Financial Stability Report

April 2007

THE BANK OF KOREA

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The Bank of Korea publishes *Financial Stability Report* to encourage lively discussion among market participants on financial stability by providing comprehensive analysis and assessment of the current state of the domestic financial system and potential risk factors therein.

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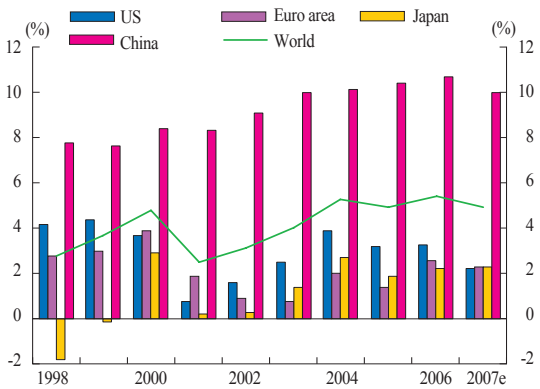
BOXES

Ⅰ. Overview

1 The stability of the Korean financial system as a whole appears to be strengthening, thanks to solidly-based economic growth at home and abroad and the favorable profitability of domestic banks. However, major potential risks are seen to be present in the household sector, which with mounting debts is becoming more vulnerable to shocks such as declines in housing prices, and in international financial markets, which have seen a heightening of volatility that could give rise to domestic financial market instability.

Economic growth and outlook of selected economies



Source : IMF, World Economic Outlook (April 2007)

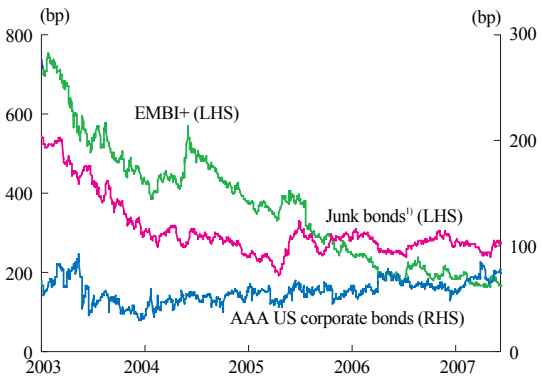
2 *The domestic economy continues on a moderate upward trend, while the world economy shows healthy growth.*

The US economy slowed down during the second half of 2006, affected by the cooling housing market, but the Chinese economy continued very strong growth at above the 10% level. The Japanese and Euro-area economies remained on a recovery course,

driven by brisk exports. This world economic growth is expected to continue in 2007, with the US, Japanese and Euro-area economies all growing at the 2% level, and the Chinese economy at around the 10% level.

Risk premiums in international financial markets remain narrow, but investors seem to have become more sensitive to potential risk factors including the persistent global imbalances, the possible unwinding of the yen-carry trade, and asset price corrections.

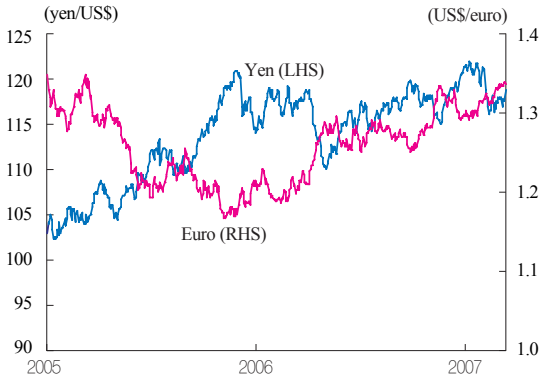
Credit spread trends



Note: 1) Figures for junk bonds refer to the average of corporate bonds with credit rating of BB+ or lower.
Source: Bloomberg

In May 2006, after the Fed had hinted at the possibility of further interest rate hikes, global stock prices underwent a correction and credit spreads temporarily widened, particularly in emerging markets. Global stock markets fell back sharply again in February 2007, dragged downward by the deterioration of the US subprime mortgage market and the possibility of further tightening by the Chinese authorities. US long-term market interest rates have shown downward movements and stayed below the policy rate since July 2006, as market concerns about a US economic slowdown have heightened and investors

Trends of exchange rates of yen and euro against the US dollar



Source: Bloomberg

have displayed an increased preference for safe assets.

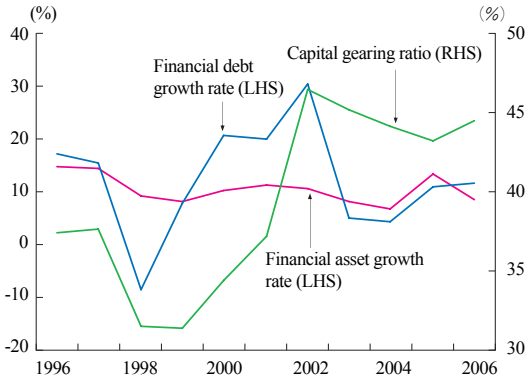
Since the second half of 2006, the euro has maintained its strength against the US dollar. The Japanese yen, meanwhile, after a run of continued weakness due to the Bank of Japan's delay in raising its policy rate further, strengthened in late February 2007 with the plummeting of global stock prices. With the resumption of capital inflows since July 2006, emerging market currencies have mostly continued to strengthen.

The Korean domestic economy, bolstered by robust exports and facilities investment, maintains a modest upward trend, and prices remain stable. These trends are expected to continue in 2007. The current account recorded a surplus in 2006, owing to brisk exports and lower oil prices, but this year it is forecast to be roughly in equilibrium due to the rapidly widening service account deficit.

3 *The household sector's debt-servicing capacity appears to have declined, as interest payment burdens have grown with the run-up in market interest rates while financial*

liabilities have increased, led mainly by housing finance loans.

Trends of household financial asset and liability growth and capital gearing ratios

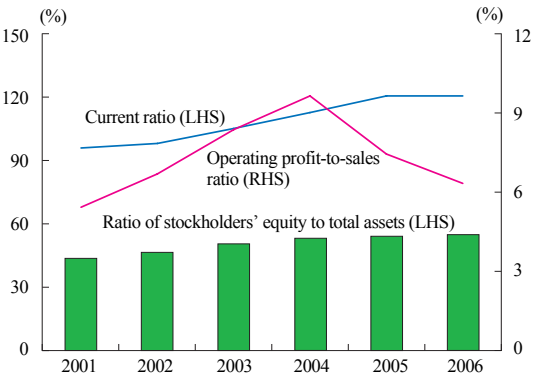


Note: 1) Year-end basis
Source: The Bank of Korea

The ratio of household financial liabilities to financial assets rose from 43.2% in 2005 to 44.4% in 2006, and the ratio of household financial liabilities to disposable income also increased during this period.

Meanwhile, the household sector's ability to absorb shocks is assessed as being only weak, since most household assets are held in the form of illiquid real estate. Given the low level of the net personal savings rate of between 3% and 5%, improvement of the sector's debt servicing capacity is foreseen to take some time.

Corporate profitability and financial soundness



Sources: KIS-Value, The Bank of Korea

4 *Despite its declining profitability, the Korean corporate sector shows comparatively healthy overall debt-servicing capacity, with sound financial status and ample liquidity.*

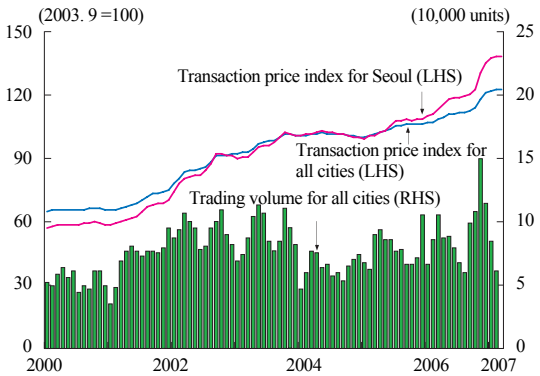
Listed companies posted lower operating profits-to-sales ratios in 2006, due to increases in raw material prices and to the strength of the Korean won. The ratio of

stockholders' equity to total assets has improved, and cash flow is also assessed as favorable. Nevertheless the proportion of companies unable to cover net financial expenses from operating income has not declined, while the degree of these firms' dependency on external borrowings has been on the rise.

5 *In the real estate market, the trend of rising housing prices appears to have subsided, but expectations of further price rises persist.*

Housing prices rose sharply in the fourth quarter of 2006, fueled by expectations of reconstruction regulations being relaxed and influenced by news of high lotting-out prices of new apartments in some areas. In the first few months of 2007, however, the trend of housing price rises has slowed markedly, and the house purchase index has declined sharply in line with housing market stabilization measures such as the tightening of regulations on debt-to-income (DTI) ratios and the ceiling on new apartment lotting-out prices. Meanwhile, market interest rates have shown upward trends, influenced by the increase in reserve requirement ratios.

Apartment transaction price indices and trading volume

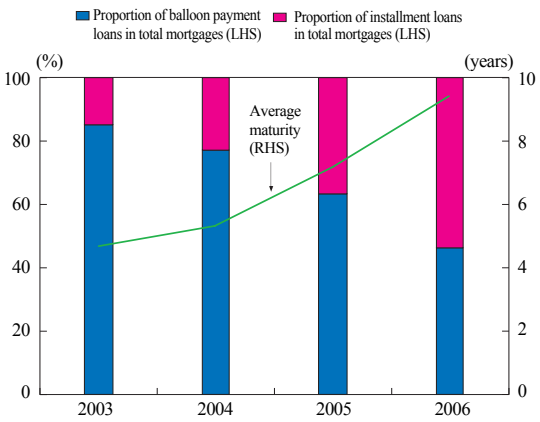


Sources : Kookmin Bank, Korea Land Corporation

Provided the real-estate policies put in place over the last year or so are applied consistently, there appears no great likelihood of a renewed sharp rise in housing prices.

6 *In the lending market, corporate lending rose sharply led mainly by lending to SMEs, as financial institutions competed fiercely to expand their asset scales.*

Distribution of domestic banks' mortgage loans by repayment method



Notes: Based on six major domestic banks (end-period basis)
Source: The Bank of Korea

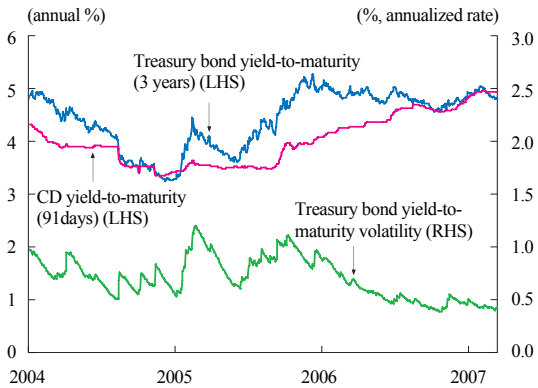
The booming real estate market of the last few years has led to a big increase in lending to construction and real estate businesses. Household lending, concentrated particularly on housing finance loans, has also continued on an upward path. However, the scale of its increase has declined compared to that of corporate lending, under the influence of the regulations imposed upon it.

The maturity and redemption structures of the housing finance loans extended by domestic banks have been changing, with a lengthening of average maturities and a gradual shift from bullet-type redemptions toward regular amortizations of the principal plus interest payments. This trend toward monthly repayment of principal and interest

may lead to further outflows of cash from household balance sheet for a times, but it is expected to reduce the potential risk to the financial system entailed by the maturing every year of outstanding large-value loans.

7 *In the bond market, long- and short-term interest rates show different patterns of movements, and the flattening-out of the yield curve continues.*

Long-and short-term market Interest rates and volatility



Sources: The Bank of Korea, KOSCOM

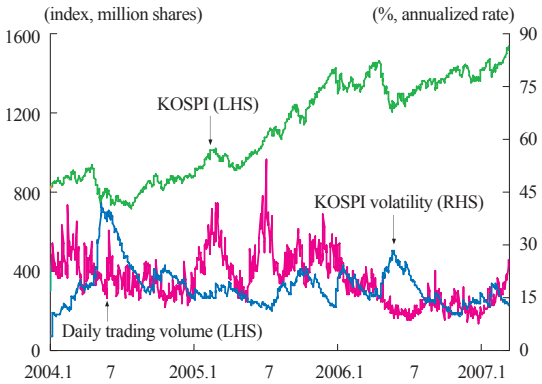
Short-term interest rates have risen comparatively rapidly, reflecting increases of the policy rate in 2006 and the tightening of reserve-requirement management policy beginning from the latter half of December 2006. In contrast, long-term market rates have declined, due to foreign bank branches' increasing appetite for Treasury bonds and concerns about slowing economic growth. As a result, the spreads between long- and short-term interest rates have narrowed, and in early 2007 the yield curve inverted for a while with short-term interest rates higher than long-term rates.

Meanwhile, the issuance and trading volumes of both Treasury and financial bonds are

rising steadily, while those of corporate bonds continue to fall. As a result, the corporate bond market remains subdued.

8 *In the stock market, stock prices have maintained a generally upward trend, despite sharp corrections in May-to-June 2006 and February 2007.*

Stock prices and volatility



Sources: Bank of Korea, Korea Exchange

The volatility index (VIX) has dropped since March 2007, concurrently with an increase in stock trading volumes, indicating improved investor confidence.

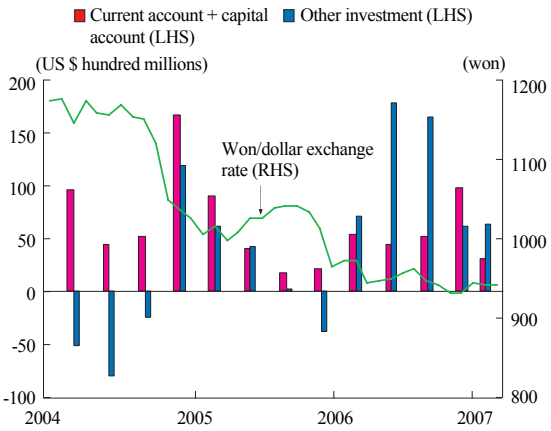
After recording a net selling position in 2005, foreign investors in the Korean stock market expanded the volume of their net selling in 2006. These net sales by foreigners are seen as having been absorbed by net purchases on the part of domestic institutional investors, boosted by the increasing cash inflows to equity-type funds and the building up of pension funds' stock portfolios.

9 *In the foreign exchange market, the preponderance of supply over demand resulting from current-account transactions has slowed down with the narrowing of the*

goods account surplus, but there have been increased capital inflows arising from financial transactions such as banks' short-term foreign borrowings.

Banks have greatly increased their external borrowings, engaging in interest rate arbitrage to exploit gaps between interest rate differential and swap rate and also borrowing to fund their foreign currency lending activities. In consequence, there has been a sharp rise in their short-term external debts and long-term interest rates have fallen excessively, which may have a negative impact on the financial markets.

Balance of payments and won-dollar exchange rate



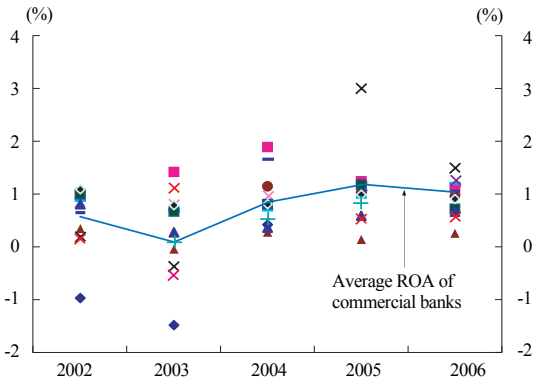
Source: Bank of Korea

The won/dollar exchange rate continued on a downward trend in 2006, but rebounded in 2007 on the back of non-residents' purchases of non-deliverable forwards (NDFs) and increasing overseas securities investment by residents. It has so far this year showed a pattern of mild fluctuations around the 930 won per dollar level.

10 *The banking sector continues to present a favorable picture, with very strong profitability and steadily improving asset soundness.*

Banks' credit risk does not look high, considering that delinquency rates remain low and loan-to-value (LTV) ratios continue on a downward course, despite the greatly increased real estate-related exposure by way of housing finance loans and lending to construction and real estate businesses. However, the possibility of a worsening of credit risk cannot be altogether ruled out, given that delinquency rates tend to trail the trends of lending growth rates with a one- or two-year time lag and that real-estate markets may also contract.

Changes in ROA of commercial banks



Source: Banks' call reports

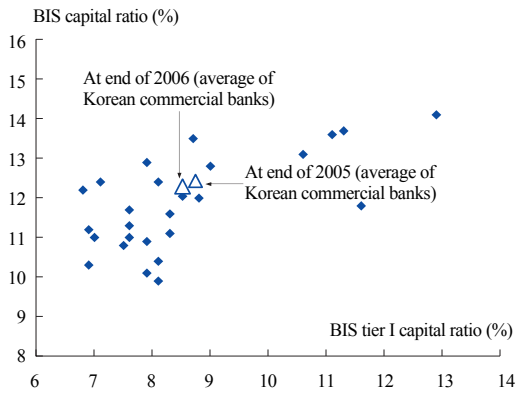
Interest rate risk has risen slightly as a result of a widening of the interest rate sensitivity gap, but its level is still low compared to that of major foreign banks. Market risk remains at a low level, as well, thanks to the reduced proportions of bond investments and of stock investments held for trading.

Banks continue to post strong profitability, supported by increased profits from loans and the disposal of shares acquired in debt for equity swaps. In terms of capital adequacy, Korean commercial banks' BIS capital ratios remain at healthy levels compared to those of

large foreign banks, although they have declined moderately due to sustained competition among banking institutions for asset scale expansion.

Banks' net profits are expected to continue to grow for quite some time, bolstered by their increasing non-interest incomes such as fees and commissions and the expansion of their business volume. If they continue to focus business operations mainly on expanding their shares of the domestic market, however, banks may face limits to growth in the medium and longer term. Also, with funding costs in their core deposit markets expected to rise owing to intensified competition with non-bank financial institutions, and with the increasing penetration of their domestic market by foreign financial institutions, domestic banks face the possibility of a decline in their business base.

Comparison of BIS capital ratio between foreign and Korean banks



Notes : 1) ◆ : The world's top 30 banks based on tier I capital size
2) Figures for foreign bank are for 2005
Source: Banks' call reports, Bankscope

Ⅱ. Changes in the environment for financial stability

1. Economic outlook at home and abroad

World economy continues solid growth

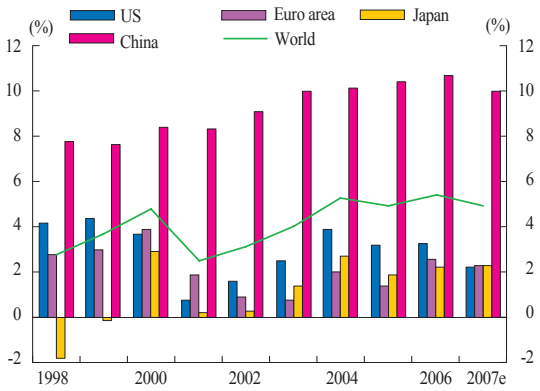
Despite slowdown in the US economy, growth in the world economy as a whole remains at around 5%, thanks to the very strong growth of the Chinese economy and to steady economic recoveries in both Japan and the Euro area.

While the US economy has enjoyed favorable consumption, supported by stable employment, GDP growth has dropped to the 2% level due to the slump in housing construction from the second half of 2006, affected by the cooling of housing markets. The Euro-area economy, on the back of robust exports, has continued to recover and posted growth in 2006 of 2.6%, its highest since 2000. In Japan, the pace of economic recovery has picked up with the help of facilities investment and exports, while in China the economy is maintaining strong growth at above the 10% level. This solid global economic growth is expected to continue in 2007, with the US, Japanese and Euro-area economies all growing at the 2% level, and the Chinese economy at around the 10% level.

However, there remains a downside risk stemming from the slowing US housing market. After continuing on a downturn since the fourth quarter of 2005, the US housing market appears to have shrunken further in early 2007 owing to defaults on subprime mortgage

<Figure II- 1>

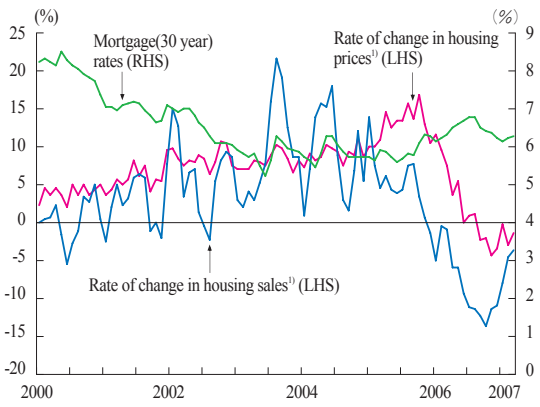
Economic growth and outlook of selected economies



Source : IMF, World Economic Outlook (April 2007)

<Figure II- 2>

US housing market trends



Note: 1) Based on existing houses (year-on-year)
Source : Bloomberg

loans[1]. Should the deterioration in credit quality of subprime mortgage loans spill over to other mortgage markets, we cannot rule out the possibility of the US economy growing at a lower rate than expected currently, since the depressed housing market will bring about a decline in consumption.

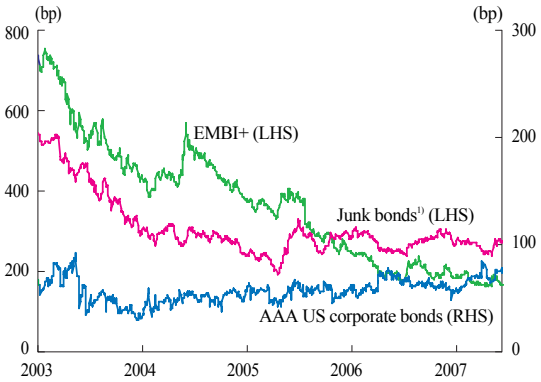
Risk appetite in international financial markets marginally lower

Credit spreads in the international financial markets have kept contracting while asset prices have risen persistently since 2003, demonstrating that investors maintain a very strong appetite for risky assets. It appears, however, that investors' risk appetite has weakened somewhat in the process of global liquidity tightening driven by interest rate hikes in major economies, as seen in investors' more sensitive responses recently to market instabilities.

The credit spreads on US junk bonds and emerging market sovereign bonds (based on EMBI+) remain very tight, as investors continue to search for high yields. The spreads widened temporarily, however, in the wake of the Fed's May 2006 announcement of a rate increase with the hint of additional future hikes to curb inflationary pressures. They widened sharply again in February 2007, when the problem of US subprime mortgage loans surfaced and as global investors reacted nervously to the possibility of monetary tightening by the Chinese government to restrain speculative asset markets.

<Figure II- 3>

Credit spread trends

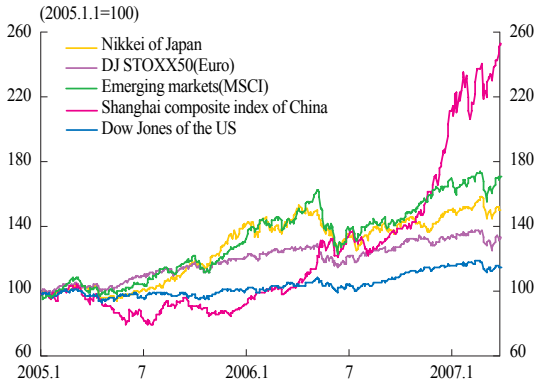


Note: 1) Figures for junk bonds refer to the average of corporate bonds with credit ratings of BB+ or lower.
Source : Bloomberg

1) Subprime mortgage loans are made to borrowers unable to qualify for loans under traditional criteria due to their limited credit histories. As of end-2006, they made up around 13% of all US mortgage loans, and the delinquency (over 30 days) rate on them currently approached 14%.

<Figure II- 4>

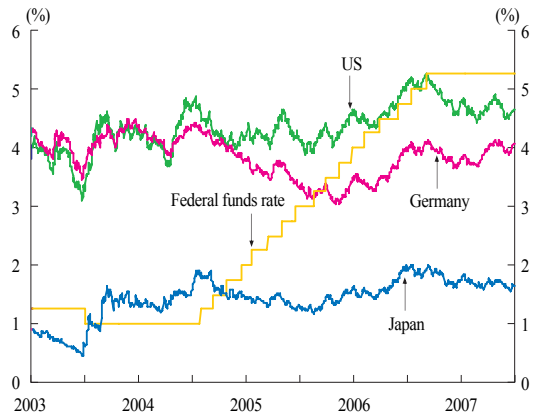
Trends of stock prices in major economies



Source : Bloomberg

<Figure II- 5>

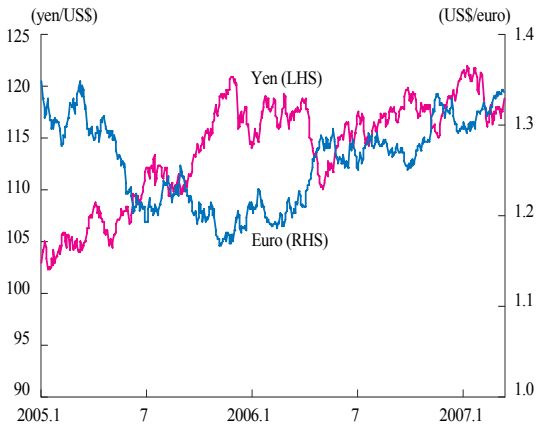
Trends of yields of government bonds[a] in major countries



Note : 1) Based on 10-year bonds
Source : Bloomberg

<Figure II- 6>

Trends of exchange rates of yen and euro against US dollar



Source : Bloomberg

Stock prices (in terms of MSCI) have continued their upward trend, both in the G7 countries and in emerging markets, although their sensitivity to global liquidity contraction now appears higher. Global stock markets underwent a sharp correction in May and June 2006, particularly in emerging markets that suffered large foreign capital outflows. They also tumbled, albeit only briefly, in February 2007 with the sudden plunge in Chinese stocks[2].

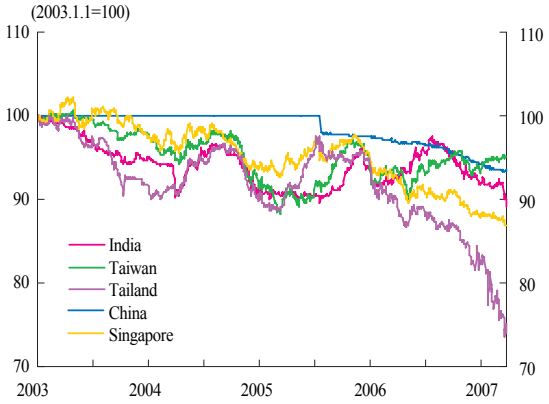
Yields on 10-year US Treasury bonds, which had shown an upward trend since the second half of 2005 tracking the continuing hikes in the Fed's target rate, reversed to a downturn in July 2006, as the cooling of the US housing market heightened the likelihood of economic slowdown. They resumed their downward movement in February 2007 and drifted well below the policy rate, as market concerns about US economic slowdown reemerged and investors displayed higher preference for safe assets.

The exchange rates of major currencies have shown different movements. The euro has remained moderately strong against the US dollar since the second half of 2006, reflecting the possibility of additional policy rate increases by the European Central Bank (ECB). The Japanese yen, however, has been weak vis-a-vis the dollar since May 2006, with the Bank of Japan defying market anticipations and delaying increases in its policy rate. The yen has strengthened since February 2007, however, in line with the plummeting of global stock prices at that time,

2) MSCI in the G7 countries and emerging markets fell by 11.0% and 24.5%, respectively, at their low points during the May-June 2006 period, and by 5.9% and 10.2%, respectively, between February and March in 2007.

<Figure II- 7>

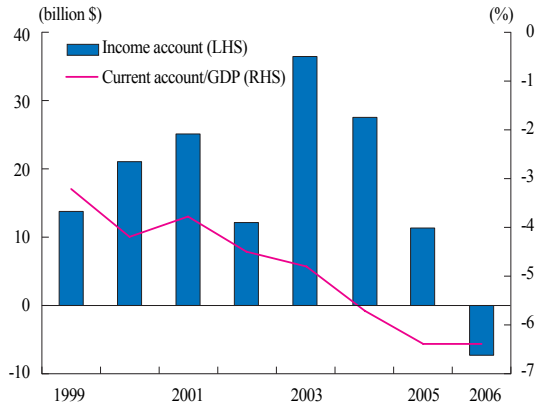
Trends of exchange rates of currencies of emerging markets against US dollar



Source : Federal Reserve Bulletin

<Figure II- 8>

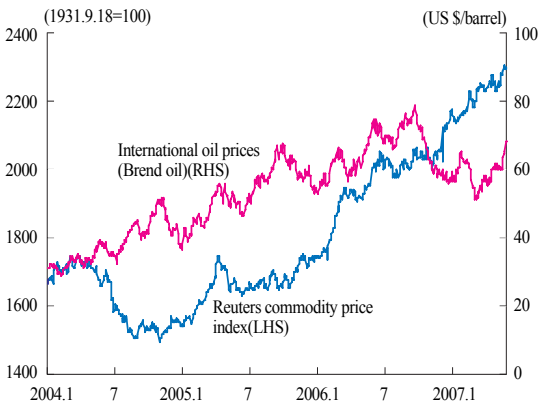
Trends of US current account and income account



Source : US Bureau of Economic Analysis

<Figure II- 9>

Trends of international raw material prices



Source : Bloomberg, Reuters

to stay at around the 117 yen/dollar level. The currencies of emerging economies have as a whole shown continued strengthening trends since July 2006, with the resurgence of foreign capital inflows into their markets.

