

Financial Stability Report

October 2005



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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I . Overview

Amid favorable economic conditions at home and abroad, the Korean financial system is considered to have stabilized across the board. The volatility of bond yields is declining, stock prices are on the rise, and foreign exchange rates remain stable. Banks' financial status in terms of profitability and so forth is benign while firms' credit risk is not running at a high level.

Nevertheless, there is the possibility that international financial market investors may adopt a cautious attitude in view of the rise in expected inflation rates brought about by persistently high oil prices. In the domestic financial market, there has been no improvement in households' overall debt servicing capacity or the weak credit standing of people in low-income brackets. In the banking sector, constraints may be placed on the continued enhancement of profitability by, for example, the narrowing of interest margins and the reduction of earnings from fees and commissions as a result of fiercer competition among banks.

The real estate market, meanwhile, which had been greatly destabilized by the steep run-up in prices, has presented a pattern of gradual stabilization in the wake of the August 31 measures to clamp down on real estate speculation. Banks consequently show signs of shedding their focus on housing finance loans and moving to increase their corporate lending.

1 *With the global economy maintaining growth at a solid pace, international financial markets are witnessing a rise in stock and bond prices. At the same time, the domestic economy is showing signs of a mild recovery.*

The US economy is carrying on its robust growth at a pace of about 3.5% in 2005, driven by consumption, housing and facilities investment. The Chinese economy continues to sustain its strong growth at around 9.5%. While the euro-area economy is still registering only modest growth, expectations of a recovery of the Japanese economy remain high. Structural weaknesses still surround the global economy,

however, including the divergences between the GDP growth rates of those countries that are leading the growth and other nations along with the massive US current account deficit. What is more, there is the possibility of a gradual rise in inflationary anticipations owing to persistently high oil prices.

Although the US Federal Reserve Board (FRB) has been steadily ratcheting up its policy rate, in the international financial markets long-term interest rates show downward stability, spreads on lower-rated and riskier bonds have narrowed and stock prices are on a rising trend. The US dollar has largely remained firm because of the divergence between the economic growth rates of the USA and other economies such as those of the euro-area and Japan as well as the FRB's step-by-step increase of its policy rate.

In this way, movements in the global economy and international financial markets are mildly conducive to exchange-rate stability and to foreign-currency denominated borrowings by domestic financial institutions and companies. Nevertheless, given that anticipated inflation rates are on the rise owing to the persistently high level of international oil prices, the possibility of a shift toward a more cautious attitude on the part of investors in international financial markets cannot be discounted.

Exports have been posting a consistently strong upward trend and, within the domestic economy, consumption has been showing modest stirrings of recovery. Prices continue to maintain stable trends despite the higher oil price, but the scale of the current account surplus is seen to narrow.

2 *As regards the household sector, debt servicing capacity has not improved in 2005, with no turn for the better in the weak credit status of those in lower income brackets.*

In the first half of 2005, there was a slight increase, as compared with the end of the previous year, in the ratio of financial liabilities to financial assets as well as in that of payments of principal and interest to personal disposable income. However, a possible rise in interest rates is not likely to increase the burden of interest payments seriously because interest-bearing assets make up a large proportion of household financial assets and the size of such interest-bearing assets is larger than that of interest-bearing financial liabilities on average. Besides this, the percentage of household borrowings from banks at relatively low interest rates among household loans from all financial institutions has been gradually rising, which may be seen as another positive factor concerning the debt servicing burden of households.

In the meantime, the number of people filing for personal bankruptcy stood at 17,000 during the period from January to July 2005. Furthermore, no improvement has been forthcoming in the financial balance of low-income households, pointing to the continued fragility of their credit status.

3 *Regarding the corporate sector, the debt servicing capacity of companies remains stable despite a drop in overall profitability and a rise in the share of high-risk companies.*

In the first half of 2005, there was a slight decrease in the profitability of companies listed on the Korea Exchange, compared with the same period of the preceding year.

However, their financial strength and liquidity are in good shape. As of the end of the first half of 2005, their average debt ratio stood at 89.8%, much lower than that in the advanced countries. In addition, their current ratio rose to 117.1%.

The number of companies identified as having high credit risks increased because of slowing profits, but the likelihood of companies' defaulting and the total risks of the corporate sector should diminish somewhat. This is ascribable to the decline in the average probability of default, in response to the recovery of domestic expenditure, and the reduced borrowings of lower-rated companies.

4 *In 2005, the real estate market experienced some instability as evidenced by a sharp rise in the price of residential property and land. The market has stabilized somewhat in the wake of the government's August 31 announcement of measures to curb real estate speculation. Nevertheless, lease deposits are continuing to show a mildly upward trend.*

In early 2005, the housing market was destabilized because an upsurge in housing prices in some parts of the Greater Seoul area triggered a chain reaction in other areas and the price of apartments in Seoul rose at their fastest pace since 2003. The August 31 anti-speculation measures brought stability to housing prices to a certain extent, reducing the possibility of asset price bubbles within the housing market. However, we need to take a wait-and-see attitude as regards the extent to which the measures will redress the side effects of the price surge. Lease deposits have been on an upward trend recently because of seasonal demand and the mismatch between demand and supply, but since lease deposits for apartments in Seoul still remain at a low level

compared to their peak in September 2002, the current situation does not appear to call for concern for the time being.

In the second quarter of 2005, speculative demand was evident in the land market, especially in areas affected by soaring housing prices and various development projects as well as green zones. Apparently, the land market has been somewhat stabilized in the aftermath of the August 31 anti-speculation measures. Since an upswing in the price of land may generate more serious and wide-reaching malign effects than in the case of housing, it is considered no less important to devote as close attention to the long-term stability of land prices as to the price of housing.

5 *In the lending market, the first half of 2005 saw a modest recovery of corporate lending and acceleration of the pace of growth of household loans. The upward trend of the latter has been slowing, however, since the government unveiled its measures to counter real estate speculation on August 31. Lending interest rates, which had exhibited a downwardly stable tendency from April, have been slightly going up since July.*

In the corporate loan market, the upward trend of lending is likely to see a further extension in future as banks have eased their attitude toward lending to corporate borrowers in line with the adoption of more stringent conditions for housing finance loans and a situation in which they enjoy an enhanced capacity to write loans thanks to their buoyant business performance. No dramatic improvement, though, is foreseen in borrowing conditions for companies considered to have high credit risks as banks are likely to discriminate in their lending terms and continue to manage their funds in a conservative manner.

In the household loan market, banks are expected to take a cautious attitude toward housing finance loans because of the stricter regulations on them after their sharp expansion in the first half of the year as well as the prospect of a fall in the value of real estate collateral. Thus, the upswing in household loans is likely to slow substantially.

It has been pointed out that the large amount of SME (small and medium enterprises) and household loans maturing during the period from the second half of 2005 to the first half of 2006 may act as a potentially destabilizing factor, but no great difficulties are expected in the light of customary lending practices whereby loans falling due are mostly re-extended upon partial redemption.

6 *In the bond market, market interest rates have been rising since June 2005 on expectations of economic recovery and a possible increase of the policy rate. Market volatility has, however, become smaller than that of the beginning of the year when interest rates rose sharply.*

The recent relative stabilization of the bond market is ascribable to the steadily growing capacity for bond purchases by long-term institutional investors including insurance companies and pension funds, and the progress in portfolio adjustment by short-term institutional investors, who had fermented market instability in early 2005. The financial markets view future adjustments of the policy rate, the expansion of the issue of Treasury bonds and the heightened demand for funds in line with economic recovery as factors that may heighten the market's volatility. It is nevertheless unlikely that stability of the bond market will be significantly compromised since

corporate demand for funds is not large and the basis of demand for bonds, including the introduction of corporate pension schemes, will be steadily strengthened.

7 *The stock market has maintained a steadily upward trend, showing a consistent pattern of movements as demonstrated by its reduced volatility.*

This stability of the stock market is seen to have been brought about by the heightened inflow of long-term investment funds including those from installment-type funds and pension funds, improved corporate profitability and anticipations of a recovery of domestic demand. Although corporate fund-raising conditions in the stock market have improved thanks to the upswing in stock prices, the actual volume of fund-raising shrank from the previous year in the absence of strong demand for funds.

Despite the steep run-up in oil prices since the first half of 2004, this has had no clearly marked negative effects on the Korean stock market in contrast to the situation in major economies including the USA and European nations. This is because Korea's increasing exports to countries with favorable economic conditions such as China have translated into buoyant corporate business performance that has been able to shrug off the rise in oil prices.

8 *In the foreign exchange market, the predominance of foreign currency supply in terms of supply and demand has continued due to the current account surplus. The country's foreign currency reserves edged up steadily, reaching 206.7 billion US dollars as of the end of September 2005.*

The FRB's series of step-by-step increases in policy rates has brought about an inversion of the spread between Korean and US short-term interest rates since July 2005, but this appears to have had very little effect on capital movements or the won-dollar rate. The explanation seems to lie mainly in the small scale of the inversion of short-term interest rates and that US long-term interest rates remain lower than Korean rates.

As regards the won-dollar rate, the Korean won retained a firm tone against the backdrop of the predominance of foreign currency supply in the domestic foreign exchange market. Since June 2005, though, it has fallen sharply owing to the rise in US interest rates and fears of a business downturn brought about by high oil prices. Consequently, the won-dollar rate fluctuated within a range of 1,040 to 1,050 won to the US dollar in October. It also continued to show a less volatile range of movement than the yen-dollar or euro-dollar rates.

 *Banks have registered growing net profits and their financial soundness has also been further buttressed. Commercial banks recorded an aggregate net profit of 5.3 trillion won in the first half of 2005, a substantial rise from the same period of the previous year and saw improvements in their BIS capital adequacy ratios, with improved profitability and financial soundness in a trend that is expected to continue on through the second half of 2005.*

Banks' profits have greatly improved with higher net profits from lending business thanks to reduced non-performing loans, the shift back into the black on their credit card operations, and increasing valuation or disposition gains on investment securities

as a result of better business performance by restructured companies. This upward tendency of banks' total assets is nevertheless slowing down. Furthermore, there are signs of a partial deterioration in their business environment such as the narrowing of interest margins and reduced earnings from fees and commissions owing to the intensifying competition among banks. If this situation persists for a long time, it may undermine the basis for banks' profitability.

Banks' credit risk in the corporate sector has remained at a low level as their exposure to large-sized companies is declining and they are selectively controlling their exposure to SMEs, focusing on prime companies. Banks' credit risk in the household sector is also declining in line with the improvement in the quality of their loan assets, the reduction of the scale of lending by their credit card operations, and the fall in delinquency rates.

Buoyed by their increased net income in the first half of 2005, banks' average BIS capital adequacy ratio inched up from 11.29% at the end of 2004 to 11.87% at the end of June 2005. Banks' capital adequacy is anticipated to improve further during the latter half of the year thanks to their buoyant profitability. Given the inherent fragility of domestic banks' profit structure including their heavy dependence on interest income, however, they should continue to strive to build up their capital by way of paid-in rights issues, the accumulation of internal reserves and additional provisioning, while improving their capital structure by the expansion of core capital for example.

10 *The combined assets of credit card companies have been on a gradual decline since 2003, reflecting the resolution of a huge amount of non-performing loans through bad debt write-offs, and a reduction of lending services in line with tighter risk management. The bottom-line has improved substantially for credit card companies, largely due to a significant drop in non-performing loans and the setting aside of additional loan-loss reserves. What is more, delinquency rates are swiftly falling in line with aggressive write-offs of non-performing loans amidst a reduction of new delinquencies.*

Considering that the financial condition of credit card companies has been dramatically improving, they may adopt more aggressive business strategies in the future. However, there also exist potential risks such as their lending exceeding their sales on credit. Besides this, the domestic credit card market has apparently reached saturation point. Given this situation, reckless expansion strategies might serve as a factor heightening risk.

Asset management companies witnessed a worsening of their profitability as the increase in the amount of fund assets under management in fiscal year 2004 (April 2004 ~ March 2005) was offset by fiercer competition and temporary non-operating losses.

Their profitability is unlikely to improve to any great extent within the short-term given the excessive amount of MMFs and bond funds with low yields, an earnings distribution structure that is highly favorable to sales companies and an overly large number of short-term and small-scale funds.

Competition in the asset management market is expected to deepen because of entry into effect of the corporate pension system in December 2005 and the advance of major foreign asset management companies into the Korean market. In order to sharpen their competitive edge, domestic asset management companies need to develop themselves into larger entities through the increase of their equity capital and M&A. In the meantime, it is essential for small-sized asset management companies to concentrate their efforts on heightening their creditability and profile by specializing in niche areas rather than pursuing external expansion. They also need to diversify distribution channels of fund products so as to improve the structure for the distribution of commission income that is presently biased in favour of the sales companies.

11 *In relation to the payment and settlement system, endeavors to enhance security and efficiency have been unremitting in an environment characterized by the ongoing shift from traditional paper-based settlement systems involving notes, checks and so forth to electronic settlement systems including fund transfers and cards.*

In the first half of 2005, the Bank of Korea continuously augmented its function of exercising oversight of the payment and settlement systems. It conducted an extensive assessment of important payment and settlement systems, requesting the operators of several systems to make improvements in connection with certain shortcomings that came to light. In addition, the Bank of Korea consistently engaged in dialogue with the government in order to ensure the incorporation of specific provisions guaranteeing settlement finality into the enforcement decree of the “Act concerning Debtor Rehabilitation and Bankruptcy” enacted in March 2005. In a further

development, the Bank of Korea advanced the designated time of net settlement for cashiers' checks from 2:30 p.m. to 11:30 a.m, thereby reducing the risks of the net settlement system. Having set up a task force team for reconstructing BOK-Wire, the Bank of Korea is also formulating plans to convert this network into a liquidity saving system (a system that reduces the need for liquidity holdings). Meanwhile, in a bid to reinforce the management of securities settlement systems, the Bank of Korea concluded an agreement with Korea Exchange on its utilization of BOK-Wire, whereby Korea Exchange undertook to engage in prior consultation with the central bank before making important changes to the operation of its settlement system for floor-based transactions of Treasury bonds.

II. Changes in the environment for financial stability

1. Economic outlook at home and abroad

Global economy continues convincing growth

The world economy has seen its solidly based growth trend evident in 2004 continuing on through 2005.

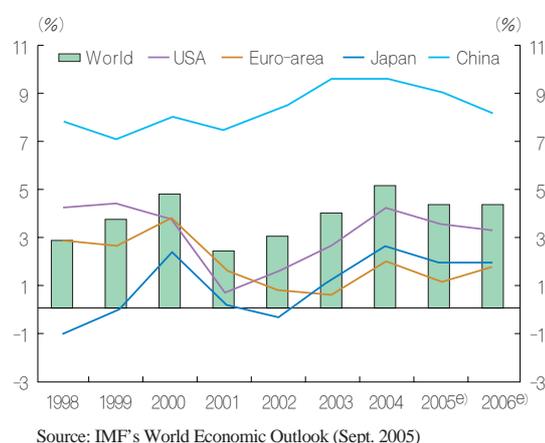
The US economy, which registered a 4.2% GDP growth rate in 2004, has been showing convincing growth, marking a rate of 3.8% in the first quarter of 2005 (annual rate compared with the preceding period) and 3.3% in the second quarter. This has been driven by strong household consumption, housing construction and facilities investment.

The Chinese economy maintained its rapid growth pace of 2004 of around 9.5% on into 2005, despite government measures to avoid the economy overheating. The country's export sales are growing at the rate of about 30% helped by factors such as the abolition of textile export quotas in January 2005. In addition, private consumption has seen a robust increase because of the expansion of expenditures related with housing, leisure and culture and entertainment.

Turning to the Japanese economy, its GDP growth rate dropped from 5.4% in the first quarter of 2005 (annual rate compared with the preceding period) to 1.1% in the second quarter. However, business, consumer and financial sector confidence indexes have been showing a modest improvement and employment indices have

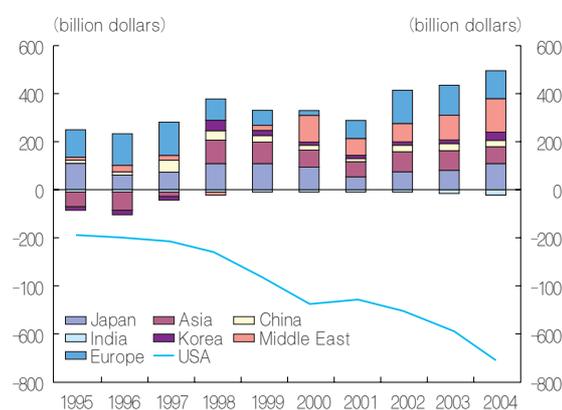
<Figure II -1>

Economic growth and outlook of selected economies



<Figure II -2>

Comparison of trade balances by major countries



also picked up in certain respects, heightening expectations of a resurgence of business activity.

In the meantime, the euro-zone economy is still registering a weak growth rate owing to the protracted listlessness of domestic consumption.

Recently, the world economy has been beset with many structural factors making for destabilization including the gap between the growth rates of the group of nations that are leading growth and other countries including those in the euro-area, the US current account deficit that is equivalent to as much as 6% of its GDP and the pressure for further appreciation of the Chinese yuan. Although prices in all these countries remain stable currently, there exists a possibility that persistently high oil prices may gradually push up expected inflation.

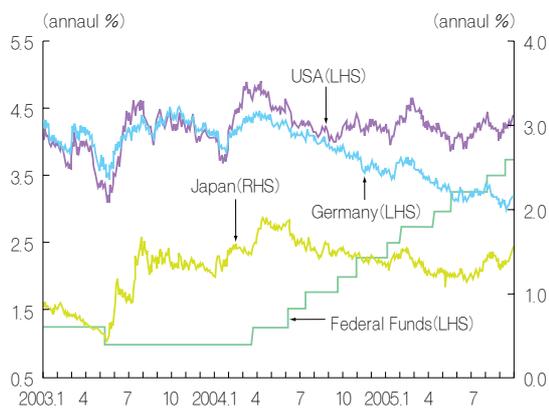
Stock and bond prices rise and dollar remains strong

Long-term market interest rates in major countries have shown downwardly stable trends despite the continual ratcheting up of the FRB’s policy interest rate. Prices of stocks and junk bonds fluctuated in line with investors’ risk appetite, but on average, the prices are higher than those prior to June 2004 when the FRB embarked upon its policy interest rate increase.

Despite the FRB’s raising of policy interest rates since June 2004, the yields on long-term Treasury bonds in the US, Japan and Germany as of September 2005 are lower than those in May 2004. Notably in the US, long-term market interest rates ran counter to the upward trend of short-term market interest rates. This situation is ascribable to the reduced term premium¹⁾ on long-term bonds as a result of stabilization of market

<Figure II -3>

Long-term interest rates in selected industrial economies



Note: Yields on 10-year Treasury bonds
Source: Reuters

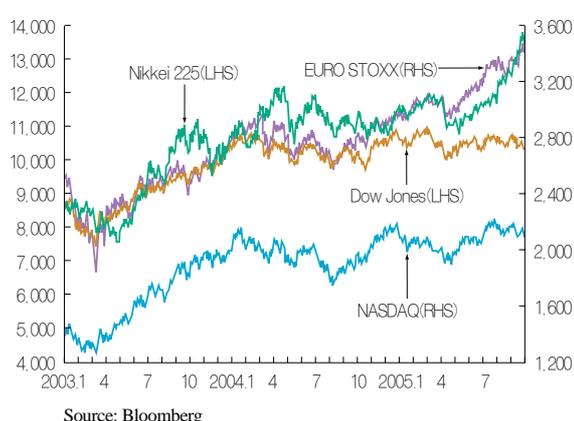
participants' view on expected inflation and the heightened predictability of monetary policy. It also reflects the overhaul of the pension system²⁾ and the subsequent swelling demand for long-term risk-free bonds as well as sustained purchases of US Treasuries by Asian central banks.

Stock prices have remained on a steady rise since 2004 against the backdrop of favorable business performance, increasing M&A's in the US and European markets and corporate releveraging³⁾ notwithstanding such negative factors as high oil prices, the policy interest rate increase by the US and the downgrading to speculative of GM bonds. In 2005, the volatility of the stock prices of major economies dropped to the lowest level since the mid 1990s. It is surmised that equity market risks are dwindling while investors' risk appetite is becoming larger.⁴⁾ Recently, however, investors have been paying increasing attention to the strengthening of the negative correlation between oil prices and stock prices and the possibility of an abrupt credit squeeze.

As of September 2005, the credit spread of US corporate bonds remained in the 100bp range (Aaa

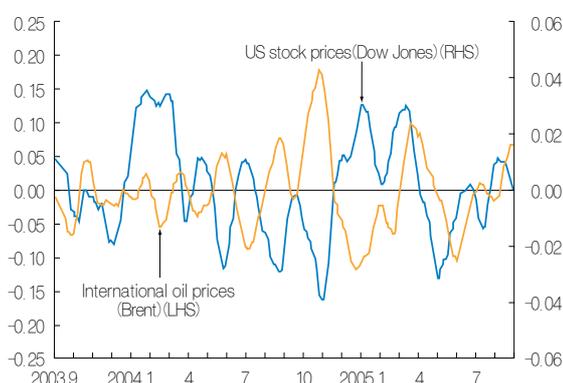
<Figure II -4>

Stock price indices of selected industrial economies



<Figure II -5>

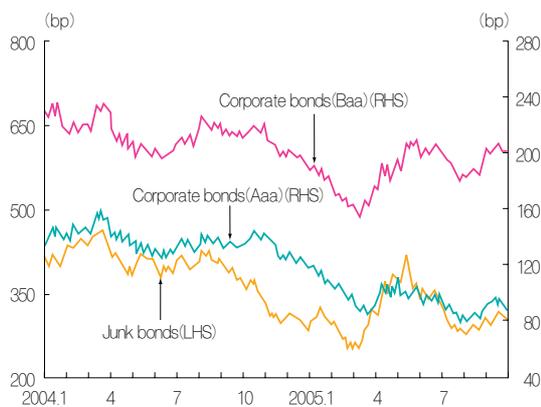
Relationship between international oil prices and US stock prices



- 1) Yields on long-term bonds can be divided into the average expected short-term yields of the future and term premiums reflecting the uncertainties surrounding the distribution of short-term yields.
- 2) The pension reform plan unveiled by the US Department of Labor in January 2005 encompasses new accounting rules including fair value-based assessment of pension fund assets (current rules allow for asset value smoothing) and discounts according to the spot yield curve of prime corporate bonds. Thus, interest rate risks of pension fund portfolios are expected to be exposed in a more transparent manner upon the introduction of the new system. Accordingly, the pension reforms being undertaken by such countries as the US, Netherlands and Sweden are deemed likely to induce the purchase of long-term bonds to narrow the duration gap between assets and liabilities.
- 3) Releveraging in corporate financing refers to debt expansion or equity to debt swaps that do not normally accompany real investment. Among specific examples is companies' application of money raised through corporate bond issuance to dividend payments or treasury stock purchase in order to increase stockholder value.
- 4) BIS, "75th Annual Report", June 2005

<Figure II -6>

US credit spreads



Note: Compared to 10-year Treasury notes
Source: Bloomberg

corporate bond basis), the lowest level since 1998, despite the shift in the underlying monetary policy stance. This is attributable to low interest rates and investors’ “search for yield” portfolio management. Such low credit spreads result from the lowest-ever probability of default⁵⁾ of companies as a result of bright prospects for yield generation and a sounder financial structure. It is also ascribable to easier credit risk management thanks to diversification of instruments for transferring credit risk including asset-backed securities.

<Table II -1>

Bank ROA of major economies

	2000	2001	2002	2003	2004	2005
USA	1.14	1.14	1.30	1.38	1.33 ¹⁾	1.31 ¹⁾
Japan ²⁾	0.12	0.00	-0.13	-0.16	-0.03	0.04

Notes: 1) Based on the performance in the 1st half of the year (based on annualized rate)

2) Fiscal year (beginning of April-end of March each year)

Source: US FDIC and Japanese Bankers’ Association

Financial institutions in major countries including the US and Japan remain in good shape in terms of managerial status. The composite ROA of member banks of the Federal Deposit Insurance Corporation stood as high as 1.31% in the first half of 2005 thanks to the faster expansion of their interest-bearing assets that offset the effects of the narrowing of the net interest margin.

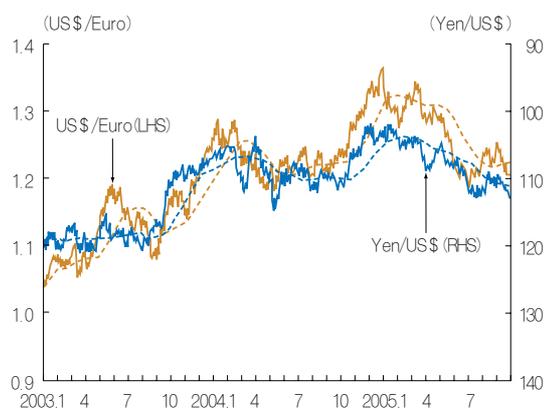
Japanese banks⁶⁾ registered reduced interest income because of narrowing of the net interest margin, but they shifted to a slight surplus, the first in five years (fiscal year 2004~2005 basis), thanks to the lightened burden of setting aside loan loss reserves, the reduction of administrative expenses and buoyant fee-based income.

From January 2005, the US dollar maintained renewed strength against the euro and the yen, reflecting the difference between the growth rates of the advanced countries and the FRB’s increase of its policy interest rate. This situation was apparently also driven by such

5) BIS, “75th Annual Report”, June 2005; Creditedge.

6) The 129 banks making up the Japanese Bankers’ Association including city banks (7), regional banks (64), regional banks II (48), trust banks (8) and others (2).

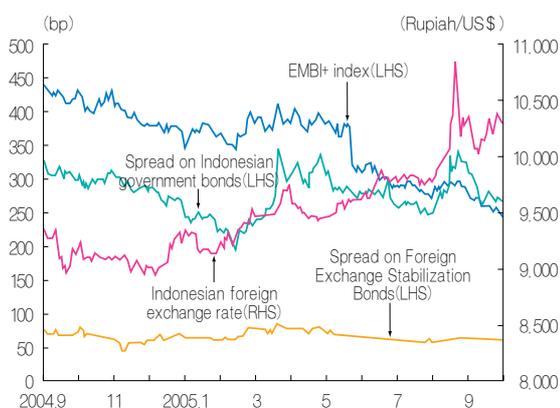
<Figure II -7>

Selected foreign exchange rates

Notes: 1) Closing prices in the local market
2) Dotted lines are 60-day moving averages.

Source: Bloomberg

<Figure II -8>

Indonesia's foreign exchange rate and spread on Korea's Foreign Exchange Stabilization Bonds

Note: Spread on government bonds is for 2014 maturities in the case of Indonesia and for 2013 maturities in the case of Korea.

Source: Bloomberg

transitory factors as increasing settlement demand⁷⁾ for the US dollar amid high oil prices and by the French and Dutch rejection of the draft European Constitution. The saving ratio in the USA, though, is running around the 14% level, the lowest since the Great Depression.⁸⁾ Moreover, its current account deficit is constantly widening. Consequently the sustainability of the strong dollar trend is somewhat problematic from a long-term perspective.

International financial market environment contributes to stabilizing domestic financial markets

The underlying easing trend in international financial markets including investors' greater willingness to take on board risk favours foreign currency borrowings⁹⁾ by Korean companies. The inversion of the US-Korean policy interest rate differential since July 2005 has not had a serious impact on capital flows or the exchange rate. This seems partially ascribable to a situation in which long-term market interest rates in major economies including that of the US are moving in an opposite direction to the upswing of short-term market interest rates.

In the meantime, the exchange value of the Indonesian rupiah plummeted toward the end of August 2005 on fears of widening fiscal deficits in the country as a

7) The US dollar currently continues to be used as the main international settlement currency for crude oil.

8) The lowering of the savings ratio in advanced countries including the USA is caused by the rise in housing prices, an aging population, the decrease of nominal interest rates (savings rates have a stronger relation with nominal interest rates than with real interest rates) and the relaxation of borrowing constraints. (The Bank of Korea, "Trends and Indications of Savings Rates in Major Countries", Foreign Economy Focus 2005-34 Issue, August 2005)

9) The spread on Foreign Exchange Stabilization Bonds rose to 70-80bp from late March to mid-May 2005 when the international credit market was tight, and has since shown downward stability at around 60-65bp.

result of the oil price hike, (Indonesia having now become a net importer of oil) and the burden of oil subsidies. Unlike the Asian foreign currency crisis in 1997, there was no contagion effect on other emerging markets.¹⁰⁾ If, however, a sudden rise in expected inflation rates brought about by high oil prices or financial instability in another country were to result in the rapid drying up of international financial markets, then the possibility could not be completely discounted that the Korean economy might be exposed to a contagion effect. Constant vigilance is accordingly required.

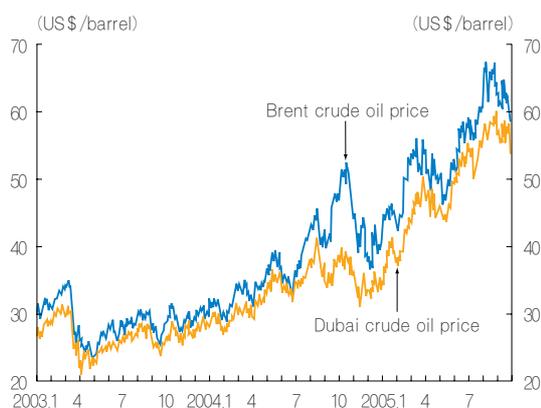
Increasing instability of oil and raw material prices

Apart from two short lived corrections in late October 2004 and April 2005, international oil prices moved consistently upward, bringing the price of the benchmark Brent crude to 62 dollars per barrel by the end of September 2005.¹¹⁾

Since March 2005, the international crude oil market has been exhibiting what is called a “contango” pattern, a situation in which oil prices for future delivery exceed spot prices. A resultant increase in crude oil inventories¹²⁾ sparked a correctional fall in oil prices in early April through mid-May 2005. From mid-May, however, market participants’ optimistic expectations

<Figure II -9>

Global crude oil prices



Source: Bloomberg

10) EMBI+ Index and EMBI Asia Index, which represent the average premiums or spreads of emerging markets, remained stable. In addition, there were no particular movements, in response, in the exchange rates of Asian currencies including the Thai baht and Malaysian ringgit.

