

This PDF is a selection from a published volume from the
National Bureau of Economic Research

Volume Title: Capital Controls and Capital Flows in Emerging
Economies: Policies, Practices and Consequences

Volume Author/Editor: Sebastian Edwards, editor

Volume Publisher: University of Chicago Press

Volume ISBN: 0-226-18497-8

Volume URL: <http://www.nber.org/books/edwa06-1>

Conference Date: December 16-18, 2004

Publication Date: May 2007

Title: South Korea's Experience with International Capital
Flows

Author: Marcus Noland

URL: <http://www.nber.org/chapters/c0155>

South Korea's Experience with International Capital Flows

Marcus Noland

South Korean economic performance over the last four decades has been nothing short of spectacular. During this period the country experienced only two years of negative growth—1980, in the wake of the second oil shock and the assassination of President Park Chung-Hee, and 1998, in the midst of the Asian financial crisis (figure 10.1). Between the initiation of a wide-ranging economic reform program by Park in 1963 and the financial crisis in 1997, real per capita income growth measured in purchasing power adjusted terms averaged more than 6 percent annually, and per capita income stood at more than eight times its level when reforms began. According to the Penn World Tables, at the start of that period the country's income level was lower than that of Bolivia and Mozambique; by the end it was higher than that of Greece and Portugal.¹

Most economists would probably subscribe to the rough notion that more complete markets are preferable to less complete markets. In the case of financial markets, there is a large theoretical and empirical literature supporting the notion that the development of local financial markets and their integration into international markets encourages a variety of desirable outcomes. Yet during its period of rapid growth, South Korea deliberately eschewed the purported gains of international financial integration and instead maintained extensive controls on international capital flows as

Marcus Noland is a senior fellow at the Institute for International Economics.

I would like to thank Paul Karner for research assistance and participants in the National Bureau of Economic Research preconference for comments on an earlier draft.

1. South Korea was “deceptively poor” in the 1950s, in that per capita income was unusually low relative to human capital (Noland and Pack 2002, table 2.1), a situation presumably explained in large part by the destruction of much of the physical capital stock during the Korean War (1950–53). That said, South Korea also accumulated human capital extremely rapidly relative to other large developing countries of that era (Noland and Pack 2002, figure 2.3).

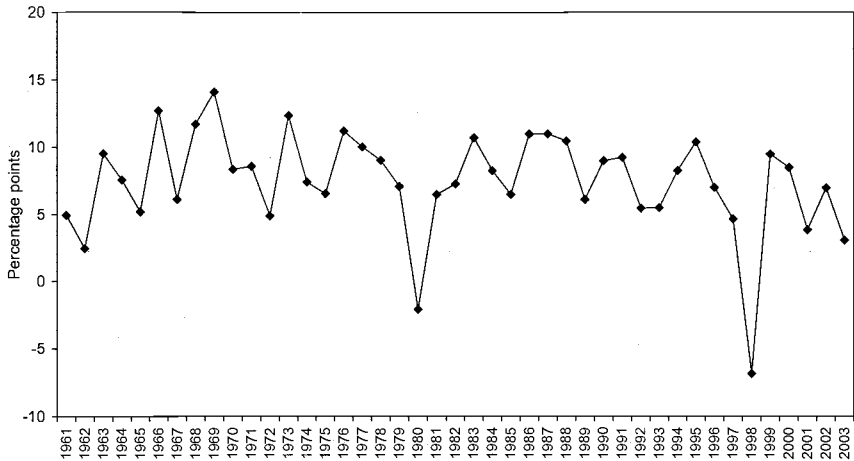


Fig. 10.1 South Korean real GDP growth, 1961–2003

Source: World Development Indicators 2004.

part of a more general policy of financial repression undertaken in the context of a state-led development strategy. In other words, rapid sustained growth occurred in the presence of capital controls for a period of several decades. This is not to argue that capital controls were causal: this paper will not speculate on the counterfactual of what South Korean economic performance might have been under a different policy package, but will simply acknowledge that this period of rapid growth coincided with the existence of capital controls, and that these controls and the delinking of domestic and international financial markets was an essential component of the country's state-led development strategy.

Problems arose as the country approached the international technological frontier and opportunities for easy technological catch-up began to erode. The disappearance of straightforward paths for industrial upgrading based on imitating the prior trajectories of more advanced economies put a heightened premium on the ability of corporate managements and their financiers to discern emerging profit opportunities. The old development strategy was no longer adequate, but decades of state-led growth had bureaucratized the financial system and created a formidable constellation of incumbent stakeholders opposed to liberalization and transition toward a more market-oriented development model. As rents dissipated, both financial and nonfinancial firms scrambled to claim the dwindling low-hanging fruit.

Under these conditions, the liberalization undertaken in the early 1990s was less a product of textbook economic analysis than of parochial politicking. A combination of South Korean policy, its accession to the Orga-

nization for Economic Cooperation and Development (OECD), and the Basel Accords on capital adequacy created unintended incentives for short-term bank borrowing. The highly leveraged nature of the South Korean economy, together with the currency and term mismatches embodied in the mid-1990s surge of foreign debt exposure, left the economy vulnerable to a variety of negative shocks, and in 1997, in the context of the broader Asian upheaval, South Korea experienced a financial crisis with net cleanup costs that eventually amounted to 16 percent of 2001 gross domestic product (GDP).² The South Korean case is interesting precisely because it combines in an unparalleled manner the characteristics of sustained success, capital controls, and financial crisis.

To preview the conclusions of this paper, capital controls were a necessary component of the state-led development process. The problem is that it is difficult to transition out of the state-led model—interventions create their own constituencies, and the 1990s liberalization was a function of political competition among domestic financial and corporate institutions over declining rents and foreign financial service providers seeking to enter the South Korean market.

Two concerns were expressed contemporaneously in South Korea about capital account liberalization—that it would adversely affect incumbent South Korean financial service firms and that it could be macroeconomically destabilizing. Systemic risk was sufficiently high that South Korea might well have experienced a financial crisis regardless of capital account liberalization; the liberalization program affected the timing, magnitude, and particulars of the crisis.

The degree of financial market integration between South Korea and the rest of the world is considerably higher as a result of the crisis-driven removal of capital controls. Yet the “dumbing down” of the financial system produced by decades of financial repression may have left lingering effects. South Korea seems to have emerged from the crisis relatively successfully, but concerns remain, largely centering on the apparent difficulty of changing the lending culture of until recently bureaucratized financial institutions and the counterpart challenge of improving the quality of market-oriented financial oversight by regulators more experienced in systems of greater direct command and control. In the specific historical and political circumstances of South Korea, whether the use of capital controls could have been separated from the more general policy of financial repression and more dynamic domestic financial markets fostered in their presence is an open question.

2. In these regards, the South Korean case is similar to those of Japan and Taiwan, which also combined state-led growth and capital controls, and in the 1990s experienced financial crises costing double-digit shares of GDP.

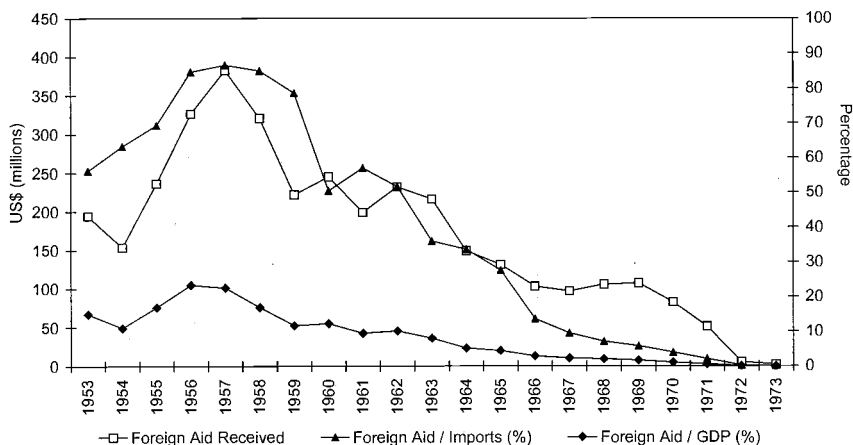


Fig. 10.2 Foreign aid to South Korea, 1953–73

Sources: Collins and Park (1989); World Bank's World Development Indicators; Bank of Korea.

10.1 Historical Context

South Korea inherited a legacy of financial repression from Japanese colonial occupation (1910–45) that carried into the period of independence (1948), reflecting the dirigiste character of Japanese colonial administration and the continuation of extensive controls by the U.S. military authorities in the immediate postwar period. A continuing theme throughout South Korean economic history has been the critical role of the state, its role in the generation of rents, and the politicization of their distribution, starting with the first postcolonial president of South Korea, Rhee Syng-Man, who exploited the policy-generated rents to build political power.³ According to S. Cho (1994), South Korean economic policy was aimed at maximizing the value of American aid in the aftermath of the Korean War (1950–53), which had left the country devastated, and the ensuing Cold War standoff. Aid financed most capital accumulation and, at its peak in the late 1950s, more than half of imports (figure 10.2).

A military government led by General Park Chung-Hee took control in 1961. As shown in figure 10.3, when Park seized power, gross domestic saving net of aid was derisory. Gross investment, financed mostly by aid, stood at a bit more than 10 percent of GDP, and the current account was in rough balance. After two years of poor economic performance, the military government unified the existing multiple exchange rate system, devalued the

3. See Cargill (1999) for a comparison of the Japanese and South Korean financial systems. See Jones and SaKong (1980) and Woo (1991) for examples of the use of state-derived rents for political power building.

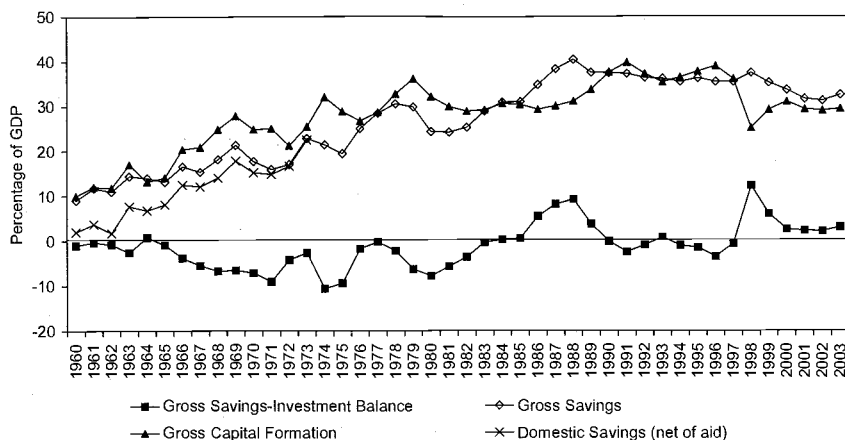


Fig. 10.3 South Korean savings and investment, 1960–2003

Source: Bank of Korea Economic Statistics System and *World Development Indicators* 2004.

currency, and initiated a series of wide-ranging reforms. After a brief experiment with floating, the currency was pegged to the U.S. dollar, and it would remain so until 1980 (Koo and Park 1990). Domestic saving net of aid began rising rapidly (looking at figure 10.3, one can understand why development economists adopted Rostow's take-off metaphor). Domestic investment began rising even faster.

While in some ways Park's reform package marked a fundamental departure from past practices (with respect to trade policy, for example), it retained an important role for the state in the development process. Pervasive regulatory entry barriers (and thus protection from competition for incumbents), and Park's penchant for sole-sourcing important infrastructural and other large-scale government-supported projects, in effect socialized risk and created opportunities for cross-subsidization across different business ventures, encouraging the *chaebol* (family-dominated conglomerates) to diversify into otherwise unrelated lines of business. By the 1980s, the top ten *chaebol* accounted for more than 20 percent of national income (SaKong 1993, table A.20). Bank of Korea independence was ended and the Bank made subservient to the Ministry of Finance and, ultimately, the Blue House.

The accumulation of capital contributed to rapid technological upgrading and a stunning transformation of the composition of output. In 1963 nonfuel primary products accounted for more than half of South Korea's exports, and human hair wigs were the third leading item. A decade later South Korea's exports were dominated by manufactures such as textiles, electrical products, and iron and steel; only one primary product category, fish, made the top ten. As seen in figure 10.3, capital accumulation was fi-

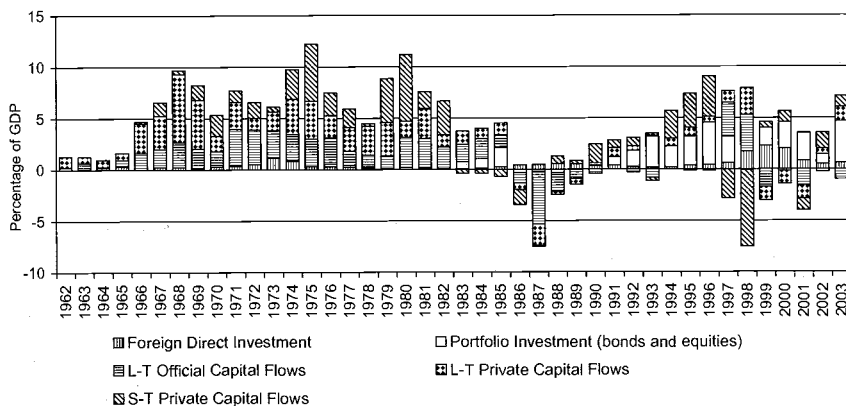


Fig. 10.4 Composition of capital inflows, 1962–2003

Sources: Park (1984); IMF Balance of Payments Statistics; Collins and Park (1989); Bank of Korea Economic Statistics System; *World Development Indicators* 2004; author's calculations.

Note: Portfolio investment is assumed to be zero from 1962 to 1973.

nanced primarily by growing domestic saving, augmented by a significant inflow of saving from abroad, reaching nearly 10 percent of GDP in 1971, and actually breaching this threshold in 1974 after the first oil shock.

These inflows predominately took the form of long-term loans and trade credits from private lenders and public institutions (including the multilateral development banks) all subject to Bank of Korea regulation (figure 10.4). Portfolio inflows and inward foreign direct investments were negligible during this period. A substantial academic literature exists (e.g., Westphal, Rhee, and Pursell 1981; Westphal, Kim, and Dahlman 1985) that attempts to understand the sources of South Korean industrial competence and that documents the varied forms of technological transfer and interaction between South Korean and foreign firms. Figure 10.4 indicates that whatever the origins of South Korean technical mastery, much of the foreign capital arrived in the form of technologically disembodied loans.