Risk premiums in the international financial market remain narrow as of the beginning of 2007. Investors seem, however, to have become more sensitive to potential market instabilities that include the persistent global imbalances and excessive yen carry trades. Given the US current account deficit reaching 6.4% of GDP, the income account balance that had helped sustain it for a considerable time turned from surplus to deficit in 2006, and the volume of capital inflows to the US is also contracting, partly because of a decline in purchases of US Treasury bonds.[3] Pressure for correction of the global imbalances thus seems to be rising. Moreover, a rapid unwinding of the yen-carry trade, that is believed to have swollen greatly against the recent backdrop of low Japanese interest rates, remains a continuing possibility should the yen strengthen sharply or any unexpected shocks to the financial markets occur.[4]

Nevertheless, considering the favorable world economic conditions, the sound financial statuses of

3) **US Current and Capital Accounts**

(billion dollars)

	2002	2003	2004	2005	2006
Current a/c	-472	-528	-665	-792	-857
Capital a/c	507	537	580	771	719
(Treasury)	(161)	(276)	(366)	(271)	(148)

Source: US Bureau of Economic Analysis

4) In October 1998, when LTCM collapsed, the yen appreciated 13% in one week and the yen-carry trade unwound sharply, even though the short-term interest rate differential between the US and Japan exceeded 5 percentage points at that time.

financial institutions and corporations,[5] and the strengthened risk management capabilities of the policy authorities, it appears unlikely that international financial market stability will deteriorate significantly for the time being.

Uncertainties latent in international raw material prices

International oil prices reversed to a downward trend in August 2006, owing to concerns about economic slowdown and to easing geopolitical tensions. Since then they have shown stable movements below 60 dollars per barrel, although they rose sharply again in March 2007 due to mounting worries concerning the imbalance between supply and demand. Price uncertainties may persist in the foreseeable future, driven by the supply shortage arising largely from production cuts by OPEC member countries and by heightened geopolitical uncertainties. Meanwhile, the Reuters Commodity Price Index[6] has continued on an upward trend since 2005, propelled by sharp increases in the prices of agricultural commodities, nickel and bronze.

<Table II- 1>

International oil price forecasts
(brent oil)

(US $/barrel)

Institution(forecast date)	2006	2007				
		1/4	2/4	3/4	4/4	Annual
Results	65.1					
PIRA[1](2.27)		57.7	62.6	59.2	61.6	60.3
CGES[2](3.19)		56.6	61.0	53.6	65.2	61.8
CERA[3](2.28)		55.1	57.0	59.0	58.0	57.3

Note : 1) Petroleum Industry Research Associates
2) Center for Global Energy Studies
3) Cambridge Energy Research Associates

Domestic economy maintains modest upward trend

The Korean domestic economy, despite sluggish consumption, continues on a moderately rising track,

5) **Bank ROA in Selected Countries**

(%)

	2002	2003	2004	2005	2006
USA	1.30	1.38	1.28	1.30	1.28
Japan[1]	-0.7	-0.1	0.3	0.5	··
Euro area[2]	0.4	0.5	0.6	0.5	··

Note: 1) Fiscal year (end of March) basis
2) After taxes
Sources: US FDIC, IMF (GFSR)

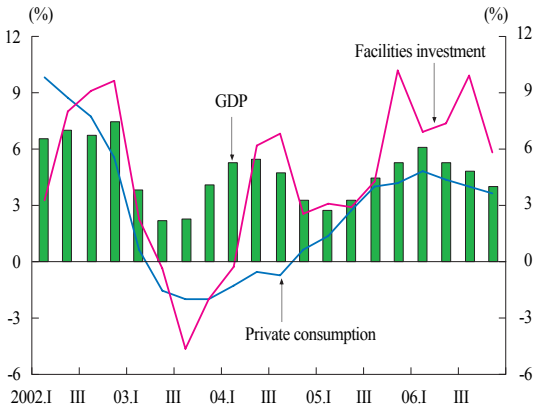
6) It comprises 17 items, excluding crude oil.

thanks to briskness in exports and in facilities investment. It is expected to maintain a rate of growth close to its potential, with a continuing of these favorable export and facilities investment trends.

Prices remained stable throughout 2006, helped by the appreciation of the won and the fall of international oil prices, and are expected to stay at a generally stable level in 2007. The possibility remains, however, that unstable movements in the price of raw materials including crude oil and agricultural commodities may lead to pressure for inflation.

<Figure II-10>

GDP, consumption and investment in Korea[a)]



Note: 1) Real, year-on-year figures
Source: The Bank of Korea

The current account balance, despite a service account deficit resulting mainly from increased overseas travel expenditures, recorded a surplus in 2006 thanks to robust exports and lower international oil prices. Although the volume of the goods account surplus may continue to expand modestly in 2007, the current account is forecast to remain at a balanced level due to the rising service account deficit.

The North Korean nuclear weapon test on October 9, 2006 was thought likely to pose a considerable burden to domestic financial system stability. Now that burden appears to have been noticeably reduced, as the six-party talks reached agreement in February 13, 2007 on progressive measures[7)] to disable North Korea's nuclear

7) The agreement is summarized here as follows. As an initial step, within 60 days, the other parties will supply North Korea with 50 thousand tons of heavy oil, North Korea will shut down its nuclear facilities and invite International Atomic Energy Agency (IAEA) inspectors to return, and the six parties will set up and operate a working group on economic and energy cooperation. As the second step, after 60 days, North Korea will disable its nuclear facilities, and the other parties will provide it with 950 thousand tons of heavy oil assistance. The final step will include convening a six-party foreign ministers' meeting for the purpose of implementing security cooperation in North East Asia, and establishing a special forum among the countries directly concerned to conclude a permanent peace agreement on the Korean Peninsula.

facilities. Although uncertainties regarding implementation of the agreement remain, the geopolitical risk now seems far lower than before October 2006.

2. Debt servicing capacity of the household sector

Decrease in debt servicing capacity continues

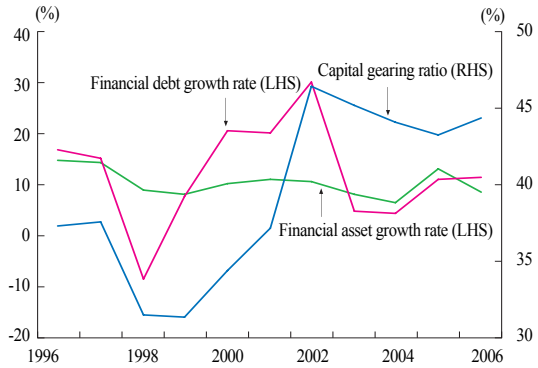
Households' financial debts increased by 11.6 percent in 2006, mainly led by housing finance loans[8]. While households' financial assets rose owing to increases in deposits and in pension and insurance policies, due to the sluggish stock market their rate of growth (8.6 percent) was lower than that of households' debts. Thus, households' capital gearing ratio (financial debt divided by financial assets), which measures households' ability to service their debts without sales of non-financial assets, rose to 44.4 percent at the end of 2006, from 43.2 percent a year earlier.

The debt-to-disposable income ratio, an indicator of households' capacity to service their debts with disposable income, continued its rising trend in 2006, as disposable income increased by only 5.6 percent, almost half the rate for financial debt. The income gearing ratio (interest payments divided by disposable income) rose substantially, in line with the increases in both financial debt and interest rates. Both of these ratios are higher than those in the United States and Japan.

The household sector's debt-servicing capacity appears to have declined, as financial liabilities have expanded

<Figure II-11>

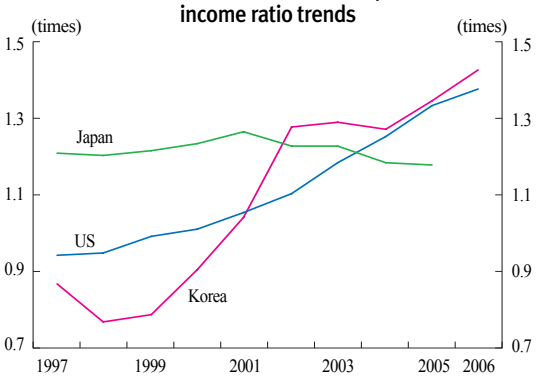
Trends of household financial asset and liability growth and capital gearing ratios



Notes: 1) Year-end basis
2) Trade credits and non-interest-bearing assets and debts such as miscellaneous financial assets and debts are excluded.
Source: Bank of Korea

<Figure II-12>

Household financial debt-to-disposable income ratio trends

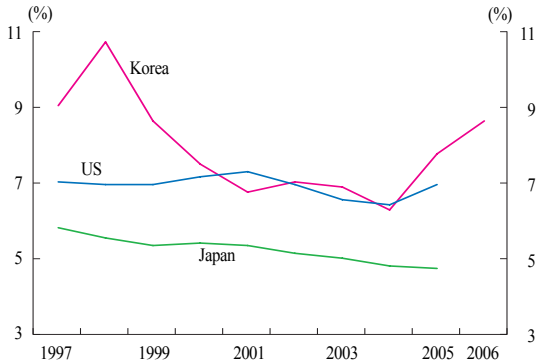


Notes: 1) Year-end basis
2) Trade credits and non-interest-bearing debts such as miscellaneous financial debts are excluded. series for Japan and the United States are updated using the same standard as in Korea.
Sources: National accounts and flow of funds statistics of the respective countries

8) The figures cited in this section were compiled in accordance with the 1993 SNA standards. However, those for the period prior to year-end 2002 (for growth rates prior to year-end 2003), which have not yet been officially updated by the Bank of Korea, are scaled based on year-end 2002 for convenience. The figures stated herein may thus differ from the statistics quoted in the related reports published in the past.

<Figure II-13>

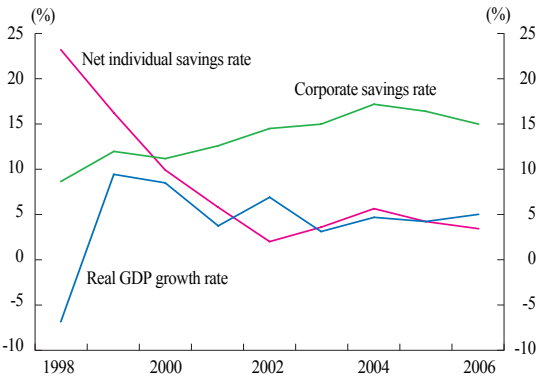
Household income gearing ratio trends



Notes: 1) Financial intermediary services indirectly measured (FISIM) are excluded from interest payments.
2) Series for Japan and the United States are updated using the same standard as in Korea.
Sources: National accounts of the respective countries

<Figure II-14>

Savings rate and economic growth rate trends



Source: Bank of Korea

<Table II- 2>

Household total assets and liabilities

(million won, %)

	Household average	House-owning households	Non-house-owning households
Total assets (A)	281.1 (100.0)	384.3 (100.0)	232.8 (100.0)
Savings	45.7 (16.3)	57.5 (15.0)	47.6 (20.5)
Real estate	216.0 (76.8)	311.5 (81.1)	130.8 (56.2)
(Houses)	127.6 (45.4)	189.0 (49.2)	- (-)
Rent deposits plus miscellaneous assets	19.4 (6.9)	15.3 (4.0)	54.4 (23.4)
Total liabilities (B)	39.5 (100.0)	52.1 (100.0)	39.0 (100.0)
Liabilities	28.8 (73.0)	36.5 (70.0)	36.0 (92.4)
Tenant deposits	10.7 (27.0)	15.6 (30.0)	2.9 (7.6)
Ratio (A / B)	7.1	7.4	6.0

Notes: 1) As of the end of May 2006
2) Figures in parentheses are the composition ratios in total assets / liabilities.
Source: National Statistical Office

faster than both disposable income and financial assets, while financial market interest rates have also risen.

The increase in financial liabilities since 2005, centered around housing finance loans, is estimated to have financed purchases of non-financial assets such as houses by the medium- and high-income classes with relatively strong debt repayment capacities, leading to an increase in total household assets as well. However, the household sector's ability to absorb shocks such as decreases in income or unemployment is assessed as low, since their capital gearing ratio is higher than those of households in the United States (31.6 percent as of the end of 2006) and Japan (22.7 percent as of the third quarter 2006), and since the bulk of their assets comprises housing and other real estate whose liquidity is regarded as low. The net personal savings rate has also remained in the low range of 3 to 5 percent since 2003, a fact which suggests improvement in the household sector's debt servicing capacity is likely to take some time.

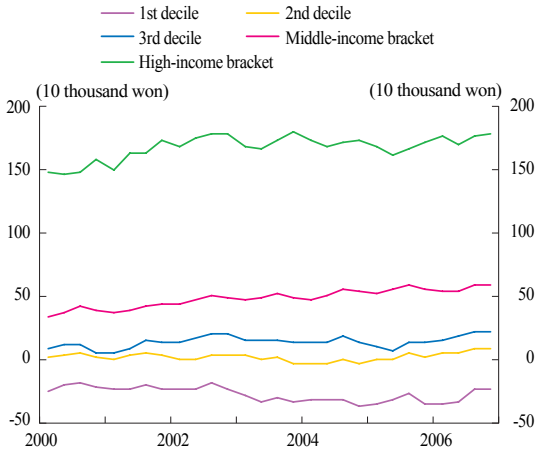
Credit standing of low-income households improves moderately

The debt burden of low-income households seems to have eased modestly in 2006, thanks to the increased effectiveness of debt rescheduling and cancellation for credit delinquents, while low-income household balances improved and the number of persons wanting additional hours of work[9] fell.

9) Referring to workers employed less than 18 hours per week, owing to economic reasons such as shortage of jobs or weak business, and who wish to work longer hours

<Figure II-15>

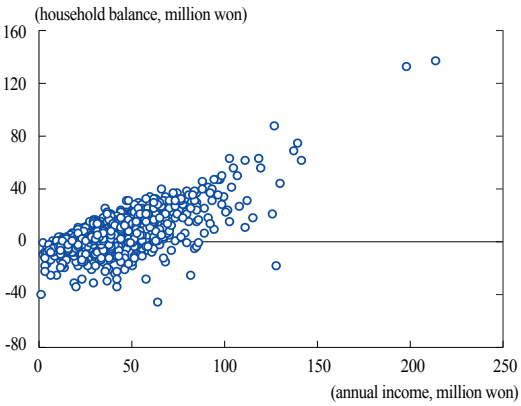
Household balance trends by income decile



Notes: 1) Series represent the balances of urban worker households, which are three-quarter moving averaged after deflation by the consumer price index (2005 = 100).
2) Series for the middle- and high-income brackets are simply averaged -- over the fourth to seventh deciles and the eighth to tenth deciles, respectively.
Source: National Statistical Office

<Figure II-16>

Indebted households' incomes and balances



Note: Annual incomes and balances of households paying more than 50 thousand won in interest annually
Source: National Statistical Office; computed by the Bank of Korea

Looking at urban worker real household balances in 2006, the gap between high-income and low-income households[10] increased marginally from the previous year. While the deficit of the lowest decile of the household income spectrum narrowed slightly, the surpluses of the second and third lowest deciles widened moderately. Thus, low-income households' balances are evaluated as moderately improved.

However, the effects of this turn-around in their balances in improving households' effective ability to service their debts is evaluated as less than might be expected, since substantial portions of both low-income and middle-income households bearing financial debts[11] were in deficit.

The unemployment rate fell moderately in 2006, while labor market employment indicators associated with low-income households, such as the number of persons abandoning job search efforts and the number of those wanting to work for longer hours, improved slightly compared with 2005. The quality of employment in the labor market also seemed to get better, with a decline in the portion[12] of non-regular employees such as temporary or part-time workers, whose job security,

10) The lowest three deciles, the middle four deciles, and the highest three deciles of the income spectrum are classified as low-income, middle-income, and high-income households, respectively.
11) In the 2005 household survey, households paying more than 50 thousand Korean won per year in interest (1,452 of the total sample size of 3,846 households) were classified as the debt-bearing sample.
12) **Trends of non-regular workers**
(surveyed in August of each year)

(thousand persons, %)

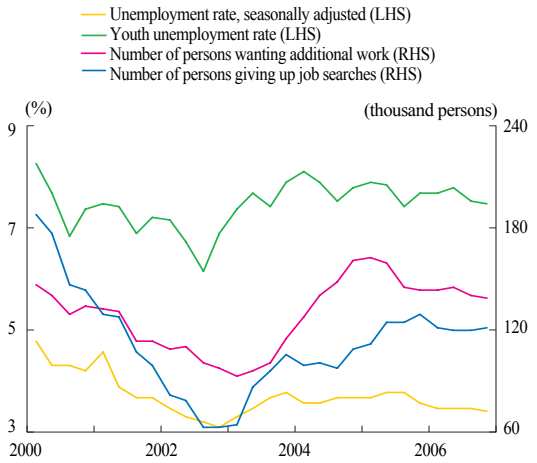
	2001	2002	2003	2004	2005	2006
Number of employees	3,635	3,839	4,606	5,394	5,483	5,457
Portion[1)]	26.8	27.4	32.6	37.0	36.6	35.5

Note: 1) Figures represent the share of non-regular job workers in total salaried workers.
Source: National Statistical Office

wages and fringe benefits are less than those of regular-job workers[13].

<Figure II-17>

Trends of unemployment and underemployment indicators

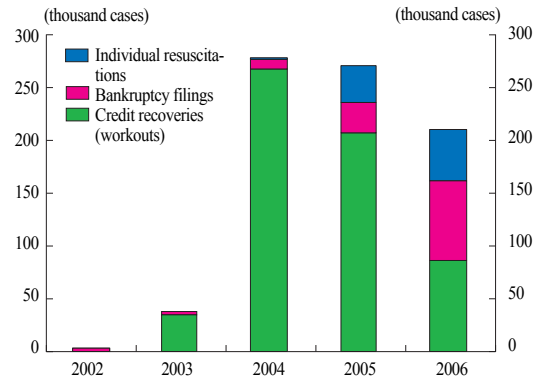


Note: Three-quarter moving averages except for the unemployment rate
Source: National Statistical Office

In 2006, the number of persons having their debts rescheduled or cancelled by appealing to the Credit Counseling and Recovery Service or the civil courts declined for the second consecutive year, by 22.0 percent. In contrast, individual resuscitations and bankruptcy filings increased substantially, due to their greater debt alleviation effects than those of the credit recovery (workout) program[14]. Rehabilitation support programs such as individual resuscitations and bankruptcy filings help financial debtors to recover economically. Some debtors may abuse these programs to escape their financial obligations, however, taking advantage of the incomplete system that prevents debtors' assets and/or income from being fully identified and surveyed.

<Figure II-18>

Trends of debt rescheduling cases



Note: Individual resuscitations and bankruptcy filings are based upon court approvals.
Sources: Republic of Korea Supreme Court, Credit Counseling and Recovery Service

13) The wages of involuntary and total non-regular job workers remained at 53.9 and 71.0 percent, respectively, those of regular job workers.
14) The average amount involved in cases appealed to the Credit Counseling and Recovery Service was 23.57 million won in 2006. Most delinquencies fell into the small case category, as shown by the 76.4 percent proportion of cases in which the amount dishonored was less than 30 million won. Individual resuscitation and bankruptcy filing cases involved substantially larger amounts of financial debts, however. A survey carried out by the Korea Development Institute, at the request of the Court Administration Office, showed the average and median amounts involved in individual resuscitations and bankruptcy filing cases in 2005 to have been 90.45 million won and 83.93 million won, respectively.

3. Debt servicing capacity of the business sector

Decline in corporate profitability continues

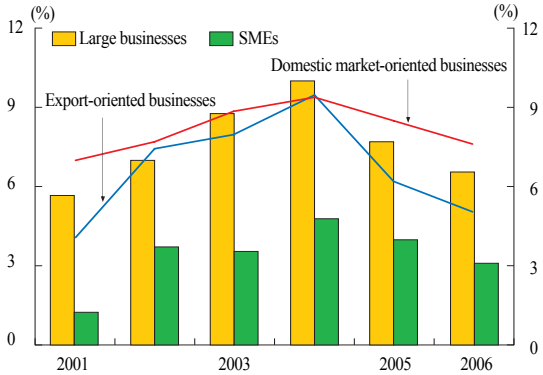
In 2006, the operating income-to-sales ratio of listed firms[15] slipped to 6.3%, from 7.5% in 2005. This decline was mainly attributable to increases in prices of raw materials and to the strength of the local currency, the Korean won.

Large businesses registered more noticeable decreases in their operating income-to-sales ratios than did small and medium-sized enterprises (SMEs). This was due to the declines in operating income of large businesses in the iron and electronics industries, stemming from increased prices for raw materials and for info-communications products, respectively. As a result, the gap in profitability between large businesses and SMEs continued to narrow. Comparing domestic market-oriented businesses with export-oriented businesses[16], the operating income-to-sales ratio dropped more sharply for export-oriented businesses which were more directly influenced than were domestic market-oriented businesses by the appreciation of the Korean won and the decreases in heavy and chemical industry export product prices.

With corporate profitability weakening and market interest rates rising, the percentage of large businesses

<Figure II-19>

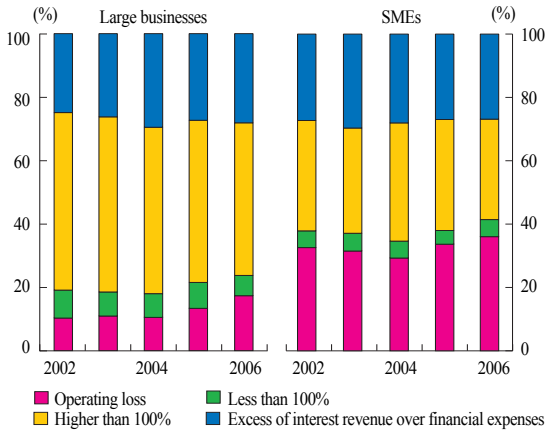
Operating profit-to-sales ratio trends



Sources : KIS-Value, The Bank of Korea

<Figure II-20>

Net interest compensation ratio trends by business size

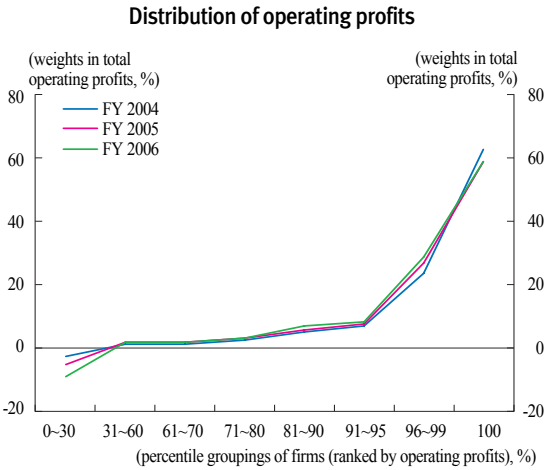


Sources : KIS-Value, The Bank of Korea

15) Those listed on the Korea Exchange (based on KIS-Value data as of March 31, 2007), with financial institutions excluded

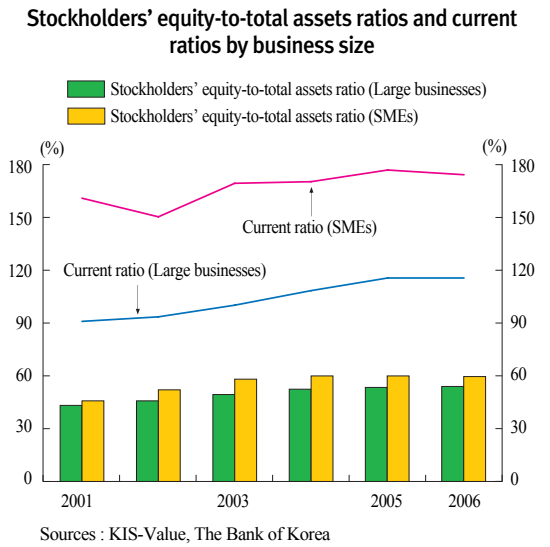
16) "Export-oriented businesses" are those whose exports account for half or more of their total sales. Other businesses are referred to as "domestic market-oriented businesses" here.

<Figure II-21>



Sources : KIS-Value, The Bank of Korea

<Figure II-22>



Sources : KIS-Value, The Bank of Korea

and SMEs unable to cover their net financial expenses[17] with operating profits rose by 23.7% and 41.5%[18], respectively.

Looking at the distribution of profitability, companies in the top 1 and 5 percents in operating incomes generated 58.7% and 86.8%, respectively, of total operating incomes, while the remaining companies recorded results at around break-even levels. This demonstrates that the polarization of profitability has not yet been alleviated.

Financial conditions and liquidity remain healthy

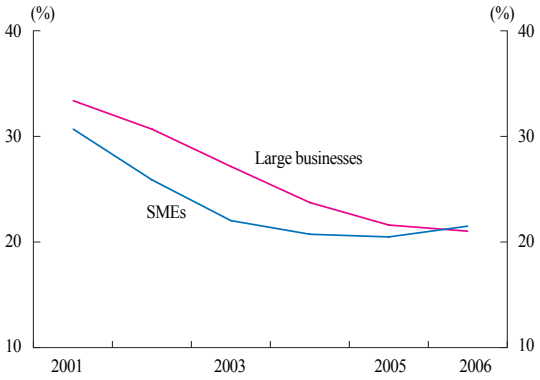
Considering the ratios of stockholders' equity to total assets, which indicate companies' capacities to withstand sales depression or deteriorating profitability, the debt servicing capacity of the business sector remained healthy in 2006. The ratio of stockholders' equity to total assets[19] of large businesses continued to pick up, recording the level of 54.0%. For SMEs, the trend of continual increase in their ratio of stockholders' equity to total assets since the Asian financial crisis came to an end in 2006, as the ratio dropped slightly. At 59.6%, however, it still remained high.

The financial soundness of businesses has been due to their switch to conservative investment activities in line with corporate governance changes, and to a trend of

17) Net financial expenses = financial expenses - interest revenue
18) Net interest coverage ratio = operating income / (financial expenses - interest revenue)
19) Ratio of stockholders' equity to total assets = stockholders' equity / total assets

<Figure II-23>

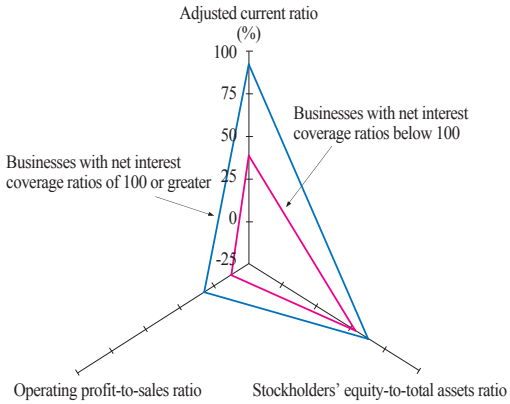
Dependence on borrowings



Sources : KIS-Value, The Bank of Korea

<Figure II-24>

Comparison of businesses based on net interest coverage ratios

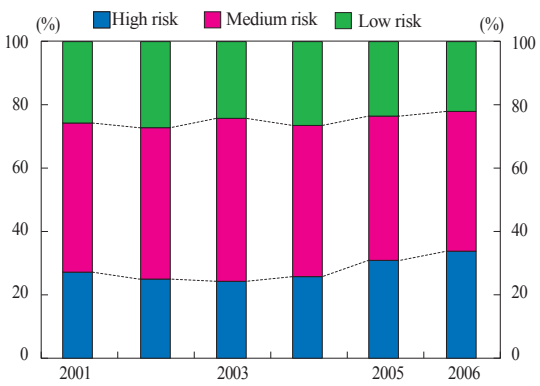


Notes: 1) Based on the end of 2006
2) Adjusted current ratio = (current assets-current liabilities) / current liabilities

Sources: KIS-Value, The Bank of Korea

<Figure II-25>

Distribution of large businesses by credit risk rating



Sources: KIS-Value, The Bank of Korea

increased precautionary cash reserve holdings and avoidance of borrowing by firms.

Business liquidity stayed at a high level overall in 2006, but that of SMEs slipped somewhat. While large businesses having sufficient liquidity reduced their borrowings, the dependence of SMEs on borrowings[20] rose, due to increased demand for working capital and to the influence of aggressive competition among banks to increase their market shares. Especially, the dependence on borrowings of SMEs with net interest coverage ratios less than 100 (indicating low profitability) rose to 29.7% in 2006, up from 27.3% the year before.

Considering the operating income-to-sales ratio, the stockholders' equity-to-total assets ratio, and the liquidity ratio all together, the debt servicing capacities of businesses with net interest coverage ratios greater than 100 seem favorable. However, the proportion of businesses which are regarded as having fragile debt servicing capacities, in other words those with net interest coverage ratios less than 100, has increased.

Moderate increase in high risk businesses

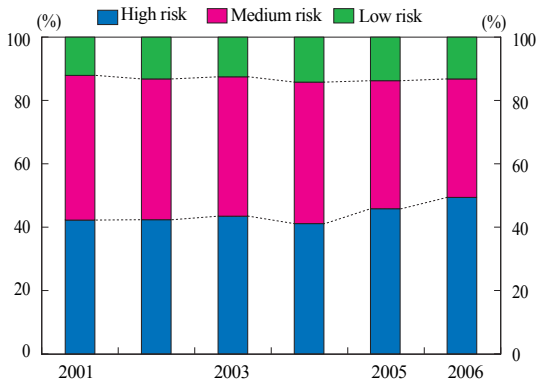
Analysis using the credit risk assessment model of Norges Bank, the central bank of Norway[21], shows that the proportion of high risk businesses in Korea increased in line with the weakened profitability in 2006, despite the favorable financial soundness and liquidity conditions.

20) Dependence on borrowings = total borrowings / total assets

21) To estimate business sector credit risk, Norges Bank has measured the debt servicing ratios of businesses by their profitability and financial structures as reflected in their financial statements.

