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Republic of Korea: Economic and Policy Developments

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REPUBLIC OF KOREA

Economic and Policy Developments

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December 3, 1999

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I. Introduction and Summary

1. **The past two years have been among the most turbulent in Korea's recent economic history.** During this period, Korea has not only witnessed severe financial turmoil in domestic financial and foreign exchange markets, but also a remarkably rapid stabilization and recovery from the crisis conditions. After a sharp decline in economic activity and employment, both are on the rise and GDP has returned to its pre-crisis levels. Financial market conditions have likewise improved. The stock market, which fell sharply at the onset of the crisis, rose by 33 percent in 1998 and by a further 70 percent through November 1999. After a free fall in early 1998, the exchange rate has strengthened dramatically, although it still remains significantly more depreciated than its pre-crisis level.

2. **The primary focus of this paper is on economic developments and policies in the period since the outbreak of the financial crisis.** However, to place what follows in context, a thumbnail sketch of pre-crisis economic conditions is presented below. This is followed by a summary of developments since the outbreak of the crisis and an overview of the remainder of the paper.[1]

A. Pre-Crisis Conditions

3. **Korea's impressive macroeconomic performance up to 1997 served to mask fundamental structural problems**, notably a weak financial sector and an over-leveraged corporate sector. Korean conglomerates, known as *chaebol,* had invested excessively and were focused primarily on gaining market share. The resulting excess capacity depressed the profitability of companies and the financial institutions from which they had borrowed.[2]

4. **Financial institutions traditionally lacked independence and were encouraged by government to channel credit to preferred sectors.** Consequently, credit analysis and risk management techniques remained undeveloped. The misallocation of credit was facilitated by a weak system of prudential controls and forbearance by the supervisory authorities. The result was a banking system with little commercial orientation, limited ability to price risk, and excessive exposure to large corporations. Bank financing for large investment projects was made available, even when such investment added to overcapacity. When export prices weakened and a number of *chaebol* went bankrupt in 1997, there was a commensurate deterioration in the asset quality of financial institutions.

---

[1] More detailed analysis of the origins of the crisis in Korea can be found in Berg (1999), Goldstein (1998), Noland (1999), Jackson (1999), Kwack (1998a and 1998b), Chang (1998), OECD (1998), Cho (1999), Kochhar, Loungani and Stone (1998) and International Monetary Fund (1997 and 1998).

[2] The origins of the problems in the corporate sector and weaknesses in corporate governance are described in detail in Gobat (1999).

5. **By 1997, Korea had also contracted a large amount of short-term foreign debt, which had been favored over longer-term capital flows.** This increase in short-term debt increased the vulnerability to crisis. As concerns increased about the health of Korean banks, and falling reserve levels made the willingness of the government to bail out banks less reassuring, international credit lines began to dry up, thus precipitating the foreign exchange crisis (Chart I.1). The situation appears to have been aggravated by the practice of Korean financial institutions making risky investments abroad. When foreign lenders started to recall loans, these assets proved to be illiquid, thereby aggravating the foreign currency crisis.

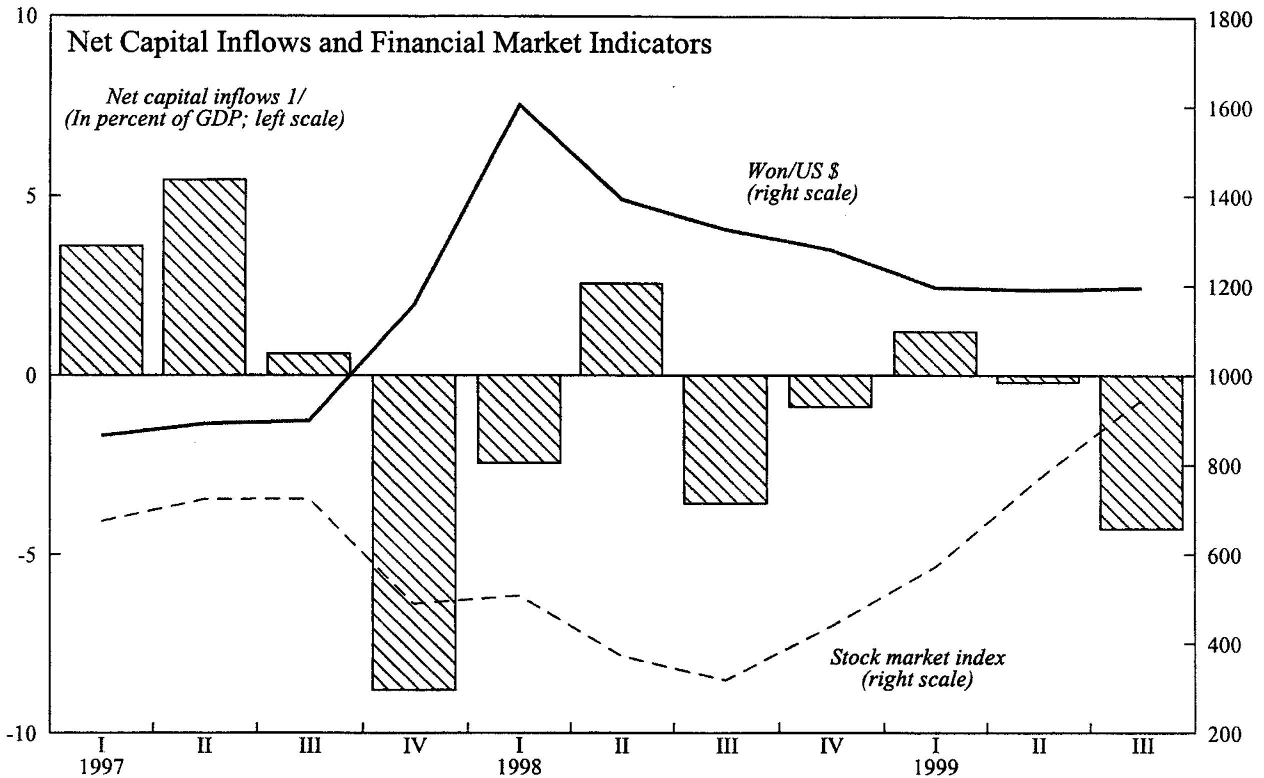
6. **Conditions in international markets and the behavior of market participants were also contributing factors.** Private investors, attracted by high returns did not carefully assess the risks involved in their investments. Likewise, the impact of adverse external shocks—such as the decline in world semi-conductor prices, the hike in oil prices in 1996, and the impact of a weakening of the yen-dollar exchange rate on competitiveness, net exports and growth—were underestimated.

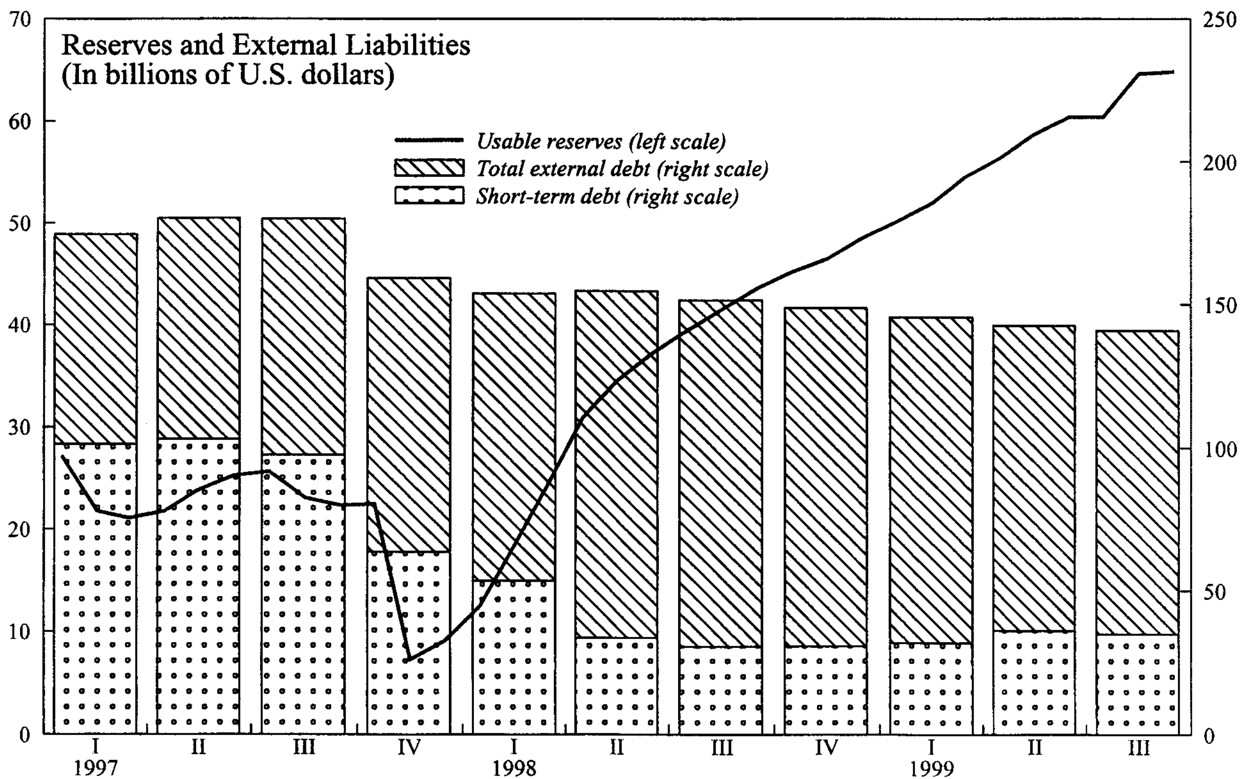
7. **Once market participants began to scrutinize Korea, especially after the foreign exchange crises in Thailand and Indonesia, the structural weaknesses of the Korean economy looked more stark.** The lack of transparency further aggravated the situation. Official data provided incomplete disclosure of key variables such as foreign reserves, external debt, forward exposure, and nonperforming loans. Illiquid deposits at offshore Korean banks were included in its foreign reserves, so that the official reserve data tended to understate the true extent of reserve loss. Official debt data were also inadequate, omitting external debt contracted by offshore entities, a practice that appears to have understated true external indebtedness by about a half. Reporting practices by prudential authorities were similarly opaque; markets placed little credibility in official estimates of nonperforming loans, widely regarded as considerable underestimates. In addition, clear assessment of corporate health was precluded by complex systems of cross corporate guarantees and incomplete financial reporting. The lack of transparency served to inflate the fears of international lenders and compounded the severity of the crisis. (Box I.1 provides a selective chronology of the key events that preceded the financial crisis in 1997.)

Chart I.1

Korea

Capital Flows, Reserves and External Liabilities, 1997 - 1999





Sources: Data provided by the Korean authorities.

1/ Net position of protfolio investment, foreign direct investment, and other investment. Figure for Q3 1999 is an estimate.

Box I.1. Korea - Chronology of Main Pre-Crisis Events and Early Policy Responses

1997: Lead up to the foreign exchange crisis

- Six of the top-30 *chaebols* declared bankruptcy.
- The bankruptcies severely weakened the financial system and nonperforming loans rose sharply.
- After the bankruptcy of Hanbo in January 1997, international credit agencies downgraded the ratings of Korean financial institutions. After the bankruptcy of Kia in July, Korea's sovereign risk was assigned a negative outlook.
- In August 1997, the authorities announced that the Korean government will ensure the payment of foreign debt owed by Korean financial institutions.
- The external financing situation deteriorated markedly following the decline in the Hong Kong stock market on October 23 and a downgrading of Korea's sovereign risk status by Standard and Poor's. Substantial difficulties were encountered in rolling over the large stock of short-term debt (about US$100 billion).
- The BOK's gross reserves declined sharply, with large amounts used to finance the repayment of short-term debt of Korean commercial banks.

November-December 1997: The government's response to the crisis

- On November 20, Korea made a request for IMF assistance. Negotiations on a Stand-By Arrangement (SBA) began in Seoul on November 26.
- On December 4, the IMF Board approved a US$21 billion Stand-By Arrangement. A total package of US$ 58.4 billion was put together, with pledges of support from the World Bank (US$10 billion) and the Asian Development Bank (US$4 billion), and a second line of defense (US$23.4) pledge from bilateral donors.
- Money market interest rates rose from 15–19 percent in early December to 25 percent on December 13 as the BOK tightened monetary conditions in line with the program.
- On December 15, the band on the exchange rate, which limited the daily change to ± 10 percent, was eliminated.
- The initial market reaction to the program was positive. But market sentiment quickly turned negative, in part, because it became known that Korea had a much lower level of usable foreign exchange reserves and a larger stock of short-term debt than markets had believed to be the case.
- The won depreciated by about 70 percent during December 5–24 to reach almost W 2000/US$, while the stock market plunged by a further 20 percent during this period.
- Usable reserves continued their free fall. On December 18, usable reserves were at US$ 4.2 billion, and net of forward commitments they were negative.
- On December 22, two major international rating agencies downgraded Korean external debt to a speculative grade. The roll-over rate on short-term external debt fell to 10 percent.
- In late December, in response to the deepening crisis, the Korean authorities strengthened their economic program in order to regain market confidence. The reinforced program called for a tightening of monetary policy and an acceleration of structural reforms (liberalization of capital and money markets, restructuring of financial sector, and trade liberalization) accompanied by a promise for the early activation of the bilateral assistance in the rescue package. (A partial disbursement of US$8 billion from the second line of defense was promised, subject to a debt restructuring agreement with creditors. However, these funds were never activated.) The call rate was increased to 32 percent.
- On December 30, the Board approved the request by Korea for the modification of the schedule of purchases to frontload part of the purchases. At year-end, usable reserves were US$9.1 billion.

B. Elements of the Adjustment Program

8. **The objective of the adjustment program was first and foremost to restore market confidence and stabilize financial markets.** To this end the program included a mix of macroeconomic policies and far-reaching structural reforms.

- **Macroeconomic policies** included a temporary period of higher interest rates aimed at stabilizing the foreign exchange market and avoiding a depreciation-inflation spiral. Fiscal policy was loosened early in the program to mitigate the impact of the deeper-than-expected slump in activity and to provide a social safety net.

- **Structural reform efforts were focused on financial sector and corporate sector reforms and liberalizing trade and capital account transactions.** Financial sector reforms focused on strengthening regulations and the framework for supervisory oversight, restructuring the financial system starting with the weakest segments (namely the commercial banks and the merchant banks), and progressively working up to the rest of the nonbank financial sector. Reforms in the corporate sector initially focused on improvements in governance and competition policies. Subsequently, the authorities' attention shifted to financial and operational restructuring aimed at reducing debt levels and strengthening the capital structure of Korean corporations. In addition, the liberalization of the capital account was accelerated and labor market flexibility was enhanced.