11) On the basis of real oil price (in constant dollar terms), this represents about 60% of its peak price (November 1979) during the second oil shock.

12) If future oil prices are higher than spot prices (with interest and inventory costs added), it is possible to conduct arbitrage trading as follows: borrowing → spot purchasing · futures sale → possession of crude oil inventory → delivery · debt repayment. (Haubrich, J. et al, “Oil Prices: Backward to the Future?”, Economic Commentary, FRB of Cleveland, December 2004)

concerning the world economy, coupled with seasonal demand, caused a rebound in oil prices despite growing crude oil stock.

The consistent run-up in oil prices is fed by the growing crude oil demand from Asian emerging markets including China and India as well as increasing insecurity concerning the long-term outlook for oil prices due to decline of the surplus production capacity by oil producing countries including OPEC members. It is notable though that in contrast to the oil shocks of the 1970s, oil prices now have a sharply reduced impact on the real economy, lessening the price sensitivity of crude oil consumption. This renders more difficult the automatic adjustment of the international crude oil market.

Regarding the price of other raw materials excluding crude oil, the price of non-ferrous metals is on a steady rise while that of grains is stable. Overall, the price of raw materials has shown no substantial change since April 2005.

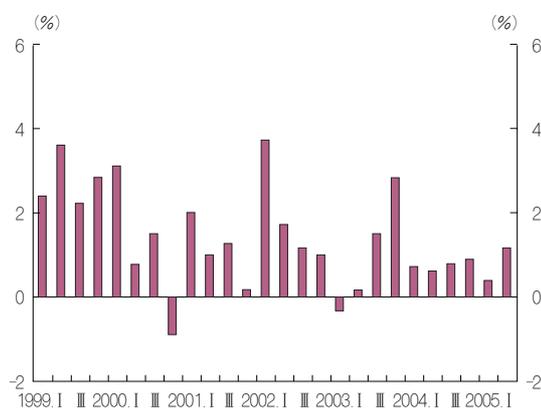
Korean economy picks up gradually

Despite the blunted growth of global trade in 2005, Korea has been witnessing a solid increase in its exports, with consumption also showing signs of gradual recovery. In the first half of 2005, the worsening terms of trade brought about a sharp widening of the gap between GDP and GNI growth rates¹³⁾, placing strains on individual agents'

13) In the first half of 2005, the country recorded a real GDP growth rate of 3%. Because of the worsening terms of trade, however, it registered a close-to-zero real GNI growth rate, which represents the real purchasing power of households. The Real GNI growth rate is closely related with the perceived strength of the economic recovery. Empirical analysis indicates that the gap between real GDP and GNI growth rates negatively influences future consumption for eight to nine quarters.

<Figure II -10>

GDP growth in Korea



Note: Seasonally adjusted (real), quarter-on-quarter figures
Source: The Bank of Korea

perceptions of economic recovery. However, it is expected that the trend toward a recovery of business activity will progressively gather pace from the second half of 2005.

On the prices front, the upward pressure on costs exerted by high oil prices has been offset by the stable trend of unit labor costs and the downward trend of agricultural product prices due to favorable weather conditions. In general, prices remain stable because of the weakness of demand-pull inflation pressures. The current account accumulated a surplus of 27.6 billion dollars in 2004, and the underlying surplus trend was maintained on into 2005. However, the likelihood is that the size of the surplus will contract substantially from the preceding year owing to swelling crude oil imports, slowing export growth and heavier spending on foreign travel.

<Box II - 1>

Foreign currency crises and contagion effects

Theories about the causes of foreign currency crises include (i) the first-generation foreign currency crisis model* that regards speculative attacks as being generated by long-standing frictions between economic fundamentals and exchange-rate levels; (ii) the second-generation model emphasizing self-fulfilling market expectations,** (iii) the third-generation model which considers the fragility of a financial system as giving rise to foreign currency crisis; and (iv) the contagion-effect model that focuses on the international spread of crises. The currency crisis that hit Indonesia in August 2005 has attracted attention from the perspective of financial stability, because there may still remain the possibility for a financial crisis in another country to have repercussions on Korea by way of the contagion effect even though Korea's current macroeconomic fundamentals and the soundness of its financial system are very much better than at the time of the 1997 currency crisis.

* The foreign currency crises that wreaked havoc in South and Central America in the 1970s are the major field of study with this model applied (Krugman, P., "A Model of Balance of Payment Crises", *Journal of Money, Credit and Banking*, 1979.11).

** According to this theory, anticipations that massive speculative attacks may force the foreign exchange authorities to abandon defensive measures owing to their excessive costs (increasing unemployment, economic depression, etc.) may translate into actual speculative attacks. The 1992 foreign currency crisis that erupted in the European Monetary Union (EMU) is a prime example.

According to the contagion effect model, if a foreign currency crisis takes place in a certain nation, it may spread to other countries as investors scramble to pull out their funds for fear of the same situation in neighboring or economically similar countries. There are many examples to support this model. The Mexican foreign currency crisis (tequila crisis) of December 1994 led to crises in Argentina, Brazil and the Philippines in early 1995. In the case of the 1992 EU currency crisis, the attack against the British pound resulted in attacks against the currencies of Ireland, Portugal, Spain, Italy and France. In a subsequent development in northern Europe, a foreign currency crisis in Finland sparked another crisis in Sweden and Norway. Another example of contagion is the outbreak of speculative attacks against the Indonesian rupiah and the Malaysian ringgit hard on the heels of the July 1997 currency crisis on the Thai baht.

Foreign-currency crisis contagion takes place through various routes. Firstly, there may be changes in trade and relative foreign exchange rates. If the exchange value of a country's currency declines (devaluation), it undermines the export competitiveness of neighboring countries that are major trading counterparts or competitors in export markets, worsening their current account position. Secondly, contagion may be triggered by similarities in macroeconomic policies and economic circumstances.

The Mexican foreign currency crisis in 1994 affected not only its neighbors in South and Central America, but also the Philippines, Hong Kong, Malaysia and Thailand that had no significant volume of trade with Mexico. From this perspective, investors become dubious about other countries in the event of a currency crisis in any one country, taking interest in the similarities of their economic conditions and macroeconomic policy management, and this may ultimately lead to the spread of the crisis through contagion. Thirdly, contagion may be based on financial interdependence. In cases where one country suffers a crisis or where foreign investors withdraw their funds from it, the crisis may widen through contagion to other countries. This is because, in the event of a foreign currency crisis in a nation, the quality of assets held by its overseas investors including banks deteriorates, causing them to call in loans provided to other countries in the attempt to maintain their capital adequacy ratios and similarly shore up their own capital adequacy.

The massive depreciation of the Indonesian currency in late August 2005 did not give rise to a contagion effect on neighbouring states such as Thailand and Malaysia. Ostensibly, this is largely ascribable to the divergence of macroeconomic fundamentals between Indonesia, suffering from relatively lackluster exports and investment together with foot-dragging in its improvement of fiscal soundness, and other emerging Asian market economies, which had moved swiftly to strengthen the fabric of their economy through restructuring in the wake of the 1997 foreign currency crisis.* Even in the event of a divergence of macroeconomic fundamentals, however, a crisis may spread through contagion by way of the channels of financial interdependence or the self-fulfilling expectations of the market. Consequently, a constant watch must be kept to avoid such eventualities.

* Among other reasons that the Indonesian crisis has so far failed to generate any marked contagion effect is that the swelling burden of fuel subsidies caused by high oil prices, which directly touched off the sharp depreciation of the Indonesian rupiah, was a problem that was specific to that country.

Comparison of recent macroeconomic conditions of three southeast asian nations

	2001	2002	2003	2004	2005p
Real GDP growth rate(%)					
Indonesia	3.8	4.4	4.9	5.1	6.0
Thailand	2.1	5.4	6.8	6.5	..
Malaysia	0.3	4.1	5.3	7.0	6.0
Current account/GDP(%)					
Indonesia	6.9	7.8	8.1	3.2	1.9
Thailand	6.2	7.0	8.0	6.4	..
Malaysia	8.3	8.4	12.9	13.5	13.2
Fiscal balance/GDP(%)					
Indonesia 1)	-3.2	-1.5	-1.9	-1.4	-1.0
Thailand 1)	-2.9	-2.8	0.2	-0.1	..
Malaysia 2)	-0.3	-0.9	-1.2	-0.5	1.0
Foreign currency reserve/ short-term foreign debt(%)					
Indonesia	78.5	126.2	153.2	195.7	152.6
Thailand	121.2	154.5	210.6	223.6	..
Malaysia	261.4	243.8	334.0	461.9	475.8

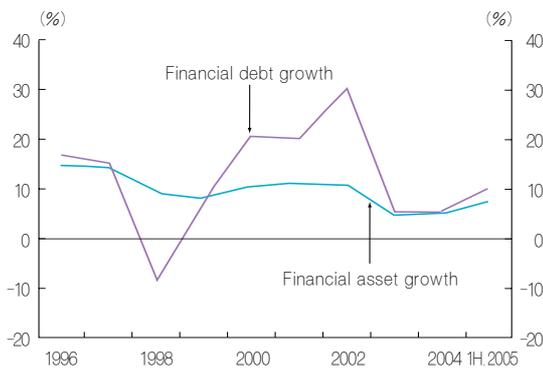
Note: 1) Central government balance 2) Integrated financial balance
Source: IMF

2. Households' debt servicing capacity

Growth of household financial assets and borrowings expanded slightly

<Figure II -11>

Household financial asset accumulation and debt growth¹⁾



Notes: 1) Compared to the previous year-end. The growth rate in the first half of 2005 is annualized.

2) Financial assets and debts exclude non-interest-earning assets and liabilities such as trade credits.

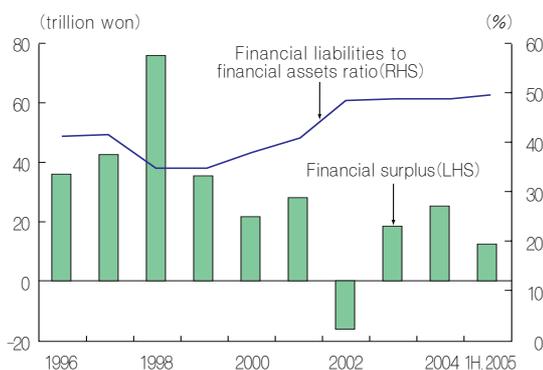
Source: The Bank of Korea

In the first half of 2005, the growth of households' ¹⁴⁾ financial liabilities saw a slight acceleration of its upward trend, registering an annual rate of 10.0%. Household financial assets, meanwhile, also picked up slightly from the previous year to mark an annual rate of 7.3%.

The capital gearing ratio, which measures the ratio of financial debts to financial assets, registered 49.3% as of the end of June 2005, a slight rise from the end of 2004. Korea's capital gearing ratio is substantially higher than the 25-30% posted by the US, the UK and Japan. Compared with major industrialized countries, ¹⁵⁾ real assets make up a much larger proportion of households' total assets in Korea. Therefore, in the event of any external shock including a fall in real estate prices or a deterioration in employment conditions, Korean households are deemed to have a relatively small capacity to absorb the impact through financial assets.

<Figure II -12>

Household financial surplus¹⁾ and financial liabilities ratio



Note: Financial surplus = financial assets growth - financial liabilities growth

Source: The Bank of Korea

Improvement in household debt servicing capacity is unsatisfactory

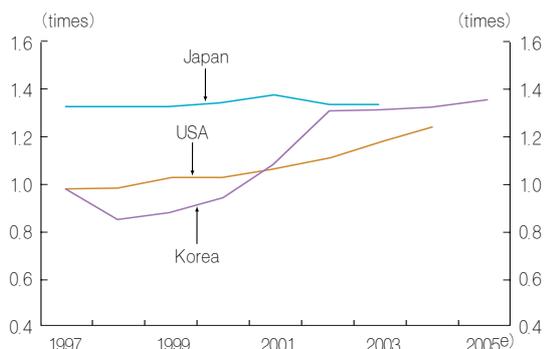
The household sector's capacity to meet payments of

14) The household sector refers to individuals as defined in the flow of funds tables. It includes small-sized personal companies and private sector not-for-profit organizations.

15) The ratio of real assets to total assets of Korean households is estimated at about 80% whereas in such countries as the US and Japanese ratio lies in the 30-40% range, half that of Korean households.

<Figure II -13>

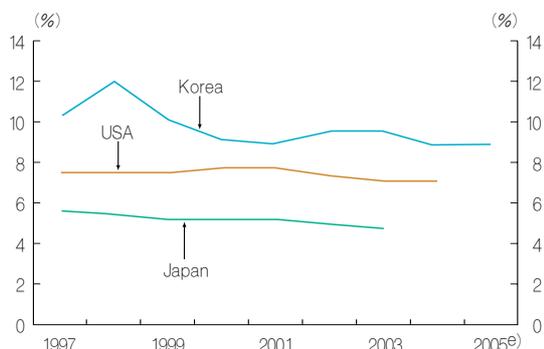
Household debt/personal disposable income



Notes: 1) Personal disposable income is net disposable income of individuals (same hereinafter).
 2) The Korean figure for 2005 is an estimate.
 Source: Statistics of national accounts (SNA93) and flow of funds tables of each country

<Figure II -14>

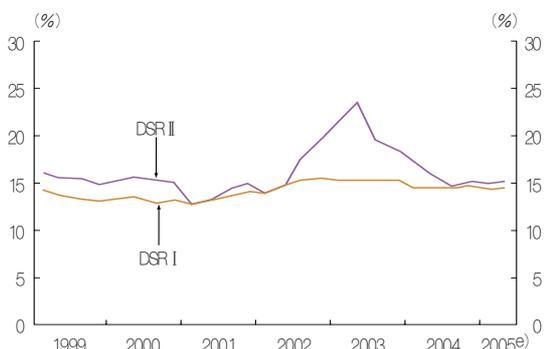
Household debt interest payments/personal disposable income



Note: The Korean figure for 2005 is an estimate.
 Source: Statistics of national accounts of each country

<Figure II -15>

Household debt principal and interest payments/personal disposable income



Note: DSR I is calculated as (normal principal payment + interest payment)/disposable income and DSR II is calculated as (normal principal payment + interest payment + credit limit reduction or prepayment)/disposable income.
 Source: Estimates by the Bank of Korea based on the statistics of national accounts, flow of funds table, etc.

debt principal and interest had been showing signs of a steady recovery in 2004, but has not improved in 2005 because of an increase in household debts, especially mortgage loans.

The debt to income ratio, which indicates households' ability to service financial obligations from disposable income, sharply rose to 1.3 times in 2002, and has since remained virtually unchanged.

As regards cash flows of households, the income gearing ratio - the ratio of debt interest payments to disposable income - did not improve in the first half of 2005 as a result of increasing household liabilities and the slowing of the decline in lending interest rates. In 2005, there was a slight increase in the debt service ratio - the ratio of debt principal and interest payments to disposable income - which had remained on a steady downward trend from its peak in the first half of 2003 thanks to households' adjustment of their balance sheets.

Such ratios are not much higher than those of major industrialized countries. Given that the level of financial asset accumulation by Korean households is lower than that in those countries, however, it is essential that these ratios be consistently reduced so as to bolster domestic households' ability to weather an external shock or interest rate increase.

In the composition of households' financial assets, interest-bearing financial assets make up a large proportion in Korea, unlike in advanced nations which show a higher percentage of stocks. Besides this, in Korea the scale of these interest-bearing financial assets is larger than that of interest-bearing financial liabilities.¹⁶⁾ Accordingly, the burden of interest payments arising from an increase in interest rates is

<Table II -2>

Household-sector financial balance-sheet¹⁾

(trillion won)

Assets		Liabilities and Balance	
Cash ²⁾	36.7	Loans	530.7
Deposits	615.6	- Bank	311.4
Life insurance & pension	230.6	- Insurance/leasing & non-banking financing corp.	100.0
Short/long-term securities ³⁾	115.1	- Other	161.1
Stocks	60.5	Trade credits	29.0
Equities other than stocks	23.1	Miscellaneous	19.5
Miscellaneous	42.9	Total debts	581.2
Total assets	1,124.1	Financial surpluses and deficits ⁴⁾	542.9

Notes: 1) Based on the flow of funds table as of the end of the 2nd quarter of 2005.

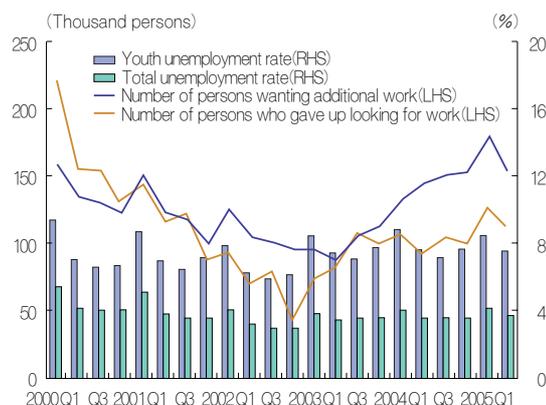
2) Including demand deposits.

3) Securities indicated in the flow of funds table are based on their par value, not reflecting their value assessed in accordance with interest rate fluctuations.

4) Financial assets - financial debts

Source: The Bank of Korea

<Figure II -16>

Unemployment rate and underemployment indicators

Note: The number of persons wanting additional work represents the number of persons who wish to work more among those currently working for 1 to 17 hours a week.

Source: National Statistical Office

not expected to be serious. In addition, commercial and specialized banks' household loans carrying a relatively low level of lending interest rates are gradually taking up an increasing share of overall household loans. This may also serve as a positive factor in reducing the burden of interest payments weighing on households.

No improvement in the weak credit standing of low-income households

The debt servicing capacity of those in low-income brackets shows no sign of improvement.

In the first half of 2005, the overall unemployment rate was 4.0%, up by 0.2 of a percentage point from the same period of the previous year. Unemployment among the young (that refers to those at the age of 20 through 28 who are entering the job market) shows no consistent improvement. In terms of the quality of employment, among those working less than 18 hours per week, the number wanting more hours of work has been on a steady rise since the third quarter of 2003, and the number of those termed "discouraged workers", such as those who have given up searching for a job in frustration, has increased slightly from 2004.

The broad picture of household financial balance sheets

16) As of the end of March 2005, the portion of deposits in household financial assets in Korea is far higher than that in foreign countries. The deposit to loan ratio is 117.6% in Korea, 46.3% in the US and 79.4% in the UK. Unlike industrialized nations, the amount of interest-bearing assets is larger than that of interest-bearing debts.

Asset composition in the flow of funds table(%)

	Deposit	Insurance & pension	Bonds	Stocks	Others
Korea	57.7	20.7	10.5	5.4	5.7
US	13.2	28.8	10.4	44.2	3.4
UK	27.1	52.1	1.6	16.1	3.1

<Figure II -17>

Household balance by income bracket

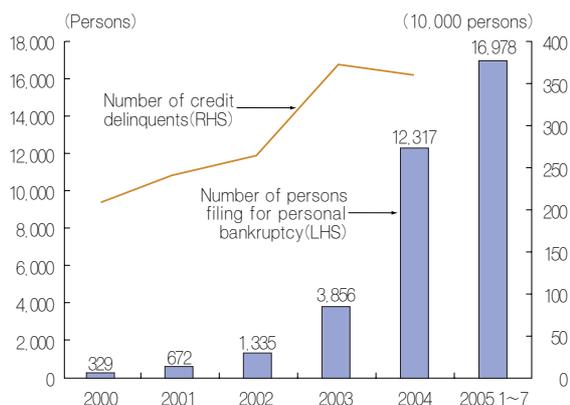


Note: Households of urban workers
Source: National Statistical Office

by income bracket (based on urban workers) may be summarized as follows. The balance sheets of households as a whole indicate a surplus in the first half of 2005 at the average level of the past few years since economic recovery is not yet in full swing. The income and expenditure of low-income households in the first through third deciles show no improvement. The surplus registered by the third-decile households, which had registered relatively favorable income and expenditure, showed signs of narrowing in 2005. In addition, the employment rate¹⁷⁾ of household members of people in low-income brackets remains consistently below the average of all income brackets, with the gap even widening slightly. Thus, it is difficult to foresee an improvement of this group’s household balance sheets through an increase in household income.

<Figure II -18>

Filings for personal bankruptcy and credit delinquents trend



Source: Supreme Court of Korea and The Korea Federation of Banks

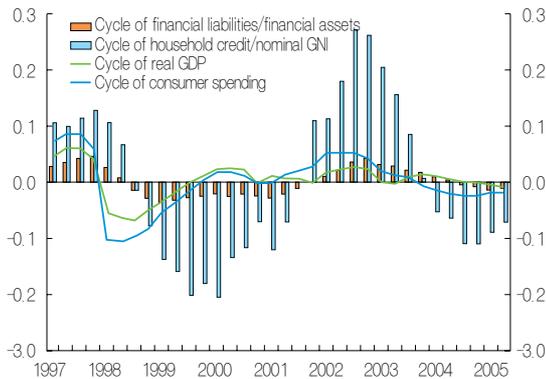
On April 28, 2005, the system of registering persons on a credit blacklist was abolished. At the time of its abolishment, the number of blacklisted people amounted to 3.6 million, about 16% of the economically-active population. Notwithstanding various credit rehabilitation support programs, the number of persons who applied for debt restructuring in order to maintain a basic livelihood was merely 87,000 during the period from April to September 16, 2005 (21.3% of those eligible). Thus, the reduction in the number of blacklisted persons failed to meet initial expectations. In addition, the number of persons filing for personal bankruptcy in January through July 2005 was 17,000, much higher than the 12,000 filings in the whole of 2004.

17) Trend of the employment rates of urban worker households¹⁾ (%)

	2001	2002	2003	2004	1H.2005
Average	43.6	44.5	44.4	45.0	45.5
1st decile	39.4	39.8	39.2	40.2	39.8
2nd decile	39.4	40.7	40.1	39.9	40.6
3rd decile	39.8	40.1	41.4	42.0	41.0

Note: 1) Number of the employed/number of

<Figure II -19>

Household debt restructuring and consumer spending

Notes: 1) Cycle = log variable - HP filtered trend (lambda = 1600)
 2) Financial assets and liabilities are based on flow of funds tables.

Source: The Bank of Korea

Dampening effect of household debt on consumer spending weakens

In 2000~2003, the enlargement of household borrowings boosted consumer spending in the short term through expansion of credit card and housing finance loans. Since 2003, however, the growth of household indebtedness has undermined households' debt servicing capacity, serving as a factor restraining private consumption.

It is expected that the burden of household debt will ease gradually due to the blunting of the growth of household debt in the wake of the August 31 real estate anti-speculation measures. In addition, given the composition of financial assets and debts, the constraints on consumer spending imposed by household indebtedness will be steadily weakened as a possible interest rate increase will not add sharply to the burden of interest payments.

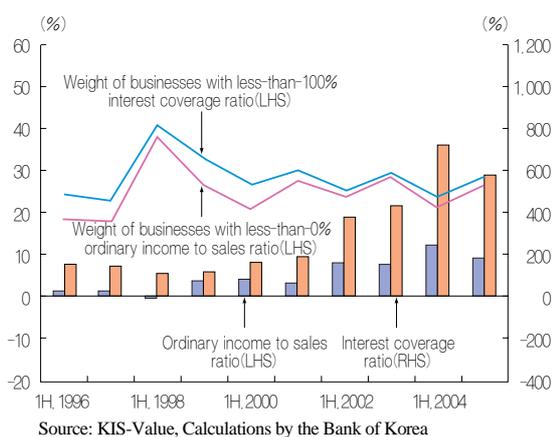
3. Debt servicing capacity of the business sector

Business profitability declines somewhat

In the first half of 2005, the average ordinary income to sales ratio of the business sector¹⁸⁾ moved down to 9.2% from 12.3% in the first half of 2004 for such reasons as shrinking export profits¹⁹⁾ caused by the strong won and worsening terms of trade. Since the first half of 2003, financial expenses have seen a steady decline. However, the larger fall in operating income reduced the interest coverage ratio²⁰⁾ to 571% from 723% in the same period of the preceding year. The percentage of companies with an interest coverage ratio of less than 100%, which means that they cannot even cover interest expenses from their operating income, rose from 23.5% in the first half of 2004 to 28.4% in the first half of 2005. Even though the profitability indicators of Korean businesses worsened to some extent this year, these indicators are at the highest level since 1996²¹⁾ except for the first half of 2004 when they were exceptionally high. Furthermore, they are not lower than those of US and Japanese companies.²²⁾

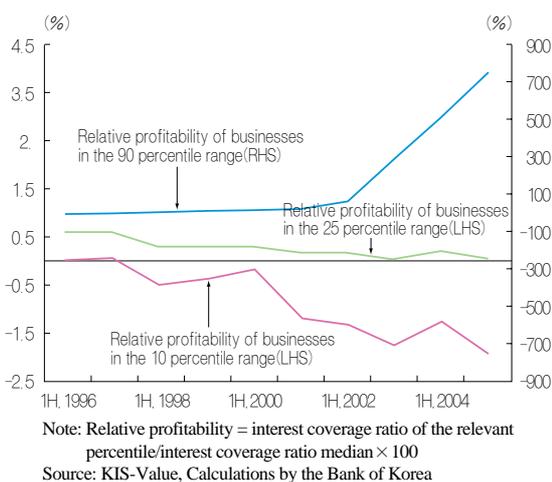
<Figure II -20>

Profitability indicators



<Figure II -21>

Polarization of profitability distribution



18) Businesses listed on the Korea Exchange excluding financial institutions.

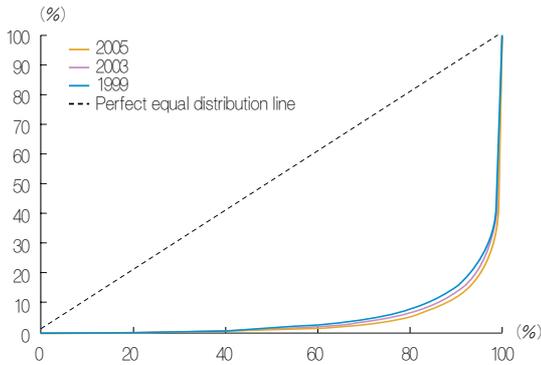
19) The results of an analysis using cross-sectional data by each unit of business line (1st quarter of 2005) indicate that an increase of 1 percentage point in exports brings about a reduction in the ratio of ordinary income to sales by 0.11 of a percentage points. By contrast, the cross-sectional difference in dependence on crude oil by line of business does not have a meaningful impact on the ratio of ordinary income to sales.

20) Interest coverage ratio = (operating income + interest revenue)/financial expenses. (Financial Stability Report 5th issue, April 2005)

21) Manufacturing industry's ordinary income to sales ratio and interest coverage ratio (of businesses subject to the Bank of Korea corporate management analysis) regarding which long-term time series data exist are running at the highest level since the early 1970s except for 2004.

<Figure II -22>

Lorenz curve on surpluses



Notes: 1) Performance in the first half of the relevant year
 2) For companies that registered negative ordinary deficits, their ordinary surpluses were put at zero.
 3) The horizontal and vertical axes respectively represent accumulated corporate ratios and the weights in accumulated ordinary surpluses. Estimates are aligned in order of ascending powers (lower→higher).

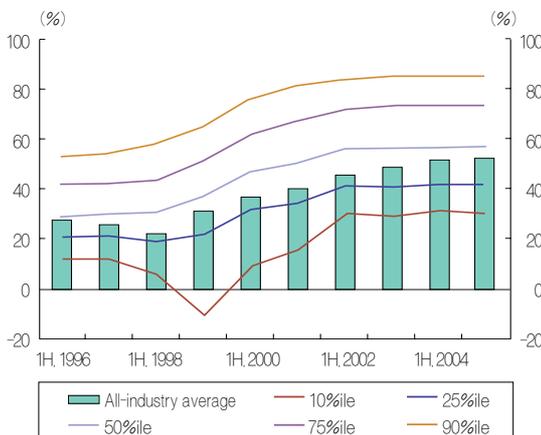
Source: KIS-Value, Calculations by the Bank of Korea

In terms of the distribution of profitability, profitability indicators are becoming increasingly polarized as evidenced by the fact that corporate earnings are concentrated on high-ranking companies while the interest coverage ratio of low-ranking companies is declining. According to the Lorenz curve on corporate ordinary surpluses²³⁾ showing the degree of disparity in profitability distribution, companies in the group of the highest 5 percentile generate 80% of ordinary surpluses (in 2005). This means that profitability distribution remains extremely tilted, with the degree of such leaning getting more and more serious. In particular, the interest coverage ratios and the ordinary income to sales ratios of companies in the lowest 10 percentile group are at their most vulnerable level since the currency crisis. Fortunately, however, the share of debt held in the lowest 10 percentile group in terms of the ordinary income to sales ratios and the interest coverage ratios (in the first half of 2004) stood at only 0.27% and 2.1% respectively. Therefore, these companies are likely to have a minimal impact on the stability of the financial system.

