

# Financial Liberalization and Housing Finance Policy in Korea

by Kyubang Lee and Juhyun Yoon

## HOUSING FINANCE AND THE NATIONAL ECONOMY

The housing sector share of the Korean national economy has sharply increased in recent years. The ratio of housing investment to GNP, which was only 4.5 percent in 1987, reached over 8 percent during the period of the housing construction plan for 2 million units (1988–92). This investment ratio exceeds the international ratio of housing investment of 6–6.5 percent based on a comparison of per capita income.

As a result, the housing supply ratio (number of housing units relative to the number of households) has increased from 69.8 percent in 1985 to 81.7 percent (estimated) in 1994. The housing price index rose from 63.7 (end 1990 = 100) in 1987 to 105.8 in April 1991, an annual rate of increase of 14 percent. The house price index decreased to 91.8 at the end of 1994 and has remained stable during early 1995. However, house prices are so high that an average household must save its entire

income for 6.4 years to buy a house. Even though the price-income ratio has declined from 9.0 in 1990, it is still high relative to 3.9 in Washington or 4.2 in Paris, but low to 11.5 in Tokyo and 7.2 in London. However, the rental price index has steadily risen from 102.0 in 1991 to 117.4 in 1994.

The importance of housing finance has increased in accordance with the expansion of the housing sector. The ratio of housing finance compared to GNP has increased from slightly over 1 percent in 1988 to around 3 percent lately. The ratio of housing finance to housing investment is almost 40 percent. The share of housing finance in the financial sector has increased from 7 percent in 1987 to 12.9 percent in 1993. This trend of housing finance expansion was mainly due to government intervention in both real and financial housing sectors. However, the effectiveness of housing finance is so low that households must save almost 80 percent of the house price, which indicates that the average loan-to-value ratio is around 20 percent.

## CHARACTERISTICS AND PROBLEMS OF HOUSING FINANCE

### Housing Finance Systems

Institutional housing finance consists of public and private sectors. The public sector is represented by the National Housing Fund (NHF) and the Agricultural Cooperative Federation, while the private sector is represented mainly by the Korea Housing Bank (KHB) and the Citizen's National Bank and Life Insurance Companies. The private sector is controlled by the government, which regulates the interest rates of savings and loans and the supply of housing finance. Private housing finance — which has been curtailed in the past by the government — is one of the sectors most affected by the new financial revolution.

### Institutional Housing Finance

Resource mobilization of NHF mainly consists of National Housing Subscription Savings Deposits, Type I or Type II National Housing Bonds, loan collections, borrowings and contributions from the government. The share of National Housing Subscription Savings Deposits and Type I and Type II National Housing Bonds was over 50 percent during the period of 1988–1992. However, the contribution of the government, including borrowings, is still negligible.

Kyubang Lee is Vice President and Juhyun Yoon is Senior Research Fellow of the Korean Research Institute for Human Settlements. This paper was presented at the International Symposium on Korean Housing Policy and Asian Regional Conference on Financing Strategies for Habitat II, held in March 1995 in Seoul, Korea.

**Table 1.** GNP, Housing Investment and Housing Finance (unit: billion won at 1990 constant prices, %)

	1985	1986	1987	1988	1989	1990	1991	1992	1993
GNP (A)	108103	121037	135913	152229	162684	178262	194459	204231	215641
Gross Fixed Capital (B) Formation	31018	34316	40142	45646	52885	66569	74973	74376	77034
Housing (C) Investment	4,965	5,651	6,161	7,559	9,050	14,577	16,470	15,373	16,989
C/B	15.7	16.5	15.3	16.6	17.1	21.9	22.0	20.7	22.1
C/A	4.5	4.7	4.5	5.0	5.6	8.2	8.5	7.5	7.9
Housing Finance (D)	140.79	1342.6	1739.0	1900.9	3208.8	6338.9	5868.3	6192.0	6713.3
D/A	1.3	1.1	1.3	1.2	2.0	3.6	3.0	3.0	3.1
D/C	28.4	23.8	28.2	25.1	35.5	43.5	35.6	40.3	39.5

Source: The Bank of Korea, Economic Statistics Yearbook

**Table 2.** Loan-to-Value Ratio (unit: 10 thousand won)

	82	84	86	88	92
House Price	1,671.2	2,250.4	3,007.0	3,203.8	4,083.2
Loan	508.1	589.7	645.3	729.0	847.1
LTV Ratio	30.4	26.2	21.5	22.8	20.8

Source: KRIHS

NHF supports the construction of small-sized housing units, usually less than 60 square meters, for sale or for rent. Loans from NHF are preferred to those of KHB and, in particular, to commercial finance because of their long-term maturities and low rates of interest. The maximum term is 20–25 years for the construction of housing units for sale, and 25–30 years for rental units. The maximum loan amounts are 14 million won for a sales unit and 16 million won for a rental unit.

