

Dealing with volatile capital flows in Korea

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Ladies and Gentlemen,

I am truly delighted to share Korea's experience in dealing with volatile capital flows. I would like to focus on three issues. My first theme is the patterns of capital flows during the Asian currency crisis, during the global financial crisis, and in recent months. The second theme is a description of some Korean policy measures in response to rapid increases in capital flows, and evaluations of them. In conclusion, I will discuss some future policy challenges.

First, then, let me describe capital flow patterns in Korea, and compare them with those of 10 other Asia and Pacific countries. I will then try to identify reasons why Korea experiences high volatility of capital flows.

Korea has seen steady growth in its volume of capital flows for many years, and this has increased further during times of crisis. The volume of capital flows during crises has risen remarkably, from about 12 billion dollars during the 3 months of the Asian currency crisis starting in November 1997 to about 48 billion dollars during the 4 months of the global financial crisis starting in September 2008. We have seen a net capital outflow of 10.8 billion dollars during the recent three months (Aug–Oct 2011), when global financial market instability re-erupted following the US credit rating downgrade and the euro-zone sovereign debt crisis emerged.

As to types of capital flows, flows were led by bank borrowings both around the time of the Asian currency crisis and at the time of the global financial crisis, but they have been driven by portfolio funds since 2009. At the end of 2010, portfolio investment represented 57.2% of total capital inflows, while bank borrowings and FDI represented 27.4% and 15.4% respectively. In line with the growing volume of capital flows, volatility has increased. The standard deviations of net capital inflows as a percentage of GDP rose sharply during the Asian currency crisis, the global financial crisis, and the recent European sovereign debt crisis. Since May 2010, portfolio fund flow volatility has also been gradually increasing.

When compared with 10 other Asia and Pacific countries (APCs), the volume of Korea's capital outflows as a percentage of GDP was not huge during the currency crisis. (The APCs are nine Asian countries – Korea, Hong Kong, Singapore, Indonesia, Malaysia, the Philippines, China, Thailand and Japan – and two Oceanian countries: Australia and New Zealand). Korea's capital outflow as a percentage of GDP ranks fourth among the 11 APCs, but the absolute volume of the outflow is in the midrange (Korea: –4.7%; average: –4.9%). The figures represent 1997–Q4 through 1998–Q3. However, the level was higher during the global financial crisis, ranking third among the APCs in 2008–Q4 (Korea: –6.2%; average: –2.1%).

As regards the recent European sovereign debt crisis, Korea has proven relatively sensitive to global shocks, ranking second among the APCs in terms of the volume of global equity fund outflows (–0.11% of GDP in 2010). The figures represent August 4 to October 12 of this year (2011).

As regards type of capital, the outflows from most APCs were driven by foreign borrowings immediately after the Asian currency crisis. After the global financial crisis, however, these

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countries showed many different types of capital outflows. Four countries (Korea, Hong Kong, Malaysia and Thailand) experienced large outflows of foreign borrowings after the Lehman failure, while the capital outflows from six countries (Australia, Indonesia, Japan, New Zealand, the Philippines and Singapore) were driven by portfolio funds. Meanwhile, Korea saw the largest outflows of foreign borrowings, amounting to 35 billion dollars.

In terms of volatility, in comparison with the APCs overall, Korea experienced a relatively large increase in capital flow volatility during the global financial crisis. Korea's foreign trade dependence grew by 25.5 percentage points in the post-crisis period (2008–2010) – from a 62.6% pre-crisis level (2000–2007) to 88.1% – while its capital flow volatility rose 0.96% points, from 0.56% to 1.52%. Recently, volatility has remained high with the rise of volatility in global equity fund flows.

Let me talk about why Korea has high capital flow volatility. I think that there are three main reasons. The first is Korea's high degree of capital market openness. If a country has a high degree of capital market openness, it is easy for foreign investors to invest or withdraw capital. According to the Heritage Foundation, Korea's capital market openness increased remarkably (20 index points: from 50 in 1997 to 70 in 2010) after the Asian currency crisis, and ranks high among emerging market countries.

The second reason is Korea's favourable investment environment. The Korean capital market is relatively advanced among those of emerging market countries, and has ample liquidity. Therefore, easy and prompt withdrawal of funds invested in the Korean capital market is available upon any worsening of global financial market conditions. The volumes of its stock market and bond market ranked 11th and 10th respectively among 25 major countries as of 2009. Moreover, its stock market turnover ratio ranked second as of 2010, and the country ranks second on the Milken Institute's Capital Access Index.

The last reason is the sustained foreign currency liquidity risk in the banking sector. Korea maintains the status of a net external creditor from the perspective of the entire economy. However, there is a serious currency mismatch issue in the banking sector. The holders of the massive amounts of foreign currency assets and liabilities differ. Also, external assets of the banking sector are concentrated in the external liabilities of currency authorities. In comparison with the exposure of other emerging market countries, the external exposure of Korea's banking sector is very high.

Let's move now to the second theme. Drastic capital inflows have caused lots of risks in terms of the macroeconomy and financial stability. Countries experiencing capital inflows can implement macroeconomic policies to cope with these risks, and can adopt macroprudential policies and capital controls to tackle systemic risks. In this context, I will describe three policy measures by Korea in response to increases in capital flows, and evaluations of them. They are macroprudential policies, expansion of official foreign reserves, and reduction of exchange rate volatility.

The macroprudential measures are judged effective in reducing systemic risk by changing the composition of capital inflows such as inflows of highly volatile short-term capital. Based on experience in the global financial crisis, Korea has introduced new macroprudential measures to try to maintain its open capital market framework while at the same time reducing capital flow volatility.