9. **There was early recognition that adequate external financing and debt restructuring would be important complements to the program.** To this end, in addition to the resources made available by the Fund (including through accelerated disbursements), the program was supported by other multilateral institutions, especially the World Bank and the Asian Development Bank. In addition, in early 1998, a "second line of defense" was mobilized and an agreement was reached with commercial banks to restructure their loans. Bilateral donors indicated their willingness to provide a supplemental financing package in the context of a voluntary program by bank creditors to maintain credit lines and restructure short-term debt so as to extend the maturity of their existing claims.

C. Economic Recovery, Recent Policy Developments, and the Road Ahead

10. **Policies adopted under the program successfully restored external stability, rebuilt reserves, and initiated reform of the financial and corporate sectors.** The severe disruption in financial markets and loss of confidence, however, led to Korea's worst recession in over three decades. Real GDP contracted by nearly 6 percent in 1998 and the unemployment rate jumped to close to 9 percent. After a brief spike in early 1998, inflation has been subdued owing to weak domestic demand and a large output gap. These latter factors, together with the depreciated won, led to a sharp swing in the current account to a large surplus in 1998.

11. **Once the task of stabilizing the exchange rate was achieved, the focus of policies shifted to stimulating growth through an easing of macroeconomic policies**. The overnight call rate was progressively reduced and has been kept at about 4¾ percent since April 1999. The

consolidated central government deficit rose to 4¼ percent of GDP in 1998 and another deficit equivalent to 4¾ percent of GDP is planned for 1999. The fiscal plans ensure that adequate support is allocated to social safety net programs.

12. **There has been a sharp turnaround in economic activity in 1999.** The economy is expected to grow by 9 percent, with significant upside potential to this forecast. Growth has been led by buoyant private consumption, a rebound in equipment investment, and a slower pace of inventory decumulation. The rapid recovery has also been aided by supportive macroeconomic policies. The strengthening of the economy is reflected in a drop in the unemployment rate to 4.6 percent in October, while inflation has remained low.

13. **Korea's external position has also strengthened considerably.** Continued robust export growth has resulted in a sizable current account surplus in the first nine months of 1999. Capital inflows have also increased markedly this year. Consequently, reserves have been built up to $70 billion by end-November 1999. External vulnerability has since been markedly reduced as reserves are sufficient to cover short-term foreign liabilities. Although the won has continued to strengthen in real effective terms, as of November 1999, the won was still about 17½ percent below its pre-crisis level.

14. **The sustainability of strong growth is, however, not yet assured and there is still a sizable unfinished agenda of reforms.** Indeed, the debt servicing difficulties and subsequent collapse of Daewoo—Korea's second largest conglomerate—and the resulting turmoil in financial markets in the second half of 1999 illustrate that there are lingering risks that could stand in the way of sustained growth in the medium term. It will therefore be essential to maintain the momentum of reform, especially in the financial and corporate sectors. Specifically:

- **Good strides have been in restructuring the financial sector, but important reforms remain to be implemented.** Tangible progress has been made in consolidating and recapitalizing the banking system with significant injections of public funds, strengthening the role and independence of the Financial Supervisory Commission, and bringing prudential regulations in line with best international practice. Looking ahead, priority now needs to be given to: (i) restructuring the fragile investment trust sector; (ii) privatizing the large equity shares acquired in the process of recapitalizing commercial banks; (iii) improving management and business practices, especially to strengthen risk analysis and lending practices; (iv) rehabilitating the insurance sector; and (v) continuing improvements in supervision and prudential regulations.

- **The need to accelerate and strengthen the corporate restructuring process has been clearly demonstrated by the Daewoo group's failure.** By moving decisively to restructure Daewoo, the government has demonstrated that the large conglomerates are not "too big to fail." For the other top-5 *chaebol*, the government has moved to enforce implementation of their capital structural improvement plans (CSIPs) and apply sanctions for noncompliance. In the case of the 6-64 *chaebol* ranked by asset size, debts are being restructured under a creditor-led debt workout framework but early evidence suggests that restructuring has not gone deep enough and several of the agreed workouts will need

to be revisited to reduce debt to a more sustainable level. Major steps have also been taken to strengthen market discipline and corporate governance. Looking ahead, the agenda for reform will need to focus on: (i) implementing the restructuring plans for Daewoo in a transparent fashion; (ii) accelerating the restructuring of the other top 5 *chaebol*; (iii) strengthening the workout process for the 6-64 chaebol and other large corporations; and (iv) continuing to improve corporate governance, especially with regard to disclosure and consolidated financial accounts.

15. **The remainder of the paper is organized as follows**: Chapter II contains a description of the developments in economic activity, labor markets and prices; Chapter III presents developments in the current and capital accounts of the balance of payments and describes recent reforms to liberalize capital and trade flows; Chapters IV and V outline the monetary and fiscal policy response to the outbreak of the crisis and the evolution in the stance of macroeconomic policies to date; and Chapters VI and VII sketch the major structural reforms that were implemented since the outbreak of the crisis to restructure and strengthen the financial system and the corporate sector.

II. DEVELOPMENTS IN ECONOMIC ACTIVITY[1]

A. Introduction

1. **By most criteria, Korea had sound macroeconomic fundamentals prior to the financial crisis that struck in late 1997,** including rapid economic growth, high investment rates, moderate inflation, small current account deficits, and balanced government budgets. In retrospect, however, the strong macroeconomic performance masked structural weaknesses that made the country vulnerable to shocks (Chapter I).

2. **The crisis resulted in Korea's worst growth performance since the Korean War.** Real GDP fell by 5.8 percent in 1998, in contrast to a 2¾ percent decline during the recession in 1980. The crisis brought about a severe disruption in the normal functioning of markets, a sharp decline in confidence, and a collapse of private demand. Corporations reacted by slashing inventories, scaling back investment plans, and lowering wages, thus exacerbating the impact of the crisis on the real sector. For their part, households reacted by raising precautionary savings to unprecedented levels in the face of large uncertainties, thus depressing private consumption. The severity of the recession was misjudged by most observers (including the IMF) at the onset of the crisis.[2]

3. **The output decline bottomed out in the third quarter of 1998 and a strong recovery has been underway since then.** Although the recession was relatively short-lived, its consequences—in terms of severely depressed consumption, record number of bankruptcies, large-scale layoffs, and increased incidence of poverty—have been widespread. The rest of this chapter is organized as follows. Section A discusses the recession of 1998; Section B outlines key aspects of the recovery; Section C discusses price developments since the crisis; Section D examines the impact of the recession on the labor market; and Section E briefly discusses the economic outlook.

B. The Recession of 1998: A Decomposition

4. **The slowdown in economic activity that had already started in 1997 became full blown in early 1998.** Equipment investment fell significantly in the third quarter of 1997 and industrial production started decelerating in the fourth quarter of the same year (Table II.1 and Chart II.1). By January 1998, the average daily number of corporate insolvencies had more than doubled to over 30, and the weakening of the real economy accelerated in early 1998. On a year-on-year basis, industrial production fell sharply in January 1998 for the first time since late 1992, and this decline continued for the next

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[1] The principal author of this chapter is Dhaneshwar Ghura.

[2] The original IMF program (December 1997) had projected real GDP growth of 2½ percent. This partly reflected optimistic assumptions about program success and concerns that pessimistic forecasts would exacerbate a fragile situation (Lane et al, 1999). The growth forecasts were revised downward in subsequent reviews as new information about the depth of the recession became available.

Table II.1. Korea: Key Indicators of Economic Activity, 1998-99

	1998				1999			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Oct.
	(Percent change over the preceding period, unless otherwise indicated; seasonally adjusted)							
Overall								
Leading economic indicators 1/	-5.7	0.0	1.5	5.3	5.5	5.2	5.6	2.0
Coincident indicators 2/	-6.3	-3.0	-0.9	3.7	2.5	3.6	4.5	0.6
Production								
Industrial production	-7.6	-3.2	4.0	5.8	-0.5	12.2	7.2	1.9
Shipment, manufacturing	-8.4	-3.0	4.4	5.3	7.1	6.2	7.0	3.0
Inventories, manufacturing	-3.8	-3.7	-3.4	-6.5	-5.5	-4.0	2.5	1.6
Capacity utilization rate 3/ 4/	68.8	67.0	66.7	69.9	71.3	76.8	79.5	78.6
Consumption								
Wholesale and retail sales	-9.9	-3.4	1.5	3.7	4.4	1.0	6.9	0.6
Investment								
Machinery orders	-23.9	-5.6	23.6	0.7	0.5	10.4	9.3	0.7
Construction orders	1.9	-43.0	9.5	-13.6	6.0	32.6	-7.0	-14.7
Labor market (period average)								
Unemployment rate	4.7	6.7	8.3	8.5	7.0	6.3	6.2	5.6
Unemployment rate 3/ 5/	5.6	6.9	7.4	7.4	8.4	6.6	5.6	4.6
Prices								
Consumer prices 3/	5.3	0.3	-0.1	0.5	0.0	0.2	0.0	0.7
Producer prices 3/	10.6	0.0	-1.3	-0.4	-1.7	0.2	0.1	1.0
	(Year-on-year percentage change, unless otherwise indicated)							
Overall								
Leading economic indicators 1/	-0.4	-2.9	-3.9	0.7	12.7	18.5	23.3	23.2
Coincident indicators 2/	-3.5	-7.9	-9.9	-6.6	2.2	9.2	15.2	14.3
Production								
Industrial production	-6.3	-12.1	-9.5	-1.5	5.8	22.7	26.7	30.6
Shipment, manufacturing	-4.3	-12.0	-9.9	-2.3	14.2	25.0	28.2	33.8
Inventories, manufacturing	-1.0	-7.8	-8.8	-16.3	-17.8	-18.0	-13.1	-5.7
Consumption								
Wholesale and retail sales	-11.2	-15.9	-15.2	-8.4	6.1	10.9	16.8	15.7
Investment								
Machinery orders	-38.9	-43.8	-22.2	-10.9	16.9	38.5	22.1	24.2
Construction orders	-23.3	-54.3	-44.4	-45.1	-42.9	32.9	12.9	33.9
Prices								
Consumer prices	8.9	8.2	7.0	6.0	0.7	0.6	0.7	1.2
Producer prices	14.4	13.9	12.0	8.6	-3.5	-3.3	-1.9	-0.2

Sources: Korea, National Statistical Office.

1/ Weighted average of 10 indicators, including index of producer shipment for intermediate goods; industrial production index for intermediate and construction goods; machinery orders; total liquidity; export letters of credit; and imports of raw material for reexports.

2/ Weighted average of 10 indicators, including index of total industrial production; index producer shipment for all goods; electric power consumption; amount of labor; wholesale and retail sales index; cement consumption; and real exports and imports.

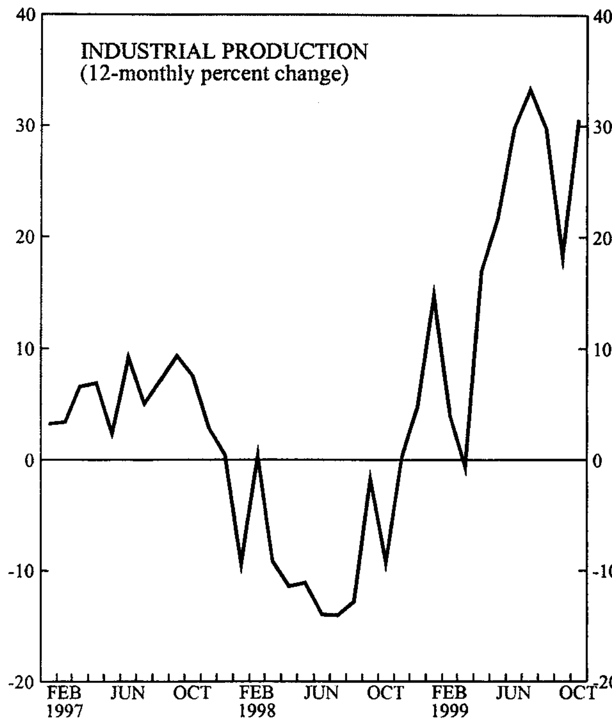
3/ Not seasonally adjusted data.

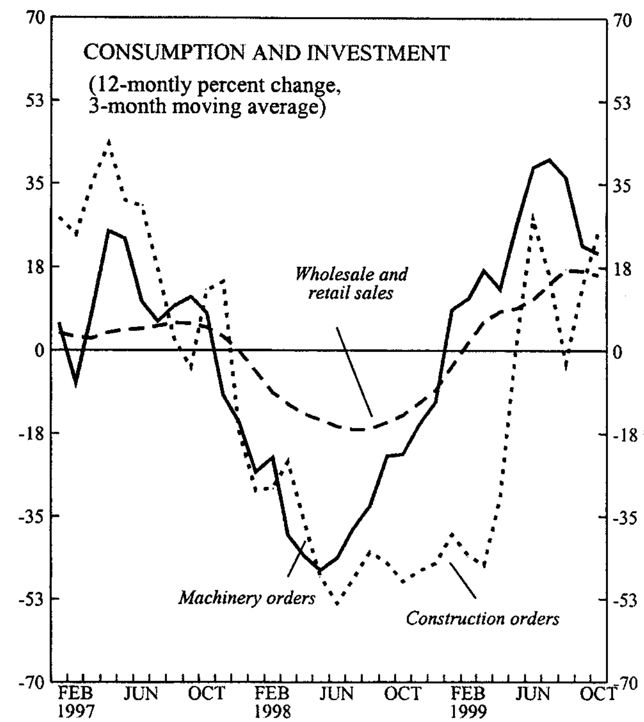
4/ Rate of capacity utilization.

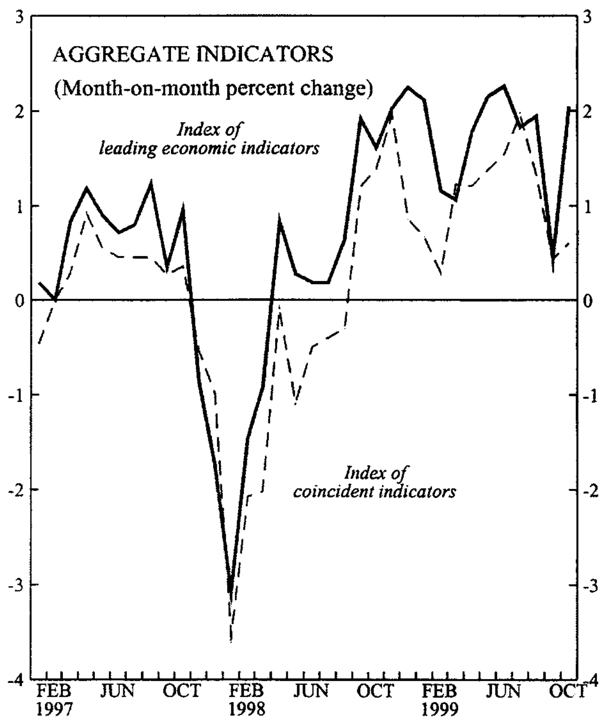
5/ Rate of unemployment.