Favourable financial soundness and liquidity

<Figure II -23>

Stockholders equity to total assets



Source: KIS-Value, Calculations by the Bank of Korea

As of the end of June 2005, the stockholders' equity to total assets ratio (52.7%)²⁴⁾ rose by 1 percentage point from the same period of the previous year, registering an increase for the seventh straight year since 1998

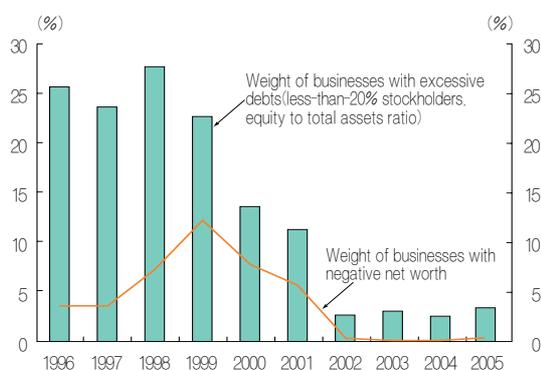
22) The ordinary income to sales ratios of the US and Japanese manufacturing industries are 9% (2004) and 4% (2003), respectively, while interest coverage ratios are 397% (2004) and 578% (2003). (The Bank of Korea, Company Management Analysis, July 2005).

23) Originally, the Lorenz curve is an index showing the level of income inequality. For the purpose of this study, the principles of the Lorenz curve were applied to the cross-sectional data regarding Korean businesses' ordinary surpluses (aligned in ascending powers), with the X-Y graph representing companies' accumulated portion in numbers (horizontal axis) and their accumulated share in surpluses (vertical axis).

24) Stockholders' equity to total assets ratio = stockholders' equity/total assets

<Figure II -24>

Businesses with fragile credit soundness



Source: KIS-Value, Calculations by the Bank of Korea

(21.7%). In terms of the debt ratio, this represents a level of 89.8%, which is much lower than that of the USA, Japan and other advanced nations.²⁵⁾ Businesses standing at the 10 percentile and the 25th percentile showed a stockholders' equity to total assets ratio equivalent to that of June 2004, keeping up with a substantially improved level from the time immediately after the foreign currency crisis. Moreover, the distribution of stockholders' equity to total assets ratios is not exhibiting any extraordinary situations either. Thus, it is believed that businesses in general remain financially sound.

<Figure II -25>

Current ratios



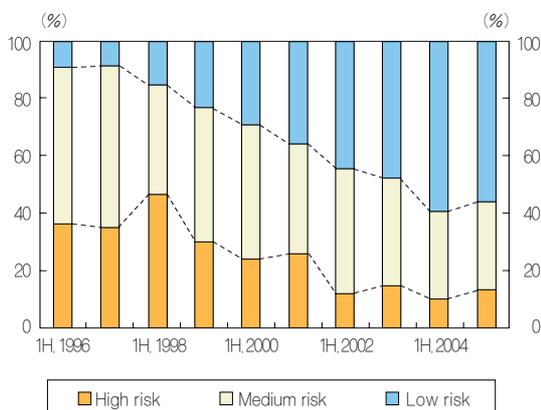
Source: KIS-Value, Calculations by the Bank of Korea

The percentage of businesses with a less than 20% equity to total assets ratio (= over 400% of debt-to-equity ratio) increased by 1 percentage point from 2.7% at the end of June 2004 to 3.7% as of the end of June 2005. However, this percentage is just one fifth of that in 2001 and earlier years. The percentage of businesses with negative net worth has been less than 0.5% since 2002.

As of the end of June 2005, the current ratio²⁶⁾ stands at 117%, up from the same period of the previous year. This is because the growth rate of current liabilities (2.0%) slowed more sharply than that of current assets (7.8%) while the upward trend of current assets and liabilities was blunted.

<Figure II -26>

Distribution of businesses by credit risk rating (large businesses)



Source: KIS-Value, Calculations by the Bank of Korea

Firms' credit risks expected to be reduced

Despite slight improvements in the soundness of financial structure in the first half of 2005, the share of high-risk companies²⁷⁾ increased from the same period

25) The debt ratios for manufacturers in the US and Japan are 141.2% (2004) and 145.7% (2003), respectively.

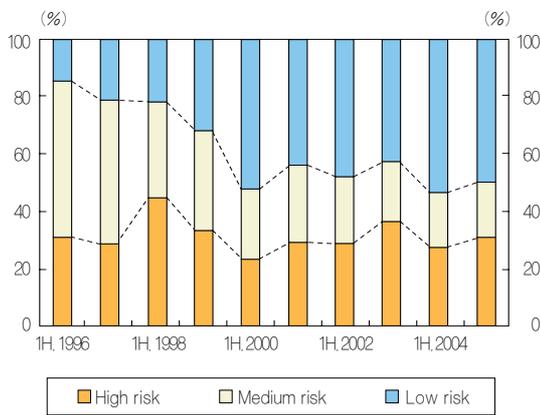
26) Current ratio = current assets/current liabilities

27) Classification method of the Bank of Norway was used (Financial Stability Report 2nd issue, October 2003).

of the preceding year as a result of slowing profitability across the board. A transition matrix of corporate credit risk ratings in the first half of 2005 (one year basis), compared with the first half of 2004, shows the following results: For both large businesses and small- and medium-sized enterprises (SMEs), a slightly higher proportion shifted to the high risk group and a lesser proportion to the low risk group.

<Figure II -27>

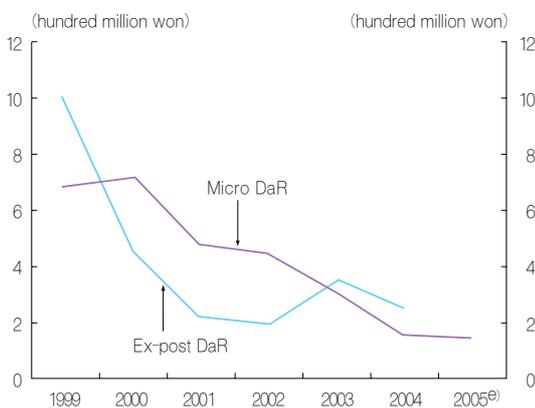
Distribution of businesses by credit risk rating (SMEs)



Source: KIS-Value, Calculations by the Bank of Korea

<Figure II -28>

Corporate DaR¹⁾²⁾



Notes: 1) DaR/number of sample companies at the end of the previous year
 2) Micro DaR represents the total of (estimated probability of default x amount of borrowings of the relevant companies) while ex-post DaR represents the total borrowings at the end of the previous year of businesses that fell into default.

Source: KIS-Value, Calculations by the Bank of Korea

The share of high-risk group among large businesses has been changing slowly since the first half of 2002 in the 10 to 15% range, some 20 percentage points lower than the average during the period from 1996 to 2001 (32.9%). Among SMEs, the share of high risk firms remains at 31.2%, a level similar to the historical average (31.4% in the 1996-2004 period). Considering that the share of debts held by high risk SMEs was just 1.3% as of the end of the first half of 2004, this is not considered to be a cause for concern.

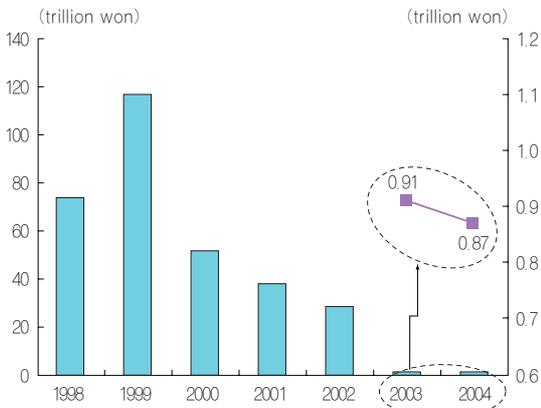
In the meantime, the DaR(Debt at Risk),²⁸⁾ which is calculated by multiplying each company's probability of default by its outstanding debt, puts forward a forecast that the total risks of the business sector at the end of 2005 will be less than those of 2004. This is ascribable to the fact that improvements in macroeconomic conditions²⁹⁾ including recovery of domestic consumption and low interest rates have reduced the average probability of default in the business sector and that borrowings by companies with

28) DaR(DaRi) of a certain company represents the expected value of loan losses that financial institutions may sustain due to the company under the assumption that the loss given default (LGD) is one. DaR of the business sector is a proxy for total corporate risk and is calculated by adding up individual DaRi's. (Financial Stability Report 5th issue, April 2005)

29) DaR is calculated by using an econometric model which estimates the probability of default for the immediately following year based on businesses' financial statements and macroeconomic indices for the current year. Accordingly, an improvement in the macroeconomic conditions in 2004 pushes down the DaR for 2005.

<Figure II -29>

Borrowings of high-risk businesses



Notes: Aggregate borrowings of high-risk businesses with no-lower-than 1.86% probability of default (90 percentile) (based on companies listed on Korea exchange or subject to external audit).

Source: KIS-Value, Calculations by the Bank of Korea

a high probability of default have been reduced.

It is believed that risks to the financial sector from the business sector have not increased despite a rise in the share of high risk businesses and a fall in profitability. It is necessary to pay constant attention to some potentially destabilizing factors including concentration and polarization of corporate earnings, weakening debt servicing capacity of businesses registering massive deficits as well as SMEs in a lower group, and slowing sales growth.³⁰⁾

30) The sales growth rate in the first half of 2005 was 6.1%, sharply down from the same period of the previous year (23.0%).

4. Real Estate Market

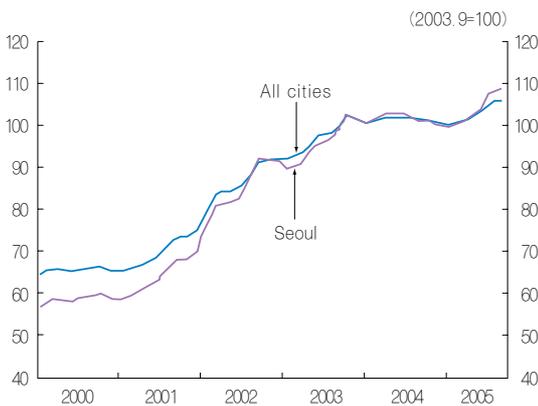
Likelihood of downward stability of housing prices

Housing prices, which had remained stable since November 2004, started to move upward as the price rises in specific areas such as Gangnam (Gangnam-gu, Seocho-gu and Songpa-gu in Seoul), Bundang and Yongin spread out in the early months of 2005 to affect other areas. Apartment prices in Seoul marked a run-up of 8.2% during the period from January to August 2005, the fastest price increase since 2003. This situation destabilized the housing market. The government's prior announcement that it would take tough real estate stabilization measures in August 2005 gradually dampened the upturn of housing prices in July. Since the announcement on August 31 of the measures to clamp down on real estate speculation, there has been a slight fall in housing prices.

Considering concerns about the deflation of the real estate bubble³¹⁾ engendered by the worldwide phenomenon of the surge in housing prices, the downturn in housing prices is considered a desirable adjustment in that it may reduce such risks. It is however difficult for demand and supply in the housing market to adjust within a short space of time. Besides this, the market remains clearly compartmentalised. Thus, it is unlikely that the August 31 anti-speculation measures will remove, all at once, the uncertainties³²⁾

<Figure II -30>

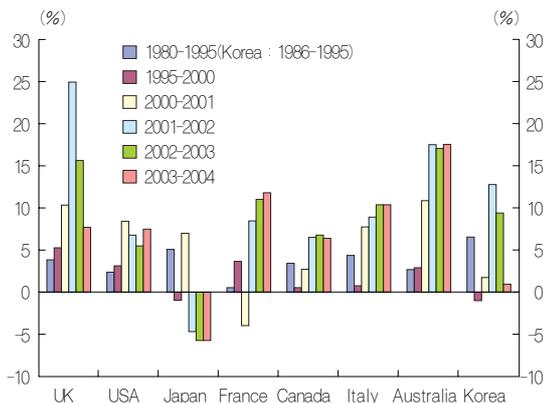
Apartment transaction price index



Source: Kookmin Bank

<Figure II -31>

Real housing price rates of increase in major economies



Source: Cited in Kim Gyong-hwan's "Market Principles, Public Opinion and the Participatory Government's Housing Policies: a Taxation-based Approach (Sept. 8, 2005)."

31) FRB Chairman Alan Greenspan, who had for some time taken an optimistic view of the real estate bubble in the US real estate market, expressed his concerns about possible bursting of the bubble at an FRB conference held in Kansas City in August 2005.

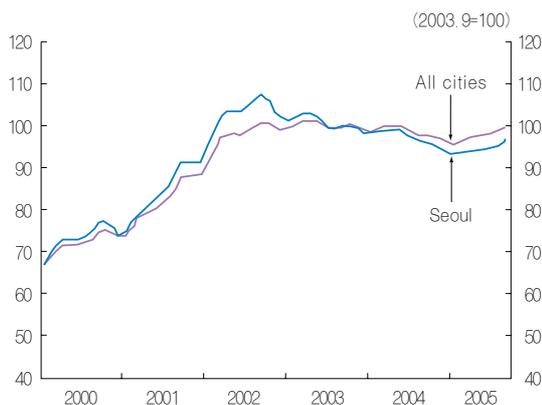
32) In assessing the stability of the prices of such assets as housing, the fluctuation rates of the asset prices are important. However, what is more meaningful is whether there is any disparity between the price level and the market fundamental value of assets and the degree of disparity if any.

underlying the housing market as a result of a sudden sharp rise in housing prices.

Unlike other markets, real estate market demand and supply are characterized by the fact that from a short-term perspective, they do not adjust promptly to price changes. Accordingly, a small number of bullish investors may lead the overall pattern of market transactions. In addition, such factors as a lack of transaction information can easily touch off a herding movement, which attests to the market's high degree of inefficiency. Given these characteristics of the real estate market, long-term stabilization of housing prices requires several measures including consistent government policies, heightened transparency of transaction information and provision of various alternative investment opportunities.

<Figure II -32>

Apartment lease deposit index



Source: Kookmin Bank

Lease deposits³³⁾ had shown downward stability starting from the second half of 2002. Since February 2005, however, they have been moving upward again. Their resurgence is seemingly a response to a combination of short-lived seasonal demand and a rising demand for relocation arising from massive reconstruction projects. There are also frictional factors in play including conversion of the previous demand for the buying and selling of houses into demand for housing leases in line with the real estate price stabilization measures. Leasing prices for Seoul apartments remain at a low level compared with their peak in September 2002. It is believed that the upward movement of lease deposits will not escalate to bring about a troublesome situation

33) In the Korean housing market, leasing does not generally take the form of the deposit of a comparatively small amount of key money and subsequent monthly rental payments. The more common practice is for the lessee to deposit a relatively large lump sum, equivalent to a certain percentage of the market value of the house or apartment. This lump sum is returned upon the termination of the lease agreement without any rent as such being paid, but the lessor having the use of the funds during the period of the agreement.

for the time being. If the August 31 anti-speculation measures dampen apartment supply or prompt prospective apartment sellers/buyers to take a wait-and-see attitude, though, then the level of lease deposits may exhibit instability.

Possibility of land price adjustments

In the second quarter of 2005, land prices, which had continued to rise even when housing price underwent a correction during 2004, rose at their highest rate since 2003. For some time, the land market had shown a pattern of price rises centering on districts where housing prices were also increasing steeply and on areas that were targeted by various business development projects, but during the first half of 2005, land prices rose in almost all areas.

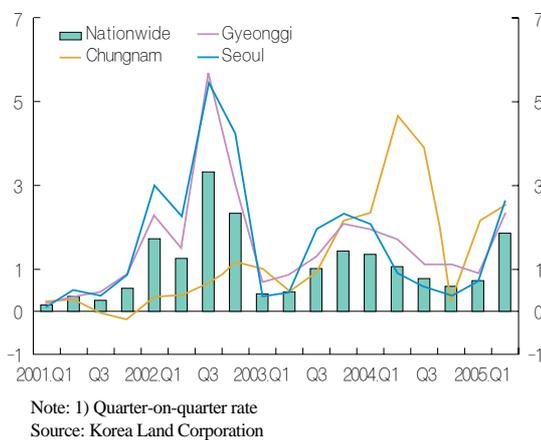
By usage of land, green zone areas registered a price increase of 3.2% during the second quarter of 2005, widening the gap with the rate of increase of the price of land for other purposes. This implies that land prices are being heavily affected by speculative demand.

The land market seems to have settled down somewhat since the announcement of the August 31 measures clamped down on real estate speculation. The supply of land is less elastic than that of housing while a rise in land prices can generate more serious and far-reaching negative effects. Accordingly, in working toward the stability of the real estate market, efforts should be directed not just toward the stabilisation of housing prices but also toward the long-term stability of land prices.

In the commercial real estate market, the lease deposits of offices in the Seoul area remain stable, with the rise in vacancy ratios evident since late 2003 flattening out

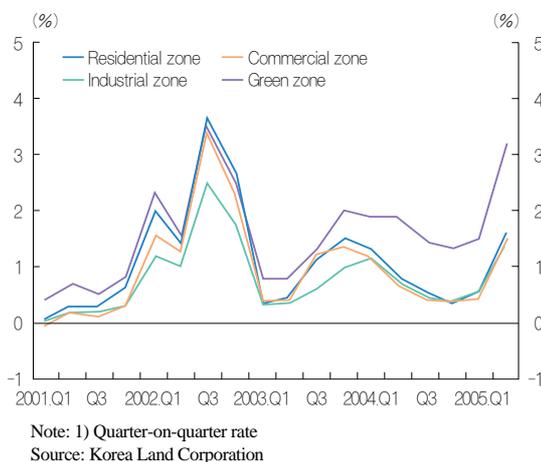
<Figure II -33>

Land price fluctuations by region



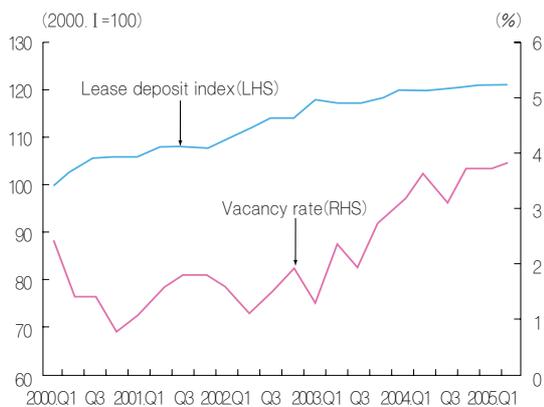
<Figure II -34>

Land price fluctuations by zone



<Figure II -35>

Office lease deposit index and vacancy rate in Seoul



Source: Korea Appraisal Board

<Table II -3>

Lease deposits and vacancy rate by size

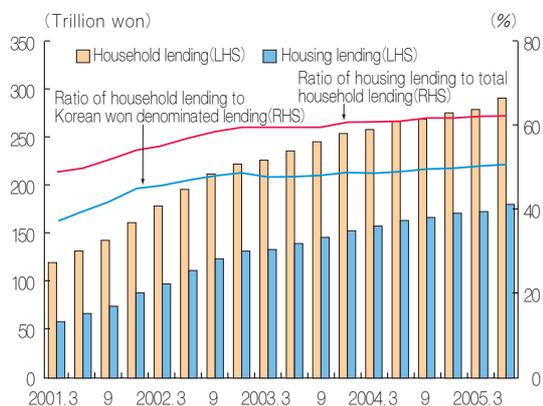
(Thousand won/pyung, %)

		<5,000 pyung	5,000~10,000 pyung	10,000~15,000 pyung	>15,000 pyung
2003	Lease deposit	4,496	4,982	5,640	7,795
	Vacancy rate	4.97	2.81	1.73	2.52
2004	Lease deposit	4,523	5,111	5,751	7,976
	Vacancy rate	6.36	4.05	3.20	2.80
2005.6	Lease deposit	4,541	5,135	5,797	7,995
	Vacancy rate	7.01	4.57	3.61	2.18

Source: Korea Appraisal Board

<Figure II -36>

Housing lending of commercial and specialized banks



Source: The Bank of Korea

in the course of 2005.

In the commercial real estate market, vacancy ratios show a trend of growing polarization by size as the ratio for large buildings with a total floor space of at least 15,000 pyung (1 pyung equivalent to 3.3m²) dropped while that for smaller buildings continued to rise. In particular, the vacancy ratios for those with a total floor space of less than 5,000 pyung stood at 7.01% as of the end of June 2005, far higher than the natural vacancy ratio (3~5%). Considering that the emergence of this polarization in the commercial real estate market results from listless domestic consumption and the restructuring of SMEs, it will not easily be rectified until the economic recovery comes fully fledged.

Contraction of housing finance loans in prospect

The growth of mortgage lending had flattened out since 2003, but still chalked up a substantial increase in the second quarter of 2005. This was because banks scrambled to expand their mortgage lending ahead of the entry into effect of the August 31 anti-speculation measures, bracing themselves for stricter restrictions on housing finance loans. In the second half of 2005, the increase in mortgage loans is likely to slow down considerably as a result of the implementation of the real estate market stabilization measures and the subsequent fall in the buying and selling of housing.

As of the end of June 2005, loans against housing collateral accounted for over 30% of all outstanding loans denominated in Korean won. What is more, the share of loans against housing collateral in total household loans is running at above 60%. Thus, the status of housing finance loans and the real estate market has an increasingly large impact on bank

performance.

The majority of these housing finance loans carry three-year maturities and call for the lump-sum repayment of the principal at maturity. Since 2004, more than a half of new loans have carried more than ten years' maturities, with preferential loan-to-value ratios (LTV) applying to long-term loans. Thus, the maturity of loans against housing collateral shows a gradually lengthening tendency.³⁴⁾

However, most housing finance loans are at floating rates pegged to market interest rates, which may detract from their stability.³⁵⁾ In connection with loans against housing collateral, the ratio of borrowers' loans to income has been on a gradual rise.³⁶⁾ In addition, the income of a significant number of borrowers is frequently not certified. In a situation where borrowers do not have sufficient debt servicing capacity, housing finance loans might act to weaken bank profitability in the event of a simultaneous drop in housing prices and household income.

34) On the basis of the outstanding balance of loans against housing collateral, loans carrying maturities of five years or less accounted for 67.3% of all loans as of the end of June 2005. Therefore, it would be premature to assume that the problems associated with shorter loan maturities have been completely settled.

35) Under floating rates, borrowers assume interest rate risk directly, but financial institutions are inevitably exposed to credit risk consequently.

36) The share of loans provided to borrowers with such ratio of no lower than 250% have been increasing, rising from 15.0% in 2003 to 19.5% in 2004 and 21.1% as of the end of June 2005.

<Box II - 2>

Level of housing prices and risks in asset markets

It is expected that housing prices will level off to some extent thanks to the government's announcement of the August 31 real estate price stabilization measures. In contrast to commodities or service prices, however, a mild flattening out of housing prices or even a small fall in them may well be inadequate to correct deep-seated elements making for market instability.

1. Significance of housing price level

Unlike ordinary commodity prices, the fundamental value of such assets as residential real estate or stocks can be estimated based on the present value of future income flows and so on.* As shown in historical examples of the formation and bursting of asset market bubbles, the asset prices adjust if there exists a sharp variance between the level of market prices and their fundamental value. Accordingly, assuming that the fundamental value of assets does not change within a short period of time, risks are deemed to underlie asset prices if the level of market prices is regarded as exceeding fundamental value even in the case of a slight decline in asset prices. In reality, however, there are severe restrictions on the accurate calculation of the "fundamental value" that serves as the basis for asset price assessment.

* The fundamental values of residential real estate, stocks and bonds can be estimated, respectively, on the basis of rents, dividend yields and the present value of their coupons. In some cases, the estimated long-term trend may be worked out to be used as an alternative for adequate asset prices. Unlike market prices of assets, fundamental values are not volatile. However, they may be subject to change from a long-term perspective, depending on changes in the factors determining fundamental value, the relative preferences for certain classes of asset compared to others, preferences for current consumption versus future consumption, and the level of expectations regarding future income flows.

In addition, real estate makes up a large proportion of households' total assets. The real estate industry generates a significant linkage effect with upstream and downstream businesses. Therefore, fluctuations in real estate prices have a serious impact on not only households, but also the national economy. Accordingly, real estate prices may directly or indirectly influence decision-making by economic entities ranging from households' consumption, savings and future financial asset management to corporate investments. In such processes, economic entities take an interest in the rise or a fall in real estate prices as well as in their current levels. Their decision-making may hinge upon their judgment as to whether the level of such prices is high or low.

As real estate and other such assets are put up as collateral to financial institutions, the availability of funds to owners of real estate and the associated scale to which the supply of credit to them can be expanded are determined according to loan-to-value(LTV) ratios. In the case of a rise in asset prices in particular, the financial accelerator comes into play, additionally expanding credit provision by the amount of the increase in collateral value. This may lead to the accumulation of financial disequilibria through the balance sheet channel.

In a situation where financial disequilibria have deepened, the downward adjustment in asset prices may be on a larger scale than expected. In such case, the collateral value of the underlying assets remains below the amount of loans, exposing financial institutions to the risks of direct losses. Accordingly, the (level of) asset prices are closely intertwined with stability of financial systems and asset price instability may serve to destabilize* the financial systems.

* Before the 1990s, the bursting of stock price bubbles was a primary reason for the destabilization of financial systems. Since then, however, sharp falls in real estate prices have not infrequently destabilised financial systems seriously, as is borne out by the experiences of Japan, Sweden, Finland, Norway and some other countries.

Changes in asset prices are characterized by asymmetric effects, which means that asset prices have a more significant impact on the economy when they are falling rather than when they are rising. The degree of these asymmetric effects varies according to the length of the period of bubble formation and the correction period following its deflation. In terms of the adjustment of asset prices, long-term downward stabilization is more desirable than a short-term plunge. Therefore, it is desirable to set quite a long time horizon for the adjustment of asset prices. In cases where financial disequilibrium has become deep-seated for a lengthy period, a slight fall in asset prices cannot be taken to indicate that unstable asset prices and accumulated financial imbalances have been completely resolved. Besides this, if the financial structure of economic players including households and businesses is weakened, it may serve as a factor lessening financial stability at any time.

2. Assessment of the level of current housing prices

It is extremely difficult to estimate accurately the fundamental value of residential real estate. It is considered that current price levels may plausibly be evaluated based on such time-series data as the trend of real housing prices and the prices of housing compared to income. Because analysis of those time-series data is not based on fundamental value, though, there exist certain limitations on judging the adequacy of current price levels. Furthermore, domestic statistics on housing prices have a less meaningful long-term average because the time series is short and only the statistical data since the late 1980s are available. It should be pointed out that the period from the latter half of the 1980s to the first half of the 1990s was characterised by soaring real estate prices and subsequent social and economic damage, and the extent of a possible housing price bubble could be underestimated if we rely on simply carrying out a price comparison between that period and the present time.

① Real housing prices (nominal housing prices/consumer price indices)

Real nationwide apartment prices,* which had shown stability in the wake of a dramatic rise in the late 1980s through the early 1990s, remained slightly lower than the average during the period covered by the analysis (January 1989~June 2005). More recently, however, real apartment prices in the Seoul area moved above the average during the period under review since 2002. They were also close to their peak in the early 1990s when real estate prices surged. Most strikingly, the price of apartments in Gangnam* have risen to a level 1.4-times

their peak in the early 1990s and 1.7-times the average during the whole of the period under review.

- * From a long-term point of view, real prices exhibit a stronger cyclical pattern than nominal prices.
- * Gangnam or Gangnam area includes Gangnam-gu, Seocho-gu and Songpa-gu in Seoul.

② Housing prices compared to income (housing prices/income)

On a nationwide scale, housing prices compared to income are at much lower multiples than at their peak in the first half of 1991 and fall short of their average during the whole of the period under analysis, despite a sudden price rise since 2001 triggered by steadily increasing incomes. Regarding the Gangnam area, the current income multiple of residential property prices remains above the average during the period under review since 2002 but lower than the highest multiples seen in 1991.

However, the scale of the housing purchased* by economic agents is regarded as gradually enlarging in line with economic growth. If this is reflected in the ratio of housing prices to incomes, it may significantly increase the burden of housing purchase on households. In line with this, when the multiple of housing prices to incomes is calculated to reflect the scale of housing, it is seen to be higher than its average during the period under review in the case of Seoul and, strikingly, that of the Gangnam area is even higher than its 1991 peak.

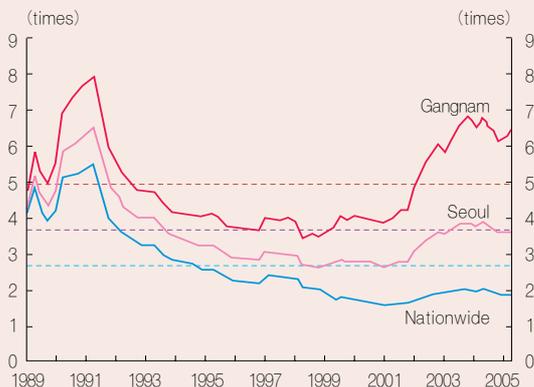
* The scale of housing is based on the two assumptions: i) the size of residential real estate was 23 pyung in 1989 and 33 pyung in 2005 ii) the size has risen uniformly.

Real apartment prices¹⁾ by pyung



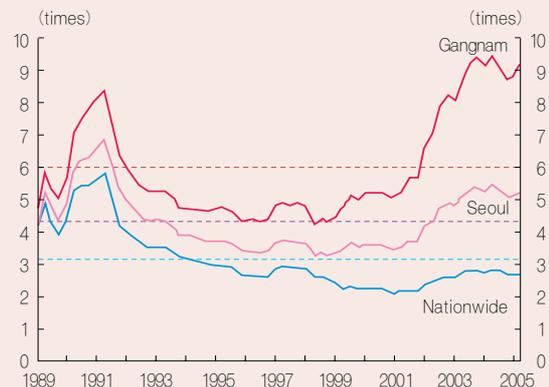
Notes: 1) Real price (1989=100) = nominal price ÷ consumer price index
 2) Dotted lines represent the averages for Gangnam, Seoul and nationwide during the relevant period (January 1989 to June 2005) respectively.

