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Financial Liberalization and International Capital Flows

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It is interesting that domestic and international financial liberalization are among the most often cited causes of the 1997–98 crisis. Liberalization in the Asian crisis countries took place prior to the crisis as did large capital inflows, many of which reversed during the crisis in the classic pattern of capital flow bonanzas ending in sudden stops (Calvo, Izquierdo, and Mejía 2008; Reinhart and Reinhart 2008; Sula and Willett 2009). Furthermore, China and India, with much less general financial liberalization and a continuing array of capital controls, were little hit by the crisis. Malaysia's experiment with increasing capital controls during the crisis, while not the resounding success that some enthusiasts suggested, was certainly not the catastrophe that many critics predicted. As a result, in many quarters support for financial liberalization suffered a strong blow.

The free-market euphoria that followed the collapse of the former Soviet Union had burst. The massive reversal toward greater financial controls that was predicted with glee by some and with fear by others did not come to pass, however. The IMF became more circumspect in its preaching for liberalization.[28] Controls in some countries were increased, but in many others, such as Korea, the crisis spurred further and more balanced liberalization but combined with efforts to improve prudential regulation and financial supervision.

This was a wise response. A careful look at the previous financial liberalization in Korea and many other countries suggests that the major problems

28. In actuality, the IMF had generally been more nuanced in its advocacy of liberalization than many of its critics charged; see IEO (2005; 2007).

were not caused by financial liberalization per se, but by the perverse ways in which it was done. It was more their strong economic fundamentals than their capital controls that protected China and India from the 1997–98 crisis (Willett et al. 2005). Furthermore several studies have found positive rather than negative correlations between measures of capital controls and the frequency of currency crises (Potchamanawong et al. 2008). There are sufficient difficulties with the various quantitative measures of capital controls currently available (Potchamanawong et al. 2008)[29] to keep one from being confident that capital controls are a strong cause of crises, but the evidence certainly supports caution about the belief that capital controls provide strong protection against crises.

Perverse Liberalization before 1997

When we look at the Korean experience we see that the liberalization that preceded the 1997–98 crisis was quite partial and frequently violated standard economic advice about how liberalization should proceed. A large literature has been developed by economic theorists and practitioners alike about the necessary preconditions and sequencing needed for liberalization to work well. Not surprisingly considerable disagreement about optimal sequencing still exists, but experts have arrived at a considerable degree of consensus that some paths work much better than others. What has become much clearer from the rash of crises during the past decade is that not only do some paths work less well, but that they can be disastrous.

The total amount of domestic and international financial liberalization undertaken by Korea before the 1997–98 crisis was much less than is often assumed, and most of the qualitative measures of the level of international capital controls in Korea and several of the other Asian crisis countries were still fairly high (Willett et al. 2005). This may help explain the positive association that some studies have found between capital controls and crises. A nontrivial amount of financial liberalization did begin in Korea in the early 1990s and was accelerated by the program agreed to as part of Korea's entry into the Organization for Economic Cooperation and Development (OECD), but Marcus Noland (2005, 17) in his study of Korea's experience with liberalization and international capital flows concluded that, even with the completion of the OECD application plan, "the South Korean financial system would have remained among the most repressed in Asia."

29. Using a more detailed new measure of capital control developed by Potchamanawong (2007) that distinguishes between controls on inflows and outflows, Potchamanawong et al. (2008) find that crises are associated more strongly with controls on outflows than on inflows. An example of the problems with the quantitative measures of capital controls is that the widely used measure of Chinn and Ito (2006) shows an increase in controls for Korea before the 1997 crisis, while qualitative discussions indicate there was a reduction. The measures developed by Potchamanawong (2007) and Schindler (2009) do show a decrease.

The liberalization did not result primarily from a conversion of Korean policymakers to neoliberal ideas. As Noland (2005, 38) puts it, "the liberalization undertaken in the early 1990s was less a product of textbook economic analysis than of parochial politicking. . . . Neither South Korean government officials nor the intelligentsia evidenced much ideological commitment to the notion of freer financial markets. . . ." This helps explain why, from the standpoint of standard economic analysis, a number of basic mistakes were made.

The state of the Korean financial system was not strong as the liberalization process began. Noland (2005, 20) describes it as "bureaucratized, bloated, and backwards." Under the old system of government support and directed credit, there was little incentive for Korean financial institutions to invest substantial resources to develop strong capabilities in credit analysis and risk management. As Frederic Mishkin (2006, 87) comments in his analysis of Korea's precrisis financial system, "Because of the government safety net for the *chaebol*s [which were generally considered to be too big to fail], banks had little need to develop a credit culture."

These capabilities cannot be developed overnight, so strong regulatory oversight is particularly important in early stages of liberalization. And, as we have discovered from the U.S. subprime crisis, even in mature financial systems this is true with respect to the development of new types of financial arrangements. As has been true in many other countries, Korea's initial financial liberalization was not accompanied by a strong boost to regulatory oversight. Mishkin (2006, 87) offers a likely reason for this failure: "Just as in Mexico, lax banking regulation and supervision [in Korea] were no accidents. It was in the interests of both the banks and the firms that borrowed from them that they be allowed . . . to do their business . . . unfettered by bothersome regulations and inspections."

