Draft October 2011 "A Comparative Analysis of Korea's Two Capital Account Crises: 1997-98 and 2008-09"

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1. Capital Flows and Financial Crisis

In 1997-98 and 2008, a reversal of capital inflows set off a capital account or liquidity crisis in Korea. As shown in Figure 1-1 and 1-2, the degree of volatility of capital flows has increased since the 1997 Asian financial crisis. In fact, the volatility has been the third highest among emerging economies. A large increase in capital outflows in the 3rd quarter of 1997 triggered a capital account crisis that persisted until the 4th quarter of 1998, when the financial account registered a small surplus.

A similar development took place in 2008. An exodus of foreign lenders and investors shrank capital inflows in the 3rd quarter of 2007, which was preceded by a capital account surplus, plunged the economy into a severe financial crisis.

Korea has developed a relatively large, liquid and open financial sector in the process of liberalizing financial markets in the aftermath of the 1997 Asian financial crisis. Since then in good times the foreign demand for financial instruments denominated in Won soars, inducing large capital inflows. The won then appreciates. It is expected and natural that when they see the signs of economic slowdown foreign investors unload their holding of Korean financial instruments.

However, foreign investors also sell out their Korean assets first regardless of its fundamentals or economic prospect when they are trying to cover losses elsewhere simply because they may have already earned profits and find it easier to cash in their Korean holdings, causing a severe reserve currency liquidity shortage. These features of capital movements explain in large part the high degree of volatility of capital flows and associated fluctuations in the foreign exchange rate and prices of other financial assets in Korea.



Figure 1-1 Net Capital Inflows (1996 Q1 – 2001 Q4)

(Unit: million \$)

Figure 1-2 Net Capital Inflows (2006 Q1 – 2011 Q2)

(Unit: million \$)



In order to highlight the differences in the evolution and resolution of the two crisis episodes and whether the regime change has affected the depth and duration of financial crisis this section presents changes in a number of macroeconomic variables during the two crisis periods in Figures 2-2 through 3-4. In all nine charts, period 0 corresponds to the month before the crisis picked up speed: 1997:6 and 2008:6. For comparison, foreign exchange reserves and gross domestic product are computed as indices worth 100 in period 0 of each crisis, even though reserves and GDP were much larger in 2008.

2. Exchange rate, Foreign Exchange Reserves, and Stock Prices

In the run up to the first crisis, Korea was on a relatively rigid intermediate regime. After agreeing to the IMF conditionality, Korea moved to free floating. Partly for this regime change, the nominal exchange rate crashed a little bit deeper in 1997-8 but recovered to end up at about the same rate of depreciation as in 2008-9. It is interesting to note that in both crises the massive depreciation did not generate any expectation of appreciation, instead moving on to an implosive time path.

The exchange rate could not be brought under control without reserve or other market interventions (Figure 2-1). This is the reason that the reserves tell about the same story-the amounts of reserve losses in the two crises were about the same-although "100" in 2008 corresponds to a volume 7.7 times larger than "100" in 1997(Figures 2-2 and 2-3). In 2008, Korea used its reserves to cope with the speculative attack instead of asking the IMF to come to the rescue. It spent about US\$50 billion, a sum commensurate with the US\$57 billion pledged by the IMF in 1998. It may be noted that both the exchange rate and the stock of reserves recovered quickly in 1998 following the IMF agreement, and there was also a similar recovery in 2009 following the currency swap agreements. Both the IMF programs and swaps succeed in turning the tide of capital outflows, whereas the use of reserves did not seem to achieve this, no matter how large the stock of reserves.

Figure 2-1 Changes in the Nominal Exchange Rate







Note: From May 1996 to July 1998, From May 2007 to July 2009. Source: Bank of Korea

Figure 2-3 Foreign Exchange Rates (Won against US Dollar)



(1st week of June 1997, 1st week of June 2008)

Note: From the week of March 7, 1994 (-130) to November 29, 1999 (+130).

From the week of March 7, 2005 (-130) to November 8, 2010 (+127).

Source: Bank of Korea

Stock Prices •

After the crisis broke out, stock prices measured by the Kospi fell continuously for about six months before rebounding in both 1997 and 2008 crisis, although in the first crisis episode

the bursting of the IT bubble in 2001 and the subsequent credit card crisis depressed the stock market before returning the pre-crisis level in 2002.





3. Economic Growth and Recovery

Figures 3-1 and 3-2 indicate that the decline in economic activity in terms of GDP is deeper in the 2008 crisis. But the economy rebounded earlier in the second crisis despite the fact that exports dropped off much more during the second crisis, even. Taken together these changes mean that much of the recovery during the second crisis came from an expansion of domestic demand.

In both cases, the crisis lasted about six months. By the end of the first quarter of 1998 the first crisis was over, and so was the second one by the end of the first quarter of 2009. As for the inventory adjustment in Figure 3-2, inventory declines lasted a lot longer in the first than in the second crisis. In contrast, in the 2008 crisis, firms had been piling up inventories before making a rather drastic cutbacks early in 2009. About six months later firms resumed building up inventory again. This development suggests that recovery began earlier in the second crisis, which is consistent with changes in industrial production and GDP in Figures 2-6 and 2-7.





Note: From the 3rd quarter of 1994 to the 1st quarter of 2001. From the 3rd quarter of 2004 to the 3rd quarter of 2010. **Source:** Bank of Korea



Figure 3-2 Exports

Note: From the 1st quarter of 1995 to the 3rd quarter of 1999. From the 1st quarter of 2006 to the 2nd quarter of 2010.

(1997.6 = 100, 2008.6 = 100)



Note: From March 1994 to September 2000. From March 2005 to September 2010. Source: Bank of Korea





Note: From the 1st quarter of 1995 to the 3rd quarter of 1999; period 0 represents the 2nd quarter of 1997. From the 1st quarter of 2006 to the 3rd quarter of 2010; period 0 represents the 2nd quarter of 2008. **Source:** Bank of Korea

• Current Account

Finally, in 1997, the large current account deficit that had remained unabated before the eruption of the crisis was perceived to be structural and one of the causes of the crisis. In contrast Korea did not run a current account deficit in the run up to the 2008 crisis. Even during the liquidity crisis period, its current account was in surplus (Figure 6-6). But the surplus was not enough to help prevent a liquidity crisis.

4. Conclusion

Whatever its overall benefits may have been, the preceding analysis makes it clear that financial market opening has not made Korea's financial system more resilient to, has not mitigated the impact of, or shortened the period of financial turbulence caused by adverse external shocks as in the case of the capital account crises in both 1997-98 and 2008. If anything, financial market opening has increased the volatility of capital movements in and out of the country, thereby exacerbating the volatility of the foreign exchange rate and other financial prices. Capital controls could deter speculative capital inflows when the economy is performing well, but there are no effective measures that could stem the tide of capital outflows, whatever the causes of the outflows may be, even in a free floating regime.