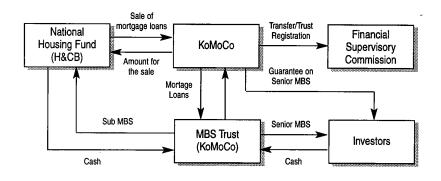
KoMoCo's mission is to securitize the National Housing Fund loans as well as private sector mortgages originated by com-

Figure 3. Percentagae of Ownership in KoMoCo



Source: KoMoCo

Figure 4. Structure of KoMoCo's MBS Deals



Source: KoMoCo. www.komoco.co.k

mercial banks and other special finance companies.

KoMoCo has established solid business operating structures and information systems to purchase and securitize while acting as its own trustee and master servicer for a total seven transactions by early 2002. It is important to note that KoMoCo MBS are not guaranteed by the Korean government, but are still considered a safe instrument due to the government involvement. With the assistance of CICS, the company developed selling and servicing guidelines as

well as marketing, risk and financial management plans. It is currently working on the second phase development of its information technology systems with the assistance of Fannie Mae.

Since its inception in 1999, KoMoCo has completed seven transactions, six collateralized by NHF loans and one collateralized by Samsung Insurance loans, bringing total MBS issued to approximately 2.7 trillion won (US\$2.26 billion) (see Table 5).

Up to this point, all of KoMoCo's securitizations have been backed by seasoned housing loans from either NHF or Samsung's portfolios. KoMoCo MBS are structured as callable and non-callable bonds with senior and subordinated tranches. They are not passthrough MBS as in the U.S. where the monthly principal and interest payments received are "passed through" to the investor (see Figure 4).

KoMoCo is an important player in the secondary mortgage market and is the only entity that can issue MBS under the Korean MBS law. However, it is not the only player in the secondary mortgage market. Other institutions could also issue MBS under the ABS law. NewState Capital (NSC), a mortgage bank, issued the first MBS in Korea in March of 2000. NSC has issued a total of eight transactions in the amount of 154 billion won (US\$128 million) all collateralized by its own mortgages.

As the secondary mortgage market in Korea is in its infancy, there are many challenges ahead. Currently, to issue mortgage-backed bonds and securities under both the MBS and ABS laws, all borrowers in the pool must be notified by letter of the sale. These borrowers are also given 10 days to object to the sale of their mortgage to the special purpose corporation. Additionally, a pre-purchase due diligence performed by a third-party accounting firm is required for 100% of the loans.

Table 5. KoMoCo MBS Issuances

КоМоСо	00–1 Amt.	4/7/00 Cpn.	00–2 Amt.	9/1/00 Cpn.	00–3 Amt.	12/8/00 Cpn.	01–1 Amt.	2/22/01 Cpn.	01–2 Amt.	7/4/01 Cpn.	02–1 Amt.	1/23/02 Cpn.	02–2 Amt.	2/21/02 Cpn.	Total
Senior															1
6-month	22	8.15%	25	7.38%	18	6.82%	8	6.24%			İ		27	4.86%	
9-month	10	8.57%	]										i		
1-year	12	8.81%	30	7.57%	16	7.05%	11	6.57%	30	4.90%	65	5.65%	25	5.30%	,
1.5-year	27	9.01%	30	7.87%	18	7.24%	12	6.82%							
2-year	33	9.16%	30	7.96%	17	7.38%	13	7.07%	35	5.33%	1		42	5.98%	
2.5-year			35	8.11%	18	7.75%	13	7.23%	İ						1
3-year	79	9.39%	35	8.17%	17	7.77%	12	7.41%	35	5.60%	60	6.78%	41	6.57%	!
3.5-year			34	8.29%	18	7.79%	13	7.53%	Ì						
4-year	92	9.69%	32	8.38%	16	7.81%	12	7.61%			1				
4.5-year			35	8.48%	20	7.83%	5	7.71%							İ
5-year	75	9.94%	35	8.53%	18	7.85%	20	7.71%	80	6.00%			77	7.11%	
6-year	19	10.04%	1				1								
7.5-year			158	9.00%	95	8.40%	57	7.80%			50	7.50%			
7.6-year			1				1		110	6.50%			110	7.30%	
10-year			1		97	8.60%	52	7.99%	110	6.78%			96	7.50%	
14-year									100	6.92%			74	7.65%	
Subtotal	369		479		368		228		500		175		492		2,61
Sub.	28.6		21		13.3		9.7		5		4.7		18.2		10
(Bln Won)	397.6		500		381.3		237.7		505		179.7		510.2		2,712
US\$ (Min)	331		417		318		198		421		150		425		2,26

Source: KoMoCo. www.komoco.co.kr

These restrictions increase the time and cost associated with each transaction. The current MBS law also prohibits KoMoCo from purchasing mortgages and retaining them in its portfolio for future securitization. A number of other changes in the legal and regulatory environment are needed in order to foster market development.