In 1972, Park, who had been reelected for a third term, pushed through the Yushin (Revitalization) Constitution, which in essence made him president for life. For a variety of reasons, he initiated the intensive promotion of heavy industry through what came to be known as the Heavy and Chemical Industry (HCI) policy. Modest financial-sector liberalizations that had been undertaken in the late 1960s were reversed in 1972, when interest rates were lowered and direct government control of the banking system was increased in order to channel capital to preferred sectors, projects, or firms (figure 10.5). In order to finance large-scale projects, special public financial institutions were established, and private commercial banks were instructed to make loans to strategic projects on a preferential basis. By the late 1970s, the share of these “policy loans” had risen to 60 percent (J.-H.

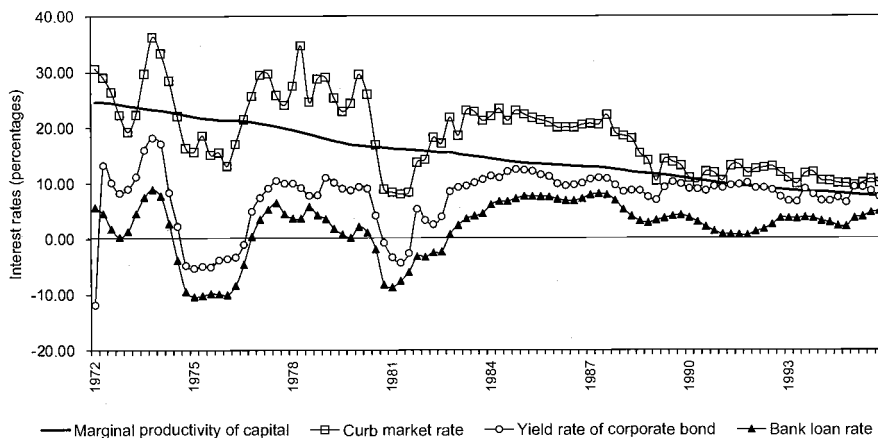


Fig. 10.5 Real interest rates

Source: D. Cho and Koh (1996).

Yoo 1994). These loans carried, on average, negative real interest rates, and the annual interest subsidy grew from about 3 percent of gross national product (GNP) in 1962–71 to approximately 10 percent of GNP on average between 1972 and 1979 (Pyo 1989).⁴ With such a large share of national income at stake, the allocation of these highly subsidized loans became the focus of intense political activity.

Park was assassinated in 1979 during what amounted to a palace coup. General Chun Doo-Hwan and his fellow officers more or less stumbled into power, driven more by intramilitary rivalries and narrow career interests than by any real sense of where they wanted to take the country (Clifford 1997). Facing deteriorating economic performance, which was exacerbated by the second oil shock, Chun and his cronies turned to Western-trained economic technocrats, who were already attempting to introduce a stabilization policy and reverse the worst excesses of the HCI policy, to fix the economy and shore up the generals' political legitimacy.⁵

Despite at times carrying a large volume of fixed-interest loan debt, South Korea managed to avoid financial trouble until the early 1980s slowdown in global growth in the wake of the second oil shock. The external shocks that hit South Korea during the period 1979–1981 were actually larger than those experienced by a number of other countries discussed at

4. The definition of "policy loans" is imprecise, and various sources report significantly different figures. See S. Cho (1994) for discussion, and see SaKong (1993, tables A.18–A.19) and Krueger and Yoo (2002) for alternative calculations.

5. Chun literally scheduled early-morning tutoring sessions. Perhaps there is something peculiarly Korean about this: it is hard to imagine the typical military dictator staying up late to study for his daily economics lesson.

this conference, including Argentina, Brazil, Chile, and Mexico (Balassa 1985, table 1). Although external debt and debt service ratios had increased substantially in the late 1970s, South Korea was able to re-attain high sustained growth by 1983, more rapidly than its comparators, through a combination of a reduction in imports associated with a sharp, though brief, decline in income, together with real exchange rate depreciation achieved through a 20 percent nominal devaluation. (The currency had also been devalued by 20 percent in 1974 following the first oil shock.) This pattern of relatively a sharp income decline and real depreciation followed by rapid recovery was to be repeated in the 1997 crisis (J.-W. Lee and Rhee 2000). The technocrats around Chun implemented a policy of macroeconomic stabilization, through which they began to liberalize and deregulate the South Korean economy. A liberalization of the financial sector initiated under the Fifth Five-Year Plan (1982–86) and extended under the Sixth Five-Year Plan (1987–91) attenuated “policy lending.”

10.1.1 Domestic Finance

The capital channeling development strategy pursued up through the 1980s rested on the twin pillars of financial repression and capital controls to delink the domestic and international financial markets. The government had to limit capital markets to institutions that could be dominated if not controlled, and it had to limit the firms’ financing options to those institutions. At the core was a positive list system through which anything not explicitly permitted was prohibited. This hampered the introduction of new instruments throughout the financial sector. In practice this meant emphasizing indirect finance and maintaining limitations on foreign participation in financial markets and domestic firms’ access to foreign capital. Presumptively less compliant foreign banks could not be allowed into the market in any significant way, for if they were allowed to establish a significant presence, they would undermine domestic banks operating under the burdens of “policy lending.”⁶ Thus, the financial system had to be built around a relatively small number of South Korean banks, and corporate finance had to be largely limited through regulatory fiat and tax provisions to borrowing from those intermediaries.

Alternative sources of corporate finance were suppressed: the development of money markets and bond markets was retarded and restricted to a limited range of maturities with no real secondary markets, and issuance was effectively dependent on bank guarantees. The government discouraged the development of an efficient auction and secondary market for

6. In the characterization of one South Korean economist, “Dominance of the Korean financial market by foreign institutions was abhorred, as it would deprive authority over various instruments of monetary control, weaken many customary, informal practices associated with industrial policy, and might also alter the public-good nature of the financial system” (C.-P. Lee 1993, p. 7).

government bonds, and no swap, bond, or interest futures markets existed. As for the stock market, in 1990 the government established a quarterly quota on new issues, and prior to the 1997 crisis a backlog of more than 360 companies was waiting to be listed (relative to the 776 that were already on the exchange). Criminal proceedings documented that firms were forced to resort to bribing officials to bring their initial public offerings to the market.⁷ As a result of these policies, corporate capital sourced through bank loans exceeded equity, bonds, and commercial paper combined until the late 1980s, and indirect finance from all sources was the primary form of corporate finance until 1991 (Y. Cho 2002, table 4).

There were multiple implications of these policies. First, the firms emphasized growth, not profitability, since risk was socialized and increased borrowing made further borrowing advantageous under the “too big to fail” notion, promoted by the government’s habitual interventions. From the standpoint of a lender, the bigger the firm, the more creditworthy the firm, since size increased the likelihood that the government would intervene in the event that the firm got into financial trouble, which it did on a fairly routine basis. The implication was that firms became extraordinarily leveraged as growth became the name of the game.⁸ Loans were the mechanism for growth, and, paradoxically, debt signaled creditworthiness, a state of affairs that S.-M. Yoo (1999) described as the “survival of the fittest.” Indeed, one study of corporate finance covering the decade 1977–86 found that “the largest firms have the weakest financial structure,” as measured by the degree of equity in their capital structures (E. Kim 1990, p. 342), while another found that the major *chaebol* were systematically less profitable than other South Korean firms (Krueger and Yoo 2002). A corollary to this system of corporate financing was the encouragement of extensive cross-shareholding, cross-loan guarantees, and nontransparency, all of which served to facilitate borrowing and had the effect of disadvantaging outside shareholders.

10.1.2 Capital Controls

Comprehensive capital controls were used to insulate the domestic financial market from the global market.⁹ Inward remittances were monitored to impede unauthorized foreign exchange transactions and inward investments. Inward foreign direct investment (FDI) was discouraged by

7. In June 1996, the governor of the Securities and Exchange Commission (SEC) and a director of the Ministry of Finance and Economy (MFE) were arrested for taking bribes to get firms listed. Six other SEC executives were forced to resign.

8. In July 1997, just prior to the crisis, the average debt-equity ratio of the thirty largest *chaebol* exceeded 400 percent (S.-M. Yoo 1999, table 9). By the end of 1997, it stood at 500 percent, and 600 percent of the debt of subsidiaries was included on a consolidated basis (Claessens, Ghosh, and Scott 1999). See also Krueger and Yoo (2002, table 6).

9. See Linder (1994) and S. Kim, Kim, and Wang (2001) for descriptions. The appendix contains a detailed chronology of the policies applied.

permitting entry only into a limited range of sectors, imposing minority ownership requirements, requiring technology transfer (in the absence of any intellectual property rights enforcement), and imposing strict export requirements. And while there were modest relaxations beginning in the late 1970s, actual FDI inflows remained minuscule until a wide-ranging liberalization was undertaken in response to the 1997 crisis (figure 10.4). On the eve of the crisis, South Korea and India were the only countries in Asia where the dominant modality of U.S. foreign investment was minority-stake joint ventures, as opposed to majority-stake joint ventures or wholly owned subsidiaries.

Stock market investment by nonresidents was prohibited until 1992, and then it was subject to stringent quantitative ceilings.¹⁰ At the time of the 1997 crisis, foreign ownership of listed companies was limited to 20 percent of capital, with individual stakes limited to 5 percent. Investment by nonresidents in domestic bonds was prohibited until 1996, and then it was subject to quantitative limitations. The local presence and activity of foreign financial institutions were highly circumscribed.

For much of this period outbound investment was similarly restricted. Domestic residents were not permitted to open foreign bank accounts or purchase foreign securities, nor were foreign entities permitted to issue won-denominated securities domestically. Export earnings had to be repatriated within six months. Outward direct investment required official approval and was subject to regulations that had the effect of encouraging the intermediation of South Korean banks.¹¹

The local currency, the won, was nonconvertible, and the South Korean government discouraged the development of any offshore market in won or won-denominated instruments. A rapid real appreciation of the Japanese yen beginning in 1985 encouraged a process of relocation of manufacturing activities from Japan to South Korea. The Bank of Korea accommodated the capital inflow, and between 1985 and 1989 the money supply increased by 105 percent, the price level rose by 3 percent, and the stock market increased by 458 percent, becoming the world's ninth largest in terms of capitalization.

In February 1980, following a 20 percent devaluation the previous month, South Korea moved off a strict dollar peg and began pegging the

10. Initially this was set at 10 percent in January 1992; it was raised to 12 percent in December 1994, 15 percent in July 1995, and 18 percent in April 1996. In June 1996, the government announced a further phased opening that would increase the ceiling to 20 percent in 1996, and 3 additional percentage points annually thereafter to 29 percent by 1999, and the government added that it might abolish the ceiling entirely in 2000 if "economic circumstances" were appropriate.

11. For example, there were restrictions on firms' ability to issue securities abroad and on contracting foreign loans at rates more than 100 basis points above the London interbank offered rate (LIBOR).

won to a basket of currencies that constituted the Special Drawing Right (whose respective weights in the basket were undisclosed) plus a "policy adjustment" factor. In the words of Jeffrey A. Frankel (1993), this was a basket peg "in name only." As observed by Balassa and Williamson (1990), the policy adjustment factor predominated: between 1984 and 1987 the won depreciated against all five currencies in the basket, generating an undervalued currency (I.-J. Kim 1993). The International Monetary Fund (IMF) was astute enough to classify South Korea's exchange rate regime as a managed float rather than a basket peg.

The undervalued won, the relocation of productive activities from Japan to South Korea, and expansionary macroeconomic policies in the United States, generated a growing bilateral surplus with the United States (Noland 1993). Through the experience of the yen-dollar talks, the U.S. political system had become enamored with negotiating with other countries over exchange rate and financial market policies. The United States initially sought to use the IMF's special consultative mechanism to pressure South Korea over its exchange rate policy despite the fact that as late as 1985 the IMF had been advising further depreciation of the won. Starting in 1986 the U.S. Treasury began publicly to pressure South Korea to revalue the won. Although Japan was the primary focus of the financial provisions of the Omnibus Trade and Competitiveness Act of 1988 (the "Trade Act"), South Korea emerged as a secondary target.

In its first three congressionally mandated reports under Section 3004 of the Trade Act, the Treasury identified South Korea as an "exchange rate manipulator," removing South Korea from the list in April 1990, after a new exchange rate management system called the market average exchange rate system was introduced. Under this arrangement, the mid-band won-dollar rate was calculated as an average of the previous day's transactions and then allowed to float within officially prescribed margins around this rate. In 1991 the government began a process of very gradually widening the bands, with the putative expectation that as the bands were widened a freely floating exchange rate would emerge (B. Kim 1993). Needless to say, things did not work out this way.

The pervasive pattern of government intervention created a symbiotic relationship between the government and the private sector, eroding private-sector autonomy and facilitating the corruption of the political system. The move toward more genuine political competition in the late 1980s arguably shifted the balance of power away from the government and toward the private sector, which became the source of badly needed campaign funds (Kang 2002a, 2002b). In the words of one contemporary observer, corruption "exploded" (Clifford 1997). With the exception of current president Roh Moo-Hyun, every South Korean president since Park Chung-Hee and/or at least one of his sons has been imprisoned on corruption offenses.

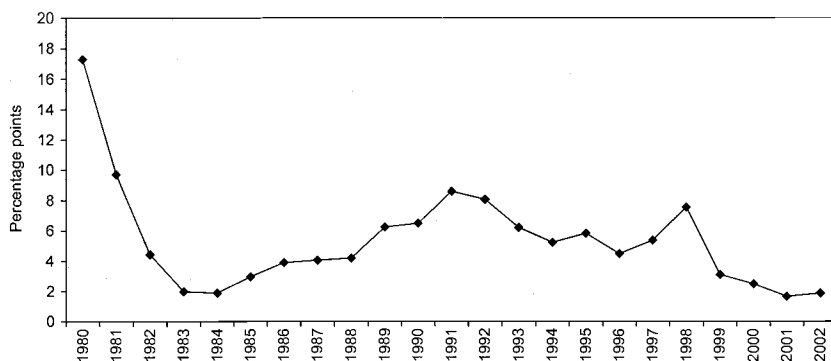


Fig. 10.6 Spread between long-term government bond yields, South Korea and the United States

Source: International Financial Statistics, IMF.