Housing prices as a multiple of income



Note: Dotted lines represent the averages for Gangnam, Seoul and nationwide during the relevant period (January 1989 to June 2005) respectively.

Housing prices against income with the scale of housing purchases reflected



Note: Dotted lines represent the averages for Gangnam, Seoul and nationwide during the relevant period (January 1989 to June 2005) respectively.

③ Strength of speculative demand in anticipation of further price rises

(Ratio of selling prices to lease deposits)

Since the ratio of the selling prices of houses to housing lease deposits shifted to an increase from the mid-and late 2001, it has registered a sharp 0.5- to 1.5-fold increase from its lowest level. This indicates that the exchange value reflecting capital gains, i.e. the selling price is being overestimated in comparison with the lease deposits determined by the utilization value. The price to lease deposit ratio shows that speculative demand for housing in anticipation of further price rises grew nationwide. Most notably, the ratio for Gangnam in May 2005 was 3.4 times, the highest-ever level since the compilation of statistical data on this ratio.*

* Since the price premium of the Gangnam area deriving from its favorable residential and educational conditions is already reflected in lease deposits, the fact that the area has a much lower price to lease deposit ratio than that of other areas underlines the greater strength of speculative demand that is present.

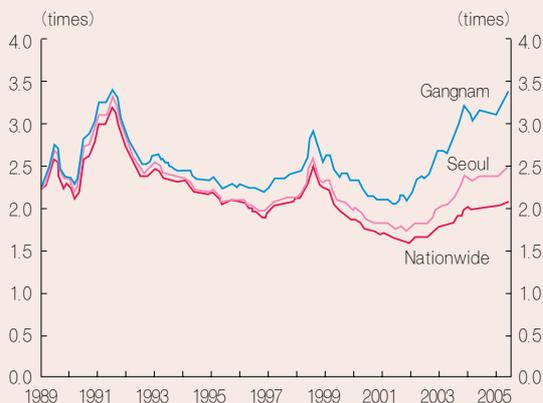
(Speculative demand considering opportunity costs)

The difference between the opportunity costs associated with housing purchase and the expected rental income generated from buy-to-let purchase also proxies the degree of speculative demand. On a nationwide scale, such opportunity costs remain lower than expected rental income. In Seoul, the opportunity costs have moved above expected rental income since 2003. Notably, opportunity costs per pyung for the Gangnam area have averaged about 240,000 won more than expected rent income since 2002. This suggests that expectations of capital gains arising from rising housing prices are strongly affecting the market. Therefore, the current level of housing prices, along with the ratio of housing prices to lease deposits stands to be severely affected by changes in speculative demand in certain areas including Seoul.

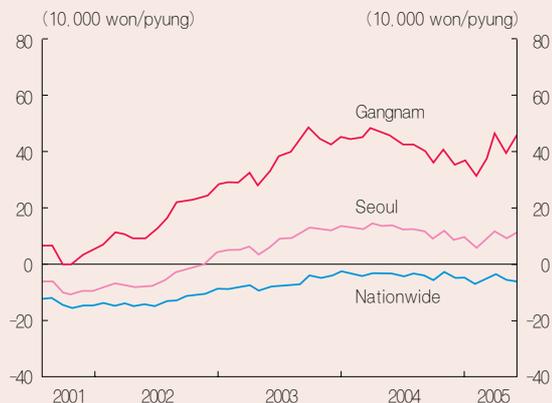
* Opportunity costs of residential real estate purchase: residential real estate selling/purchase price × deposit interest rates of mutual savings banks (1 year)

Expected leasing income from residential real estate purchase (theoretical maximum expected revenues that can be generated through leasing): lease deposits × interest rate on monthly rents × 12

Ratio of apartment price to lease deposit ratio



Differential between opportunity costs and expected income regarding housing purchases



<Box II - 3>

Gist of the real estate system reform measures to stabilize ordinary people’s housing and curb speculation in the real estate market (August 31 real estate measures)

On August 31, 2005, the government unveiled its comprehensive real estate measures in an attempt to end instability in the real estate market at the earliest possible date and pursue long-term stabilization of the market. Major details of the measures include imposition of stricter real estate ownership and transfer taxes, restrictions on mortgage loans, and expansion of residential real estate and building site provision.

Regarding composite real estate taxes, the government decided to raise the average effective tax rate from 0.15% now to 1.0% by 2009 in order to curb speculation. In addition, it will also increase the capital gains tax rates applicable to a household owning two houses from 9-36% currently to 50% in 2007. At the same time, the government decided to reduce the rates of acquisition and registration taxes imposed at the time of housing purchase by 0.5 percentage point respectively from 2006 to lessen the tax burden on those who actually need residential real estate. In an effort to improve transparency regarding real estate transactions, the government made it mandatory to report actual prices in real estate transactions.

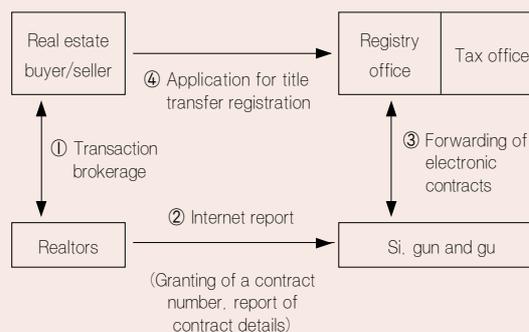
In addition, the spouse or less-than-30-year-old single child of a borrower who obtained loans by collateralizing apartments located in the speculation areas is now subject to not higher than 40% of debt to income ratio (DTI),* and mortgage loans to minors are prohibited. At the same time, the government decided to support ordinary people’s housing purchase through application of the national housing fund to stabilize their housing and also reduce the lending rates applicable to loans underwritten to the low income class for their housing purchase and rent payment. In addition, the government made a decision to resume provision of the loans for people’s purchasing of the first houses in their lifetime.

* DTI=(annual principal and interest payments concerning mortgage loans + annual interest payments regarding other debts)/annual income

Planned upward adjustment of composite real estate taxes

Gist	Details
<ul style="list-style-type: none"> ■ Expansion of the subject of taxation 	Housing: officially announced price 900 mil. → 600 mil. won Land: officially announced price 600 mil. → 300 mil. won
<ul style="list-style-type: none"> ■ Upward adjustment of taxable value rates 	50% now → 70% in 2006 → 100% in 2009
<ul style="list-style-type: none"> ■ Increase in maximum tax burden 	1.5 times of the previous year → 3 times
<ul style="list-style-type: none"> ■ Change in taxation methods 	Adding up for each individual → for each household

Implementation of the real transaction price electronic report system to support enhancement of transaction transparency (implemented in 2006)



In addition, the government would additionally provide 3 million pyung's public housing lots per annum in the Greater Seoul area and apply the cost linkage system to apartments built in public housing lots. It also decided to develop the existing downtown areas and extend the resale restriction period from 5 to 10 years regarding apartments* with the size of 25.7 pyung or smaller in the Greater Seoul area.

* Those apartments that the cost linkage system is applied to.

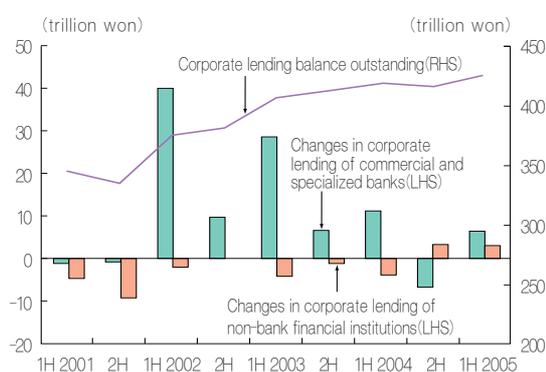
The government decided to impose development dues and infrastructure dues in the case of urban development and redevelopment/reconstruction respectively. Capital gains taxes will be levied according to actual transaction prices from 2006 concerning bare land and farming/forest land possessed by non-resident owners, and from 2007 regarding other types of land.

III . Stability of the financial market

1. Lending market

<Figure III -1>

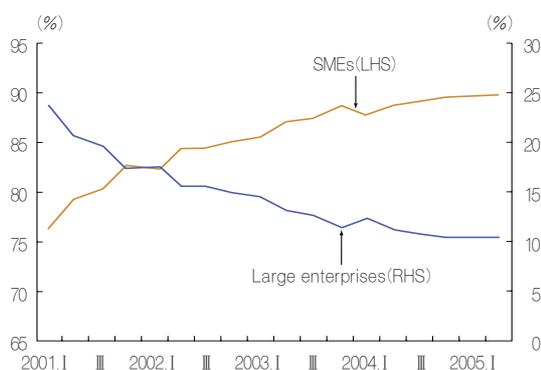
Corporate lending



Source: The Bank of Korea

<Figure III -2>

Distribution of loans by company size



Note: Shares in total corporate lending of commercial and specialized banks (excluding Korea Development Bank)
Source: The Bank of Korea

Growth of corporate lending recovers slightly

Corporate lending grew 9.8 trillion won in the first half of 2005, a slight rise in growth from 7.2 trillion won in the first half of 2004. The growth of corporate lending by commercial and specialized banks slowed down, compared to the same period of the previous year. Corporate lending by non-banking financial institutions shifted to an increase in the first half of 2005 from a decline in the same period of the preceding year.

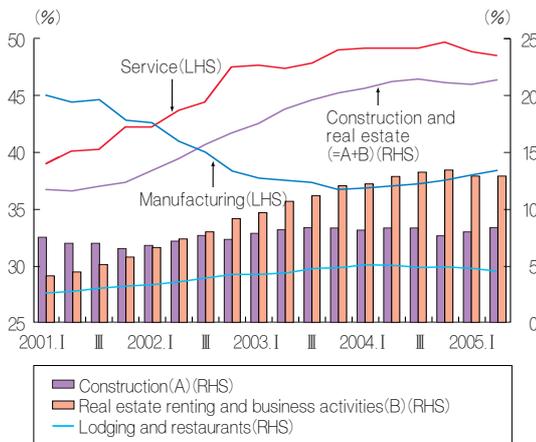
By type of borrower, the growth of deposit money banks' lending to both SMEs and large-sized companies slowed in the first half of 2005, compared with the same period of the preceding year. The upward trend of the portion of lending to SMEs, which persisted from the second half of 2000, has been steadily weakened recently. By type of business, the share of loans to manufacturers has been on the gradual rise since 2004 owing to financial institutions' reinforced credit risk management toward some players in the service industry including hotels and restaurants, real estate lessors and business service providers.

Financial institutions' corporate lending interest rates (based on newly originated loans), which went upward to some extent because of a rise in market interest rates¹⁾ in early 2005, have been falling slightly since

1) The weight of corporate lending linked to market interest rates (new loans extended by commercial and specialized banks) stands at 33.2% on average in August 2004 - July 2005 ("The Trend of Weighted

<Figure III -3>

Distribution of loans by industry



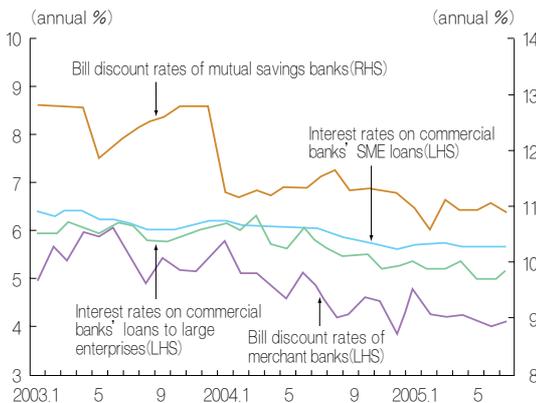
Note: Commercial and specialized banks and non-bank financial institutions (Money and Banking statistics)
 Source: The Bank of Korea

April 2005. Ostensibly, this is because most banks are adjusting their portfolios by reducing loans to companies with a low credit standing while vying with each other to expand loans to blue-chip SMEs. However, merchant banks' interest rates on discounted bills that swiftly reflect the movement of market interest rates are rising, affected by an increase in market interest rates since July.

In the corporate lending market, banks' increasingly aggressive effort to expand lending is likely to give a boost to the ongoing upward tendency. This is because their business performance dramatically ameliorated in the first half of 2005. Besides, the improvement of their BIS capital adequacy ratios has expanded their overall capacity to expand assets and their expansion of loans to the household sector is expected to be restricted owing to implementation of more stringent regulations on mortgage loans in June and August 2005.²⁾

<Figure III -4>

Interest rates on corporate lending



Note: Based on new loans issued
 Source: The Bank of Korea

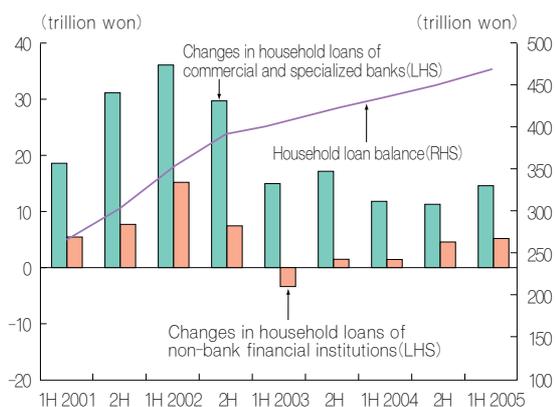
However, faced with introduction of the BASEL II capital adequacy framework in late 2007, banks will continue to differentiate among corporate borrowers according to credit standing and manage funds in a conservative manner. Thus, businesses with high credit risks will be subject to harsh loan conditions continuously. In the case of high-quality corporate borrowers, however, banks are likely to engage in more intensified competition to solicit them as customers. Thus, the pressure of increase in borrowing expenses caused by an increase in market interest rates will be

Average Interest Rates of Financial Firms in July 2005", the Bank of Korea).

2) Financial supervisory authorities strengthened regulations on loans secured by residential property by means of downward adjustment of LTV ratios and restrictions on the number of housing finance loans in speculation areas for fear that if the surge of real estate prices is accelerated, a possible future crash in the real estate market might compromise soundness of financial institutions. (Financial Supervisory Commission and Financial Supervisory Service, June and August 2005)

<Figure III -5>

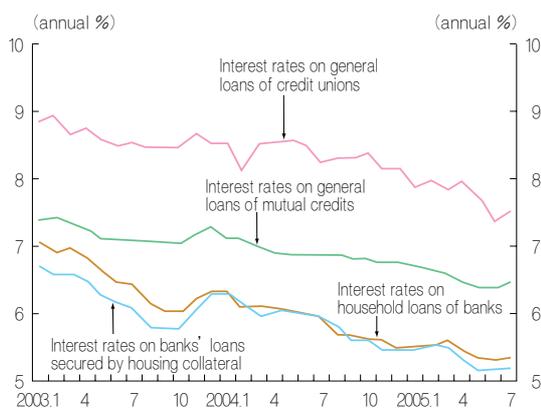
Household lending



Source: The Bank of Korea

<Figure III -6>

Interest rates on household lending



Note: Based on new loans issued
Source: The Bank of Korea

restricted.

Upward trend of household lending intensifies

In the first half of 2005, household loans increased by 19.3 trillion won, growing at a faster pace than in the same period of the preceding year (12.8 trillion won). Such growth is the highest level of a semi-annual increase since the card bubble blow-out in the first half of 2003. By type of financial institutions, commercial and specialized banks expanded household loans, especially house mortgage loans. With the downward tendency of lending by credit card companies slowing down, non-banking institutions also stepped up their writing of household loans.

Affected by a drop in market interest rates and the fiercer competition among banks to expand house mortgage loans, interest rates on household loans were put on a downturn in April 2005. Such rates edged up from July, which is attributable to the upturn of market interest rates from June and the introduction of more stringent regulations on house mortgage loans by the financial supervisory authorities from July.

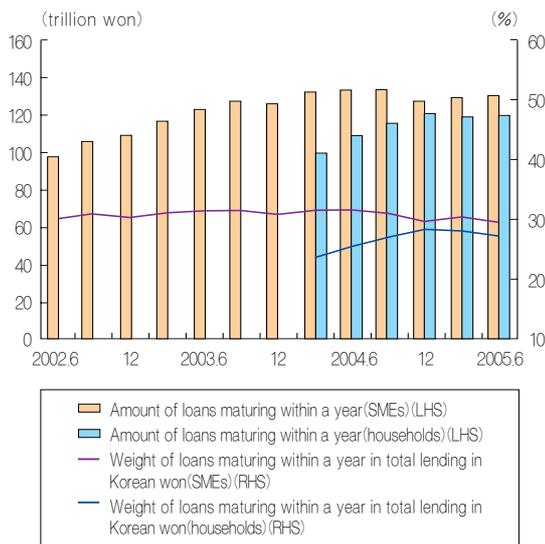
In the household lending market, financial firms are expected to assume a more cautious position³⁾ toward household loans because of the stricter regulations on mortgage loans and the forecasted drop in real estate collateral value, with households' debt servicing capacity improving at a slow pace. In addition, demand for funds to finance real estate purchases for investment purposes is likely to shrink substantially. Accordingly, the upturn of household lending,

3) It is expected that financial institutions will take a more cautious attitude toward loans secured by residential property while relaxing its position on corporate loans and ordinary household loans including unsecured loans. ('Recent Lending Practices of Financial Institutions' for the 3rd Quarter of 2005, The Bank of Korea)

particularly house mortgage loans, will be dampened seriously.

<Figure III -7>

Weight of loans maturing within one year



Source: Banks' call reports

In the meantime, the balance of loans extended to SMEs and households, which become due in the second half of 2005 through the first half of 2006 (based on loans from commercial banks), amounts to 128.8 trillion won and 119.1 trillion won respectively. Some note that this situation is a potential destabilizer in the financial markets. However, no constraints are expected on extension of the due dates because said amount is about 30% of the entire outstanding balance. Unfortunately, it is true that some household loan borrowers may suffer liquidity problems if banks concurrently tighten their lending position in accordance with the implementation of stringent mortgage loan regulations and a possible drop in real estate collateral value.

<Box III - 1>

Results of a review of the financial sector's extension of housing finance loans

In cooperation with the Financial Supervisory Service, the Bank of Korea in July 2005 conducted a scrutiny of the extension of housing finance loans by financial institutions as a whole. This was because precautionary measures needed to be taken amidst fears that if mortgage loans turned sour due to a further steep run-up in housing prices in 2005 and subsequent future destabilisation of the real estate market, it might erode the stability of the financial system. The examination placed a focus on compliance with mortgage loan-related regulations and the adequacy of risk management concerning such loans. Its major results are summarized below:

As of the end of May 2005, the outstanding balance of the financial sector's housing finance loans stood at 214.3 trillion won, which broke down into 176.2 trillion won (82.2%) from banks, 25.2 trillion won (11.8%) from non-banking financial institutions and 12.9 trillion won (6.0%) from insurance companies. By the amount lent, loans of no more than 100 million won made up the largest share with 138.0 trillion won (66.7%) while large exposures exceeding 300 million won amounted to only 12.0 trillion won (5.9%) in all. In terms of the value of collateralized housing, loans secured against housing with a value of no more than 200 million won amounted to 101.4 trillion won (56.9%) and loans secured against high-value housing of 600 million won or more represented just 16.1 trillion won (9.0%). Meanwhile, among the total of 167.4 trillion won's loans for which the type of collateral posted is identified, loans secured against apartments made up the largest chunk with 134.7 trillion won (80.5%) while loans secured by row houses or multiplex houses amounted to 9.9 trillion won and 6.5 trillion won respectively.

The outstanding balance of loans for which the location of the collateral posted was identified in the course of the evaluation amounted to 171.8 trillion won. Of this total, the outstanding balance of loans whose collateral was located in the Greater Seoul stood at 127.6 trillion won (74.2%) [Seoul: 63.8 trillion won, Gyeonggi Province: 52.2 trillion won, Incheon: 11.6 trillion won] indicating that housing finance loans are concentrated on this metropolitan area. In particular, the loans secured by residential real estate in Gangnam-gu, Songpa-gu, Seocho-gu and Gangdong-gu, Seoul and the Seongnam/Yongin area in Gyeonggi Province which recently registered a steep surge in housing prices came to 37.0 trillion won, accounting for 29.0% of the mortgage loans in the Greater Seoul area. Thus, it is presumed that increase in housing finance loans and housing prices are closely interrelated. Meanwhile, the outstanding balance of mortgage loans secured by residential real estate in 'speculation areas' or 'speculation-prone zones' came to 151.5 trillion won (73.2%) as of the end of May 2005. Of this amount, housing finance loans for homes in the speculation areas represented 80.2 trillion won (38.8%). The high share of the loans secured against housing in 'speculation areas' or 'speculation prone zones' is apparently attributable to the fact that these areas mostly consist of apartment housing complexes within the Seoul metropolitan area, and that there are many expensive apartments with high collateral value in those areas.

By contractual maturity of mortgage (housing finance) loans, loans carrying not more than three-year maturities took up the largest share with 47.6%. Since 2004, the share of loans with longer than 10-year maturities* has been growing at a rapid pace. Thus, average loan maturities are gradually lengthening. In relation to methods of payment of principal and interest, lump-sum payments accounted for 70.5% of the total value of loans (145.5 trillion won) while installment payments made up only 28.3% of all loans (58.5 trillion won). As for interest rates (as of the end of May 2005), floating-rate loans amounted to 173.8 trillion won (84.2%) while fixed-rate loans stood at just 29.5 trillion won (14.3%). The share of floating-rate loans, which force borrowers to assume the risks of interest rate fluctuations, moved up from 78.6% at the end of 2003 to 84.2% as of the end of May 2005 in a development that seems attributable to the lengthening trend of contractual maturities.

* 9.0% in 2003 → 45.1% in 2004 → 48.9% in January - May, 2005 (based on newly-originated loans)

<Box III - 2>

Analysis: Pro-cyclical movement of finance in Korea

Against the backdrop of the rapid progress of globalization, the establishment of a low price structure and financial liberalization during the 1980s to the 1990s, there has recently been lively discussion about the pro-cyclical movement of finance in the international financial sector. The pro-cyclical movement approach, which dates back to Irving Fisher's debt-deflation theory (1933), is drawing renewed attention because of a growing perception that excessive increases in asset prices/credits or the excessive reduction of risk premiums in the expansion phase is a major cause of financial crises in the new financial paradigm characterized by consistently low commodity prices and interest rates as well as investors' aggressive search for yields. There exists a possibility that the pro-cyclical movement has naturally expanded in the Korean financial sector since the foreign currency crisis due to the establishment of a low commodity price/interest rate structure and changes in financial paradigms. What is more, the scheduled introduction of the new BIS capital adequacy ratios is very likely to serve as a factor amplifying pro-cyclical movements. In these circumstances, the following study examines whether the pro-cyclical movements in the domestic financial sector have been augmented since the foreign currency crisis and what characterizes such movements.

(1) Usable data and analysis approaches

Among financial time-series data for an empirical analysis are (i) credit; (ii) money supply; (iii) banks' equity capital; and (iv) spreads. As indicators of the real economy, economic coincident indicators, real GDP and its expenditure items by sector were used. Based on these, empirical analyses including a simple lag cross correlation analysis, structural model-based analysis and Granger causality test were carried out.

(2) Lag correlation analysis

The results of lag correlation analysis indicate that the correlation between financial and real variables became stronger across the board after the currency crisis. In particular, bank loans and spreads showed quite evident pro-cyclical changes. The correlation between the real economy and finance by sector (corporate, individual, etc.) was apparently intensified at least partially. For instance, the correlation coefficient of household loans (commercial and specialized banks) and consumption moved up to 0.9 after the foreign currency crisis, remaining higher than that of overall loans (commercial and specialized banks) and income or consumption.

Time lag correlation between financial and real economic variables¹⁾

	Economic coincident indicators (cyclical components)	Real GDP (after seasonal adjustment)	Real investment (after seasonal adjustment)	Real consumption (after seasonal adjustment)
Bank loans	0.58 (0.40)	0.70 (0.48)	0.67 (-0.40)	0.83 (0.40)
Spreads	-0.71	-0.67	-0.73	-0.67
Household loans	0.57 (0.83)	0.71 (0.83)	0.66 (0.87)	0.86 (0.75)
Corporate loans	0.58 (n.a)	0.63 (×)	0.59 (-0.40)	0.69 (n.a)

Notes: 1) Relations among cyclical components. The figures in the table above represent the maximum value of the 12-quarter time lag correlation coefficients regarding time-series data after the foreign currency crisis (3rd quarter of 1997 ~ 1st quarter of 2005). The numbers in parentheses represent the figures prior to the foreign currency crisis.

2) The starting points of relevant data are the 1st quarter of 1992 for bank, household and corporate loans, the 2nd quarter of 1995 for spreads, and the 1st quarter of 1970 for other variables. As regards the starting point of samples subject to scrutiny, the latter of the data starting points of the two paired variables was used.

3) Values with no significance are marked with “×”

(3) Analysis based on a structural model

An analysis separating the financial and real economic shocks under the structural Vector autoregressive model* reveals that financial factors worked to reduce economic volatility prior to the foreign currency crisis and to expand such volatility after the crisis.

* A two-variable structural Vector autoregressive model was set for the period from February 1973 to March 2005 regarding bank loans and economic coincident indicators (cyclical components). A Blanchard and Quah type assumption that the impact of bank loans is economically neutral from a long-term perspective was applied.

Impact of financial factors on economic fluctuations

	(%)						
	1st cycle	2nd cycle	3rd cycle	4th cycle	5th cycle	6th cycle	7th cycle
(Standard deviation)	(Mar. 1972~)	(Jun. 1975~)	(Sep. 1980~)	(Sep. 1985~)	(Jul. 1989~)	(Jan. 1993~)	(Aug. 1998~)
CI ¹⁾	2.25	2.47	1.64	1.72	1.16	3.72	2.76
CI(financial factors eliminated) ²⁾	2.70	2.41	1.66	2.02	1.37	3.78	2.27

Notes: 1) Coincident indicator, cyclical component

2) Counterfactual CI generated by setting all historical financial shocks to zero. Financial shocks are identified using a structural model.

(4) Granger causality test

A Granger causality test was conducted to examine the trends of pro-cyclical movement. Its results revealed several characteristic features including enhanced information capabilities of credit since the foreign currency crisis. Firstly, the real economy forecast capabilities of lending have grown further in comparison with those of money since the foreign currency crisis, which seems to be pertaining to weakened relations between money supply and the real economy as a result of the implementation of interest rate-centered monetary policies.

Comparison of money and credit information value

	Prior to the foreign currency crisis (May 1986 – June 1997)				Entire period (May 1986 – March 2005)			
	Bank loans	M2	M3	All	Bank loans	M2	M3	All
Economic coincident indicator	0.189	0.098	0.086	0.138	0.003	0.025	0.058	0.001
Real GDP	0.532	0.029	0.206	0.059	0.021	0.042	0.342	0.013
Real investment	0.000	0.077	0.010	0.003	0.000	0.151	0.706	0.000
Real consumption	0.316	0.293	0.094	0.150	0.000	0.002	0.076	0.000

Notes: 1) The closer the value in each cell is to zero, the larger its information value or forecasting capability (rank variable → column variable) becomes.

2) Results of a block exogeneity test (P value) under the four variables-based Vector autoregressive model, with a four-month model time lag applied.

Second, the area-by-area linkage between finance and the real economy including household lending and consumption as well as corporate lending and investments was somewhat bolstered against the backdrop of overall expansion of pro-cyclical movements after the foreign currency crisis.

Third, bank soundness indicators related with forecasts of the real economy slightly improved after the foreign currency crisis although they do not have a high level of significance. The weak linkage between the soundness of banks and the real economy is apparently ascribable to the low level of value that the indicators have, as statistical information, due to the lack of transparency regarding banks' accounting in the past.

Lastly, housing prices generate a Granger effect for lending while real GDP, consumption and construction investments induce such effect for housing prices both in a unidirectional manner.

Granger causal relationship among housing prices, lending and real economy variables

		Bank loans	Income	Consumption	Facility investments
Housing prices	Before the foreign currency crisis	↗*	↘**	↔	↔*
	After the foreign currency crisis	↗*	↘**	↘*	↗*

Notes: 1) Results of the block exogeneity Granger test; The asterisk(s) represents the following degree of significance: 10% for * and 5% for **.

2) ↔, ↔, ↘ and ↗ respectively represent 'existence of no Granger causal relationship', 'two-way causal relationship', 'one-way causal relationship from the rank variable to housing prices' and 'one-way causal relationship running from housing prices to the rank variable.'

(5) Conclusions and indications

The domestic financial sector's pro-cyclical movement is highly likely to be expanded in the future. Banks will be increasingly sensitive to the financial conditions of businesses and households in extending loans. In addition, the differentiation of banks based on the structure of revenues and expenses remains at a low level. This means that there is a relatively high possibility of herd behavior. Accordingly, it is imperative to tackle the

issue of pro-cyclical movement by the financial sector energetically in order to reduce economic volatility and enhance the efficacy of interest rate policies.

Most of all, it is necessary to conduct stricter monitoring of the variables and asset prices that affect credit provision. Since the foreign currency crisis, bank loans have shown a high level of predictability concerning the overall economy as well as various expenditures including investment and consumption. Therefore, such loans should be fully utilized as information variables. Asset prices, which directly affect financial stability, have a strong prior forecasting capacity for bank loans. Accordingly, the Bank of Korea should step up its monitoring of asset prices. At the same time, the central bank should issue timely prior warnings regarding pending issues including excessive risk acceptance (aversion) in the event of economic expansion (contraction) through various channels such as Financial Stability Report, lectures and seminars. In addition, it needs to examine approaches to utilizing microeconomic credit control instruments so as to lessen the burden on interest rate policy and diversify its policy toolkit. It seems that it is high time for a discussion of the possible introduction of mechanisms including a dynamic provisioning system* whereby credit provision can be adjusted according to standing rules in response to economic fluctuations.