<Figure II-26>

Distribution of SMEs by credit risk rating



Sources : KIS-Value, The Bank of Korea

<Table II- 3>

Transition matrix

(large businesses) (%)

2005 \ 2006	High risk	Medium risk	Low risk
High risk	76.7	22.6	0.7
Medium risk	21.5	72.2	6.3
Low risk	0.9	21.2	77.9

(SMEs) (%)

2005 \ 2006	High risk	Medium risk	Low risk
High risk	81.6	16.6	1.9
Medium risk	32.9	62.7	4.4
Low risk	11.5	25.4	63.1

Sources: KIS-Value, The Bank of Korea

The transition matrixes show SMEs with a higher probability of shifting into a higher risk bracket than a lower risk bracket. Large businesses, meanwhile, owing to reduced profitability, had a greater chance of transiting from a low risk bracket to a medium risk bracket.

Despite their declining profitability, businesses' overall capacity to service their short-term debts is evaluated as not having fallen, based upon their solid cash-flow conditions. However, if business profitability continues to drop and this comes to negatively affect financial conditions and liquidity, there is a chance of debt servicing capacity ultimately weakening. Especially, considering that the proportions of businesses recording operating losses or having net interest coverage ratios of less than 100 have not yet decreased, and that market interest rates are going up, the debt service burdens of high risk businesses seem to be gradually increasing.

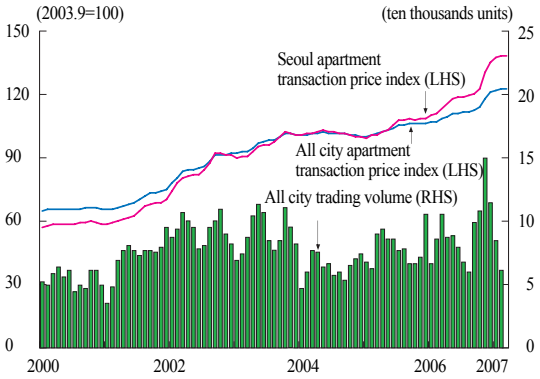
4. Real estate market

Rise in housing prices slows

The trend of rising housing prices slowed down from June 2006, due to government measures including hikes in taxes on both holding and transfer of houses and strengthening of regulations on housing finance loans. During the fourth quarter of 2006, however, housing prices returned to a rapid increase because of anticipations of deregulation related to reconstruction of old apartments and news of high lotting-out prices of new apartments in some areas. Since January 2007, the upward trend has slowed markedly. The average monthly rate of apartment price increases in the Seoul Metropolitan Area fell to 0.7% during the first quarter of 2007, from 4.2% for the last quarter of 2006. House trading volume has also shown a sharp decline since December 2006.

<Figure II-27>

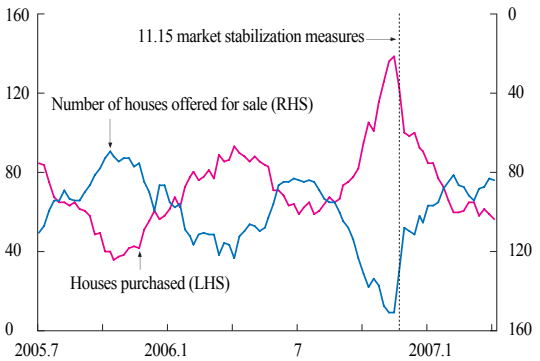
Apartment transaction price indices and trading volume



Sources : Kookmin Bank, Korea Land Corporation

<Figure II-28>

Indices of houses offered for sale and purchased



Note : 1) If the house purchase index is greater (smaller) than 100, the number of buyers is greater (smaller) than that of sellers. If the number of houses offered for sale index is greater (smaller) than 100, the number decreases (increases)
Source : www.drapt.com

The current slowdown in the rise of housing prices is mainly due to decreased investment-related demand and weakened expectations of housing price rises, following the government's November 15 2006 unveiling of a new series of housing market stabilization measures including tightening of regulations on debt-to-income (DTI) ratios for housing finance loans and the ceiling on new apartment lotting-out prices, in combination with the increase in market interest rates following the BOK's raising of the reserve requirement ratios. Accordingly, the house purchase index has declined sharply, and the volume of houses offered for sale has grown.

In many cases so far, the government's unveiling of housing market stabilization measures has resulted in

only short-term slowdown in housing price increases, and they have shifted back soon to sharp upward trend. This may be attributed mainly to demand-supply and pricing mechanism differences from that of the commodities and housing markets, and to doubt about the feasibility of government housing market stabilization measures. It is therefore felt that if the government maintains consistency in its measures, there is no great likelihood of a renewed sharp rise in housing prices.

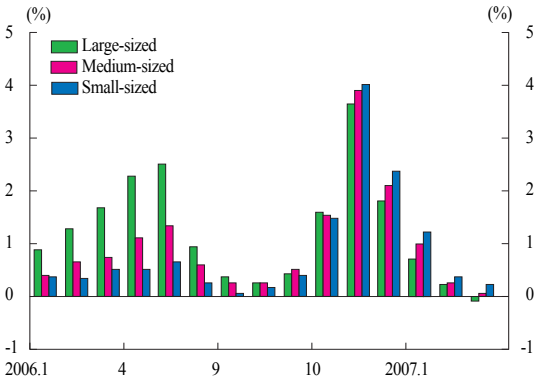
However, expectations of increasing housing prices in connection with the development of new cities and new towns has not disappeared completely. If the anticipated real estate deregulation occurs, housing markets focusing on small-sized apartments whose prices are relatively low will likely become unstable again.

The level of lease deposits, which had shown a great rate of increase between September and November 2006, returned to a downwardly stable trend from December 2006 onwards. The monthly average rate of increase in the level of deposits for apartments in the Seoul metropolitan area fell to 0.6% between December 2006 and March 2007, after increasing 1.5% from September through November 2006.

Considering the following factors, however, the possibility of a further rise in lease deposit levels remains. Firstly, construction of multiplex houses, the housing alternative to apartments, has shown a continued shrinking trend[22]. Secondly, the demand for

<Figure II-29>

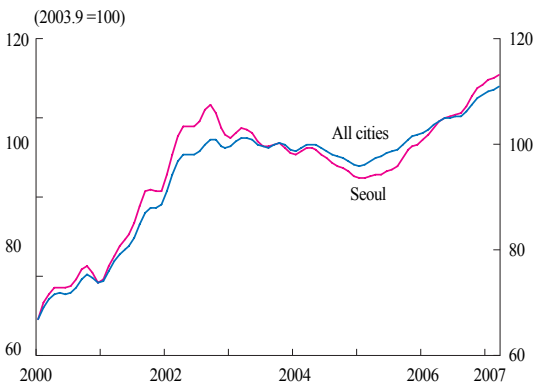
Transaction price fluctuation by apartment size[1]



Note : 1) Compared with the previous month
Source : Kookmin Bank

<Figure II-30>

Apartment lease deposit indices



Source : Kookmin Bank

22) Construction of multiplex houses, which hit a record high of 220 thousand in 2002, shrank to 12 thousand in 2006.

apartment leases might increase due to anticipation of falling new a partment sales prices and the planned change of the housing lottery program. Finally, some part of the property holding tax increase could be passed on to the lease deposits. If some of these potentially destabilizing factors materialize, the level of lease deposits could show an upward rising trend.

Land prices remain unstable

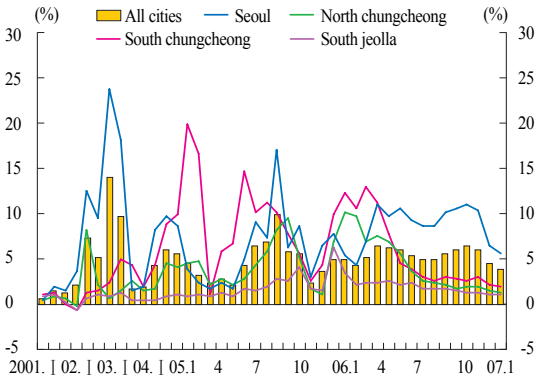
The rate of increase in nationwide land prices accelerated to 5.6% (annual rate) in 2006, from 5.0% in 2005. However it has shown a downward trend since the beginning of 2007.

By region, land prices in Seoul and the surrounding metropolitan area are still rising at a higher rate than the nationwide average, mostly due to the impact of the "New Town Project." In contrast, land prices in North and South Chungcheong Provinces, which had shown a high rate of increase owing to the development of an administrative complex city, are now recording rates much lower than the nationwide average.

By use of land, the rates of increase in land for residential, commercial, and industrial purposes, which had risen rapidly with heightened demand in the Seoul metropolitan area related to development projects including the New Town Project, has slackened greatly. The rates of increase in land prices in green zones, administrative zones[23] and agricultural and forestry zones are showing mild downward trends.

<Figure II-31>

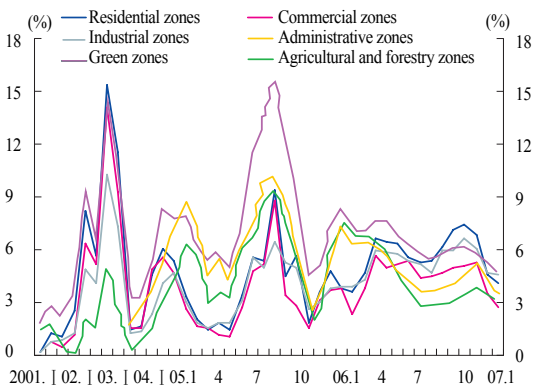
Land price fluctuation by region[1]



Note : 1) Anunalized increase ratios compared to the previous quarters (until the end of 2004) and the previous months (from 2005)
Source : Korea Land Corporation

<Figure II-32>

Land price fluctuations by usage[1]



Note : 1) Annunalized increase ratios compared to the previous quarte (until the end of 2004) and previous months (from 2005)
Source : Korea Land Corporation

23) Under the Law Pertaining to the Planning and Use of National Land, some areas are designated as administrative zones for the promotion of the agricultural/forestry industries, the conservation of the natural environment and forests, or systematic management for accommodation of the populations and industries in urban areas.highest figure since 2003.

Meanwhile, a possibility is seen that land prices in green zones, administrative zones, and agricultural and forestry zones will experience upward pressures in line with the progress of development of innovation cities and company towns.

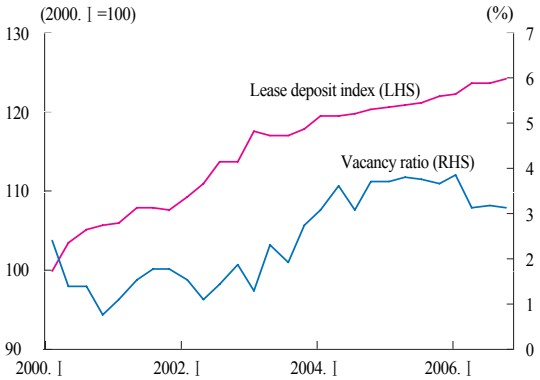
Commercial real estate market remains stable

In the commercial real estate market, lease deposits for offices in Seoul have remained stable. They increased by 0.4% in the second half of 2006, slowing down from the 1.3% rate of the first half. In real price terms, calculated in consideration of the rate of increase in the Consumer Price Index, lease deposits have continued to fall since 2004.

In the fourth quarter of 2006, the ratio of office space vacancy in Seoul stood at 3.1%, a level similar to what it has maintained since 2005. The gap between the vacancy ratio for large-sized buildings with total floor space of 15,000 pyung or greater (1 pyung is equivalent to approximately 3.3m^2) and that for small-sized buildings (with total floor space less than 5,000 pyung), appears to have narrowed somewhat in the last quarter of 2006, after having continually widened since the third quarter of 2003. This change can be attributed to a concentration in company demand for small-sized buildings with lower rents.

<Figure II-33>

Office lease deposit index and vacancy ratio in Seoul



Source : Korea Appraisal Board

<Box II-1>

Special characteristics of supply and demand and the price mechanism in asset markets

In terms of the factors affecting their supply and demand, and the mechanism determining their prices, markets for assets like real estate or stocks are distinct from markets for goods like clothing or electronics.

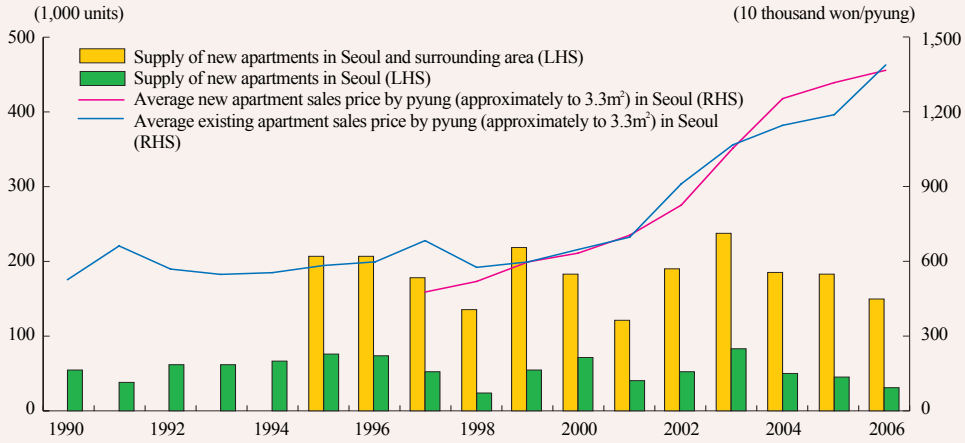
First, unlike the case in goods markets, existing inventories such as existing houses or outstanding stocks account for the predominant share of the transaction volume in asset markets and have a decisive impact on housing prices. In the Korean housing market, existing apartment transactions represented nearly 73% of all apartment transactions (existing apartment transactions + new apartment supply) in 2006, while, in the stock market, transactions in outstanding shares accounted for 99.5% of all transactions (secondary market sales proceeds + proceeds from new share issuance). In the asset markets, while supply of new assets can affect prices over the long term by increasing total stocks, short-term price changes are mostly affected by transactions in existing assets in the secondary markets.

A second difference is that supply of and demand for existing houses and outstanding shares can be more decisively influenced by anticipated future prices than by current prices, which is not true of general goods. Stocks are assets for investment aimed at capital gains in addition to dividend income. Houses have characteristics both of investment assets and of consumer goods providing housing service to their occupants. Because the annual depreciation of a house is negligible owing to its very long useful life, when housing prices go up overall during the period of its use the residual value of a house can be higher than its original purchase price. Therefore, anticipations of further housing price rises might lead to a greater number of persons wanting to purchase houses in the market. This is in contrast to the case in the general goods market, where an increase in price reduces demand. At the same time, expectations of future price increases encourage sellers to wait before putting property up for sale, which often leads to a shrinking of supply. In other words, classical supply and demand law, whereby rising prices decrease demand and increase supply, while declining prices have the reverse effects, may not be fully applicable to the asset markets, whose supply and demand relationships are chiefly influenced by price expectations.

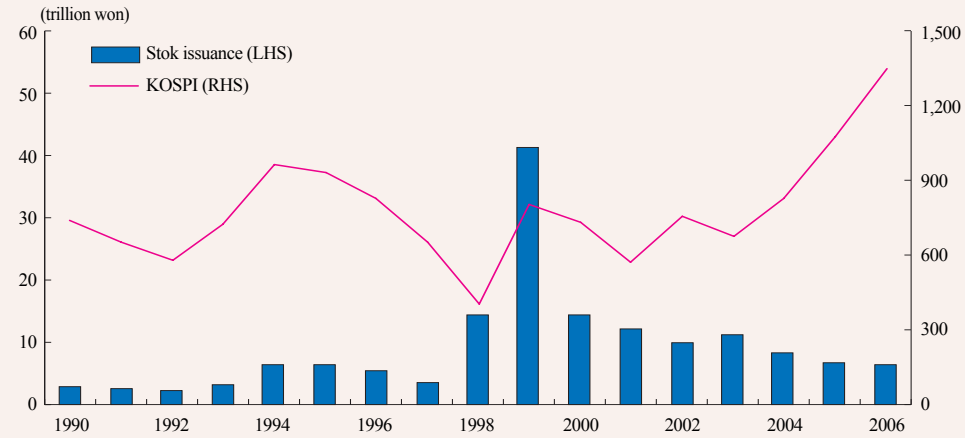
A third point is that supply of new stocks and houses is inelastic to price changes, unlike what we see in the general goods markets, where production tends to increase when prices go up. Issuance of new stocks is generally determined by the amount of funds available in a company and its future funding needs, rather than by stock prices. Likewise, new house supply is more greatly influenced by factors other than prices, due to the non-elasticity of supply caused by land use restrictions, and to the time lag existing between the start and the completion of new house construction. According to the World Bank and other empirical studies, the price elasticity of new housing supply ranges between 0.1 and 0.4, which means that it is inelastic. In Korea, since the 1998 liberalization of lotting-out prices of new apartments developed by the private sector, while new

apartment sales prices have climbed continuously along with those of already-existing apartments, supply has remained generally static with only minor fluctuations. Meanwhile, in the stock market, there is little correlation between new stock supply and movements of the Korea composite stock price index.

New apartment sales prices and supply



KOSPI and stock issuance[1)]



Note : 1) Sum of IPO and issue of new shares to be purchased

In addition, because they are very heterogeneous, there is imperfect substitution among houses, a high degree of asymmetric information, and various non-price factors that have great influence on housing demand. In the meantime, exogenous factors like borrowing costs and loan restrictions also heavily influence house demand, as most house purchases are financed through long-term loans. This may be one of the reasons why the housing market has great susceptibility to price distortions and why adjustment of supply and demand imbalances through the price mechanism is ineffective.

Given all of these factors, if the government is to accomplish its policy goals of expanding supply and stabilizing prices in the housing market, an approach distinct from those that would work in the goods market seems called for. Specifically, in order to expand the supply of houses, easing of construction-related regulations and an increase in residential land supply may be more effective than raising new apartment sales prices. Meanwhile, to stabilize prices, efforts to reduce market uncertainties by enhancing policy consistency and the reliability of information appear essential measures for improving the balance between supply and demand.

Ⅲ. Stability of the financial market

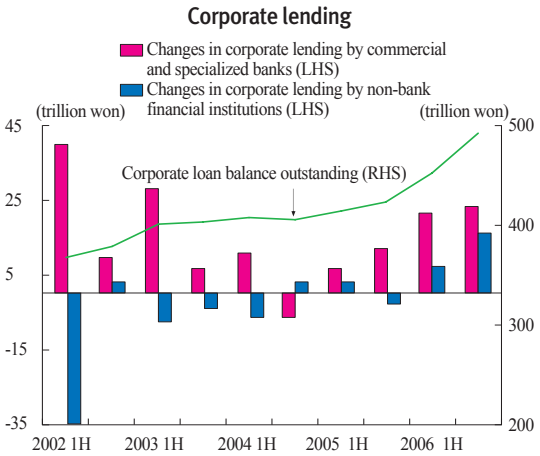
1. Lending market

Corporate lending increases significantly

Corporate lending increased by 68.9 trillion won in 2006, recording its highest rate of growth at 16.2% since 2000. Broken down by type of financial institution, commercial and specialized banks increased their corporate loans by 14.5% and non-banking financial institutions by 20.7%. Notably, both rates were above the rates of increase in household lending by these institutions.

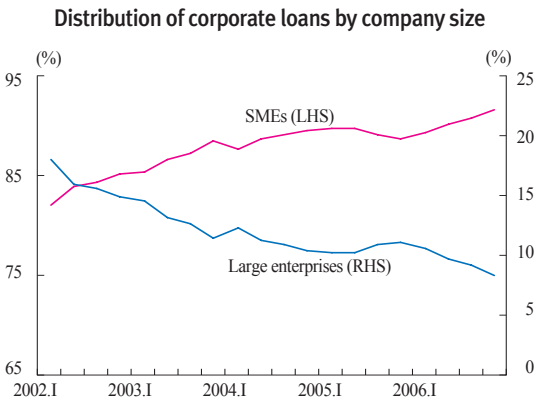
By type of borrower, the rate of increase in lending to SMEs by commercial and specialized banks rose significantly in 2006. This was attributable to such factors as banks' fierce competition to expand their asset scales, and the increase in qualified loan applicant companies due to upgrades in their credit ratings. However, the share of banks' lending to large enterprises declined in 2006, reflecting such factors as enterprises' favorable liquidity conditions and their increased issuance of privately placed bonds[1]. Accordingly, the share in banks' total corporate portfolios of loans to SMEs continued the previous year's increase in 2006.

<Figure III- 1>



Source: The Bank of Korea

<Figure III- 2>

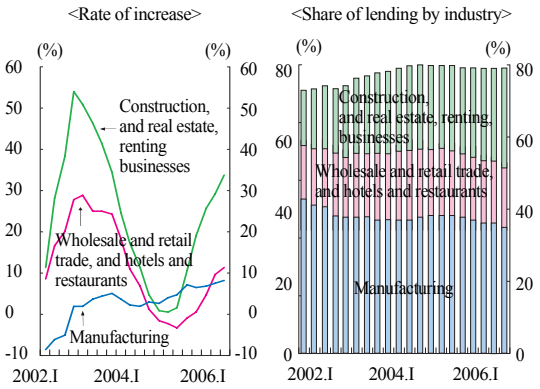


Note: 1) Proportions of corporate loans of commercial and specialized banks
Source: The Bank of Korea

1) The outstanding amount of privately placed bonds underwritten by domestic banks (excluding the KDB and KEXIM) has been increasing greatly since the fourth quarter of 2005, with the net balance outstanding climbing from 14.7 trillion won at the end of 2005 to 31.4 trillion won at year-end 2006.

<Figure III- 3>

Distribution of corporate loans by industry

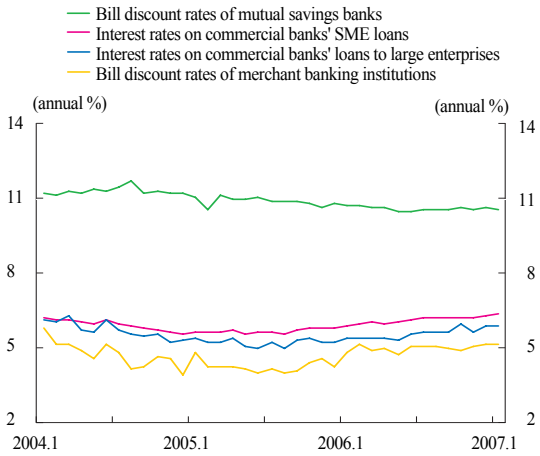


Source: The Bank of Korea

Note: 1) Commercial and specialized banks and non-bank financial institutions (Money and Banking Statistics)
Source: The Bank of Korea

<Figure III- 4>

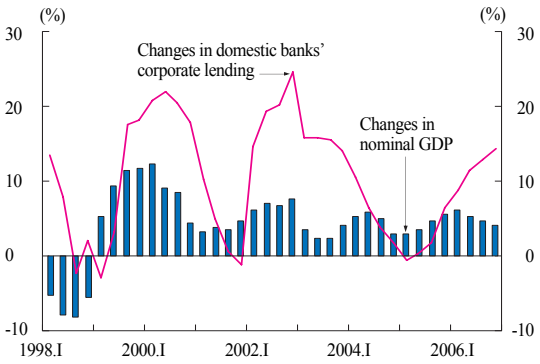
Corporate loan interest rates



Notes: 1) Based on new loans extended
Source: The Bank of Korea

<Figure III- 5>

Domestic bank lending and nominal GDP growth



Note: 1) Compared with the same period of the previous year
Source: The Bank of Korea

By type of industry, the rate of growth in lending by all financial institutions to the construction and the real estate and renting businesses is rising sharply, due to factors such as the expanding demand for loans for purchasing land for housing and for construction funds. Lending to the manufacturing sector, meanwhile, is increasing at a low rate. Thus, the share of banks' loans to the construction and the real estate and renting business sectors is rising, while that of bank lending to manufacturers continues to decline.

Banks' lending rates on loans to SMEs (based on newly-extended loans) fell temporarily in the second half of 2006, due to heightened competition among financial institutions to expand their market shares. They for the most part remained on an upward trend, however, in accordance with the increase in market interest rates.

In the meantime, the rate of increase in corporate lending had until recently shown procyclicality, moving in line with the trend of nominal GDP. Since 2006, however, notwithstanding the sluggishness of nominal GDP growth, the rate has continued to rise. In light of the lowered corporate profitability, the burdens of financial institutions, which continue to expand their lending to SMEs, are likely to increase if these trends continue.

Household lending continues to increase

Household lending increased by 57 trillion won (11.5%) in 2006, led mainly by both banks' and mutual credit facilities' housing finance loans. While this was a faster pace of growth than in the preceding year, it was below that of corporate lending, as the share of household loans in financial institutions' total lending,

which had been on the rise since 2000, registered a slight decrease.

Banks' interest rates on (newly-extended) household loans continued the previous year's increase in 2006. Rates on housing finance loans, which account for the bulk of household loans, showed a similar trend to those on household loans overall. However, interest rates on mortgage loans have been at relatively low levels, as bank branch managers have been given greater scope for deciding lending rates.

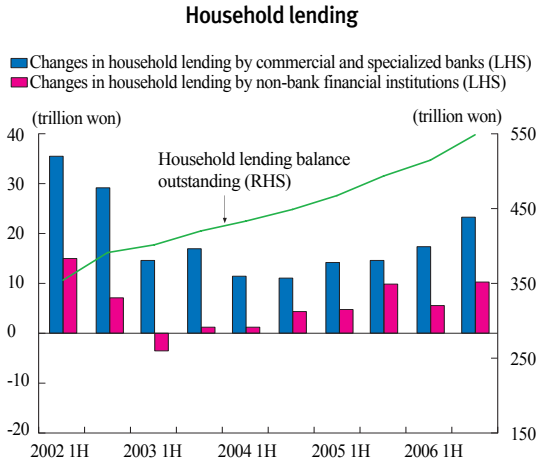
However, the interest rate differentials between housing finance loans and other household loans have narrowed greatly since December 2006, in reflection of the stricter risk management guidance on housing finance loans.

In the meantime, against the backdrop of increasing credit card issuance owing to factors such as improved credit card company profitability and falling delinquency rates, the rate of growth of merchandise credit in the credit card company sector is rising drastically, moving in line with the increase in private consumption.

Currently, the volume of merchandise credit outstanding is not high compared to the period before the 2003 credit card crisis. However, it is likely to increase further in the near term, given the growing number of credit cards issued recently.

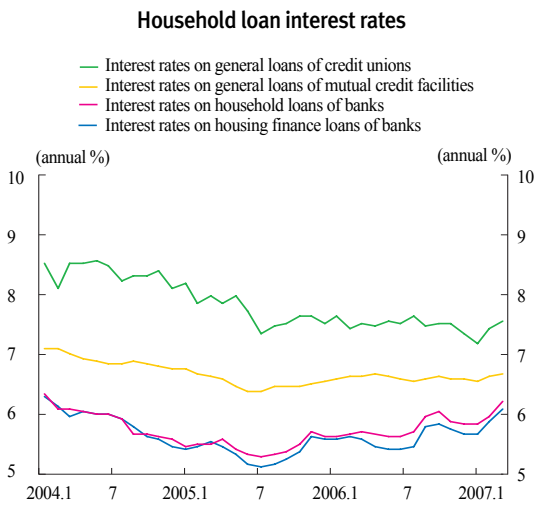
The maturity and redemption structures of housing finance loans extended by domestic banks have been shifting from mainly short-term bullet-type redemptions toward long-term regular amortizations of the principal plus interest payments, as the average

<Figure III- 6>



Source: The Bank of Korea

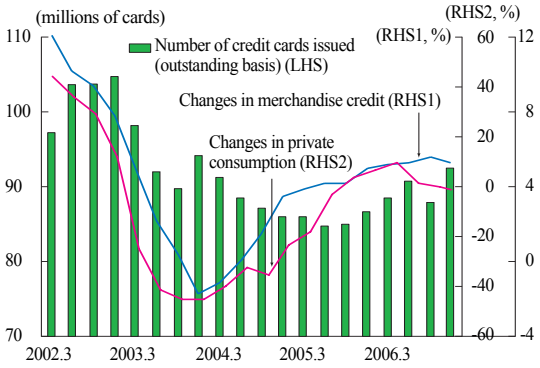
<Figure III- 7>



Notes: 1) Based on newly extended loans
Source: The Bank of Korea

<Figure III- 8>

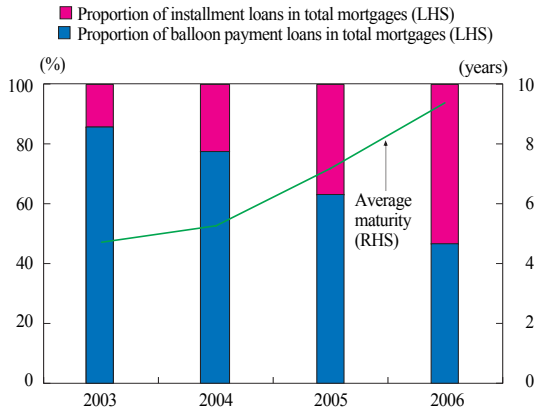
Merchandise credit of credit card companies, and number of credit cards issued



Note: 1) Compared with the same period of the previous year
Source: The Bank of Korea

<Figure III- 9>

Distribution of domestic banks' mortgage loans by repayment method



Note: 1) Based on six major domestic banks (end-period basis)
Source: The Bank of Korea

maturities of mortgage loans are lengthening and the share of installment loans in total mortgages is rising. This trend toward monthly repayment of principal and interest may for a time lead to further outflows of cash from household balance sheets, but it is expected to reduce the potential risk to the financial system entailed by the maturing every year of outstanding large-value loans.

