In 2005, the Korean government implemented a number of new financial policies. Of those, two policy measures deserve special attention because of their potentially significant impact on domestic financial markets. First, in July, the Korean government launched an overseas investment promotion plan to encourage residents of Korea to invest abroad; this was followed in December by the expiration of sunset clauses on limits to capital account transactions. These two liberalization measures on foreign exchange transactions were considered bold steps taken by Korea’s government because most of the restrictions liberalized by these two measures had been considered the last defense against market opening because of their potential for destabilizing domestic financial markets. Second, in August, a new real estate policy was introduced by the Korean government; its objective was the stabilization of the real estate market. The new real estate policy was the Korean government’s second comprehensive attempt during the postcrisis period to remove speculative real estate trading. The government’s first attempt was in October 2003, and it proved to be unsuccessful in achieving its objective. The purpose of this paper is to investigate the effects of these two policy measures—both put in place in 2005—on Korean financial markets.

Expansion of Foreign Exchange Liberalization

Since the beginning of Korea’s financial crisis in 1997, the Korean government has aggressively pursued foreign exchange liberalization. In the first stage of liberalization, launched in April 1999, the positive list system of the Foreign Exchange Act, which governed foreign exchange transactions in Korea, was overhauled and transformed into a negative list system. The second stage of liberalization followed in January 2001; it provided for deregulation of virtually all current account transactions. After these two rounds of foreign exchange liberalization, the Korean government introduced two additional liberalization measures in 2005: the overseas investment promotion plan and the expiration of sunset clauses for capital account transactions.

The overseas investment promotion plan, which took effect in July 2005, is designed to abolish unnecessary barriers on foreign exchange transactions, to promote investment abroad with foreign exchange reserves, and to realign the foreign exchange system to facilitate overseas investment. Liberalization measures include:

- Lifting the ceiling on the corporate sector’s direct investment in foreign financial firms;
- Raising the upper limit for individuals’ direct investment abroad from $1 million to $3 million;
- Eliminating the need for Bank of Korea (BOK) approval of investments in foreign real estate markets by asset management companies; and
- Permitting individuals to purchase residential housing costing up to $500,000 for the purpose of residing abroad for more than two years or more.

Sunset clauses, which came into effect at the end of 2005, affected regulations on capital account transactions that had required close monitoring and supervision for their possible destabilizing effects on domestic financial markets. For example, nonresidents’ onshore borrowings denominated in Korean won had been strictly regulated—requiring permission from the Ministry of Finance and Economy (MOFE)—given their potential for speculative trading in the foreign exchange market. Also, guarantees by residents on local financing abroad were subject to permission by the MOFE because of concern that they could be used...
for illegal capital outflow. In addition, residents were not allowed to engage in securities exchange, securities acquisition, and short selling with nonresidents unless they had permission from the BOK. Beginning in January 2006, however, these capital account transactions and others covered by the sunset clauses could be carried out if they were reported to the MOFE or the BOK.

The two 2005 liberalization measures for foreign exchange transactions are expected to mitigate the excess supply of foreign currencies in the domestic foreign exchange market. Korea has experienced a growing overall balance of payment surplus since 1999. Although the surplus was temporarily reduced in 2001, it has continued to grow since then. It reached $38.7 billion in 2004, five times larger than the surplus recorded in 2001. The growing balance of payments surplus has been driven mainly by strong export performance and rising capital inflows. A large trade surplus supported by rising exports was more than enough to offset deficits experienced by services trade and other current account transactions. Also, a large capital inflow derived from foreigners’ portfolio investment helped the capital account balance maintain a surplus during the past seven years.

The balance of payments surplus and, therefore, the excess supply of foreign currencies in the foreign exchange market would have continued into the future without the institutional reforms affecting foreign exchange liberalization. That is, the foreign exchange market in Korea lacked a mechanism that automatically helped maintain balance between demand and supply of foreign currencies because earlier liberalization measures had been designed to encourage inflow of foreign capital while restricting outflow of domestic capital. The overseas investment promotion plan and the activation of sunset clauses are expected to correct this structural problem in Korea’s foreign exchange market.