In Korea, lax prudential regulation allowed heavy concentration of lending and the disproportionate growth between Korean banks and nonbank industries. In the three-year period leading up to the crisis, merchant banks acquired $20 billion in foreign debt (Chang, Park, and Yoo 1998, 738). Regulation was especially lax for newly licensed merchant banks whose capital requirements in proportion to loans were woefully inadequate. The same can be said for Thailand. This fact alone significantly further increased the vulnerability of the banks to business failure. But the lack of prudential regulation, an act of omission, also interacted with the removal of various government restrictions on foreign borrowing, an act of commission, to exacerbate banking-sector weaknesses. Financial liberalization and tight money kept domestic interest rates above world rates, which encouraged domestic banks to rely on foreign credit. The pegged exchange rate also encouraged the perception that foreign capital was relatively cheap, contributing to the wave of excessive short-term foreign borrowing that was intensified by ineffective prudential supervision. And, because private actors considered the pegged exchange rate system quite credible, they made borrowing decisions under a false sense of security (Demetriades and Fattouh 1999, 788). But the concentration of bad loans leading up to the crisis may not have been due only to the government's encouragement to lend short term through the unintentional creation of perverse incentives. There is evidence that government officials supported lending to the *chaebol* by Korean banks even after *chaebol* profitability had fallen sharply (Krueger and Yoo 2002, 602).

One contributor to the financial weakness of the private banking sector has to do with the incentives behind bank ownership. Privatization of state-owned banks constitutes an important component of the financial reform process. Yet the privatization process itself can fall prey to perverse incentives. This can be viewed as an incompatibility between political motivations and economic incentives, or as political capture of the reform process. Privatization in theory should lead to greater overall efficiency as, for example, the private sector possesses some comparative advantage over government in making profit-maximizing economic decisions. Given the stakes involved, however, the privatization process is particularly susceptible to political capture and rent seeking, as with the charter of new merchant banks in Korea. The government converted 24 financially weak short-term financing companies into merchant banks in two separate rounds: 9 in 1994 and 15 in 1996. The merchant banks then proceeded to engage in risky foreign exchange transactions. Among the banks whose licenses were revoked in 1998, 5 were new entrants from 1994, and 10 were from 1996. Thus, government reforms seem to have encouraged greater debt exposure in an already overexposed financial system (Auerbach 2001, 208).

In Korea, moreover, as part of financial reform banks were allowed to open and expand operations overseas. As a result, banks expanded their foreign currency–denominated business as aggressively as they did their domestic loan portfolios. The net result was an increase in foreign currency liabilities of overseas branches that was almost as large as the external debts of domestic branches (Dooley and Shin 2000, 9). Nor did this happen only in Korea. The number of nonbank financial institutions expanded dramatically in Thailand as well prior to the crisis (Furman and Stiglitz 1998, 7). In fact, throughout East Asia in the 1980s and 1990s, there had been a proliferation of new banking and quasi-banking institutions with little equity capital and less experience, nearly all engaged directly or indirectly in intermediating foreign capital (Katz 1999, 428).

Obviously the buildup of short-term debt severely weakened the domestic banking sectors of crisis countries in Asia. And clearly the governments had a lot to do with encouraging short-term debt buildup (Fischer 1999). One way to understand why short-term debt skyrocketed with financial deregulation is to look at the incentive structures created by state regulation of the financial sector before liberalization and to understand that before liberalization those perverse incentives might have been held in check by government oversight. For example, continued government control over the long-term capital market, in the form of window guidance or direct controls over interest rates, created a shortage of long-term capital during the earlier rapid growth period in most Asian countries. This shortage encouraged the use of short-term credit to finance long-term investments. This perverse incentive ultimately led to a perverse outcome in the form of a mismatch of borrowing and lending terms, which is widely acknowledged to be one of the main ingredients of the Asian financial crisis (Katz 1999, 429). Under these conditions, reform may encourage market actors to take advantage of pre-existing incentives because oversight has diminished.

The starkest example of this kind of perverse incentive is the liberalization of the short-term loan market in the context of an already weakened banking sector (Demetriades and Fattouh 1999, 788). When governments in East Asia liberalized their banking sectors and capital markets, they began by opening up only the short-term maturity end of these markets. Unfortunately, this segment of the market tends to be characterized not only by short-term horizons on the part of investors but also by short-term rent seeking for quick profits by banks taking advantage of close ties with government (Katz 1999, 429). Some Korean banks actually had a negative net worth when the loan market was liberalized. The fact that banks with negative net worth could continue to operate obviously is more a function of inadequate prudential regulation in the preliberalization period than of liberalization per se. In this context of insolvency, however, liberalization may have actually exacerbated the problem because banks with negative net worth do face strong (perverse) incentives to load up on short-term debt as a means of gambling for redemption in a liberalized short-term loan market. That is, if the banking system is unsound owing to a large debt overhang or a large percentage of nonperforming loans that have not yet been written off, these banks have very little to lose by loading up on more risky but potentially highly profitable new loans made accessible as a result of liberalization. This is especially true when viewed in conjunction with the too-big-to-fail form of moral hazard. In both cases, the downside risks of taking on more short-term loan risk are considerably discounted in comparison with the upside of redeeming a failing business enterprise with the infusion of fresh capital.