* The dynamic provisioning system put in place in Spain from July 2000 is designed to ensure that a constant level of reserves is maintained from a long-term perspective, irrespective of economic fluctuation. In a booming (slowing) economy, more (less) reserves are accumulated than necessary to cover actual bad debts in an effort to restrain (expand) loans.

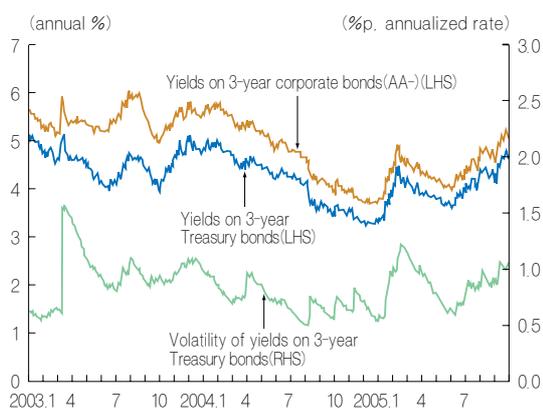
Dynamic provisions = amount of potential bad debts - amount of specific provisions accumulated

Amount of potential bad debts = total loans \times potential bad debt ratio

2. Bond market

<Figure III -8>

Bond yields and volatility



Note: Volatility is calculated by the EWMA (exponentially-weighted moving average) method

Source: The Bank of Korea and KOSCOM

Bond yields rise steadily

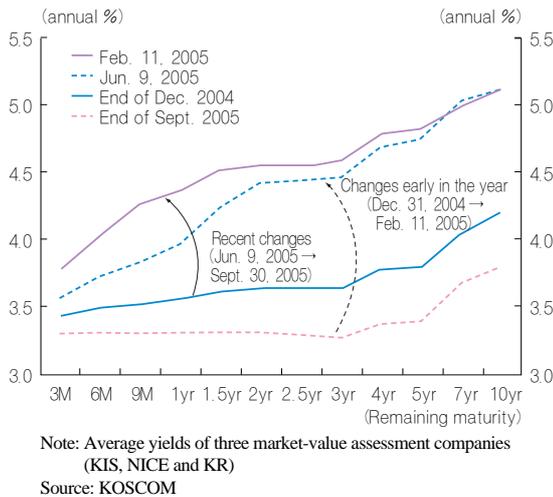
Yields on bonds had continued to overshoot downwards up until the end of 2004. With the beginning of 2005, though, they rebounded sharply, rising by 100bp by early February (3-year Treasury bonds) from their year-end figure because of the likely expansion of Treasury bond issues and anticipations of a recovery of business activity. Subsequently, bond yields showed a mild decline until June. Coupled with rising expectations of the recovery of the domestic economy, the possibility of an increase in policy interest rates triggered a renewed upturn of bond yields. However, volatility and credit spreads in the bond market remain stable in general, unlike the situation in early 2005. This is seen to reflect the fact that the factors triggering the current rise in bond yields differ from those that underlay the two previous episodes of bond market instability that have occurred since 2003.

The instability of the bond market in March 2003 was touched off by credit events including accounting malpractices by SK Networks and the financial distress of credit card companies. The herd behavior of bond investors, who increased their long-term bond purchases to an excessive level up until the end of 2004 in anticipation of falling interest rates before reducing their positions substantially in 2005 on expectations of economic recovery and possible expansion of Treasury bond issuance was a major factor underlying the market instability in early 2005.

Since July 2005, interest rates have been on the rise. However, the conjuncture of bond market demand and

<Figure III -9>

Changes in Treasury bond yield curve

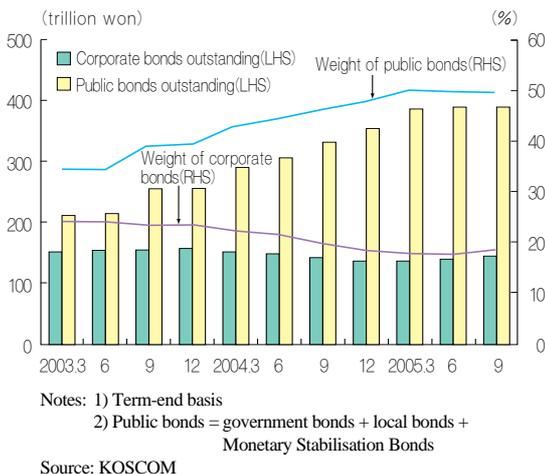


supply remains relatively healthy, with the yield curve shifting only mildly. This is ascribable to the facts: firstly, long-term institutional investors including insurance companies and pension funds are enjoying a higher level of asset management profitability thanks to the rise in interest rates with their capacity for bond purchases consistently increasing; secondly, short-term institutional investors including banks made substantial headway in their portfolio management in the first half of this year, sharply reducing the possibility of a flood of bond sales.

With regard to the pace of the upward movement of the benchmark interest rate, it soared by 51bp from the previous day on March 12, 2003. In early 2005, it surged 118bp within about 40 days. Over the past 4 months approximately (early June to the end of September 2005), the scale of the rise in interest rates reached only 119bp.⁴⁾

<Figure III -10>

Corporate and public bonds outstanding



In the meantime, the adjustment of the policy rate, the expansion of Treasury bond issuance due to the compilation of a supplementary budget⁵⁾ and the growing need for financing in line with economic recovery are emerging as major reasons for bond market volatility. Companies' demand for funds will not be that large for such reasons as the listlessness of facilities investment. Furthermore, it is expected that demand for long-term bonds will build up consistently, led by insurance companies, pension funds and the scheduled introduction of a corporate pension system.

4) In terms of the abruptness of a shock triggering bond market instability, an unexpected credit event has a relatively abrupt impact. With respect to the durability of the shock, the herd-like behavior, which represents the building-up and resolution of disequilibrium over a certain period of time, is deemed to last for a relatively lengthy period.

5) The size of the revised supplementary budget for 2005 is estimated at about 5.1 trillion won. Of this amount, the financial markets are looking for approximately 4 trillion won to be financed through the issuance of Treasury bonds.

Thus, there would appear to be no particular reason to anticipate any particular changes in bond market volatility for quite some time.

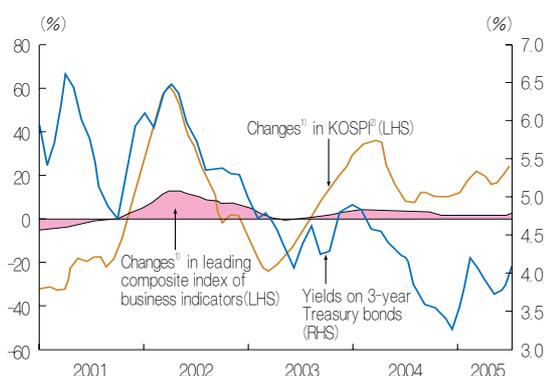
Declining yields on bond funds and fund outflows

The yields on bond-type funds fell sharply⁶⁾ in 2005 as the rise in interest rates calls a fall in bond prices. This resulted in a steady draining of deposits from bond-type funds. As of the end of September 2005, the scale of bond-type beneficiary certificates outstanding had shrunk to 56.1 trillion won, down 19.7 trillion won from December 2004.

By contrast, rising stock prices had increased the amount of outstanding beneficiary certificates of stock-type funds to 17.3 trillion won as of the end of September, up 8.7 trillion won from the end of December 2004. In addition, the scale of MMFs, short-term financial funds investing in bonds, etc. with remaining maturities of no more than 90 days, swelled by 9.5 trillion won over the same period. Thus, it is presumed that the outflow of liquidity from bond funds moved into MMFs or stock-type funds, which are stand-by facilities (where funds may conveniently be parked). Meanwhile, the government's announcement of its intention to introduce legislation to change the basis for buying and selling prices on which MMFs are quoted⁷⁾ and the rise in deposit interest rates in banks' MMDAs, which are closely competing products,

<Figure III -11>

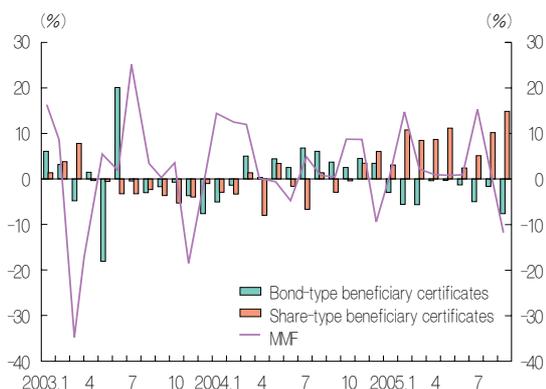
Business conditions, stock prices and bond yields



Notes: 1) $(\frac{\text{index of the current month}}{\text{12-month moving average index centered on the index of the same month of the previous year}} - 1) \times 100$
 2) Based on the monthly average KOSPI
 Source: Korea National Statistical Office and the Bank of Korea

<Figure III -12>

Changes in bond/share-type beneficiary certificates and MMFs



Note: Compared to the end of the previous month
 Source: KOSCOM and Asset Management Association of Korea

6) Due to fund outflows amidst rising bond interest rates, capital losses arising from falling bond prices were bigger than interest income generated from bond investments. Thus, the monthly average yields on bond funds dropped from 0.47% in 2004 to 0.19% in January - August, 2005. (Source: Korea Fund Research)

7) The government announced that it planned to introduce legislation from September 2005 to change the basis for the quoted prices for corporate MMFs from their historical valuation (closing price on the day immediately preceding the billing date) to future valuation (closing price calculated after the point of billing). (Ministry of Finance and Economy, August 2005)

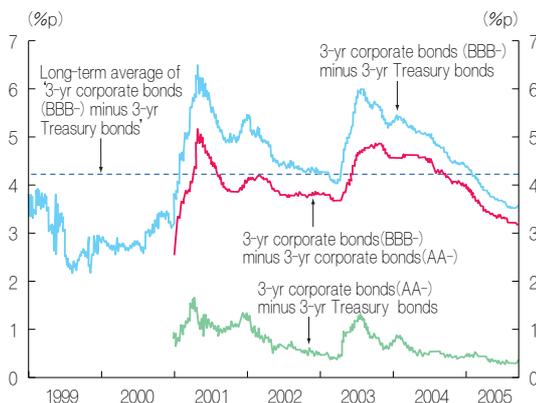
resulted in a reduction of 11.6 trillion won in MMFs in September 2005. Nevertheless, this apparently had only a limited impact on the bond market.

Smaller credit spread on corporate bonds

With the credit spread on corporate bonds over Treasury bonds narrowing, it has fallen since March 2005 below its level in early 2003 prior to the melt-down generated by the revelation of accounting malpractices by SK Networks and the distress of credit card companies. In other words, there has recently been a substantial narrowing of the credit premium on sub-prime investment-grade corporate bonds, which had widened sharply due to credit events in 2000 - 2001⁸⁾ and 2003. This is mainly due to lackluster business investment and the subsequent stalling out of the increase in corporate bonds supply⁹⁾ against the backdrop of the stabilization of businesses' credit risk-related indicators including delinquency and default ratios.

<Figure III -13>

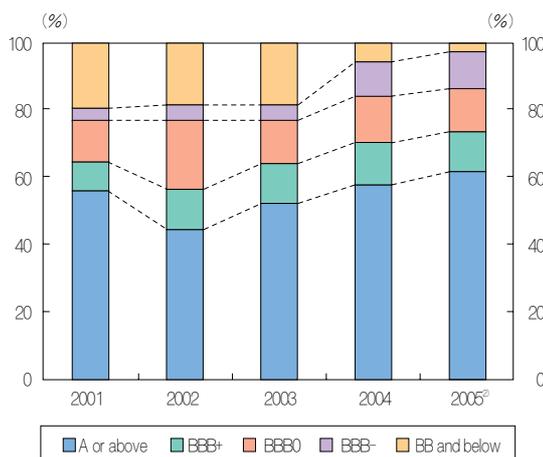
Credit spread on corporate bonds



Notes : 1) Marked-to-market base yields [Korea Securities Dealers Association (Sept. 1998 - Sept. 2000), average of the three credit rating companies (Oct. 2000 - Sept. 2005)]
 2) Average during the period from Sept. 1998 - Sept. 2005
 Source: Korea Securities Dealers Association and KOSCOM

<Figure III -14>

Newly issued corporate bonds¹⁾ by credit rating



Notes: 1) Non-guaranteed corporate bonds
 2) January 1 to September 14, 2005
 Source: Fn Guide

Such reduction of credit spreads is likely to contribute to allaying the negative effect of the recent rise of interest rates on corporate fund-raising conditions. In particular, issuers of low-rated corporate bonds (BBB-) stand to enjoy a greater degree of reduction in their fundraising expenses.

An aggressive search for higher yields may emerge in the domestic bond market, as it has in international financial markets. However, there seems to be very

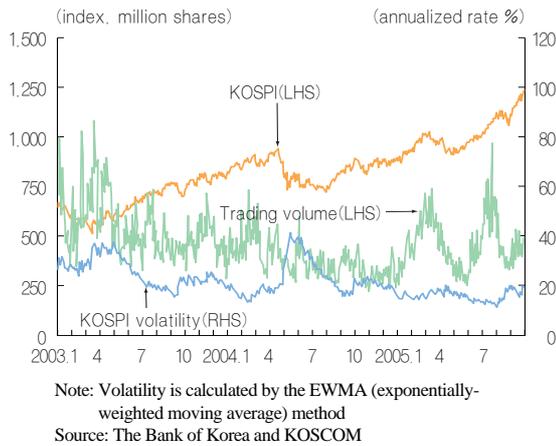
8) The period from 2000 to 2001 witnessed such credit events as the liquidity crisis of the Hyundai Group, the government-enforced market exit or merger of 175 financial institutions, the default of Dongah Construction Industrial and Korea Express, the setback in overseas sale of Daewoo Motor, and delays in restructuring of Hynix Semiconductor.

9) From 2004, corporate bonds exhibited net redemption before shifting to net issuance, albeit on a small scale, in mid-2005.

little scope for an additional narrowing of credit spreads, given the expansion of the issue of government and public bonds and expectations of a rise in market interest rates. The share of corporate bonds with a speculative grade (BB and lower) continued to drop to reach 5% in 2004 and 2% in 2005 as against 19% on average during the period from 2001 to 2003. This is serving to place strains on financing by companies with high credit risk and reduces the diversity of portfolios for highly profitable fund management.

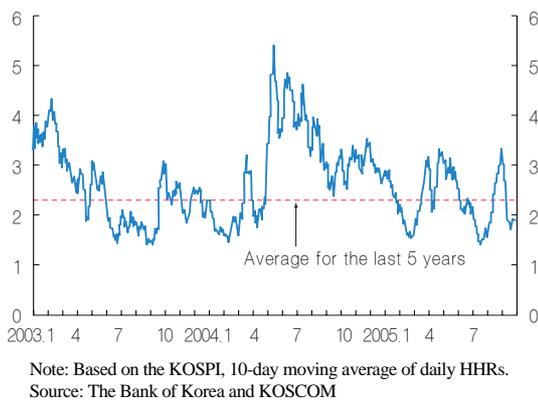
<Figure III -15>

Stock prices and volatility



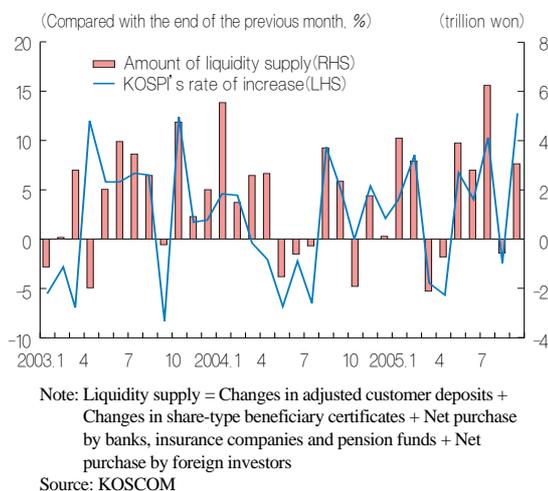
<Figure III -16>

HHR of the stock market



<Figure III -17>

Liquidity supply to stock market and stock prices



3. Stock market

Stock prices continue to rise

Stock prices maintained a strongly upward trend on robust corporate earnings and firm expectations of economic recovery although the stock market experienced a correction phase in March through May 2005 in response to the possibility of a revaluation of the Chinese yuan, the rise in oil prices and the increase of US interest rates. At the same time, the volatility of stock price movements has been reduced.

The HHR(Hui-Heubel ratio),¹⁰⁾ an indicator of the resilience of the stock market as well as the volatility of stock prices, has declined overall since the latter half of 2004, which means that the Korean equity market does not overreact to external shocks.

Rising stock prices and a stable stock market have a lot to do with such fundamentals as solid corporate earnings and expectations of economic recovery. What is more, growing inflows into installment-type funds¹¹⁾ and the expanded base of share purchases by pension funds¹²⁾ are bringing about a stable enlargement of the basis of stock demand. Given that a corporate pension system will be introduced in December 2005 and that alternative investment objects including deposits and real estate carry low yields, the basis of stock demand is likely to deepen continually.

10) $HHR = \{(Highest\ price - Lowest\ price) / Lowest\ price\} / (trading\ value / total\ market\ capitalization)$

11) Net fund inflows into cumulative savings schemes rose, on a monthly average basis, from about 166 billion in 2004 to approximately 458 billion in January - July 2005.

12) With amendment of the "Framework Act on Fund Management" in December 2004, the number of pension funds eligible to make equity investments increased from 25 to 43 out of the total of 57. In addition, equity investments by existing pension funds are growing gradually.

<Figure III -18>

Yields on shares, bonds and apartments

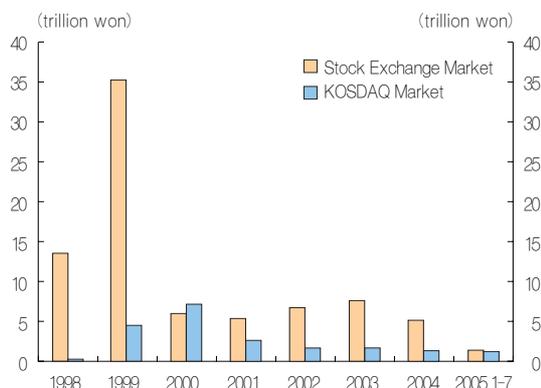


Notes: 1) Compared to the same period of the previous year
 2) Earnings yields = inverse number of PER
 3) Average during the period from Dec. 1988 to Aug. 2005
 Source: The Bank of Korea, Thomson IBES and Kookmin Bank

Amidst rising stock prices, corporate fund-raising through the stock market is enjoying increasingly benign conditions. Since the fourth quarter of 2004, the stock market environment has been particularly favorable to SMEs because of a sharper increase in the prices of small- and mid-cap stocks. This is because foreign and institutional investors have consistently increased¹³⁾ their investments in such instruments on the strength of their ample liquidity and strong business evaluation skills, offsetting the persistent net selling by individual investors.

<Figure III -19>

Stock market financing

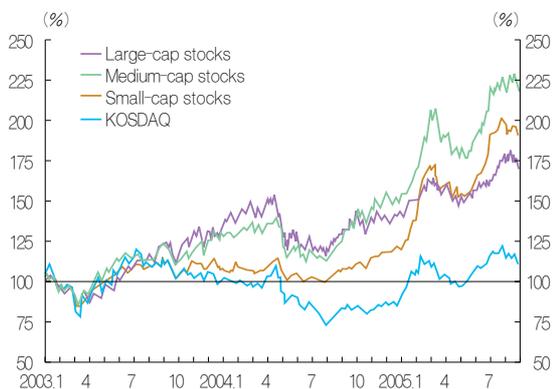


Source: The Financial Supervisory Service

Due to the relatively low level of the increase in the KOSDAQ index, however, some small- and medium-sized high-tech startups, which find it difficult to borrow money from banks because of their high risk, still face difficult financing conditions. In addition, funding through the stock markets (Stock Market and KOSDAQ Market) in January - July 2005 fell by 55.1% from the same period of the previous year. This is ascribable to the fact that businesses' need for funds was not significant as a result of their half-hearted investment activity.

<Figure III -20>

Stock price index by business size



Note: Dec. 30 of 2002 = 100
 Source: KOSCOM

Rising oil prices have only a limited impact

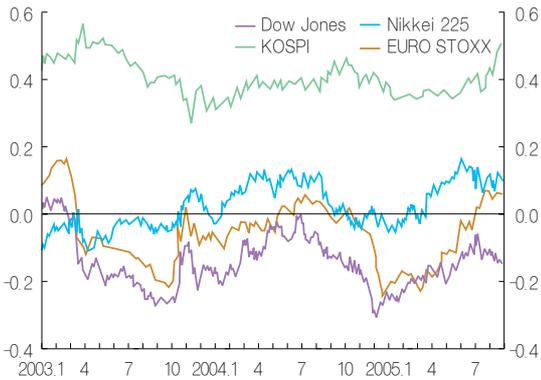
Since the second half of 2004, oil prices have seen a sharp run-up. However, unlike oil price shocks of the 1970s, this has not had any obvious negative impact on the domestic equity market. This contrasts with the situation in the US and European nations where the run-up in oil prices has had a negative impact on stock prices.

13) Net stock purchase by company size and investor type (Oct. 2004~Aug.2005)

	(billion won)		
	Foreigners	Institutions	Individuals
Large-cap	-3,606	3,158	-5,105
Mid-cap	1,004	982	-1,763
Small-cap	176	172	-295

<Figure III -21>

Correlation coefficient of stock and oil prices



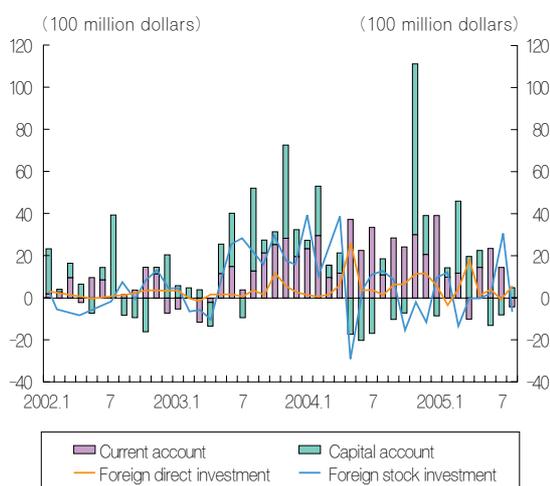
Notes: 1) Six-month moving correlation coefficient of daily change rates
 2) Oil prices on the basis of West Texas Intermediate (Dubai crude in the case of KOSPI)
 Source: Bloomberg, the Bank of Korea and KOSCOM

The following factors have combined to maintain the upward trend of stock prices in Korea even in a period of abruptly rising oil prices. First, Korean companies' increasing exports to major trading counterparts with favorable economic conditions such as China have translated into buoyant corporate business performance that has been able to shrug off the rise in oil prices. In addition, the steady improvement in the financial soundness of domestic companies after the foreign currency crisis led to the recent positive reassessment of their corporate value. A substantial expansion of the basis of demand in the Korean stock market has also helped drive the run-up in stock prices.

4. Foreign exchange market

<Figure III -22>

Current account and capital account



Source: The Bank of Korea

Predominance of supply in the interplay of foreign exchange supply and demand continues

With the underlying surplus on the current account being maintained this year, the predominance of supply in the interplay of foreign exchange supply and demand has continued this year, but the scale of these surpluses in foreign currency has narrowed somewhat.

Driven by the increase in overseas borrowings and the net inflow of direct foreign investment, the capital account registered a surplus for the first five months of the year before shifting mildly into the red in June and July 2005 as a result of the expansion of Korean residents' overseas portfolio investment.¹⁴⁾ Since August 2005, the capital account has shifted back into surplus.

In both April and August 2005, the current account registered a small deficit owing to seasonal factors including the repatriation of foreign investors' dividend earnings and the payment of overseas travel expenses. Nevertheless, the current account largely adhered to its surplus trend thanks to strong exports, which offset the effects of burgeoning imports brought about by the run-up in international oil prices. As a net consequence of these movements, the country's foreign currency reserves stood at 206.7 billion US dollars as of the end of September, up 7.7 billion US dollars from the end of the previous year.

14) Trend of net outflows (inflows) of Korean residents' overseas securities investments in 2005 (hundred million US dollars)

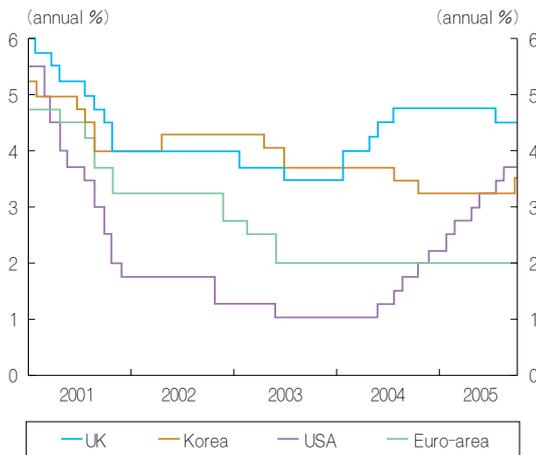
Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.
-7.8	-2.8	-5.8	0.2	-11.3	-16.4	-10.2	-12.9

(+): net inflows, (-): net outflows

Fluctuations in the differential between interest rates at home and abroad have little impact

<Figure III -23>

Fluctuations in major economies' policy interest rates

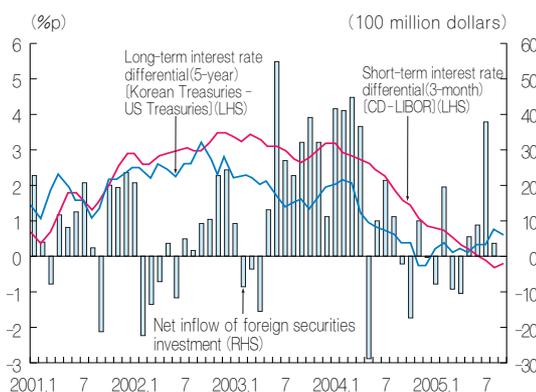


Source: The Bank of Korea

In the case of short-term interest rates (three-month basis), a series of step-by-step increases of the policy rate by the Federal Reserve Board pushed up US interest rates dramatically. This has meant that since July 2005, Korean short-term interest rates have remained below those in the USA. Concerning long-term interest rates (yields on five-year Treasury bonds), domestic interest rates, which had been lower than US rates in November - December 2004, rose to move slightly above those of the US which have remained on a stable course this year.

<Figure III -24>

Domestic/international interest rate differentials in Korea and the USA and foreign securities investment flows



Note: Internal/external interest rate differential is based on monthly average interest rates while foreign securities investment is based on monthly net inflow.

Source: The Bank of Korea, Bloomberg

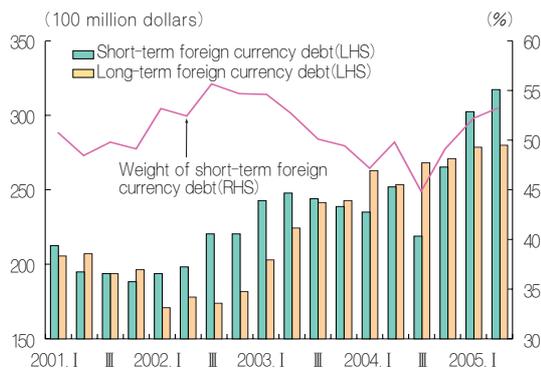
It appears that the inversion of the normal pattern of short-term Korean and the US interest rates has scarcely affected capital inflows and outflows or the won/dollar exchange rate. This is mainly attributable to the small scale of this inversion and the relatively low level of long-term US interest rates. As a matter of fact, foreign indirect investment in Korea is concentrated in stocks, which are less sensitive to the gap between domestic and international interest rates. Foreign holdings of short-term financial instruments remain at an insignificant level. Given that Koreans' overseas indirect investment is on a steady rise because of undersupply of domestic long-term bonds and the diversification of their portfolios, it is likely that such investment activity may gather further pace in the event of an inversion of domestic and international long-term interest rates.

Domestic banks increase short-term borrowings denominated in foreign currencies

In line with rising premiums on Foreign Exchange Stabilization Fund Bonds since late March 2005,

<Figure III -25>

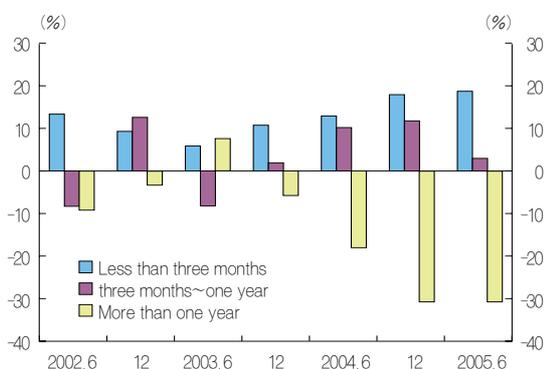
Short- and long-term debt of domestic banks denominated in foreign currencies



Source: The Bank of Korea

<Figure III -26>

Maturity gaps between foreign currency-denominated assets and liabilities of domestic banks

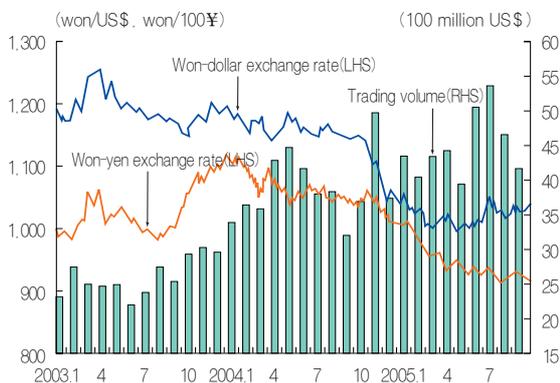


Note: Banking accounts (commercial banks, specialized banks and development institutions)

Source: Banks' call reports

<Figure III -27>

Won-dollar, won-yen exchange rates and foreign exchange trading volume



Note: Trading volume is based on interbank foreign-exchange spot transactions (daily average).