Notes: For Korea, the yield reported is on national housing bonds. For the United States, the yield reported is on the ten-year treasury note.

10.2 Financial Liberalization in the 1990s

Over time, pressure for liberalization developed both from domestic firms disadvantaged in international competition by relatively high domestic interest rates and limited options for corporate finance, and from the U.S. government, promoting the interests of American financial service providers (figure 10.6).¹² The outcome of this tension was a political compromise that resulted in a gradual, uneven, and ultimately problematic liberalization program that both contributed to and was overtaken by the 1997 financial crisis. (A chronology of policies actually applied is provided in the appendix.)

The United States had begun pressuring South Korea for improved market access for U.S. financial services providers in the late 1980s, initiating a more or less ongoing process of bilateral consultations on the issue of financial market liberalization. The conclusion of the Sixth Five-Year Plan (1986–91) provided treasury officials an opening to talk to their South Korean counterparts about “the vision thing.”¹³ Some commentators (Park,

12. In figure 10.6 the interest rate differential is calculated as the difference between yields on South Korean won-denominated ten-year government bonds and U.S. government bonds of the same maturity. If one expected the Balassa-Samuelson effect to hold and the won to appreciate in real terms over the long run, then, from the standpoint of a South Korean firm, the implicit differential was even larger.

13. Wang Yen-Kyun (1993, p. 186) quotes the November 1991 treasury report to Congress mandated under Section 3004 of the Trade Act as reading in part, “Most troubling at this stage is that the Korean government appears to lack a ‘vision’ and well-defined strategy for the liberalization of its financial markets. [Recent reforms] are steps in the right direction but do not appear to go fast enough.”

Song, and Wang 2003) argue that these discussions formed the basis of the first of a series of multiyear financial sector policy plans, the most important of which was promulgated in 1995 and scheduled to run through 1999 (Kwon 1996).¹⁴ Additional reforms were announced as part of South Korea's 1996 accession to the OECD, which itself was undertaken for largely politically symbolic reasons by President Kim Young-Sam. Nevertheless, there was considerable domestic opposition to these initiatives (from underwriters of domestic securities, for example), and the 1995 plan and South Korea's application to join the OECD became the focal points in the internal battle over reform (as well as an opportunity for further U.S. government pressure).

The aspects of the plan itself were arguably captured by special interests through corruption. Part of the process of unifying the financial markets had been the regularization of curb market lenders as investment and finance companies. The traditional commercial banks began to get squeezed: their share of deposits and lending fell steadily from roughly 80 percent in 1975 to less than 50 percent in 1990. This process accelerated in the mid-1990s when a new class of institutions was established: merchant banks, which had a broader remit than the existing nonbank financial intermediaries. Merchant bank licenses were issued in two tranches in 1994 and 1996. The issuance of licenses was dominated by bribery and kickbacks, and a later investigation by the Board of Audit and Inspection determined that three of the fifteen merchant banks approved in 1996 were insolvent when the licenses were issued (Haggard 2000). The merchant banks played a significant role in the subsequent crisis both at home and abroad through connected lending to their *chaebol* owners, particularly the financing of unviable investments in steel, automobiles, and chemicals during the mid-1990s investment boom, and reckless investments in Russia and Southeast Asia (Ishii and Habermeier 2002, p. 69). The commercial banks were experiencing erosion of both market share and margins: in 1996 their share of deposits and lending had fallen to 33 percent and 43 percent, respectively, and returns on assets and equity were declining as well.

Out of the OECD application process came a phased multiyear financial liberalization plan to break down some barriers within the domestic market and liberalize capital outflows before capital inflows. The plan amounted to a continuation of the ongoing liberalization process on a variety of fronts, though many of its provisions would leave the government with significant discretion. It was unclear what controls would remain in 1999, the terminal year of the plan. At the end of 1995, domestic market in-

14. American demands for financial market opening are a hardy perennial. Invariant to partisan control of the government, they continue to this day. See Frankel (1989, 1993), Wang Yen-Kyun (1993), Blustein (2003), Stiglitz (2003), and U.S. Trade Representative (USTR; 2004) for examples.

terest rates had largely been freed (indeed, a year ahead of schedule). However, the government still regulated the portfolios of commercial banks. It still owned a large number of financial institutions (of which the Korea Development Bank was the largest), and state-owned financial institutions dominated some markets (such as mortgage lending). It announced in August 1996 that foreign investors would be allowed to invest in convertible bonds issued by large corporations beginning in 1998, but that full opening of the bond market would be delayed until the differential between Korean and overseas interest rates (at the time 500–600 basis points) narrowed to 200 basis points.¹⁵ Of course there was no guarantee that this condition would ever be met.

Government control over the introduction of new instruments had retarded the adoption of innovations in the securities market, and would be expected to continue to do so under this plan. Despite the decline of policy loans, the central bank would still act as a source of subsidized lending to preferred borrowers. Foreign participation in South Korean financial markets would continue to be circumscribed, and access by residents to international capital markets would still be restricted. Under this plan, the South Korean financial system would have remained among the most repressed in Asia. Reservations to OECD codes are permitted, and the average acceptance rate of financial liberalization codes in the financial services area is 89 percent; South Korea used its exceptions remit liberally, accepting only 65 percent of the OECD's financial system codes (although, in fairness, some of these exceptions were scheduled for phaseout by 2000; Dobson and Jacquet 1998). The Presidential Commission for Financial Reform was established in January 1997 to propose broad follow-on recommendations for the modernization of the financial system (Cargill 1999). Needless to say, its recommendations were overtaken by events.

The case for international financial market integration is well known: the benefits include enhanced opportunities for intertemporal consumption, greater opportunities for portfolio diversification and risk reduction for both borrowers and lenders, enhanced competition and technology transfer in both financial and nonfinancial sectors, and a reduction in systemic risk. Conversely, the symptoms of financial repression include low rates of return to savers, banking-sector inefficiency manifested by high spreads between lending and deposit rates, poor allocation of funds across alternative uses, politicization of lending decisions, and the existence of large informal and unregulated credit markets (“the curb market”). Financial repression tends to retard the development of the economy by dis-

15. The *chaebol* had been lobbying to be allowed to access foreign capital directly through the bond market. The government had been reluctant to do so, fearing that this would further advantage the *chaebol* relative to smaller firms that would be less able to take advantage of this opportunity. The banks presumably also preferred to their privileged position as financial intermediaries.

couraging the accumulation of capital. Savers are offered low rates of return, while firms face a high cost of capital for their investment needs. At the same time financial repression impedes the efficient allocation of what capital is accumulated. Projects are typically not funded according to their rates of return but rather on the basis of noneconomic considerations, which may include political connections or bribery of the relevant officials. The likely result of financial repression is that the total amount of savings is lower than it should be and the allocation of the total among its possible uses is inefficient. Disequilibrium in the financial markets generates rents that may be allocated through corruption. These distortions become severe when the real economy develops rapidly and profitable real investment opportunities abound yet the financial system lags behind. Capital controls act as an implicit tax on holders of government debt. By restricting international capital flows, the government can in effect force domestic residents to accept government debt at lower interest rates than would be the case if there were no controls on capital.

These arguments are easily applicable to the South Korean case, and indeed supporting evidence could be observed contemporaneously. Opportunities for intertemporal consumption smoothing could be particularly important for a country like South Korea, where the rate of return on capital during this period was quite high (figure 10.5) and the economy was subject to major financial shocks, such as the need to finance unification (Noland 1996b).¹⁶ With respect to portfolio diversification, during the period under consideration, foreign investment in the South Korean stock market was legally restricted, and in statistical terms it was “mildly segmented” from the rest of the world (Claessens and Rhee 1994; Watanabe 1996). There was even some evidence that the correlation between movements in the South Korean and foreign markets was declining, which would have enhanced the attractiveness of cross-border diversification. Although it was sometimes argued that foreign investment in the stock market amounted to “hot money,” the dominant behavior of foreign investors was to reinvest sales as part of the process of portfolio realignment (Jun 1995). Giovanni and deMelo (1993) estimate that in the case of South Korea for the period 1975–87, the “financial repression tax”—the reduction in borrowing costs to the central government generated by capital controls that effectively force domestic residents to invest in local instruments or the implicit tax rate—was more than 5 percent, amounting to 0.25 percent of national income, or 1–2 percent of actual tax revenues.

Not only were the prospective gains to relaxation capital controls discernable, but the implicit costs were also evident. There were enormous spreads across borrowers, reflecting the segmentation and repression of fi-

16. See Y. Cho (2002, fig. 1) and Krueger and Yoo (2002, tables 3–4, figs. 1–2) for alternative estimates of rates of return.

nancial markets (figure 10.5). The South Korean financial service sector was bureaucratized, bloated, and backward. This was reflected in the low average rate of return on bank assets, which was among the lowest of those observed in emerging markets (Goldstein and Turner 1996, table 5). The role of foreign firms was highly circumscribed. Given the highly concentrated South Korean industrial structure with respect to both firms (a relatively small number of firms accounted for a large share of national income) and the composition of output and exports (highly concentrated in a few products such as automobiles and computer chips), systemic risk was a real concern. The situation was exacerbated by a relaxation in 1995 of bank provisioning requirements and by fragmented regulatory authority, in which the Bank of Korea was responsible for oversight of the commercial banks while “poor supervision [of the merchant banks] by the MOFE [Ministry of Finance and Economy] created the possibility for regulatory arbitrage and high risk practices” (Ishii and Habermeier 2002, p. 69).¹⁷ Macroeconomic volatility was higher than in other Asian economies, and data from the Bank of International Settlements (BIS) indicated that the risk-adjusted capital adequacy ratio of South Korean banks was among the lowest of all developing countries (Goldstein and Turner 1996).

South Korean reluctance to deregulate reflected a mixture of motivations. There were two sorts of counterarguments offered in opposition to liberalization. The first was that the South Korean financial service firms simply could not compete. Some South Koreans probably opposed liberalization out of self-interest, since liberalization would erode their privileged position within the South Korean financial system. (Likewise, some foreign calls for opening the Korean financial market were surely motivated by similar self-interest.) For example, Park Yung-Chul (1995, p. 7) argued that “domestic financial institutions have little competitive advan-

17. Writing prior to the crisis, the present author summarized the situation as follows:

The potential problem with the system is the implicit guarantee that banks not be allowed to fail; this, together with deposit insurance, simultaneously creates an incentive for banks to seek risk, while it relieves depositors of the incentive to monitor bank health. . . . Moreover, the Korean definition of bad loans is narrower than that commonly used abroad, and foreign bankers estimate the true bad loan problem may be three times as large as admitted. . . . Concerns about the banking system are further aggravated by the MFE's dual function as a promoter and supervisor of financial institutions, and legitimate questions can be raised about the degree of independence of the regulatory authorities. . . . The bottom line is that Korea should be concerned about the strength of its banking system, *and much of this concern is related to domestic financial repression and is unrelated to the issue of external financial liberalization.* Market discipline does not work when there is a lack of information, or when the notion that banks cannot fail is widely held. The appropriate responses are to deal with the structural problems of the banking system (which are likely to involve both domestic and international liberalization together with strengthened prudential supervision by public authorities), to strengthen public disclosure requirements, and to signal limits on public bailouts. (Noland 1996a, pp. 12–14; emphasis in the original)

tage over their foreign counterparts. At best Korea's financial sector remains an infant industry and may need market protection."¹⁸ On some level this was undoubtedly true (although irrelevant): the South Korean banking sector was highly inefficient, as could easily be observed at the time. This was subsequently confirmed by the industry's postcrisis consolidation, which, despite a strong union presence in the industry, was accompanied by a roughly 40 percent decline in sectoral employment and no apparent diminution in service.

A more serious argument was that destabilizing capital flows would create macroeconomic instability. Park and Song (1996, p. 14) wrote, "Korean policymakers have been reluctant to liberalize the capital account rapidly. There is concern that devastating macroeconomic instability would result from a sudden opening of financial markets. In contrast efficiency gains to the economy from liberalization are considered to be small, possibly even insignificant, and at best realized in the long run." Johnston et al. (1999, p. 71) write that upon joining the OECD, South Korean government officials expressed their disinclination to ease capital controls further and explicitly stressed that they wished to maintain controls over short-term capital inflows that may "hamper macroeconomic and financial market stability." A major source of reluctance to remove barriers to capital inflows was the fear that inflows of reserves would increase the money supply excessively and lead to real exchange rate appreciation, either through inflation or through nominal appreciation of the currency.¹⁹

A striking aspect of the South Korean case is that while a variety of policy responses to this concern were suggested, it does not appear that any were seriously considered. One way of avoiding excessive appreciation would have been to continue to sterilize the capital inflows, as South Korean policymakers had done throughout the 1980s and 1990s by forcing domestic financial institutions to purchase monetary stabilization bonds (MSBs) to offset the expansionary impact on the money supply of foreign capital inflows. Indeed, research cited by Park Yung-Chul (1995) indicated that the optimal policy from a South Korean standpoint would have been a mixture of exchange rate adjustment and sterilization. Sterilization may

18. Another South Korean economist wrote, "Unless the weakness in domestic financial institutions is improved, financial markets in Korea could eventually be controlled by foreign firms. Fortunately, [under the agreement with the OECD] it is predicted that liberalization of capital movements will not result in foreign control of domestic financial industries. Such prediction is supported by the fact that foreign banks operating in Korea have experienced a decline in their asset size, and foreign insurance firms' market share is less than one percent" (Chae 1997, pp. 71-2).

19. For example, in an NBER paper, D. Cho and Koh (1996) write, "With the current level of interest rate differentials between Korea and developed economies, drastic full-scale liberalization would certainly induce a large amount of capital inflows and appreciate the Korean won. This would affect the price competitiveness of Korean products in international markets, which could bring about significant macro-instability in an economy like Korea which relies heavily upon external transactions" (p. 1).

have been advisable in the short run, but it is doubtful whether this is a good long-term policy: such a policy generates quasi-fiscal costs as long as the interest rate on the MSBs exceeds the return on holding foreign exchange. (In the case of comparable Latin American countries, Leiderman [1995] estimated their annual costs at 0.25 percent to 0.50 percent of national income.) In any event, since domestic rates were higher than foreign rates, it would be desirable to reduce domestic rates and obtain the benefits of higher investment and growth.²⁰ Moreover, as *domestic* financial markets became more complex, the ability of the Bank of Korea to exercise monetary control through administrative guidance and MSBs would be increasingly less possible, underscoring the advisability of developing the capacity for indirect control through open market operations. Another alternative, proposed by Dornbusch and Park (1995), was for the government to create a long-term (six years or more) won currency bond exclusively for foreigners for use when sterilizing capital inflows.