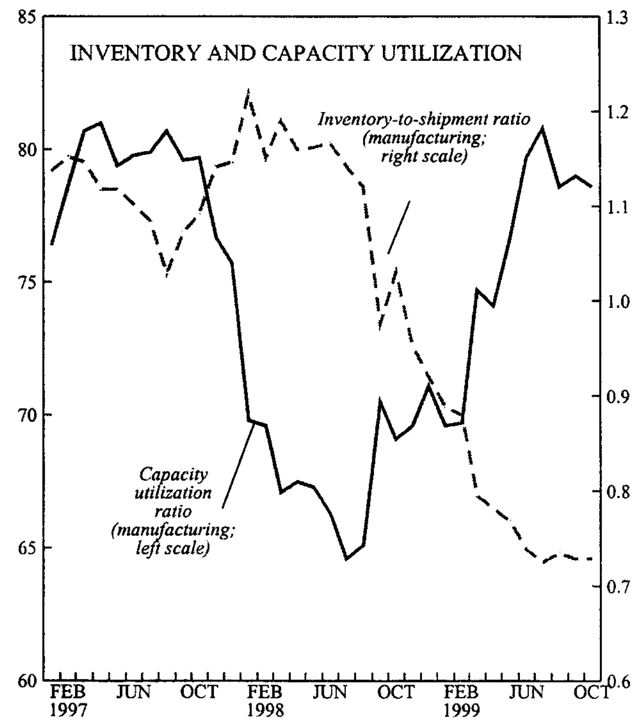
Chart II.1
Korea

Real Sector Activity, 1997-99





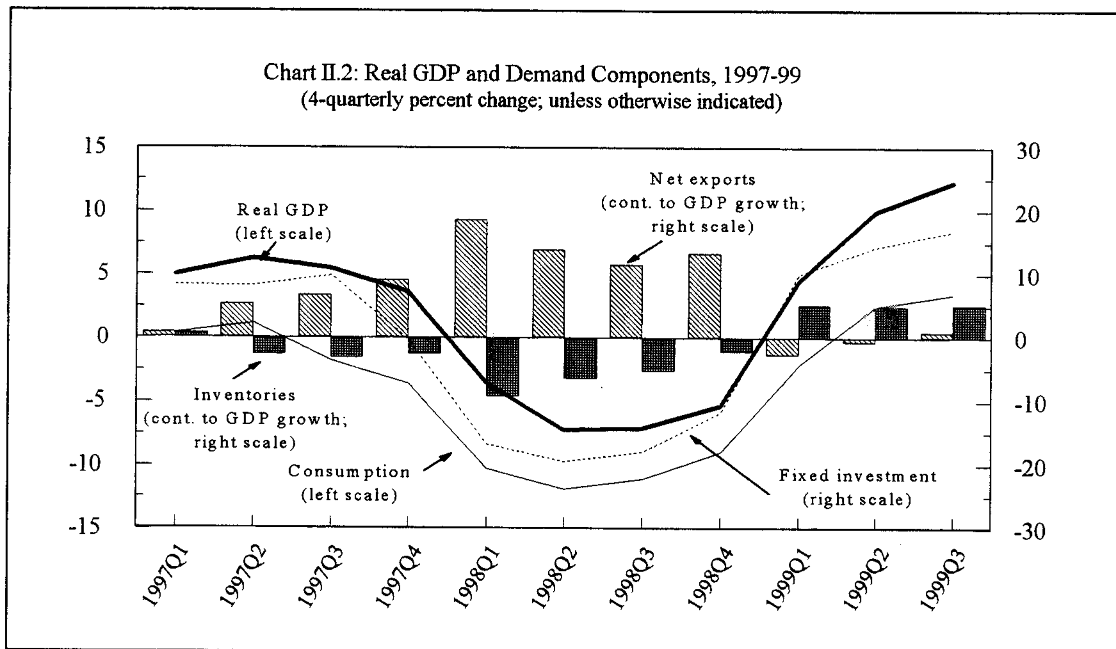




Sources: National Statistical Office; and the Korean authorities.

nine months. With the exception of electronic goods, output of all major industrial products fell during this period. The index of wholesale and retail sales started declining in December 1997 and continued to decline through end-1998.

5. **The crisis resulted in a collapse in investment spending**. Construction and equipment investment fell by 10 percent and 38½ percent respectively in 1998 due to the uncertain outlook, weak corporate balance sheets, and reluctance of banks to make loans owing to impaired capital adequacy ratios giving rise to a credit crunch (Chapter IV for a discussion of credit developments). By mid-1998, overall capacity utilization rates had fallen to about 66 percent, a decline of about 14 percentage points from the level a year earlier.



6. **Private consumption fell by 9½ percent in 1998**, reflecting declining income and wealth, as well as depressed confidence levels. According to a survey of urban households, income fell by about 11 percent in real terms in 1998 owing to a sharp increase in layoffs and cuts in nominal wages. In addition, household wealth was reduced by the fall in stock prices, and also land and housing prices. Furthermore, consumer confidence was adversely affected by rising unemployment and the record number of bankruptcies. Increased government spending on social safety net in 1998 helped mitigate the steep decline in private consumption (Chapter V).

7. **The sharp decline in private consumption was mirrored by a rise in the private saving-investment balance.** This reflected in part an increase in precautionary saving in view of the uncertainty brought about by the deterioration in labor market conditions. Private saving rose to a record 34 percent of GDP in the second quarter of 1998. Together with the fall in private sector investment, the private saving-investment balance swung from a deficit of 5½ percent of GDP in 1997 to a surplus of 10½ percent

of GDP in 1998. The government saving-investment balance worsened by 1½ percentage points of GDP over the same period.

8. **Inventory destocking—including the one-off exports of recycled gold jewelry and used machinery—played an important role in the decline in economic activity.** The scale of inventory reduction in 1998 was unprecedented and depressed real GDP growth by about 6 percentage points. By end-1998, the inventory-to-shipment ratio was at its lowest level since 1993 (Chart II.1). The rapid pace of inventory destocking that occurred in the first three quarters of 1998 is explained by the high cost of holding stocks due to high interest rates, the need by cash-strapped firms to raise cash owing to difficulty in obtaining new bank loans, and the compression of output by firms, arising from the unexpectedly steep decline in demand.

9. **The only component that made a positive contribution to GDP in 1998 was the net foreign balance.** Imports of goods and services were severely compressed—owing to the depreciated won and the sharp contraction of output and consumption—declining in volume terms by 22 percent in 1998. (See Chapter III for a more detailed description of external sector developments.) Exports of goods and services, however, rose in volume terms by more than 13 percent, helped by the improved external competitiveness and the government's export drive. As a result, the net foreign balance contributed about 12 percentage points to GDP growth in 1998.

C. The Recovery in 1999

10. **The economic upturn, which started in the last quarter of 1998, has been much faster and stronger than expected, giving the path of GDP growth a distinct "V" shape.** On a year-on-year basis, real GDP grew by 4.6 percent in the first quarter of 1999 for the first time since the crisis. Real GDP growth has accelerated since then to 9.8 percent (y/y) and 12.3 percent in the second and third quarters of 1999 respectively. Real GDP thus grew by 9 percent in the first three quarters of 1999, in sharp contrast with a decline of about 6 percent during the same period last year. Indeed, the Korean economic recovery has been faster and stronger than in other countries that suffered similar financial crises (Box II.1).

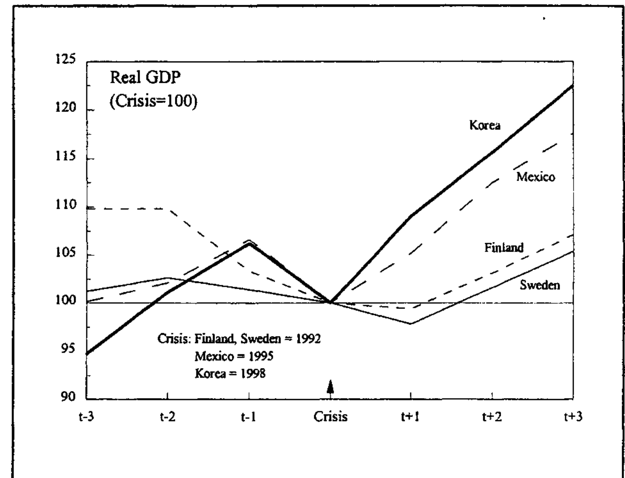
11. **The contribution of net exports to GDP growth in 1999 has moderated considerably, in sharp contrast with 1998.** Owing to the fast pace of recovery in imports (reflecting strong economic activity and an unwinding of the severe import compression in 1998), the contribution of net external balance to GDP growth was slightly negative in the three quarters of 1999, a trend which is expected to continue for the rest of 1999.

Box II.1. Comparison of Korea's Recovery with Other Crisis Countries

A comparison of Korea's recovery with those of Sweden, Finland and Mexico – which experienced similar financial crises during the 1990s marked by severe external shock, exchange-rate depreciation and a banking crisis – reveals some striking differences that may explain why Korea has been able to adjust as quickly as it has.

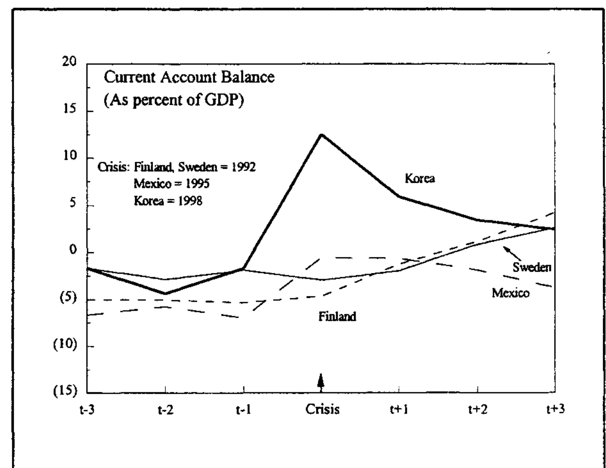
The Korean economy's turnaround has been quicker, stronger and broader based than in Finland, Mexico, and Sweden. The economy bottomed by the fourth quarter of 1998, roughly one year after the onset of the crisis. Although initially externally driven—with net exports contributing 12 percent to GDP growth in 1998—the recovery has broadened to private consumption and investment thanks to improved sentiment, corporate profitability and a regional recovery.

Sweden and Finland entered deep and prolonged recessions well before the financial crises struck in 1992 when the currency peg was abandoned. Their recessions were triggered by a combination of adverse factors, including the bursting of an asset price bubble and an overvalued exchange rate. Finland's recession was more severe mainly because of the collapse of trade with the former Soviet Union and a terms of trade shock. Starting in early 1990, their recessions lasted three full years. Sweden's real GDP contracted by a cumulative 5 percent, Finland's by almost 9.5 percent. The initial recoveries were narrow and externally driven. Domestic demand began strengthening only in late 1994.



Mexico went into a severe recession in 1995 following the financial crisis in late 1994. Real GDP contracted by 7 percent in 1995. Similar to Korea, Mexico's economy rebounded swiftly. The recovery ensued within six months of the financial crisis and was driven chiefly by booming exports, benefiting from market-opening trade reforms, strong partner country growth and an improvement in terms of trade.

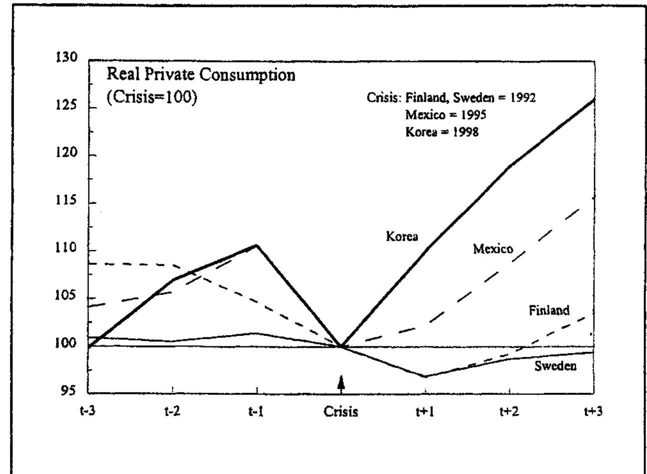
In all countries, the external sector led the recovery and contributed to a sharp turnaround in the current account. But the nature of the external adjustment differed. While in Finland, Mexico and Sweden, strong exports led the recovery and current account swing, in Korea, import compression rather than a burst in exports led the initial current-account swing. However, since mid-1998, robust export growth, benefiting from a competitive exchange rate, the regional recovery and rising semiconductor prices, has also contributed.



Korea enjoyed several advantages in the pre-crisis period—a fiscal surplus; high household savings; and a relatively balanced pre-recession real estate market—which helped the country come out of the recession relatively quickly.

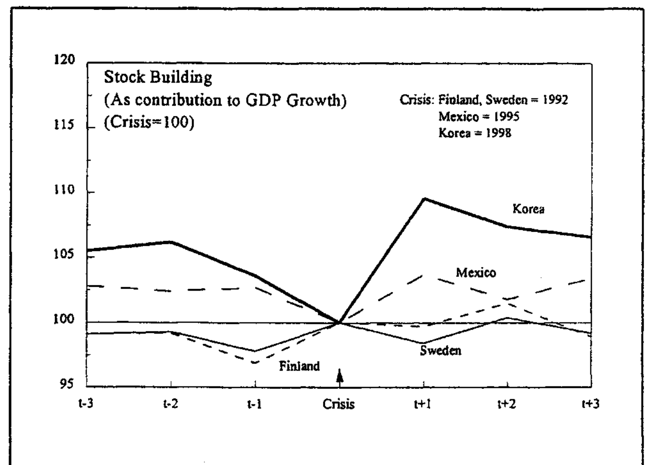
Governments' ability to respond with fiscal and monetary policy differed. Korea entered its recession and financial crisis with very low public debt and fiscal surplus, allowing greater latitude in countercyclical policies and in absorbing bank restructuring costs. In Sweden and Finland, public finances deteriorated rapidly with the recession, and were at the core of the crises, leaving less room for fiscal accommodation. The downturn in Sweden

and Finland was also prolonged by the authorities' tight monetary policy stance used to defend an overvalued currency. In Mexico, the government sought a fiscal surplus to offset foreign capital outflows and the effects of higher external debt service and bank restructuring costs, dampening its recovery.

