An Analysis of the Attractions of Arbitrage Transactions and of Domestic Bond Investment by Foreigners and Korean Branches of Foreign Banks

In Korea, the incentives for undertaking arbitrage transactions have increased sharply since the third quarter of 2007, influenced by the U.S. subprime mortgage crisis, causing them to experience a rapid expansion. Consequently, investment in domestic bonds rose sharply led by foreign investors. A future outflow of foreigners' bond investment funds owing to sudden changes in domestic or overseas financial conditions would be likely to widen the scale of fluctuations in the domestic financial and foreign exchange markets. In order to respond to such a situation effectively, there is an urgent need for a systematic grasp of the factors making arbitrage transactions attractive and their impact on domestic bond investment. Against this backdrop, this paper sets out to understand the reasons that have made arbitrage transaction made in Korea attractive for a prolonged length of time and undertake an empirical analysis of their impact on foreign capital investment in domestic bonds. The reason why the factors making arbitrage transaction attractive have persisted is that the continued structural imbalance between supply and demand in the domestic forward exchange market as a result of massive forward exchange sales by shipbuilders and heavy industry exporters and overseas portfolio investors have kept the swap rate much lower than the domestic/international interest rate spread. Another contributory factor has been the widening imbalance between supply and demand in the swap market in response to the worsened foreign currency fund raising conditions of domestic foreign exchange banks, affected by the global credit crunch since the latter half of 2007 following the U.S. sub-prime mortgage melt-down. Meanwhile, the patten of domestic bond investment by foreign capital, which has grown sharply since 2006, shows that domestic bond investment was led by Korean branches of foreign banks until the first quarter of 2007, but from the

third quarter of 2007, it has been driven by foreign investors. Specifically bond investment by Korean branches of foreign banks rose 33.7 billion dollars between the second quarter of 2006 and the first quarter of 2007, although the yield on arbitrage transactions marked just 20~30bps. This was mainly attributable to the fact that Korean branches of foreign banks with relatively ample foreign currency liquidity invested in domestic bonds with Korean won-denominated funds secured in exchange for foreign currency funds through swap transactions with domestic banks, as forward exchange sales by shipbuilding companies and overseas portfolio investors caused an increase in domestic banks' demand for foreign currency funds for position adjustment. However, despite a sharp increase in the attractiveness of arbitrage transactions between the second quarter of 2007 and the second quarter of 2008, bond investment by Korean branches of foreign banks declined by 4.6 billion dollars, since both foreign currency loans and domestic bond investments by branches of foreign banks reached the country limit for Korea set by their head offices. This implies that the scope for foreign currency fund raising and bond investment has played a more crucial role in bond investment by Korean branches of foreign banks than the attractiveness of arbitrage transactions.

Unlike bond investment by foreign bank branches, foreigners' investment in the domestic bond market increased significantly from the third quarter of 2007, and this was mainly due to a sharp increase in the potential for arbitrage transactions. However, the scale of the profit possible decreased during the first half of 2008, except for March and April, and accordingly bond investment by foreign investors rose by only 13.2 billion dollars, substantially less than its expansion of 32.3 billion dollars during the second half of 2007.

The idea that foreign bank branches and foreign investors are lured by different incentives in arbitrage transactions involving attractions of domestic bonds is supported by the results of a quantitative analysis: bond investments by foreign bank branches are not significantly influenced by arbitrage transactions, whereas those by foreign investors are heavily influenced by them.

Although decreasing slightly in response to a slowdown in shipbuilders' foreign order books and overseas bond investment, the incentive of arbitrage transactions is expected to remain at around its present level for a considerable period of time. This is because forward selling pressure exists due to forward exchanges roll-overs related to the shipbuilding industry's hedging of its previous order-book and overseas securities investment and also because it seem likely to take some time for concerns over the global credit crunch be subside. In this respect, a large-scale capital exodus from the Korean bond market is judged to be unlikely, as the attractions of arbitrage transactions are expected to remain at the present level and foreign bank branches are likely to have more surplus funds to invest in the bond market in accordance with the shift back to the previous level for the recognition as an expense of their interoffice account borrowing(three times capital → six times). However, efforts need to be made to prepare for a possible situation in which volatility increases in the Korean financial and foreign exchange markets as a result of a substantial outflow of capital invested in the bond market in response to sudden changes in the domestic and global financial markets. To this end, the monitoring of the maturity structures of bonds held by foreign investors and foreign bank branches and in-and out flows of portfolio investment funds should be strengthened and, in case of their own severe imbalances in the swap market, the authorities should expand their own participation in it in order to prevent the rise of unrest in the financial and foreign exchange markets.