If it is not possible to adequately sterilize or otherwise offset inflows, and the capital inflows are financing consumption (instead of investment), another response would be to reintroduce some controls on capital inflows, presumably in the form of “Tobin taxes” that would throw some sand in the external financial market wheels.²¹ Park Yung-Chul and colleagues (Dornbusch and Park 1995; Park 1995; Park and Song 1996) devoted considerable effort to thinking about this in the South Korean context. They raised two possibilities, which they appeared to regard as temporary measures for extreme situations. The first was a variable deposit requirement (VDR), in which reserve or deposit requirements are imposed on capital inflows, with the deposit varying according to type of inflow and investor. It is possible, in principle, that the reserve requirement could be set exactly so that the opportunity cost of the deposit sitting in a non-interest-bearing Bank of Korea account could exactly offset the international interest rate differential. Apparently the legal framework existed for the imposition of this deposit requirement, and the existing procedures would make it feasible to impose this on foreigners. The main problem (beyond damage to future credibility with foreign investors) would appear to be that this would also most certainly generate conflicts with foreign governments and investors and, depending on its implementation, possibly amount to a violation of South Korea’s World Trade Organization commitments. These emergency

20. Park (1995) suggested central bank swaps as a possible alternative to sterilization. When central bank foreign exchange holdings got too high, the central bank would sell foreign exchange to domestic financial institutions to invest abroad. At the end of a specified time, the swap would be reversed, and the central bank would compensate financial institutions for losses due to interest rate differentials and exchange rate movements. The problem, as in the case of sterilization, is that the quasi-fiscal cost could be high.

21. If the foreign capital inflows were going into productivity-enhancing investment, the proper response would be to allow the exchange rate to appreciate with productivity gains and allow the capital inflows to continue.

safeguards were to be explicitly authorized postcrisis in the Foreign Exchange Transaction Act of 1999.

The alternative to controlling quantity (in terms of setting the size of the deposit) would be to control price, and Park and Song (1996) raised the issue of a transaction tax, for which, like the VDR, the necessary legal framework apparently already existed. The transaction tax could be confined to capital account transactions and, in principle, could be imposed solely on foreigners. Like the VDR, this would surely raise hackles with foreign firms and governments. Moreover, although the won could not legally trade outside of South Korea, it is hard to see why interested parties could not simply move their activities offshore and avoid the tax. More generally, the market for the won was already relatively thin, and it is not clear that reducing the volume of transactions would be desirable.

Finally, one might fight destabilizing inflows by encouraging outflows. At first blush, encouraging outflows to offset inflows would appear to be the natural response to concerns about excessive net inflows. There are two arguments as to why encouraging outflows may actually exacerbate the problem, however. First, barriers to outflows create an element of irreversibility to foreign investors, and if there is uncertainty about the future conduct of economic policy, then this irreversibility may deter investment. Elimination of irreversibility through the removal of capital controls could reduce foreign investor caution and paradoxically lead to higher net inflows. Second, since barriers to external flows are sometimes maintained to facilitate the collection of financial repression taxes, the removal of the impediments may be regarded as a signal of a lower permanent rate of taxation on capital, and thus it can induce capital inflow. It is unclear whether either of these arguments carried much force in the South Korean case.

In any event, South Korean authorities appeared to be proceeding more rapidly with liberalization on outbound flows than on inbound flows. To the extent that one believes that, for conventional portfolio diversification reasons, domestic residents wish to hold foreign currency assets and have been prevented from doing so, the elimination of these impediments would encourage capital outflow. If the fundamental concern about external financial liberalization is that it would lead to destabilizing net inflows, the South Korean policy amounted to firing the guns before the enemy was in sight.

Not only that, but the effect of government policy was to encourage those inflows to take the form of short-term lending to South Korean banks. The closure to foreign investors of the long-term corporate bond market created the perverse incentive to raise capital through short-term borrowing. This was significant because South Korean firms were highly concentrated in relatively footloose manufacturing industries and subject to contentious labor relations at home. As a consequence, South Korean firms began investing abroad at a scale that was unusually large for an economy at its level of income and industrial development.

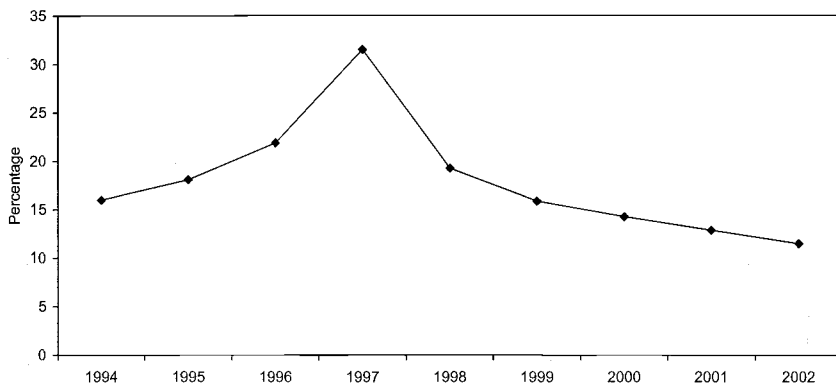


Fig. 10.7 Foreign currency percentage share of total debt, 1994–2002

Source: Goldstein and Turner (2004), table 4.4.

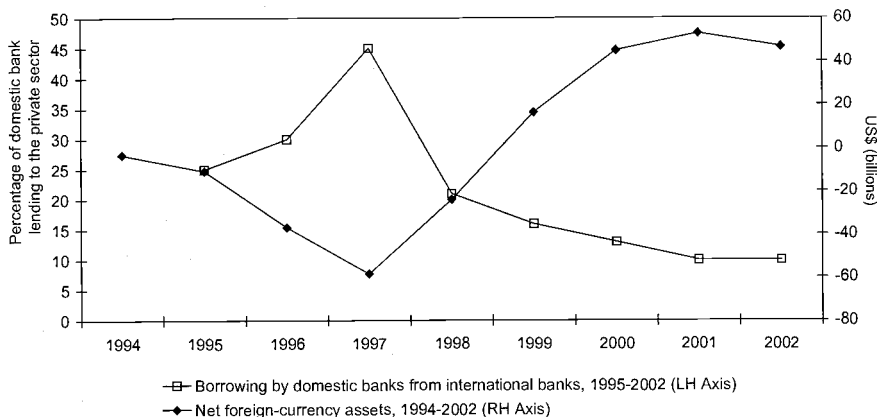


Fig. 10.8 Borrowing by domestic banks from international banks and net foreign currency assets

Source: Goldstein and Turner (2004), tables 2.2 and 4.3.

In 1993, the government expanded the scope for short-term foreign currency borrowing by allowing firms to borrow abroad directly or through South Korean banks to finance the importation of capital goods (figure 10.7). With interest rates relatively high in South Korea, and continued restrictions on firms’ ability to issue long-term bonds or secure long-term loans in foreign markets still in effect, firms were encouraged to increase their reliance on short-term foreign borrowing, and South Korean banks were encouraged to step up their on-lending activities (figure 10.8).²²

22. Further impetus was provided in October 1995 when the government announced that, in the case of direct investments abroad by South Korean corporations of \$100 million or more, at least one-fifth of the funds would have to be raised at home.

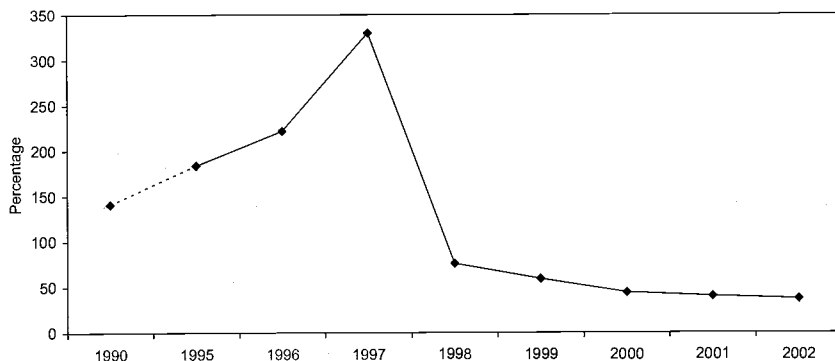


Fig. 10.9 Short-term external debt as a percentage of foreign exchange reserves

Source: Goldstein and Turner (2004), table 9.1.

The following year, the government removed restrictions on banks' foreign currency loans, resulting in a massive increase in net foreign currency liabilities (figure 10.8). Moreover, the Bank of Korea applied window guidance to limit medium- and long-term borrowing on international markets, apparently due to concerns about potential loss of control over domestic financial institutions through debt-equity swaps biasing borrowing toward the short end of the term spectrum (Johnston et al. 1999). Short-term external debt rose from \$40 billion in U.S. dollars in 1993 to US\$98 billion at the end of September 1997, representing more than half of external liabilities and more than three times the amount of foreign exchange reserves (figure 10.9). The growth of short-term debt outstripped the growth in usable reserves, raising the specter of a liquidity crunch. The ratio of usable international reserves—official reserves less the amount of illiquid funds that had been deposited at overseas bank branches to cover short-term debt repayments—to short-term debt declined from 42 percent in 1993 to 29 percent at year-end 1996 (Chopra et al. 2002).

These demand-side factors were reinforced by supply-side effects through the Basel Accords. Lending to other OECD banks, irrespective of the term of the loan, is assigned a risk weight of 20 percent in the capital adequacy requirements. However, in the case of non-OECD banks, the assessments vary with the term of the loan: loans of less than one year's duration receive the 20 percent risk weight while those with a duration of more than one year are assigned a 100 percent risk rate. Since all corporate lending receives the 100 percent risk weight, Basel Accord incentives arguably encouraged lending to South Korea to take the form of short-term bank lending, reinforcing South Korean government policy (Johnston et al. 1999). When South Korea joined the OECD, the effect was to reduce the risk premium on lending to South Korea.

The net result was currency and term mismatching on a massive scale. One way of getting a handle on the implications of this is suggested by

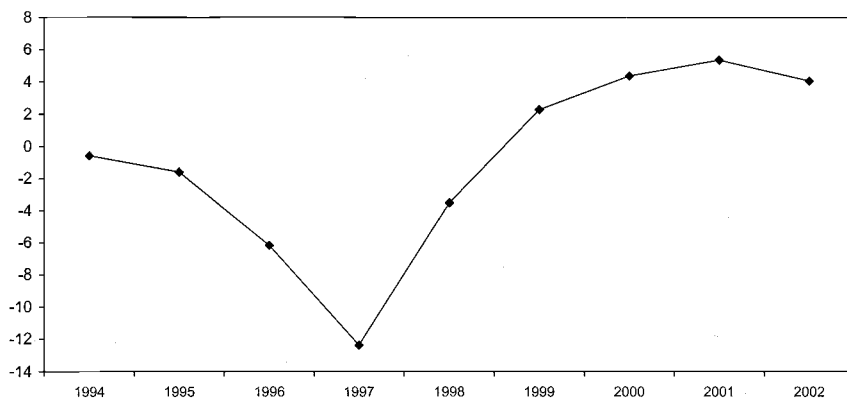


Fig. 10.10 Modified Goldstein-Turner aggregate effective currency mismatch (AECM) estimates, 1994–2002

Source: Goldstein and Turner (2004), table 4.6.

Goldstein and Turner (2004), who propose an aggregate effective currency mismatch measure—the net foreign currency asset position normalized by a country’s export openness and the foreign currency share of total debt—as a shorthand stress indicator of the vulnerability of an economy to an exchange rate depreciation. As shown in figure 10.10, South Korea moved from a small net negative position in 1994 (i.e., an exchange rate depreciation would slightly reduce the net worth of the economy) to a sizable negative position in 1996, as the economy experienced a tenfold rise in net currency liabilities and a smaller increase in the foreign currency share of total debt, in the absence of a significant increase in export openness. The implication of this movement in the Goldstein-Turner measure was that, heading into 1997, a South Korean currency collapse was both more likely to occur and more likely to have a severe impact on the economy.²³ Although internal vulnerabilities could be easily observed contemporaneously, few if any analysts properly understood the external vulnerabilities created by the borrowing activities of overseas bank affiliates.

10.3 The 1997 Crisis and Its Aftermath

Between 1994 and 1996 South Korea experienced an investment boom that was increasingly financed by mismatched foreign borrowing. Unlike Southeast Asia, where the investment boom was concentrated in the real estate sector, much of the capital was flowing into manufacturing, pre-

23. To be clear the effective mismatch index is retrospective—the data requirements preclude contemporaneous calculation of the measure. However, the index is now reported on the Asian Development Bank’s AsianBondsOnline Web site, http://asianbondsonline.adb.org/asianbondindicators/ave_effect_currismatch.php.

sumptively giving less cause for concern.²⁴ However, a substantial share was invested in industries that were already arguably characterized by excess capacity, and by the mid-1990s South Korea was experiencing slowing total factor productivity growth, deteriorating terms of trade, and declining profitability. South Korea's largest export market, Japan, went into recession in 1996, and the yen began to depreciate significantly against the dollar, generating an effective real appreciation of the won. Export growth slowed in 1996 and turned negative the following year. Stock market prices, which peaked in 1994, accelerated their decline.

As conditions worsened in 1996, the margin of error for the highly leveraged *chaebol* evaporated. In January 1997 Hanbo Steel, the seventeenth-largest *chaebol* ranked by sales, collapsed amid \$6 billion of outstanding debts. The collapse of Hanbo, the first major *chaebol* to go bankrupt in more than a decade, was to have repercussions beyond its debts: a subsequent series of bribery arrests culminating in the arrest and conviction of President Kim Young-Sam's son and political confidante, Kim Hyun-Chol, shook the political establishment and greatly damaged the elder Kim. The Hanbo collapse was followed by the failures of two more *chaebol*, driving up interest rates in the large corporate bond market and imposing negative externalities on all corporate borrowers. During the second quarter of 1997, spreads on South Korean government bonds began to widen, while, as points of comparison, those on Indonesian and Malaysian government bonds remained unchanged. The market was signaling an increase in South Korean country risk. The turning point arguably came in June with the failed nationalization of Kia, the country's third-largest automaker.

