

WHAT HAPPENED TO KOREA TEN YEARS AGO?

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What began with the panic triggered by the failure of the Thai financial system led to the rapid economic downturn of some of the globe's most dynamic economies in 1997 and 1998. Especially for South Korea the consequences of financial and economic crisis and the intervention of the IMF in overcoming the accompanying problems were extremely painful. These problems included, for example,

- a large number of bankruptcies of industrial firms and private banks,
- the increasing pressure on industrial firms to carry out rapid restructuring and specialisation in a limited number of competitive areas including the so-called "big deal" of exchanging business activities among large conglomerates,
- the massive dismissal of workers and the subsequent insecurity in businesses and society,
- the increase of production costs caused by the *won* devaluation and the change of relative prices of imported goods such as semiconductors and natural resources like petroleum,
- the drastic decrease in domestic households' demand and firms' investment spending caused by income reduction and high interest rates, etc.

In fact, South Korea had a real economy crisis that was rapidly triggered by a financial shock. According to the standard economic literature, a financial crisis is generally defined as a situation in which a significant group of financial institutions have liabilities exceeding the market value of their assets, leading to runs and other portfolio shifts, collapse of some financial firms and government intervention. Additionally, it is also quite often characterised as a non-linear disruption to financial markets in which adverse selection and moral hazard problems become much worse, so that

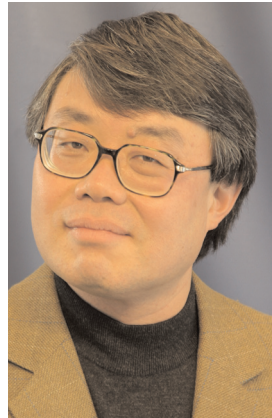
financial markets are unable to efficiently channel funds to those who have the most productive investment opportunities (see also Hahm and Mishkin 2000; Pettis 2001). According to Shin and Hahm (1998), the South Korean case not only demonstrates all the aspects of a financial crisis under the first definition but also fulfils the criteria posited by the latter definition.¹ In addition, this type of financial crisis was accompanied by the currency crisis (i.e. strong depreciation of the *won*) in the fourth quarter of 1997.² Their negative impacts caused the total economic break-down in South Korea. This abrupt crash was also partly triggered by the pressure of the IMF that insisted on a domestic austerity package and on fundamental structural reforms in return for bail-out funds (see also Weisbrot 2007).³

¹ The facts that support their arguments include: (a) the ratio of commercial banks' non-performing loans to total loans increased rapidly in 1997, (b) although a domestic depositors' run was absent, banks and merchant banking operations in South Korea experienced a large scale foreign creditors' run at the end of the same year that led to the sharp reduction in short-term external debts of these financial institutions (by more than 40 percent) within a short period of time, (c) fifteen merchant banking corporations were suspended in December 1997 and thirteen of them were closed later, while the government intervened in two insolvent banks at the end of the same year, and (d) the pattern of rising interest rates and declining stock prices in the midst of an increase in number of incidents of default (the so-called non-linear disruptions in domestic financial markets) had already been in place early in September 1997, which, however, became more evident two months later. For example, the KOSPI stock price index only amounted to 390.3 in December compared to 494.1 in November (Shin and Hahm 1998).

² On average, the *won* was devalued from ca. 844 won/US\$ in 1996 to 1,850 won/US\$ in 1997.

³ Policy errors made by the South Korean and other Asian governments and the IMF during the first stage of panic appear to have contributed to the deepening of economic distress (Feldstein 1998). "The IMF roared into Asia and promised to supply \$17 billion to Bangkok, \$40 billion to Jakarta, and \$57 billion to Seoul. [In return], it demanded austerity budgets, high interest rates, and sales of local businesses to foreign bargain-hunters. It claimed that these measures would restore economic health to the "Asian tigers" ..." (Johnson 1998, 659). According to the IMF, "high [real] interest rates would encourage domestic capital to stay at home and foreign lenders to resume lending, which would boost the currency. The currency boost would both make it easier for domestic firms to repay their foreign debts and check the danger of competitive [devaluation]. ... In practice, [however] the increase in real interest rate combined with [tax increases, cuts in government expenditure and other restrictive measures which also led to compression of private consumption] only depressed firms' cash flow and raised their fixed-payment obligations, tipping more and more into insolvency, accelerating the [capital] outflows and reducing inflows. ... The IMF [appeared to forget] that private cash flows are cyclical ... When a whole economy is [in trouble], foreign capital will not return whatever the interest rate. ... Requiring a sharp rise in bank capital adequacy standards in the midst of the crisis caused a cut in credit, a rise in non-performing loans, and further bankruptcies. ... The IMF also required [Asian] governments to guarantee the foreign debts of local firms and banks. Protected from default, foreign creditors hung back on rescheduling or rolling over the debt. This worsened the hard currency squeeze on local debtors, pushing them to buy foreign exchange to cover their increased dollar needs and adding to the exchange rate collapse" (Wade 1998, 700-701).