Governments further encouraged the buildup of short-term debt by liberalizing the loan market while implicitly lowering the perceived costs of foreign borrowing through the pegged exchange rate (Demetriades and Fattouh 1999, 788; Dooley and Shin 2000, 5). Most of the crisis country governments sharply limited the size of exchange rate fluctuations and fostered the impression that the private sector need not worry about the possibility of a large depreciation. The substantial differential between high domestic interest rates in the crisis countries and low rates in Europe, Japan, and the United States was seen as a source of arbitrage profits or low borrowing costs rather than as an indicator of differentials in risk (Krueger and Yoo 2002, 603). As a consequence, much of the crisis country foreign borrowing went unhedged. Thus, financial-sector liberalization and exchange rate policies interacted perversely. In many countries, often with explicit government encouragement, the private sector came to believe that large exchange rate depreciations would not be allowed, or, if such changes did occur, nationals would be compensated by the government (Krueger and Yoo 2002, 603). This both encouraged foreign borrowing and discouraged the purchase of forward cover as an insurance against the risk of major exchange rate changes (Krueger and Yoo 2002, 606).

Korean state managers came under significant pressure by 1993 from the chaebol to liberalize short-term finance (Lee, Lee, and Lee 2000, 1). There is no question the move toward liberalized financial markets fit in with the Kim Young-sam government's globalization priority and therefore served a political function. But this does not explain why both short-term and long-term credit markets were not liberalized. Ironically, policymakers suggested that one of the strongest reasons for introducing competition in the market for bank loans was to mitigate the considerable economic power and influence of the *chaebol.* Indeed, controlling the excesses of big business throughout the liberalization process was an explicit goal for Korean policymakers (Auerbach 2001, 85–87).

The state first embarked upon financial liberalization in 1980 not with the idea of giving market forces free rein, but rather with the idea of building new institutions between the state and big business that would serve to ensure economic control over big business irregularities and to prevent its dominance in the market. Korean officials saw liberalization as redefining the rules in order to continue meeting prudential objectives and prevent the exercise of cartel-like private market power. Part of the long-term liberalization plan was to restrict the privileged access of big business to policy loans and these businesses' oligopolized production in the market (Rhee 1994, 154). Reform-oriented officials firmly believed that economic liberalization would not be successful without preventing further business concentration. State control over big business served not only the state's economic goals but also its political goals. The Chun government (1981–88) put an emphasis on the political goal of the welfare and justice society against the previous regime's collusive state–big business ruling coalition, thus pinning the new regime's legitimacy on its ability to control big business (Rhee 1994, 193).

Despite rather explicit state goals to avoid such outcomes, there is considerable evidence that the content and sequence of Korean liberalization ultimately allowed the *chaebol* to take advantage of perverse incentives. That is, the rather unbalanced form that financial opening took was partially a result of the unyielding pressure from the *chaebol,* which saw short-term borrowing as a way to get around government restrictions on borrowing and investment decisions as well as the capitalization restrictions. Some observers have described the government strategy of liberalizing short-term borrowing while leaving long-term borrowing regulated as government officials giving in where pressures were strong and holding back where it was not. Given the short-term nature of borrowing by nonbank financial institutions, the liberalization of the short-term market prior to the long-term market was an understandable outcome of interest politics. Between 1994 and 1996, foreign bank lending to Korea went from $52 to $108 billion. About $60 billion of debt outstanding in 1997 was used by the *chaebol* to finance direct investments abroad. Korean banks invested in foreign assets with funds borrowed from foreign banks in the range of $23 billion (Haggard and Mo 2000, 204). The reliance of the *chaebol* on bank borrowing—as opposed to equity or bond financing—increased leverage ratios and made the *chaebol* highly susceptible to bankruptcies when hit with shocks. In turn, the health of the banking sector became heavily dependent on the viability of the *chaebol* because such a high fraction of bank assets are in the form of lending to these enterprises (Dekle and Ubide 1998, 18). Korean financial institutions were overexposed to foreign exchange risk, and a high proportion of foreign liabilities had relatively short maturities. So, at the very least, deregulation of the financial sector in the early 1990s, together with ongoing features of the government-banking-*chaebol* relationship, increased Korea's vulnerability to outside capital flows by creating the incentive for short-term indebtedness (Haggard and Mo 2000, 215).