Despite these worsening conditions, the vulnerability of the South Korean economy was not universally appreciated, by either forecasters, whose expectations for the South Korean economy were myopic in the extreme (figure 10.11), South Korean government officials, or the IMF.²⁵

If domestic turmoil had been its only problem, South Korea might have been able to avoid the conflagration that was to engulf it. Instead, in the second half of 1997 South Korea was rocked by the shocks emanating from the financial crisis that had seized Southeast Asia and an emerging bank-

24. There is a gargantuan literature on the South Korean crisis of 1997–98. For entry points into this literature, see Wang Yunjong and Zang (1998), Noland (2000), Smith (2000), Coe and Kim (2002), and Web sites maintained by the NBER, <http://www.nber.org/~confer/2000/korea00/korea00.html>, and Nouriel Roubini, <http://www.stern.nyu.edu/globalmacro/>.

25. For example, the head of one government think tank, after accurately diagnosing the labor problems, loss of political confidence, and macroeconomic imbalances emerging in South Korea, in a public address in Washington, DC, in April 1997, dismissed concerns over the short-term debt and concluded: "There is, in fact, no economic crisis in Korea, if, by a crisis, we mean that there is imminent danger to the national economy—as was the case with Mexico in 1994" (Young 1997, p. 4). He was not alone—as late as September 1997, IMF missions to Seoul were giving the economy a clean bill of health.

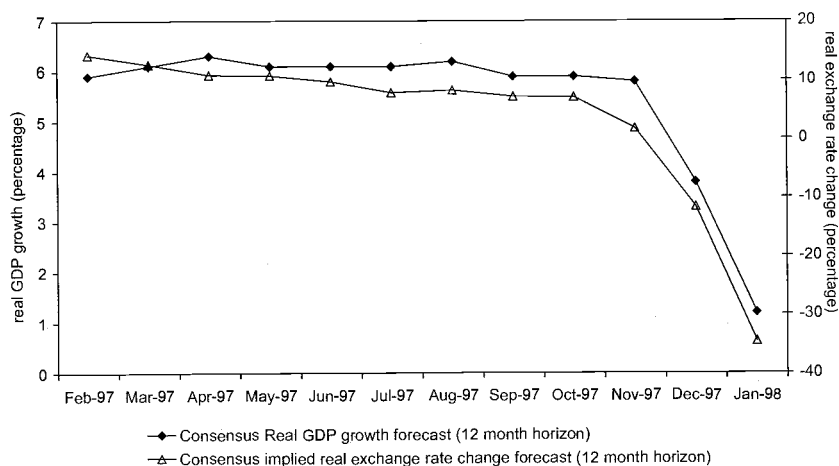


Fig. 10.11 Real GDP growth forecast and expected real exchange rate change

Source: Noland (2000), figure 6.5.

ing crisis in Japan, its principal source of foreign loans. The South Korean economy was adversely affected through three channels: spillovers in real terms as the depreciations of its competitors (especially Taiwan) effectively acted as competitive devaluations; contagion in financial terms; and a precipitous decline in rollover rates as Japanese banks hunkered down. The result was a collapse in private capital inflows (figure 10.4).

These forces put considerable downward pressure on the won in the latter part of 1997. South Korean authorities spent billions of dollars in an unsuccessful attempt to maintain their quasi-peg, but by December they were forced to abandon any pretense of controlling the exchange rate.²⁶ The currency went into a free fall. Developments in the currency market rebounded on the domestic financial system. As the exchange rate collapsed, financial and nonfinancial firms with unhedged foreign currency-denominated debt were crushed by a mounting debt burden in domestic resource cost terms. By the year's end the stock market had lost more than half its value in a period of eight months.

South Korea initially sought assistance from Japan and the United States bilaterally; after being rebuffed, it approached the IMF. The IMF,

26. On 27 August a high-ranking official of the MFE, in one of history's weirder abuses of metaphor, told a Seoul press conference that the Bank of Korea would defend its "Maginot Line" of 900 won to the dollar. Unfortunately, this new Maginot Line was as ineffective as the original, and the level was soon breached. The Bank of Korea continued to intervene in the foreign exchange market in a futile attempt to defend the won. On November 17, in a press conference that would have been farcical if not for the stakes, MFE officials again invoked the Maginot Line imagery, solemnly declaring that they would defend their newest line of 1,000 won to the dollar. They spent billions of dollars trying, but the following day the barrier was breached once again.

the multilateral development banks, and bilateral donors agreed to contribute to a rescue. Agreement was reached in November on a US\$57 billion package—then the largest in history, and nearly twenty times South Korea's IMF quota—in return for broad, though vaguely worded, reforms. This agreement was promptly denounced by all three candidates in the ongoing presidential campaign. The National Assembly refused to consider a package of financial reform legislation proposed by MFE, and the bank regulators marched on the National Assembly to protest their possible reorganization. Moreover, given the vagueness of the reform commitments, outside observers expressed skepticism about their eventual implementation. South Korean asset prices continued to plummet. On December 18 a former political dissident, Kim Dae-Jung, was elected president. The following week, default was avoided when a second agreement involving expedited disbursements was concluded, and William McDonough, chairman of the New York Federal Reserve, persuaded the international banks to keep their credit lines open. Ultimately, South Korea's creditors were persuaded to exchange their existing short-term loans for government-guaranteed bonds of longer maturity.²⁷

In negotiating the second package, the IMF extracted significant policy commitments, including both monetary and fiscal tightening (despite the fact that the 1996 general government budget surplus was 5 percent of GDP), as well as a variety of structural reforms, some unrelated to the financial crisis, such as the removal of the ban on the importation of Japanese automobiles. Although trade liberalization had been a staple of other IMF programs, the inclusion of these items contributed to the perception in South Korea that the IMF was simply being used as a tool of Japanese, and especially U.S. commercial policy.

Feldstein (1998) argues that the South Korean case could be thought of as a fundamentally well-functioning economy experiencing a temporary liquidity crisis. Had the IMF initially acted to coordinate a restructuring of private-sector lending while providing temporary credits (in essence a bridge loan), the huge official money package could have been avoided and along with it the intrusive conditionality that the IMF demanded as part of the second deal. Indeed, South Korea ultimately borrowed less than \$29 billion and in fact did not draw down the entire IMF portion of the loan.

The South Korean crisis presented the IMF, the major finance ministries, and the multilateral development banks with a difficult situation. It occurred in the context of a cascading set of crises, which threatened to spread to Brazil and Russia. The South Korean government's willingness to guarantee the short-term foreign debt of private entities socialized risk, creating moral hazard and ultimately increasing the severity of the crisis. It waited too long to approach the IMF, and once it did, it engaged in un-

27. See IMF (2003) for a detailed description of the coordinated rollover.

helpful tactics such as leaking confidential documents. The IMF and its allies had little control over these events, and in November 1997 they confronted a situation that arguably posed a systemic risk to the international financial system.

When push came to shove, the IMF and its collaborators provided South Korea with an enormous package, far beyond its past lending practices in other cases, and a timely infusion of cash that undoubtedly prevented a chaotic default. That said, the macroeconomic conditionality imposed on South Korea was too severe.²⁸ It needlessly intensified the recession that was to come to be known colloquially as “the IMF recession” as the growth rate collapsed from 7 percent in 1996 to -7 percent in 1998 before rebounding to more than 10 percent in 1999 (figure 10.1). Yet the South Korean economy had been beset with some significant structural problems, and, given the vast scope of the December 1997 standby agreement, considerable demands for structural reform could be expected, at least with regard to financial market regulation and corporate governance. Other aspects of the program, requiring specific trade and labor market reforms, or demanding an independent central bank with price stability as its sole mandate, were intrusive and at best only tangentially connected to the crisis.²⁹ Yet one could argue that the existence of such a demanding international organization allowed Kim Dae-Jung to advance his own relatively liberal economic agenda more effectively than if the IMF or some similar organization had not existed.

In a sense South Korea benefited from the vagaries of the electoral calendar—President Kim entered the Blue House essentially owing nothing to the dominant interests in the society and could blame the mishap on his predecessor. Given this freedom to maneuver, he moved resolutely to extract concessions from both the labor unions and the *chaebol*. In the financial sector, the government immediately closed two brokerage houses and a number of merchant banks (including some affiliated with *chaebol*). The government began the process of auctioning off two nationalized commercial banks, while putting other financial institutions on short tethers. Despite the austerity and dislocation that would accompany the process of restructuring, the financial markets responded positively to these actions.

The crisis forced a restructuring of South Korea’s systems of finance, regulation, and corporate governance, and a dismantling of the pervasive controls on international capital flows that characterized the precrisis

28. There is a substantial academic literature on the monetary policy aspects of the crisis response that reaches ambiguous conclusions about the interest rate increases embodied in the IMF program. There is less disagreement that the fiscal tightening was inappropriate. See IMF (2003) for a review.

29. The IMF appears to have belatedly acquiesced on this point, observing that “the IMF may have been better advised to confine its advice and conditionality to a narrower range of issues, and then let the Korean authorities define their own agenda for implementation on a more focused set of policy issues” (IMF 2003, p. 111).

regime. Since the crisis South Korea has arguably made better progress on economic reform than the other heavily affected Asian crisis countries, or Japan, for that matter.

One manifestation of this has been an increase in FDI. As noted earlier, before the crisis, South Korea was unusual in that the dominant modality of investment was minority stake joint ventures. FDI spiked in 1999 and 2000 and has fallen considerably since then (H.-K. Kim 2004, table 1). The temporary hike stemmed in large part from foreign minority partners buying out their South Korean counterparts—given the opacity of South Korean accounting practices at the time, incumbent investors were uniquely informed about the franchise value of these businesses.³⁰ Subsequent FDI has mostly taken the form of greenfield investments.

In the financial sector, prudential regulation has been consolidated and strengthened through the creation of the Financial Supervisory Commission and the introduction of new regulatory practices, approaches, and standards. Competition was injected into the financial sector by the increased role of foreigners through a variety of institutional arrangements. What appears to be more difficult to change has been the lending culture of South Korean financial institutions (Mann 2000). In the aftermath of the crisis, lenders went from bingeing on corporate lending to bingeing on household lending: South Korean household debt registered the fastest growth in the world, increasing 18 percentage points of GDP in two years, before ending in crisis with the insolvency of the country's largest credit card issuer.³¹ A current challenge centers on the rapidly growing use of financial derivatives by South Korean financial institutions and the concern that the regulatory regime may not have kept pace with financial innovation.

Nevertheless, the improvement in the function of South Korea's financial system can be seen in firm-level balance sheet data: South Korean corporations on the whole have reduced their leverage, and access to capital is increasingly a function of profitability (Alexander 2003). This development is, in turn, facilitated by improved corporate governance through enhanced financial transparency, stricter enforcement of existing laws, and expanded scope for minority shareholders to seek legal redress.

What has not happened is the development of independent institutional investors capable of monitoring management. To the extent that such institutional investors exist in South Korea, they tend to be affiliated with the major *chaebol*, and although some foreign institutional investors and the nascent shareholder rights movement have exerted some salutary influence, it is fair to say that the country still lacks a real market for corporate

30. One issue is whether these acquisitions amounted to a "fire sale" of assets by financially distressed South Korean firms. Econometric results reported by Chari, Ouimet, and Tesar (2004) suggest not.

31. See IMF (2004) for a summary of the credit card debacle.

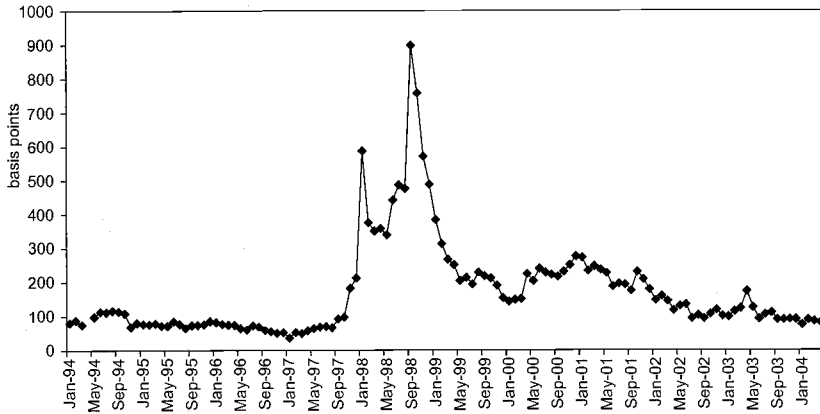


Fig. 10.12 JPMorgan Emerging Markets Bond Index global strip spread for South Korea, 1994–2004

Source: JPMorgan's MorganMarkets database.

control. South Korean equity markets have become more integrated with markets elsewhere. In part this increase reflects the natural integration of markets following the removal of restrictions on foreign ownerships of South Korean stocks (foreigners now own more than 40 percent of the shares on the Korean Stock Exchange) and the removal of restrictions on South Korean residents' ability to invest abroad. Yet despite these developments, the interest rate spread on South Korean debt remains higher than it was precrisis (figure 10.12).

In June 1998 the government announced a plan to liberalize all foreign exchange transactions in two stages. The first stage took effect on April 1, 1999, with the implementation of the Foreign Exchange Transaction Act, which liberalized most existing restrictions on current account transactions and established a negative list system for capital account transactions under which transactions are legal unless stipulated by law or decree. (See the appendix in K.-S. Kim 2001 for a complete description.) The second stage of the exchange control liberalization took effect January 1, 2002.

In April 2002 the government announced "The Plan for the Development of the Korean Foreign Exchange Market," which envisions full liberalization of foreign exchange regulations by 2011 as part of the government's attempt to establish South Korea as a regional business hub for Northeast Asia. At present the exchange rate system is classified as independently floating in an inflation-targeting framework by the IMF. In recent years, however, exchange rate interventions have been sizable: they appear to go beyond the smoothing operations as characterized by the IMF and instead involve an attempt to prevent appreciation of the won. As of August 2004, South Korea had accumulated US\$171 billion in official reserves, and exchange rate policy and the magnitude of currency market in-

terventions have emerged as a source of controversy within the South Korean government.