The majority of capital account transactions that had been restricted were related to capital outflow. The expiration of regulations through the use of sunset clauses therefore implies the establishment of a new institutional arrangement wherein domestic capital is freer than before to move abroad. The new institutional arrangement will be strengthened with the execution of the overseas investment promotion plan because the plan includes the liberalization of many regulations that restrict investment abroad by domestic residents under the Foreign Exchange Act.

Indeed, it is very likely that the excess supply of foreign currencies in the foreign exchange market can be alleviated significantly once the institutional setting to facilitate capital outflow is put in place. Recently, financial capital in Korea has tended to show a flight to short term, which means that investment has tended to be moving more toward short-term financial assets. For example, during the first half of 2004, deposits with maturities of less than one year stood at 49.2 percent of total deposits held by financial institutions in Korea; short-term deposits have increased continuously since 1997 when they accounted for a mere 25.9 percent. The flight-to-short-term tendency implies that financial capital in Korea has become sensitive to shocks and that its mobility has increased. Given this tendency, the removal of capital controls, induced by Korea’s foreign exchange liberalization, suggests that domestic financial capital would move abroad if the profitability of investing offshore is judged to be greater than investing onshore. Recent economic indicators, including interest rates, show that investment opportunities abroad are more lucrative than at home.

If Korea’s problem of excess supply of foreign currencies is cured by the two foreign exchange liberalization measures conducted in 2005, the Korean government is expected to enjoy reduced burdens associated with currency appreciation. The Korean won has appreciated strongly in the past several years, and its appreciation is highlighted by the recent decline of the won-dollar exchange rate below 970, reaching its lowest level since November 1997. The revaluation of the Chinese yuan, the huge U.S. current account deficit, rising Korean exports, and the bullish Korean stock market contributed to the strong rally of the Korean won against the U.S. dollar.

The appreciation of the Korean won is not likely to stop soon despite a number of developments—such as the tightening monetary policy by the U.S. Federal Reserve and rising international oil prices—that may lower the pressures for currency appreciation. The persistent U.S. current account deficit, which shows little signs of improvement, is one factor that makes this prediction highly plausible. According to the 2005
The edition of *World Economic Outlook*, released by the International Monetary Fund (IMF), the U.S. current account deficit rose from 5.7 percent of gross domestic product (GDP) in 2004 to 6.1 percent of GDP in 2005, and it is expected to remain high in 2006. The U.S. current account deficit has, surprisingly, worsened in the presence of the weak U.S. dollar since 2002 (based on the real effective exchange rate).\(^1\) Furthermore, the Chinese government may attempt to revalue its currency once again, given the widespread belief in the markets that the first round of revaluation in July 2005 was not sufficient. Although foreigners have recently been net sellers of Korean stocks, the Korean stock market rally, if it continues, would also push the value of the Korean currency further upward because it would attract additional investment from foreigners.

If the Korean government reacts to the appreciation of the Korean won with aggressive foreign exchange intervention, it may harm the stability of macroeconomic conditions in Korea. In particular, a government purchase of U.S. dollars in the foreign exchange market to suppress currency appreciation could be accompanied by an increase in money supply and rising inflationary pressures. Moreover, aggressive buying of U.S. dollars may make managing foreign exchange reserves a very costly business for the government. In Korea, foreign exchange intervention is financed by issuing foreign exchange stabilization bonds or monetary stabilization bonds, or both; both bonds pay higher interest rates than the U.S. Treasury bonds in which the vast majority of Korea’s foreign exchange reserves are invested. These costs associated with foreign exchange intervention can be reduced significantly if the liberalization measures undertaken in 2005 help mitigate currency appreciation.