Finally, large business groups throughout Asia benefited from the process of bank privatization. As many scholars have pointed out, privatization because of the large stakes involved is particularly prone to rent seeking and capture. In countries like Korea, government relaxation of controls over entry and ownership has led to the largest business groups' domination of both the ownership of commercial banks and nonbank financial institutions (Tan and Schneider, forthcoming). One result in Korea was that credit became concentrated, with the largest 30 business groups receiving more than 70 percent of total short-term credit (Rhee 1994, 203). One potential sticking point for Korean officials was that, in order to strengthen banks, it was necessary to end the ban on *chaebol* ownership of them. But bank privatization only strengthened the already powerful *chaebol.* In short, the privatization process allowed big business groups to capture an ever-increasing proportion of the banking sector, thereby fortifying the large business groups' position in relation to government control.

Not all the pressures for liberalization were domestic. International pressures were also important. These can operate through a number of channels. One is through impersonal market forces; that is, the degree of international capital mobility can influence the costs and benefits of a wide array of financial strategies. Actions by other emerging-market governments may also have important effects through this channel. Liberalization of competitors raises the costs of continued restrictions in the home country.

A second is through influence on actors' mental models. Although the extent of influence is open to debate, there can be little question that attitudes toward financial liberalization had become much more favorable by the 1990s compared with the 1970s, and that the international transmission of ideas has a good deal to do with these changed attitudes.

A third channel is through direct pressure. This can come from the international financial institutions such as the IMF and World Bank and via direct lobbying on emerging-market governments by international financial interests, but such pressures are perhaps more commonly intermediated by national governments in the industrialized countries (Bhagwati's Wall Street–Treasury complex). Lobbying, persuasion, and arm-twisting by industrial-country governments and the international financial institutions can come of course from the sincere belief that liberalization is in the best interests of the emerging-market countries. The relative influence of interests and ideas or ideology in this context will often be difficult if not impossible to tease out. Assuming that bureaucrats throughout Asia have been reluctant to cede discretionary power to the private sector, one could interpret the decision to liberalize short-term finance as the result of market pressure. That is, international finance brought the most market pressure to bear in the short-term credit market in part because the volume of short-term financial flows was so much greater. In other words, bureaucrats failed to liberalize long-term finance because they possessed the capability to resist, whereas they could not resist the tide of market forces in the short-term financial market.

External pressure for financial-market opening can be extremely powerful. This is an area in which unintended consequences are of major importance. Sometimes the effects on emerging markets are the result of industrial-country policies. Fluctuations in credit conditions in the rich countries have been shown to have strong effects on the size of international financial flows to emerging markets. Less inevitably, the efforts of the industrial countries to develop better standards for risk management by the major international banks resulted in incentives for the banks to shift from longer-term to short-term lending (Goodman and Pauly 1993; Cohen 1996). The so-called Basel Accord on capital adequacy standards for banks reflected a substantial achievement of international cooperation, but few noticed at the time that this was followed quickly by a dramatic increase in the ratio of short-term to long-term bank loans going to emerging markets. This was the result of the much higher ratios of capital required to back bank loans of over one year.

The Czech Republic, Mexico, and Korea were hit by a double whammy. By achieving sufficient economic and political success to be allowed to join the industrial countries as members of the OECD, they automatically qualified under the Basel rules for a lower risk category with lower capital requirements on loans. While not all international banks were following these regulatory rules, enough were so that the admissions of these countries to the OECD were followed by surges of capital inflows (concentrated of course on the short-term end). We also cannot totally discount the more formal external pressures to liberalize. In Korea, President Kim Young-sam's desire to join the OECD, combined with pressure from the IMF and the U.S. government, may have led to the liberalization of domestic financial markets before existing weaknesses in the banking system, including poor regulatory and supervisory framework, could be addressed (Demetriades and Fattouh 1999, 791). So, although some liberalization would undoubtedly have taken place in the absence of foreign pressure, the nature and timing of liberalization may have been acutely affected.

Perhaps the strangest aspect of Korea's liberalization sequencing was the decision to liberalize short-term capital flows before long-term ones—the exact opposite of the normally recommended sequencing. As Mishkin (2006, 88, 29) explains, however, allowing an "unlimited short-term foreign borrowing by financial institutions while maintaining quantity restrictions on long-term borrowing . . . made no economic sense, . . . however [it] made complete political sense." ". . .[This] allowed the government to say that it was still redirecting foreign capital inflows, and to claim that it was opening up to foreign capital in a prudent manner." Just the opposite was the case, of course.

At least one minor contribution to the excessive short-term foreign borrowing that developed was due to the unconsidered consequences of the international efforts to improve financial systems' stability through the Basel I capital requirements. These crude risk control measures drew a sharp distinction between countries that were and were not members of the OECD, so when Korea was admitted the capital requirements for some loans to Korea were substantially lowered for banks in countries following Basel I, then leading to greater incentives for banks to lend to Korea. Although the revised declarations in the Basel II agreement appeared to be much more sophisticated, the current crisis has shown that much of this apparent sophistication was an illusion, as little if anything had been done to improve consideration of the possible effects on systemic risk that might be generated by following the regulations.