Source: The Bank of Korea, KOSCOM

domestic banks reduced the scale of their issuance of foreign currency-denominated bonds, while expanding short-term foreign currency borrowings to cope with an increase in forward exchange selling¹⁵⁾ by exporters against the backdrop of a strong won and a drop in foreign currency deposits. Accordingly, the share of domestic banks' short-term liabilities in their total foreign liabilities inched up from 49.5% at the end of 2004 to 53.2% as of the end of June 2005. Since June 2005, however, overseas borrowing conditions have been improving for such reasons as the upward adjustment of the international credit ratings of commercial banks. In addition, banks have increased the issue of long-term bonds ahead of possible hikes in international interest rates.

The maturity gap between the foreign-currency denominated assets and liabilities of domestic banks has followed a pattern of an asset surplus for less-than-three-month remaining maturities and a liability surplus for remaining maturities of at least one year. The size of assets and liabilities with remaining maturities of not less than three months and not more than one year has become almost the same.

Downward trend of won-dollar exchange rates levels off

In the first half of 2005, the won-dollar exchange rate fell to 997 won per dollar (appreciation of the Korean won) by the end of April owing to expectations of a revaluation of the Chinese yuan and the predominance of supply in the domestic foreign exchange market. The exchange rate rebounded to the 1,050 won per dollar mark (depreciation of the Korean won against

15) When banks purchase forward exchange from exporters etc., they sell it obtaining foreign currency borrowings in a bid to hedge their for forward over-bought position.

the US dollar) amidst fears about economic slowdown as a result of soaring international oil prices and the step-by-step increase of US policy interest rates since late-June. The won-dollar exchange rate eased back slightly (appreciation of the Korean won) partly due to the revaluation of the yuan by the Chinese government on July 21, stabilizing in the range of 1,020 to 1,040 won per dollar.

The faster pace of the yen's depreciation against the dollar compared to that of the won resulted in a steep fall in the won-yen rate to the 900 won per 100 yen level in early August, the lowest (highest exchange value of the Korean won against the yen) since August 1998. However, expectations of a recovery of the Japanese economy and the easing of political uncertainties following the overwhelming victory of the ruling party in a general election brought about a slight rebound of the yen, which now changes hands at around the 920 won per 100 yen level.

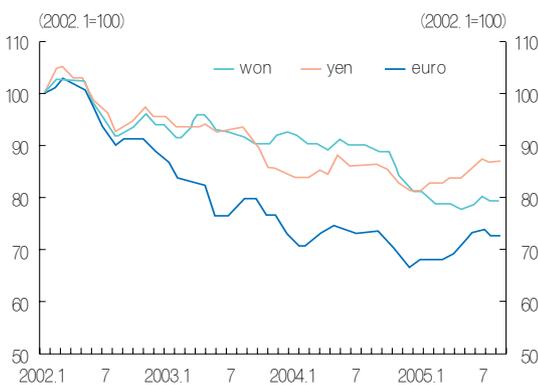
In the meantime, the won-dollar rate fell (strong won) until May 2005 while the yen-dollar and the euro-dollar rates rose (weak yen and euro) until May 2005, manifesting movements in an opposite direction. Since June, however, these rates have tended to move in the same direction in general.

The volatility of the won-dollar exchange rate sharply expanded from late 2004 to early 2005 before declining gradually thereafter. From July, fears of the delay of economic recovery under the pressure of high oil prices fueled such volatility on a temporary basis. However, the movement of the exchange rate has stabilized again since August.

The relatively small scale of trading in the Korean foreign exchange market may amplify foreign

<Figure III -28>

Trend of exchange rates of won, yen and euro against US dollar

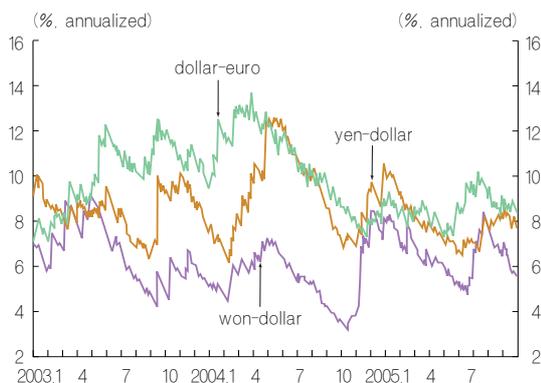


Notes: 1) Exchange rates of each currency are indexed to a base of 100 as of January 2002.

2) The figures for the exchange rate of the euro are reversed from the normal order (dollar-euro).

Source: The Bank of Korea

<Figure III -29>

Volatilities of the won-dollar, yen-dollar, and dollar-euro exchange rates

Note: Volatility is calculated by EWMA(the exponentially-weighted moving-average) method.

Source: The Bank of Korea

exchange volatility when the domestic or overseas financial environment turns unstable. Heightened uncertainties and risks in the foreign exchange market may dampen external transactions including exports and imports and increase financial expenses to hedge exchange risks, placing strains on economic activities. Compared with the yen or the euro, the won has a low degree of foreign exchange volatility. Furthermore, Korea has substantially built up its foreign currency reserve so far. Therefore, it is highly unlikely that problems will arise in connection with foreign currency demand and supply. Having said that it is vital to maintain a stable pattern of exchange-rate volatility for the sake of stability in the foreign exchange market.

IV. Soundness of financial institutions

<Figure IV-1>

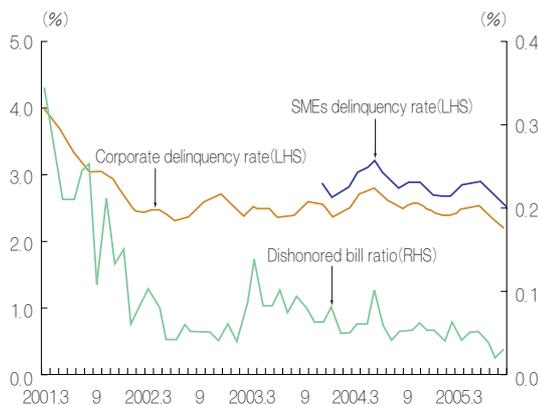
Banks' exposure to the corporate sector



Source: Banks' call reports

<Figure IV-2>

Dishonored bill ratio¹⁾ and corporate delinquency rates²⁾



Notes: 1) Amount basis, including electronic based payments
2) Three-month moving average

Source: The Bank of Korea, Banks' call reports

<Table IV-1>

Ratio of substandard and below loans by industry

	(%)			
	2003.12	2004.6	2004.12	2005.6
Manufacturing industry	2.7	1.9	1.7	1.5
Construction industry	3.0	2.8	2.6	2.1
Service industry	3.0	2.6	2.2	2.1
(Lodging and restaurants)	2.8	3.4	3.7	4.4
(Other private service industries)	2.9	3.8	4.3	4.4

Source: Banks' call reports

1. Soundness of banks

A. Credit risk

Corporate credit risk remains at a low level

Banks' exposure to large-sized companies remains on a downward trend because of the latter's faltering demand for funds due to lackluster investment. The expansionary trend of banks' exposure to SMEs is flattening out as banks follow the policy of extending loans selectively to prime corporate borrowers.

As mentioned above, banks' exposure to the corporate sector as a whole is not increasing. In addition, indicators including dishonored bill ratio and corporate delinquency rates have maintained stable trends since the latter half of 2004, except for a transient rise in early 2005. Given the favorable cash flows and financial soundness of listed companies despite the slight deterioration in their profitability, banks' credit risk in the corporate sector appears to be running at a low level.

Nevertheless, the ratio of substandard and below loans extended to consumption-oriented businesses including those in the lodging and restaurant sector stood at 4.4% as of the end of June 2005, higher than that at the end of the previous year, in spite of loan portfolio adjustments including bad debt write-offs and the reduction of lending. As the ratio of bank loans extended to such sectors is not high,¹⁾ the impact on banks' asset quality will not be significant. However,

credit strains may worsen for businesses in these sectors.

Reduction in credit risk of the household sector

Banks' exposure to the household sector grew in the second quarter of 2005, driven by housing finance loans in particular. However, their credit risk in the household sector seems to be falling steadily, helped by the fall in the ratio of substandard and below loans and their rigorous risk management of customer segments with low debt servicing capacity. Notably, the weight of credit card receivables in total household exposure declined to the 6% range in June 2005 and their delinquency rates fell substantially. Consequently, this is not seem to remain as a factor exercising an influence on overall household credit risk.

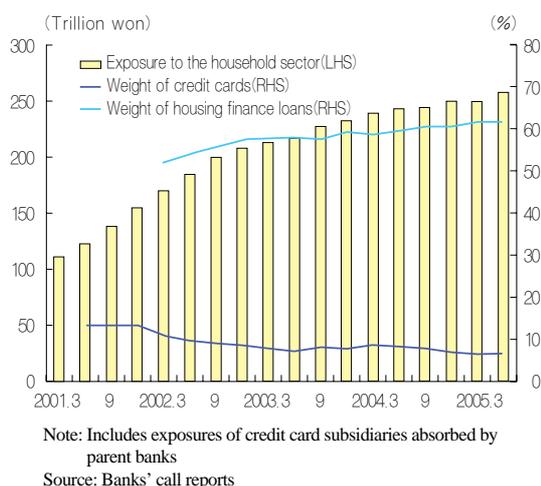
Housing finance loans that account for no less than 60% of household loans are registering low loss rates. In addition, their LTV ratios²⁾ are controlled at a relatively low level. In light of this situation, these loans do not seem to pose any direct risk at this moment. Nonetheless, housing finance loans are mostly written at floating rates. Therefore, households that have an excessive amount of liabilities compared to their income may be placed under a heavy burden in the event of an interest rate rise.

Banks' overall asset quality continues to improve

The scale of commercial banks' substandard and below loans has continued to shrink owing to their endeavors

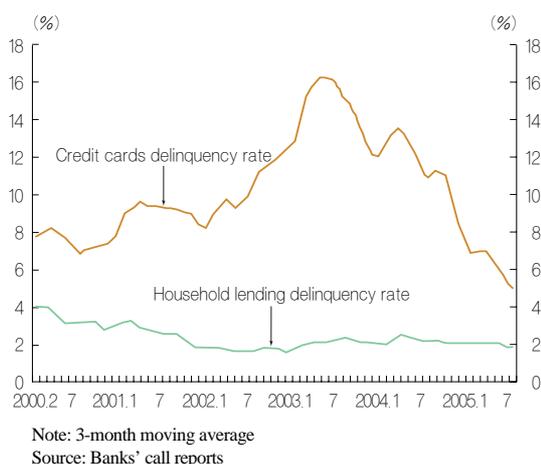
<Figure IV-3>

Exposure to the household sector



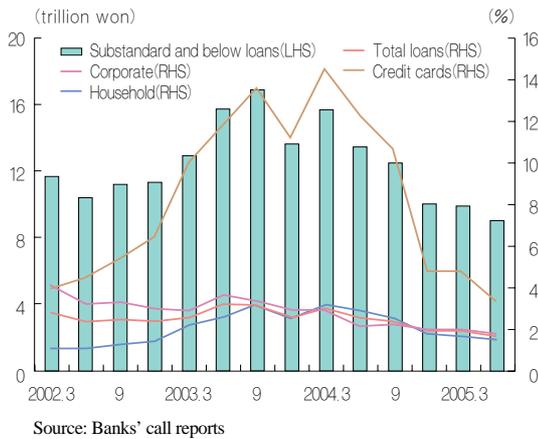
<Figure IV-4>

Household sector delinquency rates



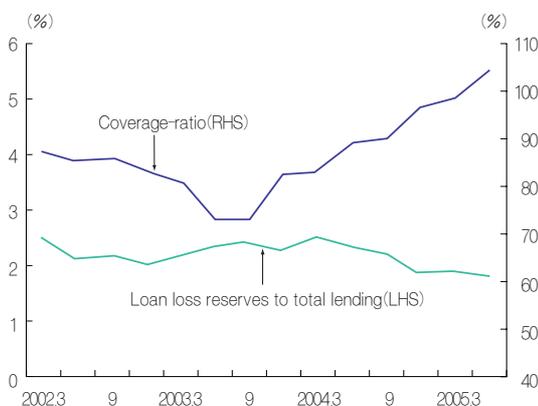
- 1) The ratio of loans extended to the lodging and restaurant industries in total exposure stands at 4.3%.
- 2) Regarding new household loans with the maturity of over 10 years secured by apartments with the market value of more than 600 million won located in a speculation area (including combined residential-commercial buildings), an LTV ratio of 40% applies. For other loans, an LTV ratio of 60% applies.

<Figure IV-5>

Substandard and below loans ratio

to rid themselves of bad debts including write-offs and credit recovery as well as the fall in new non-performing loans. Subsequently, the ratio of substandard and below loans stand at 1.71% as of the end of June 2005, down 0.9 percentage point from the same period of the previous year. The ratios of loans classified as substandard and below in the corporate and household sectors fell 0.47 percentage points and 1.37 percentage points, respectively. In particular, the sharp drop in that of the household sector is attributable to the fact that the ratio of substandard and below loans in the credit card sector had declined to 3.48% as of the end of June 2005, a third of the figure for the same period of the preceding year.

<Figure IV-6>

Loan loss provisions

Note: Coverage ratio = (loan loss reserves/substandard and below loans) × 100

Source: Banks' annual reports

The decrease of substandard and below loans and the setting aside of greater loan loss reserves combined to raise the coverage ratio - the ratio of loan loss reserves to substandard and below loans - to 104.9% as of the end of June 2005 from 96.4% at the end of 2004. Thus, it exceeded 100% for the first time since statistical data collection started. In the meantime, the ratio of provisions taken to total loans fell from 1.9% at the end of 2004 to 1.8% as of the end of June 2005 as a result of improvements in asset soundness. As of the end of June 2005, the ratio of US commercial banks' loan-loss provisions to non-performing loans was 177.4%, higher than that of Korea, whereas that of their loan loss provisions to total loans stood at 1.38%, lower than that of Korea.

It is important for effective credit risk management to ensure the creditability of measured credit risk factors including the probability of default and the loss rate given default, which serve as the basis for loan loss provisioning. This is also of great significance for the seamless putting-in-place without unwanted side effects, such as wrenching adjustments of financial

institutions' loan portfolios or a credit crunch directed toward SMEs, of the BASEL II framework to be introduced at the end of 2007.

B. Interest rate risk and market risk

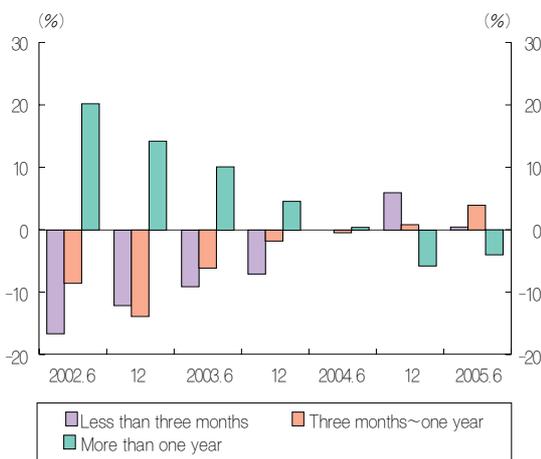
Formation of an interest rate risk structure favorable to banks as interest rates rise

As of the end of June 2005, liquidity positions were judged to be generally favorable toward commercial banks in terms of the maturity structure of their assets and liabilities in that assets exceeded liabilities at the short-term end (remaining-maturity basis) whereas liabilities exceeded assets at the long-term end. In the case of short-term assets and liabilities with remaining maturities of no more than three months, there was an expansion of short-term fund-raising through CDs, RPs and other marketable deposits that brought about a mild deterioration in liquidity conditions, by way of the reduction of the scale of the excess of their assets over their liabilities.

The difference between interest-sensitive assets and liabilities (interest-sensitive gap) based on the interest rate repricing cycle³⁾ has been maintaining the recent trend of surpluses of short-term assets and of long-term liabilities. In the case of remaining maturities of no more than three months, the asset surplus rose by 7.3 trillion won in the first half of 2005. This is attributable to the fact that short-term market interest rates including CD yields stood at historically low levels⁴⁾ in

<Figure IV-7>

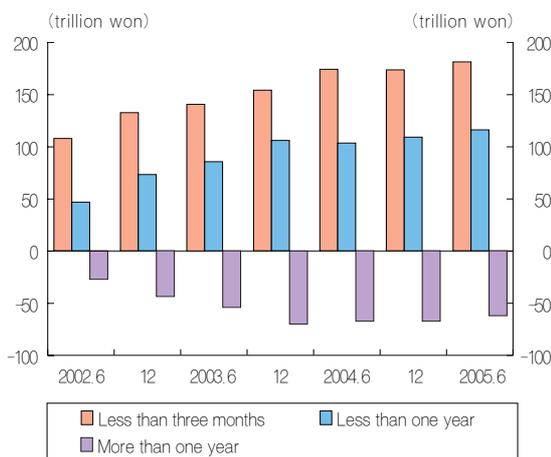
Maturity gap¹⁾ between assets and liabilities²⁾ in Korean won



Notes: 1) (Assets - liabilities)/assets
 2) Bank account & trust account
 Source: Banks' annual reports

<Figure IV-8>

Rate sensitive gap between assets and liabilities in Korean won



Notes: 1) Less than one year assets and liabilities include less than three month assets and liabilities.
 2) Rate sensitive assets - rate sensitive liabilities
 Source: Banks' call reports

3) This means the period in which financial institutions' contractual interest rates on assets and liabilities are reset for such reasons as the maturity of deposits and loans or the repricing of the base rates for financial products carrying floating rates. A short term of three months hereinafter refers to re-setting of interest rates due to maturity or the repricing of the base rate within three months.

<Table IV-2>

Weight of loans by interest rate type

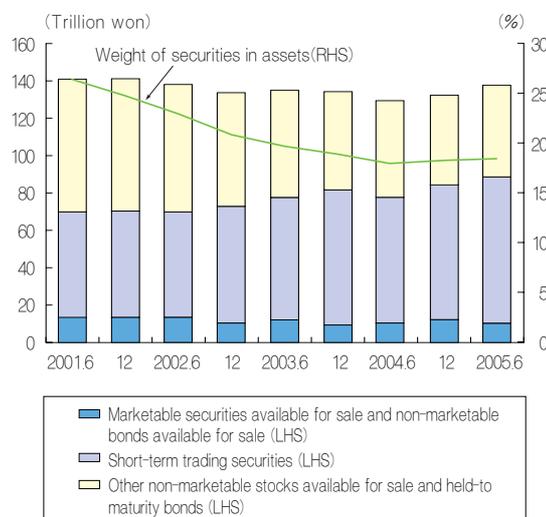
Classification		Dec. 2002	Dec. 2003	Dec. 2004 (A)	Jun. 2005 (B)	Increase (decrease) (B-A, %p)
Loans at fixed interest rates	corporate	49.9	49.4	55.7	43.5	-12.2
	household	26.5	26.4	29.1	12.1	-17.0
Loans at floating interest rates	corporate	50.1	50.6	44.3	56.5	12.2
	household	73.5	73.6	70.9	87.9	17.0

Note: Commercial and specialized banks, Newly originated loan
Source: The Bank of Korea

the first half of 2005. Besides this, the real estate market boom prompted financial institutions to expand their housing finance loans at floating rates aggressively. Regarding maturities of no more than one year, the asset surplus showed a tendency toward a further increase with interest-sensitive assets exceeding interest-sensitive liabilities owing to the expansion of floating-rate loans.

<Figure IV-9>

Investment in marketable securities



Note: Bank accounts, Closing balance
Source: The Bank of Korea

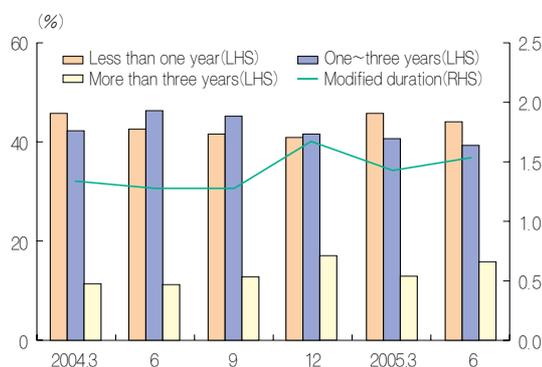
As for the structure of assets and liabilities with the maturities of no more than a year, commercial banks show an asset-sensitive interest risk structure where interest-sensitive assets exceed interest-sensitive liabilities. Thus, banks may incur losses if interest rates fall and make profits if they rise.

Market risk of bonds increases while that of equities remains insignificant

Securities accounted for 18.4% of the total assets of commercial banks, similar to the proportion as of the end of 2004. However, the volume of short-term trading securities and marketable securities available for sale expanded to 90.0 trillion won as of the end of June 2005, up from 86.7 trillion won⁵⁾ as of the end of 2004. Accordingly, the amount of securities exposed to the market risk is seen to have increased.

<Figure IV-10>

Duration of local currency bonds and maturity distribution



Sources: The Bank of Korea, Banks' call reports

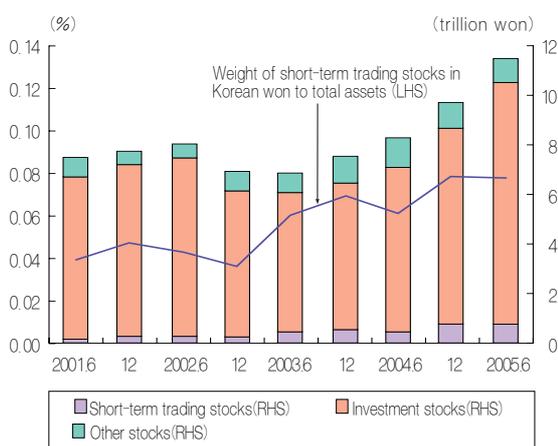
Market risk of bonds seems to be on the rise with increasing volatility and exposures in the course of the dramatic run-up in interest rates in early 2005.

- 4) Yields on three-month CDs remained around 3.5% on average during the same period.
- 5) The figures as of the end of December 2004 as detailed in the 5th issue of the Financial Stability Report (96.7 trillion won, 762.1 billion won) include the amount of securities incorporated into privately-placed funds under then effective accounting principles. If these amounts are not included, as at the end of June 2005, the figures stand at 86.7 trillion and 568.5 billion won respectively.

As banks reacted by adjusting their bond portfolios⁶⁾ to focus on short-term bonds with a maturity of no more than a year and accordingly reduced the duration of the bonds in their possession, however, this is likely to serve as a factor lessening the possibility of additional losses in future.

<Figure IV-11>

Investments in equities



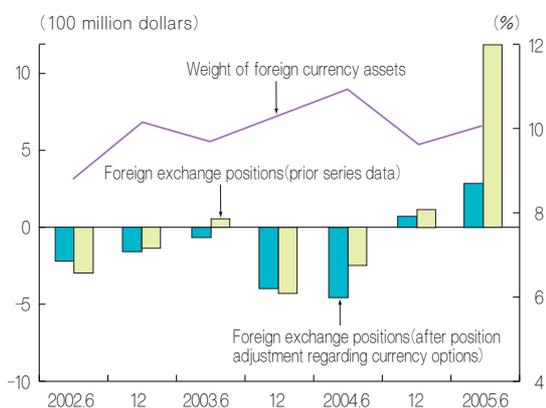
Source: Banks' call reports

Given the fact that the volume of stocks held for short-term trading rose modestly to 584.7 billion won as of the end of June 2005 from 568.5 billion won⁵⁾ at the end of 2004, while their weight in total assets failed to rise above 0.08%, market risk from stock price fluctuations is evaluated as being insignificant. Higher stock prices increased the valuation of investment stocks by 2.1 trillion won during the first half of 2005. As of the end of June 2005, investment stocks amounted to as much as 9.9 trillion won. Equities investment has contributed to the improvement in banks' profitability, bolstered by the recent favorable performance of the stock market. However, this may act as a potential risk factor, depending on the circumstances in the stock market.

Foreign exchange risk limited

<Figure IV-12>

Weight of foreign currency assets¹⁾ and foreign exchange positions in total assets



Note: 1) Korean won basis
Source: The Bank of Korea

Foreign currency assets of commercial banks increased to 76.0 billion dollars as of the end of June 2005, up 11.1 billion dollars from the end of 2004, as banks purchased the dollars sold by exporters to brace for an appreciation of the Korean won against the US dollar. The weight of foreign currency assets in total assets (on a Korean won basis) rose only one half of a percentage point, from the end of the previous year because of a fall in the won-dollar rate as the Korean won firmed.

6) In the process of adjusting bond portfolios, commercial banks sustained losses of 115.9 billion won on the disposition of Korean-won denominated short-term trading bonds. This can be construed as the realization of market risk that had increased in accordance with the prolongation of the duration of the bonds held.

In regard to foreign-exchange positions⁷⁾ exposed to the exchange-rate risk, the over-bought position stood at 380 million dollars as of the end of June 2005, up 300 million dollars from the end of 2004. In such an over-bought position where purchases of foreign currencies exceed sales, a drop in the won-dollar rate (appreciation of the Korean won) may generate exchange losses. However, its ratio is equivalent to only 0.9% of banks' equity capital, which means that the foreign exchange risk of commercial banks is limited.

Risk management strengthened by the use of derivative products

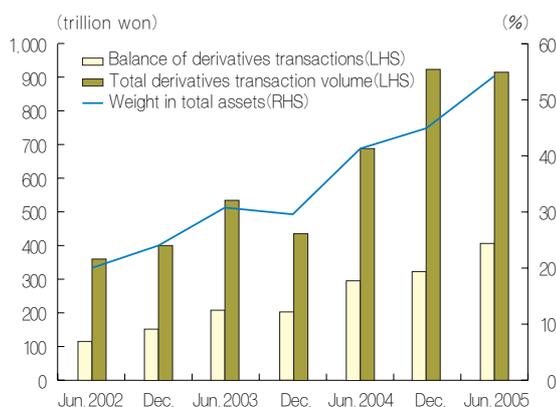
With the heightening volatility of market price variables including interest rates and exchange rates, the turnover of derivative instruments increased.

The balance of derivatives traded by commercial banks reached 404.1 trillion won as of the end of June 2005, up 82.3 trillion won from the end of 2004. The share of such derivatives in total bank assets went up by 9.1 percentage points to 53.8%. In particular, there was a marked expansion in the trading of foreign currency-related derivatives, arising from banks' purchase⁸⁾ of forward exchange sold in large quantities by exporters to ward off exchange losses and the increase in banks' trading to hedge the resultant over-bought position.

In spite of this expansion of trading, the ratio of the balance of commercial banks' derivatives trading to

<Figure IV-13>

Balance of derivatives transactions and their weight in total assets



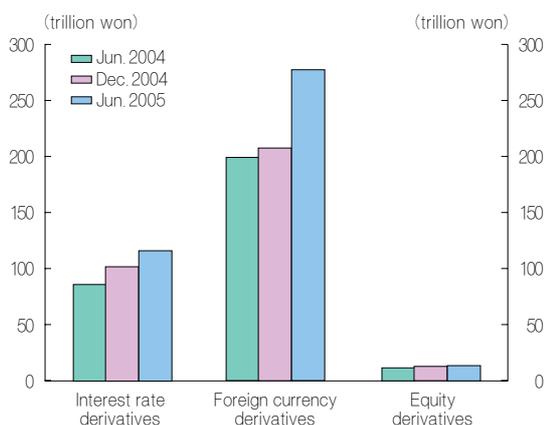
Note: Total assets represent the closing balance of bank accounts.
Sources: The Bank of Korea, Banks' call reports

7) Under the amended Detailed Rules on Foreign Exchange Transactions (enacted on October 1, 2004), currency option trading positions with hedged exchange risk were excluded from exchange positions. Thus, this analysis was conducted in accordance with the revised standards.

8) The balance of commercial banks' foreign currency forward transactions moved up 45.3 trillion won from 165.1 trillion won as of the end of 2004 to 210.4 trillion won as of the end of June 2005.

<Figure IV-14>

Balance of derivatives transaction by product



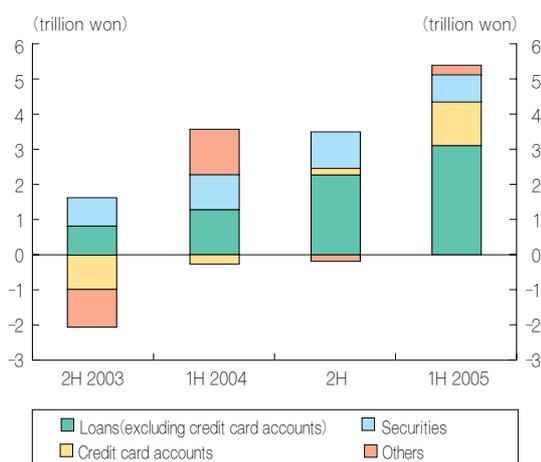
Source: Banks' call reports

total assets and core capital (Tier 1) stood at 0.54 and 9.2 times respectively, much lower than the 14.7 and 209.6 times of US commercial banks.⁹⁾ Thus, it seems that the trading of derivative products has little impact on the management of banks at the moment.