In the past, the Foreign Exchange Act was used by the Korean government to control foreign exchange transactions, including both current and capital account transactions. Now that most of the remaining restrictions have been lifted following the implementation of the two liberalization measures in 2005, the Korean government is left with few policy instruments with which to control foreign exchange transactions. This suggests that the Korean economy has become more vulnerable to shocks causing sudden and massive capital outflow. In fact, concern has risen recently in Korea that rapid increases in overseas investment by individuals and their remittances abroad are signs of capital flight. In 2004, 8.2 percent of direct investment abroad was undertaken by individuals, rising from 6.7 percent in 1995. In addition, the total amount of funds remitted abroad by individuals increased to 1.2 percent of GDP during the same period.

Recent empirical analysis at the Korea Institute of Finance demonstrates that capital flight is unlikely to occur in Korea without rapid currency depreciation.\(^2\) During the second half of 2005, the U.S. federal funds rate, which had remained below the Korean call market rate, started to exceed the latter owing to the U.S. Federal Reserve’s aggressive interest rate increases. Owing to these interest rate shifts between the two countries, caused by governmental policy decisions, the possibility of capital flight was raised by many who proposed a tightening of Korea’s monetary policy by the BOK. However, the Korea Institute of Finance analysis dismisses the possibility of capital flight in Korea by showing with historical data that the two countries’ reversal of policy interest rates has not necessarily been accompanied by the reversal of market interest rates. The analysis also shows that capital flows into and out of Korea are not sensitive to interest rate movements.

*Figure 1* shows the relationship between the interest rate differential and net capital inflow, and *Figure 2* shows the linkage between the adjusted interest rate differential and net capital inflow. For this purpose net capital inflow is taken to be the sum of portfolio investment, short-term debt, and errors and omissions

\(^1\) Maurice Obstfeld and Kenneth Rogoff, in *The Unsustainable U.S. Current Account Position Revisited*, Working Paper no. 10869 (Cambridge, Mass.: National Bureau of Economic Research, November 2004), estimated that the U.S. dollar needs to appreciate by 30 percent in real terms in order to eliminate the current account deficit.

in the IMF balance of payments account. The interest rate differential is defined by the three-year public bond rate in Korea subtracted by the U.S. Treasury bond rate with the same maturity. The adjusted interest rate differential is the interest rate differential adjusted by the change in the won-dollar exchange rate. It is clear from Figure 1 that the net capital inflow into Korea is uncorrelated with the interest rate differential; however, the net capital inflow shows a close relationship with the adjusted interest rate differential. Figure 1 therefore supports the Korea Institute of Finance’s finding that capital flight would be more likely to occur if the market loses confidence in the currency.

It is understood that investors engage in capital flight when their assets are seriously exposed to default risk caused by social instability, political instability, or economic problems. Accordingly, capital flight is closely related to investors’ quest for a higher quality of assets rather than profitability. It is true that flight to quality has increased significantly among Korean investors during the postcrisis period. For example, the Korean household sector held 1,018 trillion won in bank deposits guaranteed by the deposit insurance system in 2004; that same figure amounted to a mere 451 trillion won in 1996. Coupled with further foreign exchange liberalization, which makes capital outflow easier, the flight to quality suggests that the likelihood of capital flight has increased in Korea. The risk of capital flight would fall significantly, however, if the foreign exchange market maintains its stability. Therefore, this expectation points to the importance of a government policy that secures stable exchange rates to reduce the risk of capital flight that could arise from foreign exchange liberalization.