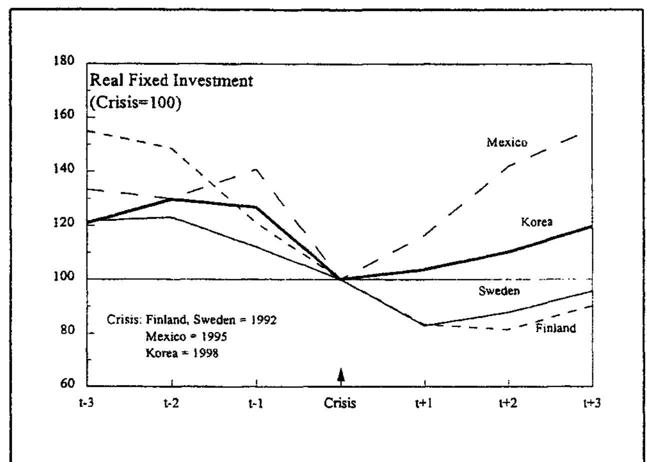


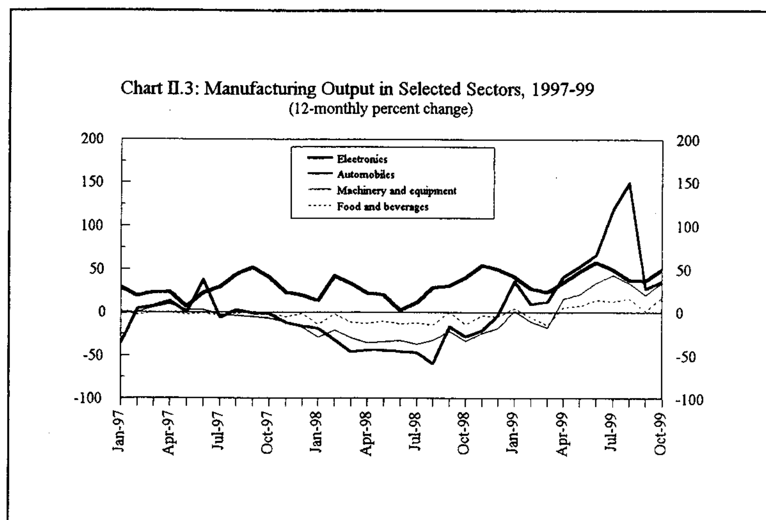
Korea's **private consumption** rebounded very fast, despite high unemployment and a real-wage decline, due to Korea's exceptionally high household saving ratio (23 percent average between 1995-1997) and low debt burden. A revival of private consumption in Finland and Sweden, but also Mexico, by contrast, was slow to come. Households were heavily indebted going into the recession, forcing a sharp retrenchment when interest rates rose and credit contracted. This sparked a major increase in household savings, effectively precluding any swift revival of private consumption and prolonging the recession.

Investment recovery has been swifter in Korea. There is a strong technical element to the rebound, however. Companies faced a severe liquidity squeeze as sales collapsed and banks were reluctant to finance working capital. This forced companies to rapidly destock to free up cash and reduce costs. A large share of these inventories also were exported in the first quarter of 1999 in response to the depreciated currency. With the rebound in domestic demand and easing of liquidity pressures, restocking to desired levels is contributing to the recovery (4 percentage points to growth in 1999).



Fixed investment has responded surprisingly fast in Korea, after a severe collapse in 1998. There were some concerns that the capacity overhang in several heavy industries and excessive corporate indebtedness would act as drag on investment. Yet, there are signs of recovery. Capacity utilization rates have returned to their pre-crisis levels. Capital expenditure plans that were cancelled during the crisis are being executed because of improvements in corporate profitability and outlook. In addition, new emerging growth industries—such as IT, telecommunications and high-tech start-ups—are investing strongly in new equipment and upgrades. The recovery in fixed investment could also be faster in Korea than in other countries because the construction sector, where excess supply takes longer to absorb, was not overheated. The construction sector boom of the late 1980s had already unwound when the 1997 crisis hit. By contrast, fixed investment in Sweden and Finland only began to recover three full years after the recession began, reflecting largely the overhang that resulted from the construction sector boom of the late 1980s.





12. **From the supply side, industrial production began to recover during the last quarter of 1998, and the upturn is becoming more broad-based.** The growth rate (year-on-year) of overall industrial production turned around in October 1998, and has been trending upwards since then. A closer look at the major components of total manufacturing output shows that the recovery has been primarily driven by the consistent strong growth of electronics since 1997. More recently, there has been a sharp pick-up in the production of motor vehicles. The output of other sectors, especially those producing nondurable consumption goods has remained fairly stable since January 1997.

13. **The recovery has been helped by the supportive macroeconomic policy stance since mid 1998, the temporary measures implemented to alleviate the credit crunch, and progress made in implementing structural reforms.** With the strengthening of the won starting in early 1998, the call market rate was progressively lowered to below 5 percent by end March 1999. The easier monetary policy stance lowered borrowing costs by firms and interest rates across the maturity spectrum (Chapter IV). In addition, the recovery has been helped by the implementation of expansionary fiscal policy, especially since the second half of 1998 (Chapter V). The restoration of confidence (through the stabilization of the won in early 1998, build up of external reserves, and upgrade of Korea's sovereign rating) has also been instrumental in the recovery process.

D. Impact on Prices

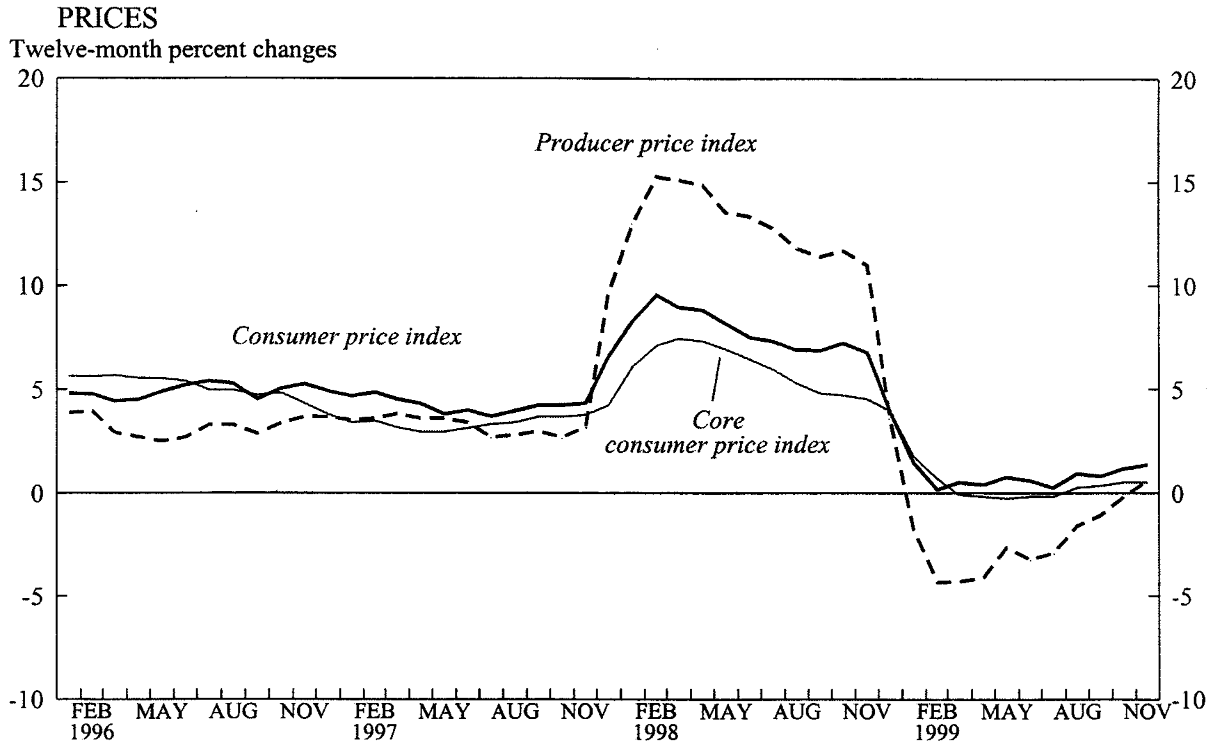
14. **Consumer price inflation jumped sharply in the immediate aftermath of the crisis, but has remained subdued since then**. However, the CPI- and PPI-based inflation rates reacted differently to the depreciation of the won at the onset of the crisis:

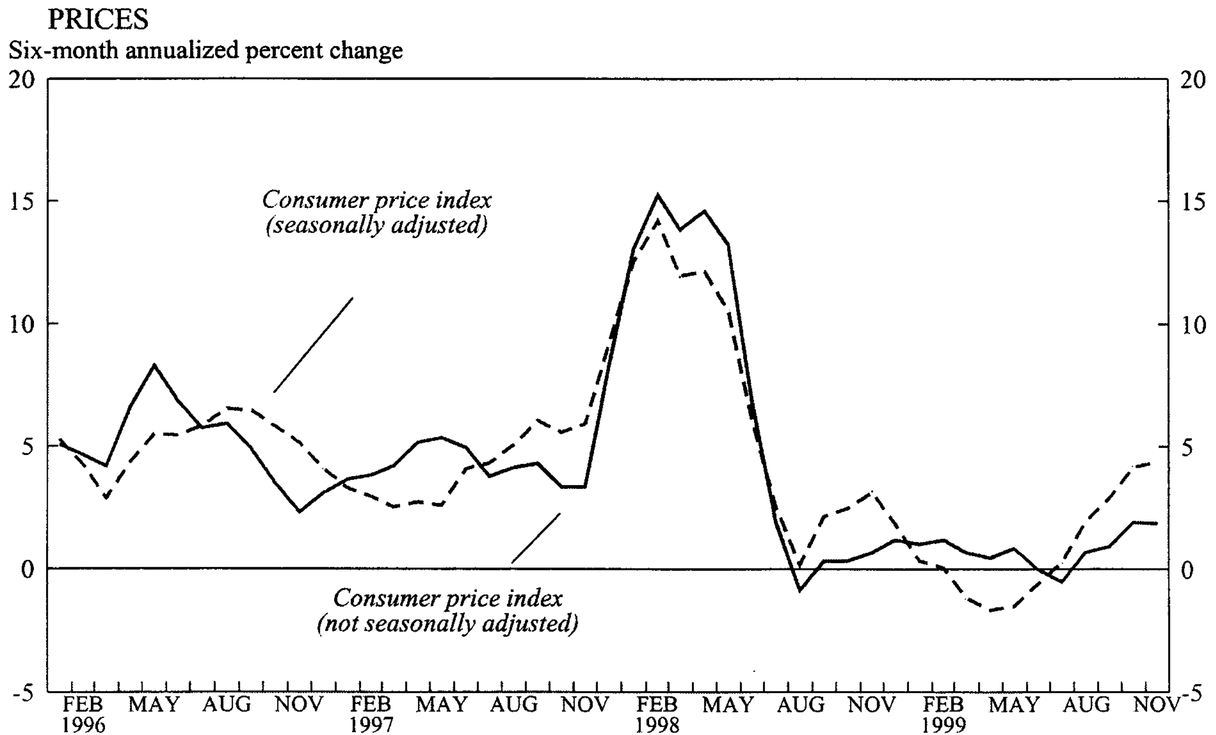
- **The CPI-based inflation rate peaked at 9½ percent (y/y) in February 1998.** The pass-through of the large exchange rate depreciation to consumer prices was only partial, reflecting primarily the collapse of imports of consumer goods and the decline of import prices.

- **The PPI-based inflation rate peaked at 15 percent (y/y) in February 1998.** The larger pass-through of the exchange rate depreciation to PPI-based inflation can be explained by the large share of imported raw materials and capital goods used in manufacturing, coupled with continued increase in production for exports.

Chart II.4
Korea

Price Developments, 1996-99





Source: Bank of Korea, Monthly Statistical Bulletin.

15. **Both the CPI- and PPI-based inflation rates have decelerated since early 1998.** The price level has remained broadly unchanged since February 1998 although the CPI has edged up in recent months. The recent increase in the CPI-based inflation—to 1.2 percent (y/y) in November 1999—is explained by higher energy and agricultural prices. Nevertheless, core CPI inflation remains very low, and producer price inflation remains negative on a year-on-year basis. The subdued inflation rates reflect the continued output gap, the appreciation of the won since the beginning of 1999, and the decline in import prices.

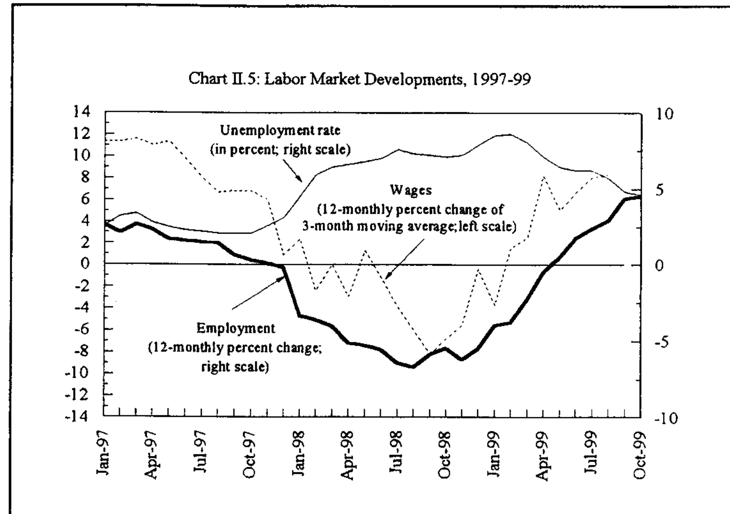
E. Labor Market Developments

16. **The financial crisis took a heavy toll on the labor market.**[3] Faced with the collapse in demand in the wake of the crisis, firms slashed both employment and wages. Layoffs were concentrated in small and medium-size enterprises where the highest rate of bankruptcies were recorded, as well as in the financial sector. By contrast, with few exceptions, *chaebol* did not undertake large-scale layoffs, although many reduced employment through voluntary separation and early retirement packages.