Major sources of funds for the Korea Housing Bank are general deposits, including Savings Deposits for Housing Purchases, Housing Installment Savings Deposits, Worker's Asset Formation Deposits, loan collections and Housing Bonds. The share of revenue from general deposits, including Savings Deposits for Housing Purchases, has been over 50 percent, but fell to 10 percent in 1993. However, the share of loan collections and Housing Installment Savings Deposits has increased

since 1989. The share of Housing Bonds has notably increased recently.

The Korea Housing Bank supports loans for operational capital and for equipment capital to builders. In general, loans are for one year and can be extended to three years. KHB also lends for individual construction, for improvement and for purchase by the individual household for terms of 10–20 years. Interest rates are within the range of 9.0–11.5 percent, as shown in Table 7. KHB's loan rates are lower and the term of its loans longer than those of commercial banks.

#### Non-Institutional Housing Finance

Non-institutional sources of funds are very important in Korea. Non-institutional housing finance consists of Chonseis deposits, pre-sale of incomplete housing units, construction loans from the Korea Housing Financial Cooperative (KHFC), and moving cost support

for site suppliers in reconstruction and redevelopment projects.

Chonseis deposits are a form of financial support from tenants to owners. Tenants have to give a Chonseis deposit (amounting to approximately one-half of the house price) to owners in advance. The deposit is refunded when they move out. Although Chonseis is a popular type of tenure in Korea, it is a primitive form of housing finance. Owners prefer to rent houses using Chonseis because they can get a large amount of funds for use for other purposes. Tenants prefer Chonseis because they can use Chonseis principal as seed money to buy their own houses. Chonseis tenants in 1990 represented around 28 percent of all households and as high as 37 percent in the six largest cities. The size of the Chonseis deposit market is estimated at 32,600 billion won in 1991, which is more than three times the volume of housing finance loans outstanding of 9,700 billion won.

The pre-sale of incomplete housing units is a form of financial support from buyers to builders. With excess demand in the housing market, housing builders can mobilize funds to cover their construction costs, which are very heavy in the beginning stage of the construction period. Buyers get the sales premium caused by the difference between the regulated purchase price and the market price. Pre-sales are permitted for builders who build

**Table 3.** Housing Loans in Institutional Housing Finance (in billion won)

	1985	1986	1989	1990	1991	1992	1993	85-93 % Increase
Korea Housing Bank (A)	1998.5	3291.1	4671.3	6170.3	7620.0	9520.8	11360.6	468.5
National Housing Fund (B)	2648.0	3910.1	5000.9	7624.4	9802.4	11930.5	14601.1	451.4
Agricultural Cooperatives Federation	425.7	497.9	514.5	535.4	590.8	696.2	816.4	91.8
Citizen's National Bank	249.6	403.8	434.4	594.9	887.3	1150.1	1438.8	476.4
Life Insurance Companies	78.2	94.8	98.3	158.7	778.3	942.3	1098.6	1304.9
Commercial Banks		232.3	329.5	472.7	562.1	634.9	712.4	
Local Banks		84.7	120.0	169.6	194.3	196.5	234.0	
Other Banks		88.8	112.5	112.2	145.9	193.8	114.1	
Total (C)	5400.0	8601.5	11281.4	15838.2	20581.1	25265.1	30375.9	462.5
Share of KHB (A/C<%)	37.0	38.3	41.4	39.0	37.1	37.7	37.4	
Share of NHF (B/C<%)	49.0	45.5	44.3	48.1	47.7	47.3	48.1	

Source: KHB, Monthly Economic Review

more than 20 housing units on one site. Assuming 450 thousand units of apartment construction per year, the funds collected from pre-sale of houses is estimated to be 12,275 billion won.