10.4 Conclusion

South Korea is a fascinating case in that it combines the characteristics of sustained prosperity, capital controls, and financial crisis in a striking manner. Pervasive capital controls, which delinked South Korea's internal financial markets from the rest of the world, were a necessary component of the country's capital-channeling development strategy. This strategy clearly was consistent with rapid and sustained economic development, although it may or may not have been causal.

These interventions create domestic political constituencies for both their perpetuation and dissolution, and the implementation of liberalization programs will reflect political competition among these groups. Transition is also affected by the demands of foreign financial services providers, which, having developed greater efficiency in a more competitive environment, regard the protected market as an opportunity. All of these phenomena are evident in the South Korean case.

Because of its somewhat amorphous nature, perhaps the most difficult challenge is the legacy of financial repression in "dumbing down" both private-sector actors and their public-sector regulatory counterparts. The main ongoing concern in South Korea is not the macroeconomic adjustment to the removal of capital controls per se, but rather the lingering concerns about both the lending culture of South Korean financial-sector firms and the capacity of South Korean authorities to successfully regulate the more complex financial system enabled by liberalization.

The obvious question is whether South Korea could have developed a more dynamic and market-oriented financial system in the presence of international capital controls. In theory there is no reason why this could not have happened if South Korea had chosen this path. Indeed, the strengthening of domestic financial institutions prior to opening the capital account is a staple of the sequencing literature, and South Korea in the late 1980s appeared to meet the basic preconditions for a successful transition, such as fiscal health (Edwards 1989). Similarly, one can imagine a greater (or lesser) role for foreign financial service providers under a variety of institutional and regulatory constructs. Yet it is doubtful whether this could have been obtained in practice. Neither South Korean government officials nor the intelligentsia evinced much ideological commitment to the notion of freer financial markets, and, perhaps more important, there were some very large and powerful interest groups that were opposed to liberalization. For better or worse, given the specifics of the South Korean situation, freer international capital flows, a less regulated domestic financial system, and an increased role for foreign financial service providers were probably not greatly separable components of financial-sector reform.

Appendix

Chronology of Capital Flow Liberalization in South Korea

This appendix provides a timeline of capital flow liberalization in South Korea. It is derived primarily, though not exclusively, from Johnston et al. (1999) and the Bank of Korea web site, <http://www.bok.or.kr>. The chronology is organized by topic: FDI, portfolio investment, other capital flows, capital market organization, and foreign exchange.

Foreign Direct Investment

1983

- Revision of the Foreign Capital Inducement Law establishes the principle that inward FDI, subject to approval, is permitted except in specific “negative list” sectors.

1985

- More than 100 sectors are eliminated from the negative list. The “liberalization ratio” (share of industries open to FDI) reaches 76 percent, 92 percent in manufacturing.

1986

- Initial liberalization of restrictions on direct investment abroad begins.

1987

- Twenty-six additional manufacturing sectors are eliminated from the negative list.
- Tax incentives for FDI in strategic sectors are reduced.

1988

- Restrictions on FDI in advertising, motion pictures, and insurance are relaxed.

1989

- Six manufacturing sectors are opened to FDI, raising the liberalization ratio to 79 percent, 98 percent in manufacturing.
- Limit on automatic approval is raised to US\$5 million from US\$3 million.

1990

- The limit on automatic approval is raised to US\$100 million from US\$3 million.
- Two more sectors are opened to FDI.

1991

- The approval requirement is replaced with notification system for projects with foreign participation of less than 50 percent.

- Exemptions are granted to foreign firms on corporate profit taxes for three years, while a 50 percent exemption is established for the two successive years.
- Restrictions on foreign ownership of retail businesses are relaxed.

1992

- The approval requirement is replaced by a notification system for investments in most business sectors.

1994

- The Foreign Capital Inducement Act is amended to streamline application procedures. Rules on land ownership are relaxed.

1995

- Investment in 101 sectors is permitted or greatly liberalized.

1997

- August: The debt limits on corporations making overseas direct investments, whereby 20 percent of investments exceeding US\$100 million had to be financed by a firm's own capital, are abolished.

1998

- The Foreign Investment Promotion Act establishes the principle of national treatment; further narrows the negative list down to 5 percent of all sectors and 1 percent of manufacturing (twenty-two sectors, including real estate rentals and sales, land development, waterworks, and investment companies and trusts, fully open to foreign investment); broadens the scope of tax incentives available to foreign investors; simplifies approval procedures; and establishes foreign investment zones.

1999

- Five more categories—book publishing, alcoholic beverages, external maritime transport, blood-related products, and casinos—are fully opened.
- Investment in foreign real estate by domestic entities is permitted.

2000

- Regulations on FDI are brought into compliance with OECD standards.
- Cattle husbandry and news agencies are partly liberalized.

2001

- Meat wholesaling is partly liberalized.

Present situation: Out of 1,121 industries, 29 remain partially or completely closed to FDI. There is no limit on the amount that corporations can invest abroad, but all direct investments require notification of the corporations' banks, and for financial, banking, and insurance companies, acceptance is required by the Ministry of Finance and Economy (MOFE).

Notification of the Bank of Korea (BOK) and foreign exchange banks is also required for purchases of foreign real estate by domestic companies or purchases of domestic real estate by foreigners. Minimum standards of domestic companies' foreign exchange earnings must be met in order for them to establish branches overseas.

Portfolio Investment

1984

- The Korea Fund is listed on the New York Stock Exchange, providing international investors with an indirect means of investing in the Korean stock market.

1985

- South Korean firms are allowed to issue depository notes and warrants up to 15 percent of their outstanding share volume provided that no single foreign entity can acquire more than 3 percent of the capital by exercising conversion rights.

1987

- The Korea Europe Fund is established, further enabling foreigners to invest in the stock market.
- Inward remittances greater than US\$20,000 are monitored to discourage investments in the stock exchange.

1989

- Foreigners are allowed to trade among themselves. South Korean shares are permitted to be acquired through the exercise of bond conversion rights.
- Foreign exchange banks are allowed to issue foreign currency bonds offshore and to underwrite and trade foreign currency bonds issued by nonresidents.

1990

- The government allows the three domestic investment trusts each to establish a US\$100 million fund (of which US\$60 million is to be raised abroad) to invest in South Korean companies (70 percent of the capital) and foreign securities.

1991

- The Korea Asian Fund is established
- Nonresidents are allowed to convert into won up to US\$100,000 to invest in development trusts with a maturity of more than two years.
- Securities in foreign currencies are permitted to be issued by residents to finance import of inputs and machinery for which no domestic substitute is available.
- Nonresidents who had acquired South Korean shares through convertible bonds are allowed to trade them in the stock exchange.

1992

- Foreign investment directly in the South Korean stock market by non-residents subject to ceilings of 3 percent for a particular investor and 10 percent for foreign investors in the aggregate is permitted.
- Investments in stocks by resident foreign financial institutions are subject to the same limits as those of institutions owned by nationals.
- Authorization for the issuance abroad of bonds, callable bonds, warrants, and stock depository receipts by residents is simplified, and receipts can be maintained in accounts abroad.

1993

- Issues of securities denominated in foreign currency are not subject to permission but only to reporting requirements; the class of eligible issuers is widened to include those with positive cumulative profits over the past three years.

1994

- The ceiling on nonresidents holdings of individual South Korean firms' capital is raised from 10 percent to 12 percent. Nonresidents' holdings of individual South Korean public corporations are allowed up to an 8 percent ceiling.

1995

- The ceiling on nonresidents' holdings of private South Korean firms' capital is raised from 12 percent to 15 percent.
- Brokers are allowed to engage in foreign exchange transactions related to nonresidents' investments in the stock market.
- Issuance of exchangeable bonds overseas is permitted, provided that they do not exceed 15 percent of the firm's capital.
- Limits on offshore security issuance by small and medium-sized companies are relaxed.

1996

- Investment in domestic bonds by foreigners is allowed through the US\$100 million Korea Bond Fund listed in London.
- Limits on foreign ownership of listed Korean firms are raised to 20 percent and 15 percent for private and public enterprises, respectively; the ceiling on individual ownership is increased to 5 percent.
- Up to 50 percent of won-denominated securities issued by nonresidents can be sold abroad.

1997

- Foreigners can collectively purchase up to 30 percent of convertible bonds issued by small and medium-sized companies and only 5 percent individually.
- June: Regulations are relaxed so that foreign investors are allowed access to nonguaranteed bonds of small and medium-sized companies

(maturities over three years and up to 50 percent of the amount listed) and of conglomerates (up to 30 percent limit of an issue together with a 6 percent individual limit).

- The issue abroad of won-denominated securities requires approval by the MOFE. The issue of foreign currency-denominated securities must be reported to the MOFE.
- December 11: Authorities raise the ceiling on aggregate foreign ownership of listed Korean shares from 26 percent to 50 percent and the individual ceiling from 7 percent to 50 percent; eliminate all limits on foreign investment in nonguaranteed bonds issued by small and medium-sized companies; and allow foreign investment in the guaranteed corporate bond market (for maturities greater than three years) with limits at 10 percent and 30 percent for individuals and in aggregate, respectively.
- December 12: Authorities raise aggregate limits for foreign investment in nonguaranteed corporate (convertible) bonds from 30 percent to 50 percent.
- December 23: Authorities allow foreigners to invest in government and special bonds, up to the aggregate ceiling of 30 percent, and eliminate all individual limits for foreign investment in corporate bonds.
- December 30: Authorities eliminate all foreign investment ceilings for the government, special, and corporate bond markets, including for maturities of less than three years; lift the restriction on foreign borrowing of over three years' maturity; and raise the aggregate ceiling on foreign investment in Korean equities to 55 percent.

1998

- Restrictions on the amount of foreign investment in Korean equities are lifted; domestic bond and money markets are opened to foreigners.

1999

- Offshore issuance of securities with a maturity of less than one year by domestic entities is permitted.
- Issuance of won-denominated and foreign currency-denominated securities by foreign entities is permitted.
- Investment in foreign financial and insurance markets by domestic entities is permitted.

Present situation: Ceilings on purchases of Korean stocks remain in place for twenty-three domestic firms.

Other Capital Flows

1981

- Issuance of foreign beneficiary certificates by Korean trust companies is allowed.

1985

- Some restrictions on foreign loans to domestic firms are relaxed.

1986

- Regulations on foreign currency loans are tightened.

1987

- The government directs financial institutions to repay foreign short-term borrowing and bank loans that bear “unfavorable conditions.” Special deposits by the central bank are made at Korean foreign exchange banks for this purpose.

1988

- Nonresidents are prohibited from converting in won amounts withdrawn from their accounts. Sales of foreign currency by nonresidents to domestic banks are limited to US\$10,000.
- Limits on banks' foreign exchange loans to small and medium-sized enterprises and export firms are strictly enforced.

1989

- A limit of US\$200 million is set on special foreign currency loans granted to a firm during a year.
- Currency loans are now admissible for investment operations abroad, subject to a ten-year maturity limit and ceilings of 60 percent and 80 percent of the investment for large and small firms, respectively.
- The amount of foreign currency allowed in the country without notification to the tax authorities is raised in two steps to US\$10,000.

1990

- Central bank loans for the redemption of the foreign currency loans by banks and firms are abolished.

1991

- Limits on foreign currency loans for investments abroad are reduced to 40 percent and 60 percent of the total for large and small enterprises, respectively.

1992

- The maximum amount of loans of overseas investments is increased to 60 percent and 70 percent for large and small enterprises, respectively.
- Residents can issue abroad negotiable certificates of deposit and commercial papers.

1993

- Nonresidents are allowed to hold won accounts.
- Manufacturing companies can obtain loans in foreign currencies for all imports of inputs and equipment; the BOK raises the amount of

foreign exchange reserves earmarked for supporting foreign currency loans by domestic banks from US\$1 billion to US\$4 billion.

1994

- Ceilings are abolished on borrowing by resident corporations and their foreign branches from nonresident financial institutions located abroad.
- Foreign-financed general manufacturing companies are eligible for short-term overseas borrowing, while the overseas borrowing by foreign-financed, high-tech firms is raised to 100 percent of the foreign capital share.

1995

- Eight leasing companies are allowed to undertake medium- and long-term borrowing offshore without intermediation from foreign exchange banks.
- Direct foreign borrowing by enterprises engaged in social projects and foreign-financed, high-tech firms is allowed up to 100 percent of capital (90 percent for large corporations) for redemption of import-related debts.
- The ratio of foreign currency loans taken by large companies for import of inputs and machinery is lowered to 70 percent of total cost.

1996

- Restrictions on foreign borrowing are eliminated for certain small and medium-sized firms.
- Nonresidents are allowed to open won accounts in overseas branches of domestic banks.

1997

- April: The period for importing on a deferred-payment basis is lengthened by 30 days for raw materials used in manufacturing export commodities for small and medium-sized enterprises. The period is extended for large enterprises as well in August.
- July: The MOFE abolishes regulations on the usage of long-term loans with maturities of over five years brought into the country by foreign manufacturers.
- Foreign investment funds approved by the MOFE can purchase domestic money market instruments. Other foreign institutions and domestic individuals require the prior approval of the MOFE. The issuance abroad of other securities, like certificates of deposit in foreign currency denominations, requires the MOFE's approval.
- Certain forms of trade credit are allowed without prior approval; however, deferred payments for the import of goods and export advances (except those by small and medium-sized firms) are subject to binding value limits. Export down payments up to 8 percent of the value are allowed for ships and plant building during production.

- Foreign exchange banks can borrow from abroad. They need to report foreign borrowing to the MOFE when the maturity exceeds one year and when the amount is over US\$10 million.
- Credits from nonresidents to nonbank residents require prior approval by the MOFE.
- Foreign-financed, high-tech companies can borrow up to 100 percent of the foreign invested capital with maturity limited to three years.
- Foreign borrowing with a maturity of less than three years is governed by the Foreign Exchange Act.
- Residents cannot lend abroad without the approval of the MOFE.

1998

- February 16: Authorities removed restrictions on corporate borrowing from abroad up to US\$2 million for venture companies.
- Authorities opened up money market instruments issued by nonfinancial institutions (commercial papers, commercial bills, and trade bills) to foreigners without limits.
- The requirement that foreign borrowing from abroad exceed US\$1 million is eliminated.