17. **An important policy initiative aimed at building consensus on greater labor market flexibility was the formation of the Tripatrite Commission in January 1998.** This Commission, with representation from government, business and labor, came to agreements on layoffs, payouts, reductions in overtime and bonuses. Labor laws were also changed in February 1998 to allow layoffs of redundant workers in cases of "urgent managerial need," including mergers and acquisitions.

18. **Nevertheless, firms contemplating shedding workers are required to follow strict guidelines aimed at minimizing actual layoffs.** Prior to making a final decision on layoffs, firms are encouraged to maximize efforts to avoid dismissals, including through wage cuts, reductions in working hours, freezing of new recruitment, reduction of the number of temporary workers, early retirement, and temporary shutdown. In addition, the Ministry of Labor has to be notified of layoff plans and firms must provide severance payments. Moreover, the government provides various temporary wage subsidies to firms that retain redundant workers. The government has also put in place a social safety net program in order to assist the unemployed via public works programs, unemployment insurance, vocational training, and job placement (Chapter V).

[3] Comprehensive reviews of the labor market situation can be found in KDI (1999), ILO (1999), and OECD (1999).



19. **Unemployment, which averaged about 2½ percent during 1990–97, rose sharply following the crisis to peak at 8.7 percent in February 1999**. Total employment fell by more than 5 percent (y/y) in 1998, representing a total of 1.1 million people. Unlike the past when unemployment was concentrated mainly among the young, the rate of joblessness in the 30–50 age group rose substantially. The unemployment increase in this age group, including a tripling of unemployment among heads of family in 1998, amplified the hardship caused by the crisis. The unemployment problem was moderated by a significant decline in the labor force participation rate, mainly as a result of postponement of job search by younger workers and a substantial withdrawal from the labor force by discouraged female workers.

20. **Nominal wages fell by an average of 2½ percent in 1998, or by 9 percent in real terms.** The decline in nominal wages was the first since 1970. The flexibility of wages reflected mainly adjustments of overtime payments and bonuses, which account for about ⅓ of total pay. Bonuses fell by about 17 percent in 1998, and due to the large decline in production and work hours overtime pay fell by 15 percent. In addition, during the 1998 wage negotiations, many workers had agreed to wage cuts and freezes in an effort to limit employment reduction.

21. **The labor market situation has been improving since the second quarter of 1999**. The unemployment rate has declined to 4.6 percent in October owing to the pick up in economic activity, the impact of public works program, and expanding part-time and temporary employment. Wages have also been rising steadily since the beginning of the year, reflecting the pick up in economic activity and rising demand by workers for increased pay to recover lost ground in 1998. Average wages per full-time worker have increased by about 5½ percent in the first eight months of 1999 (y/y).

22. **However, the quality of job creation may not be as strong as suggested by the headline numbers.** Given the significant decline in the labor force participation rate, the unemployment problem was actually more pronounced than indicated by official statistics. In addition, if international standards are used, the unemployment rate would be higher—in Korea, only those who have looked for work during the previous 1 week are counted as unemployed, while the ILO and OECD definitions include those who have looked for work in the preceding 2 weeks and 4 weeks, respectively. Moreover, many of the newly created jobs are for temporary and part-time employment.

F. Economic Outlook

23. **Key indicators point to continued economic expansion in the period immediately ahead.** The rise in the aggregate index of leading economic indicators continued to be robust in the third quarter of 1999. In addition, the Bank of Korea's Business Survey Index (for all industries) increased from 66 in the first quarter to 99 in the third quarter of 1999.

24. **The staff's projection for growth in 1999 has been raised to 9 percent (from 6½ percent at the time of the last World Economic Outlook).** Even this forecast has considerable upside potential. Growth is projected to slow to about 6 percent in 2000, reflecting the tapering off of the technical rebound registered in 1999 (e.g., a smaller contribution to growth from stockbuilding) and the shift of macroeconomic policies to neutral as the output gap narrows. Sustaining strong growth in 2000 and beyond will depend critically on progress made in the implementation of reforms in the financial and corporate sectors. With these reforms, Korea can lay the foundation for a growth path based on higher value-added production and strong productivity growth.

III. EXTERNAL SECTOR DEVELOPMENTS[1]

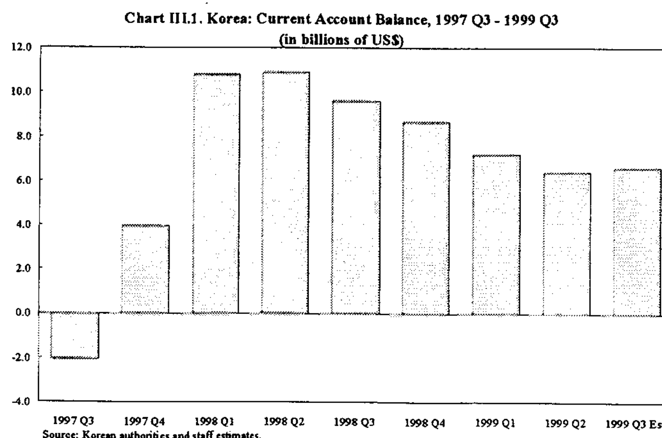
1. **Since the crisis, Korea has made considerable progress in reducing its vulnerability to external shocks.** Following the March 1998 debt restructuring agreement with commercial banks, Korea's short-term external liabilities have come down significantly from their excessive pre-crisis level. Government measures to further open Korean capital markets have also helped to attract foreign capital and reduce corporation's reliance on short-term debt and bank financing. Strong inflows in the current account, the return of foreign investors, and foreign direct investment inflows related to corporate restructuring, have helped Korea to rebuild quickly its international reserves. The rest of this chapter is organized as follows: Section A describes the evolution of the major components of the current account; Section B outlines capital and financial account developments; and Section C presents details of the liberalization of the current and capital accounts.

A. Developments in the Current Account

2. **A remarkable feature of Korea's economic performance following the crisis has been the large turnaround in the current account balance.** This turnaround has played a major role in helping Korea to rebuild quickly its international reserves and restore investor confidence in Korea. Specifically, the current account moved from a deficit of 1.7 percent of GDP in 1997 ($8 billion) to a large surplus of 12½ percent in 1998 ($40 billion)—a turnaround of almost $50 billion. While much of the turnaround was due to the sharp reversal of capital flows and the collapse of imports associated with the severe recession, other factors, including the national export drive, the significant real depreciation, the strong inflows of transfers from Korean living overseas, and the impact of the inventory decumulation were also important.

3. **The switch to a current account surplus was mainly due to a sharp improvement in the trade account.** Korea's current account deficit averaged around 2½-3 percent of GDP during 1995-1997, and in the three months prior to the crisis, amounted $2½ billion (Chart III.1 and Table III.1). Starting in Q4 1997 (November), however, the current account switched to a surplus reaching a peak of $10.9 billion in Q2 1998. The trade balance jumped from almost zero in Q3 1997 to a surplus of $4 billion in Q4. Imports in all commodity groups fell sharply while exports remained fairly steady during the early part of 1998. The nontrade current account (services, income, and transfers) also showed strong improvement moving from a deficit of $2 billion in Q3 1997 to a surplus of $1 billion in Q1 1998. As Chart III.1 shows, the current account surplus began to shrink after the first half of 1998.

Chart III.1. Korea: Current Account Balance, 1997 Q3 - 1999 Q3 (in billions of US$)



Source: Korean authorities and staff estimates.

[1] The principal author of this chapter is Kenneth H. Kang.

Table III.1. Korea: Developments in the Current Account, 1997 - 1999
(In billions of U.S. dollars)

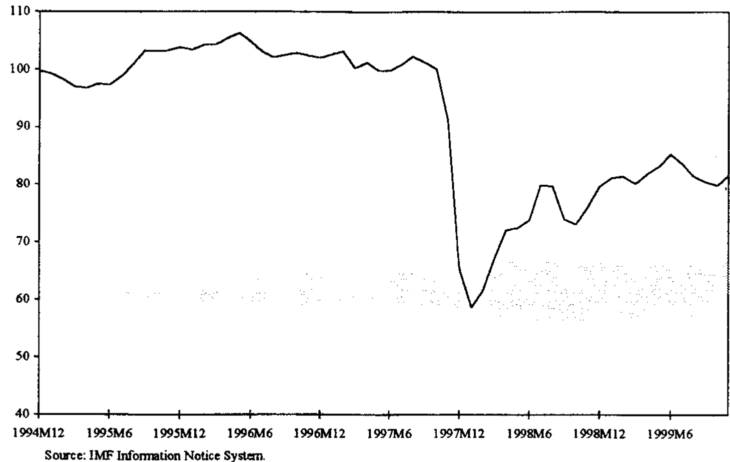
	1997					1998					1999		
	QI	QII	QIII	QIV	1997	QI	QII	QIII	QIV	1998	QI	QII	QIII
Current account balance	-7.4	-2.7	-2.1	4.0	-8.2	10.8	10.9	9.6	8.7	40.0	6.8	6.0	6.6
Trade balance	-5.4	-0.8	-0.0	3.1	-3.2	9.7	11.3	10.3	9.8	41.2	7.1	7.4	7.2
Exports	31.1	36.0	34.9	36.7	138.6	32.8	34.3	31.2	33.6	131.8	31.7	35.5	36.1
(growth rate, y / y)	(-2.8)	(9.2)	(15.8)	(5.0)	(6.7)	(5.5)	(-4.6)	(-10.6)	(-8.6)	(-4.9)	(-3.2)	(3.5)	(15.9)
Imports	36.5	36.8	34.9	33.7	141.8	23.1	23.0	20.8	23.8	90.6	24.6	28.1	29.0
(growth rate, y / y)	(6.2)	(2.0)	(-2.1)	(-13.5)	(-2.2)	(-36.7)	(-37.5)	(-40.3)	(-29.5)	(-36.1)	(6.6)	(22.1)	(39.1)
Services (net)	-1.4	-1.1	-1.4	0.7	-3.2	0.5	0.1	-0.1	-0.1	0.4	-0.1	-0.3	-0.3
Income (net)	-0.4	-0.8	-0.6	-0.7	-2.5	-0.7	-1.3	-1.1	-1.7	-4.8	-0.8	-1.2	-0.7
Current transfers	-0.1	-0.0	-0.1	0.9	0.7	1.3	0.8	0.5	0.7	3.3	0.6	0.2	0.5
Memorandum items:													
Current account balance													
(as a percent of GDP)	...	...	...	...	-1.7	...	...	...	...	12.5	...	...	
Usable gross reserves	21.1	25.3	22.4	9.1	9.1	24.2	37.0	43.4	48.5	48.5	54.5	60.4	65.4
Usable reserve cover													
(in months of goods and service	...	...	...	...	0.6	...	...	...	...	5.1	5.3	5.2	5.56053

Sources: Korean authorities, and staff estimates.

Exchange rate developments

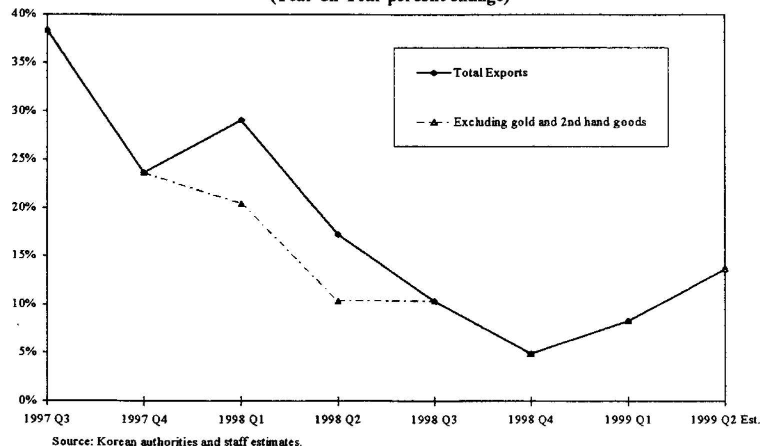
4. **The crisis also led to a sharp real depreciation of the won.** In real effective terms, the won depreciated by an average of 26 percent in 1998 (Chart III.2).[2] Following its sharp fall in late 1997 and early 1998, the won began to recover steadily such that by the end of 1998 it was about 20 percent below its pre-crisis level.[3] The currency came under significant upward pressure in the first half of 1999 due to a sharp increase in capital inflows and the continued large current account surplus. In addition to keeping interest rates low, the authorities have intervened in the foreign exchange market to smooth the appreciation of the currency and to rebuild international reserves. There has, however, also been considerable exchange rate flexibility under the managed float. The won appreciated by 11 percent in nominal effective terms during the first half of the year, but it depreciated in the third quarter because of Daewoo-related market jitters. Upward pressure resumed in November with the return of foreign portfolio investment following the announcement of the workouts for Daewoo affiliates. Taking into account these fluctuations, and in view of the strengthening of the Japanese yen against the U.S. dollar in the second half of 1999, there has been little movement in the real effective exchange rate during 1999. Specifically, as of end-November 1999, the real effective exchange rate for the won still remains some 17½ percent below its level in June 1997.

Chart III.2. Korea: Real Effective Exchange Rate, 1995 - 1999
1995 = 100



Source: IMF Information Notice System.

Chart III.3. Korea: Export Volume Growth, 1997 Q3 - 1999 Q2
(Year-on-Year percent change)



Source: Korean authorities and staff estimates.

Export performance and the response to the real depreciation

5. **Despite the competitiveness gains from the large real depreciation and government led efforts to boost exports, export growth slowed in 1998.**

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[2] Chinn (1999) applies the concept of purchasing power parity and finds that the Korean won was substantially undervalued before the crisis.

[3] See Chapter IV for a discussion of the policies adopted to arrest the free fall of the exchange rate.

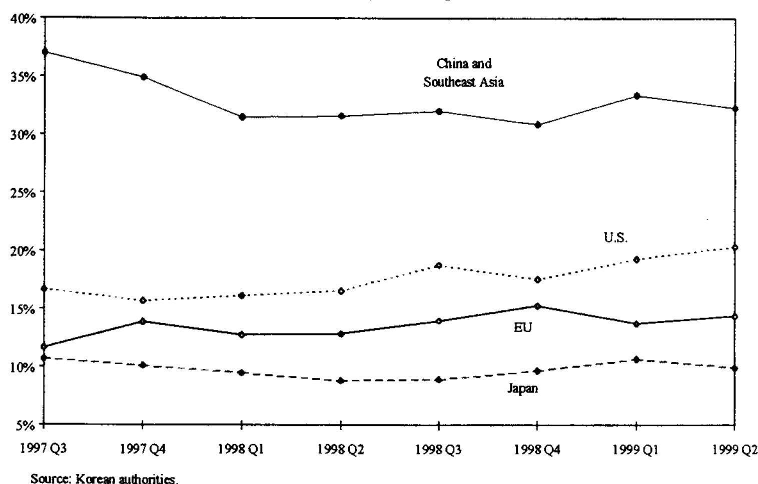
Chart III.3 shows that annual export volume growth remained on a declining trend through 1998 before showing signs of recovery in early 1999. After the onset of the crisis, the growth rate of Korean exports fell in volume terms from an average of 24 percent in 1995-1997 to 14½ percent in 1998.