Concerns about deterioration of Korean housing finance loans have also been raised since the defaults in the US subprime mortgage market in February 2007. However, the loan-to-value ratios (LTVs) on domestic financial institutions' housing finance loans are much lower than those in the US, while the loan delinquency rate in Korea is also at an insignificant level. The likelihood of loan defaults, therefore, does not seem great.

<Box III-1>

The effects of the increase in installment mortgage loans

Under the active encouragement of the policy authorities, housing finance loans extended by Korean banks have been shifting recently from mainly short-term balloon repayment mortgages toward long-term installment loans. In line with this trend, the average maturity of housing finance loans increased from 4.7 years at the end of 2003 to 9.4 years at the end of 2006. The volume of installment loans also grew massively over the same period, from 22.1 trillion won (14.7% of all housing finance loans) to 115.2 trillion won (53.7% of all housing finance loans). If this pace persists, the volume of installment loans is likely to rise to 173.7 trillion won (81.0% of all housing finance loans) by the end of 2010. Meanwhile, 88.9% of all installment loans offer borrowers grace periods during which no principal repayments are required. The grace periods* for the majority (57.5%) of these loans are between two and three years.

* Grace periods of installment mortgage loans outstanding of 6~7 largest Korean banks (as of year-end 2006)

No grace period	1 year or less	1~2 year	2~3 year	3~4 year	4~5 year	Over 5 year	Total
11.1%	11.3%	1.4%	57.5%	1.1%	14.2%	3.4%	100.0%

Based upon the volume of installment mortgage loans outstanding and taking into consideration their distribution according to grace period, one can estimate the amount of the same type of lending in forthcoming years and the annual amounts of principal repayment burden to be shouldered by borrowers, as follows:

About 20 trillion won in installment mortgage loans are expected to reach the ends of their grace periods every year. In 2009, however, this amount is likely to surge temporarily to 48.6 trillion won, as a consequence of loans issued in 2006 coming to the ends of their grace periods, since lending of this type increased massively during 2006. Accordingly, the aggregate principal and interest repayment burden will also gradually rise, from 13.2 trillion won in 2006 to 13.7 trillion won in 2007 and 14.4 trillion won in 2008.

Estimated principal and interest repayment burdens[1] of housing finance loans

(trillion won)

	2006	2007	2008	2009	2010
Mortage loans outstanding	214.5	214.5	214.5	214.5	214.5
Balloon repayments	99.3	84.9	69.4	53.8	40.8
Installment repayments	115.2	129.6	145.1	160.7	173.7
Post-grace period installment loans	· ·	19.5	21.8	48.6	15.9
Principal and interest repayment burdens[2]	13.2	13.7	14.4	15.6	16.7
Balloon repayments	6.0	5.5	4.6	3.7	2.8
Installment repayments	7.2	8.2	9.8	11.9	13.8

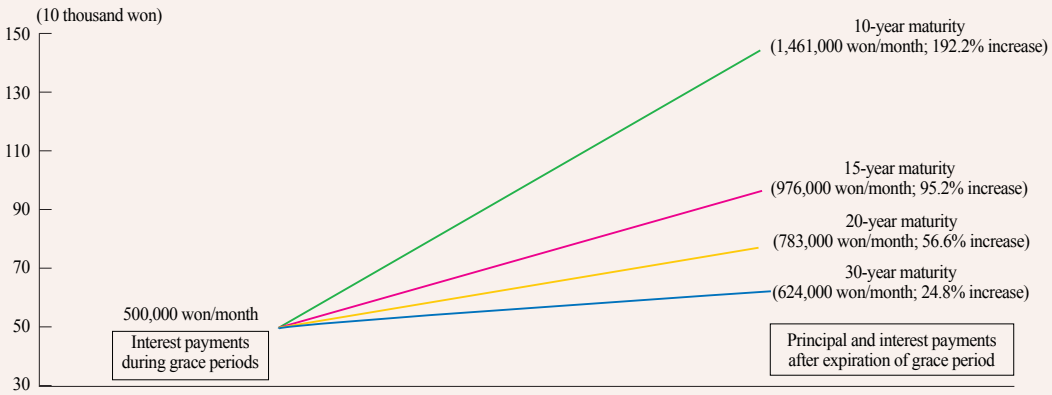
Notes: 1) Since most housing finance loans using balloon repayment methods are either granted an extensions or refinanced at maturity, calculation of the cash-flow burdens borne by borrowers includes only the interest payments.
2) For this estimation, the annual interest rate for housing finance loans was set at 6.0%. The estimation also assumes, for installment loans, that principal repayments are made in equal amounts over a maturity period of 20 years (The principal and interest repayment burden for 2006 was calculated based upon the volume of housing finance loans at the end of 2006 and the grace period distribution.)

The shift in mortgage repayment practices, whereby short-term balloon repayment loans are being replaced by long-term installment loans, is expected to alleviate potential financial system risk resulting from simultaneous maturation each year of loans requiring large-volume principal repayments. It may also lead to decreased use of home mortgage loans as a means for short-term investment in housing properties.

At the same time, however, this shift could also prove a destabilizing factor to the country's financial system, if the erosion of borrowers' liquidity due to further cash outflows caused by principal repayment needs suppresses consumption and drives up the delinquency rate, especially among low-income households. Among Korean households, the ratio of mortgage interest payments to disposable income remained in the range of 7-8% for the period 2005-2006. If installment principal repayments are added to interest payments, that figure is likely to grow to the mid-9% level by 2010.

The burden of having to make monthly installment payments of principal might weigh heavily on individual borrowers with home mortgage debts. While the size of the monthly payment increase at the end of the grace period varies depending upon the loan maturity and length of the grace period, under typical borrowing conditions (20-year maturity, equal monthly installments of principal due at expiration of a 3-year grace period, and a 6.0% annual interest rate), a borrower taking out a loan of 100 million won will see his or her monthly payments rise 56.6%, from 500,000 won to 783,000 won. This steep increase will especially hurt low-income households or households whose loan amounts are quite large compared to their incomes. At expiration of the grace period, these households will see either their financial balance deficits (based on cash flow) widen or their surpluses shrink substantially.

Monthly repayment burden increases after grace period expiration



Note: Estimations based upon a loan amount of 100 million won at an annual interest rate of 6.0%, to be repaid through equal installments after a grace period of 3 years

In spite of the increased debt service burden, the delinquency rate on housing finance loans is unlikely to rise in any significant way in the near future. The increases in principal repayment burden at grace period expiration will remain moderate for 2007 and 2008, at 500 billion won and 1,200 billion won, respectively. Also, with most households perceiving their homes as their most important assets, cases of delinquency tend to result in active debtor efforts to resolve them.

As of end-2006, the average loan-to-value (LTV) ratio of outstanding housing finance loans remained at 49.3%, which suggests that the incidence of foreclosure due to delinquency will be rather low in the future. Furthermore, as some banks offer opportunities to extend grace periods, borrowers with higher principal and interest repayment burdens may utilize such arrangements. To meet additional needs for funds, households can always take out personal loans from banks or borrow from non-bank financial institutions or, if necessary, even from lenders not subject to LTV or DTI-related restrictions. Accordingly, it will take some time before the deterioration of balance sheets among households produces echoes in the form of rising numbers of delinquencies.

To minimize any potential threats to financial system stability arising from installment mortgage loan practices, the government needs to encourage lending banks to gradually cease offering grace periods or to offer only short ones. Specifically, the authorities need to use supervisory tools like loan loss provision ratios, risk weighting and LTV ratios, discriminately, applying more stringent standards for long-term loans with grace periods, which are riskier than short-term loans with no grace periods. In the US, in September 2006, the Federal Reserve Board classified mortgage loans with grace periods prior to principal repayment as ‘nontraditional mortgage products’, to distinguish them from less risky loans without such grace periods, and asked lending institutions to strengthen their risk management related to such loans by taking into account the effects of the increased monthly payments on the borrowers’ debt servicing capacities at the time of loan review, as well as establishing an early warning system for detecting signs of trouble and conducting stress tests. In addition to similar measures, the Korean government also needs to consider limiting the grace periods of housing finance loans eligible for tax deduction (currently loans with maturities of 15 years or over with grace periods of three years or less) to one year or less.

The soundness of loan quality should also be closely monitored to prevent any sudden rise in delinquencies in the event of a sharp decline in housing prices or economic recession, or deterioration of other financial conditions. Banks should also make efforts toward early detection of potential credit problems by taking into consideration, during delinquency rate analysis, whether the loans involved came with grace periods and whether the delinquencies occurred during or after the grace periods, and should reflect the findings from these analyses in setting their grace period-related lending policies thereafter.

<Box III-2>

The meltdown of the US subprime mortgage market and its effects

(Current status of subprime mortgage market)

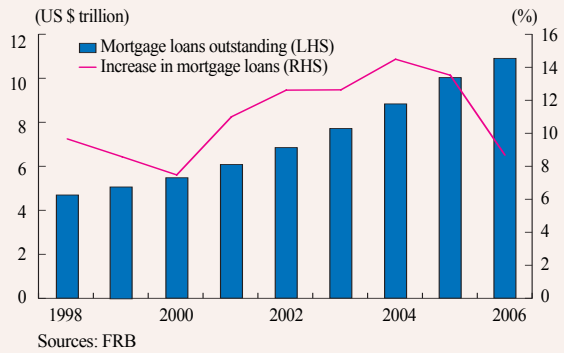
The recent crisis in the US subprime mortgage market, which lends to borrowers having poor credit ratings, has resulted in delisting from the NYSE of large mortgage lenders with high volumes of lending to this type of borrower, causing turmoil in the overall mortgage and the mortgage-backed securities (MBS) markets. In the US, mortgage loans are classified into three types in accordance with the borrowers' credit scores and without regard to the lenders: Prime, Alt-A and Subprime. Subprime loans are low-credit loans issued to borrowers with credit scores less than 620.

Types of US mortgage loans

Prime	High-credit loans issued to borrowers with high credit ratings (generally credit scores of 620 or above)
Alt-A (Alternative-A)	Loans to creditworthy borrowers with incomplete asset or income documentation
Subprime	Low-credit loans issued to borrowers with low credit ratings (generally credit scores below 620)

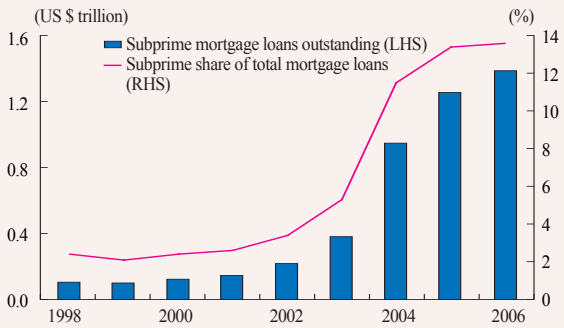
Since the early 2000s, mortgage lending has increased massively in the US, on the back of the continually low interest rates and buoyancy of the housing market. More recently, over the past few years, the share in total mortgages of subprime loans has surged. As a result of the housing boom, the volume of mortgage loans outstanding has doubled, rising from US $ 5.5 trillion in late 2000 to US $ 11 trillion in late 2006. Over the same period, subprime lending, the least sound portion of home mortgage lending, has soared from an estimated US $ 0.1 trillion to US $ 1.4 trillion.

US mortgage loans outstanding and rate of increase



Sources: FRB

Subprime mortgage loans[1)]



Note: 1) Estimations based upon home mortgage loan survey by the MBA
Sources: FRB, MBA (Mortgage Bankers Association)

The dramatic increase in subprime mortgage lending has been due to two factors: the abundant liquidity of financial institutions resulting from continuing low interest rates, and the intensifying competition among them

which has led them to embark on high-risk, high-return home lending through a variety of variable rate loans offering low principal repayment burdens during their initial periods. The phenomenon was also helped greatly by progress in financial engineering and growth of the MBS market, which enabled mortgage firms, although they are not deposit-taking institutions, to borrow money cheaply by granting put-back options* to MBS investors or by issuing variable-rate MBSs.

* MBS investors are frequently granted the option of putting back the securities they have purchased to the issuer when the delinquency rate in mortgages used as collateral exceeds a certain level. Such exercise of put-back options by MBS investors, while it enables issuers to lower their coupon rates, can also plunge mortgage-issuing financial institutions into liquidity crisis in the event of a general deterioration of conditions, for example a surge in the delinquency rate.

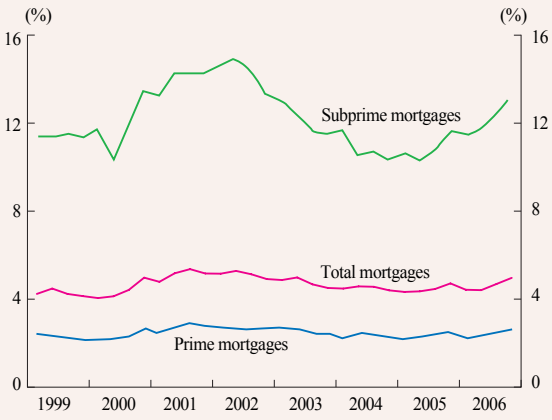
(Impacts and implications)

Concerns about rising defaults are expected to drastically reduce new subprime lending in the US,* possibly causing a slowdown in the housing market and dampening household consumption. Also, if institutional investors respond to the subprime woes by demanding buyback of massive volumes of MBSs, this will mire mortgage firms in liquidity crises, cutting their cash pipelines. This can have severe repercussions on the financial market, and a wave of foreclosures aimed at recovering debts could hit the nation, causing social unrest.

* The recent stiffening of mortgage lending rules by the US supervisory authorities such as the FRB, and the decision to discontinue subprime loan products by government-sponsored lenders like Freddie Mac, are also factors that may contribute to shrinking of the US housing market.

However, the share of subprime mortgage lending in total mortgage lending is still quite moderate at about 13%, and the delinquency rate in the healthier prime sector remains at the mid-2% level. Hence, most observers consider it unlikely that the subprime mortgage crisis will have negative repercussions across the entire home mortgage market or on the US or global financial markets.

US home mortgage delinquency rates



Sources: MBA (Mortgage Bankers Association)

Lending to low-credit borrowers also appears to have accounted for a sizeable portion of housing finance loans in Korea, where non-bank financial institutions are the primary issuers of such loans. However, the probability of low-credit housing finance loans having destabilizing effects on the country's overall financial system appears rather small. The delinquency rate on housing finance loans underwritten by Korean banks was a mere 0.6% at the end of 2006, significantly lower than the 2.2% figure among large US banks. The average LTV ratios of Korean banks and non-bank financial institutions stood at 50% and 55%, respectively, also at the end of 2006, which was drastically lower than the 80% of US banks.* Finally, in Korea, unlike in the US with its

developed securitized mortgage market, most financial institutions use their own funds for making loans. This delays the exposure to liquidity risks of Korean financial institutions, should financial and economic conditions worsen, and reduces the chances of liquidity risks spreading to other financial institutions.

* According to the Federal Housing Finance Board and First American Loan Performance, 37% of all residential loans issued by US banks, as of the end of 2006, had LTV ratios of 90% or greater. Their research also found that the delinquency rates of these high-LTV loans tend to spike quickly.

Nevertheless, should drastic changes occur in financial and economic conditions, for example plummeting housing prices or spiraling market interest rates, it is undeniable that non-bank financial institutions, that are more extensively engaged in low-credit residential mortgage lending than banks, will be at greater risk. Hence, oversight of non-bank institutions needs to be stepped up so as to monitor their compliance with LTV and DTI-related lending rules, their housing finance loan delinquency rates, their levels of loan loss reserves, etc., to ensure their financial soundness.

2. Bond market

Treasury bond yields decline

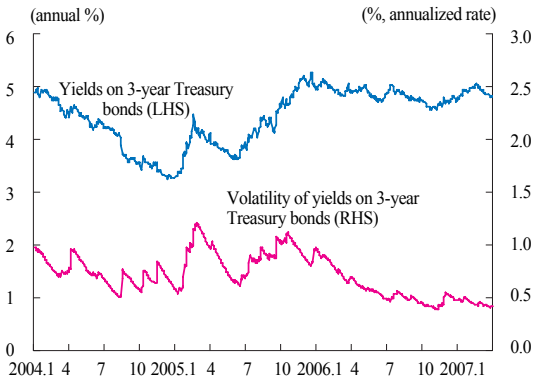
In spite of the three upward adjustments of the call rate target in 2006, yields on Treasury bonds (three-year Treasury bonds here and hereafter) gradually declined for most of the year, influenced by the increased demand mainly from domestic branches of foreign banks. With the improvement of economic indicators, they shifted upward from October 2006, however, before reverting to a downward trend again in February 2007 amid deepening concerns about economic slowdown among bond market participants. Bond market volatility (based on EWMA)[2], while generally declining, rose moderately in November as a result of the temporary increase in bond yields.

While the net issuance of Treasury bonds will decrease significantly in 2007, due among other things to the reduced ceiling on Treasury bond issuance, the predominance of demand in the market is expected to continue, as demand from pension funds and domestic branches of foreign banks will remain strong.

The spreads between long- and short-term interest rates (the yield on Treasury bonds with three-year maturity -

<Figure III-10>

Treasury bond yields and volatility[1]



Note: 1) Volatility is calculated using the EWMA (exponentially weighted moving average) method.
Sources: The Bank of Korea, KOSCOM

<Table III- 1>

Net issuance of Treasury bonds

(trillion won)

	Issuance	Redemption	Net issuance
2006	60.7	24.4	36.3
2007	50.6[1]	27.9[2]	22.7

Notes : 1) Annual ceiling on new issuance of bonds
2) Sum of redemption at maturity and ceiling on buybacks (KRW 7 trillion)
Sources : The Bank of Korea, Ministry of Finance and Economy

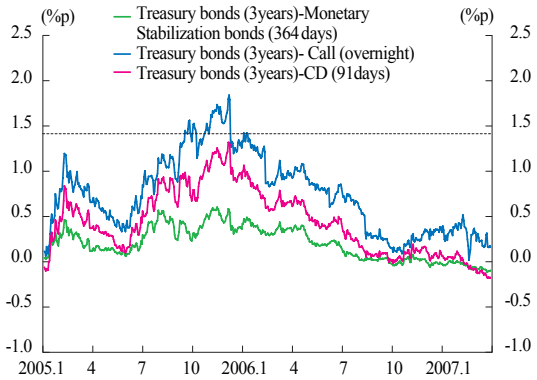
2) The EWMA (exponentially weighted moving average) improves on the simple mean of volatility by assigning greater weight to more recent volatility in terms of volatility assumptions. More specifically, the weights decline exponentially as time recedes. Under this method, variation (σ_t^2) is set as $\sigma_t^2 = \lambda\sigma_{t-1}^2 + (1-\lambda)r_t^2$. Present variance is fixed by yesterday's variance and the new shock (r_t^2) in today's market. Here, the weighted value (λ) applied to yesterday's variance is a kind of shock delay factor ranging from 0 to 1 (0.97 is generally used for daily data). EWMA volatility is an annualized figure, converted from the standard deviation of daily data with this method.

the yield on 91-day CDs) have continually narrowed since 2006, as higher call rate targets have sent short-term market interest rates up. Short-term rates have risen particularly sharply since November 2006, under the influence of the stricter reserve requirements. In the meantime, long-term rates have been on the opposite course since February 2007, and the flattening of the yield curve continues.

However, a faster-than-expected pace of economic recovery could send long-term market interest rates soaring, widening the spreads between long- and short-term rates.

<Figure III-11>

Long-and short-term Interest rate spreads[1)]



Note: 1) The dotted line indicates the long-term (January 1999 through March 2007) average of yields on 3-year Treasury bonds minus overnight call rates.
Sources: The Bank of Korea, KOSCOM

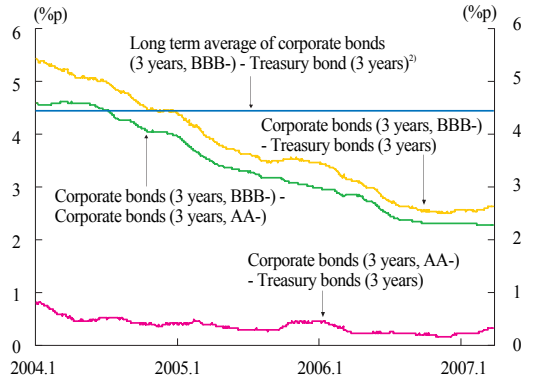
Corporate bond credit spreads widen moderately

Corporate bond credit spreads (the yield on corporate bonds minus the yield on three-year Treasury bonds) have been steadily narrowing since 2005, owing to the decline in issuance. In November 2006, they hit their lowest level since the full-fledged introduction of mark-to-market valuation (in July 2000), at 19bp (based on AA- corporate bonds).

Starting from December, however, a moderate widening of credit spreads was observed under the influence of downward credit rating adjustments for some low-rated bonds and increased issuance of bank bonds[3)]. Credit spreads are seen as unlikely to widen significantly in the foreseeable future, as corporate sector credit risks remain generally low.

<Figure III-12>

Credit spreads on corporate bonds[1)]



Notes: 1) Average of mark-to-market base yields estimated by 3 bond appraisal companies
2) Average for the period October 20, 2000 to March 30, 2007
Source: KOSCOM

3) The average monthly net issuance of bank bonds, which was 0.5 billion won for the period September to October 2006, increased to 2.4 trillion won over the November 2006 to March 2007

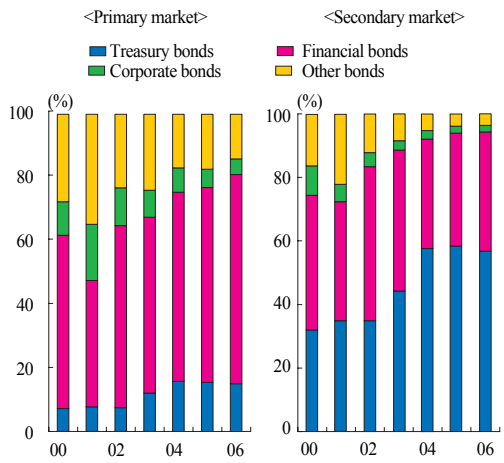
Mediocre performance of the corporate bond market

In contrast to the case with Treasury bonds and financial bonds (including Monetary Stabilization Bonds), both corporate bond issuance and trading have continued to decline.

While the share of Treasury bonds in overall bond issuance has remained steadily in the 15% range since 2004, trading activity in government debt instruments remains vigorous and their share in overall bond market trading volume spiked to the level of 60% in 2006.

<Figure III-13>

Issuance and secondary trading by bond type



Sources: The Korea Securities Depository, KOSCOM

Issuance of financial bonds has also been increasing steadily, to account for 66% of all new bond issues and 38% of overall trading volume in 2006.

In comparison, issuance of corporate bonds has been on a consistently downward trend ever since 2002, and accounted for a mere 4.9% of overall bond issuance in 2006 with a share in trading volume in the 2% range. The liquidity and depth of the corporate bond market therefore remain poor.

The prolonged mediocre corporate bond market activity can act as an impediment to balanced growth of the overall bond market, and hinder its function as the capital market for corporate borrowers. Since 2006, a great number of small and medium-sized companies have been raising funds through borrowing from financial institutions. This could increase corporate sector vulnerability to any unexpected external shocks that shrink the lending market.

3. Stock market

Stock prices on the rise

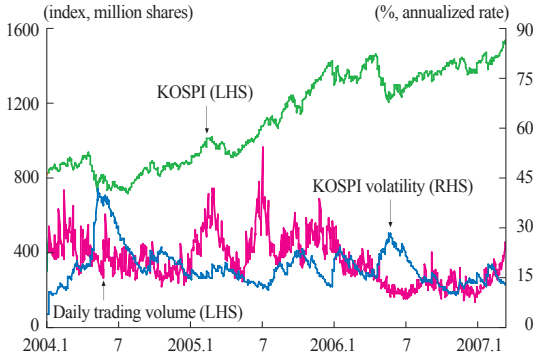
Stock prices have shown an upward trend overall, although the stock market experienced large-scale corrections from May to June of 2006 and in February 2007.

The KOSPI, the Korean composite stock index, fell steeply to a yearly record-low of 1,203.9 in around mid-May 2006, in the course of portfolio rebalancing due to fears of additional US policy rate hikes and deepening uncertainties about the world economy. However, it has shifted to a rising movement since June 2006, in line with the exuberance of stock markets in major countries. The KOSPI showed a drop again in early 2007, influenced by stock market corrections in China and the US. However, it has reverted to an upward movement since March.

The VIX (Volatility Index)[4], which measures the degree of risk aversion among stock investors, has fallen, after surging sharply at the end of February 2007. At the same time, stock trading volumes have steadily increased. The HHR (Hui Heubel Ratio)[5], an indicator of stock market liquidity as well as the volatility of stock prices, has also declined since March of this year, indicating that the stock market has become more resilient.

<Figure III-14>

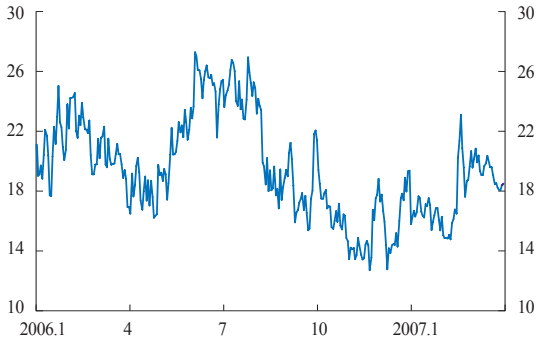
Stock prices and volatility[1]



Note: 1) Volatility calculated by the EWMA (exponentially weighted moving average) method
Sources: The Bank of Korea, Korea Exchange

<Figure III-15>

VIX[1]

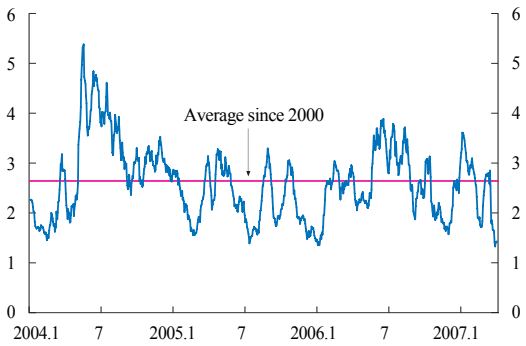


Note: 1) Stock price volatility index for underlying assets of KOSPI200
Sources: The Bank of Korea, Korea Exchange

4) The VIX for the KOSPI was calculated by borrowing the VIX calculation method used in the Chicago Mercantile Exchange. A high VIX implies a heightening degree of risk aversion in stock investment.
5) HHR={(highest price - lowest price) / lowest price} / (trading value) / (total market capitalization)

<Figure III-16>

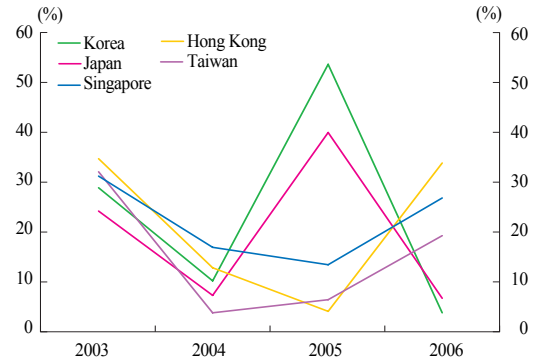
HHR[1] of stock market



Note: 1) Based on the KOSPI, 10-day moving average of daily HHRs
Sources: The Bank of Korea, Korea Exchange

<Figure III-17>

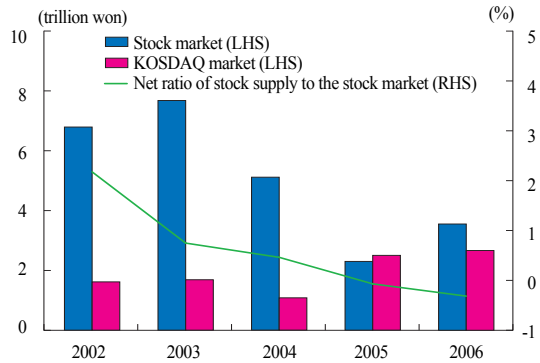
Rates of stock price increase in major Asian countries



Sources: Korea Exchange, Bloomberg

<Figure III-18>

Stock market financing and net stock supply[1]



Note: 1) Net stock supply ratio = [(IPOs and paid-in capital increases - net treasury stock purchases) / annual average market capitalization (based on stock market)] × 100
Sources: Financial Supervisory Service, Korea Exchange

Stock prices climbed at a slower pace in Korea than in other countries during 2006. The KOSPI rose only 4.0% for the year, due to a decline in business sector profits and a considerable net outflow of foreigners' stock investment funds. This was drastically lower than the average rate of increase of 22.0% among four other major Asian economies - Japan, Hong Kong, Singapore and Taiwan - and was in sharp contrast to 2005, when the KOSPI soared 54.0% to substantially exceed the 16.3% average rate of increase for these four other countries. In 2007, meanwhile, the KOSPI has risen at a rate similar to the four-country average.

In the meantime, the net value of stock supply from businesses[6] has declined continuously, owing to reduced corporate financing through initial public offerings and rights offerings, coupled with an increase in treasury stock purchases intended to support stock prices and defend management rights. While total financing through initial public offerings and rights offerings (stock market basis) amounted to 3.5 trillion won in 2006, a 50.6% increase from the previous year (2.3 trillion won), net purchases of treasury stocks jumped to 5.5 trillion won, up 177.4% from 2005 (2.0 trillion won).