1999

- The Foreign Exchange Management Act is abolished and replaced by the Foreign Exchange Transaction Act, which liberalizes most current account transactions. It also authorizes safeguard mechanisms, including freezing of transactions; a permission-based transaction system; the funneling of foreign currency to the BOK; activation of a VDR system; and requirement that a certain percentage of capital flows be deposited in a non-interest-bearing account.
- Overseas short-term borrowing by “financially sound” domestic firms is permitted.
- Nonresidents are permitted to make deposits and open won-denominated savings and trust accounts with maturities in excess of one year.
- The requirement that foreign-invested firms receive government approval for intrafirm transactions exceeding \$1 million is abolished.

2001

- All restrictions are lifted on foreign currency loans to residents by domestic banks.
- The remaining ceilings on current account transactions by individuals are eliminated.

2002

- Regulations on individuals' external payments are eased.

Present situation: Requirements for the repatriation of overseas claims, limits on nonresident won funding aimed at hedge funds, and restrictions

on short-term external borrowing by “financially unsound” corporations are still in place. The Foreign Exchange Transactions Act contained sunset provisions expiring December 31, 2005, relating to the permission system for certain capital account transactions. This expiring system was replaced by a streamlined reporting system on January 1, 2006. Sale by nonresidents of foreign exchange over US\$20,000 without documentation is subject to notification requirements. Purchase by nonresidents of foreign exchange without documentation of previous sale in excess of US\$10,000 is subject to notification requirements. Notification requirements remain on foreign currency loans for nonbank firms, in particular loans in excess of US\$30 million. Firms whose debt ratio is greater than their industry average and/or whose credit rating is below investment grade are considered financially unsound and are subject to special notification requirements for short-term foreign currency borrowing. Exceptions exist for certain general manufacturing or high-tech industries.

Capital Market Organization

1985

- The underwriting of foreign assets by domestic securities companies is permitted.

1987

- Foreign exchange banks begin offshore banking at the initiative of the government.
- Nine additional foreign banks are allowed to enter the trust investment business.

1993

- Overseas branches of domestic banks are allowed to supply loans to residents who trade commodities futures and financial futures.

1997

- Foreign exchange banks can conduct all form of transactions in the foreign currency market, including swaps, options, forwards, and futures, but the terms of the forward transaction between banks and nonbank customers must be based on bona fide transactions.
- December 29: Restrictions on commercial bank ownership are eased to encourage foreign investment in domestic financial institutions. The financial-sector legislation passed on December 29 abolishes the 4 percent ownership limit for commercial banks. Purchase of bank equity by foreign banks is now permitted without limit, but requires approval at three stages: 10 percent, 25 percent, and 31 percent. Domestic ownership above 4 percent is permitted provided that an equal or larger share is held by a foreign bank.
- Commercial bank open positions in foreign currencies are subject to

the following limits: (a) the overall overbought position must be lower than 15 percent of the equity capital and the oversold position lower than 10 percent of the equity capital or US\$20 million, whichever is larger; and (b) the spot oversold positions cannot exceed 3 percent of the equity capital or US\$5 million, whichever is larger.

1998

- March 31: Authorities allow foreign banks and brokerage houses to establish subsidiaries.

1999

- Domestic institutions are permitted to engage in derivative transactions.
- The principle is established under the Foreign Exchange Transaction Act that any financial institution meeting certain requirements need merely notify MOFE before engaging in foreign exchange-related business.

2002

- Securities and insurance companies are allowed entry into the inter-bank market.

Present situation: Sixty-one institutions are recognized as “foreign exchange banks” and authorized to engage in foreign exchange transactions for third parties. A larger number of businesses are authorized to engage in foreign exchange transactions on their own behalf. The overall open overbought (oversold) position in foreign currencies of foreign exchange banks must be lower than 20 percent of the equity capital. A foreign exchange bank must maintain reserves amounting to a prescribed proportion of its foreign currency deposit liabilities in the form of foreign currency deposits at the BOK. The current requirements are 5 percent for demand deposits, 2 percent for saving deposits, and 1 percent for foreign currency deposits by nonresidents and other banks. The banks are also subject to foreign currency mismatch regulations: 80 percent of short-term (less than three months) liabilities must be covered by deposits, and 50 percent of long-term loans must be financed by long-term borrowings.

Foreign Exchange

1963

- The multiple exchange rate system is unified; the won is pegged to the dollar.

1980

- A “multibasket” peg for the won is introduced, determined by the weighted average of the special drawing rights (SDR) basket and a

trade-weighted basket of major currencies, plus an additional “policy” adjustment factor.

1985

- Currency swaps are permitted.

1986

- Regulations on swaps are further liberalized.

1987

- Restrictions on futures and options are lifted. The limit on the forward contract period is eliminated.
- The ceiling on foreign banks’ swap operations is relaxed by 10 percent.

1988

- The limit on swaps by foreign banks is relaxed again by 10 percent.

1989

- The ceilings on swap operations by foreign banks are relaxed by another 10 percent.

1990

- The Market Average Exchange Rate (MAR) System is adopted, in which the won is allowed to float within certain bands of daily fluctuation. The band is initially set at ± 0.4 percent.

1991

- The band is widened to ± 0.6 percent.

1992

- The range of admissible forward exchange contracts is extended.
- The band is widened to ± 0.8 percent.

1993

- Regulations on forward foreign exchange transactions are relaxed; ceilings held on foreign exchange deposits payable in domestic currency are abrogated.
- The band is widened to ± 1.0 percent.

1994

- The band is widened to ± 1.5 percent.

1995

- The band is widened to ± 2.25 percent.

1996

- The yen-won spot and forward market are established.
- Foreign currency–derivative transactions are opened to nonresidents. Documentation requirements for forward and futures transactions are eliminated, but transactions still need to be based on real demand.

- The ceiling on the swap facility provided to foreign banks is relaxed by 10 percent.
- Swaps are allowed for portfolio investments abroad by financial and insurance companies.

1997

- All settlements with other countries can be made in any convertible currency except the won. Export earnings exceeding US\$50,000 must be repatriated within six months.
- Residents can purchase derivatives through a foreign exchange bank, but issuance abroad requires MOFE's approval.
- November 11: The band is widened to ± 10 percent.
- December 16: South Korea floats the won.

1999

- The real demand principle for forward and derivative transactions is abolished, permitting further development of these markets. The Korea Futures Exchange (KOFEX) is established.

2002

- The Plan for the Development of the Korean Foreign Exchange Market, which envisions full liberalization of foreign exchange regulations by 2011, is announced.

Present situation: The exchange rate system is classified as independently floating in an inflation-targeting framework by the IMF. Interventions are sizable and would appear to go beyond the smoothing function as characterized by the IMF.

References

- Alexander, Arthur. 2003. Korea's capital investment: Returns at the level of the economy, industry, and firm. Special Studies Series no. 2. Washington, DC: Korea Economic Institute.
- Balassa, Bela. 1985. Adjusting to external shocks: The newly-industrializing developing economies in 1974–76 and 1979–81. *Weltwirtschaftliches Archiv* 121 (1): 116–41.
- Balassa, Bela, and John Williamson. 1990. Adjusting to success: Balance of payments policy in the East Asian NICS. Policy Analyses in International Economics no. 17 (revised). Washington, DC: Institute for International Economics, April.
- Blustein, Paul. 2003. *The chastening*. Rev. ed. New York: Public Affairs.
- Cargill, Thomas F. 1999. Economic and financial crisis in Korea, the Japanese financial regime, and the need for a new financial paradigm. *Joint U.S.-Korea Academic Studies* 9:111–30.

- Chae, Wook. 1997. Korea's admission to the OECD: Implications and economic effects. *Korea's Economy* 1997 (13): 68–72.
- Chari, Anusha, Paige P. Ouimet, and Linda L. Tesar. 2004. Acquiring control in emerging markets: Evidence from the stock market. NBER Working Paper no. 10872. Cambridge, MA: National Bureau of Economic Research.
- Cho, Dongchul, and Youngsun Koh. 1996. Liberalization of capital inflows in Korea: Big bang or gradualism? NBER Working Paper no. 5824. Cambridge, MA: National Bureau of Economic Research.
- Cho, Soon. 1994. *The dynamics of Korean development*. Washington, DC: Institute for International Economics.
- Cho, Yoon Je. 2002. What have we learned from the Korean economic adjustment program? In *Korean crisis and recovery*, ed. David Coe and Se-Jik Kim, 105–27. Washington, DC: International Monetary Fund and Korea Institute for International Economic Policy.
- Chopra, Ajai, Kenneth Kang, Meral Karasulu, Hong Liang, Henry Ma, and Anthony Richards. 2002. From crisis to recovery in Korea: Strategies, achievements, and lessons. In *Korean crisis and recovery*, ed. David T. Coe and Se-Jik Kim, 13–104. Washington, DC: International Monetary Fund and Korea Institute for International Economic Policy.
- Claessens, Stijn, Swati Ghosh, and David Scott. 1999. Korea's financial sector reforms. *Joint U.S.-Korea Academic Studies* 9:83–110.
- Claessens, Stijn, and Moon-Whoan Rhee. 1994. The effect of barriers to equity investment in developing countries. In *The internationalization of equity markets*, ed. Jeffrey A. Frankel, 231–75. Chicago: University of Chicago Press.
- Clifford, Mark. 1997. *Troubled tiger*. Rev. ed. Singapore: Butterworth-Heinemann Asia.
- Coe, David T., and Se-Jik Kim. 2002. *Korean crisis and recovery*. Washington, DC: International Monetary Fund and Korea Institute for International Economic Policy.
- Collins, Susan, and Won-Am Park. 1989. External debt and macroeconomic performance in South Korea. In *Developing country debt and economic performance*, vol. 3, ed. Jeffrey Sachs and Susan Collins, 153–369. Chicago: University of Chicago Press.
- Dobson, Wendy, and Pierre Jacquet. 1998. *Financial services liberalization in the WTO*. Washington, DC: Institute for International Economics.
- Dornbusch, Rudiger, and Yung Chul Park. 1995. *Financial opening: Policy lessons for Korea*. Seoul: Korea Institute of Finance.
- Edwards, Sebastian. 1989. The sequencing of economic reform: Analytical issues and Latin American experiences. In *Korea's macroeconomic and financial policies*, 177–98. Seoul: Korea Development Institute.
- Feldstein, Martin. 1998. Refocusing the IMF. *Foreign Affairs*, March/April.
- Frankel, Jeffrey A. 1989. And now won/dollar negotiations? Lessons from the yen/dollar agreement of 1984. In *Korea's macroeconomic and financial policies*, 109–29. Seoul: Korea Development Institute.
- . 1993. Liberalization of Korea's foreign exchange markets and the role of trade relations with the United States. In *Shaping a new economic relationship: The Republic of Korea and the United States*, ed. Jongryn Mo and Ramon Myers, 119–42. Stanford, CA: Hoover Institution Press.
- Giovanni, Alberto, and Martha deMelo. 1993. Government revenue from financial repression. *American Economic Review* 83 (4): 953–63.
- Goldstein, Morris, and Philip Turner. 1996. Banking crises in emerging economies: Origins and policy options. BIS Economic Papers no. 46. Basel, Switzerland: Bank of International Settlements, October.

- . 2004. *Controlling currency mismatches in emerging markets*. Washington, DC: Institute for International Economics.
- Haggard, Stephan. 2000. *The political economy of the Asian financial crisis*. Washington, DC: Institute for International Economics.
- International Monetary Fund (IMF). 2003. The IMF and recent capital account crises. Evaluation Report. Washington, DC: International Monetary Fund.
- . 2004. Republic of Korea: Article IV consultation—Staff report; staff statement; public information notice on the executive board discussion; and statement by the executive director for the Republic of Korea. Washington, DC: International Monetary Fund, February.
- Ishii, Shogo, and Karl Habermeier. 2002. Capital account liberalization and financial sector stability. Occasional Paper no. 211. Washington, DC: International Monetary Fund.
- Johnston, R. Barry, Mark Swinburne, Alexander Kyei, Bernard Laurens, David Mitchem, Inci Otker, Susana Sosa, and Natalia Tamirisa. 1999. Exchange rate arrangements and currency convertibility. World Economic and Financial Surveys. Washington, DC: International Monetary Fund.
- Jones, Leroy P., and Il SaKong. 1980. *Government, business, and entrepreneurship in economic development: The Korean case*. Cambridge, MA: Harvard University Press.
- Jun, Kwang W. 1995. Effects of capital market liberalization in Korea. In *The U.S.-Korea economic partnership*, ed. Youn-Suk Kim and Kap-Soo Oh. Aldershot, UK: Avebury Press.
- Kang, David C. 2002a. Bad loans to good friends: Money, politics, and the developmental state in South Korea. *International Organization* 56 (1): 177–207.
- . 2002b. *Crony capitalism: Corruption and development in South Korea and the Philippines*. Cambridge: Cambridge University Press.
- Kim, Benjamin Jin-Chun. 1993. An empirical assessment of the multiple currency basket peg system and the market average system in Korea. *Joint U.S.-Korea Academic Studies* 3:113–27.
- Kim, E. Han. 1990. Financing Korean corporations: Evidence and theory. In *Korean economic development*, ed. Jene K. Kwon, 341–57. New York: Greenwood.
- Kim, Hee-Kyung. 2004. FDI in Korea: Recent trends and policy issues. *Korea Focus* 12 (6): 133–52.
- Kim, In-June. 1993. Fluctuating foreign-exchange rates and price competitiveness. In *Shaping a new economic relationship: The Republic of Korea and the United States*, ed. Jongryn Mo and Ramon Myers, 143–52. Stanford, CA: Hoover Institution Press.
- Kim, Kyung-Soo. 2001. Managing international capital flows: The case of Korea. In *New international financial architecture and Korean perspectives*, ed. Tae-Jun Kim and Doo Yong Yang, 35–58. Seoul: Korea Institute for International Economic Policy.
- Kim, Soyoung, Sunghyun H. Kim, and Yunjong Wang. 2001. *Capital account liberalization and macroeconomic performance: The case of Korea*. Seoul: Korea Institute for International Economic Policy.
- Koo, Bon Ho, and Won Am Park. 1990. Exchange rate policy in Korea. In *Korean economic development*, ed. Jene K. Kwon, 79–98. Westport, CT: Greenwood.
- Krueger, Anne O., and Jungcho Yoo. 2002. Falling profitability, higher borrowing costs, and *chaebol* finances during the Korean crisis. In *Korean crisis and recovery*, ed. David T. Coe and Se-Jik Kim, 157–96. Washington, DC: International Monetary Fund and Korea Institute for International Economic Policy.
- Kwon, Jae-Jung. 1996. Financial liberalization: 1995 accomplishments and future plans. *Korea's Economy* 1996 (12): 31–39.