The Korea Housing Financial Cooperative provides construction loans to members according to their contribution to the cooperative's capital and credit guarantees which allow members to get loans from banks. The main loans from KHFC are for site purchase, for operation and for discount of bills. The maximum loan amount is 90 percent of a member's capital investment and the term is 1-2 years (less than 90 days for discount of bills). Loan interest rates are very low, as shown in Table 8. Loans outstanding amount to 579 billion won, 89 percent of KHFC's loan capacity.

Moving cost support in the process of reconstruction and redevelopment is a type of financial support from builders to site suppliers. Funds are provided from their own capital or from loans from banks. In order to activate projects, builders advance moving costs to site suppliers. Moving cost support is attractive because builders need not spend money and

effort in purchasing the site, increasing relative profitability and reducing project risk. At the same time, members of the cooperative benefit by substituting a new house for their old one with only a small expenditure since they supply their own site. Since the share of houses over 20 years old is 40-50 percent of housing stock in Seoul, reconstruction or redevelopment is a popular way to avoid the difficulty of purchasing sites in the large city area. There are a total of 5,980 thousand units of reconstruction or redevelopment projects in the Seoul plan. The total amount of moving cost support from builders is estimated at 500 billion won per year, assuming an average moving cost support of 50 million won to 10,000 households.

#### Housing Finance Problems and Causes

**Problems.** One of the problems in housing finance is that the demand for housing finance is excessively high relative to the supply of funds. Demand for housing loans has increased due to the housing shortage and to housing price increases. Moreover, housing loans have had low interest rates relative to

commercial bond yields, which are regarded as a market interest rate in Korea.

The lack of competitiveness in funds acquisition by providers of housing finance inevitably makes them dependent on semi-compulsory fund sources, such as the National Housing Subscription Savings Deposit, Savings Deposits for Housing Purchases and Housing Installment Savings Deposits. The person who wants to buy a new house must take out one of these savings deposits first and must wait until the qualification period is fulfilled. Purchase of Type I National Housing Bonds is required of the interested person or business. Type II National Housing Bonds are sold to the prospective purchasers on a competitive bid basis.

There are several other problems affecting housing finance in Korea. First, the shortage of housing finance has been aggravated by the fact that the leverage effect of securitization of mortgage debt cannot be utilized due to underdevelopment of the bond market. As a result, private housing finance is based on collecting short-term funds and lending long term.

KOREA

**Table 4. Resource Mobilization in NHF (in billion won, %)**

	1986	1987	1988	1989	1990	1991	1992	1993
National Housing Subscription	-46.1	-125.2	163.3	693.6	801.8	728.6	112.8	-225.7
Savings Deposit	(-8.1)	(-21.2)	(19.1)	(34.4)	(27.3)	(22.0)	(3.1)	(-6.3)
Type 1 National Housing Bonds	132.3 (23.2)	144.9 (24.5)	214.4 (25.1)	359.3 (17.8)	584.8 (19.9)	719.4 (21.8)	792.1 (21.7)	927.7 (25.9)
Type 2 National Housing Bonds	72.6 (12.7)	15.4 (2.6)	37.4 (4.4)	89.3 (4.4)	277.1 (9.5)	642.7 (19.4)	648.7 (17.8)	303.6 (8.5)
Loans	50.5	129.1	72.7	138.8	480.0	684.6	542.1	1199.6
Collections	(8.8)	(21.8)	(8.5)	(6.9)	(6.3)	(20.7)	(14.9)	(-33.4)
Borrowings From Government	100.0 (17.5)	100.0 (16.9)	130.0 (15.2)	230.0 (11.4)	-2.7 (-0.1)	-357.3 (-10.8)		
Government Contributions			30.0 (3.5)	30.0 (1.5)				
Fund Carried Over Previous Year	128.3 (22.5)	26.2 (4.4)	38.0 (4.5)	221.9 (11.0)	842.3 (28.7)	241.5 (7.3)	802.9 (22.0)	597.7 (16.7)
Others	133.7 (23.4)	301.0 (50.9)	167.1 (19.6)	253.4 (12.6)	-51.1 (-1.7)	-651.9 (19.7)	753.0 (20.7)	782.1 (21.9)
Total	571.2 (100)	591.4 (100)	852.9 (100)	2016.2 (100)	2932.1 (100)	3311.4 (100)	3651.6 (100)	3582.0 (100)

Source: KHB, Housing Economic Statistical Yearbook

Second, resource mobilization for housing finance is unstable since it depends on the business cycle in the housing sector. Revenue from compulsory bond deposit sources for housing purchases fluctuates according to the real estate business cycle. The instability of resource mobilization for housing finance can be seen by comparing the amount during the recession periods of 1986-87 and 1992-93 to the boom of 1988-90, during which the housing construction plan for 2 million units was in process.