6. **To help meet the urgent need for foreign exchange, a national drive to export second-hand goods and recycled gold jewelry was initiated in early 1998.** Financial institutions collected gold products (jewelry, coins, etc.), refined and exported them, and then sold the foreign exchange proceeds to the Bank of Korea. The drive had widespread national support, and is estimated to have contributed about $4.2 billion to total exports in 1998. Chart III.3 shows that the national drive also played an important role in sustaining the export growth in the first half of 1998. Excluding exports of gold and second-hand goods, export volume growth in 1998 is estimated to have been about 4 percentage points lower.

7. **In 1998, Korean exports responded slowly to the large real depreciation of the won and were hampered by several factors** including: (i) weak world demand; (ii) a collapse in trade financing associated with external creditors reducing their exposure to Korean firms and banks; (iii) continued declining export prices; and (iv) the high import content of Korean exports.

8. **External demand, particularly in Asia, remained weak in 1998** and hampered the response of Korean exports to the real depreciation. Reflecting the disparity in economic conditions between regions, exports to China, Japan, and Southeast Asia in 1998 fell by 17 percent in value terms, while exports to the U.S. and the EU rose by 6½ percent. As a share of the total, exports to China, Japan, and Southeast Asia fell from 48 percent to 41 percent in 1998, while exports to the U.S. and EU increased from 28 percent to 31 percent (see Chart III.4).

Chart III.4. Korea: Share in Total Exports by Area of Destination
1997 Q3 - 1999 Q2



Source: Korean authorities.

9. **The strong U.S. economy was a significant source of growth for Korean exports** during this period, in particular for both light and heavy industrial products. A closer examination reveals that much of the decline in exports of industrial products to Japan (mainly in electronic and metal goods) were being redirected to the U.S. and to a less extent to the EU.[4]

[4] This is consistent with the findings of Marquez (1999) that the effect of the recession in Japan on Korea's exports was more than offset by the expansion in the U.S., disputing the hypothesis that the Japanese recession was responsible for the slowdown in Korean exports prior to the crisis.

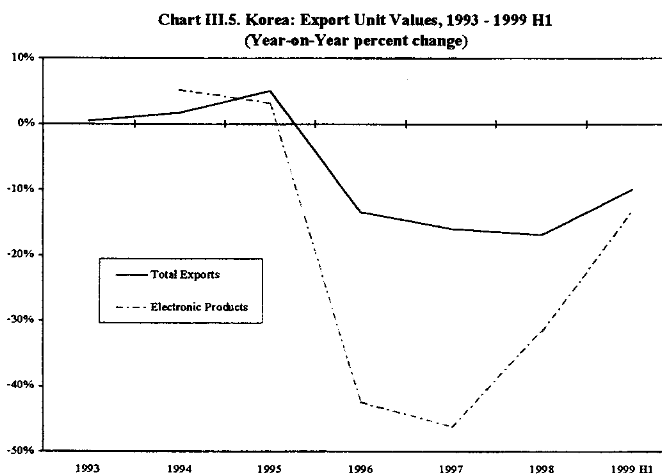
10. **Exports immediately after the crisis were also constrained by the collapse in available trade financing as external creditors reduced their exposure to Korean firms and banks.** While larger firms were able to utilize credit lines from foreign banks, smaller firms faced difficulties in opening new letters of credit. In response, during the first half of 1998 the Korean government initiated a number of programs to help address the difficulties experienced by small- and medium-sized enterprises (SMEs) including:

- Establishing a $300 million facility for the rediscount of export bills in the BOK.
- Increasing the capital of the Korean Credit Guarantee Fund (KCGF) and the Korean Technology Credit Guarantee Fund (KOTEC) whose objectives were to provide credit guarantee services to viable enterprises that lacked tangible collateral.
- Creating a $3 billion import financing scheme for SMEs supported by the World Bank Structural Adjustment Loan (SAL) and by the reserves of the BOK.[5]

11. **The use of the trade financing scheme, however, got off to a slow start** as commercial banks remained cautious in assuming additional risk in lending to SMEs, while SMEs themselves relied upon their traditional links to large conglomerates for purchasing needed raw material imports. Although the program was later expanded to include larger non-chaebol companies, through mid-July, only $0.7 billion out of the available $3 billion in the trade financing scheme and only $25 million of the available $300 million in the BOK facility for the rediscount of export bills was utilized.

12. **Exports were also constrained by the decline in export prices**, led mainly by the price of semiconductors, which continued to fall throughout 1998 and 1999 (see Chart III.5). After having fallen by a cumulative 27 percent from 1995 to 1997, export unit values declined by a further 17 percent in 1998. The price of electronic products, which make up roughly 26 percent of total exports, fell by almost 80 percent from 1995 to 1998 (by 32 percent alone in 1998). Light industrial exports, which make up roughly 25 percent of total exports, fell in price by 20 percent over the same 3-year period. The terms of trade, however, improved slightly in 1998 (by 2 percent) as import prices fell by more than export prices in 1998. Nevertheless, the terms of trade still remained some 22 percent below its level in 1995.

Chart III.5. Korea: Export Unit Values, 1993 - 1999 H1
(Year-on-Year percent change)



[5] The purpose of the scheme was to provide trade financing to SMEs on commercial terms with a maximum duration of six months.

13. **Finally, the large import content of Korean exports limited the competitiveness gains from the large real depreciation**. In 1997, the share of imports used for export production was around 37 percent, implying that the gains from the large real depreciation of the won were partially offset by higher import prices for inputs to production. In 1999, this increased to around 39 percent, reflecting to some degree the restocking of inventories.

14. **Exports continued their strong growth in 1999, led by electronics, semiconductors, and automobiles.** Export volume growth during the first three quarters of 1999 is estimated to be around 12 percent (year-on-year). Exports of crude materials and light industrial products were stagnant, while exports of electronic products and automobile, particularly to the U.S. and Japan, remained strong. Export prices, after declining about 9 percent during the same period, also showed signs of a turn-around starting in Q3 1999, largely as a result of the recovery in world electronic prices.

Import compression and substitution

15. **The large turnaround in the current account was also due to the sharp compression of imports following the onset of the crisis**. In value terms, imports in 1998 were some $50 billion below their level in 1997. As Table III.2 shows, imports across all major commodity groups, except for cereals, fell sharply in volume terms in 1998. In particular, capital goods which make up roughly 40 percent of imports in 1998, fell by 21 percent in real terms.

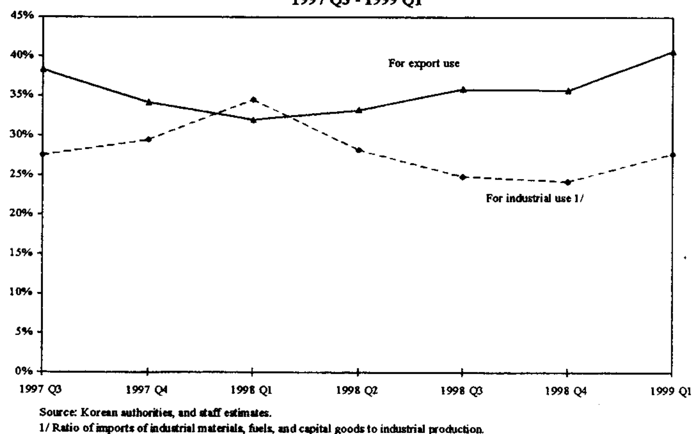
Table III.2. Korea: Volume Growth of Imports, by Selected Groups, 1995-99
(Year-on-Year percent change)

	Total imports	Consumer goods	Cereals	Industrial materials	Crude petroleum	Capital goods
1995	21.2	22.0	13.9	19.0	10.0	23.9
1996	12.6	17.6	9.7	9.8	15.5	14.9
1997	1.5	1.0	-11.1	6.4	21.1	-4.4
1998	-21.0	-33.4	-0.2	-18.6	-5.6	-20.9
1999 Q2	29.0	32.0	1.1	25.4	1.4	32.5

Sources: Korean authorities; staff estimates.

16. **In addition to the slowdown in overall economic activity, the drawdown of inventories and the effects of the real depreciation also contributed to the collapse in imports.** In the face of higher domestic cost of importing, producers moved away from importing towards drawing down existing inventories for their production inputs. Chart III.6 shows that the ratios of imports for overall industrial and export production declined starting in early 1998. In particular, the ratio of imports of

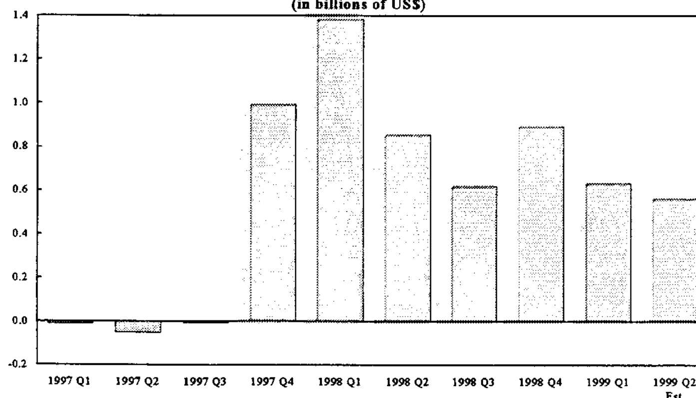
industrial raw materials, fuels, and capital goods to industrial production dropped from 35 percent in Q1 1998 to 24 percent in Q4 1998 before recovering.



17. **Also, despite the continued decline in international prices for oil and agricultural commodities, import prices expressed in domestic currencies increased significantly as a result of the real depreciation.** From November 1997 to March 1998, import prices denominated in won rose 38 percent before stabilizing. On a period average basis, import prices rose by 28 percent from 1997 to 1998.

18. **Imports in 1999 showed signs of a significant rebound, reflecting the unwinding of last year's import compression and the rapid speed of the economic recovery.** Imports surged by 27 percent in volume terms during the first three quarters of the year (year-on-year). Consumer goods, particularly non-cereal items, and capital goods led the rebound, growing in volume terms by 31 percent and 36 percent respectively during this period. Import unit values also began to rise in early 1999, driven mainly by the recovery in oil prices.

Developments in the nontrade current account



19. **The sharp turnaround in the current account was also helped by one-time factors affecting the service and transfer accounts,** which are estimated to have added some $4.5 billion to the current account surplus in 1998 (Chart III.7). These included: (i) a deferment of interest payments from 1998 to 1999 granted under the debt restructuring program (about $1 billion, see Box III.1); (ii) inflows of private transfers from Koreans living overseas ($2.5 billion); and (iii) sharply curtailed travel and study abroad ($1 billion). In particular, net private transfers increased from close to zero in 1995, to almost ¾ billion in 1997 (with nearly all of this coming in December), and then to $3.3 billion in 1998. Net transfers have started to decline from their record levels starting in end-1998 but still remain a significant source of foreign exchange inflows in 1999.

Box III.1. Korea: Debt Restructuring Agreement with Commercial Banks

On January 28, 1998, the Korean authorities and a group of 13 foreign banks reached an agreement in principle on a voluntary rescheduling of the short-term debt of 33 commercial and specialized Korean banks (including their overseas branches) and certain merchant banks.

On March 31, 1998, the debt restructuring agreement was signed, in which $21.8 billion (96 percent of eligible debt) was tendered from 134 creditor banks in 32 countries. The debt covered interbank deposit obligations as well as short-term loans owed to foreign banks and financial institutions that matured during calendar year 1998. It excluded: (i) trade related debt; (ii) bonds and publicly traded securities (i.e. commercial paper); (iii) overnight deposits and lines of credit; (iv) obligations arising from derivatives; (v) off-balance sheet obligations; and (vi) foreign exchange contracts.

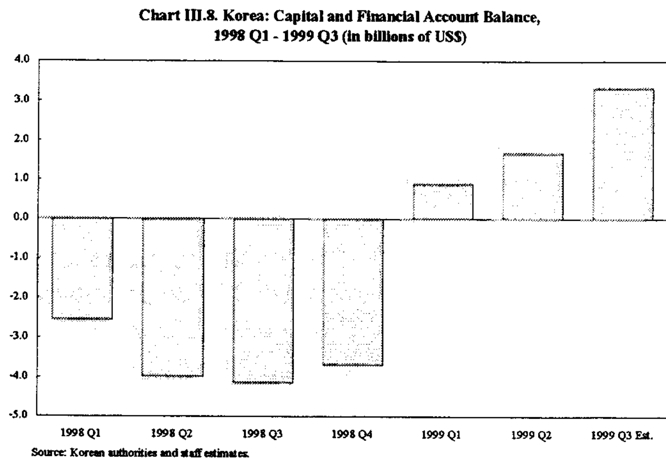
The original deposits and loans were converted into new loans in the form of "transferable loan certificates" which could be transferred to other financial institution and carried an explicit guarantee by the Government of Korea. Creditor banks chose from a menu of three options in restructuring their original claims, all of them with bullet amortization and semi-annual interest payments: (i) a 1-year rescheduling at an interest of 225 basis points above 6-month LIBOR ($3.8 billion), (ii) a 2-year rescheduling at an interest rate 250 basis points above 6-month LIBOR ($ 9.8 billion); and (iii) a 3-year rescheduling at an interest rate of 275 basis points above 6-month LIBOR ($8.3 billion). Individual creditors were not permitted to choose more than 20 percent of their exposure for the 1-year rescheduling option.

The new loans were denominated in U.S. dollars except for those loans that originally were issued in yen or deutsche marks. Korean banks reserved the option to prepay the new loans having final maturities of two or three years, in part or in full, on any interest payment date, without premium or penalty, but no earlier than the first 6-months after the completion of the operation. A number of Korean banks have availed of this prepayment option.

B. Capital and Financial Account Developments

20. **Movements in the capital and financial account have also been very sharp.** Immediately following the onset of the crisis, the capital and financial accounts switched from a surplus to a deficit as a result of the large outflow of portfolio investment and curtailment of short-term capital, and remained in deficit through 1998. Starting in the first quarter of 1999, the capital and financial accounts registered a surplus led by strong inflows of portfolio and foreign direct investment, a decline in overseas investment by Korean companies, and a slight pickup in short-term trade financing related to the economic recovery (Chart III.8).