Recently, banks have developed and provided instruments for risk management including over-the-counter derivatives to hedge foreign exchange risks of the corporate sector. This can be construed as a positive phenomenon whereby the risk management function of banks extends to the corporate sector and the routes of risk transfer and dispersion among economic entities are diversified. In order to ensure that the positive effects of derivatives trading take firm hold, risk management systems that can accurately measure and manage the risk inherent in derivatives need to be implemented. At the same time, it is essential to provide customers with accurate and sufficient information on the risk of derivative products.

<Figure IV-15>

Changes in the structure of net profit before tax



Source: Banks' call reports

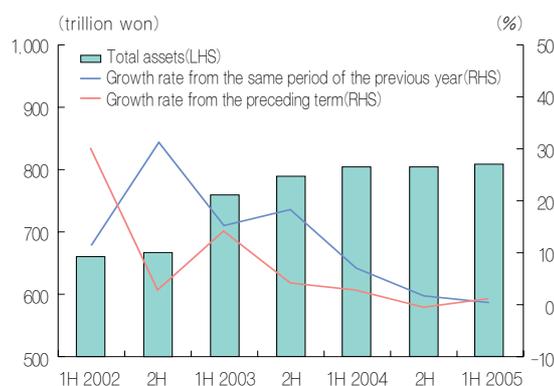
C. Profitability

Growth of net profits gains momentum

Commercial banks saw their net profits before tax grow by 61.6% from 3.3 trillion won in the first half of 2004 to 5.3 trillion won in the first half of 2005. The expansion was driven by several factors: the profitability of lending business improved with a sharp fall in non-performing loans; credit card operations shifted into surplus; better business performance by restructured companies including Hynix

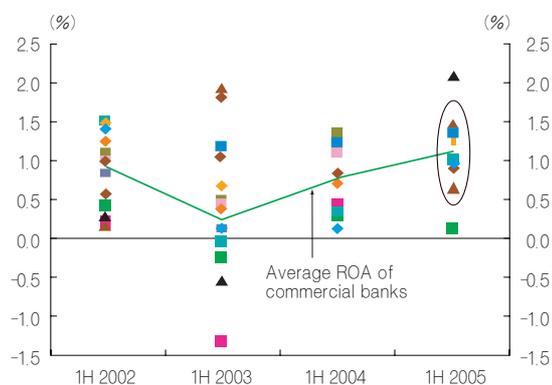
9) Calculated on the basis of the US commercial banks(84 banks) that had at least 10 billion dollars in total assets as of the end of June 2005.

<Figure IV-16>

Size and growth of total assets

Source: Banks' call reports

<Figure IV-17>

Change in ROA

Source: Banks' call reports

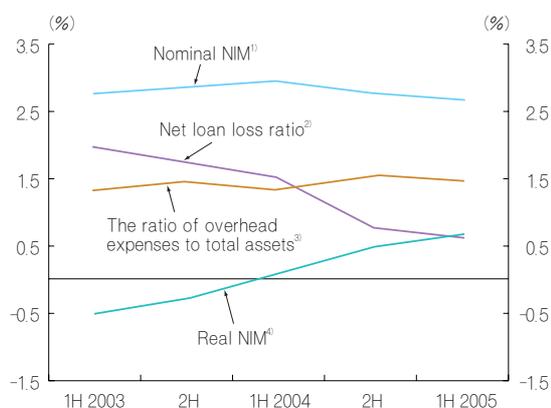
Semiconductor led to gains on disposition of stocks received in debt/equity swaps; and there was an increase in non-recurring profits including valuation gains on capital participation taken in invested companies.

Continuing the pattern evident in 2004, 14 commercial banks registered surpluses in the first half of 2005. Their average return on assets (ROA) inched up 0.4 of a percentage point from 0.8% in the first half of 2004 to 1.2% in the first half of 2005. The average ROA of domestic commercial banks is lower than that in the USA (1.31%, first half of 2005), but higher than that in Germany (-0.013%, 2004), Japan (0.043%, 2004) and the UK (0.533%, 2004). This shows that the domestic banking sector has greatly improved its profitability in terms of individual banks. Differences between their profitability narrowed except for the case of two banks burdened by non-recurring losses specific to them. The overall improvement is regarded as attesting to the heightened stability of the banking system.

Nominal net interest margin narrows while real net interest margin widens

In the first half of 2005, nominal net interest margins (ratio of nominal net interest income to interest-earning assets) registered 2.71%, down 0.18 of a percentage point from the first half of 2004. This reflected a reduction in interest margins due to the expansion of housing finance loans carrying low interest rates and intensified competition to attract deposits by means of the sale of high-interest-bearing promotional deposit products, which partially offset the effects of the expansion of interest-bearing assets thanks to improved asset quality. However, real net interest margins, with the ratio of overhead expenses to total assets and the net loan loss ratio taken into

<Figure IV-18>

Net interest margins(NIM)

Notes: 1) (Interest revenue - interest expenses)/interest-earning assets
 2) Net bad debt expenses/interest-earning assets
 3) (Severance pay + overhead expenses + depreciation + amortization)/total assets
 4) Nominal NIM - net loan loss ratio - the ratio of overhead expenses to total assets

Source: Banks' call reports

account, surged sharply as a result of the reduced provisioning burden. The decrease in nominal net interest margin lessened the weight of interest payments on the business and household sectors and the increase in real net interest margins heightened banks' profitability, acting as a positive factor for both banks and their customers.

In other respects, however, such trends in the net interest margin can be deemed a product of conservative asset-oriented management by banks excessively averse to risk-taking. This situation may restrict the availability of credit to high-risk customers. For the purpose of expanding the basis for long-term profits, it is necessary for banks to expand net interest margins through the management and acceptance of risk rather than simply avoiding it. They should reflect expected losses and risk capital appropriately in extending loans based on the practical application of risk adjusted loan pricing.

Continuation of buoyant profitability expected for the latter half of the year

The buoyant profitability of banks is expected to be sustained in the second half of 2005 as the burden of setting aside loan loss provisions should remain stable while fee and commission income stands to increase in line with the gradual recovery of the domestic economy and rapid expansion of installment-type funds.

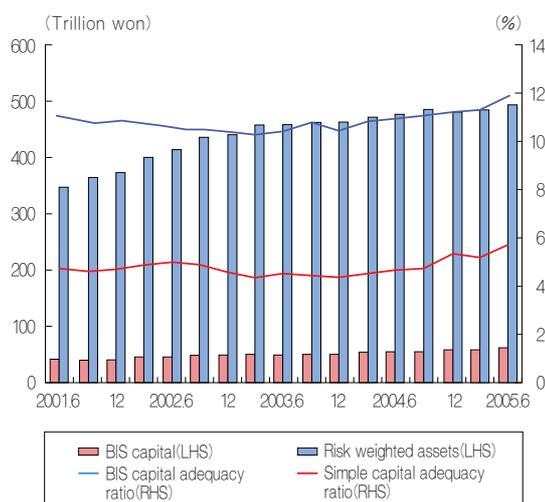
However, the non-operating income generated in the past in connection with corporate restructuring, which has made a marked contribution to the recent improvement of profitability, is unlikely to be sustained. Furthermore, such factors as fiercer competition among banks and the slowdown of

housing finance loans are expected to blunt the growth of net income to some extent.

In spite of a substantial rise in net profits, the growth of commercial banks' total assets is witnessing a continual slowdown. Moreover, the environment for banks' characteristic operating activities is showing signs of worsening in some respects including the narrowing of earning from interest margins and shrinking fees and commissions owing to fiercer competition and listless domestic demand.¹⁰⁾ If the deterioration in the profitability of banks' core business proves to be prolonged, it may undermine the structure for their generation of profits. Therefore, banks need to devote more effort to consolidate the basis for their profits, diversifying their sources of earnings through the development of new objects for fund management as well as innovative financial services.

<Figure IV-19>

BIS capital adequacy ratio¹⁾



Note: Calculated from March 2002 taking into consideration credit and market risks

Source: Banks' call reports

D. Capital adequacy

Capital adequacy ratios rise consistently

The capital adequacy ratio of commercial banks on the basis of the BIS criteria stood at 11.87% as of the end of June 2005, up 0.58 of a percentage point from the end of 2004. The ratio of equity capital to total assets also rose 0.42 of a percentage point from the end of 2004 to 5.70%. This indicates that the upward trend of the capital adequacy ratio is being sustained. The upswing is attributable to the fact that banks' equity capital has expanded substantially on the back of their net income growth, while the increase of their assets

10) In the first half of 2005, net interest income before provisions contracted by 81.4 billion won from the first half of 2004 while net income from fees and commissions fell by 63.8 billion won because of the slowdown in the use of credit cards.

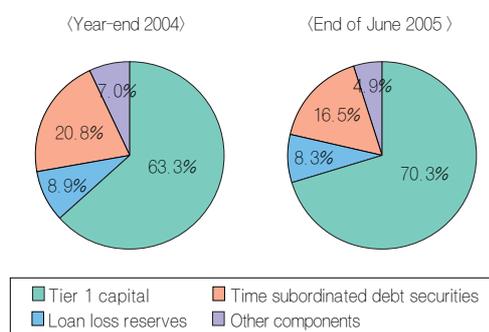
has been blunted. These benign profitability conditions for banks are expected to be maintained on through the second half of 2005. Thus, there is a good prospect that the upward trend in banks' capital adequacy ratios will be sustained.

Equity capital structure improves dramatically

Buoyed by net income expansion, the share of core capital in equity capital stands at 70.3% as of the end of June 2005, up 7.0 percentage points from the end of 2004. The share of supplementary capital including subordinated debts with fixed maturities shrank, resulting in a dramatic improvement in the equity capital structure. The average BIS core capital ratio as of the end of June 2005 stood at 8.3%, somewhat lower than that of the USA (10.1%, end of June 2005), but similar to that of the UK (8.3%, end of 2004). Overall, domestic banks' capital adequacy is assessed as being good.

<Figure IV-20>

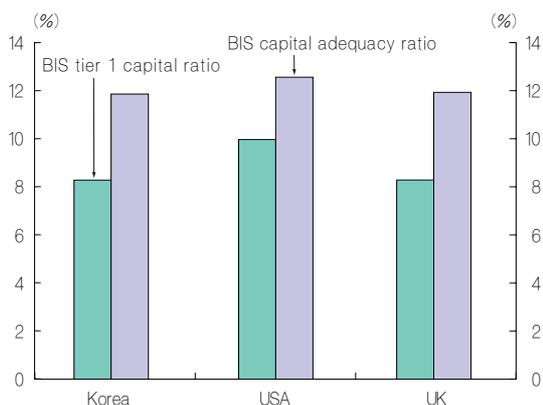
BIS capital structure



Source: Banks' call reports

<Figure IV-21>

BIS capital adequacy ratios of banks in Korea and major economies



Source: Banks' call reports, FDIC of US (end of June 2005), Bank of England (year-end 2004)

Given domestic banks' heavy dependence on interest income in generating profits and the consequent high volatility of their net income, they must endeavor to improve their capital structure to ensure sound management, while expanding core capital.

In particular, banks are required to improve their capital structure and increase equity capital to avoid the destabilization of credit including the abrupt adjustment of lending portfolios upon the introduction of the New Basel Accord. Toward that end, they need to build up their internal reserves including setting aside additional loan loss provisions and expanding their capital by such means as rights and public offerings.

<Box IV-1>

Impact of the planned introduction of the New Basel Capital Accord

In June 2004, the Basel Committee on Banking Supervision finalized its plan to introduce a new capital regulatory framework (“Basel II”) for implementation by banks in 13 member countries starting from the end of 2006.

Basel II requires banks to calculate capital requirements by reflecting operational risk as well as the credit and market risks already reflected. In addition, the differentiation of minimum capital requirements is expanded according to the degree of borrowers’ credit risk. Banks are also permitted to measure credit risk based on their internally developed risk assessment models. Instead, the supervisory authority conducts a scrutiny of banks’ risk management system and capital adequacy, taking relevant measures if necessary. In addition, banks are required to disclose their capital and risk status in a transparent manner, based on proactive utilization of the market monitoring function.

① Status of Korea’s preparation for introduction of Basel II

Gearing up for major economies’ introduction of the Basel II, the domestic supervisory authority in October 2004 unveiled a tentative plan for its domestic introduction. In December 2004, it decided that the new Basel Capital Accord would apply for all banks from the end of 2007, one year later than in the case of member countries of the Basel Committee. Banks may select an appropriate option out of diverse risk measurement methods presented by the Basel Committee. Currently, the majority of nation-wide commercial banks are preparing for the introduction of the advanced approaches (internal ratings-based approach (IRBA) for credit risk and advanced measurement approach (AMA) for operational risk).

By September 2006, the domestic supervisory authority is to formulate approval standards concerning individual banks’ IRBA/AMA as well as detailed guidelines on the supervisory review and market disclosure by following procedures to reflect relevant comments. Then, the

BASEL II introduction timeline

Major Duties	(quarter)											
	2005				2006				2007			
	1	2	3	4	1	2	3	4	1	2	3	4
1. Formulation of detailed guidelines and relevant regulations												
a. Formulation of detailed guidelines regarding IRBA/AMA												
Formulation of detailed guidelines regarding supervisory review /disclosure												
b. Establishment of the standards regarding qualified external credit assessment institutions and their selection												
c. Formulation of the ‘New BIS capital adequacy ratio calculation standards (draft),’ into regulations												
2. Guidance and approval concerning banks’ preparation for introduction of BASEL II												
a. Guidance for each bank’s formulation of the BASEL II implementation plan												
Review and guidance regarding execution of banks’ implementation plans												
b. Approval regarding IRBA/AMA												

authority will incorporate these standards and guidelines into the relevant supervisory regulations.

② Impact of the introduction of Basel II

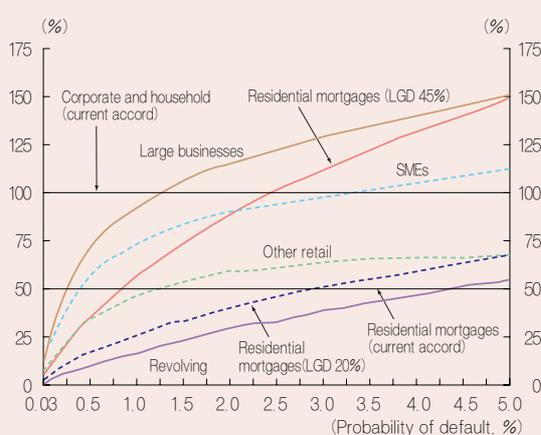
The introduction of Basel II is aimed at enhancing banks' soundness and safety by upgrading their risk measurement techniques and management approaches and requiring them to maintain capital commensurate with risks. Accordingly, its implementation will improve banks' capacity to absorb and handle external shocks and thus contribute to promoting financial system stability and economic development at the end of the day. It will also facilitate banks' business innovation and their nurturing of staff expertise, greatly contributing to the further progress of the financial industry and markets.

In addition, by strengthening the supervisory authority's monitoring function and the banks' system of disclosure, it will help considerably toward improving the transparency of bank management and tightening the stability of the financial system.

In the meantime, upon application of the internal ratings-based approach, differentiated risk weights are applied according to the scale of risk factors including the probability of default (PD) and the loss given default (LGD). Accordingly, banks will scramble to expand lending to prime companies with a low PD or residential mortgages. Under these circumstances, lending conditions applicable to borrowers with a lower credit rating may worsen. In addition, a rise in the PD as a result of the economic slowdown ratchets up risk weights, prompting banks to take a more cautious attitude toward lending and thus subsequently holding back economic recovery. As banks are required to maintain additional capital based on the reflection of operational risk, the external competitiveness of domestic banks may worsen. In addition, the new application of risk weights to that portion of earmarked funds not used out of the contracted loan amount and the upward adjustment of risk weights regarding non-listed securities or asset-backed securities including credits subject to debt/equity swaps act to heighten banks' burden of maintaining capital.

In consideration of these problems, the Basel Committee included preferential treatment of SME loans* in the final draft of Basel II and granted the financial supervisory authorities of each country discretionary powers in respect of 75 items, providing a variety of means to cushion the impact.

Risk weight by loan type applicable upon adoption of the internal ratings-based approach¹⁾²⁾



Notes: 1) Assuming 45% LGD, 2.5-year maturity and 6 billion won of sales for SMEs
 2) Lowest PD limit for corporate and retail lending: 0.03%

* Including acknowledgment of reduction of risk weights (100% → 75%) for SME loans not higher than a certain level (1 billion won) in the case of application of a standardized approach, reduction of default correlation coefficients for SMEs in the event of application of the IRBA (maximum 0.04), etc.

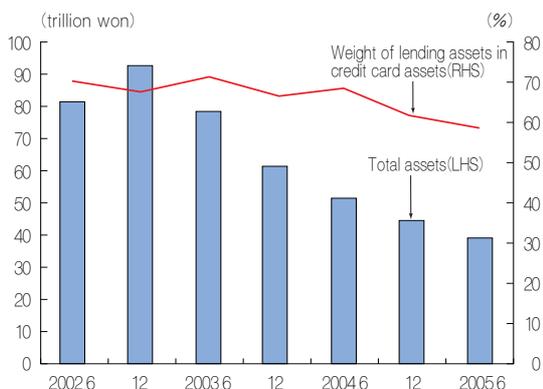
Accordingly, the Korean financial supervisory authority intends to utilize the discretionary power given by the New Accord to the utmost possible extent. Banks are tightening the sophistication of their risk management systems and sharply expanding capital on the basis of recent dramatic improvements in their revenue generation capacity, while aggressively striving to reduce risks including the designation of credit ratings for securitized assets and the reduction of unused credit lines. Thus, it is expected that the negative influence of the introduction of Basel II at the end of 2007 will be alleviated to a greater degree than had been originally anticipated.

Major factors improving or worsening capital adequacy ratio

Improving factors	Impact	Worsening factors	Impact
Residential mortgage exposures	↑	Securitization exposures	↓
		Credit subject to debt/equity swaps, non-listed or non-registered stocks and equity securities	↓
Small exposures to SMEs	↑	Portion not drawn down of contractual loan amount	↓
Other retail loans	↑	Operational risk	↓

<Figure IV -22>

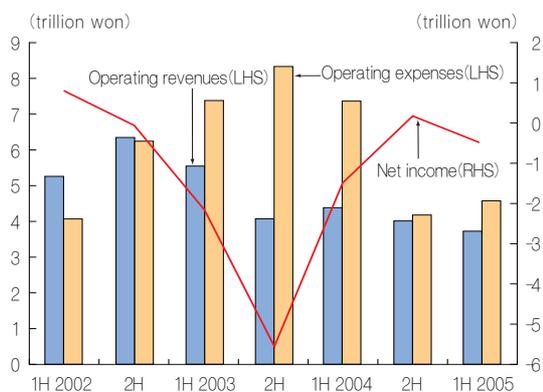
Total assets of credit card companies¹⁾



Notes: 1) Managed assets of 6 stand-alone credit card companies
 2) Figures for 2003 and before include those of Samsung Capital, which was absorbed into Samsung Card.
 Source: The Financial Supervisory Service

<Figure IV -23>

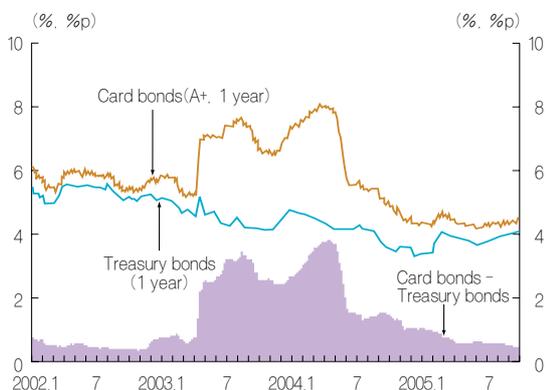
Net profits of credit card companies



Source: The Financial Supervisory Service

<Figure IV -24>

Interest rate spread between card and Treasury bonds



Source: Korea Exchange

2. Soundness of non-bank institutions

A. Credit card companies

Total assets shrink but profitability improves

As of the end of June 2005, the amount of total assets of credit card companies¹¹⁾ (based on managed assets¹²⁾) fell to 39.0 trillion won, only 42.3% of that at the end of 2002 when the scale of their operations reached its peak (92.1 trillion won). However, the pace of decline is slowing down gradually. The decrease in total assets was triggered by credit card companies' resolution of bad debts based on massive write-offs and their reduction of lending services (cash advances and card loans) to bolster risk management. Accordingly, the share of lending services in credit card assets (credit purchases and lending services) fell back from 67.2% at the end of 2002 to 58.2% at the end of June 2005.

In the first half of 2005, credit card companies registered a combined deficit of 0.5 trillion won, a third of the losses that they had chalked up in the same period of the previous year (1.5 trillion won). Except for one company that recorded a large deficit because of setting aside a further loan loss provision for the resolution of bad debts, however, credit card companies' bottom line shifted to a combined surplus of 0.9 trillion won. This improvement in credit card companies' profitability has been mainly due to a sharp drop in new bad debts. A reduction in financing costs stemming from lower interest rates on the issue of

11) Based on six companies including LG, Samsung, Hyundai, BC, Lotte and Shinhan.

12) These assets refer to the combined balance sheet assets and securitization assets, which are total real operating assets directly affecting profits and losses.

credit card bonds and an increase in card commission rates also contributed to strengthening profitability.

Financial soundness improves

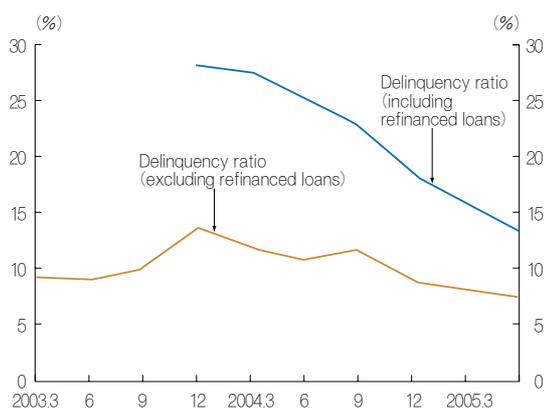
Stand-alone credit card companies' average delinquency ratio (including redemption loans),¹³⁾ which amounted to 28.3% as of the end of 2003, fell to 13.3% as of the end of June 2005, showing a rapid improvement in their asset soundness. Such progress was made possible by credit card companies' write-off of bad debts and proactive efforts to handle the relevant difficulties, while thanks to their tightened risk management, there was a reduction in new delinquencies arising.

The average adjusted equity capital ratio¹⁴⁾ of stand-alone credit card companies rose to 17.6% as of the end of June 2005, from -3.3% at the end of 2003 and 9.8% at the end of 2004. All such credit card companies are seeing these ratios at levels above the management guidance ratio (8.0%) of the supervisory authority. They have improved dramatically although credit card businesses have registered deficits for a considerable length of time. This is because they substantially expanded their share capital as part of their efforts to turn themselves around.

Given that their management status is returning to normal at such a fast pace, credit card companies are expected to pursue expansion strategies in a more aggressive manner. However, such expansion will not be attained easily because the domestic credit card market is regarded as having reached saturation point.

<Figure IV-25>

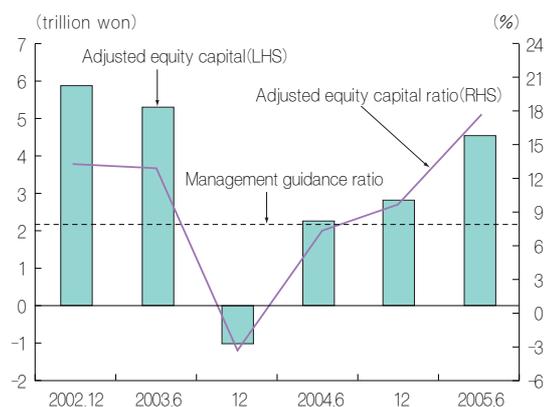
Delinquency ratio of credit card companies



Source: The Financial Supervisory Service

<Figure IV-26>

Adjusted equity capital ratio of credit card companies



Source: The Financial Supervisory Service

13) The delinquency ratio was calculated by including redemption loans in the amount in arrears except for those regarding which debt servicing capacity has improved significantly.

14) Adjusted equity capital ratio = adjusted equity capital/adjusted total assets

At the same time, the share of their lending assets including cash advances and card loans remains larger than that of credit purchases, with delinquency ratios still running high. Under these circumstances, if credit card companies recklessly expand their business, it may add to the accumulation of risks. The possibility of risk accumulation may well be higher for stand-alone credit card companies, which may be at a disadvantage in regard to financing terms, as compared to banks and their subsidiaries engaged in the credit card business.

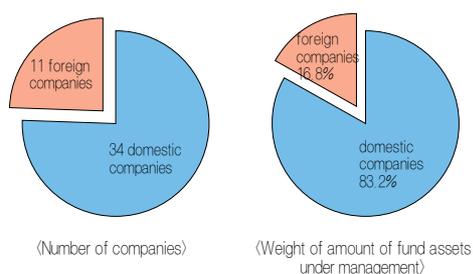
B. Asset management companies

Equity funds continue to grow while MMFs shift to a decrease

<Figure IV -27>

Number and market share of domestic/foreign asset management companies

(as of the end of Sept. 2005)



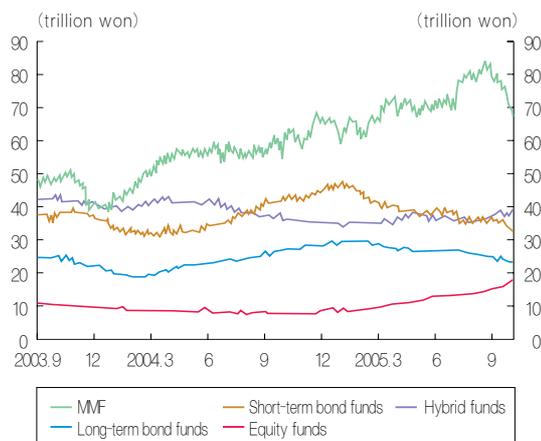
Source: Asset Management Association of Korea

There were 45 asset management companies¹⁵⁾ in operation as of the end of September 2005. Among them, 11 are foreign companies, over 50 percent of whose capital shares are held by foreign investors. Following the entry into effect of the “Act on Business of Operating Indirect Investment and Assets” in January 2004, 4 companies were newly incorporated and 4 exited for reasons such as merger by September 2005.

15) Pursuant to the ‘Act on the Business of Operating Indirect Investment and Assets’ of January 2004, asset management companies include both the previously existing investment trust management companies and asset management companies. The duties of asset management companies encompass establishment and termination of investment trusts, operation and operational instruction of investment trust assets, issuance of relevant management orders, operation of investment companies’ assets, nonspecific money trusts (banks), variable insurance (insurance companies), etc, which include the duties of investment trust management companies under the old ‘Securities Investment Trust Business Act’ (same as the business of the current asset management companies) and asset management companies within the meaning of the previous ‘Securities Investment Companies Act’ (operation of investment companies’ assets) as well as the banks’ trust business under the ‘Trust Business Act’ and the special accounts of insurance companies under the ‘Insurance Business Act’.

<Figure IV-28>

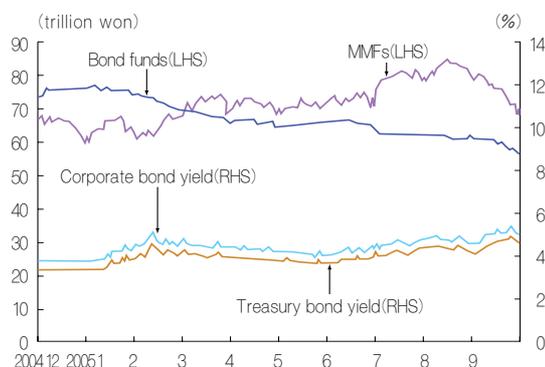
Fund assets by type of fund



Source: Asset Management Association of Korea

<Figure IV-29>

Change in MMFs and bond funds in 2005

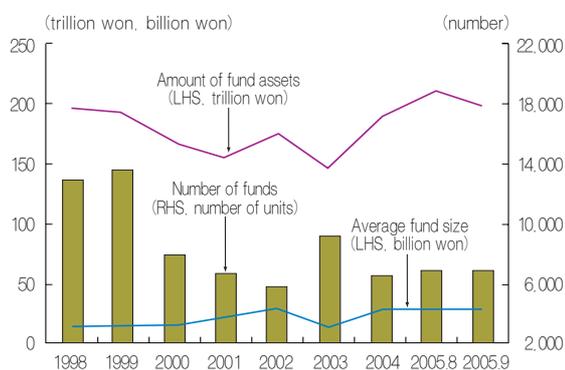


Note: Based on 3-year maturity (AA- in the case of corporate bonds) and final price

Source: Asset Management Association of Korea and KOSCOM

<Figure IV-30>

Change in average fund size



Source: Asset Management Association of Korea

The amount of fund assets managed by asset management companies (based on the outstanding balance of establishment) grew by 9.9 trillion won during the first nine months of 2005 to stand at 196.9 trillion won as at the end of September. Driven by rising stock prices and investors' growing interest in indirect investment products, equity funds increased by 8.7 trillion won, with installment-type funds to the fore. In addition, MMFs grew by 8.1 trillion won due to the increasing migration of funds towards the short-term end of the market. Other derivative funds increased by 5.6 trillion won. After showing a strong upward trend until August, MMFs declined considerably from September owing to concerns about the government's pursuit of changes in trading prices,¹⁶⁾ some banks' sale of special promotional deposit products bearing high interest rates and an increase of MMDA deposit rates.¹⁷⁾ Meanwhile, bond funds shrank by 19.8 trillion won because of investors' increasing retirement of their funds in line with the upward movement of market interest rates.