Third, the role of the public sector is not distinguished from the private sector in housing finance. Government contribution of resources in NHF is very low, while the private contribution to NHF is over 90 percent. The average income of NHF beneficiaries falls in the 6th decile in income distribution of city workers. This result derives from the fact that the housing supply rule is based on non-ownership rather than on income level. Only the very small size of less than 40 square meters leads to an income restriction. The fact that NHF lends mainly for unit construction for sale rather than for rent is

another reason why the benefits of NHF accrue to upper income households. KHB sets a higher limit of unit size at less than 100 square meters.

**Causes of the problems.** One of the main causes of the housing finance problems is government's regulation of the financial sector. A government-led, export-based economic growth strategy was pursued during the 1960s-1980s. The financial sector was regarded as a complementary element to help achieve the real sector goal. The main function of the financial sector was to supply sufficient funds to selective investment projects and to the export industry at preferential interest rates. Thus, regulation of the financial sector was focused on policy-based collection and allocation of funds.

As a result, a sector with low priority in the government's strategic investment plan, like the housing sector, faces difficulty in funds acquisition through the institutional sector. The policy response has been government-regulated housing loans with preferential interest rates in order to provide housing for

common people. An increased demand for housing has created a housing shortage and housing price increases which, in turn, have brought about an excess demand for housing finance.

At the same time, government regulation of the housing sector through sales price controls on newly constructed units, and allocation of housing supply based on contract savings and by government-led site development, have been taken in order to restrain speculative demand under the housing shortage. Semi-compulsory funds collection in institutional housing finance has been possible because of the existence of excess demand for housing. And government led site development with funds mobilized through the pre-sale of sites to housing builders has inevitably resulted in the pre-sale of incomplete housing units.

The result of government intervention in the financial sector through credit rationing is difficulty in funds acquisition for housing. Housing shortages and housing price increases have resulted from the government regulation of the housing sector, which, in turn,

**Table 5.** Lending Interest Rates of NHF (unit: %/year)

Use of Funds	1986	1989	1990	1993
Operation Loans for Construction	10.0	10.0	10.0	9.5
Site Development	10.0	10.0	10.0	9.5
Building Materials Purchase				9.5
<b>Housing Construction</b>				
Collective Housing Construction and Partnership	10.0	10.0	10.0	7.5-9.5
Rural	7.5	7.5	7.5	5.5
Rental	5.0	3.0	3.0	3.0
Welfare House for Labor			8.0	7.5-9.5
Rental for Employee			3.0	3.0
Multi-family House for Rent			10.0	9.5
Lottery	4.0			
Public Construction	8.0	8.0	8.0	8.0

led to semi-compulsory fund collection. Thus, non-institutional sources of housing finance such as Chonseil deposit, pre-sale of incomplete housing units, and activities of the Korea Housing Financial Cooperative grow spontaneously and take on an enlarged role due to the underdevelopment of institutional housing finance.

### FINANCIAL LIBERALIZATION AND HOUSING FINANCE

#### Contents of Financial Liberalization

**Opening of the financial market.** It has been recognized recently that the underdevelopment of the financial sector relative to the real sector because of the tight regulation by the government has become a barrier to stable economic growth. The financial revolution was motivated by the recognition that the market mechanism must be restored in order to respond properly to financial and capital market liberalization. In addition, the other purposes of financial liberalization are to make funds supply more effective through the market mechanism, to reduce cyclicity of housing finance, to promote fair competition among banks and to raise the effectiveness of money supply control. Thus, the government has prepared a step-by-step financial liberalization plan which attempts to minimize any negative effects on the real sector.

The main components are interest rate deregulation, improvement of money supply control policy, deregulation of fund management of financial institutions and expansion of their scope of business activities.

The interest rate deregulation plan is set and in process. The authorities launched a de facto liberalization of interest rates by implementing on November 21, 1991, the first stage in a series of measures for deregulation. Since then the scheduled process of step-by-step liberalization has proceeded on schedule and is now in its third stage.