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Following the big shocks of the crisis in South Korea and other Asian countries, the following standard questions were raised at the end of 1990s: After the lessons learned from the previous Latin American economic crisis, how could this happen again and especially in East Asia? How could such rapidly growing economies experience a sudden depression, one after the other? Why had the crisis not been foreseen? And, of course, what could be done to prevent such crises in the future? History repeats itself. Today Americans and Europeans are asking themselves similar questions. How could such a large scale financial crisis happen to the world's most advanced economies just ten years after the Asian crisis? This article revisits the Korean economic crisis at the end of 1990s and identifies some specific financial and real sector problems to provide a better understanding of the origins of the crisis and its economic consequences for the victims.⁴

Principal causes of the Korean economic crisis

According to Bergsten (1997) and Krugman (1998), the Asian crisis was initiated in the 1980s. The rapid appreciation of the Japanese yen against the US dollar in 1985 led to a relative increase in production costs in Japan, which triggered the relocation of production facilities of Japanese firms to South Korea and Taiwan. In order to counteract its negative impact on domestic economic development, Japanese authorities carried out an expansionary monetary policy, which, in turn, increased asset prices in Japan and stimulated, due to the low domestic interest rates, capital outflow to South Korea and Taiwan. At the end of the 1980s, these Asian economies were forced to appreciate their currencies and to aggressively expand the money supply. As had been the case in Japan, the implementation of these political measures in Korea and Taiwan created asset price bubbles at home and large capital flight to Indonesia and Thailand. On the other hand, the sharp devaluation of the Chinese *yuan* (by about 40 percent in 1994) and the Japanese *yen* (by over 25 percent in the period of 1995–96) put tremendous competitive pressure on the other Asian countries, eroding their trade positions and producing large trade deficits in South Korea and throughout East Asia.

⁴ This article is largely based on Nam (2005).

Furthermore, it is also quite often argued that the rapid creation of bubbles in expanding production capacities and investment activities of (large) industrial firms (not only in the domestic country but also abroad) were, to a larger extent, financially (in many cases also politically) backed by the government (the so-called moral hazard problem).⁵ In this context, it was suggested that since the mid-1990s South Korean industrial firms have faced strong challenges in the Asian and world market, particularly from Chinese, Thai and Indonesian competitors. Furthermore, labour costs also drastically increased, which again made Korean products more expensive in the world market. In order to maintain their competitive position, South Korean industrial firms were forced to quickly carry out structural changes including large-scale investments in modern capital stock and to intensify their R&D activities (Bergsten 1997; Kwon 2008). As a consequence, South Korean imports of modern investment goods have increased rapidly since the mid-1990s. In addition, the Korean *chaebols* also attempted a relocation of their production facilities to foreign countries. Although large South Korean industrial firms lacked their own financial means and suffered from the serious asset-liability mismatches,⁶ as Krugman (1998) argued, they could well finance their (in some cases not adequately examined, risky and/or less profitable) long-term modernisation and internationalisation projects – thanks to government support – by taking short-term loans from domestic banks which played solely the role of a “cash box” in the country.⁷

To be sure, corporate sectors with high levels of debt are generally vulnerable to shocks that cause a fall in cash flow or an increase in fixed payment obligations

⁵ This view is also reflected in the IMF programme for Korea, which demanded that the government should take measures to weaken the large, diversified, family-owned *chaebols*. The proposed measures included the banning of mutual payment guarantees among the member firms of the same *chaebol*, the demand for the publication of consolidated balance sheets for the whole *chaebol* (rather than for individual firms), and the strengthening of minority shareholder rights through stricter disclosure requirements (Chang et al. 1998). The implemented big-deal business activity exchange programme among large conglomerates mentioned above was the consequence of these measures.