First, to prevent an increase in short-term borrowing overseas resulting from excessive forward selling by shipbuilders and asset management companies (or forward buying by banks), Korea introduced ceilings on the FX derivatives positions of financial institutions in October 2010. Second, in January 2011, in order to ease excessive inflows of foreign bond investment funds, exemptions from tax withholding for foreigners investing in treasury bonds and MSBs were eliminated, and flexible tax rates were introduced. Finally, in August 2011, a macroprudential stability levy was adopted to curb excessive growth in financial institutions' borrowings overseas.

Generally speaking, the macroprudential measures in Korea are seen as having lengthened the maturity composition of capital inflows by cutting short-term borrowing by domestic branches of foreign banks, and by reducing foreigners' holdings of short-term bonds.

Due to the ceilings on FX derivatives positions, currency forward trades and short-term external debt have decreased greatly, especially where the domestic branches of foreign banks are concerned. Currency mismatches have also declined, since the funds to repay short-term external debt are raised mainly through the redemption at maturity (or sales) of domestic bonds.

As regards the revival of taxation on bond investment, this measure reduces foreigners' incentives to hold domestic bonds, and lengthens the terms of their investment by causing investment returns to fall and making investment procedures more complicated.

As far as the macroprudential stability levy is concerned, it is too early to accurately assess the policy's effects, since it was introduced not long ago. However, this measure is expected to reduce incentives for domestic branches of foreign banks to conduct arbitrage and cause a shift in debt term from short to long.

We can also use official foreign reserves. Most APCs have expanded their official foreign reserves to cope with growing capital inflows in the wake of the global financial crisis. Their central bank balance sheets have consequently expanded. For example, the total assets of APCs' central banks (excluding those of Australia and New Zealand) registered annual average growth of 5%–25% between 2009 and 2010, due mostly to increases in overseas assets.

Korea ranked fifth among the APCs in terms of the volume increase in its official foreign reserves, which expanded by 98.1 billion US dollars between end-March 2009 and end-June 2011. The expansion of official foreign reserves provides us some positive effects. After the global financial crisis, the importance of securing foreign currency liquidity in advance as a buffer for responding to crises is clear. Such action may have provided a backstop to mitigate the procyclicality of capital flows, and provided foreign currency liquidity during the financial crisis. The expansion of official foreign reserves may also have a positive influence on sovereign credit rating, since international credit rating agencies use the official foreign reserve level as an important yardstick when calculating a nation's credit rating. However, excessive expansion of a nation's official foreign reserves is accompanied by side effects such as increases in their holding costs and increased global imbalances.

Sterilized intervention has brought about imbalances in the central bank balance sheet, and a consequent exposure to risk from changes in interest rates and exchange rates. If domestic interest rates are higher than overseas rates, carrying costs are incurred by the official foreign reserves. As of end-2010, the carrying costs of the APCs are estimated to have stood at around 0.25–1.3% of GDP.

With the official foreign reserves of emerging countries increasing, global imbalances, which narrowed right after the global financial crisis, have been widening again since 2010.

Last but not least, it is important to reduce exchange rate volatility. The exchange rate volatility of most APCs rose during the global financial crisis. It then eased in 2010, but has recently expanded again with the increase in capital flow volatility due to the international financial market. A large increase in exchange rate volatility will negatively impact real economic activities such as exports and investment as a result of increased uncertainty.

A majority of APCs in principle leave it to the market to autonomously determine the exchange rate, and have conducted constraining smoothing operations when the exchange rate deviates from economic fundamentals and changes sharply in a short time. However, if capital flow volatility increases as a result of global financial market unrest, smoothing operations alone have limitations. This implies a need for complementary policy instruments to mitigate capital flow volatility, including macroprudential policies.

I would like to conclude my presentation by mentioning future policy challenges. Policy responses to capital flows should be multi-layered networks of facilities. They could have four layers: country-specific, bilateral, regional and global. At the individual country level, it is important to establish economic stability and engage in capacity building. Sound macroeconomic policies are the first line of defence in reducing economies' vulnerability to external shocks. Crisis-triggering events should also be eliminated in advance. We can use lots of macroprudential measures. However, we have to keep in mind that capital flow regulations need to be introduced cautiously. Properly designed and well implemented prudential regulations may play an effective role in alleviating capital flow problems.

At the bilateral level, we can consider bilateral swap lines. The network of bilateral swap lines was proven to be highly effective during the last financial crisis. In consideration of the heightened uncertainty of the global economy caused by the European sovereign debt crisis, BOK increased the size of its swap arrangements with BOJ and the People's Bank of China. In October 2011, Korea and Japan increased the maximum amount of their bilateral won-yen swap arrangement from 3 billion US dollars to 30 billion US dollars. Korea and China also increased the size of their bilateral swap arrangement, from 38 trillion to 64 trillion Korean won.

At the regional level, cooperation is very necessary to expand the scale of the existing regional financial safety nets. In this connection, we can think of lots of programmes, such as enhancing financial collaboration by expanding CMIM (Chiang Mai Initiative Multilateralisation), establishing an information exchange system to strengthen monitoring of capital flows, expanding multilateral liquidity arrangements, and promoting the development of regional financial markets.

Lastly, on the global level, the need for an international lender of last resort (ILLR) as a backstop for global financial stability has become apparent. The FRB took on the role of *de facto* ILLR during the last crisis. For example, in May 2010, the FRB reauthorized dollar liquidity swap lines with five foreign central banks in response to the re-emergence of strains caused by the European sovereign debt crisis. Recently (30 November 2011), BOC, BOE, BOJ, ECB, FRB and SNB announced coordinated actions to enhance their capacity to provide liquidity support to the global financial system.

Thank you so much for your attention.