Lending rates have been almost fully deregulated. The only major exclusion from the two stages of deregulation were discount rates on commercial bills eligible for rediscount with the Bank of Korea. Major liberalized lending rates included those on bank overdrafts; on the discount of commercial banks (including their trust accounts), mutual savings, finance companies and life insurance companies; on the discount of commercial paper and trade bills by investment and finance companies; on the purchase of firms' paper with recourse by bank trust accounts; and those on overdue loans by all financial institutions.

As for deposit rates, the liberalization applied to those on short-term, large-denomination, marketable instruments, such as CDs, the sale

of large denomination trade bills, commercial paper and repos. In addition, rates on time deposits with a maturity of at least two years offered by both banks and other financial institutions were deregulated. Furthermore, the issue rates of corporate bonds, monetary stabilization bonds and financial debentures were deregulated in the first two stages of the interest rate liberalization.

The authorities intend to achieve the virtual deregulation of interest rates in the third stage of the process starting in 1994 by deregulating the rates on all but demand deposits, the discount rates on commercial bills eligible for rediscount with the central bank, and the issue rates of government and public bonds. The third stage deregulation is scheduled to be completed by the end of 1996. However, it is highly likely that the pressures from domestic and overseas financial markets for the more rapid liberalization will force the authorities to accelerate the speed of deregulation.

The degree of deregulation can be represented by the market shares of deposits and loans on which interest rates have been deregulated. At the end of 1994, deregulated deposits represented 67.7 percent of deposits at banks and 74.3 percent of those at non-bank financial institutions.

The authorities also plan to enhance the effectiveness of monetary policy and the efficiency of the financial markets. For this purpose, they will improve the environment for the utilization of orthodox indirect monetary control measures; and develop a more effective monetary policy applicable to the changing financial market, placing more emphasis on the role of interest rates and exchange rates. In addition, the policy-based loan function of the central bank is planned to be gradually reduced and ultimately abolished.

In addition, the authorities plan to consolidate the managerial autonomy of banking institutions by relaxing the restrictions considered to hinder autonomy. Furthermore, in order

**Table 6.** Resource Mobilization in KHR (in billion won, %)

	1986	1987	1988	1989	1990	1991	1992	1993
General Deposits	56.6 (8.4)	473.5 (38.7)	1226.7 (63.3)	1294.9 (42.8)	1870.6 (54.5)	1219.8 (33.5)	820.1 (22.6)	432.6 (9.8)
Savings Deposits for Housing Purchases	-51.6 (-7.6)	74.5 (6.1)	771.0 (39.8)	1229.1 (40.6)	1059.7 (30.8)	228.5 (6.3)	-414.5 (-11.5)	-205.5 (-4.6)
Other Deposits	108.2 (16.0)	399.0 (32.6)	455.7 (23.5)	65.8 (2.2)	810.9 (23.6)	991.3 (27.3)	1234.6 (34.1)	638.1 (14.4)
Housing Installment Savings Deposits	94.6 (14.0)	100.5 (8.2)	100.1 (5.2)	232.3 (7.7)	328.9 (9.6)	618.4 (17.0)	746.8 (20.6)	1115.0 (25.2)
Workers Asset Formation Deposits	264.5 (39.2)	276.3 (22.6)	-107.1 (-5.5)	-76.3 (-2.5)	-58.1 (-1.7)	41.9 (1.2)	146.0 (4.1)	22.0 (0.5)
Loan Collections	65.9 (9.8)	90.7 (7.4)	165.5 (8.5)	173.2 (5.7)	355.2 (10.3)	489.3 (13.5)	648.7 (17.9)	871.3 (19.7)
Housing Bond	150.0 (22.2)	-0.3		85.8 (2.8)	-128.5 (-37)	-67.2 (-1.9)	297.6 (8.2)	650.4 (14.7)
Capital	5.0 (0.7)	10.0 (0.8)	5.0 (0.3)	5.0 (0.2)				
Fund Carried Over From Previous Year				925.4 (30.6)	803.7 (23.4)	788.2 (21.7)	662.5 (18.3)	657.0 (14.8)
Others	38.2 (5.7)	272.7 (22.3)	547.8 (28.3)	383.6 (12.7)	263.6 (7.7)	552.4 (15.2)	307.5 (8.5)	690. (15.6)
Total	674.7 100.0	1223.5 100.0	1938.0 100.0	3023.9 100.0	3435.4 100.0	3642.8 100.0	3629.2 100.0	4438.5 100.0