- Lee, Chon-Pyo. 1993. Preconditions for a successful liberalization and a feedback process of managing progressive liberalization. *Joint U.S.-Korea Academic Studies* 3:1–23.
- Lee, Jong-Wha, and Changyong Rhee. 2000. Macroeconomic impacts of the Korean financial crisis: Comparison with the cross-country patterns. *World Economy* 25 (4): 539–62.
- Leiderman, Leonardo. 1995. Policy lessons from Latin America's experience with capital inflows. In *Financial opening*, ed. Rudiger Dornbusch and Yung Chul Park, 80–105. Seoul: Korea Institute for Finance.
- Linder, Deborah J. 1994. Foreign exchange policy, monetary policy, and capital market liberalization in Korea. In *The Korean economy at a crossroad*, ed. Sung Yeung Kwack, 123–39. Westport, CT: Praeger.
- Mann, Catherine L. 2000. Korea and the brave new world of finance. *Joint U.S.-Korea Academic Studies* 10:55–68.
- Noland, Marcus. 1993. The origins of U.S.-Korea trade frictions. In *Shaping a new economic relationship: The Republic of Korea and the United States*, ed. Jongryun Mo and Ramon Myers, 13–39. Stanford, CA: Hoover Institution Press.
- . 1996a. Restructuring the Korean financial system for greater competitiveness. Working Papers in Asia-Pacific Economic Cooperation no. 96-14. Washington, DC: Institute for International Economics.
- . 1996b. Some unpleasant arithmetic concerning unification. Working Papers in Asia-Pacific Economic Cooperation no. 96-13. Washington, DC: Institute for International Economics.
- . 2000. *Avoiding the apocalypse: The future of the two Koreas*. Washington, DC: Institute for International Economics.
- Noland, Marcus, and Howard Pack. 2002. *Industrial policy in an era of globalization*. Washington, DC: Institute for International Economics.
- Park, Yung Chul. 1984. Korea's experience with external debt management. Korea University, Department of Economics. Manuscript, April.
- . 1995. Korea's experience with managing foreign capital flows. Seoul, Korea: Korea University and Korea Institute of Finance. Manuscript, September.
- Park, Yung Chul, and Chi-Young Song. 1996. Managing foreign capital flows: The experiences of Korea, Thailand, Malaysia and Indonesia. Jerome Levy Economics Institute Working Paper no. 163. Annandale-on-Hudson, NY: Bard College, May.
- Park, Yung Chul, Wonho Song, and Yunjong Wang. 2003. Finance and economic development in Korea. In *Financial development and integration in East Asia*, ed. Choong Yong Ahn, Takatoshi Ito, Masahiro Kawai, and Yung Chul Park, 317–45. Seoul: Korea Institute for International Economic Policy.
- Pyo, Hak K. 1989. Export-led growth, domestic distortions, and trade liberalization. Paper presented at the United States–Korea Financial Policy Discussions. 12 December, Washington, DC.
- SaKong, Il. 1993. *Korea in the world economy*. Washington, DC: Institute for International Economics.
- Smith, Heather. 2000. *Looking forward: Korea after the economic crisis*. Canberra, Australia: Asia Pacific Press.
- Stiglitz, Joseph E. 2003. *Globalization and its discontents*. New York: Norton.
- U.S. Trade Representative (USTR). 2004. *2004 national trade estimate report on foreign trade barriers*. Washington, DC: Government Printing Office.
- Wang, Yen-Kyun. 1993. Exchange rates, current accounts balance of Korea, and U.S.-Korea negotiations on exchange rate matters. In *Shaping a new economic relationship: The Republic of Korea and the United States*, ed. Jongryun Mo and Ramon Myers, 153–70. Stanford, CA: Hoover Institution Press.

- Wang, Yunjong, and Hyoungsoo Zang. 1998. *Adjustment reforms in Korea since the financial crisis*. Seoul: Korea Institute for International Economic Policy.
- Watanabe, Toshiaki. 1996. Pacific Basin stock market returns and volatility: Statistical properties and correlations. Paper presented at the International Symposium on Macroeconomic Interdependence in the Asia-Pacific Region, Economic Planning Agency. 22–23 October, Tokyo, Japan.
- Westphal, Larry E., Yung W. Rhee, and Garry Pursell. 1981. Korean industrial competence: Where it came from. World Bank Staff Working Paper no. 469. Washington, DC: World Bank.
- Westphal, Larry E., Linsu Kim, and Carl Dahlman. 1985. Reflections on Korea's acquisition of technological capability. In *International technology transfer*, ed. Nathan Rosenberg and Claudio Frischtak, 167–221. New York: Praeger.
- Woo, Jung-En. 1991. *Race to the swift*. New York: Columbia University Press.
- Yoo, Jung-Ho. 1994. South Korea's manufactured exports and industrial targeting policy. In *Manufactured exports of East Asian industrializing economies*, ed. Shu-Chin Yang, 149–73. Armonk, NY: M. E. Sharpe.
- Yoo, Seong-Min. 1999. Corporate restructuring in Korea. *Joint U.S.-Korea Academic Studies* 9:131–99.
- Young, Soo-Gil. 1997. The end of Korea's economic miracle? Paper presented at congressional roundtable discussion. Washington, DC.

Comment Gita Gopinath

This paper provides a detailed characterization of economic policy events, particularly those related to international capital flows, in South Korea from the early 1960s to the present. It describes the policy stance on internal and external financial liberalization in South Korea over this period. It notes that several years of high growth in South Korea prior to the 1980s took place in a climate of financial repression: only starting in the 1980s and later were there signs of financial liberalization. The paper also discusses the origins of the financial crisis of 1997–98 and the subsequent reforms.

This paper contributes to the literature that identifies turning points in financial liberalization policies in developing countries. A related paper that performs an analysis of policy changes with respect to financial-sector liberalization and generates an index of financial liberalization for several developing and developed economies is Abiad and Mody (2003). Their index of financial liberalization can potentially take values from 0 to 18, with higher numbers implying greater levels of financial liberalization. Consistent with this paper, they also find that until 1980 Korea had extensive controls on domestic financial institutions and international capital flows. Figure 10C.1 indicates this. Further, there is no evidence of substantial

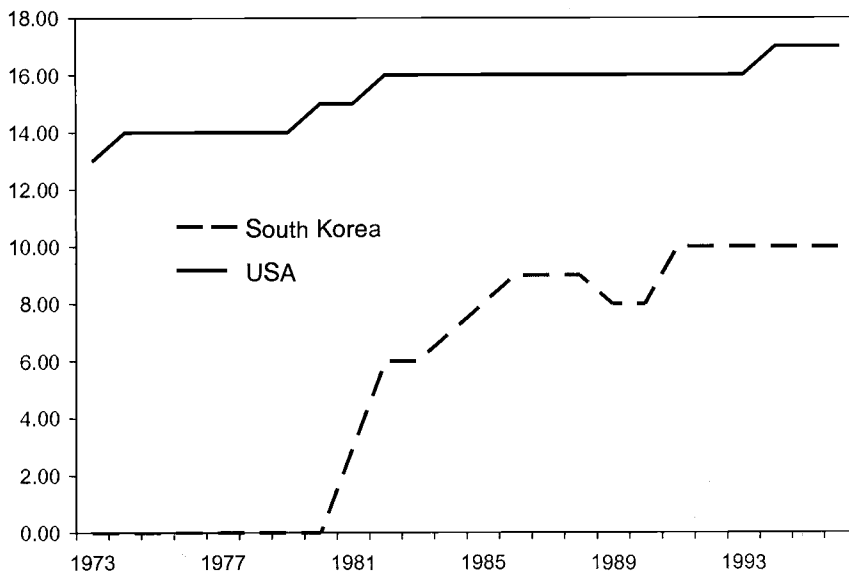


Fig. 10C.1 Index of financial liberalization

Note: For details regarding construction of this index see Abiad and Mody (2003).

reversals in the steps toward financial liberalization, as seen in figure 10C.2. This is contrary to the experience of certain other emerging markets, especially Argentina, when liberalization measures were adopted in the 1970s and almost completely reversed following the debt crisis of the 1980s. Also, comparing the level of financial development in Korea to a developed economy indicates that Korea is still below the frontier.

Country studies of this nature help answer questions about what drives changes in policy. Is it political events, crisis events, or IMF interventions? In the case of Korea it appears that at different points in time different factors were at work. Phase I, prior to 1980, was a period of extensive capital controls. This appears to be a result of the political/economic ideology at the time, which led to a state-led development strategy. A question that can be raised about this period is why savings rates were so high in Korea. Savings rates were as high as 40 percent of GDP in the initial decades, which allowed high levels of investment even when the economy was closed to foreign capital flows. To ensure policy-directed lending only, there was a need to keep domestic and international markets segmented. This involved limiting firms' financing options to regulated banks and limiting lending institutions to those that could be controlled. Until 1991, capital was mainly sourced through banks, and alternative sources of corporate finance were suppressed. This period saw the growth of the *chaebol*, and studies find that indeed the largest firms had the weakest financial structure.

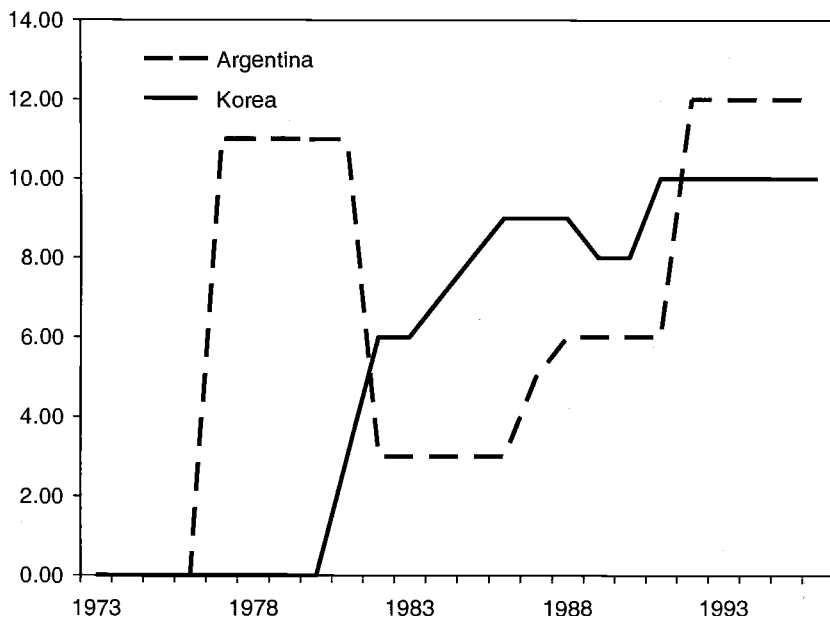


Fig. 10C.2 Steady financial liberalization

Phase II, which started around the 1980s, involved stop-and-go liberalization. The move to more liberalization was spurred partly by domestic institutions' desire to borrow at lower rates. Foreign financial service providers, especially from the United States, also desired to enter the South Korean market, and accordingly there was external pressure to open up. Also, South Korea was attempting to join the OECD. Phase III was the 1997–98 crisis phase, in which IMF-imposed policies were adopted by Korea. So the reform during this period had a substantial IMF component.

The financial crisis in South Korea in 1997–98 has often been blamed on the short-term nature of capital flows into the country. An important question, then, is why capital flows took this form. A country study, like that in this paper, is a very useful tool to decipher different stories. This paper suggests that short-term flows were very much an outcome of government policy. According to policy, foreign investors were prevented from investing in the long-term corporate bond market. There were concerns with longer-term lending because of ownership issues: The government wished to retain control over domestic financial institutions, and most of the lending went through banks. Policy therefore created an incentive to borrow short term. Further, Basel Accord incentives encouraged lending to South Korea to take the form of short-term bank lending.

This explanation for short-term flows contrasts with the explanation put forth by Diamond and Rajan (2001a, 2001b). According to this view, poor

information in emerging markets and relationship banking results in foreign investors' primarily lending to banks. This is also the reason why foreign investors keep their lending short term: to safeguard themselves against the risk of bad investments by banks. It was a combination of the nature of investments being financed and lack of foreign investor confidence that resulted in a short-term debt buildup. This hypothesis is presumably testable given the policy details in this paper.

In the 1990s there was a rise in foreign currency liabilities held by Korean banks, with currency and maturity mismatches. This meant that an exchange rate adjustment would have strong negative effects on bank balance sheets. The source of the crisis in South Korea has been much debated. This paper finds a combination of explanations, including domestic shocks associated with failures of the *chaebol* and domestic political turmoil. The financial crisis in other parts of Southeast Asia and the emerging banking crisis in Japan, which was the principal source of foreign loans to South Korea, were added problems.

The question of what fundamentally changed during the crisis period in Korea is an open one. Alternative hypotheses include the view that the crisis was a liquidity crisis. An interesting feature of the crisis episode was the entry of foreign direct investment into South Korea even during crisis years. Aguiar and Gopinath (2005) find evidence that a significant portion of acquisitions took the form of fire sale of assets. That is, domestic firms that were liquidity constrained were, all else being equal, more likely to be acquired during the crisis.

Following the financial crisis, Korea took several steps to improve financial institutions by introducing new regulatory practices and standards. The paper notes that while attempts have been made to improve corporate governance, the years of financial repression have left a legacy that makes it difficult to efficiently regulate bank lending to large corporations and to enforce the new regulations. This provides an interesting perspective into the role of institutions and the persistent effect they have on future developments in an economy.

References

- Abiad, Abdul, and Ashoka Mody. 2003. Financial reform: What shakes it? What shapes it? IMF Working Paper no. 07/03. Washington, DC: International Monetary Fund.
- Aguiar, Mark, and Gita Gopinath. 2005. Fire-sale FDI and liquidity crises. *Review of Economics and Statistics* 87 (3): 439–52.
- Diamond, Doug, and Raghuram Rajan. 2001a. Banks, short-term debt and financial crises: Theory, policy implications and applications. *Proceedings of Carnegie-Rochester Series on Public Policy* 54:37–71.
- . 2001b. Liquidity risk, liquidity creation and financial fragility: A theory of banking. *Journal of Political Economy* 109 (2): 287–327.