The number of funds established and operated as of the end of September 2005 stands at 6,825, up 333 from the end of 2004. The average size of funds (amount of fund assets/number of funds) remains at only 28.8 billion won, a level similar to that as of the end of 2004. This is much smaller than that in advanced nations¹⁸⁾ and even falls short of the level before the

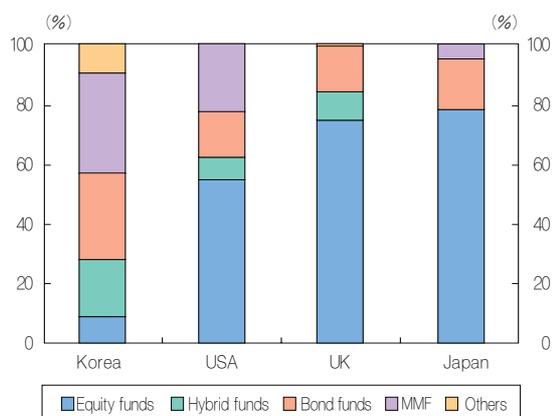
16) The government announced in advance its intended introduction of legislation to change the purchase and repurchase prices for corporate MMFs from the past price (closing price on the date immediately preceding the billing date) to the future price (closing price calculated after the timing of billing) from September 2005. (Ministry of Finance and Economy, August 2005)

17) In September 2005, such banks as SC First Bank, City Bank Korea, Hana Bank and Woori Bank sold one-year time deposits bearing an annual interest rate of 4.5%. From September 20, Hana Bank applied an interest rate per annum of 3.5% to MMDA (companies: not less than 1 billion won, individuals: not less than 100 million won).

18) 28.8 billion won for Korea (as of the end of September 2005), 1.0432 trillion won for the USA, 463.8 billion won for Italy, 298.3 billion won for the UK, and 162.0 billion won for Japan (as of the end of 2004)

<Figure IV-31>

Fund composition by type of fund



Notes: 1) As of the end of September 2005 for Korea
 2) As of the end of July 2005 for the USA and the UK regarding mutual funds only
 3) As of the end of July 2005 for Japan regarding securities investment trust only

Source: Asset Management Association of Korea

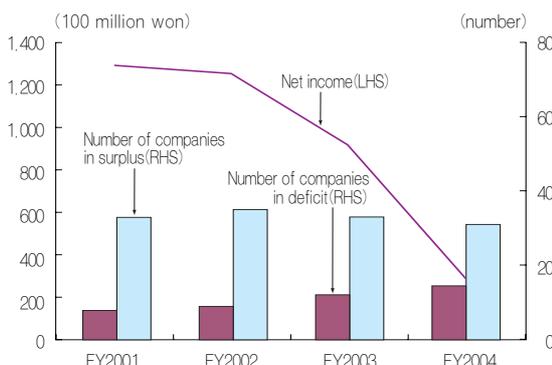
market was affected by the backlash from SK Networks scandal and the default on credit card bonds (30.1 billion won as of the end of 2002).

As described above, the average size of funds is small. Compared with the weight of equity funds (8.8%), the proportion of short-term funds (MMF and short-term bond funds) remains at over 50%, showing the persistence of the trend toward increasingly smaller and shorter-term funds. This hampers efficient fund management including diversified investment and also increases fund management expenses, weakening the profitability of asset management companies.

Profitability of asset management companies sufferers continued decline

<Figure IV-32>

Net income and number of asset management companies



Note: Years are fiscal years (closing at the end of March).
 Source: The Financial Supervisory Service and Asset Management Association of Korea

During fiscal year 2004 (April 2004 - March 2005), asset management companies saw a massive reduction in their profitability, registering combined net income of 27.0 billion won, down 63.2 billion won from the same period of the preceding year. Of the 45 asset management companies, 14 recorded deficits, among which, 8 companies were in the red for the second straight year.

Despite an increase in the amount of fund assets managed by asset management companies, their net income declined. For the most part, this is because large non-operating losses were incurred by the additional collection of corporate income taxes due to the mistaken accounting treatment by some companies of the distribution of commission income with sales companies and the sharing of losses related to the repurchase of Daewoo bonds.

In other respects, the poor performance is attributable to the following factors: management fees, a major

<Table IV-3>

Ratio of selling and administrative expenses to management fees

(100 million won)

	FY2001	FY2002	FY2003	FY2004
Management fees(A)	3,595	3,777	2,845	2,633
Selling & administrative expenses(B)	2,363	2,796	2,696	2,861
Ratio(B/A, %)	65.7	74.0	94.8	108.7

Source: The Financial Supervisory Service and Asset Management Association of Korea

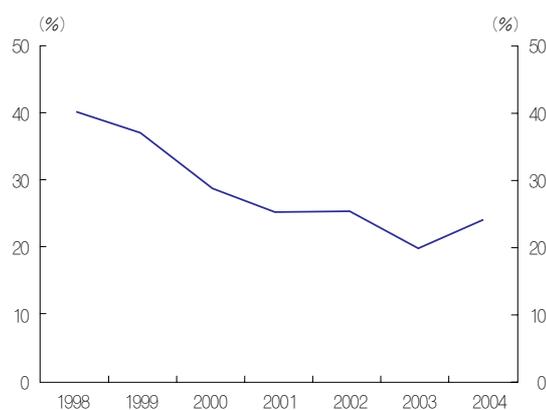
source of revenues for asset management companies, curtailed because of the general lowering of fund charges as a result of heightened competition among asset management companies; the overly large number of MMFs and bond funds providing less management fees than equity funds; and an income distribution structure heavily skewed in favour of sellers.¹⁹⁾ Meanwhile, selling and administrative expenses including labor costs increased as funds become increasingly shorter in duration and smaller. These structural problems also played a part in preventing the increase in fund assets under management from leading to the achievement in the economies of scale.

Demand for funds expected to grow

Currently, the domestic asset management market is relatively small in comparison to the size of the economy. Taking into account the implementation of the August 31 real estate market stabilization measures, the expansion of reserves for the National Pension Fund, and the planned introduction of the corporate pension system in December 2005, the asset management market has a large potential for further growth.

Although individuals' indirect investments through such products as installment-type funds are on the rise, their weight is not large at this moment. In addition, the pattern of corporate and institutional investors' placement of funds in short-term instruments including

<Figure IV-33>

Change in ratio of fund assets to GDP

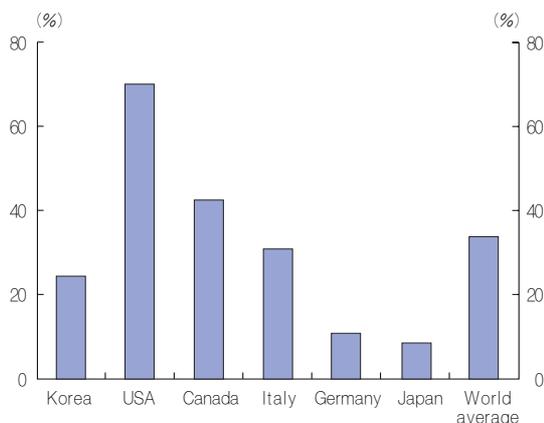
Source: The Bank of Korea and Asset Management Association of Korea

19) Currently, the commission income distribution ratio between asset management companies and sales companies reportedly stands at 3 to 7, which is biased against asset management companies. This seems to be attributable to the fact that leading players in the sales market including securities companies (68.3%) and banks (29.6%) exercise influence based on their superior position as the parent companies of asset management companies (12 subsidiaries of securities companies and 8 subsidiaries of banks), and thus income is not being distributed equitably according to the degree of difficulty associated with fund management, management performance, investment scale, etc.

<Figure IV -34>

Ratio of fund assets to GDP by country

(as of 2004)



Source: The Bank of Korea, World Bank and US ICI

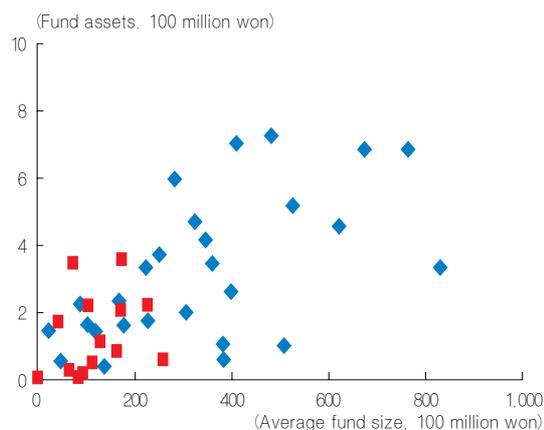
MMFs is not likely to change for the time being. In addition, cut-throat competition among asset management companies may lead to a decrease in their commission income. Thus, no dramatic improvement is foreseen in the management conditions of asset management companies.

In particular, it is likely that small-sized asset management companies with a small average size of funds will face a bumpier road. This is because most of the asset management companies with poor management performance are small-sized companies having only a small volume of fund assets under management and with a low average size of fund.

<Figure IV -35>

Distribution of asset management companies by fund assets and fund size

(as of the end of March 2005)



Notes: 1) ■ represents companies in deficit and ◆ represents companies in surplus.
 2) Excluding five companies with at least 10 trillion won in fund assets or at least 100 billion won of average fund size
 Source: Asset Management Association of Korea

Accordingly, asset management companies need to grow themselves by such means as merger in order to sharpen their competitive edge. In the case of small-sized asset management companies, they should adopt strategies to pursue specialized fund composition and increase fund size, rather than seeking external expansion. In addition, they must examine ways to consolidate the structure of returns distribution, diversifying the distribution channels of fund products and expanding the sales limit²⁰⁾ in implementing a system for direct sale of fund products by asset management companies.

Defying expectations, the amount of financing through other investment funds including derivative funds, real estate funds and real asset funds, which were permitted upon enforcement of the “Act on the Business of

20) Under the ‘Act on the Business of Operating Indirect Investment and Assets’, asset management companies’ direct sale of fund products is put on hold until January 4, 2006 (within 2 years from implementation of the Act on January 4, 2004). The prescribed sales limit is 20% of the relevant asset management companies’ outstanding amount of beneficiary certificates issued (400 billion won on the basis of trust principal if the outstanding amount is no more than 2 trillion won).

<Table IV-4>

Change in other investment fund assets

(trillion won)

	2004				2005		
	Mar.	Jun.	Sept.	Dec.	Mar.	Jun.	Sept.
Derivative funds	-	0.5	2.9	4.7	6.9	9.1	10.3
Real estate funds	-	0.1	0.3	0.9	1.3	1.7	2.1
Real asset funds	-	0.0	0.0	0.0	0.0	0.0	0.0
Fund of funds	-	0.3	1.1	2.2	3.4	3.3	3.6
Special asset funds	-	0.0	0.1	0.4	0.5	0.8	1.0
Total	-	0.9	4.4	8.2	12.1	14.9	17.0

Source: Asset Management Association of Korea

Operating Indirect Investment and Assets” of January 2004, remains at an insignificant level²¹⁾ except for some derivative funds centered on equity-linked securities funds (ELS funds). It seems that asset management companies need to reinforce their efforts for product innovation and enhance investors’ awareness of their new products.

The downward tendency of MMFs, which persisted in September, has stabilized recently, but there exists the possibility of a massive run on MMFs around the timing of implementation of the revised MMF trading price system. This may fuel volatility in the market even if it proves short lived. In this situation, some small-sized asset management companies with a high proportion of MMFs may experience a loss of competitiveness.²²⁾

21) As the end of September 2005, the amount of fund assets under management was 17.0 trillion won, about 8.6% of total fund assets under management (196.9 trillion won).

22) Out of 45 asset management companies as of the end of September 2005, the number of small-sized companies with less than 3 trillion won in the amount of fund assets under management is 27. Among them, the share of MMFs at 5 companies is larger than the industry average (34.5%). Of the 5 companies, 3 recorded a deficit in fiscal year 2004.

V. Changes in the financial infrastructure

1. Payment and settlement system

A. Payment and settlement trends

Overview

In the first half of 2005, the daily average volume of settlements by non cash payment instruments¹⁾ (21.1 million transactions, 143.6 trillion won) went up 7.6% by volume and up 3.3% by value from the same period of the previous year. Such expansion of the scale of settlements is largely attributable to the increase in funds transfer through the payment and settlement system brought about by the more intensive use of BOK-Wire, which more than offset the substantial decline in the number and value of checks and bills. By payment medium, fund transfers (9.9 million cases on a daily average) and cards (7.5 million cases) account for a large proportion in terms of the number of transactions while fund transfers (128.5 trillion won) take a large share in terms of value.

Checks and bills

The daily average volume of settlement by checks and bills posted 3.4 million transactions, for a total value of 14.0 trillion won in the first half of 2005, down 8.7% by volume and down 14.3% by value from the same period of the previous year. This represented a continuation of the trend in recent years of traditional

<Table V -1>

Settlement volume by payment instrument

(thousand transactions, trillion won, %)

		1H 2004	1H 2005	Change
Volume	Checks/Bills	3,688	3,369	-8.7
	Fund transfer	9,283	9,871	6.3
	Cards, etc. ¹⁾	6,632	7,858	18.5
	Total	19,603	21,097	7.6
Value	Checks/Bills	16.4	14.0	-14.3
	Fund transfer	121.6	128.5	5.7
	Cards, etc. ¹⁾	1.0	1.0	2.5
	Total	139.0	143.6	3.3

Note: 1) Credit cards, debit cards, check cards, prepaid cards and e-money

Source: The Bank of Korea

<Table V -2>

Settlement by bills and checks

(thousand transactions, trillion won, %)

		1H 2004	1H 2005	Change
Volume	Cashier's checks	3,628	3,313	-8.7
	Promissory notes, etc. ¹⁾	46	43	-8.1
	Other certificates ²⁾	13	12	-1.2
	Total	3,688	3,369	-8.7
Value	Cashier's checks	5.7	4.3	-23.9
	Promissory notes, etc. ¹⁾	9.1	7.5	-17.4
	Other certificates ²⁾	1.6	2.2	38.5
	Total	16.4	14.0	-14.3

Notes: 1) Including current account checks, personal checks and bills of exchange

2) Receipts for call loan repayment, receipts of transactions related to securities investment trusts, negotiable certificates of deposit (CD), etc.

Source: The Bank of Korea

1) Payment instruments are broadly classified into cash and non-cash instruments, and non-cash instruments include checks and bills, funds transfer, cards, e-money, etc.

paper-based settlement giving way to electronic-based settlement.

Fund transfers

Among fund transfers²⁾ between financial institutions in the first half of 2005, credit transfers increased 1.1% by volume and 5.7% by value year-on-year. This expansion was generated mainly by the increase in the number of small value funds transfers through the electronic banking network and the CD/ATM network as well as that of large value fund transfers through BOK-Wire. Meanwhile, the daily average volume of settlements by debit transfers posted an increase of 13.3% by volume and 11.9% by value from the same period of the previous year. Their increase was driven by the wider use of automated Giro transfers and the greater use of the Cash Management Service (CMS) system.

During the first half of 2005, the daily average volume of large value funds settlements in Korean won through BOK-Wire reached 7,841 transactions, for a total value of 114.1 trillion won in 2004, up 20.0% by volume and 5.1% by value from the same period of the previous year. This rise was primarily due to the expansion of securities settlements by the delivery-versus-payment (DVP) system, the more intensive use of the Call System by BOK-Wire participants and the increase in call transactions by asset management companies as a result of the inflow of funds into MMFs.

<Table V-3>

Settlement by funds transfer

(thousand transactions, trillion won, %)

		1H 2004	1H 2005	Change	
Credit transfer	Volume	Large value credit transfer	7	8	20.0
		Retail credit transfer	5,270	5,326	1.0
		Total	5,277	5,333	1.1
	Value	Large value credit transfer	108.6	114.1	5.1
		Retail credit transfer	12.6	14.0	10.9
		Total	121.3	128.1	5.7
Debit transfer	Volume	Giro system direct debits	1,760	1,981	12.6
		CMS debit transfers	2,247	2,557	13.8
		Total	4,007	4,538	13.3
	Value	Giro system direct debits	0.1	0.1	8.8
		CMS debit transfers	0.2	0.2	14.0
		Total	0.3	0.4	11.9

Source: The Bank of Korea

<Table V-4>

Settlement over BOK-Wire

(transactions, trillion won, %)

		1H 2004	1H 2005	change
Volume	Gross settlement	5,020	6,344	26.4
	Net settlement	640	621	-3.0
	Receipt and disbursement of Treasury funds, etc. ¹⁾	877	877	-0.0
	Total	6,537	7,841	20.0
Value	Gross settlement	88.7	96.0	8.2
	Net settlement	13.1	9.7	-25.7
	Receipt and disbursement of Treasury funds, etc. ¹⁾	6.8	8.4	22.4
	Total	108.6	114.1	5.1

Note: 1) Receipt and disbursement of Treasury funds, Bank of Korea loans, transactions of government and public bonds

Source: The Bank of Korea

2) Funds can be transferred from one account to another either by credit transfer or debit transfer. Credit transfer refers to a transfer of funds initiated by the payer directing his/her bank to deposit a certain amount into the bank account of the payee whereas in a debit transfer the payee instructs his/her bank to withdraw a certain amount from the payer's account in accordance with a prior contract.

<Table V -5>

Settlement by cards

(thousand transactions, billion won, %)

		1H 2004	1H 2005	Change
Volume	Credit Cards	6,008	6,983	16.2
	Debit Cards ¹⁾	2	11	380.3
	Check Cards	158	436	175.4
	Prepaid Cards	15	28	83.7
	Total	6,183	7,458	20.6
Value	Credit Cards	964.3	974.7	1.1
	Debit Cards ¹⁾	0.2	0.5	257.7
	Check Cards	4.7	17.6	275.6
	Prepaid Cards	0.6	1.4	129.0
	Total	969.7	994.3	2.5

Note: 1) Throughput of Debit Card Net of Korea Financial Telecommunications and Clearings Institute

Source: The Bank of Korea

Cards

The usage of cards for settlement registered a daily average of 7.5 million transactions by volume and 994.3 billion won by value in the first half of 2005, marking an increase of 20.6% in volume terms and 2.5% in value terms from the same period of the preceding year. The usage of credit cards posted an increase of 16.2% in volume terms and 1.1% in value terms. As of the end of the first half of 2005, they accounted for well over 90% of the entire use of cards (93.6% by volume and 98.0% by value). The usage of cards other than credit cards, such as debit cards and check cards, recorded a strong growth of 129% ~ 276% (by value) from the same period of the previous year, but these figures still remain much more low-key than those for the use of credit cards. Their rapid expansion is ascribable to strengthened customer management by credit card companies and changes in preference on the part of customers.

<Table V -6>

Net settlement, net exchange payments and collateral securities

(billion won, %)

Category		1H 2004	1H 2005	Change
Net settlement	Morning	4,180.9	4,525.2	344.3(8.2)
	Afternoon	8,870.5	5,172.8	-3,697.7(-41.7)
Net average exchange payments ¹⁾	Morning	2,256.4	2,382.0	125.6(5.6)
	Afternoon	5,760.1	3,782.2	-1,977.9(-34.3)
Securities called for as collateral ²⁾ (A)		5,560.9	4,287.4	-1,273.5(-22.9)
Value of securities deposited as collateral ²⁾ (B)		5,774.7	4,406.1	-1,368.6(-23.7)
B/A		103.8	102.8	

Notes: 1) Sum of net exchange payments during the half-year/net exchange payment days

2) Based on figures at the end of each half-year period

Source: The Bank of Korea

B. Settlement risk trends

In the first half of 2005, daily average net settlement by participants in net settlement, which indicates the level of net settlement risk, decreased by 25.7% year-on-year to 9.7 trillion won, while daily average net exchange payments shrank 23.1% to 6.2 trillion won over the same period. This resulted from a sharp reduction in afternoon net settlement,³⁾ which was caused by the fall

3) Apart from the Check Clearing System of Korea Financial Telecommunications and Clearings Institute (KFTCI), the net settlement amount, and subsequent fund adjustments, arising from inter-bank fund transfers through 10 systems (Giro System, Electronic Banking System, Interbank Funds Transfer (IFT) System, Interbank CD/ATM System, Cash Management Service (CMS) System, Electronic Funds Transfer at the Point of Sale (EFTPOS) System, BANKLINE System, K-cash System and B2B & B2C E-Commerce Payment System) are settled across the current accounts of participating institutions at the Bank of Korea as of 11:30 a.m. every business day.

in the use of bills and checks and the change of the procedure followed in funds adjustment after the clearing of cashier's checks (from a basis of compensation for the cumulative total of the daily amounts foregone to one of compensation for the interest foregone).

Net debit caps set by participants in net settlement (26 institutions) increased to 13.7 trillion won as of the end of the first half of 2005, up 8.6% from the end of the same period of the previous year. This is because participants raised net debit caps to handle an increase in real-time fund transfers between customers through retail payment systems such as the Electronic Banking System and the Interbank Funds Transfer System. Accordingly, the simple average of the maximum utilization rate of net debit caps by participants registered 53.9%, down 13.2 percentage points from the 67.1% during the same period of the previous year.

The volume of securities posted as collateral with the Bank of Korea by net settlement participants to guarantee fulfillment of net settlement stood at 4.4 trillion won as of the end of the first half of 2005, down 23.7% from the end of the same period of the previous year. This is because of the change of the method of funds adjustment and the subsequent reduction in the amount of collateral provided required⁴⁾

4) With the abolishment of the basis of compensation for the cumulative total of the daily amounts foregone, the size of the required collateral (75% of the average fund adjustment payments of cashiers' checks, etc.) necessary for net settlement of the relevant amount was automatically reduced.

C. Developments in the payment and settlement system

Oversight of payment and settlement system tightened

Of the eleven payment and settlement systems⁵⁾ operated by the Korea Financial Telecommunications and Clearings Institute, the Bank of Korea conducted an assessment of seven systemically important settlement systems⁶⁾ including the Giro and CMS Systems in the first half of 2005. The results indicated that these systems were mostly in compliance with international standards regarding safety and efficiency. The Bank of Korea recommended improvement of certain shortcomings including unsatisfactory risk management measures and a lack of remote back-up systems.

Safety and efficiency of payment and settlement systems enhanced

In the “Act concerning Debtor Rehabilitation and Bankruptcy”(enacted in April 2006), the Bank of Korea was able to ensure the insertion of a provision that payment orders or relevant settlements made through a designated payment and settlement system should remain in full force and effect even in the event of bankruptcy of a financial institution (including commencement of rehabilitation procedures). Now, it is engaging in consultation with the government to incorporate such specific provisions as designation (by the Governor of the Bank of Korea) of those payment

<Table V -7>

Evaluation of systemically-important/major payment and settlement systems

Category	Operator	Payment & settlement system
Systematically important payment & settlement systems	Bank of Korea	● BOK-Wire
	Korea Financial Telecommunications and Clearings	● Check Clearing System
		Interbank shared network
	Korea Securities Depository	● Over-the-counter bond market settlement system
CLS Bank International	● Continuous linked system	
Major payment & settlement systems	Korea Financial Telecommunications and Clearings	▲ Giro System
		Interbank shared network
	e-commerce settlement system	▲ B2C ▲ B2B
	Korea Securities Depository	○ Stock market settlement system ○ KOSDAQ market settlement system

Note: ● Assessed in 2004.

▲ Assessed in the first half of 2005

○ To be assessed in the second half of 2005

Source: The Bank of Korea

5) The Korea Financial Telecommunications and Clearings Institute operates four systemically important payment and settlement systems including the Bill Clearing System and seven major payment systems including the Giro System.

6) Evaluation of the 4 systemically important settlement systems was completed in December 2004.

and settlement systems whose settlement finality should be guaranteed into the Act's enforcement decree.

In addition, the Bank of Korea brought forward from 2:30 p.m. to 11:30 a.m the designated time of net settlement for cashier's checks, etc. whose exchange and settlement may be truncated (by means of electronic information exchange without physical transfers), thereby reducing the time exposed to the risks of the net settlement system. In addition, the Bank of Korea made improvements in the payee-designated fund transfer method including abolishing the minimum amount (1 billion won) in order to encourage the migration of large-value fund transfers through the inter-bank shared networks fraught with settlement risk to BOK-Wire. In the meantime, the wider use of BOK-Wire has led to a gradual increase in liquidity risk in forms such as participants' heightened burden of settlement liquidity and the concentration of settlements toward the daily deadline. Accordingly, the Bank of Korea widened the scale of the differential applied to commissions for the use of BOK-Wire just before 16:00 (2 times → 3 times). The Bank of Korea also set up a BOK-Wire re-construction task force to convert this network into a system that reduces the need for liquidity holdings.

In accordance with the BOK-Wire BCP (Business Continuity Planning) formulated in December 2004, the Bank of Korea set up operational guidelines for BOK-Wire BCP officers. It ordered installation of UPS (Uninterrupted Power Supply) in the second half of the year.

In early 2005, the closing time of BOK-Wire had to be put back because of a delay in the settlement of floor-traded government bonds between the Korea

Exchange and Korea Financial Telecommunications and Clearings Institute. To prevent recurrence of such incidents, the Bank of Korea concluded an agreement with Korea Exchange on its utilization of BOK-Wire, whereby Korea Exchange undertook to perform in a timely manner the net settlement of floor-based transactions of government bonds and to engage in prior consultation with the central bank before making important changes to the operation of its securities settlement system.

In addition, the Bank of Korea induced proactive participation⁷⁾ by foreign exchange banks in the Continuous Linked Settlement (CLS) System introduced in December 2004 in order to reduce foreign exchange settlement risk arising from time differences between the two legs of international foreign exchange transactions.

7) As of the end of June 2005, 15 domestic banks and the Korean branches of 3 foreign banks participated in the CLS System in addition to Kookmin Bank and Korea Exchange Bank, which are the designated Korean settlement banks for CLS Bank.

2. Domestic financial system

Amendment of the act on lending business registration and financial service user protection

For the purpose of eradicating illegal business by unregistered lenders and strengthening the protection of borrowers from lending businesses, the government amended the “Act on Lending Business Registration and Financial Service User Protection” on May 31, 2005 (effective from September 1, 2005).

Deleting the existing provision on the waiver of registration requirements for small-sized lending businesses, the amended Act makes it mandatory for all persons that wish to engage in the lending business to be registered with the relevant local government having jurisdiction over it, regardless of the scale of business. In addition, it repealed the ceiling limit (30 million won) applicable to loans subject to maximum interest rate regulation (66% per annum currently), expanding the scope of interest rate regulation to all loans. At the same time, the Act included the following in the scope of illegal acts of credit collection: disclosing the existence of debts to a third party by requesting payments by means of a postcard; and inquiring of any party having a relationship with a debtor whose whereabouts is uncertain about the debtor’s location.

Announcement of planned relaxation of regulations regarding asset management business

In a bid to promote competition and innovation in the asset management industry and galvanize the establishment and activity of private equity funds, the government has mapped out plans to ease regulations

<Table V -8>

Major details of the amendment of the act on lending business registration and financial service user protection

Description	Details of Amendment
<ul style="list-style-type: none"> ▪ Lender registration 	Before: Registration of small- sized lenders waived After: Waiver provision deleted
<ul style="list-style-type: none"> ▪ Restrictions on upper interest rate ceiling 	Before: Not applicable to large exposure of a certain amount or more After: Non-application provision deleted (application of an upper interest rate ceiling to all loans)
<ul style="list-style-type: none"> ▪ Illegal collection 	Prohibition of requests to repay debts by means of postcards, etc.

Source: The National Assembly of the Republic of Korea

on the asset management business. For the necessary legislative amendments, the government intends to revise the “Enforcement Decree and Regulation of the Act on Business of Operating Indirect Investment and Assets” within the latter half of 2005 and the body of the Act in the first half of 2006.

In line with the planned easing of regulations, the government intends to permit the establishment of asset management companies specializing in derivatives, real assets and privately-placed funds. It also intends to ease the minimum capital requirement dramatically and abolish regulations allowing only asset management companies to establish and operate privately-placed funds as regards such funds of a certain scale or smaller.

In addition, the government intends to permit stock borrowing and subsequent short selling within a certain extent of fund assets to ensure efficient fund management. Concerning asset management companies’ commissioning of stock trading orders to their affiliates independently performing such affairs, the government will also allow block trading by such affiliates. At the same time, the government will diversify fund distribution networks by allowing insurance agents to canvas potential fund investors and introducing a system of specialized fund-sale brokerage companies. In a bid to galvanize privately-placed funds, the government also decided to abolish the existing regulations concerning participation by venture-capital companies and new-technology financial-service providers as partners with unlimited liability. It will also reduce the minimum investment amount applicable to partners with limited liability (individuals: 2 billion won → 1 billion won, companies: 5 billion won → 2 billion won) and seek to permit investments in non-performing loans on condition of a debt-for-equity swap.

<Table V -9>

Measures for deregulation of the asset management business

Item	Details of Deregulation
<ul style="list-style-type: none"> ■ Specialization · enlargement 	<ul style="list-style-type: none"> - Permit establishment of specialized asset management companies - Relax regulations concerning fund establishment substantially
<ul style="list-style-type: none"> ■ Autonomy regarding operations and sales 	<ul style="list-style-type: none"> - Ease prohibition on short selling (permit stock borrowing and subsequent short selling partially) - Permit an integrated order by an affiliate entrusted to place stock trading orders
<ul style="list-style-type: none"> ■ Diversification of sales networks 	<ul style="list-style-type: none"> - Permit insurance planners, etc. to solicit sales - Introduce a specialized sale brokerage company mechanism
<ul style="list-style-type: none"> ■ Promotion of privately-placed funds 	<ul style="list-style-type: none"> - Remove regulations on participation by venture capital companies and new-technology financial-service providers as partners with unlimited liability - Reduce the minimum amount of investments for partners with limited liability - Allow investments in bad debts on condition of a debt-for-equity swap

Source: Ministry of Finance and Economy

'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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