Source: KHB, Housing Economic Statistical Yearbook

**Table 7.** Interest Rate of Loans from KHB (unit: %/year)

	1986	1989	1990	1993
Loans for Builders	11.5	12.0	11.0	9.0-11.5
Loans for Households	11.4	11.5	11.5	9.5-11.5

to create the more competitive environment that is vital to the enhancement of financial efficiency, the authorities intend to ease further restrictions inhibiting competition and consider privatization of the government-owned banks. Judging from the policy direction, the KHB is likely to be privatized soon.

**Opening of the capital market and decontrolling foreign exchange.** The rapid economic growth and a high degree of internationalization in the overall economy have made it inevitable for Korea to pursue a gradual internationalization of the capital markets. The active participation of Korean corporations in

the overseas capital markets has provided them with good opportunities and enabled them to do their business abroad more effectively. A typical example of these benefits is that domestic corporations can raise capital at lower costs by issuing securities overseas rather than financing primarily through bank loans. Also, the Korean government, responding to strong pressures from the industrialized countries, has taken measures to open its capital markets step-by-step, with full opening by 1997.

Liberalization of the capital markets consists of two parts: opening of the local capital mar-

kets to foreigners (nonresidents) and allowing residents to participate in overseas capital markets without restriction.

The foreign exchange and capital transaction liberalization plan, embodied in the third stage of the financial liberalization and market opening blueprint (1993-1997), reveals the government's commitment to implement financial reforms as scheduled. The decontrolling plan is basically aimed at promoting economic growth and more efficiently supporting Korean companies' overseas activities. Thus, it emphasizes stimulating the foreign exchange markets through step-by-step deregulation.

**Table 8.** Lending Interest Rates of KHFC

Interest Rates by Term	less than one month	3.0
	1-3 months	3.5
	3-6 months	4.5
	more than 6 months overdue	5.0 16.0
Bill Discount		3.0

The regulations to be relaxed include those imposed on the daily fluctuation band of exchange rates and on the business activities of the foreign exchange banks. The plan is designed also to promote internationalization of the Korean won.

#### Effects of Liberalization on Housing Finance

**Interest rates.** Interest rate deregulation will bring about an increase in institutional interest rates in the short run due to the existence of excess demand for money under the regulated market. Rates in the curb market will decrease. Thus, the interest rate difference between institution and non-institution will disappear. In the long run, however, market interest rates will tend to decrease as funds flow in from abroad due to the capital market liberalization and the relatively low inter-national interest rates.

**Demand for housing finance.** Interest rate deregulation will increase the cost of funds, resulting in an increase in loan interest rates. Thus, the demand for housing finance in the short run is expected to shrink. However, the opportunity to get housing loans will also increase, as long as the borrower can afford to pay the market interest rate. The implicit demand for housing finance at market rates is sufficient in that there exists huge demand in the curb market which is characterized by high interest rates.

On the other hand, an interest rate decrease in the long run will bring about an increase in

demand for housing finance. It will also bring about an increase in housing investment and an increase in demand for housing finance by inducing an increase in real estate, including housing, in investor portfolios.

**Supply of housing finance.** The provision of funds for housing will be totally integrated into the general finance sector through the commercialization of housing finance. Fund suppliers will be able to invest in the real sector, in bank savings, in non-bank savings or in the capital market. The capacity of housing finance lenders will be expanded due to the financial integration. However, bank institutions will avoid loans to the housing sector because housing loans should be made with a long term. This will reduce the bank share of housing loans.

Funds suppliers tend to prefer profitability to stability in their portfolio allocation. Thus, they will move their money more into the non-banking sector than into the banking sector. Moreover, the banking sector has no function of money seclusion any more due to the regulation requiring the real name of depositors. Therefore, fund acquisition through bank savings is expected to shrink for a while.

Housing finance mobilization will become much more related to the investor's portfolio management, which reflects on the business cycle of the real estate sector, including the housing sector. Funds collection will be low during real estate boom periods since investors prefer real estate investment to putting savings into banks. During real estate recessions, it

will be the reverse. This implies that housing finance will become more dependent on the business cycle of the real estate sector.