Chart III.8. Korea: Capital and Financial Account Balance, 1998 Q1 - 1999 Q3 (in billions of US$)

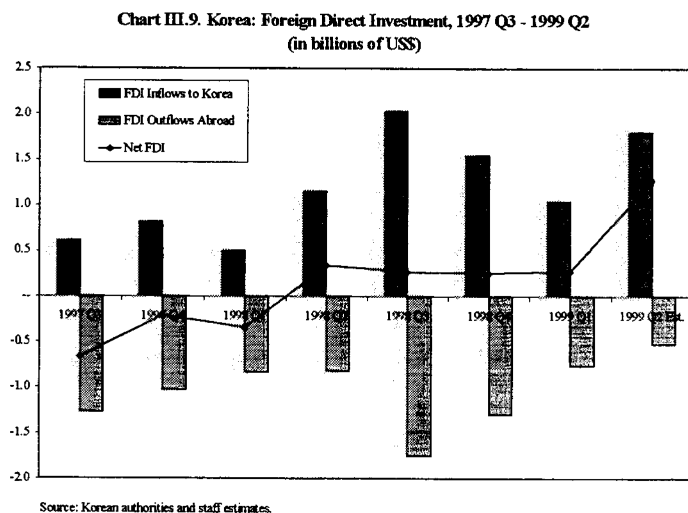


Source: Korean authorities and staff estimates.

Foreign direct and portfolio investment

21. **After the crisis, foreign direct investment into Korea picked up sharply in 1998** as companies began to rely increasingly on foreign capital to finance their corporate restructuring efforts (Chart III.9). Gross foreign direct investment in Korea (on a disbursement basis) grew from \$2.8 billion in 1997 to \$5.1 billion in 1998; for 1999, the figure is projected to be even higher.[6]

Chart III.9. Korea: Foreign Direct Investment, 1997 Q3 - 1999 Q2 (in billions of US$)



Source: Korean authorities and staff estimates.

22. **Recently, there has also been a marked shift in FDI flows away from manufacturing to the service sector.** For the first four months of 1999, the share of FDI commitments to the service sector rose from 33 percent in 1998 to 67 percent in 1999. The leading recipients in the service sector industries were telecommunications, finance, trade and hotel business.

[6] On a commitment basis, FDI is projected to rise from \$8.9 billion in 1998 to \$15 billion in 1999. So far through October, commitments for 1999 have amounted to \$10 billion.

23. **In an effort to raise capital, Korean companies have also increasingly relied upon overseas issuances of depository receipts (DRs).** In the first three quarters of 1999, Korea issued about $8 billion in global DRs, compared to only $495 million in 1998 and $630 million in 1997. The largest issuance of depository receipts so far was for Korea Telecom which raised $2.5 billion in May 1999, followed by Pohang Iron and Steel ($1.5 billion) and Hanvit Bank and SK Telecom (about $1 billion each).

24. **Korean investment overseas fell sharply starting in mid-1998**. Specifically, faced with a tighter financing constraint and the need to reduce debt-equity ratios, Korean companies significantly scaled back their overseas investment plans. Of the investment overseas by Korean companies in 1998, about 85 percent was directed to help overseas affiliates and subsidiaries meet their debt service obligations. With the improvement in Korea's credit ratings in the second half of 1998 and early 1999, overseas affiliates and subsidiaries were able to roll-over existing debt or obtain new financing, and no longer required emergency financing from headquarters. As a result, overseas investment by Korean companies fell from an average of $1.2 billion per quarter in 1998 to roughly half that in 1999.

25. **With regards to portfolio investment**, Chart III.10 shows that private equity flows rebounded sharply from the large withdrawal during the Q4 1997. Partially in response to the early liberalization measures, private equity flows began to return to Korean starting in 1998. Portfolio inflows picked up markedly in the first half of 1999 after international credit rating agencies raised Korea's sovereign rating to investment grade. Financial market jitters because of Daewoo's debt servicing problems, however, led to outflows in the third quarter. The share of Korean stocks held by foreigners rose from 14½ percent in 1997 to 18½ percent in 1998; in August 1999, the share stood at 21 percent (Chart III.11). The amount of Korean bonds held by foreigners also increased from W 209 billion in 1997 to W 968 billion in 1998.

Chart III.10. Korea: Net Equity Inflows, 1997 Q3 - 1999 Q3 (in billions of US$)

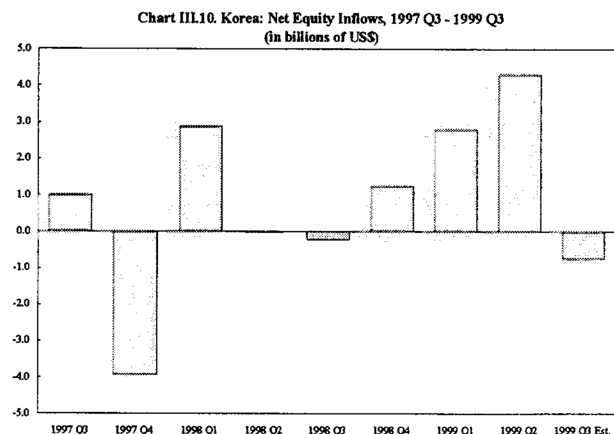
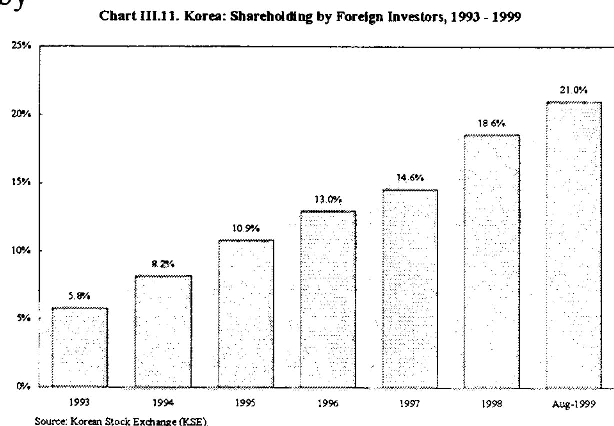


Chart III.11. Korea: Shareholding by Foreign Investors, 1993 - 1999



Source: Korean Stock Exchange (KSE)

26. **After a period of extreme volatility, the spread on international bond yields have come down to near pre-crisis levels** (Chart III.12). Following the devaluation in December 1997, international bond spreads

Chart III.12. Yield Spreads on Korean Sovereign Bond Issues
July 1997 - November 1999, in basis points

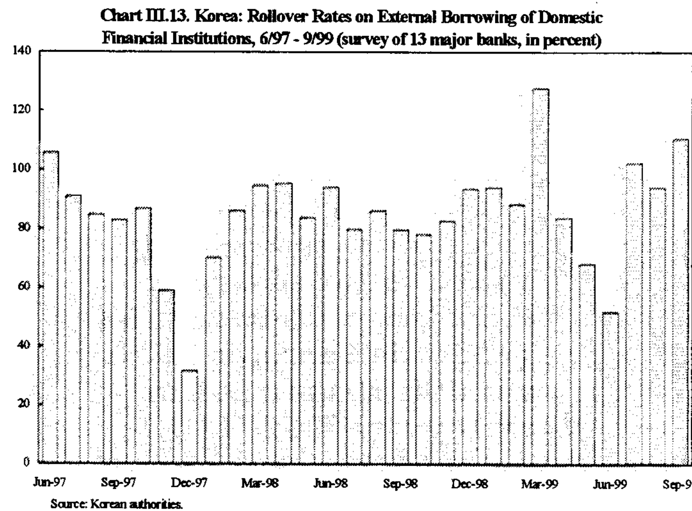
Source: Korean authorities; Bloomberg; and staff estimates

jumped from around 80-90 basis points to a peak of 850 basis points before declining.[7] In early April 1998, the Korean government issued $3 billion in 10-year global bonds (priced at 355 basis points above U.S. treasuries) and $1 billion in 5-year bonds (priced at 345 basis points over U.S. treasuries). With the crisis in Brazil and Russia and international investors again retreating from emerging markets, international bond spreads in Korea widened again, to as high as 1000 basis points. By June 1999, international spreads had come down to as low as 150 basis points.

External liabilities

27. **Since the crisis, Korea has managed to significantly improve the structure of its external debt.** Prior to the crisis at end-September 1997, Korea's total external liabilities stood at $180 billion, of which $98 billion (54 percent of the total) was short-term debt. Within two year (by end-September 1999), Korea had managed to reduce its total external liabilities to $141 billion, with short-term debt ($35 billion) now accounting for only 25 percent of the total (see Table III.3).

Chart III.13. Korea: Rollover Rates on External Borrowing of Domestic Financial Institutions, 6/97 - 9/99 (survey of 13 major banks, in percent)



Source: Korean authorities.

28. **Short-term liabilities of domestic financial institutions fell by over 50 percent from September 1997 to March 1998,** as a result of actions taken by foreign creditors to cut off new lending and limit the rollover rates of existing lines of credit to Korean financial institutions at end-1997 (Chart III.13). Following the March 1998 agreement to reschedule some $22 million of short-term liabilities into maturities of 1–3 years, short-term debt was reduced further to $34 billion by end-June 1998 (Box III.1).

29. **Short-term financing began to recover starting in the second half of 1998, reflecting the improved credit ratings of Korean companies and increased availability of trade financing.** The rollover rates on domestic financial institutions'

[7] Measured as the difference between the yield on a 10-year Export-Import Bank of Korea (KEXIM) global bond yield and a comparable 10-year U.S. Treasury bond. KEXIM is one of Korea's sovereign borrowers.

Table III.3. Korea: Stock of External Liabilities, 1996-99 1/
(In billions of U.S. dollars)

	1996	1997	1998	1999		
			Rev.	March	June	Sept.
Short-term external liabilities	**93.0**	**63.6**	**30.7**	**31.9**	**32.1**	**35.0**
(Percent of total external liabilties)	(56.6)	(39.9)	(20.6)	(21.9)	(22.7)	(24.8)
I. Financial institutions	73.0	42.4	18.9	19.2	18.2	19.4
A. Domestic financial institutions 2/	60.0	27.2	11.3	11.7	9.6	10.7
Resident domestic financial institutions 3/	26.1	12.2	6.3	6.8	6.2	6.9
Off-shore banking of domestic financial insti	7.5	5.6	2.0	1.7	1.2	1.0
Foreign branches of domestic financial instit	26.4	9.4	3.0	3.1	2.3	2.8
B. Branches of foreign banks 6/	13.0	15.2	7.6	7.5	8.6	8.7
II. Domestic corporations 7/ 8/	20.0	21.2	11.8	12.7	13.9	15.5
Medium and long-term external liabilities	**71.4**	**95.7**	**118.0**	**113.7**	**109.3**	**106.0**
(Percent of total external liabilties)	(43.4)	(60.1)	(79.4)	(78.1)	(77.3)	(75.2)
I. Financial institutions	43.5	47.5	52.0	50.3	47.5	46.9
A. Domestic financial institutions 2/	40.0	43.2	45.8	44.4	42.6	42.0
Resident domestic financial institutions 3/	23.0	26.9	28.2	27.5	26.9	25.8
Off-shore banking of domestic financial insti	11.7	11.0	9.9	9.4	8.4	8.9
Foreign branches of domestic financial instit	5.3	5.3	7.8	7.6	7.3	7.3
B. Branches of foreign banks 6/	3.5	4.4	6.3	5.9	4.9	4.9
II. Domestic corporations 7/ 8/	21.8	25.9	29.4	29.2	29.7	31.0
III. Public Sector	6.1	22.3	36.5	34.2	32.1	28.1
A. IMF	--	11.1	16.9	14.3	10.8	6.0
B. World Bank 9/	1.8	4.6	7.5	7.5	8.5	8.5
C. Asian Development Bank 9/	0.4	2.3	4.0	4.0	4.0	4.0
D. Market financing	0.1	0.7	4.2	4.2	4.2	4.2
E. Other	3.8	3.5	3.9	4.3	4.6	5.4
Total external liabilities	**164.4**	**159.2**	**148.7**	**145.5**	**141.4**	**141.0**
Memorandum item:						
Borrowings of nonresident nonfinancial Korean c	46.2	53.2	40.6	39.5	39.5	...

Sources: Korean authorities; and staff estimates.

1/ Excluding nonresident holdings of domestic bonds, estimated at US$0.8 billion at end-December 1998.
2/ Includes commercial banks, specialized banks, merchant banks, and development institutions.
3/ Includes commercial paper, call money, refinance, and term loans.
4/ Domestic finanicial institutions' offshore borrowing, excluding interoffice accounts.
5/ Domestic financial institutions' overseas branches and subsidiares, excluding interoffice accounts. The data in the table exclude the nonresident deposits in the overseas branches and subsidiaries of domestic financial institutions.
6/ Includes nonresidents' deposits, call money, refinance, term-loan, and interoffice account borrowings.
7/ Includes trade credit, loans for oil imports, and advance receipts of export.
8/ In line with international standards, these data exclude nonresident subsidiaries of Korean corporations.
9/ Including structural adjustment lending beginning December 1997.

external debt increased from an average of 30–35 percent in December 1997 to over 95 percent in March 1998 reflecting the agreement reached with foreign creditors to voluntarily rollover short-term debt. Roll-over rates on short-term debt remained above 90 percent through July 1998 before dipping temporarily as conditions in emerging markets deteriorated with the crisis in Russia and Brazil. By January 1999, rollover rates had recovered and exceeded 100 percent mainly due to increased trade financing associated with the economic recovery.

Accumulation of international reserves

30. **As a result of the strong inflows in the current and capital account, and aided by the disbursements from the AsDB, IMF, and World Bank, Korea was able to quickly rebuild its international reserve position.** After having fallen to a low of $9 billion at end-1997 (2.7 months of imports of goods and services), gross usable reserves increased steadily reaching $48.5 billion by end-1998. At end-November 1999, gross usable reserves stood at nearly $70 billion. The ratio of gross usable reserves to short-term debt has increased from 14 percent at end-1997 to 181 percent by end-November 1999. In terms of short-term debt on a residual maturity basis, the coverage ratio rises from 12 percent to 101 percent over the same period. The accumulation of reserves by the BOK also reflects (i) direct foreign exchange interventions by BOK; (ii) repayments to the BOK of both emergency and non-emergency support by commercial banks, and (iii) operational income from the sizable reserve accumulation.

31. Korea has made ten purchases totaling $20 billion under the 36-month stand-by arrangement approved on December 4, 1997. Of this amount, $13.75 billion was purchased under the Supplemental Reserve Facility (SRF). With the strengthening of the reserve position, Korea accelerated repayments under the SRF and by September 1999 had repaid the entire amount 9 months ahead of schedule.

