Changes in Foreign Investors' Behavior in Korean Stock Market in Response to Changes in the International Investment Environment

After the subprime crisis erupted in the second half of 2007, foreign investors maintained massive net selling position in the Korean stock market. As a result, stock prices plunged, the exchange rate rose sharply and uncertainties swelled in the domestic financial and foreign exchange markets. Against this backdrop, this paper looks into how changes in the global investment landscape, such as the subprime crisis, affected the stock investment behavior of foreign investors. It pays particular attention to changes in the factors influencing foreign stock investment and the relative importance of each factor.

One of the characteristics of recent foreign investment behavior is a short-term trading pattern. From 2007 onwards, domestic investors' turnover rate fell, while that of foreign investors saw a big increase. The share of foreign investors' trading volume in the total trading volume increased, as foreigners bought and sold stocks more frequently. Accordingly, volatility in the scale of investment also increased. Foreign investors greatly expanded their buying volume as well as their selling volume, while they recorded massive net sales of stocks. With the rise in the share of the foreign trading volume coupled with growing volatility in the trading scale, foreign investors have recently exerted greater influence on stock prices. Meanwhile, foreign investors changed their portfolio to focus on blue-chip stocks with relative low price volatility in order to respond to growing investment risks.

The paper estimates a behavioral equation for foreigners' net stock purchase using daily data during the period between 2002 and 2008 in order to examine changes in foreign investors' stock investment behaviors more thoroughly. It was found that structural change in the behavioral equation took place starting from the second half of 2007. It was also found that the influence of variables related to the investment environment, such as a risk aversion trend, rather than variables related to return on investment including local stock prices and the exchange rate, became greater in the period after the subprime crisis erupted, compared to a pre-crisis period. The results, in particular, show a weaker influence of the exchange rate, which has had a negative influence on foreign stock purchases, in the post subprime crisis period. This seems to be attributable more to the lack of consensus regarding future directions of changes in the exchange rate, than to a decline in the importance of the exchange rate factor in investment decision-making by foreigners.

In addition, this paper uses a vector auto-regression (VAR) approach to conduct impulse response and variance decomposition analyses in order to examine the influence and the relative importance of variables such as stock prices, the exchange rate and a risk aversion trend on foreign stock investment. The analysis results show that a rise in the exchange rate consistently had the effect of reducing foreign stock investment during the pre-crisis period, while having an effect of temporarily lowering foreign stock investment initially but then increasing it over time in the period after the crisis erupted. Stock prices in the USA and those in Korea, have had a positive influence on foreign stock investment and this influence has become larger since the subprime mortgage meltdown. The rising sense of risk aversion had a weak influence on foreign stock investment during the pre-crisis period. However it has consistently had a negative influence for a considerable time period in the post subprime crisis period and as a result, it has had the greatest cumulative influence on foreign stock investment.

Shorter-term and more flexible foreign investment behavior since the sub-prime crisis is attributable to an increase in the influence of factors related to investment sentiment, including global stock market trends and risk aversion. Meanwhile, the influence of traditional price variables, including local stock prices and the exchange rate, has weakened. As foreign investors exhibit short-term investment behavior and are influenced by changes in external conditions, attention needs to be given to the possibility that frequent inflows and outflows of foreign investment funds may act as a factor disturbing the financial markets and the macro-economy. The short-term trading pattern of foreign investors may make the local stock market more vulnerable to external shocks. And the increased volatility in the flow of foreign stock investment funds may cause dramatic changes in the balance of payments and the exchange rate regardless of economic fundamentals and thus increase uncertainties in the macro-economy. Therefore, close monitoring needs to be carried out on the trends of foreign investors' stock investment and a stable demand base needs to be established by strengthening the asset management capabilities of local institutional investors, including pension funds, and expanding their role in the stock market.