⁶ According to the Bank of Korea, the debt-equity ratio of Korean manufacturing corporations amounted to approximately 340 percent between 1973 and 1996.

⁷ Against this type of argument, Chang et al. (1998) suggested: (a) the low corporate profitability in Korea is mainly due to high interest payments rather than to inefficiency, (b) the investment that the *chaebols* had made in the building-up to the crisis were mainly in industries with stable returns (like those leading export activities like petrochemicals, iron and steel, cars, electronics and shipbuilding), rather than high-risk high-return industries, which those investors operating under moral hazard will be inclined to choose, and (c) there has been no instance in last two decades where Korean government bailed out a failing *chaebol*. In the period of 1990–96 three (Hanyang, Yoowon and Woosung) of 30 conglomerates went bankrupt in addition to the six others (Kia, Hanbo, Sammi, Haitai, Jinro and Halla) in 1997.

– systemic shocks such as a fall in aggregate demand, a rise in interest rates, or a devaluation of the currency when part of the debt is foreign (Wade 1998). In this context, it should also be noted that in South Korea there was asymmetry in the deregulation schedules regarding the foreign currency-denominated lending and borrowing by financial institutions in the country. In spite of the fact that in 1993 the Korean government expanded the positive list of usage for which financial institutions may provide foreign currency-denominated loans in the scope of the financial liberalisation programme, the quantitative restriction on long-term borrowing was maintained, while short-term borrowing (by banks) was freely allowed (see also Amess and Demetriades 2001; Bratsiotis and Robinson 2005). As a consequence, the short-term foreign debts of the South Korean banks grew rapidly in the first half of the 1990s to meet the increasing investment demand of the corporate sector. For these reasons, the credit increase largely exceeded the growth of available domestic resources in the financial sector, and the extra credit supply of banks was provided by the steady and strong expansion of external debts and foreign currency-denominated assets (Shin and Hahm 1998; Chang et al. 1998).⁸

“Such practices may be sustainable as long as the rate of economic growth remains high, as financial institutions compensate for the low effective rate of return on loans to these preferred borrowers with high rates of return on other loans. However, if the rate of growth slows, the bad loan drag begins to inhibit the ability of banks and non-bank lending institutions to supply credit to the economy. This is what transpired in a number of Asian economies [in 1997], as some key export prices declined (computer chips, for example)” (Noland 1998, 2). Furthermore such reductions in the export revenue of Asian countries rapidly created the expectation of declining corporate profits and equity prices. As a consequence, domestic and foreign investors started to transfer money abroad in search of higher returns. This, in turn, had a significant effect on the collapse of the domestic asset market and the exchange rate depreciation in Asian countries.

⁸ For example, in South Korea foreign currency-denominated assets of banks relative to nominal GDP went up to approximately 29 percent in 1996 from ca. 20 percent in 1992, while the ratio of total (short- and long-term) external debts to GNP rose to around 22 percent from 14 percent in the same period of time and reached around 120 billion US dollars in September 1997 (Shin and Hahm 1998; Chang et al., 1998). The total sum of short-term foreign debt reached approximately 95 billion US dollars in the mid-December 1997.

In other words, apart from the large deficits in the balance of payments and the insufficient foreign currency reserves, the weakness of the real sector reflected by the decline in economic and export growth, additionally makes South Korea and other Asian victims more vulnerable to speculative attacks, panics and external financial shocks leading to sudden crises, as is also shown by the monetary and financial crises in Europe and Latin America in 1992–93 and 1994–95, respectively (see also Cartapanis et al. 2002).