**Implementation of the New Real Estate Policy**

The Korean government announced its new real estate policy in August 2005, aiming to stem skyrocketing real estate prices by curbing speculative trading in the market. The new real estate policy entails plans to raise tax rates on the sale and holding of real estate in order to increase the supply of housing, and to restrain mortgage loans extended by financial institutions. Before the introduction of this new policy, real estate prices in Korea were widely seen as driven by factors irrelevant to fundamentals. Consequently, great concern had arisen over the inefficient allocation of financial resources, which would, in turn, hamper potential growth of the Korean economy. Figure 3 shows the price movements of apartments traded nationwide, in Seoul, and in the southern part of Seoul (Kangnam) beginning in January 2000 through August 2005. It shows that apartment prices almost doubled nationwide during this period. During this period, the Kangnam area in Seoul experienced the greatest price increase—more than 200 percent.
When the new real estate policy was introduced, some claimed that it would damage the stability of the Korean financial system if it triggered a tumble in real estate prices. There are two channels through which a large drop in real estate prices could exert an adverse impact on the domestic financial system. First, financial markets could be destabilized if falling prices in the real estate market were reflected in a large reduction in wealth. In this case, a depressed real estate market would reduce consumption and delay economic growth. Given that the performance of the financial markets is closely related to real economic conditions, it is likely that domestic financial markets would be at risk if the wealth effect dominated. Second, many real estate investors in Korea have financed their real estate investments through borrowings from financial institutions. Accordingly, tumbling prices in the real estate market could threaten the soundness of domestic financial institutions if falling prices cause borrowers to default on outstanding mortgage loans.

Contrary to expectations, the new real estate policy has thus far made little impact on the Korean financial system. In particular, the new real estate policy has not caused a large price drop in the real estate market. Transactions have almost disappeared in the market, but prices are holding steady. This implies that speculators remain in the market and are maintaining a wait-and-see attitude. The wait-and-see attitude on the part of speculators has been motivated by their belief that the Korean government would backpedal on its new real estate policy if real estate prices dropped drastically. Experience suggests that the prevailing market sentiment among real estate investors would remain intact unless the government shows a stronger commitment to fend off speculative trading in the real estate market. In October 2003, the Korean government attempted to eliminate speculative activity in the real estate market, but it failed to achieve its objective because of the wait-and-see strategy of speculators. Real estate prices dropped slightly after the announcement of the policy in October 2003, but they rebounded strongly thereafter.

With a moderate decline in real estate prices in response to the new real estate policy, it is not surprising to see financial markets showing price movements contradictory to the prediction suggested by the wealth effect. If the wealth effect is in play, the new real estate policy should be accompanied by falling stock prices. In contrast, the Korean stock market indices continue to hit historic highs and are supported by sharp increases in customer deposits at brokerage houses and a large inflow of funds in stock market investment accounts at asset management companies. It can be argued that the stock market rally is a result of the substitution effect, not the wealth effect. That is, because the expected rate of return on real estate investments is lowered owing to the implementation of the new real estate policy, investors have shifted their attention to investing in the capital markets. The investors’ portfolio shift, induced by the substitution effect, can explain the recent stock market performance in Korea. However, this recent investor behavior is not able to justify actual interest rate movement in the bond market. If the substitution effect is binding, interest rates should fall; they should not rise, as is happening in Korea today.

Loans from financial institutions have been a major source of financing for real estate investors in Korea. Such debt-financed investment behavior has led to a dramatic increase in household loans. Household loans outstanding in the first half of 2005 amounted to 494 trillion won, accounting for 63.5 percent of GDP. Banks have been especially aggressive in lending to the household sector: they shared more than 50 percent (290.6 trillion won) of total outstanding household loans in the first half of 2005. Of these household loans extended by banks, 61.7 percent (179.4 trillion won) were made in the form of mortgage loans. After the
banking sector come mutual credit institutions, including agricultural cooperative unions, credit unions, and community credit cooperatives, whose active household lending topped other nonbank financial institutions with 73.6 trillion won outstanding during the first half of 2005.

Rising household debt would not pose a threat to Korea’s financial industry if the household sector were equipped with a strong debt-servicing ability. The interest redemption ratio of the Korean household sector indicates that the debt-servicing ability of Korean households has improved gradually in recent years. The interest redemption ratio, computed by the ratio of interest payments to disposable income, peaked at 10.7 percent in 1998 but declined continuously thereafter, reaching 6.2 percent in 2004. Coupled with this improved debt-servicing ability of household borrowers has been Korean banks’ maintenance of a low delinquency ratio of outstanding loans and a sound loan loss coverage ratio. The delinquency ratio of household loans made by banks has remained below 2 percent since 2000, while the loan loss coverage ratio of banks rose to 102 percent in 2004. These figures suggest that Korean banks are able to withstand at least a moderate price shock in the real estate market.