Share of foreign-owned stocks shrinks

After shifting to net sales of 3.0 trillion won (stock market basis) in 2005, foreign investors recorded more than three times that amount in net sales at 10.8 trillion won in 2006. While they have reversed to a moderate net buying trend in 2007, the ratio of foreign-owned stocks to total market capitalization in Korea has fallen

6) Net value of stock supply = initial public offerings and rights offerings - net purchases of treasury stocks

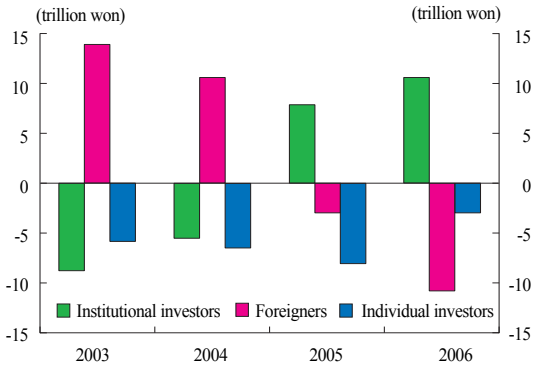
from 39.7% at year-end 2005 to 37.7% at the end of March 2007. However, the share of foreign stock investment in Korea still remains higher than those in other emerging markets with the exceptions of Hungary (77.7%) and Mexico (45.1%).

The substantial net sales by foreigners are likely to have contributed to the limited rise in stock prices during 2006. However, the net sales by foreigners were absorbed by net purchases on the parts of domestic institutional investors, upheld by increased fund inflows to stock-type funds and expanded portfolio investment by pension funds. The local institutional investors' demand base thus appears to have expanded.

In the meantime, investment in overseas funds by individual domestic investors is surging sharply in line with an increase in stock-type funds. The outstanding amount of overseas funds[7] increased from 12.9 trillion won at year-end 2005 to 30.1 trillion won at the end of 2006 and 39.0 trillion won at the end of February 2007. This massive growth may be attributed to the steep rise in stock prices worldwide as well as to favorable investment conditions, such as the easing of restrictions on overseas fund investment. Overseas funds, by introducing diversification in the investment vehicles available, can contribute to expansion of the overall fund demand base. In Korea, however, the diversification effect of individual investors' investment in overseas funds appears all but negligible, as the majority of these funds invest nearly exclusively

<Figure III-19>

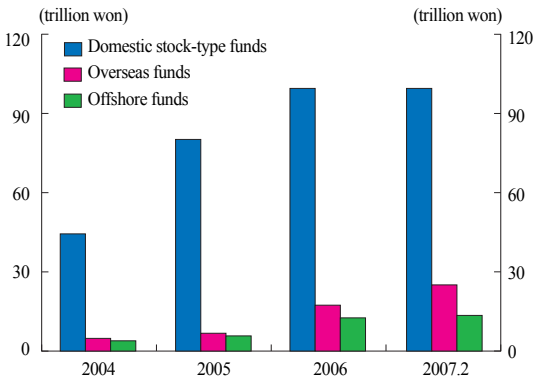
Net buying of stocks by investor type[1]



Note: 1) Based on the stock market
Source: Korea Exchange

<Figure III-20>

Outstanding balances of domestic stock-type and overseas funds[1]



Note: 1) Domestic stock-type funds: stock-type and mixed type;
Overseas funds: overseas funds operated by domestic asset management firms;
Offshore funds: offshore funds operated by foreign asset management firms
Source: Asset Management Association of Korea

7) This is the sum of overseas funds operated by domestic asset management firms and offshore funds operated by foreign asset management firms. The size of overseas funds is calculated based upon outstanding balance, and that of offshore funds based upon net asset values.

in emerging market countries[8] like China, India or Vietnam. Meanwhile, an explosive growth of investment in overseas funds can also reduce the inflow of funds into domestic stock-type funds.

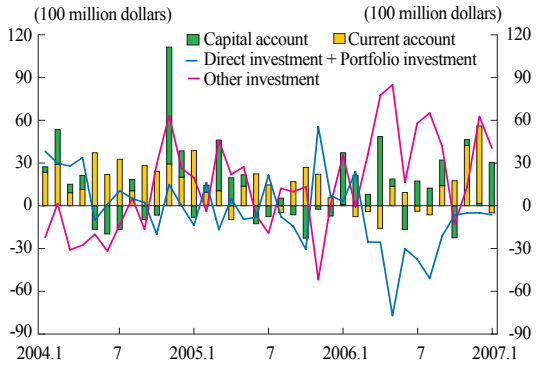
8) As of the end of 2006, emerging market countries were the destinations for 70% of all overseas fund investment.

4. Foreign exchange market

Short-term foreign borrowings increase considerably

<Figure III-21>

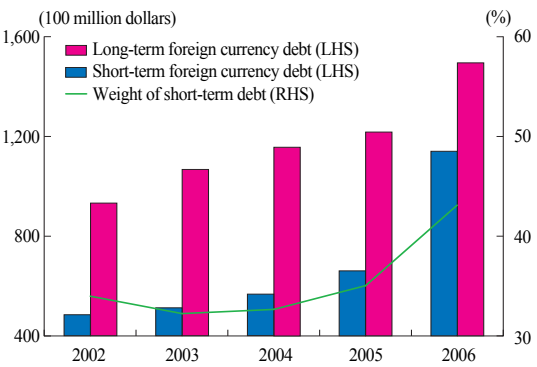
Balance of payments



Source : The Bank of Korea

<Figure III-22>

Short-and long-term foreign currency debt



Source: The Bank of Korea

While the preponderance of supply over demand resulting from current-account transactions has slowed down with the narrowing of the goods account surplus, capital inflows arising from financial transactions, such as banks' short-term borrowings, have increased considerably.

The current account surplus narrowed to US $ 6.09 billion in 2006 from US $ 14.98 billion the previous year, due to a decline in the trade surplus and an expanded service account deficit reflecting increased travel expenditures. In the capital account, the other investment account[9] surplus surged to US $ 47.68 billion, from US $ 6.81 billion in 2005, owing mainly to short-term foreign borrowings by deposit money banks. In contrast, the direct investment and portfolio investment accounts both shifted from surplus in 2005 to deficit, owing to a net outflow of funds caused by residents' investment overseas and foreigners' withdrawals of stock investment funds.

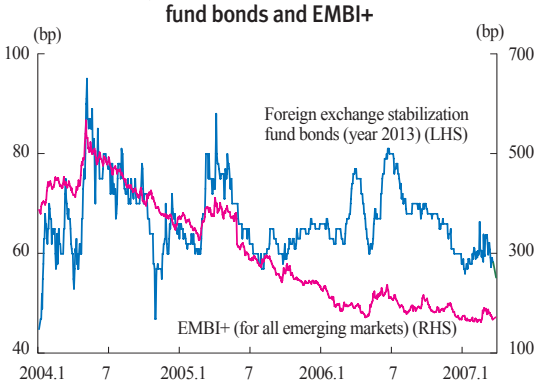
The dramatic expansion of short-term foreign debt can be attributed to banks' increased borrowings for positional adjustment following large-scale exporters' sales of forward contracts[10], and for funding sources in response to growing demand for foreign currency

9) This includes foreign trade credits, loans (borrowings), and cash & due from banks (deposits).

10) In 2006, domestic businesses' net selling of forward exchange contracts totaled $ 49.3 billion, a 68.8% increase compared to 2005 (29.2 billion).

<Figure III-23>

Interest rate spreads on foreign exchange stabilization fund bonds and EMBI+



Sources: JP Morgan, Bloomberg

<Table III- 2>

Interest rate spreads on short-term borrowings by domestic banks[1)]

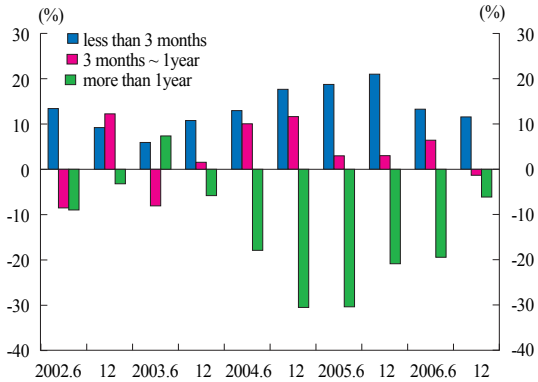
(bp)

2004.12	2005.12	2006.6	9	12	2007.1	3
16	9	7	5	7	5	5

Note : 1) Spread on Libor; period-average basis
Source: The Bank of Korea

<Figure III-24>

Maturity gaps between foreign currency-denominated assets and liabilities of domestic banks[1)]



Note : 1) Banking accounts of domestic banks
Source: Banks' call reports

loans[11)], in the midst of one-sided expectations of local currency appreciation on the part of market participants. Consequently, the share of short-term debt in total external debt climbed to 43.1% as of the end of 2006, from 35.1% at the end of 2005.

Despite the sharp increase in short-term external debt, the Korean economy's external debt structure does not appear to be a serious concern, given the soundness of overseas borrowing conditions and external payment capacity. Premiums on Foreign Exchange Stabilization Fund Bonds have declined since the second half of 2006 and those on foreign-currency borrowings have remained at low levels. In addition, the ratios to foreign exchange reserves of short-term external debt and of floating external debt[12)] at year-end 2006 were 47.6% and 58.2%, respectively, meaning maintenance of liquidity indices within the stable levels[13)] recommended by the IMF. However, when external conditions deteriorate with a change in economic environment, a surge in short-term foreign debt can lead to lowering of external credibility and emergence of negative effects such as increased liquidity risk and expanded foreign exchange volatility.

Examining the maturity gap between foreign currency-denominated assets and liabilities of domestic banks, the maturity gap ratios[14)] for maturities of not more than one year showed asset surpluses and those for

11) The balance of foreign currency loans made by domestic banks increased from 41.1 trillion won at the end of 2005 to 55.8 trillion won at the end of 2006.
12) Short-term debt + long-term debt with maturities of one year and below
13) Less than 60 percent and less than 100 percent, respectively, are considered stable.
14) [(Foreign currency assets - foreign currency liabilities)/Foreign currency assets] × 100

maturities exceeding one year displayed liability surpluses. This is because, while short-term foreign currency-denominated borrowings have increased greatly, a considerable portion of these borrowings are also lent out on a short-term basis. Domestic banks thus appear to have maintained favorable liquidity conditions.

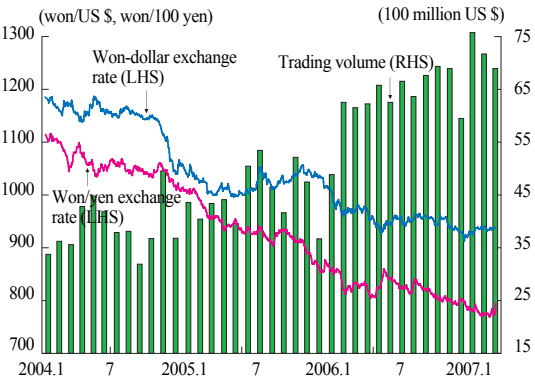
Korean won appreciation against the US dollar slows

In 2006, the Korean won showed a strengthening trend against the US dollar, due to solid growth of exports and large-scale exporters' sales of forward contracts. At the end of 2006, the exchange rate was 929.8 won to the dollar, an appreciation of 8.8% for the year. In 2007, the won has fluctuated at around 930 won/dollar level after losing a little ground due to foreigners' net buying of non-deliverable forward contracts (NDFs) and to outflows of residents' overseas investment. The volume of daily inter-bank foreign exchange transactions expanded greatly, from $ 4.52 billion in 2005 to $ 6.33 billion in 2006, reflecting an increase in overseas trade and improvement of the foreign exchange quotation system.

With regard to the won/Japanese yen exchange rate, the won continued to appreciate against the yen in 2006, dropping to 780 won per 100 yen level by the end of the year. This reflected the fact that, while the won/dollar exchange rate fell, the yen/dollar exchange rate rose owing to the widening interest rate gap between the US and Japan following US interest rate hikes. In 2007, the won/yen exchange rate has rebounded slightly in line with weakening of the won, to fluctuate at around 800 won per 100 yen.

<Figure III-25>

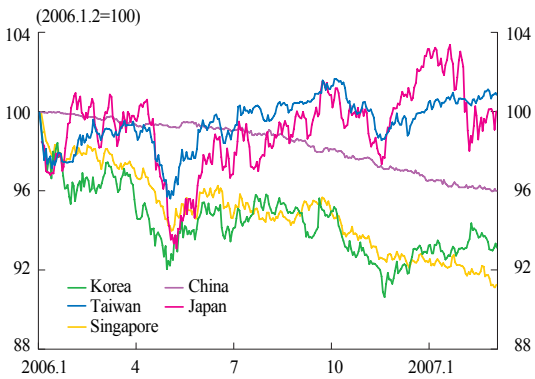
Won-dollar and won-yen exchange rates, and foreign exchange trading volume[1)]



Note : 1) Trading volume is based on inter-bank foreign exchange spot transactions (daily average)
Source: The Bank of Korea

<Figure III-26>

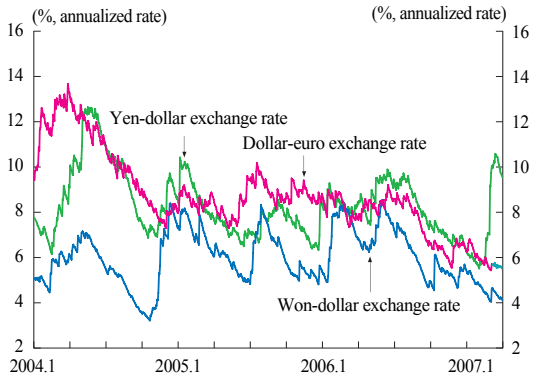
Trends of currencies of major Asian countries against the US dollar



Source: Bloomberg

<Figure III-27>

Volatilities of the won-dollar, yen-dollar, and dollar-euro exchange rates[1)]



Note: 1) Volatility is calculated by the EWMA (exponentially weighted moving average) method
Source: The Bank of Korea

After expanding temporarily in May 2006, due to sharp exchange rate fluctuations reflecting large-scale foreign investment fund flows, the volatility of the won/dollar exchange rate then declined as the rate itself fell slowly from June 2006. In early 2007, however, the Japanese yen showed increased volatility, owing to worries about unwinding of the yen-carry trade. The volatility of the won-dollar exchange rate is thus likely to be influenced by future movements of the yen-dollar rate.

<Box III-3>

Interest rate arbitrage exploiting gaps between the swap rate and the interest rate differential, and its effects on the financial market

When cross-border movements of capital are free and there are no associated transaction costs, the interest rate differential between two currencies generally coincides with the swap rate - which is the difference between the forward and spot exchange rates for the same pair of currencies, divided by the spot rate. However, in situations such as a state of imbalance between supply and demand in the foreign exchange market or when there is a deterioration in foreign currency conditions, a significant gap may occur between the swap rate for a currency pair and their interest rate differential, and this provides opportunities for interest rate arbitrage.*

For example, when the swap rate falls below the interest rate differential, an investor can profit by borrowing money in the foreign currency and investing it in assets denominated in the local currency. Conversely, when the swap rate surges above the interest rate differential, profits can be realized by borrowing money in the local currency and investing it in assets denominated in the foreign currency.

* This relationship, in interest rate parity theory, expresses itself as follows: domestic interest rate (i) = foreign interest rate (i*) + swap rate ((forward exchange rate - spot rate)/spot rate). Accordingly, an investor can realize a risk-free profit by comparing the return on domestic asset investment (i) with that on foreign asset investment (i* + swap rate), and borrowing money in the lower-return currency to invest it in assets denominated in the higher-return one.

Swap rate[1] and interest rate differential[2]

Note: 1) The annualized rate of difference between the NDF rate (3-month) and the spot rate, divided by the spot rate
2) Domestic interest rate: CDs (91-day); foreign interest rate: Libor (3-month)

Since 2006, there have been multiple factors encouraging interest rate arbitrage in the Korean foreign exchange market. Amid predominantly bullish sentiment about the won, exporters including shipbuilders and heavy-industrial firms have sold massive quantities of forward exchange contracts to banks in attempts to hedge their foreign exchange risk,* which has caused forward exchange rates to tumble. Banks have then sold spots to adjust their foreign exchange positions, increasing the downward pressure on spot rates. Importers, meanwhile, have held off buying forwards. This situation creates an imbalance between supply and demand in the forward

market, also causing forward rates to drop more drastically than spot rates. As a result, swap rates have dipped to levels far below the corresponding interest rate differentials, and maintained their levels until recently.

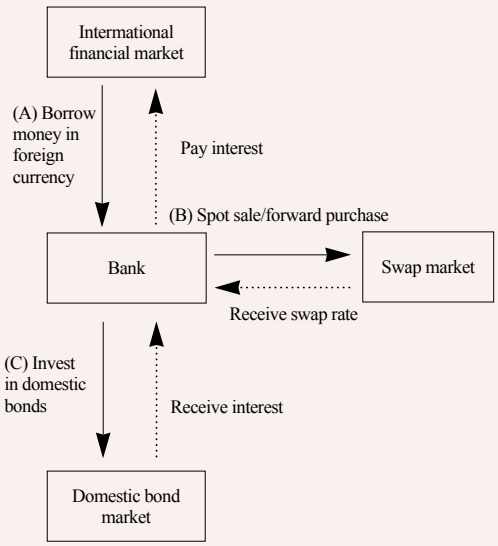
* While export orders received by Korean shipbuilders totaled US $ 22.1 billion in 2006, up 24.9% over 2005 (US $ 17.7 billion), domestic businesses' net selling of forwards amounted to US $ 49.3 billion, a 68.8% increase over 2005 (US $ 29.2 billion).

As swap rate remains persistently below interest rate differential, this situation has encouraged banks to actively engage in arbitrage. Domestic banks and local branches of foreign banks are borrowing short-term funds in the international financial markets and converting them into won through currency swaps, consisting in selling of spots and buying of forwards to invest in domestic bonds or other domestic assets. Interest rate arbitrage, although it provides financial institutions with means of improving their profitability, has negative effects on the domestic financial market.

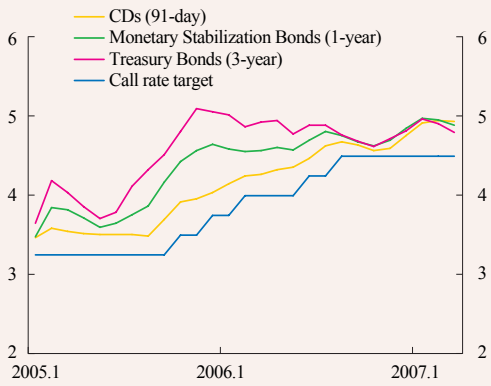
First of all, the continuously high volume of arbitrage has resulted in a massive increase of short-term borrowings in foreign currency, sending foreign debt to record levels and causing a deterioration of foreign debt-related financial soundness indicators. At the end of 2006, short-term foreign debt stood at US $ 113.6 billion, almost twice its amount at the end of 2005 (US $ 65.9 billion). The share of short-term debt jumped as well, from 35.1% at the end of 2005 to 43.1% at the end of 2006.

A second negative impact of interest rate arbitrage has been the decline in long-term interest rates to record abnormal lows. Arbitrage trades by local branches of foreign banks have increased the demand for domestic bonds, putting downward pressure on long-term interest rates. Net buying of Treasury Bonds and Monetary Stabilization Bonds by local branches of foreign banks amounted to 16 trillion won in 2006, over five times their amount in 2005 (2.9 trillion won). For January through February 2007, the figure stood at 8.6 trillion won. The three successive policy rate increases effected during 2006, while helping to keep short-term interest rates on an upward course, failed to boost long-term rates and brought them down instead. As a result, the spreads between long- and short-term interest rates are gradually narrowing. The effects of interest rate arbitrage, therefore, appear restrictive to monetary policy effectiveness.

Interest rate arbitrage transaction structure



Long-and short-term interest rates



Ⅳ. Soundness of financial institutions

1. Soundness of banks

Credit risk

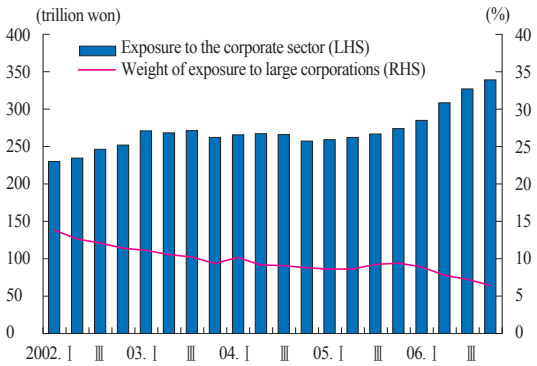
Corporate exposure increases considerably

In 2006, banks' exposure[1] to the corporate sector, and to SMEs in particular, increased 23.6% from the end of the year before. While banks' fund operations in the household sector were restricted owing to tightened regulations on housing finance loans, given the low delinquency rate in the corporate sector banks continued easing their SME lending policies.[2]

By sector, loans to construction and real estate businesses increased sharply, led mainly by project financing for construction companies. The share of construction and real estate companies in banks' total corporate sector exposure jumped by 3.1 percentage points, from 18.0% at the end of 2005 to 21.1% at year-end 2006. If housing finance loans are included,

<Figure IV- 1>

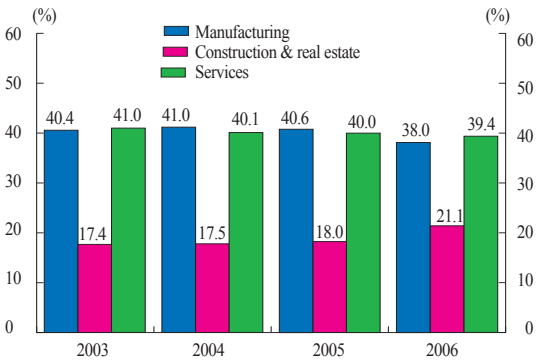
Banks' exposure to the corporate sector[4]



Note : 1) End of period basis
Source : Banks' call reports

<Figure IV- 2>

Changes in banks' exposure to industrial sectors[3]



Note: 1) End of period basis
Source: Banks ' call reports

1) The concept of "exposure" includes loans (won or foreign currency loans, advances for payment on loss compensation related to payment guarantees, foreign bills bought, credit card receivables, and private placement bonds), CP (including guaranteed notes), acceptances and guarantees outstanding, trust account loans, and merchant bank account loans.

2) Trend of corporate DI[1] for banks' credit standards

	2005. Ⅳ	2006. Ⅰ	2006. Ⅱ	2006. Ⅲ	2006. Ⅳ	2007. Ⅰ
Large companies	9	12	19	3	6	0
SMEs	21	32	31	16	22	25

Note:1) Diffusion index (DI) = {(percentage of respondents indicating a 'substantial relaxation' of credit standards × 1.0) + (percentage of respondents indicating a 'modest relaxation' × 0.5)} - {(percentage of respondents indicating a 'substantial strengthening' × 1.0) + (percentage of respondents indicating a 'modest strengthening' × 0.5)}. DI is measured on a scale with a minimum of -100 and a maximum of 100.
Source: Bank of Korea

<Table IV- 1>

Ratio of substandard and below loans by industry

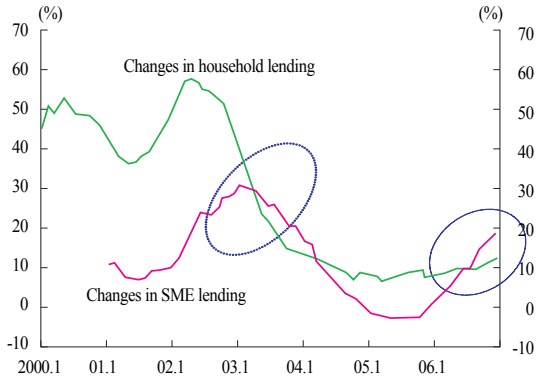
(%)

	2003	2004	2005	2006
Manufacturing	2.7	1.7	1.1	1.1
Construction & real estate	2.6	2.4	1.8	1.1
Services[1)]	3.1	2.2	1.7	0.9
(Wholesale & retail trade)	4.6	1.9	1.3	0.7
(Lodging & restaurants)	2.8	3.7	4.1	2.8
(Other personal services)	2.9	4.3	4.4	3.1
All industries	2.9	2.0	1.5	1.0

Notes: 1) End of year basis
2) Excluding real estate
Source: Banks' call reports

<Figure IV- 3>

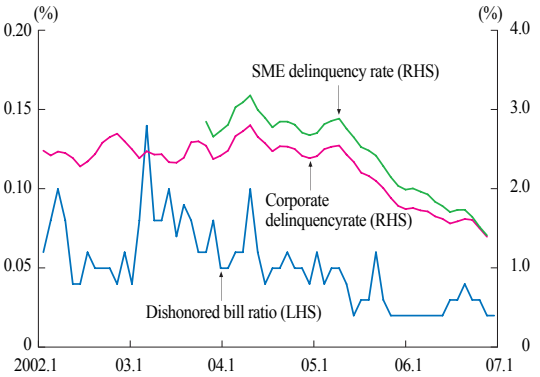
Rates of increase/decrease[1)] in loans to households and SMEs



Note: 1) Year-on-year basis
Source: Banks' call reports

<Figure IV- 4>

Dishonored bill ratio[1)] and corporate delinquency rates[2)]



Notes: 1) Amount basis, including electronic-based payments
2) Three-month moving average
Sources: The Bank of Korea, banks' call reports

exposure to the real estate sector grew sharply compared to the past. However, the ratio of substandard and below loans extended to construction and real estate businesses remained at 1.1%, similar to that to the corporate sector overall (1.0%).

Although loans to SMEs showed a high rate of increase from the beginning of 2006, they remained at a low level compared to the years 2002~2003, right after the period of rapid expansion of household sector credit (2001~2002). The ratio of substandard and below loans to the corporate sector remained at around the 1% level in 2006, and the dishonored bill ratio also stayed at a low level, amid a downward trend in the SME delinquency rate during the year. Considering these points, the credit risk of the corporate sector does not appear to be at a high level.

In the future, it is anticipated that banks will be willing to maintain their strategies of expanding their SME loans, as an alternative means of fund operation owing to the regulations on household sector lending. However, given the tendency of the corporate delinquency rate to follow the corporate lending increase rate,[3)] there is a possibility that the delinquency rate will increase in case of an economic slowdown. Moreover, as SMEs' profitability declines, there is also a possibility of their weakness in debt servicing

3) Analysis of the coefficient of correlation between corporate lending increase and delinquency rates reveals a reliable level of positive correlation, having a time lag of approximately one year.

Coefficient of correlation between the corporate lending increase and delinquency rates[1)]

(1999.Q1~2006.Q4)

Lags	-2Q	-1Q	0	+1Q	+2Q	+3Q	+4Q	+5Q
Coefficient of correlation	0.06	0.02	-0.03	0.14	0.24	0.31	0.42	0.37

Note: 1) Coefficient of correlation between the corporate lending increase rate for quarter k and the delinquency rate for quarter k ± i

capacity causing burdens to banks' credit risk management.

Possibility of household sector credit risk increases

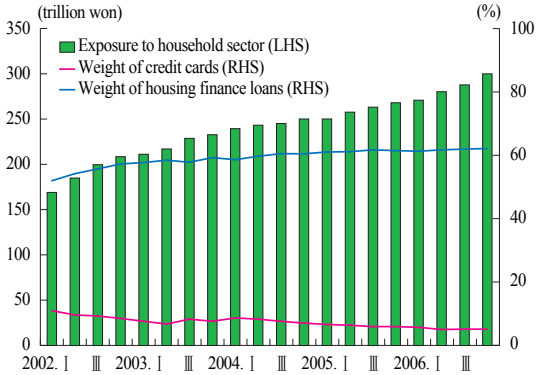
Although banks' exposure to the household sector rose by a relatively high rate of 11.9% compared to the end of 2005, led mainly by housing finance loans, indices related to household sector credit risk maintained stable movements in 2006.

The delinquency rate of the household sector fell below 1% and the LTV ratio of housing finance loans[4], which make up more than 60% of all household loans, has been on a continuous decline. The share of loans to households with good credit ratings has also increased.[5] What is more, the share of credit card receivables in total household exposure dropped to 5.1% at the end of 2006, from 6.0% at year-end 2005, and the delinquency rates on them also fell to the 2% level.

However, as household sector financial debt increased faster than incomes or financial assets, households' debt servicing capacities seem to have declined. If real estate prices were to drop sharply and interest rates to keep on rising in the future, household sector vulnerability could materialize owing to the rise in households' principal and interest repayment burdens.

<Figure IV- 5>

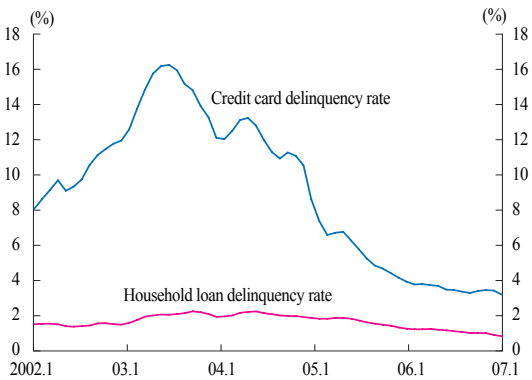
Banks' exposure to the household sector



Source: Banks' call reports

<Figure IV- 6>

Household sector delinquency rates[1]



Note: 1) Three-month moving averages
Source: Banks' call reports

4) The average LTV ratio for banks' housing finance loans decreased to 49.3%, 2.5 percentage points lower than at the end of 2005.

LTV ratios of banks' housing finance loans[1]

(%)

2005.12	2006.3	6	9	11	12
51.8	51.9	51.0	50.6	49.7	49.3

Note: 1) Including 6 banks (KB, Woori, SC First, Shinhan, Hana, NACF)
2) End of period basis

5) The share of loans to households with good credit ratings(ranking 1~3) was 51.9%, a 1.3 percentage point rise from the end of 2005.