Perhaps the most serious weakness in financial system oversight came, however, not from issues with the behavior of the commercial banks but from the merchant-banking sector that Mishkin (2006, 89) describes as "virtually unregulated." In 1990 Korea had only six merchant banks, all affiliates of foreign banks. Wanting greater access to foreign borrowing, the *chaebol* launched a lobbying campaign that "persuaded government officials, often through bribery and kickbacks, to permit many finance companies which were not allowed to borrow abroad, to be converted into merchant banks, which could." The result was that by the time of the crisis the number of merchant banks in Korea had grown to 30, 16 of which were controlled by the *chaebol*.

The result was a domestic credit boom financed heavily by foreign borrowing. Not surprisingly, the rapid expansion of credit led to an increasing proportion of lending of a dubious nature. Regulators in Korea were no more successful in limiting this problem than were U.S. regulators in taking action to head off the subprime crisis. The major problem was not that the regulatory agencies could not pay enough to hire competent supervisors. The danger signs were not difficult to see if one was looking. Rather the biggest problem (Mishkin 2006, 93) was that "political pressure on bank supervision led to 'regulatory forbearance,' the supervisors were not forcing banking institutions to reveal these bad loans and were allowing insolvent institutions to stay in business."

Given these problems, it seems likely that a major financial crisis was inevitable. The financial system was in much too fragile a state to weather the spillover from the crisis that started in Thailand. The result was huge capital outflows, substantial overdepreciation of the *won*, and widespread financial distress and economic hardship.

Postcrisis Liberalization

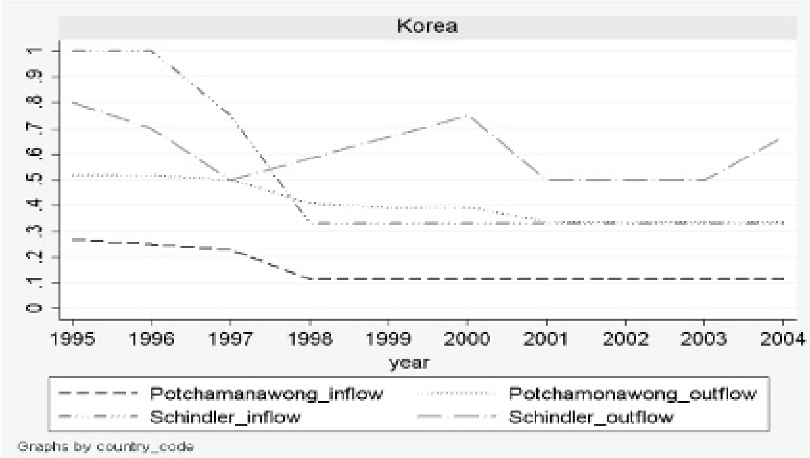
Fortunately Korea drew the right lessons from the Asian crisis concerning the financial sector. Instead of pushing for re-regulation, the government saw that more and especially better liberalization was needed, accompanied by greatly strengthened prudential supervision in order to improve the soundness of the financial system (Kim, Kim, and Suh 2009; Kang 2009).

A number of regulations on the banking sector and stock market, particularly aimed at the foreign investors, were largely eased or eliminated. At the same time, incentives were created to induce foreign investors to return their investments or to attract new investors to Korea. In addition, after the Asian crisis, the Korean government nationalized many large domestic banks that were vulnerable to solvency risks, and Korean authorities also concurrently loosened some restrictions on the entry of foreign banks in order to attract foreign banks to purchase or merge those nationalized banks. In 1998, for example, the Emergency Economic Committee allowed foreigners to buy up to one-third of a company's shares without prior approval of the target firm's board of directors (Bekaert and Harvey 2004), foreign investors were allowed to directly participate in Korean banks through acquisition or through equity markets, and foreign banks were subject to the same restrictions as Korean banks. The Korean government also engaged in intensive financial reforms in order to strengthen its prudential regulation and supervision, increase its financial-market development, and improve corporate governance (Kim, Kim, and Suh 2009). An important aspect of this push was the creation of the Financial Supervisory Commission in 1999. The result has been a much sounder domestic financial system.

Korea has generally kept tighter restrictions on capital outflows than on capital inflows (***Figure 5-1***). During the crisis restrictions on inflows were reduced in order to moderate the downward pressure on the *won*; this was followed after the crisis by more liberalization of both capital inflows and outflows (***Table 5-1***). The regulations in several asset categories were lifted for both foreign and domestic investors; categories included securities, bonds, short-term money market instruments, derivatives, collective investments, and real estate. In 1998, for example, foreigners were freed to purchase domestic collective investment securities without restrictions; in 1998 domestic corporations were allowed to issue securities abroad with maturities of less than three years; in 1998 nonresidents were allowed to issue securities denominated in foreign currency (Bekaert and Harvey 2004); and in 2003 the government extended the range of foreign securities qualified for investment by residents (Ahn 2008). In 2007, restrictions on the investments by residents in overseas real estate were relaxed (Kim, Kim, and Suh 2009).