Unlike banks, nonbank financial institutions may suffer serious financial difficulty from a decline in housing prices. The vulnerability of nonbank financial institutions to a price shock can be inferred from their high loan-to-value ratios of mortgage loans. For example, the loan-to-value ratios of mortgage loans extended by insurance companies and mutual savings banks are in the speculative region of 60 percent. In addition, the major customers of nonbank financial institutions are borrowers who are high credit risks or who are speculators. This is mainly due to the less stringent restrictions imposed by the financial supervisory authority upon loan policies of nonbank financial institutions as well as the tendency for nonbank financial institutions to exercise lax prudence over loan extension. In fact, the restrictions on mortgage loans included in the new real estate policy do not apply to mutual credit institutions, which have the second-largest outstanding volume of household loans in Korea (banks have the largest outstanding volume of household loans).

The default risk of household loans at nonbank financial institutions could well become higher if the current trend of rising market interest rates continues. Compared with bank customers, borrowers from nonbank financial institutions are subject to higher interest payments because of their poorer credit histories. The debt-servicing ability of borrowers would not be affected by rising market interest rates if their loan contracts were made at fixed interest rates; however, recently both banks and nonbank financial institutions in Korea have been increasingly interested in variable-rate loan contracts. As of June 2005, 73.8 percent of household loan contracts extended by Korean banks were written at prevailing market interest rates, an increase of 20.6 percent increase compared with 2002. Accordingly, a deteriorating debt-servicing capability on the part of customers of nonbank financial institutions would be inevitable with rising market interest rates. Furthermore, if this situation continues unchecked by the financial supervisory authority, nonbank financial institutions in Korea would become more exposed to the risk of insolvency. It is therefore extremely important for the Korean financial supervisory authority to strengthen supervision over nonbank financial institutions and take prompt action to correct their financial distress before it is too late.

Concluding Remarks

This paper examined the effects of two Korean government policy changes in 2005 that affected domestic financial markets: foreign exchange liberalization and the new real estate policy. In 2005, the Korean government implemented two additional measures for foreign exchange liberalization; it introduced the overseas investment promotion plan and permitted sunsetting of capital account transaction regulations to occur as scheduled. These two liberalization measures are considered milestones in the domestic foreign exchange market because they are expected to correct one of the prolonged structural problems of Korea’s economy: an excess supply of foreign currencies that was likely to persist because of the institutional arrangement wherein the regulations on foreign exchange transactions encouraged capital inflow and restricted capital outflow. Now that the two additional liberalization measures have been implemented to remove most of the restrictions on capital outflow,
the problem of excess supply of foreign currencies is expected to be alleviated significantly. Correction of this structural problem can help lessen pressures for currency appreciation and can slow the rapid fall of the won-dollar exchange rate that has been observed recently.

The effectiveness of the new real estate policy, which was designed to stem speculative transactions in the real estate market, is once again in doubt owing to the wait-and-see attitude of real estate speculators. Real estate prices declined, but only slightly, while leaving transactions in the market almost frozen. Because there has been only a moderate drop in real estate prices, domestic financial markets have not been affected by the new real estate policy, but a risk of a large price decrease still remains in the real estate market. If speculators are convinced that a large drop in prices is imminent, they may end their wait-and-see attitude and precipitate a further fall in prices. If this happened, Korean financial institutions might encounter an increasing risk of insolvency because many real estate investments in Korea have been financed by financial institutions. To reduce the risk of insolvency for financial institutions, the financial supervisory authority needs to take corrective actions to promote more prudent lending, especially by nonbank financial institutions that have weak balance sheets.

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