In the beginning of the 1990s, South Korea experienced a sharp decline of the real GDP growth rate from 9.1 percent (1991) to 5.1 percent (1992). However, this did not cause a crisis, in contrast to the more recent economic slowdown from 8.9 percent in 1995 to 7.1 percent in 1996. Even in 1997 the country was able to achieve a GDP growth rate of 5.5 percent, although its economy had already started to collapse that autumn. Under the additional consideration of the quarterly business climate index for the South Korean manufacturing sector, provided by the Bank of Korea, one can easily see that the rapid fall of the real GDP growth rate in the period of 1991–92 was accompanied by a decline in this leading index.⁹ In spite of the increase in the real GDP growth rate from 8.6 percent to 8.9 percent in the period 1994 to 1995, however, the business climate index had gradually decreased since the 3rd quarter of 1994 from a value of ca. 120 falling sharply to below 40 in the 4th quarter of 1997. This fact clearly shows that South Korean manufacturing firms had actually anticipated the decline in their economic activity since 1994, although the GDP growth rate was very high and its reduction was rather modest in the mid-1990s. Following the idea of Noland (1998), one can assert that in mid-1994 South Korean and foreign investors started to move money abroad in search of higher returns, and this process continued until 1997. This fact is also reflected in the development of the South Korean capital account deficits in the period between 1993 and 1996. Measured in terms of the 1990 won/US\$ exchange rate, the deficit amounted to approximately 536 million US dollars in 1993, which was reduced by 55 million US dollars in 1994. In both subsequent years, however, the deficits increased rapidly reaching 527 and 704 million US dollars in 1995 and 1996, respectively.

⁹ The quarterly business climate index is calculated on the basis of business surveys conducted among South Korean manufacturing firms. Its value of the first quarter of 1991 is set 100.

More immediately, the sudden widening of the trade balance gap in 1996 made South Korea less immune to the financial crisis (Krugman 1998; Shin and Hahm 1998; Wade 1998). Expressed in 1990 exchange rates, the trade (goods and services) deficit increased from 8 to 25 billion US dollars between 1995 and 1996.¹⁰ Yet, it should be emphasised that this large gap was not created by the reduction in total exports but by the country's import growth being much faster than its export growth in the same year. Since computer chips were the leading exports of South Korea in the 1990s, the decline in semiconductor exports in 1996 created the expectation of declining corporate profits and equity prices, as Noland (1998) and Wade (1998) also suggested.¹¹ Partly thanks to the gradual export increase of items like cars, woven fabrics and ships, South Korea was able to achieve an export growth of 13 percent in 1996, although that rate was clearly lower than the 28 percent of 1995. As mentioned above, import growth was more dynamic in these years: its rate reached 28 and 23 percent in 1995 and 1996, respectively. In particular, imports of petroleum and sophisticated semiconductors showed an above-average growth trend: the percentage share of imports of the former component reached around 10 percent of South Korea's total imports in 1996, while that of the latter amounted to ca. 8 percent. In other words, the dependence of South Korean manufacturing activities on foreign-made semiconductors and petroleum imports had dramatically increased within two years. In combination with the effects of the decrease in semiconductor exports on capital flight, South Korean import performance made the country's economy more vulnerable to the financial crisis. Especially imports of items like semiconductors and petroleum, which were required for the manufacturing activities in South Korea, became obviously more expensive when the *won* was strongly devalued at the end of 1997. This was also one of the most decisive reasons why the domestic production system started to collapse.

Conclusions

The Asian crisis, which began with the panic triggered by the failure of the Thai financial system,

rapidly turned out to be a real sector crisis rather than a financial and currency crisis. The abrupt breakdown was particularly evident and serious for the South Korean economy. The list of major causes for the crisis in South Korea is long.

The *financial* factors that led to the crisis generally include: the serious asset-liability mismatches of domestic firms, the over-reliance on foreign debts partly caused by the government's badly designed financial liberalisation schedule, the poorly-developed and little transparent domestic financial system, the insufficient foreign currency reserves, the moral hazard resulting from the close relations between governments and large firms as well as from the so-called cross-firm debt guarantee within a conglomerate.

In addition, some macro- and meso-economic conditions and weaknesses have not only made the Korean economy vulnerable to external shock but also contributed to the sudden capital flight by investors and the subsequent economic collapse. Major *real* sector problems were, for example, the (expectation of a) decline in the economic growth rate from 1995 and the slow growth of export revenues in 1996 (due mainly to the world-wide decrease in price of the computer chips – Korea's most important export item in the 1990s), the sharp increase in the trade deficit in 1995–96 caused by import growth of petroleum and sophisticated semiconductors, the intensive modernisation efforts of Korean firms, and competitive pressure caused by the increase in labour costs and recent devaluation of *yuan* and *yen*, to name a few.

Furthermore, policy errors made by Korean governments and the IMF during the early stages of panic appear to have deepened the economic distress. For example, the increase in real interest rates combined with tax increases, cuts in government spending, etc. which were demanded by the IMF in return for bailout funds depressed Korean firms' cash flow and raised their fixed-payment obligations, forcing them more strongly into insolvency.