Recent empirical research by Sompornserm (2009) has found that domestic financial liberalization in emerging markets often plays an important role in attracting foreign investors over and above capital account liberalization. The process of liberalization not only affects prices and returns on assets directly, but it also leads to an improvement of investors' expectations about further economic policy reforms or acts as a signal of an improvement of economic policies, making foreign investors more confident about investing in the liberalized countries. In addition, financial liberalization has on average had

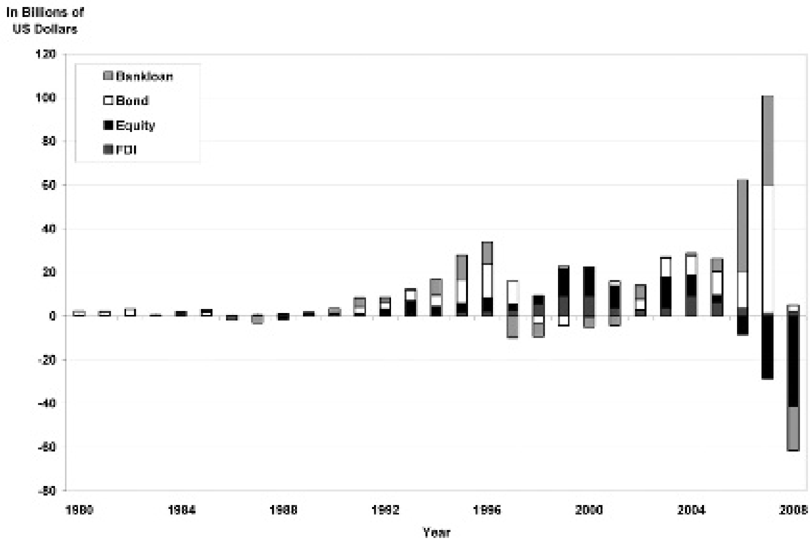
Figure 5-1: **Potchamanawong and Schindler Capital Control Indexes 1995–2004**



Sources: P. Potchamanawong, “A New Measurement of Capital Controls and Its Relation to Currency Crises” (Ph.D. dissertation for Claremont Graduate University, 2007); M. Schindler, “Measuring Financial Integration: A New Data Set,” IMF Staff Papers 56 (2009): 222–38.

Note: The Potchamanawong and Schindler capital control indexes range between 0 and 1. The higher value represents a higher degree of capital control.

Figure 5-2: **Patterns of Foreign Capital Flows into South Korea 1980–2008**



Sources: International Financial Statistics database of the International Monetary Fund; author’s calculations.

Table 5-1: **Financial Liberalization in Korea after the Asian Financial Crisis, 1997–2007**

Year	Changes in regulations
1997	In December, the ceiling on foreign ownership of Korean stock was raised from 26 percent to 50 percent.[a]
1998	The first stage of restructuring aimed to restabilize the financial system and enhance the soundness and effectiveness of financial institutions; this began with large-scale restructuring shortly after the crisis in February 1998 and lasted until August 2000. Capital markets, including the short-term money and real estate markets, were completely open to foreigners.[b]
	Korean government fully removed the ceilings on shareholding by foreign investors.[c]
	Foreign investors were allowed to directly participate in Korean banks through acquisition and equity market.[d]
	Foreigners were allowed to purchase domestic collective investment securities without restrictions.[a]
	The Emergency Economic Committee agreed to allow foreigners to buy up to one-third of a company's shares without prior approval.[c]
	The deposit requirement ratio, which required that stock purchase orders be accompanied by a cash deposit, was eliminated.[a]
	Some of the foreign investment limits on Korean securities were lifted.[a]
1999	The government aggressively pursued foreign exchange liberalization in order to transform the Korean financial market into a major business hub of Northeast Asia by 2011. In the first stage of liberalization, launched in April 1999, the positive list system of the Foreign Exchange Act, governing foreign exchange transactions in Korea, was overhauled and transformed into a negative list system.[c,e]
	Investment in foreign real estate by domestic entities was permitted.[f]
	Investment in foreign financial and insurance markets by domestic entities was permitted.[f]
	Korean government allowed domestic corporations to borrow money with maturities of less than one year directly from foreign financial institution and to issue short-term foreign currency–denominated bonds.[c,f]
	Requirement that foreign-invested firms receive government approval for intrafirm transactions exceeding $1 million was abolished.[f]
	Domestic institutions were permitted to engage in derivatives transactions.[f]
	Foreigners were allowed to make deposits and open trust accounts denominated in Korean won with maturities of more than one year.[c]

Table 5-1: cont.