Banks' asset quality improves steadily

The scale of commercial banks' substandard and below loans has continued to shrink, registering 5.8 trillion won at the end of 2006, a 1.2 trillion won drop from the end of 2005. The amount of new bad debts declined to 9 trillion won during the year, from 11.3 trillion won in 2005. The volume of bad debts disposed of through write-off or redemption reached 10.2 trillion won, an amount greater than that of new bad loans. Consequently, the ratio of substandard and below loans stood at 0.90% as of the end of 2006, down 0.38 of a percentage point from the end of the previous year. By sector, the ratios of loans classified as substandard and below in the corporate and household sectors fell 0.45 and 0.34 of a percentage point, respectively. In particular, the ratio of substandard and below loans in the credit card sector continued to decline, dropping 0.95 of a percentage point.

Korean commercial banks' proportion of bad loans(based on non-performing loans) fell to 0.76% at the end of 2006, similar to the average NPL ratio of US commercial banks.[6)]

In spite of the decrease in new NPLs, banks' loan loss provisions rose sharply at the end of 2006, affected by

<Table IV- 2>

Increase/decrease in banks' substandard and below loans

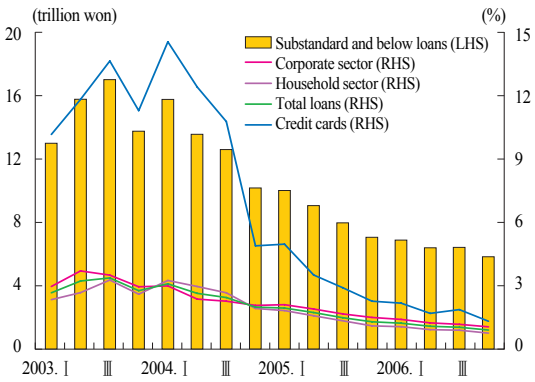
(trillion won)

	2004	2005	2006
New loans	20.2	11.3	9.0
Disposed	24.2	14.3	10.2
(Redeemed)	(6.2)	(5.5)	(4.1)
(Write-offs)	(12.0)	(4.6)	(2.9)
(Sold)	(3.5)	(3.3)	(1.3)
Net increase	-4.0	-3.1	-1.2
Term-end balance	10.0	7.0	5.8

Source : Banks' call reports

<Figure IV- 7>

Substandard and below loan ratios



Source: Banks' call reports

6) The average NPL ratio of US commercial banks was 0.79% at the end of 2006.

NPL ratio of US commercial banks[1)2)]

(End of 2006)

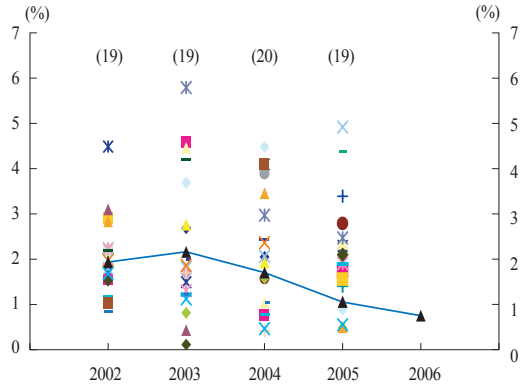
(%)

Total	By asset volume		
	Less than 0.1 billion dollars	0.1~1 billion dollars	More than 1 billion dollars
0.79	0.94	0.71	0.79

Note : 1) Based on banks insured with the FDIC (Federal Deposit Insurance Corporation)
2) End of 2006 basis
Source : FDIC

<Figure IV- 8>

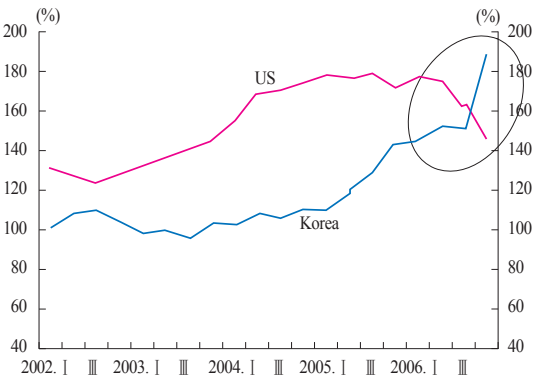
NPL ratios of Korean and world's 30 largest banks[3]



Note: 1) In terms of core capital
2) ▲ : Average of Korean banks
3) Excluding Chinese and Japanese banks that have high NPL ratios
4) Figures in parentheses represent the numbers of banks with data available during the relevant years.
Sources: Banks' call reports, The Banker

<Figure IV- 9>

Comparison of coverage ratios[1] in Korea and the US



Note: 1) Coverage ratio = (loan loss provisions/amount of NPLs) X 100
Source: Banks' call reports

the Financial Supervisory Service's measures to raise the loan loss provision ratios[7]. The ratio of loan loss provisions to NPLs(the coverage ratio) stood at 188.7% at the end of 2006, up 44.8 percentage points from a year earlier. Consequently, the ratio of loan loss provisions of domestic banks exceeded that of US commercial banks for the first time. This indicates that Korean banks have become stronger in their abilities to absorb external shocks.

7) At the end of 2006, the Financial Supervisory Service strengthened the loan loss provision standards by raising the loan loss reserve requirements for normal loans(0.5~1.0%→0.7~1.5%) and for precautionary loans (2.0~12.0%→7.0~15.0%), and making precautionary and below contracted loans which are unused also subject to loan loss provision requirements. Banks' loan loss provisions registered 2.9 trillion won during 2006, 200 billion won more than in 2005.

Interest rate risk and market risk

Interest rate risk increases

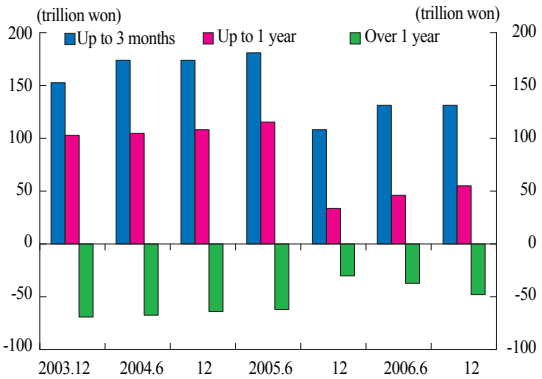
At the end of 2006, the difference between commercial banks' interest rate sensitive assets and liabilities (their repricing gap[8]) had expanded, so that compared to year-end 2005, there was a higher positive (asset sensitive) gap in short-term assets and a higher negative (liability sensitive) gap in long-term liabilities. The positive gap stood at 131.2 trillion won for the up to 3-month repricing cycles, an increase of 23.3 trillion won over the year before. For the over 1-year repricing cycles, meanwhile, the negative gap stood at 48.9 trillion won, an increase of 22.3 trillion won.

These changes were caused chiefly by the fact that, on the asset side, banks had massively increased their extension of adjustable rate housing finance loans[9] with short interest rate repricing cycles, while, on the funding side, expanding their issuance of financial bonds[10] with repricing cycles of over one year.

The increase of the repricing gap exposed to the risks associated with interest rate fluctuations appears to have in turn increased banks' interest rate VaR[11], from 3.6 trillion won at the end of 2005 to 4.8 trillion won at the end of 2006. The ratio of VaR to BIS capital also

<Figure IV-10>

Trends of repricing gap[1)2)]
(Based on the local currency)



Notes : 1) Assets and liabilities belonging to "up to 1 year" include those belonging to "up to 3 months".
2) Rate-sensitive assets(RSA) minus Rate-sensitive liabilities(RSL)
3) Data from Dec. 2005 and thereafter are based on the newly-made call report.
Source: Banks' call reports

<Table IV- 3>

Repricing gap schedule
(As of the end of 2006/Based on the local currency)

(trillion won)

	0-3 months	3-6 months	6-12 months	Over 1 year
Interest-bearing assets (a)	448.6	71.9	75.1	113.6
Interest-bearing liabilities (b)	317.4	89.3	134.5	162.5
Repricing Gap (a-b)	131.2(+) <23.3>	17.4(-) <-1.4>	59.4(-) <-0.3>	48.9(-) <22.3>

Notes : 1) + and - signs in ( ) indicate the directions of the gap. (+) means an asset sensitive gap, and(-), a liability sensitive gap.
2) Figures in < > refer to changes in repricing gap from the end of Dec. 2005.
Source: The Bank of Korea

8) Rate sensitive assets (RSA) minus rate sensitive liabilities (RSL) in each time bucket
9) In 2006, home mortgage loans issued by banks increased by 24.1 trillion won, accounting for 74.7% of the increase in overall household lending (32.3 trillion won).
10) In 2006, the value of the outstanding balance of financial bonds issued by banks increased by 20.3 trillion won. The outstanding balance of bonds with interest rate repricing cycles greater than one year amounted to 15.9 trillion won.
11) As measured by the BIS standard methodology. [For the methodology concerning VaR measurement, refer to the Apr. 2006 Financial Stability Report, (Vol. 7), p. 57].

<Table IV- 4>

Interest rate VaR

(trillion won)

	Dec. 2004	Dec. 2005 (a)	Dec. 2006 (b)	b-a
VaR(A)[1]	5.1	3.6	4.8	1.2
BIS Capital (B)	54.1	64.6	75.5	10.9
A/B(%)	9.4	5.5	6.4(9.5)[2]	-

Notes: 1) Calculated by using BIS methodology
2) Figures in ( ) refer to percentage ratios to large US banks (based on the end of Jun. 2006 data).
Source: The Bank of Korea

<Table IV- 5>

Comparison between Korean banks and large US banks

(trillion won, billion US dollar, %)

		0-3 months	3-12 months	1-3 years	Over 3 years	Total
Korean Banks	Repricing gap	131.3	76.8	27.2	21.6	256.9
	Gap to assets ratio	18.5	10.8	3.8	3.1	36.2
Large US Banks	Repricing gap	56.8	651.3	160.2	814.0	1,682.3
	Gap to assets ratio	1.9	21.7	5.3	27.1	56.0

Note: data based on the end of 2006 for Korean banks, data based on the end of Jun. 2006 for large US banks
Source: The Bank of Korea

rose for the year to 6.4%, up 0.9 percentage points from year-end 2005. This level, however, is well below the maximum ratio of 20% recommended by the BIS.

Interest rate risks borne by Korean banks appear moderate, however, when compared to large US banks.[12] The interest rate VaR-to-BIS capital ratio of 9.5% among large US banks is significantly higher than the corresponding figure for Korean banks. The repricing gap-to-assets ratio of 56% among large US banks is also far above the 36.2% of Korean banks.

Those differences can be explained by two factors. Firstly, the level of interest rate volatility is much higher in the US than in Korea, and US banks, in efforts to maximize revenue, frequently use short-term funds to finance long-term, fixed-rate loans. However, as US banks manage these interest rate risks quite aggressively, making use of interest rate derivatives or asset securitization,[13] the actual interest rate risk exposures of large US banks are likely to be much less substantial. Secondly, unlike the case in Korea, interest rate risk is not transferred to households but borne by banks in the US. It is thus assessed that by taking on these interest rate risks instead of households, along with enhancing their profitability large US banks play a beneficial role as risk-managing institutions.

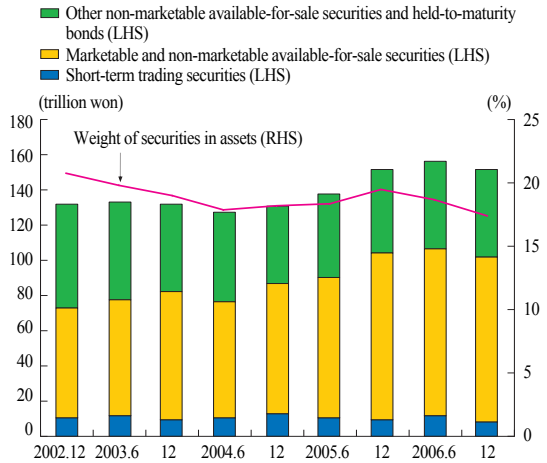
Slight decrease in market risk of bond investment

At the end of 2006, banks' investment in securities

12) The five largest US commercial banks: BOA, JP Morgan Chase, Citibank, Wachovia and Wells Fargo
13) The value of derivatives trading is about 26.5 times total assets among large US banks and only 0.8 times total assets for Korean banks. While the share of securitized assets in total loans among large US banks stands in the range of 25%, the corresponding figure for Korean banks is only 2.4%.

<Figure IV-11>

Volume of securities investment



Note: Bank accounts based on closing balance
Source: Banks' call reports

<Table IV- 6>

VaR of won-denominated bonds held by commercial banks

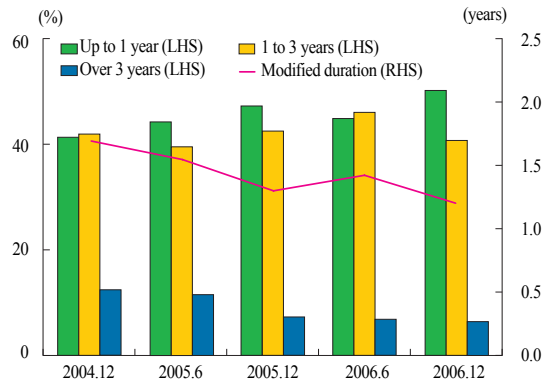
(trillions won)

	End of 2004	End of 2005 (a)	End of 2006 (b)	b-a
VaR[1]	0.32	0.39	0.27	-0.12
(Exposure)	92.3	102.6	95.9	-6.7
(Interest rate volatility)[2]	3.3	5.6	3.5	-2.1

Notes: 1) 10-day holding period, Confidence level of 99%
2) Treasury bonds (3 years), EWMA-based daily volatility (bp)
Source: The Bank of Korea

<Figure IV-12>

Duration and maturity distribution of won-denominated bonds



Source: The Bank of Korea, Banks' call reports

amounted to 152 trillion won, an increase of 0.2 trillion won from the end of 2005. However, due to the massive increase in lending volume, driven by small and medium-size business loans and housing finance loans, the share of securities in total investment assets fell 2.2 percentage points from the end of 2005, to 17.4%. Investment in trading securities and marketable available-for-sale securities totaled 102.5 trillion won, 2 trillion won less than at the end of 2005, indicating a diminishing investment in securities exposed to market risks.

Market risks associated with bond investment decreased slightly, as the VaR of banks' won-denominated bonds shrank by 0.12 trillion won from the end of 2005, and the share of bonds on hand with maturities of one year or longer declined,[14] leading to a reduction in the overall duration of bonds on hand. This owed mainly to the decrease in risk exposure related to bond investment[15] and to the slow downward trend in Treasury bond yields, which is reducing interest rate volatility.

Although banks' stock investment for trading amounted to 1.1 trillion won, an increase of 0.5 trillion won during 2006, market risks associated with stock investment appear negligible, as stocks comprise a mere 0.12% of their total investment assets. Meanwhile, stock price volatility dropped sharply from August through the end of the year, bringing price volatility risk down to an insignificant level.

14) The share of long-term bonds in banks' overall bonds on hand amounted to 49.9% at the end of 2006, down 2.8% from the end of 2005.
15) This was primarily due to the reduction in banks' investment in Deposit Insurance Fund bonds by 6.5 trillion won (based on trading and marketable bonds), as a consequence of the net redemption of 16.6 trillion won that occurred during 2006.

Derivatives trading risk remains moderate

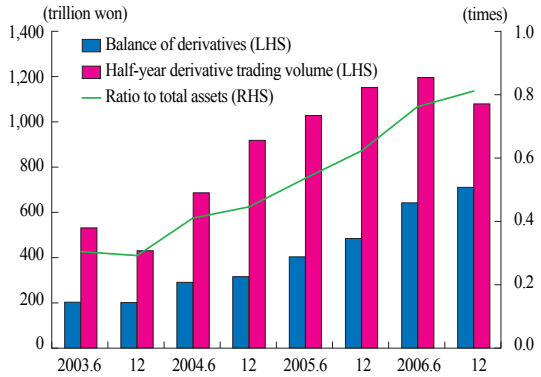
At the end of 2006, banks' outstanding balance in derivative products stood at 711.8 trillion won, up 46.9% from the year before (484.7 trillion). This raised the ratio of derivatives outstanding in total assets of Korean banks from 0.63 at the end of 2005 to 0.81.

By type of transaction, amid a dramatic increase in swap transactions aimed at hedging interest rate risk in conjunction with issuance of structured notes, trading volumes grew particularly in forward contracts used to hedge exchange rate risk and in currency swaps targeting interest rate arbitrage by domestic branches of foreign banks.

Derivatives trading, while increasing steadily in volume, appears to entail little direct risk for banks, since most transactions are aimed at hedging or conducted in view of zero-risk arbitrage trading. However, as short-term funds procured through currency swaps are frequently used to finance long-term investments, the resulting discrepancy in maturities may prove a problem in the end. The sharp increase in demand for long-term Treasury bonds may also serve as a factor contributing to excessive flattening of yield curves.

<Figure IV-13>

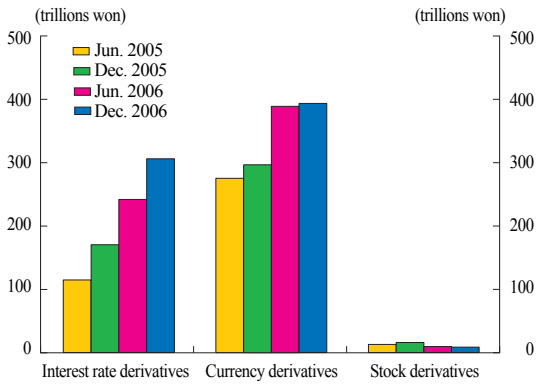
Trading volume of derivatives and their share of total assets[1)]



Note: 1) Total assets are based on closing balances
Source: The Bank of Korea, Banks' call reports

<Figure IV-14>

Derivatives trading by product type



Source: Banks' call reports

Profitability

(Net income increases)

In 2006, commercial banks' net before-tax income rose 10.9% over the previous year, from 10.9 trillion won to 12.1 trillion won. This improvement came despite increases in loan loss provisions and shrinking net interest margins, as banks' business expansion initiatives helped boost their revenues from loans. The increase in proceeds from sales of stocks received from Daewoo Engineering & Construction, Hyundai Engineering and Construction and Hynix, in the context of debt-to-equity conversion programs, also contributed to banks' expansion of net income.

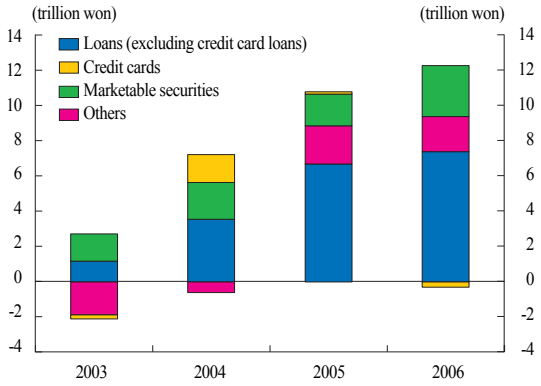
Return on assets (ROA) fell slightly from the previous year to 1.05%, as banks' asset sizes grew in line with their drives to expand market share. All banks posted profits for the third straight year, however, with ROAs still at high levels compared to large foreign banks. The profitability of domestic banks is therefore assessed as remaining strong.

(Net interest margin shrinks)

Commercial banks' nominal net interest margin on interest-earning assets stood at 2.29% in 2006, a decrease of 0.11 percentage points from 2005. The nominal net interest margin shrank in spite of an improvement in asset soundness and the resulting increase in interest income, as intensifying competition among banks led to narrowing gaps between deposit and lending interest rates[16]. The real net interest

<Figure IV-15>

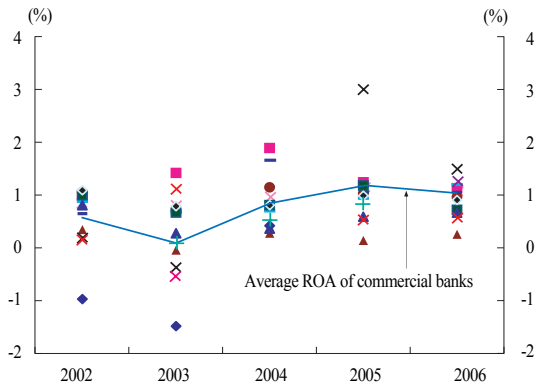
Structural changes in banks' income before tax



Source: Banks' call reports

<Figure IV-16>

Changes in ROA

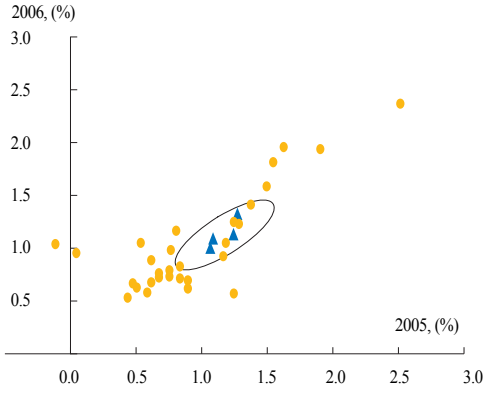


Source: Banks' call reports

16) The spread between interest rates on newly extended deposits and loans decreased to 1.58 percentage points in 2006, from 1.97 percentage points a year earlier.

<Figure IV-17>

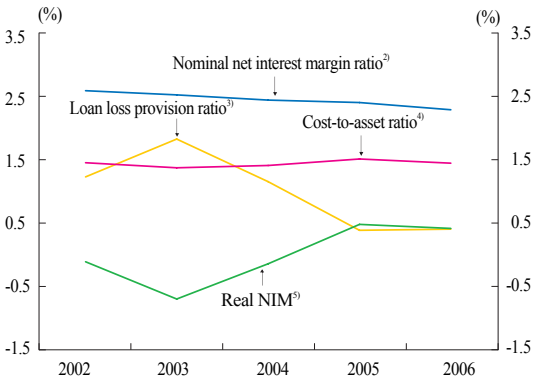
ROA comparison of top 30 world banks[1] and Korean banks



Notes: 1) Based on the size of tier 1 capital
2) ▲ : Top 4 Korean banks based on asset size
3) ROA of foreign banks based on 2004 and 2005 data
Sources: Banks' call reports, The Banker

<Figure IV-18>

Net interest margin (NIM)[1]



Notes: 1) Excluding credit card sector
2) (Interest income - Interest cost)/Interest earning assets
3) Net bad debt expense/ Interest earning assets
4) (Severance and retirement benefits+Expenses+Depreciation and amortization)/Total assets
5) Nominal net interest margin ratio - Loan loss reserve ratio - Cost-to-asset ratio
Source: Banks' call reports

margin, which takes into consideration the cost-to-asset and loan loss provision ratios, also fell slightly, as the loan loss provisions burden, after having declined greatly due to a reduction in non-performing loans, shifted back to a modest increase.

The dwindling of the nominal net interest margin may be considered a positive development, in that it eases the financial cost burdens of businesses and households. However, it can also be seen as a result of domestic commercial banks' flight-to-quality, rather than performing their financial intermediation function by actively taking in or managing risks, despite their greater ability to absorb financial shocks due to their increased net incomes. In other words, they have preferred safe assets like housing finance loans or loans to low-risk businesses with high credit ratings, instead of developing new clients or lending to high-risk businesses.

(Strong profitability expected to continue)

The upturn in profitability among commercial banks is expected to continue for the foreseeable future. Although the shrinking net interest margin and the hike in the Credit Guarantee Fund contribution rate will weigh on banks' short-term earnings, factors like their steadily-expanding business sizes and buoyancy in sales of beneficiary certificates and bancassurance products are likely to boost their fee incomes, improving their overall earnings. Income from sales of debt-converted stocks is also expected to continue to grow for some time to come.

However, if domestic commercial banks continue to focus on the domestic market as they are doing now, they may hit growth ceilings in the medium and long

term and eventually see weakening of their revenue base. The race for bigger shares of the domestic lending market, most particularly in home mortgages and small and medium-size business lending, is likely to result in a continuous decline in net interest rate margins. Meanwhile, the intensifying competition with non-bank financial institutions might put an end to the supply of low-interest funds, driving up interest rates in core deposit markets and eroding banks' earnings. The advancement of domestic financial market opening is expected to intensify competition with foreign financial institutions, as well.

<Box Ⅳ-1>

Why Korean commercial banks must seek overseas expansions, and how they should go about it

The continuous efforts at business region expansion by multinational banks like HSBC, Citi, UBS and ABN AMRO, targeting not just developed but also emerging market countries, have helped them to grow into some of the world's most competitive financial groups. By adding new overseas branches, taking over foreign banks and increasing the shares of their overseas-invested assets, these banks have vastly improved their global asset rankings.

In comparison, Korean banks, although growing in size through a wave of mergers and acquisitions following the 1997 foreign currency crisis, have held steadfastly to their domestic market-oriented business models. With a high level of concentration giving 50% of its financial market to the country's top three banks, Korea has experienced repeated herd behavior by its commercial banks, which operate their assets with excessive concentration in housing finance or SME loans due to the intensifying competition among them for business expansion.

Given the modest size of the domestic market and the heated competition taking place in it, there seems little potential left for further growth by means of mergers and acquisitions. As banks' performances are swayed almost exclusively by domestic economic conditions, it is difficult to expect their revenues to remain stable. Overseas expansion could not only provide banks with additional sources of revenue, but also help them to disperse their risks associated with over-concentration of domestic assets, and build up the kind of competitiveness needed in the globalized financial market.

1. Level of internationalization of Korean banks

As of the end of 2006, Korean banks operated 113 overseas offices in 28 countries, most of which were branches. The assets of their overseas offices, amounting to US $ 32 billion, represent a mere 2.3% of Korean banks' total assets. Moreover, their categories of clients are limited to overseas affiliates or branches of Korean companies and Koreans living overseas.

Meanwhile, the shares of foreign in total assets among top banking groups of key developed countries range from 30% to 90%. These banks do business not only with their own countries' companies having local presences in the foreign countries, but also with local firms and banking customers there. The ratios of foreign assets-to-GDP exceed 100% in

Foreign asset-to-GDP ratios[9] of selected banks

(as of 2005)

(%)

HSBC (UK)	Citi (US)	ABN AMRO (Netherlands)	Deutsche Bank (Germany)	UBS (Switzerland)	Korean Bank Average
38.7	5.2	111.7	33.2	386.0	3.5

Notes: 1) Foreign assets/ Current price GDP
Source: Banks' annual reports, OECD

the cases of UBS and ABN AMRO, in striking contrast to the corresponding average among Korean banks of a mere 3.5%.

The TNI (transnationality index)*, a measurement of internationalization, reports scores of 60 and above for UBS, Deutsche Bank and ABN AMRO, while for Korean banks for the year 2005 this score was only a small fraction of that at 3.4.

* TNI = {[(foreign assets/total assets) + (foreign income/total income) + (foreign employees/total employees)] / 3} × 100

2. Feasibility of overseas expansion

Large banks of developed countries realized early that overseas expansion was the only way to circumvent the growth limits they would inevitably face in their home markets, and their aggressive efforts in this direction made them the global banks that they are today. Since the late 1990s, European banking heavyweights like UBS and ABN AMRO, for example, actively sought to expand their competitive arenas from their home markets to the global marketplace. Meanwhile, big Australian and Spanish banks began forays into foreign markets from the late 1980s and late 1990s, respectively, by taking over local banks.

Tier 1 capital global ranking of selected banks

(as of end of 2005)

	DBS	ANZ	Kookmin Bank	Woori Bank	Shinhan Bank
Tier 1 capital (100 US $ million)	78.8	115.4	115.7	71.7	71.6
World ranking	74	52	51	87	88

Source: The Banker, Jul. 2006

Acquiring foreign financial institutions does not seem beyond the reach of the large Korean banks. The sizes of capital (tier 1 capital at the end of 2005) of multinational giants surveyed, including Citi, are 2.2 to 6.9 times that of the largest Korean bank. However, Australia's ANZ Group and Singapore's DBS are both smaller in capital size than the largest Korean bank, and only slightly larger than the second and third largest Korean banks. The tier 1 capital of Standard Chartered Bank at the time it acquired Korea First Bank (end of 2004) was US$8 billion, roughly the same as that of the biggest Korean bank at that time (US$7.8 billion). Standard Chartered's total asset value, meanwhile, at US$141.7 billion, was substantially less than that of the biggest Korean bank (US$176.6 billion).

Financing takeovers of foreign financial institutions should not be a difficult problem. Recent cases of multinational banks' acquisitions of equity in other financial institutions and of mergers and acquisitions by domestic Korean banks indicate there is a sufficient availability of financing options. In 2006, while UBS bought Banco Pactual, a Brazilian bank specialized in investment banking and asset management, for US$2.5 billion, the Shinhan Financial Group paid US$7.2 billion (6.7 trillion won) to take over LG Card.

3. Strategy

(Acquisition of foreign financial institutions)

Both banks with extensive experience in foreign markets like HSBC and Citi, and those with relatively short histories in this area like UBS and ABN AMRO set out starting from the 1990s to take over foreign financial institutions, aiming to establish footholds in local markets around the globe and create worldwide business networks.

Since the early 2000s, many multinational banks have been establishing presences in emerging market countries in Asia, Central and South America and Eastern Europe, as growing numbers of countries in these regions have begun allowing foreign equity participation in domestic financial institutions, in bids to attract foreign capital as well as promote transfers into their markets of advanced management knowledge.

It is high time also for Korean banks to look into acquiring foreign financial institutions to make inroads into overseas markets, as this will expand their bases for growth, help diversify their risks and build up their international competitiveness.