The liquidity increase caused by capital market liberalization will bring about an overall expansion of funds supply to meet the domestic demand for money. Thus, the capacity of housing finance can be expanded if the housing finance system is integrated into the capital market. However, due to investor profitability preferences, segregated housing finance will encounter difficulties in fund acquisition based on savings deposits.

**Housing finance institutions.** Funds acquisition costs for banking institutions will increase as a result of competition among banks. Thus, they need to minimize intermediation costs through effective management in order to strengthen their competitiveness. They may tend to avoid putting their funds into housing loans due to the maturity mismatch problem.

Banks will focus their efforts on developing various financial commodities in order to meet the demand for housing finance. An especially important innovation will be short-term loans for the moving of homeowners, which may be profitable by avoiding the mismatch problem of housing finance.

Loans to households are less risky in that banks can take a mortgage on the house; but they are more costly because of the relatively small loan amounts. On the other hand, loans to the builders are more risky because they have no mortgage, but less costly in loan management because of their size. Risk management as well as cost minimization will be important. Therefore, banking institutions will have to choose the proper share of funds to be distributed between these two sectors for their profit maximization. Advanced technology for asset and liability management (ALM) will be actively introduced to assist in these choices.

For example, KHB, which has been a representative institution of housing finance in

Korea, will face a whole new environment. KHB will be exposed not only to financial liberalization but also to the removal of government protection and to privatization. KHB may enjoy a favorable market position for a while, owing to its specialty in housing loans and its on-going customer relationships. However, KHB has to promote its competitiveness in the financial market as a commercial bank as well as the leading bank in housing finance.

**Housing finance market.** Interest rate deregulation will bring about competition in the financial market, making the market more effective. Financial institutions will attempt to minimize their intermediation costs and develop various new products. Borrowers will easily be able to access various loans with market interest rates, according to their ability to pay. Funds from the curb market will flow into financial institutions as the financial market develops. However, financial institutions, as well as borrowers and investors, will have to prepare for the interest rate risk which will be increased by the liberalization.

Integrating housing finance into the liberalized capital market could enlarge the supply of housing financing, thereby supporting the housing sector more effectively. The liquidity increase in the capital market will facilitate the acquisition of funds by other industries, which will alleviate the competition in the financial market between housing finance and other industries.

In addition, capital market liberalization will facilitate the in-and-out flow of foreign speculative capital, which may cause instability in the domestic capital market. Capital market liberalization will bring about a close relationship among interest rates, exchange rates and stock prices, which implies a close relation between the domestic market and foreign markets. Thus, government has to prepare for the impact on the domestic market from financial shocks in foreign markets.

The prospective changes in the financial sector will result in the shrinkage of private housing

finance in the short term. However, housing finance could be expanded by integrating housing finance into the liberalized capital market and by absorbing the huge amount of money from the curb market in the long term. Thus, the housing market and housing finance market will become more competitive, facilitating the development of housing finance through market expansion and increased market efficiency.

#### **FUTURE DIRECTIONS FOR HOUSING FINANCE POLICY**

##### **Guidelines for Housing Policy in the Future**

Housing finance policy is closely related to housing policy because housing finance takes the role of supporting the housing market. Thus, we need to turn our focus first to the basis of housing policy in the future.

**Expansion of housing supply.** The housing construction plan for 2 million units has helped to raise the housing supply ratio over the last 10 years. The housing supply ratio is planned to reach 90 percent by 1998 in the New Economy Plan for five years. Thus, the expansion of housing supply will be the basic policy goal up to the year 2000 or when the housing supply ratio is projected to reach 100 percent.

**Pursuing the principle of market competition.** As the housing supply ratio increases, the housing problems caused by housing shortages will be mitigated. Competition between builders both in and out of the country will become greater. Thus, in order to raise the competitiveness of domestic builders, the distorted housing market should be normalized.

The housing construction industry has been regulated by the government in almost every phase, including land development, housing construction and sales of the units. Private participation in site development must be expanded. In order to promote competitive-

ness of developers, various regulations imposed on the housing sector and housing finance sector should be abolished in the very near future. These regulations include price control on the newly constructed housing units, the housing supply rule, the pre-sale of incomplete housing units, the bidding of Type II National Housing Bond for buying new houses and savings deposits tied to the housing supply rule.

##### **Housing policy for the low-income class.**

The current focus on liberalization, localization and globalization implies that markets will become more competitive in the future. One result may be that income and asset distribution become more unequal. The government has the role of protecting those who cannot afford to participate in the housing market due to their low-income status.