The unstable development of important Asian currencies, including the Korean *won*, the transmission of bubbles from one country to another and the related less-disciplined monetary policy practice of individual Asian countries since the mid-1980s were the initiators of the Asian crisis. In this context it was argued that in Asia a more intensive co-ordination in

¹⁰ Measured in terms of 1990 exchange rates, Korea's total exports increased from ca. 135 to 153 billion US dollars between 1995 and 1996, while its total imports experienced a stronger growth from ca. 143 to 178 billion US dollars in the same period of time.

¹¹ As a consequence, the share of semiconductor export revenue decreased from 16 to 13 percent of total South Korean exports between 1995 and 1996.

the fields of monetary and exchange rate policy-making, debt negotiations and expansions would be necessary to prevent and to overcome the crisis (Eichengreen and Bayoumi 1996). Although some economists and politicians supported the idea of establishing a type of Asian monetary union (with a common currency and central bank), its realisation has remained fruitless due to significant economic disparities, structural differences and different financial systems in Asian countries (Wade, 1998). Moreover, Asia lacks the kind of political solidarity and institutional processes that have played an important role in the economic integration of the EU since the 1950s.

References

- Amess, K. and P. Demetriades (2001), *Financial Liberalisation and the South Korean Financial Crisis: Some Qualitative Evidence*, Discussion Papers in Economics 01/3, University of Leicester.
- Bergsten, C.F. (1997), *The Asian Monetary Crisis: Proposed Remedies*, Statement before the Committee on Banking and Financial Services, US House of Representatives, November 13, Washington DC.
- Bratsiotis, G. and W. Robinson (2005), "Currency Composition of Debt, Risk Premia and the 1997 Korean Crisis", *Economic Modelling* 22, 459–471.
- Cartapanis, A., V. Dropsy and S. Mametz (2002), "The Asian Currency Crises: Vulnerability, Contagion, or Unsustainability", *Review of International Economics* 10, 79–91.
- Chang, H. J., H. J. Park and C. G. Yoo (1998), "Interpreting the Korean Crisis: Financial Liberalisation, Industrial Policy and Corporate Governance", *Cambridge Journal of Economics* 22, 735–746.
- Eichengreen, B. and T. Bayoumi (1996), *Is Asia an Optimum Currency Area? Can It Become One? Regional, Global and Historical Perspectives on Asian Monetary Relations*, Center for International and Development Economic Research Working Paper C96/081, University of California Berkeley.
- Feldstein, M. (1998), "Refocusing the IMF", *Foreign Affairs* 77/2, 20–38.
- Hahn, J. H. and F. S. Mishkin (2000), "The Korean Financial Crisis: An Asymmetric Information Perspective", *Emerging Markets Review* 1, 21–52.
- Johnson, C. (1998), "Economic Crisis in East Asia: The Clash of Capitalisms", *Cambridge Journal of Economics* 22, 653–661.
- Krugman, P. (1998), *What Happened to Asia?*, January 1988, <http://web.mit.edu/krugman/www/disinter.html>.
- Kwon, E. (2008), *The Korean Financial Crisis a Decade Later: Restructuring the Chaebols*, http://www.allacademic.com/meta/p250582_index.utml.
- Nam, C. W. (2005), Major Causes of the Korean and Asian Economic Crises, in: Gangopadhyay, P. and M. Chatterji (eds.), *Economic Globalization in Asia*, Aldershot: Ashgate Publishing Limited, 89–107.
- Noland, M. (1998), *The Financial Crisis in Asia*, Statement before the House International Relations Committee Subcommittees on Asia and Pacific Affairs, and International Economic Policy and Trade, February 3, Washington DC.
- Pettis, M. (2001), *The Volatility Machine: Emerging Economies and the Threat of Financial Collapse*, Oxford: Oxford University Press.
- Shin, I. and J. H. Hahn (1998), *The Korean Crisis – Causes and Resolution*, Paper presented at the East-West Center/Korea Development Institute Conference on the Korean Crisis, August 8, Honolulu.
- Wade, R. (1998), "From "Miracle" to "Cronysm": Explaining the Great Asian Slump", *Cambridge Journal of Economics* 22, 693–706.
- Weisbrot, M. (2007), *Ten Years After: The Lasting Impact of the Asian Financial Crisis*, Center for Economic and Policy Research, www.cepr.net/documents/publications/asia_crisis_2007_08.pdf.