(A strategic approach to individual target markets)

Seasoned multinational banks like HSBC and Citi, with long histories of overseas business, have usually begun by setting up branches in countries near their target markets, with which they are familiar. Using these countries as beachheads, they have gradually expanded their presences in regional markets. Latecomers from Spain, Australia and Singapore have also initiated their efforts at foreign expansion by acquiring financial institutions in neighboring countries or countries with cultural or linguistic kinships to their own countries. Some European banks, such as UBS, Deutsche Bank and ABN AMRO, have taken different tacks. By acquiring financial institutions in the US or Europe, they have sought to first create global names for themselves.

A good strategy for Korean banks would be to start out in regional markets that are both geographically and culturally close to Korea, such as China or Southeast Asia, where their strengths in IT and retail banking can be best utilized. Such moves might be combined with strategies to leverage their names and images in developed country markets by acquiring mid-sized banks there.

4. Future directions

To draw up well thought-out strategies for acquiring foreign financial institutions, Korean banks must step up their efforts at gathering information on potential target markets, in order to keep abreast of high-growth

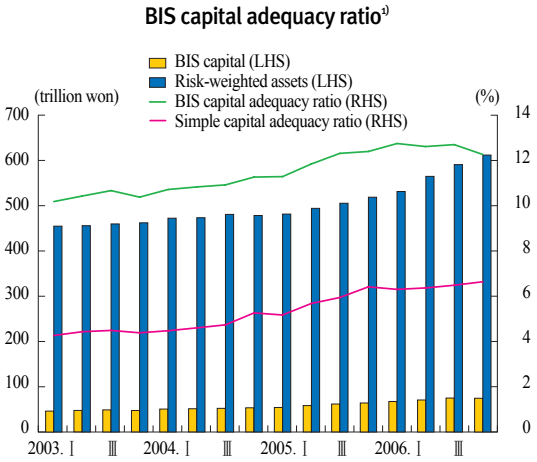
business segments, economic conditions, the levels of financial market development, market entry restrictions and M&A case studies.

Also key is the building up of capabilities in the areas of human resources and management systems, to support operation of the foreign financial institutions acquired. Risk management in particular may prove a crucial area of competence, as the levels of economic volatility are much higher in emerging market countries that interest Korean banks, than they are in developed countries. Restrictive financial regulations common in these countries are another factor making stronger risk management imperative.

Meanwhile, the financial supervisory authorities, when reviewing banks' applications for approval of their foreign operation plans, should ease regulations on target markets and on opening new foreign branches. At the same time, they should make rules to prevent excessive competition between domestic banks in certain specific regions of the world, while also stepping up oversight to monitor the financial healths of banks, including their degrees of overseas exposure

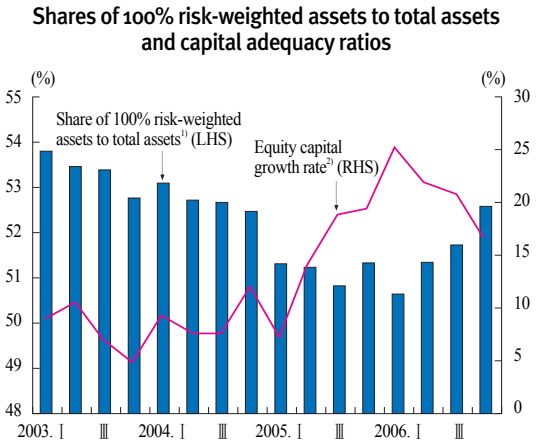
Capital adequacy

<Figure IV-19>



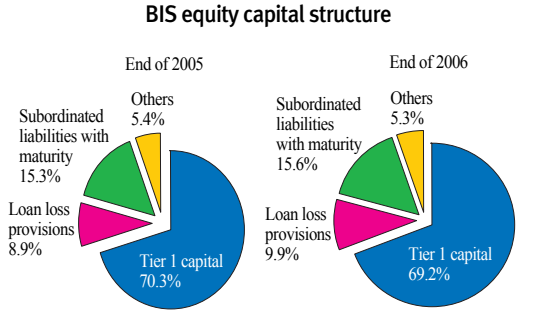
Note: 1) The calculation takes into account credit and market risk.
Source: Banks' call reports

<Figure IV-20>



Notes: 1) book value basis
2) year-on-year figures
Source: Banks' call reports

<Figure IV-21>



Source: Banks' call reports

(BIS capital adequacy ratio declines)

At the end of 2006, commercial banks' BIS capital adequacy ratio stood at 12.31%, down 0.12 percentage points from a year earlier. This result is attributable to the massive increase of risk-weighted assets reflecting competition for asset scale expansion, in spite of a sharp growth in capital size owing to strong net income and increased loan loss reserves[17]. As of the end of 2006, 100 percent risk-weighted assets accounted for 52.5% of total assets, up 1.3 percentage points from the end of the previous year. The ratio of capital-to-total assets, however, increased 0.23 percentage points from the end of 2005 to 6.66 %.

Amid continued favorable net income, BIS capital adequacy ratios are likely to stabilize in 2007, as banks are expected to tone down their drives for business expansion somewhat in line with their more conservative business approaches.

(BIS tier 1 capital ratio falls slightly)

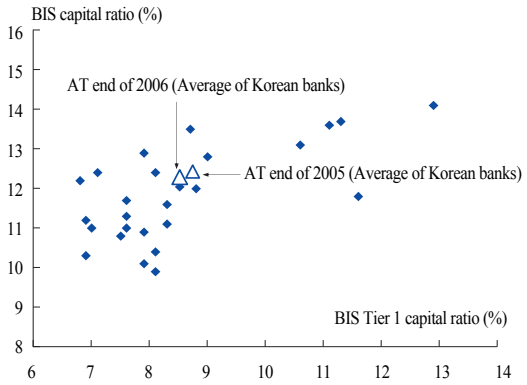
Due to the sharp increase in loan loss reserves, the proportion of BIS tier 1 capital to equity capital dropped slightly year-on-year in 2006, to 69.2%. The BIS tier 1 capital ratio also fell, from 8.7% a year earlier to 8.5%.

However, Korean commercial banks' BIS capital

17) The intensified race for business expansion among the three banks ranked number two to four in size contributed to a decline in BIS capital adequacy ratio for these banks to 11.68% at the end of 2006, down 0.61% points from a year earlier.

<Figure IV-22>

Comparison of BIS ratio between foreign and Korean banks



Notes: 1) ◆: The world's top 30 banks based on tier 1 capital size
2) Figures for foreign banks are for 2005
Sources: Banks' call reports, Bankscope

adequacy ratio (12.3%) and BIS Tier 1 capital ratio (8.5%), although slightly declined from 2005, are still at healthy levels compared to the 30 largest banks in the world.

2. Soundness of non-bank institutions

Securities companies

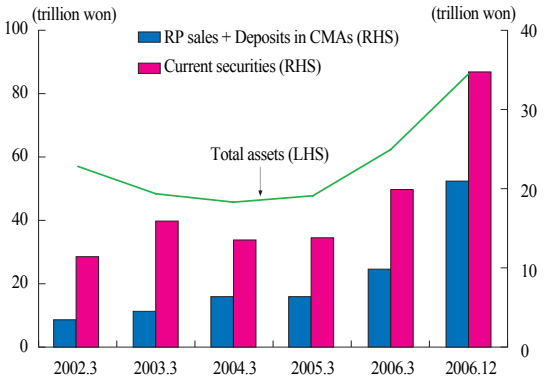
Total assets expand

At the end of 2006, securities companies' total assets amounted to 86.1 trillion won, an increase of 17.9 trillion won (26.2%) from a year earlier. Two factors contributed to this result. First, securities companies experienced favorable growth in deposits, bolstered by expanded sales of CMA[18] products and securities sold under repurchase agreements (RPs). Meanwhile, their purchases of securities such as Monetary Stabilization Bonds and financial debentures, and their investments in structured securities[19] all increased sharply during 2006.

Thanks to relatively high returns offered on CMAs and new financial services like transfers between accounts, securities companies have been experiencing a sharp increase in inflows of surplus cash from individual investors. The outstanding amount of CMAs, which stood at just 1.4 trillion won at the end of 2005, jumped to 8.1 trillion won at the end of 2006, an almost six-fold increase. Provided this trend continues, CMAs are

<Figure IV-23>

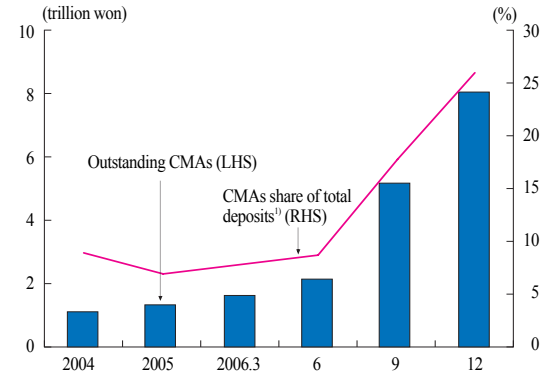
Securities companies' total assets and sources and uses of funds



Source: Financial Supervisory Service

<Figure IV-24>

Securities companies' outstanding CMAs



Note: 1) Customers' deposits +RP sales + CMA sales + Structured securities + Note issuance (merchant bank account)
Source: Bank of Korea

18) In 2006, in a bid to diversify their business lines and broaden their revenue bases, securities companies started offering CMA products with a variety of payment options. As of the end of 2006, the outstanding amount of CMAs exceeded 8 trillion won and accounted for 20% of total deposits.

19) Structured securities refer to equity-linked securities (ELSs), equity-linked warrants (ELWs) and other similar financial products that bundle a variety of derivative products with stock price- or composite stock price index-linked security, interest rate, or foreign currency products.

<Table IV- 7>

Total assets and equity capital[1] of large Korean and US securities companies

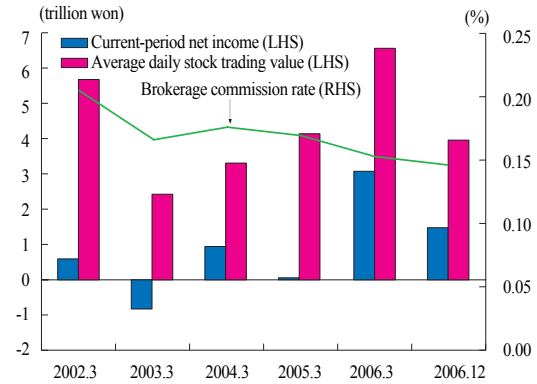
(US $ 100 million, %)

		2004	2005	2006
Assets	Top 5 Korean securities firms (I)	34.3	43.9	65.4
	Top 3 US securities firms (II)	6,356.0	7,621.1	9,333.8
	(I/II)	0.5	0.6	0.7
Capital	Top 5 Korean securities firms (III)	12.1	13.9	17.7
	Top 3 US securities firms (IV)	282.2	309.3	367.3
	(III/IV)	4.3	4.5	4.8

Note: 1) Based on fiscal-year closing data for Korean and US firms closing in March and November or December, respectively
Source: Bank of Korea

<Figure IV-25>

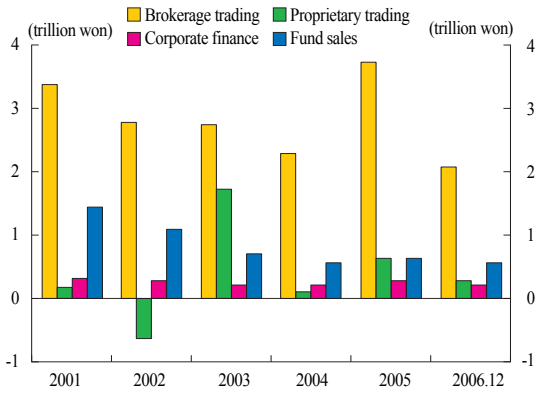
Securities companies' net income



Source: Financial Supervisory Service

<Figure IV-26>

Composition of securities companies' net revenues



Source: Financial Supervisory Service

likely to help improve the income structure of securities companies, which has hitherto been concentrated on brokerage commissions. The income stream from CMAs, including interest margins and commissions and fees, is more stable than that from brokerage commissions. This is because CMA customers, who will engage in securities trades and fund sales, are also likely to become customers for securities companies. However, securities companies may also be exposed to liquidity and interest rate risk in endeavoring to meet CMA customers' withdrawal demands. They may also shoulder credit risk associated with the potential deterioration of portfolio assets.

Although steadily expanding over the years, the asset scale of Korean securities firms remains rather modest compared to their foreign counterparts. Average total assets among Korea's top five securities companies is less than 1% of the corresponding average for large US securities firms. The average equity capital scale of the same five firms is also less than 5% that of their US counterparts.

Net income shrinks

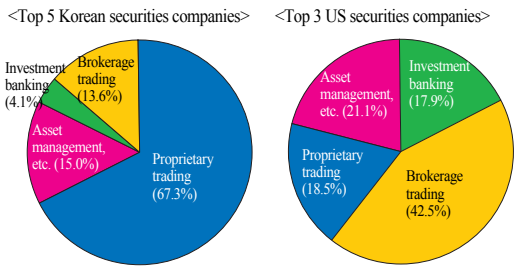
Securities firms' net income during the first three quarters (April to December) of fiscal year 2006 stood at 1.5 trillion won, 0.7 trillion won (-32.5%) less than in the same period of 2005 (2.2 trillion won). As the sharp growth of stock prices slowly tapered off from the beginning of 2006, and indirect investments increased, the stock trading volume also shrank. In addition, as securities firms' competition to increase their asset scales has intensified, brokerage commissions have declined.

At the end of 2006, the net working capital ratio [20], an indicator of securities firms' capital adequacy, stood at 537.8%, down 127.5 percentage points from the end of March that year (fiscal year basis). This figure, however, remains far above the guidance ratio of 150% set by the Financial Supervisory Service.

Income structure is vulnerable

<Figure IV-27>

Composition of net revenues by large Korean and US securities companies
(As of 2006)



Source: Bank of Korea

Brokerage commissions account for the largest share of securities firms' total income. However, the income contribution of brokerage commissions is expected to dwindle in the coming months, due to changes in the stock market environment such as the trend of decline in small investors' participation in direct stock investment and competition among securities firms to lower brokerage commissions.

Meanwhile, the income contribution of proprietary trading, which is highly sensitive to market conditions, has been fluctuating widely. Early improvement in the income structures of securities firms does not therefore seem likely. The income share of investment banking, including corporate finance, remained within the paltry 5% range at the end of 2006.

In contrast, the income breakdown for large US securities firms is vastly different, with income from proprietary trading and investment banking representing 60% of total income and brokerage trading contributing only 18%.

20) A ratio calculated by dividing net operating capital (equity capital - fixed assets + subordinated borrowings) by the total risk amounts (the market risk amount, credit concentration risk amount, etc.)

However, the share of income from fund sales, which stood at a modest 18% in Korea at the end of 2006 (15% for the top five securities firms), is expected to progressively increase, as the rising interest in both domestic and overseas funds has been expanding the scale of fund subscription.

Meanwhile, as of end-February 2007, over 8,500 funds are offered on the market. The plethora of funds makes it difficult for securities firms to verify the soundness and profitability of each of the products they sell. This situation may increase customers' risk of investment loss and damage securities firms' reputations. The market may also have to contend with conflicts of interest between holding companies or their securities firms and their subsidiaries or affiliated asset management firms, for example when a securities company subsidiary sells funds operated by the asset management company subsidiary without properly assessing or managing the potential risk.

<Table IV- 8>

Changes in number of funds operated by domestic asset management firms

(number of funds)

2003	2004	2005	2006	2007.2
6,875	6,554	7,383	8,239	8,515

Note: Period-end basis
Source: Asset Management Association of Korea

<Table IV- 9>

Links between domestic securities companies and asset management firms

(number of companies)

	Subsidiary of a financial holding company	Subsidiary of a large business group	Others	Total
Securities companies	5	5	6	16
Asset management firms	5	5	7	17

Note: As of end of 2006
Source: Securities companies and asset management firms

<Box Ⅳ-2>

Securities companies' CMA sales

Increasingly sensitive to interest rates, individual investors have in recent years shown growing interest in high-yield financial products, despite their somewhat greater degree of investment risk. To capitalize on this changing investment demand, starting since late 2006, securities firms have been releasing CMA-based hybrid financial products, which offer high yields and come with additional financial service options. The spread of CMAs, although expected to contribute to expanding the income base for securities firms, is also likely to have a significant impact on these firms' risk management practices.

(Structure of CMAs and their sales volume)

CMAs are dividend products, introduced pursuant to the Merchant Banks Act (Aug. 1984), through which money deposited by investors is invested in assets like commercial paper and marketable securities, and the investment profits are distributed to the investors. CMA products issued by merchant banks are treated as deposit products protected under the Depositor Protection Act and are currently insured for up to 50 million won per account holder. These products are commonly used by merchant banks as a funding source and guarantee fixed yields which vary depending upon the length of the deposit.

The CMAs introduced by securities firms, starting from January 2004, differ from those issued by merchant banks in that they have additional features making them closely resemble asset management products. This type of CMA is commonly referred to as a "Merrill Lynch-type CMA." Money deposited by customers is automatically invested in high-yield assets like securities sold under repurchase agreements (RPs), MMFs, etc. When money is invested in RPs, securities firms generally guarantee a fixed yield, which is pre-agreed on with the customer. With MMF-invested assets, customers receive dividends based upon the performance of the asset management firm. Yields from CMAs are therefore significantly higher than interest earnings from bank deposits. At the end of October 2006, interest rates on CMAs were running in the range of 3.80 ~ 4.25% – 3.60 ~ 4.15 percentage points above the going rates on non-term bank deposits like checking accounts. One disadvantage of this type of CMA sold by securities firms is that it is not covered by deposit insurance. On the other hand, CMA customers can benefit from a range of bank account-linked services. They can, for instance, conveniently deposit or withdraw funds from their accounts using CD or ATM machines. Fund transfer, direct deposit of paychecks, bill payment and payment through non-bank credit cards are among the additional services offered to CMA customers.

The combination of high yields with value-added services has proved to be an attractive proposition for individual investors. The number of CMA subscribers has been growing steadily, increasing the flow of funds to securities firms. At the end of 2006, the outstanding amount of CMAs in Korea was 8.1 trillion won, and the number of active accounts came to 1.5 million. These were six-fold and three-fold jumps, respectively, from

the year before. As a result, the contribution of CMAs to total new client assets of securities firms selling CMAs increased massively, from 7.0% at the end of 2005 to 25.9% at the end of 2006.

Value and number of securities companies-issued CMAs

(100 million won, %, thousands)

	2004	2005	2006.3	2006.6	2006.9	2006.12
Value of CMAs outstanding	11,180	13,662	16,177	21,302	52,100	80,610
Share of total deposits[1)]	8.8	7.0	7.7	8.7	17.7	25.9
Number of CMAs	439	545	631	786	1,095	1,478

Notes : 1) Customers' deposits + RP sales (excluding CMA-related sales) + CMA sales + Structured securities + Note issuance (merchant bank account)
2) Period-end data

(Outlook and impact)

The limited settlement options offered by CMAs make these products unsuitable for use as the main transactional accounts for direct deposit customers. However, if the proposed Capital Market Consolidation Act ends up allowing securities companies to participate in retail settlement, this will enable them to provide settlement services similar to those offered by banks, and further boost the competitiveness of CMAs. It will also increase the migration of funds from bank deposit accounts to CMAs, triggering large portfolio shifts between different financial sectors. Meanwhile, an increase in sales of RP-based CMAs could expand the demand base for Monetary Stabilization Bonds and financial debentures, as these are the types of fixed-interest securities most commonly included in CMA portfolios.

The income contribution of CMAs, negligible for the moment, may become larger in the future if and when securities companies broaden their offerings of these products. If this were to happen, it would improve securities firms' income structure as well as expand their income base. The income stream from CMAs is more stable than that from brokerage commissions, both in terms of interest margin and fee-based income. Furthermore, CMA customers form a potential customer base for other security and fund transactions.

On the other hand, the growth of CMAs is likely to entail commensurate increases in liquidity, interest rate, credit and management risks. When a customer demands withdrawal of funds from a CMA, the securities firm meets the demand from internal funds and restores its cash flow by returning the MMFs or the securities underlying the RPs to the issuers. This process exposes securities companies to liquidity risk. A sudden increase in CMA withdrawals can push a securities firm into difficulty, especially if it occurs during a period where market interest rates are fluctuating wildly or the financial position of a securities firm is weakened. Also, when the portfolio assets are invested in long-term bonds, losses from early retirement can be significant. Further, as CMAs are sold with a guaranteed interest rate, in the case of deterioration of investment performance, their issuers run interest rate risk as well as credit risk. Finally, given that securities companies' IT infrastructures are generally weaker than those of banks, there may also be operational risk, of a failure of

internal systems or of a network disturbance that interrupts the connection between securities companies and banks.

To manage these risks, securities companies should consider placing safe ceilings on their CMA-linked RPs and setting maximum maturities for the bonds included in the portfolios. Upgrading their IT infrastructures is of course also important.

Credit specialized financial companies

Asset size increases

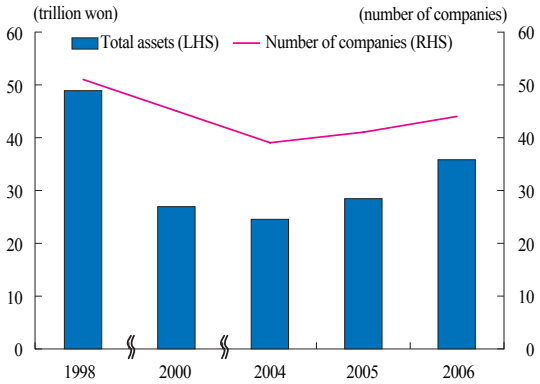
The currency crisis and the credit card crisis that ensued were severe setbacks for Korea's credit specialized financial companies (hereinafter "credit companies".[21]) However, since the completion of restructuring in 2005, the sector has been on track towards recovery. At the end of 2006, the total assets of credit companies stood at 35.9 trillion won, up 26.1% from the end of 2005. By asset type, the assets of credit companies broke down to 12.8 trillion in general loans (35.6%), 9.4 trillion won in leases, 5.9 trillion in installment financing and 0.7 trillion won in new technology financing.

Credit companies' lending grew by 52.8% (4.4 trillion won) over the end of 2005, driven by expansion of automobile and other consumer loans and small and medium-sized business loans. Meanwhile, housing finance loans (including home installment financing), increased by just 0.9 trillion won, held back by more restrictive LTV and DTI ratios.

The share of lease assets, which has been steadily expanding since 2004 thanks to the upturn in the auto lease segment and the recovery of facilities investment, increased from 16.9% at the end of 2003 to 26.2% as of year-end 2006. Helped by the buoyancy in auto leases, the volume of installment financing jumped 27.1% (1.3 trillion won), although its share in total

<Figure IV-28>

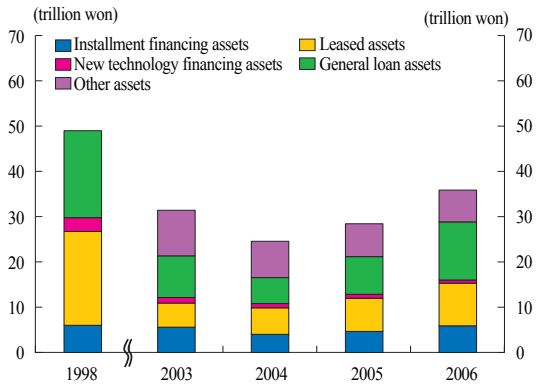
Total assets and number of credit specialized financial companies



Source: Credit companies' call reports

<Figure IV-29>

Credit companies' composition of assets by business segment[1)]



Note : 1) The general loan asset figure for 1998 includes 'other assets'.
Source: Credit companies' call reports

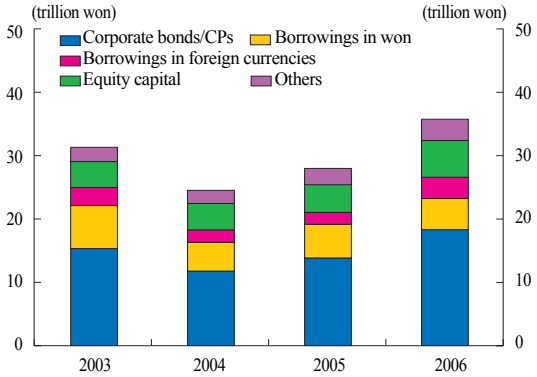
21) This term refers to financial institutions engaged in credit card lending, installment financing, facilities leasing and new technology project financing, pursuant to the Credit Specialized Financial Business Act. For the purposes of this report, however, the term "credit companies" will be understood as including all of the above-mentioned types of institutions except credit card companies.

assets fell short of the peak level seen at the end of 2003.

Meanwhile, being non-deposit- taking institutions, credit companies' main funding sources remain corporate bonds and CP[22], together with borrowings in Korean won. As their credit ratings have been improving since the recent round of restructuring,[23] long-term vehicles like corporate bonds[24] account for a growing share of credit companies' funding.

<Figure IV-30>

Credit companies' funding sources



Source: Credit companies' call reports

Asset quality and profitability improved

Thanks to the restructuring in 2003-2004, during which much of their bad debts were written off or sold, and to the enforcement of stricter loan review procedures, the asset quality of credit companies has improved dramatically. The ratio of substandard and below loans fell from 13.0% at the end of 2002 to 2.4% at the end of 2006. Due to the large loan loss provision requirements, credit companies had posted losses until 2004. They returned to the black in 2005, however, and then recorded a substantial profit of 982.5 billion won in 2006.

By business segment, interest income and lease income increased over the end of 2005 by 26% and 37%, respectively, in 2006. Income from installment financing, meanwhile, which had been 19.5% in 2002, fell to 12.4% in 2006 owing to the downturn in the

22) The cap on the maximum value of corporate bond issuance is set at ten times equity capital for credit companies, pursuant to the Credit Specialized Financial Business Act. This is much higher than the cap of four times equity capital that applies to general corporations.
23) The number of credit companies rated "BBB" and above (based on non-secured corporate bonds) rose from 10 at the end of 2003 to 17 at the end of 2006.
24) The share of long-term funds increased from 51.3% at the end of 2003 to 60.5% at the end of 2006.

segment and to the decline in interest rates on installment financing products[25].

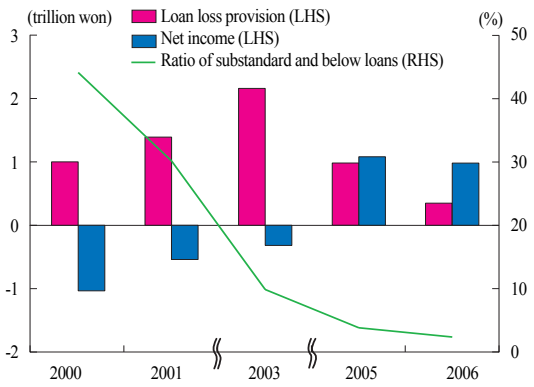
Business regulations eased and prudential regulations strengthened

The business performance of credit companies is sound. However, their growth potential is expected to remain limited. Credit companies' business structure is heavily focused on automobile-related financing, and there is a limit on the extent to which new car sales can expand.[26] In addition, as their other business lines like installment financing and loans are services also offered by credit card companies and banks, credit companies' special revenue base is likely to be vulnerable. They also face competition from money lenders, who are engaged in similar business lines and target similar categories of customers but are only lightly regulated, and who have been quickly building up their market share. Credit companies have therefore not benefited greatly from the strengthening of banking sector regulations, such as the rules on household loans[27] and LTV and DTI-related restrictions on housing mortgage loans and installment financing.

It may, therefore, be necessary for the financial authorities to substantially ease the business regulations

<Figure IV-31>

Changes in credit companies' net incomes



Source: Credit companies' call reports

25) The share of installment financing assets in credit companies' total assets fell from 22.4% at the end of 2002 to 16.5% at the end of 2006. The interest rate (average balance of installment income divided by installment receivables) on installment financing products offered by the top ten credit companies dropped from 16.08% in 2004 to 9.75% in 2006.

26) While the share of automobile-related financing products in credit companies' total operating assets (excluding current assets, securities and fixed assets) reached 48.8% at the end of 2006, domestic automobile sales increased by only 2.6% during 2006.

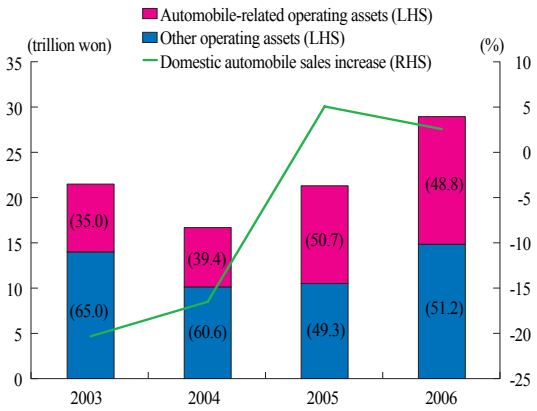
27) Household lending by credit companies is currently limited to installment financing and leases, in other words, types of loans associated with this sector only.

applying to credit companies, by for instance expanding the list of equipment and facilities[28] eligible for leasing, so that these companies may tap into niche markets to achieve growth. This should be coupled with measures to curb credit risk inherent to credit companies, as businesses dealing chiefly with small consumer credit. Credit companies should tighten their loan review-related rules and strengthen their risk management capabilities to prevent any future wave of defaults like the one they experienced several years back. In the meantime, the authorities should keep closer oversight on their financial soundness to ensure that they maintain sound loss-absorption capabilities.[29]

GE Capital, a leading US financial firm having a business model similar to those of Korea's credit companies, sets a useful precedent in linking financing to product sales by affiliated manufacturing companies to thus fuel growth with the synergy created from this arrangement. In the long-term, Korea's credit companies may be able to grow into general financial service providers by learning from the successful models of overseas financial firms.