Thus, housing policy should focus on a public housing policy for the low-income class and deregulation of the private housing sector. The rental housing stock should be increased and operated so as to be affordable to consumers. Government contributions to affordability will be more important in public housing policy.

##### **Increase in the role of housing finance.**

Once the housing market becomes competitive, the government will have less power to intervene through direct regulation of the housing market or housing finance market, as is currently the case. Exceptions are the direct regulation of quality control or land-use control. Instead, indirect market intervention through the tax system or financial policy should be pursued.

Tax policy has been limited in use to short-term control of the business cycle. Tax incentives would be preferable if used for long-term adjustment of housing demand and supply.

In the area of financial policy, an indirect way to intervene in the housing market may be for the government to supply seed money to housing finance institutions for sustainable



growth and active functioning of the housing market. At the same time, government support may be needed for the maintenance and expansion of housing finance. In other words, government has to make various efforts to prevent short-term shrinkage of housing finance resulting from the housing finance liberalization. To do so will require inventions to steer the fund inflow caused by the liberalization into the housing finance sector.

#### Housing Finance Policy Directions

**Basic direction.** The basic direction for the housing finance policy is to solve the problems currently encountered and to accomplish the housing finance liberalization with minimum side effects. In addition to this, the housing finance market should be normalized to support the housing market effectively. There will surely be limits to government intervention in housing finance. Thus, housing finance policy will be only complementary to the housing finance market, and government should focus on targeted housing policy and housing finance policy.

**Distinction between public and private housing finance.** NHF must support lower income classes, not only because it uses public financing but also because government must protect against the exclusion of these classes from the competitive housing market. Therefore, NHF should focus more on rental units than on units for sale. Once the rental housing stock is increased to some degree, NHF could turn its focus to helping the moderate-income groups to purchase their own housing.

On the other hand, the private sector of housing finance should be liberalized to meet the

various demand for housing finance according to market-based interest rates. Even with the market interest rate higher than the regulated one, there will be sufficient funds to meet the demand for housing finance coming from the huge amount of capital in the curb market which operates at high interest rates. However, fund acquisition could shrink unless housing finance is integrated into the capital market.

**Deregulation of private housing finance and securitization of mortgage debt.** Commercialization of housing finance may result in a shrinkage of funds for housing because households may invest their capital in non-banking institutions rather than depositing in banking institutions. Thus, financial liberalization without any preparation will shrink the housing finance sector in the short term. Government has to support housing finance through indirect ways like tax incentives to the housing-related savings and loans. Income tax reduction on savings accounts related to housing finance or tax exemption on housing loan payments should be expanded. Secondly, the government has to devise a way to steer the fund inflow caused by the liberalization into the housing finance sector. Moreover, the ability of housing finance institutions to issue bonds abroad must be permitted in order to expand their funds acquisition.

Finally, mortgage debt should be securitized to solve the mismatch problem of housing finance. At the initial stage, permitting bond issues with self-guarantees based on the mortgage debt held by housing finance institutions is preferable in that it minimizes the securitization cost and improves the possibility of acceptance in the capital market. Securitization of new originations and by new

institutions can be established later on. Stable housing prices and correction of distortions in the housing finance market will enhance the possibility of the securitization of mortgage debt.

**Development of loan commodities and introduction of new technology.** Deregulation of private housing finance will raise the effectiveness of the housing finance market through self-supporting operation of finance institutions and high competition among them. As demand for housing finance diversifies, new loan products will be invented to meet the various demands. Short-term loans for moving owners should be considered since it will solve the mismatch problem of housing finance and since the demand for that kind of loan is abundant. Wider application of asset and liability management technology to manage the interest-rate risk should be considered.

The role of government is very important in the process of deregulation and liberalization of the housing finance sector since housing finance has been protected and controlled by the government and, therefore, is competitively very weak. Government has to correct the distortions of the housing finance sector first in order to promote the competitiveness of housing finance in the financial and capital markets. A solid foundation for housing finance is necessary to support the housing sector effectively. In addition, the government has to devise various ways to move the huge amount of non-institutional housing finance, which exists in the curb market, in the form of Chonsei deposits and in builder's financing to site suppliers, into the institutional sector so as to increase the social and economic efficiency of housing finance.