KoMoCo is also faced with other challenges from the primary mortgage market:

 Mortgages are a small portion of most commercial bank's assets, limiting the potential seller base.

- There is on-going consolidation in the banking sector, which further decreases the potential pool of sellers of mortgages.
- Most commercial banks currently have high deposit balances and do not have much incentive to off-load high quality mortgage assets from their balance sheets.
- Mortgage payments are remitted every day of the month, as the payment date is chosen at the time of the mortgage contract between the lender and the borrower.
- A loan can be assumed by another borrower with the approval of the lender, but the enforceability of this approval is questionable.
- Loan documents are not standardized.
- Mortgage products currently offered are not standardized.

KoMoCo has been successful in its short history in fulfilling its role in the capital market by providing long-term instruments to investors as well as the mortgage market by providing long-term funding for lenders such as NHF and Samsung.

Table 6 News State Capital MBS Issuances

NSC (Bln Won)	1st Amt.	3/00 Cpn.	2nd Amt.	1/01 Cpn.	3rd Amt.	3/01 Cpn.	4th Amt.	5/01 Cpn.	5th Amt.	9/01 Cpn.	6th Amt.	10/01 Cpn.	7th Amt.	11/01 Cpn.	8th Amt.	12/01 Cpn.	Total
Senior				-													
1-year	10	3YCB+10bp															
3-year	10	3YCB+75bp	5	8.5%	ŀ												
4-year									3	6.8%	3	6.65%	3	6.75%	3	7.70%	
5-year	10	5YGB225bp			7	7.7%	6	8.5%							1		
7-year			9	9.2%	2	12.0%			3	7.2%	3	7.05%	3	7.15%	3.5	8.10%	
10-year	13	5YGB350bp					1.3	12.0%	3	7.6%	3	7.45%	3	7.55%	3.5	8.50%	
11-year									0.6	8.0%	0.8	10.0%	0.6	10.0%	0.6	10.0%	
Subtotal	43		14		8		7		10	• • •	10		10		11		112
Sub.	16		8		3		2		3		4		4		4		42
(Bln Won)	58.9		21.1		10.5		9.7		12		13.4		13.5		14.5		154
US\$ (Mln)	49		17.6		8.75		8.08		10		11.2		11.3		12.1	*	128

Source: NewState Capital. www.newstate.co.kr

However, it has a more difficult job of convincing the commercial banks to sell their high quality mortgage assets to be securitized. Once securitized and guaranteed by KoMoCo, MBS collateralized by their own mortgages may be purchased back by these commercial banks. This structure decreases the capital risk weighting from 50% to 20%. So far, this incentive has not been sufficient for commercial banks to sell their mortgages. KoMoCo's newest and first private sector issuance, backed by Samsung loans, will hopefully open opportunities for Ko-MoCo to work with commercial banks in the near future.

KoMoCo may also target other noncommercial bank mortgage originators such as mortgage banks and other special finance corporations. Some of these originators depend on warehouse lines to fund their mortgages and generally have a higher cost of funds. As such, capital is scarce for these entities, and selling their newly originated mortgages to KoMoCo will free up capital to satisfy their warehouse agreements as well as allow them to originate more loans.

# CONCLUSION

The housing finance market in Korea has been very active in the past few years. The government has made good progress in putting in the appropriate measures to support the privatization and development of the mortgage industry. Further development in this area is still needed, however.

The combination of rising property prices, the weakness of the main rental system and more focus and attention being paid to the consumers by commercial banks strongly suggests that the primary market is ready for take off.

The highly concentrated private primary market has been slow to respond to the changing secondary market. However, the

MBS issued by NSC, all collateralized by private sector mortgages and KoMoCo's private sector MBS backed by Samsung mortgages are clear evidence of where the market is headed. As fierce competition continues, commercial banks will increasingly need capital to fund mortgages and the continuous development in the secondary mortgage market will no doubt prove to have a positive impact on the overall market in the years to come.

#### **NOTES**

- 1 World Fact Book 2001.
- <sup>2</sup> Financial Times
- <sup>3</sup> International Financial Statistics 2001 IMF
- <sup>4</sup> ABN AMRO
- <sup>5</sup> Government of Hong Kong Special Administrative Region.
- <sup>6</sup> Countrywide International Consulting Services