2000	Regulations on foreign direct investment were brought into compliance with Organization for Economic Cooperation and Development standards.[j]
	The financial accounting standards regarding both financial and nonfinancial firms were revised in March 2000.[g]
	Korean government began allowing financial holding companies to offer all financial services, and four companies—Woori, Shinhan, Korea Investment, and Hana—began conducting business. Other financial companies, including Kookmin Bank, Citibank Korea, and the National Agricultural Cooperative Federation, now are on the verge of conversion into financial holding companies.[h]
	The second stage of restructuring, aimed at restabilizing the financial system and increasing the soundness and effectiveness of financial institutions, was triggered by Daewoo Group's liquidity crisis in September 2000.[b]
2001	The second stage of foreign exchange liberalization followed in January 2001, accompanied by the deregulation of virtually all current account transactions.[b]
	All restrictions were lifted on foreign currency loans to residents by domestic banks.[f]
	Remaining ceilings on current account transactions by individuals eliminated.[f]
	In January 2001, over-the-counter securities transactions between residents and nonresidents were liberalized.[i]
	The ceiling on overseas payment for overseas expense for travel, education, and emigration was abolished.[d]
	Restrictions on obligatory repatriation of oversea claims were relaxed.[c]
2002	The government announced the plan for the development of a liberalized foreign exchange market. For example, the government eased procedural regulations on the foreign exchange activities of individuals and business firms.[c]
	Securities and insurance companies were allowed to participate in the interbank foreign exchange market.[c]
	The government liberalized the export of the Korean *won*.[c]
2003	Foreign investors in high-growth sectors would be exempt from corporate and income taxes for seven years.[a]
	Korean government reduced the limit on overseas direct investment in financial and insurance companies by residents.[j]
	Korean government extended the range of foreign securities eligible for investment by residents.[j]

Table 5-1: cont.

2006	Korean government announced a foreign exchange liberalization plan that advanced the schedule of completing the foreign exchange liberalization from 2011 to 2009.[c,d]
	The limit on the value of an individual's residential property overseas was removed completely.[j]
	Korean government removed the ceiling on direct investment abroad by individuals.[b]
	Korean government abolished all restriction on the types and items of overseas securities investment by residents.[d,j]
	Korean government removed licensing requirements for capital transactions; replaced by ex post reporting requirements.[c,d]
2007	Korean government exempted domestic asset management companies from capital gains taxation through overseas stock purchases in foreign investment funds.[j]
	Korean government raised ceiling on overseas properties acquired by domestic investors.[d,j]

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i. K. S. Kim, "Opening Up to Capital Flows Poses Challenges," *Korea Times,* 31 December 2008, http://news.naver.com/main/read.nhn?mode=LSD&mid=sec&sid1=001&oid=044&aid=0000079529&.
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a strong influence in changing the composition of capital flows within the short-term flows, by tilting the structure of capital flows toward portfolio investment flows. This result suggests that an increase in the degree of financial liberalization can translate into greater financial-market deepening. Korea's experience fits this general pattern.

Postcrisis Capital Flows

After the Asian financial crisis, international capital inflows to Korea reappeared, particularly in the form of equity flows and FDI flows as a result of domestic financial liberalization, capital account openness, and favorable macroeconomic conditions. Several factors contributed to large changes in the composition of capital inflows in Korea during 1999–2000, shifting Korean capital flows away from foreign loans toward FDI flows and equity flows. An increase in risk perceptions by foreign creditors as a result of the loss of confidence in Korean borrowers' ability to repay their debts was one. Another was the lessons learned by Korean borrowers from the sudden stops and the reversals of foreign loans during the crisis. After 2000, a continuing surplus in current and capital accounts, which would put upward pressure on foreign exchange rates, led Korean authorities to encourage capital outflows by relaxing restrictions on capital outflows to overseas real estate, portfolio investments, and direct investment abroad (Kim, Kim, and Suh 2009).

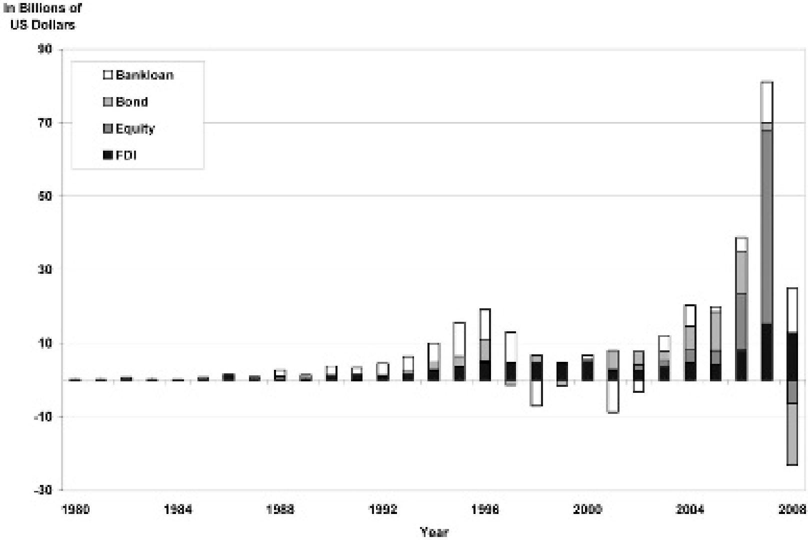
As we can see in ***Figure 5-2,*** by 1999 net capital flows had turned positive again, with especially large investments coming into the Korean stock market in 1999 and continuing on a large scale through 2004 with only the exception of 2002. Total net capital flows followed a similar pattern over these years. In 2005 total net inflows dropped, with inflows in the bond market and banking exceeding equity inflows. Bond sales and bank borrowing reached much higher levels in 2006 and 2007 while net foreign flows into the Korean stock market turned mildly negative in 2006, with net sales accelerating in 2007. At the same time, the loosening of restrictions on capital outflows led to a boom in purchases of foreign stocks and real estate by Korean residents. This led to sizable net portfolio equity outflows in 2006 and even larger ones in 2007 (***Figure 5-3***). As a result, total net capital flows turned negative in 2007 (***Figure 5-4***). Note that this shift occurred before the effects of the U.S. subprime meltdown began to be felt in emerging markets.