<Figure IV-32>

Share of automobile-related operating assets in credit companies' total operating assets[1]



Note: 1) Total assets minus current assets, securities and fixed assets
2) The figures in ( ) are the percentage shares in total operating assets

Source: Korea Automobile Manufacturers Association, Korea Automobile Importers and Distributors Association, Credit Finance Association

28) The list of equipment and facilities for which leasing is currently allowed, comprising machinery and equipment, vehicles, boats, aircraft and real estate properties directly related to their lease, could be expanded to include, for instance, property leasing for small and medium-sized businesses.

29) In April 2007, to prevent credit companies' household loan credit risk from expanding further, the financial supervisory authorities stiffened the asset classification criteria and raised the loan loss provision ratio. However, the prudential guidance standard for the adjusted capital ratio(7%) and the ratio for reflecting asset-backed securities(ABSs) included in adjusted total assets(10%) also need to be adjusted upward, as business conditions among credit companies have been improving

<Box IV-3>

Factors behind and implications of GE Capital's growth

The GE group, a US business group founded through the 1892 merger between the Edison General Electric Co. and the Thomson-Houston Electric Co., was engaged in manufacturing only until 1932, when it forayed into the financial sector through GE Credit Corp., an installment financing company. Since then, led by GECS (GE Capital Services), its intermediary financial holding company, the group has gradually expanded its business areas and currently provides a nearly complete spectrum of financial services excluding deposit-taking and securities investment, including corporate financing, installment financing, leasing, mortgage lending, credit cards and insurance. Since the late 1990s, the group has been engaged in the banking business in foreign markets such as the U.K., and Asian and Eastern European countries

GE Capital's key business lines

Segment	Business lines
Corporate financing	General corporate loans, commercial property-related lending, commercial equipment purchase financing and leases, M&A consulting and other corporate financial services, issuance of bonds such as ABS, aviation-related financial services including sales, leases and payment guarantee services, health and medical equipment-related loans and leases
Insurance	General non-life insurance, reinsurance, guarantee insurance, mortgage insurance
Consumer loans	Installment financing, credit cards, mortgage loans
Equipment lease and management	Ships, trains, trailers and other transportation equipment-related loans and leases
Others	Private equity investment, satellite communications service

Up until the early 1980s, the growth of the GE Group was driven by its manufacturing division, which made products such as home appliances, power generation equipment, plastics and health and medical equipment. After Jack Welch took the helm of GE in 1981, however, its financial service division underwent rapid growth and reached US $ 564.7 billion in total assets by the end of 2006, raising the division's share in total group assets from 50.3% at the end of 1980 to 81.0%. Meanwhile, the financial division's net income, which had stood at a mere US $ 100 million in 1980, jumped to US $ 10.9 billion by 2006. This was 51.2% of the group's total net income and marked a significant expansion of the financial sector's contribution to the Group.

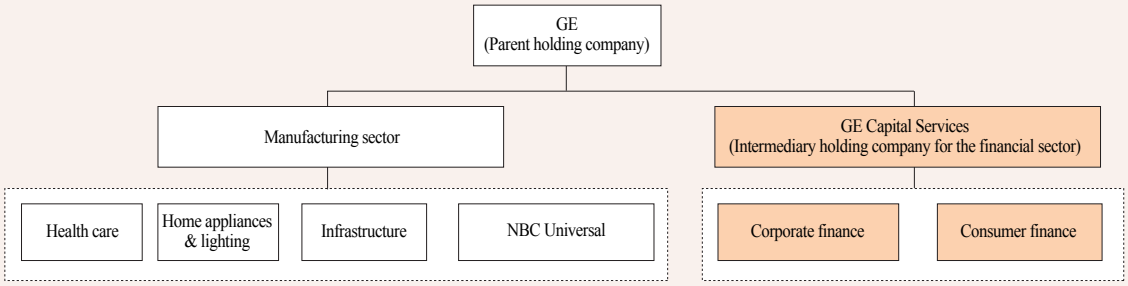
GE Capital's stunning growth owes foremost to the synergy created from linking its financial services with the group's manufacturing businesses. GE, the parent company rated "AAA," has helped its financial service subsidiaries also obtain and maintain "AAA" long-term credit ratings, by, for instance, extending payment guarantees on their corporate bonds or making capital commitments when their capital-to-debt ratios drop. As a result, GE Capital's credit rating has remained consistently higher than those of large US financial groups like Citigroup (AA-) and Goldman Sachs (A+). GE has provided its financial subsidiaries with easy access to low-interest funds, when issuing corporate bonds and CPs, and transmitted to them its management know-how and best practices accumulated through its long history in the manufacturing business. In this way, it has supported them in their M&A activities and assisted the overall financial service division in becoming the competitive division that it is today.

Meanwhile, GE Capital and other group financial service subsidiaries have contributed to sales growth in the manufacturing division by offering financing services for purchase of the division's products, rather than directly extending them loans. Using their abundant funds, acquired at low interest rates thanks to the support of the parent company, these firms have provided customers purchasing GE affiliates' products with installment financing or lease programs at competitive interest rates. They also help the manufacturing division meet business financing needs and manage financial risks through derivative financial products and other advanced financial techniques, while providing financing for M&As and financial consulting for the entire group.

Another factor contributing to GE Capital's success is the group's simple cross-ownership structure, coupled with a transparent accounting system, which has earned it market trust and makes its corporate information highly accessible. By creating an intermediary holding company (GE Capital Services) through 100% equity participation by GE, the parent company, the group has made its financial service arms into indirect subsidiaries. There is, therefore, no cross-ownership between the group's financial service firms and manufacturing companies that are the direct subsidiaries of the parent company. This structure protects the GE Group's financial division from the effects of any business downturns in the manufacturing division. In the meantime, the GE Group, in addition to the consolidated financial statements for the entire group, provides separate financial statements for its financial and non-financial divisions, while also disclosing transactions between the two divisions in full detail and in an easy-to-understand presentation, cementing investors' and market participants' confidence in the group.

GE's financial division, applying a business model similar to those of Korea's credit companies, has successfully achieved synergy with the group's manufacturing division, by linking its financial services with the latter's product sales. By learning from such foreign examples of success, Korea's credit companies could in turn look into ways to grow over the long run into general financial service institutions, offering services like feasibility analysis for corporate M&As, management of financial portfolios, and fund financing/risk management for manufacturing businesses.

GE's business diagram



Ⅴ. Changes in the financial infrastructure

1. Payment and settlement systems

Settlement risk trends

In 2006, payments and settlements via the Korean won payment systems and the CLS (Continuous Linked Settlement) system grew sharply, both in volume and value. In spite of the massive expansion in the volume of transactions, the payment and settlement systems operated stably, and settlement risks were managed appropriately.

BOK-Wire, operated by the Bank of Korea, experienced an improvement in system stability and efficiency. No instances of delay in settlement caused by system disturbance were recorded in 2006, while the incidence of settlement delays due to lack of funds on the part of participating banks fell dramatically, especially among domestic branches of foreign banks. However, the share of settlements during the period after 4:00PM, near system closing time, climbed to 50.4% from 48.7% the year before, somewhat increasing the likelihood of settlement delay and gridlock during this period.

As of the end of 2006, institutions participating in the retail payment systems operated by the Korea Financial Telecommunications and Clearings Institute (KFTC) had deposited 5.2 trillion won in securities with the Bank of Korea as collateral to guarantee execution of net settlement. This total is well in excess of what would be needed to complete all net settlement

<Table V- 1>

Settlement volume by payment instrument
(daily average)

(thousand transactions, trillion won, %)

		2004	2005 (A)	2006 (B)	Change (B-A)/A
Volume	BOK-wire	6.9	7.9	8.4	5.8
	Retail payment system	13,599	14,089	15,146	7.5
	Bill clearing system	3,489	3,283	3,263	-0.6
	Giro system	3,714	3,753	4,008	6.8
	Interbank networks	6,396	7,053	7,875	11.6
	Total	13,606	14,097	15,155	7.5
Value	BOK-wire	107.8	120.7	128.7	6.7
	Retail payment system	28.0	29.7	33.3	12.0
	Bill clearing system	14.8	14.4	14.9	3.6
	Giro system	0.5	0.5	0.5	9.0
	Interbank network	12.7	14.8	17.8	20.3
	Total	135.9	150.3	162.0	7.7

Source: Bank of Korea

<Table V- 2>

Settlement volume via CLS

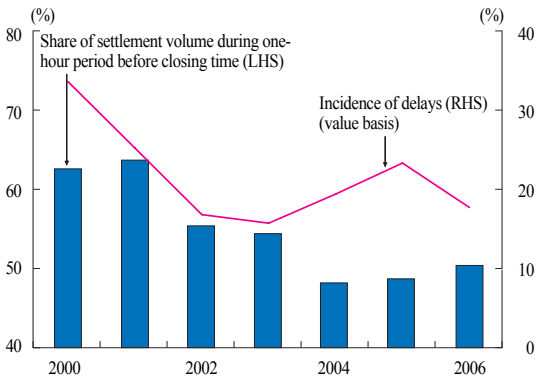
(100 million dollars, transactions)

	2005	2006
Volume	289,789	930,089
<daily average>	1,159	3,750
Value	9,523.9	25,028.1
<daily average>	38.1	100.9

Source: Bank of Korea

<Figure V- 1>

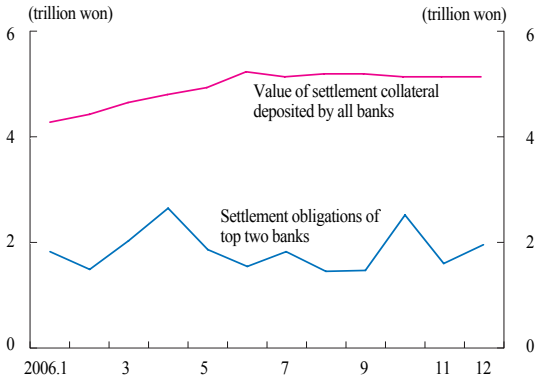
Volume of settlements via BOK-wire during one-hour period before closing time and incidence of delays



Source: Bank of Korea

<Figure V- 2>

Settlement obligations of top two banks[1] and total value of settlement collateral



Notes: 1) Top two banks in terms of the value of net exchange payments made on the day with the highest net exchange payments, in the reference month for morning net settlements

Source: Bank of Korea

requirements (the 2006 peak was 2.7 trillion won), in a situation where the two banks with the largest netting obligations failed to meet them. It easily satisfies the international best practice proposed by the BIS.

Meanwhile, the volume of settlements made via the DVP (Delivery versus Payment) System, jointly operated by the Bank of Korea and the Korea Securities Depository, also increased steadily, contributing to a reduction in securities settlement risk associated with the occurrence on different days of the two legs involved: the delivery of securities and the payment for them. The increase in the share of foreign exchange transaction settlements made through the CLS system operated by CLS Bank was particularly sharp, resulting in a marked reduction of foreign currency settlement risk arising from mismatches between currencies sold and bought at settlement time.

Improvements of payment and settlement systems

Oversight of payment and settlement systems strengthened

In 2006, the Bank of Korea assessed the safety and efficiency of BOK-Wire, the systemically important payment system it operates, and of the Over-the-Counter Bond Market Settlement System. The assessment found that both systems met the relevant international standards, although there were a few minor details on which improvement was needed. Recommendations for improvement were issued to the institution operating the Over-the-Counter Bond Market Settlement System and the department of the Bank of Korea overseeing BOK-Wire. For the Over-the-Counter Bond Market Settlement System, the assessment results were reported to the policymakers and supervisory authorities concerned.

For systematic exercise of payment and settlement system oversight in compliance with the relevant international standards, the framework for assessing them was comprehensively overhauled. The classification of payment systems, for instance, was changed from the three-tier model consisting of 'systemically important,' 'major' and 'others' to a two-tier model recommended by the BIS consisting only of the 'systemically important' and 'others' categories. The number of systemically important payment systems was also expanded from seven to nine. Finally, assessment of systemically important payment systems is now conducted biannually instead of annually.

<Table V- 3>

Payment systems subject to oversight by the Bank of Korea

Category			System operator
Systemically important payment systems (9)	BOK-Wire		Bank of Korea
	Bill Clearing System		
	Interbank Networks	Interbank Funds Transfer	KFTC
		Electronic Banking	
	Over-the-Counter Bond Market Settlement System		Korea Securities Depository
	Securities Market Settlement System		Korea Exchange
	KOSDAQ Market Settlement System		
	Futures Market Settlement System		
	CLS System		CLS Bank International
Other payment systems (10)	Giro System		KFTC
	Interbank Networks	CD	
		CMS	
		B2C e-commerce	
		B2B e-commerce	
		e-Money	
		Debit Cards	
		Local Banks	
	BC Card Settlement System		BC Card
	Domestic Interbank Foreign Currency Funds Transfer System		Korea Exchange Bank, Kookmin Bank

Source: Bank of Korea

Safety and efficiency of payment systems enhanced

'The Electronic Financial Transaction Act', which was enacted in April 2006 and came into force in January 2007, grants the Bank of Korea the right to demand records and documents from electronic financial service providers and the right to require the Financial Supervisory Service to examine, either on its own or jointly with the central bank of businesses whose transaction practices are deemed to warrant such action. Subsequently, in order to efficiently reinforce its oversight duties related to electronic financial transactions, the Bank of Korea established (in Jan. 2007) the 'Regulation on Bank of Korea Requests for Electronic Financial Transaction-related Records and Documents.'

Prior to this, in accordance with the "Act on Debtor Rehabilitation and Bankruptcy", in effect from April 2006, a new set of rules was established by the 'Regulation on Designation of Payment Systems Whose Settlement Finality Is Guaranteed' (Mar. 2006). BOK-Wire operated by the Bank of Korea, the Interbank CD/Interbank Funds Transfer System and Electronic Banking System operated by the KFTC, and the CLS System were designated as payment systems whose settlement finality should be guaranteed (Aug. 2006). This means that fund transfer instructions and settlements placed and made through these payment systems are guaranteed under the relevant legislation to be final, even in the event of failure of the financial institutions involved.

Furthermore, to enhance the safety of the retail payment systems, the Bank of Korea modified its methods of valuation and management of securities deposited with it as collateral to guarantee net

<Table V- 4>

Settlement finality-guaranteed payment systems

System operator	Name of system	Date effective
Bank of Korea	BOK-Wire	Aug. 21, 2006 09:30
KFTC	Interbank CD Network	Aug. 21, 2006 07:00
	Interbank Funds Transfer Network	Aug. 21, 2006 09:30
	Electronic Banking Network	Aug. 21, 2006 07:00
CLS Bank International	CLS System	Aug. 21, 2006 09:30

Source: Bank of Korea

settlements. Collateral securities deposited by institutions participating in the net settlement system, whose value was previously assessed once every quarter, are now assessed daily. When the assessed value falls short of the amount required, the securities deposited must be replaced or additional securities collateral must be posted. These changes allow the Bank of Korea to manage securities collateral on a mark-to-market basis.

Concerning the CLS System, the Bank of Korea launched an initiative to remedy the low level of participation by domestic branches of foreign banks, which had hindered use of the system by domestic banks who are their transaction counterparts. The Bank of Korea will collaborate with the Financial Supervisory Service (FSS) to step up the management of foreign currency settlement risk at domestic branches of foreign banks. In the meantime, to reduce the costs associated with CLS System participation, a decision was made, with the approval of domestic banks, to waive the special participation fee for local branches of foreign banks joining the KFTC's CLS network.

To reduce the daily need for settlement funds among institutions participating in BOK-Wire, and to curb the concentration of settlements during the period shortly preceding the system's closing time, the Bank of Korea is now at work building the next-generation BOK-Wire system, in a project scheduled for completion in the first half of 2009. The basic architecture for this hybrid payment system, closely adapted to the Korean financial markets, was designed and system details provisionally finalized by gathering the opinions of participating institutions and external experts.

<Table V- 5>

Changes in valuation method for collateral securities

	Before	After
Valuation cycle	Once quarterly	Once daily
Reference date	15th of the first month of each quarter	Business day immediately preceding the date of valuation
Method of obtaining market price information	Information manually retrieved from specialized bond valuation organizations (3 organizations)	Automatically obtained from the Bond Market Information System (BOMIS)
Deadline for covering collateral shortfalls	Last business day of the valuation month	Day of valuation

Source: Bank of Korea

Finally, to alleviate the workloads of participant institutions and enhance the accuracy and safety of business handling, a decision was reached to link the Bank of Korea's servers with BOK-Wire members' servers through a direct access method. This connection method will be first implemented for banks and other large institutions participating in the system.

2. Domestic financial system

Adjustment of bank reserve requirement ratios

Effective December 23, 2006, the Bank of Korea made an upward adjustment of the reserve requirement ratios for banks' Korean won and foreign currency deposits. This decision was aimed at improving interest rate policy effectiveness in a situation where, in spite of five consecutive raises of the call rate target since October 2005, the share of current assets in financial institutions' total assets had increased massively due to sustained inflows of foreign funds and other factors, which was causing the loan supply to continually expand.

While the reserve requirement ratio for long-term savings deposits was lowered from 1% to 0%, that for short-term deposits like demand deposits and money market deposit accounts (MMDAs) was raised from 5% to 7%, widening the reserve requirement ratio spread between long-term and short-term deposits.

Meanwhile, the reserve requirement ratio for foreign currency deposits having the character of demand deposits was also raised from 5% to 7%, only for those deposits.

Changes in financial institutions' credit guarantee organization contribution requirements

On January 30, 2007, the government announced a legislative initiative to revise both the scope of loans and the list of financial institutions subject to requirements of contribution to the Credit Guarantee Fund, the Technology Credit Guarantee Fund and the

<Table V- 6>

Adjustment of the reserve requirement ratios

(%)

		Previous	Current
Korean won	Long-term time and savings deposits[1]	1.0	0.0
	Time deposits, installment savings deposits, mutual installment deposits, housing installment deposits and certificates of deposit (CD)	2.0	2.0
	Other deposits including demand deposits and money market deposits accounts (MMDA)	5.0	7.0
Foreign currency	Foreign currency deposits of special entities[2]	1.0	1.0
	Time and savings foreign currency deposits and negotiable certificates of foreign currency deposit	2.0	2.0
	Foreign currency demand deposits	5.0	7.0

Notes: 1) Long Term Housing Savings Deposits, Worker's Preferential Savings Deposits, Long Term Savings Deposits for Household, Worker's Asset Formation Deposits, Worker's Long Term Savings Deposits and Worker's Housing Savings Deposits.
2) External accounts, overseas emigrant accounts and resident accounts which are opened by foreign exchange banks, and negotiable certificates of deposit held by those eligible to open such accounts.
Source: Bank of Korea

Agriculture, Forestry and Fishery Credit Guarantee Fund.

<Table V- 7>

Changes in types of loan subject to contribution requirement

Before	After
- Loans in Korean won[1)] - Subrogation of guarantee payments in Korean won	- Loans in Korean won[1)] - Subrogation of guarantee payments in Korean won <Added> - Loans in foreign currency - Subrogation of guarantee payments in foreign currency - Private placement corporate bonds - Bills bought in Korean won - Factoring receivables - Loans issued by the export-import bank <Removed > - Loans for facilities - Loans on guarantee issued by financial institutions under consignment agreements with the Credit Guarantee Funds

Note: 1) Excludes loans to households and interbank loans
Source: Ministry of Finance and Economy

Foreign currency loans and subrogation of payment guarantees, together with private placement bonds, were added to the list of loans on which contributions are required, that previously consisted of Korean won loans and subrogation of payment guarantees only. Meanwhile, facility loans and loans secured with guarantees issued by financial institutions under consignment agreements with the credit guarantee funds were excluded from the list. Further, for the sake of fairness among financial institutions, the Export-Import Bank of Korea was added to the list of financial institutions required to contribute to the credit guarantee organizations. The National Agricultural Cooperative Federation and National Federation of Fisheries Cooperatives, which contribute to the Agriculture, Forestry and Fishery Credit Guarantee Fund, and non-banking institutions that deal little if at all in loans secured with credit guarantees, will continue to be exempt from the requirement.

<Table V- 8>

Changes in contribution ratio

(%)

	Before	After
Credit guarantee fund	0.25	0.225
Technology credit guarantee fund	0.15	0.135
Agriculture, forestry and fishery credit guarantee fund	0.3	0.362

Source: Ministry of Finance and Economy

Meanwhile, to alleviate the burdens on financial institutions due to the expanded scope of loans subject to contributions, the rates of contribution to the Credit and Technology Credit Guarantee Funds were downward adjusted. At the same time, to ensure greater fairness the rates of contribution to the Agriculture, Forestry and Fishery Credit Guarantee Fund applying to the National Agricultural Cooperative Federation and National Federation of Fisheries Cooperatives were raised to a level closer to the rates in force for general financial institutions.

<Table V- 9>

Upward adjustment of minimum loan loss provision ratios[1]

(%)

	Before	After
Corporate loans		
Standard	0.5	0.7
Precautionary	2.0	7.0
Household loans		
Standard	0.75	1.0
Precautionary	8.0	10.0
Credit card loans		
Standard	1.0	1.5
Precautionary	12.0	15.0

Note: 1) Minimum loan loss provision ratios for substandard and below loans are left unchanged.
Source: Financial Supervisory Service

<Table V-10>

Changes in the scope of application of loan loss provision requirement

	Before	After
Corporate loans	Standard-classified unused commitments	All unused commitments (standard to estimated loss)
Household loans	Standard-classified unused commitments	All unused commitments (standard to estimated loss)
Credit card loans	Standard-classified unused commitments <excludes accounts that have been inactive during the past one-year period>	All unused commitments (standard to estimated loss) <including accounts that have been inactive during the past one-year period>

Note: 1) Unused share of credit lines granted to clients for financial products such as overdrafts and credit loans.
Source: Financial Supervisory Service

<Table V-11>

Changes in delinquency criteria

		Before	After
Delinquency criteria		Principal basis	Principal or interest basis
Delinquency initial date	Overdue principal payments	The following day of the due date	Same as before
	Overdue interest payments	Upon the lapse of one month[1] from the due date	The following day of the due date for interest payment
	Overdue installment payments	Second missed due date[2]	The following day of the first missed due date

Note: 1) 14 days for corporate loans
Source: Financial Supervisory Service

Changes in loan loss provision rules, etc.

On December 31, 2006, in an effort to strengthen banks' capability to absorb credit losses, the Financial Supervisory Service (FSS) revised the loan loss provision rules. The new minimum loan loss provision ratios for precautionary-rated loans, calculated via the expected loss estimation method under the New Basel Capital Accord, was raised to 7.0% from 2.0% for corporate loans, to 10.0% from 8.0% for household loans, and to 15.0% from 12.0% for credit card loans. However, the minimum loan loss provision ratios for substandard-and-below loans were left unchanged. For greater compliance with the New Basel Capital Accord in expected loss calculation, meanwhile, provision requirements, which were previously limited to standard-classified unused commitments, have now been extended to cover all unused commitments including estimated losses.

Effective January 1, 2007, the FSS also revised the loan delinquency criteria, thereby improving their rationality greatly. The current principal-based criteria, whereby a loan is deemed delinquent only when delinquency occurs on principal repayments, were replaced by new principal and interest-based criteria whereby a loan is regarded as delinquent when delinquency occurs on either principal or interest repayment. The method for calculating the delinquency rate has also been changed accordingly. Delinquencies considered in the calculation are now principal and interest repayments overdue for one month or longer, in place of the previous principal repayments overdue for one day or longer. Out of concern for protecting financial service consumers, however, the delinquency

criteria used for calculating late fees remain the current principal-based ones[1].

Effective January 1, 2007, the Financial Supervisory Commission (FSC) also revised the capital adequacy rule so as to extend application of the BIS capital ratio requirement to bank holding companies. The new rule requires bank holding companies to maintain their BIS capital ratios, on a consolidated basis, at 8% or above.

<Table V-12>

Schedule for implementation of the New Basel Capital Accord[3] in selected countries

	2007	2008	2009	2010
Standardized approach Basic internal ratings-based approach	EU Japan Hong Kong	Korea Australia Singapore Thailand	-	China[2]
Advanced internal ratings-based approach	-	Australia Singapore EU Hong Kong Japan	Korea US Thailand	-

Notes: 1) Credit risk basis
2) Basic internal ratings-based approach

Meanwhile, the FSS postponed introduction of the advanced approaches[2] agreed on under the New Basel Capital Accord, from January 2008 to January 2009. However, the FSS will go ahead with the plan to implement the standardized and basic internal ratings-based approaches in January 2008, as scheduled. Notwithstanding this, banks in need of further preparation will be offered the option of maintaining the current standards[3] during the first year of implementation.

Implementing measures to strengthen housing finance loan risk management

On November 15, 2006, the financial supervisory authorities announced measures to strengthen risk management practices related to housing finance loans, in a move to reduce the inflow of funds to the real estate market and help improve soundness of the financial institutions and household sector.

1) Interest is charged on overdue interest payments if delinquency concerns the interest, and on overdue principal payments if delinquency concerns the principal.
2) The advanced internal ratings-based approach (for credit risk) and advanced measurement approach (for operational risk)
3) The option to maintain the current standards is also granted in EU countries, for the period leading up to introduction of the advanced approaches (in January 2008)

The highlights of the measures include abolishment of the special loan-to-value (LTV) ratio applied to certain banks and insurance companies, downward adjustment of the LTV ratio for non-bank institutions, and extended application of the debt-to-income (DTI) ratio requirement, previously imposed only on loans for purchases of apartments worth 600 million won or more located in 'speculative zones,' to include 'overheatedly speculative zones' in the Seoul metropolitan area.

On January 11, 2007, supplementary measures were issued to complement the existing risk management rules on housing finance loans. From now on, a borrower holding two or more mortgages on apartments located within speculative zones will be allowed to extend the maturity on only one of the loans. Also, restrictions on provision of multiple loans[4] to the same borrower, which had previously applied only to banks, insurance companies and mutual savings banks, were extended to all financial institutions. Meanwhile, to strengthen the supervisory authority's guidance and oversight of financial institutions and ensure proper assessment by lending institutions of their borrowers' debt repayment capabilities, best practices[5] were developed jointly by the supervisory authority and the banks.

4) Restrictions on multiple loans include the following:
   1. No more than one loan per borrower on apartments located in speculative zones (based on new loan contracts);
   2. A DTI ratio cap of 40% for loans on apartments within speculative zones to married borrowers already carrying mortgage loans or to unmarried borrowers aged 29 or younger;
   3. Prohibition of residential mortgage lending to minors; and
   4. Restriction on maturity extension for borrowers with two or more loans on apartments located in speculative zones.

5) This relates to financial institutions' internal loan review systems for adequate assessment of borrowers' repayment capabilities, as opposed to direct regulations like DTI ratio requirements.

Korea-US FTA highlights related to the financial sector

On April 2, 2007, Korea concluded a free trade agreement with the US. While the items negotiated that concerned the financial sector were few, since efforts to open this sector had been actively pursued for years already, issues such as the conditions for allowing new financial services[6], the range of authorized cross-border financial services[7] and the scope of government-owned financial institutions exempt from FTA rule application were at the fore of debate.

With regard to further opening of the Korean financial market, the two sides agreed to approve market participation by means of setting up of local branches or subsidiaries, while allowing opening through cross-border trade to a limited extent. They further agreed that either country's authorities may resort to prudential measures when necessary to protect financial consumers, sustain financial institution soundness and ensure stability of the financial system.

Concerning the above-mentioned issues, several agreements were reached. First, resident financial institutions are now permitted to provide new financial services in the host country, on the condition that they obtain approval of the host country's financial supervisory authorities or accept being monitored and regulated by them in regard to their financial soundness. Cross-border financial services, meanwhile,

<Table V-13>

Korea-US FTA highlights related to financial sector

Category	Description
New financial services	- Allowed for resident financial institutions
Cross-border financial services	- Selected cross-border services, including asset management and non-life insurance, permitted
Public financial institutions	- Five state-owned financial institutions exempted from national treatment obligations - Commitment to strengthen prudential supervision of postal insurance
Safeguards in an economic crisis	- Financial authorities' use of short-term safeguard measures permitted

6) New financial services that are not provided in the home country, but only in the host country

7) Cross-border financial services provided via the internet or telephone by suppliers who do not own a local branch or subsidiary in the destination country

are only allowed for pre-agreed-upon types of trade[8], so that the financial authorities' ability to supervise the related transactions is not interfered with.

With regard to financial institutions excluded from the FTA commitments, five government-owned institutions including the Korea Development Bank, the Industrial Bank of Korea, the National Agricultural Cooperative Federation, the National Federation of Fisheries Cooperatives and the Korea Housing Finance Corporation were exempted from national treatment obligations[9]. Also agreed was the stepping up of financial soundness supervision on postal insurance to the level applied to private-sector insurance companies. The right to impose temporary safeguard measures, enabling temporary control of in- and outflows of foreign currency in the event of natural disaster or economic crisis, has been maintained.

8) Asset management, maritime, aviation and disaster insurance services, and auxiliary insurance services such as actuarial and claim adjustment services and insurance consulting were included among authorized cross-border financial services.

9) 'National treatment,' in this case, means that the governments of the two FTA party countries treat each other's financial institutions with commercial presences in their territories in the same ways they treat their own financial institutions, without discrimination.

Financial Stability Report is published twice a year and also posted on the web-site of the Bank of Korea (http://www.bok.or.kr).

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ISSN 1975-7042

www.bok.or.kr