The other especially notable feature of Korean capital flows between the crises was the rapid buildup of short-term foreign debt by the Korean banking sector beginning in 2006. The foreign borrowing by the Korean banking sector considerably increased from $1.1 billion in 2004 to $40 billion in 2007, growing approximately 10-fold per year. In addition, during 2006–07, bank borrowing alone on average accounted for 45 percent of the capital inflows. The substantial increase in foreign borrowing was in part a consequence of the large portfolio outflows from Korean residents; Kim, Kim, and Suh (2009, 30) state that "capital outflows via overseas equity investment increased markedly, but at the same time investors (funds) sold forward exchange on a large scale to hedge against exchange rate risk, leading to a considerable increase in overseas foreign currency borrowing." The increase was also caused in part by hedging against future export proceeds, especially from shipbuilding. This buildup in short-term foreign borrowing was generated largely by the Korean branches of international banks.

This rapid buildup illustrates how quickly international financial relations can change even in noncrisis periods. This accumulation of short-term foreign debt was carefully monitored by the Korean authorities, who judged that, because of the combination of the reasons for the borrowing, its concentration with Korean branches of international banks, and Korea's ample supply of international reserves, this increase was not a major source of concern despite its large size. As will be discussed in Chapter 10, this judgment was well founded in the sense that, during the current crisis, the decline in such debt has been fairly modest in contrast with the Asian crisis, but the large headline number helped contribute to considerable investor concerns during the crisis, which helped contribute to the dramatic plunge of the *won*.

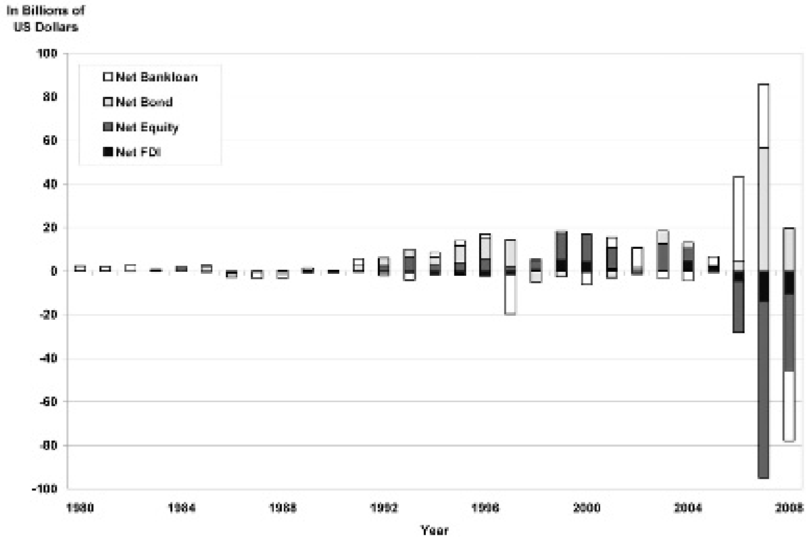
Sizable portfolio outflows continued in 2008. In contrast, short-term bank debt, which had begun to surge in 2006, has remained at high levels. This is a substantial deviation from the pattern in the 1997–98 crisis, when reversals in the banking accounts were the major factor and the falloff in stock market investment was slight. To a substantial degree we can explain these differences in the patterns of capital flows by the differences in the nature of the crises. In 1997–98, the crisis was centered in Korea and focused on problems in the financial sector. Consequently, there was considerable risk to foreign lending to Korean banks, and it is not surprising that there were considerable outflows from the banking sector. The current crisis is centered in the United States, and the Korean banking sector is much sounder, although concerns have been expressed about the recent large accumulations of short-term foreign debt and the increasing reliance on wholesale funding. The behavior of capital flows during the current crisis will be discussed in Chapter 10.

Figure 5-3: **Patterns of South Korea's Capital Outflow, 1980–2008**



Sources: International Financial Statistics database of the International Monetary Fund; author's calculations.

Figure 5-4: **Patterns of Net Total Capital Flows for South Korea 1980–2008**



Sources: International Financial Statistics database of the International Monetary Fund; author's calculations.