C. Further Liberalization of the Current and Capital Accounts

32. **From the outset, the Korean program emphasized structural reforms aimed at further opening Korea's economy and addressing the problems which led to the financial crisis.** As described in Chapter I, the external financing crisis had its roots in structural weaknesses in the financial sector which left domestic financial institutions lacking in market discipline and highly vulnerable to destabilizing external shocks. These weaknesses, to some extent, were a result of government actions to regulate overseas borrowing by Korean corporations and the legacy of government control of the financial system.

33. In 1993, **the Korean government had expanded the scope for short-term overseas borrowing by removing controls on short-term borrowing by banks, while maintaining tight restrictions on medium- and long-term capital.**[8] As a result, short-

[8] See Johnston et al (1999) for an overview of how the sequencing of capital account liberalization in Korea prior to the crisis led to a bias in favor of short-term external borrowing.

term debt increased dramatically and a maturity mismatch was created, as Korean financial institutions borrowed short-term overseas in order to help finance Korean company long-term investment projects. In addition, foreign borrowing was intermediated mainly through domestic financial institutions while direct corporate borrowing from capital markets was limited, leaving domestic financial institutions highly vulnerable to external shocks. Finally, a long history of government control had left the financial system in a weakened state and lacking in market discipline, as evidenced by problems of moral hazard, inadequate expertise in credit and risk analysis, and lack of transparency in financial operations.

34. **In order to address these problems, the structural reforms in the external sector had four main objectives**:

- Open up the capital account to allow Korean companies direct access to foreign capital markets and to expand the range and amounts of financial instruments available to foreign investors. This would not only help provide Korean companies with a wider menu of financing options and lower borrowing costs, but also help shift corporate financing away from an excessive reliance on debt. Allowing Korean companies direct access to capital markets would also reduce the exposure of Korean domestic financial institutions to sudden changes in external market conditions.

- Increase foreign participation in the Korean economy by allowing for greater foreign investment and ownership of Korean companies and financial institutions. By allowing for mergers and acquisitions and imposing the threat of hostile takeovers, the opening of the market to foreigners would strengthen market discipline on managers and owners of domestic companies and help with corporate restructuring.

- Create a simple and transparent framework of rules governing the use of foreign exchange in both current and capital account transactions.

- Eliminate distortions in the trade regime and liberalize the service account in order to enhance the competitiveness of Korean companies.

Program for liberalization of the capital account: access to foreign market and corporate control

35. **From the beginning, the opening of the capital account was a major focus of the program and can be roughly divided into two stages.** In the first stage, the government moved quickly to liberalize the equity, bond, and money markets and removed the restrictions on direct corporate borrowing in order to attract much needed foreign capital and reduce the excessive amount of short-term debt. In the second stage, the controls on foreign takeovers of nonstrategic Korean companies and restrictions on

foreign ownership of corporations were liberalized to promote greater foreign direct investment and to impose greater market discipline on corporations.

First stage: opening of the capital markets

36. **In the first stage, the government took early action to open the bond and equity markets to foreign investors.** Measures undertaken by the end of December 1997 included: (i) raising 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; (ii) increasing the aggregate ceiling on foreign investment in Korean equities to 55 percent, and (iii) eliminating all foreign investment ceilings for the government, special, and corporate bond markets, including for maturities of less than 3 years. In May 1998, some 7 months ahead of schedule, the aggregate ceiling on foreign investment in Korean equities was eliminated.

37. **Given the authorities' concern about short-term inflows, the government next moved to liberalize the domestic money market in two steps.** First, the government allowed for unlimited foreign investment in domestic money market instruments starting with nonfinancial institutions in February 1998 and then with all financial institutions in May 1998.[9] The government also deepened the treasury bill market by issuing more than W 1 trillion in government notes.

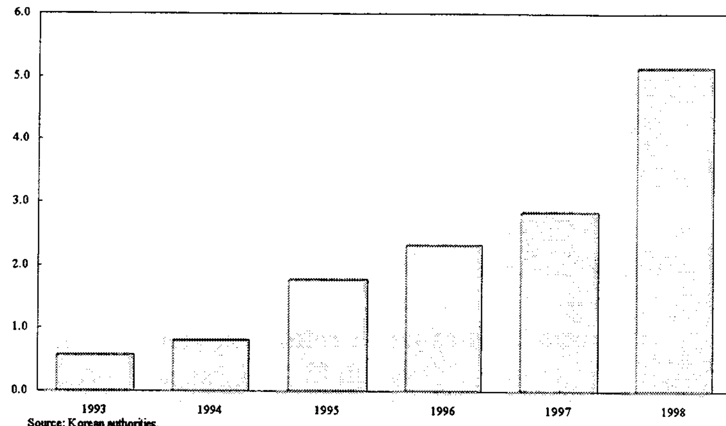
38. **The government also took steps to facilitate direct overseas borrowing by corporations.** In December 1997, the government lifted the restriction on foreign borrowing of over 3 years maturity and initiated a review of the remaining restrictions on borrowing of 1–3 year maturities as part of its overhaul of the Foreign Exchange Law. In February 1998, venture companies were allowed to borrow in excess of $2 million.

39. **As discussed above, these liberalization measures contributed to strong portfolio and foreign direct inflows,** starting as early as the first quarter of 1998. Furthermore, in response to the lifting of the restrictions on overseas borrowing, long-term external liabilities of domestic corporations rose from $25 billion at end-1997 to $30 billion by end-June 1999, while short-term borrowings by domestic financial institutions was reduced from $63 billion to $31 billion over the same period.

[9] This measure was done 7 months ahead of schedule under the program.

Second stage: liberalizing controls on corporate ownership

Chart III.14. Korea: Gross Foreign Direct Investment in Korea, 1993 - 1998 (in billions of US$)



Source: Korean authorities.

40. **In the second stage of capital account liberalization, the focus shifted towards removing the controls on corporate ownership** to allow for greater foreign participation through mergers and acquisitions and direct foreign investment. In order to promote corporate restructuring, foreign investors were allowed for the first time to undertake hostile takeovers. In April 1998, the amended Foreign Direct Investment Act was put into effect which (i) permitted the takeover of nonstrategic Korean corporations by foreign investors without government approval, and (ii) raised the ceiling on the amount of stock foreigners can acquire in nonstrategic companies without approval by the company's board of directors from 10 percent to 331/3 percent. In May 1998, restrictions on foreign ownership of land and real estate properties on the basis of national treatment were abolished, and in July 1998, the government allowed equity investment in nonlisted companies.

41. **The government also pushed for greater foreign participation in the restructuring of state-owned enterprises by relaxing restrictions on foreign ownership and control.** In May 1998, the permitted share of equity ownership by foreigners of Korean telephone service providers was increased from 33 percent to 49 percent. Other public utility sectors are also being considered for further privatization with greater foreign involvement.

Streamlining the administrative procedures on the use of foreign exchange

42. **The opening of the capital account was also accompanied by further liberalization of the rules governing the use of foreign exchange.** The objective was to replace the cumbersome set of laws and restriction on foreign exchange transactions with a simple and transparent framework. In April 1999, the first stage of the new Foreign Exchange Transaction Act was put into effect. The first stage streamlined the various procedures of current account transactions by corporations and financial institutions and moved from a Positive List System to a Negative List System for capital account transactions. Out of concern over speculative activity by non-residents, the limits on Korean won denominated borrowing by non-residents was maintained, and overseas short-term borrowing by unsound corporations are still restricted. The second stage, scheduled to go into effect by the end of 2000, will remove the remaining restrictions on

capital account transactions and relax further the guidelines on current account transactions, except those related to national security.[10]

D. Trade Reform and Liberalization of the Services Account

43. **Korea had a relatively open trade regime before the crisis, characterized by low tariff rates and dispersion.** The average tariff rate was 8 percent in 1997, including an average rate of 6 percent for manufacturing and 17 percent for agricultural products.

44. Steps taken early in the program to eliminate remaining distortions in the trade regime included:

- **Elimination of trade-related subsidies**. The government in January 1998 abolished the assistance program for domestically produced mini-computers, and in March 1998, eliminated the subsidies related to the reserves for export losses, the reserves for overseas market development, and the import content of the tax credit for investment in facilities.

- **The phasing out of the import diversification program**. In the first stage, the government liberalized 25 items from the Import Diversification Program in December 1998, and the remaining 40 items in June 1999.

- **Tariff reductions**. The number of items subject to adjustment tariffs was reduced from 62 to 38 on January 1, 1998.

- **Import certification procedures.** In August 1998, a plan to streamline import certification procedures and bring them closer to international practices was implemented.

45. Following an announcement in January 1998 that Korea would liberalize financial services as agreed with the OECD, a new offer was submitted to the WTO in January 1999. The bindings made in this offer are broadly consistent with the financial services liberalization measures agreed earlier with the OECD, although they fall short in the area of cross-border services. Starting in April 1998, the government also allowed foreigners for the first time to engage in security dealings, insurance, leasing, and other property-related businesses.

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[10] In the new Foreign Exchange Transaction Act, the government reserved the right to institute safeguard measures, including a partial or complete freeze in payments and transactions of foreign exchange or the introduction of a Variable Deposit Requirement, in the event of extreme emergencies.

IV. Monetary and Exchange Rate Policy and Developments[1]

1. **The monetary policy response to the Asian financial crisis has drawn considerable attention**, with the discussion surrounding themes such as whether and by how much interest rates should have been raised, when they should have been lowered, the effect of the change in interest rates on exchange rates and credit markets as well as the causes and appropriate response to tight credit conditions—"credit crunches." This section examines some of these issues and is organized as follows: Section A describes the framework used for the conduct of monetary policy prior to the crisis and outlines key monetary policy developments during that period. Section B describes the key policy responses to the financial turmoil, and key outcomes with respect to interest rates, exchange rates and monetary and credit aggregates. Section C outlines the changes in the monetary policy framework since the outbreak of the crisis and key developments thus far in 1999.

A. Pre-Crisis Monetary Policy Framework and Key Developments

2. **Prior to the crisis, monetary policy was aimed at the dual objectives of maintaining the stability of the value of the won and ensuring the soundness of the financial system.**[2] In practice, this translated to the government pursuing both external objectives (the exchange rate) and domestic objectives (growth/inflation) as conditions required. The Bank of Korea (BOK) sets monetary targets to achieve its objectives. Reserve money was the key operational target for day-to-day implementation of monetary operations and M2 was adopted as the intermediate target. (Box IV.1 contains definitions of key monetary aggregates.) In the 1990s, financial sector liberalization caused significant portfolio shifts which gave rise to an unstable demand for bank deposits. In particular, the restructuring of the money-in-trust system in May 1996, to clearly distinguish between money-in-trust products with time and savings deposits, triggered large portfolio reallocations. As a result, in early 1997, the BOK adopted MCT in place of M2 as the intermediate target. However, continued liberalization in the financial sector led to further large portfolio shifts between bank and nonbank financial institutions. Finally in late 1997, the BOK chose to target M3.

Box IV. 1. Definition of Monetary Aggregates

M2 is defined as M1 (currency in circulation + demand deposits at deposit money banks) plus quasi money (time and savings deposits + residents' foreign currency deposits at deposit money banks. MCT is defined as M2 plus certificates of deposits plus money in trust. M3 is defined as MCT plus deposits at other financial institutions plus financial debentures issued plus commercial bills sold plus reverse repurchase agreements plus cover bills.

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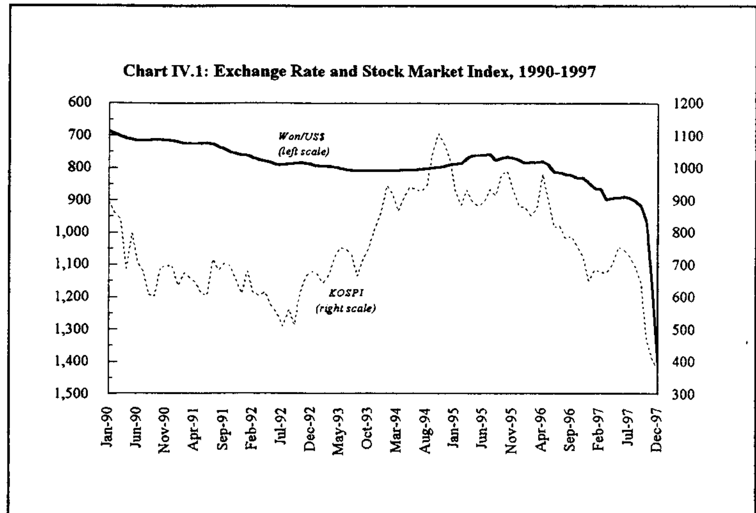
[1] The principal authorsof this chapter are Kalpana Kochhar and Cheng-Hoon Lim.

[2] For a detailed description of the evolution of monetary policy operating procedures, targets and instruments, see Kim and Kim (1998).

3. **During most of the 1990s, the exchange rate regime was essentially a tightly managed float, with the won/dollar rate moving in a very narrow range.** In March 1990, the Korean authorities introduced the market average exchange rate system (MAR) to replace the previous multi-currency basket. Under this system, the won/US dollar rate in the foreign exchange market was allowed to float within a range centered around the previous day's weighted average spot rate. The daily exchange rate band was initially set at ± 0.2 percent. The authorities would intervene as necessary to keep the exchange rate within the daily band and would suspend foreign exchange market trading if pressures proved too great. Between 1990 and 1996, the won depreciated by 2 percent on average per year against the U.S. dollar (Chart IV.1). The intervention to maintain stability of the won was partly sterilized. In the first five years of the MAR system, the BOK issued W 10 trillion (50 percent of reserve money) in new Monetary Stabilization Bonds (MSBs) to absorb liquidity.[3]



4. **As Korea embarked on the process of opening up its financial and capital markets during the early 1990s, the focus of monetary and exchange rate policy was to ensure a smooth transition to the more liberalized markets.** In addition, by July 1997, most interest rates had been deregulated.[4] With greater freedom in the movement of capital flows and the deregulation of interest rates, developments in the exchange rate were likely to be influenced to a greater extent by short-term interest rates than in the past. It was important therefore to fully integrate the interactions between money supply, interest rates and the exchange rate into a consistent monetary framework. To this end:

- First, the BOK started to pay more attention to movements in short-term interest rates and increased the use of market-based auctions to allocate MSBs as well as the use of repurchase operations to fine tune liquidity on a day-to-day basis.

- Second, in the face of increased capital flows, greater flexibility of the exchange rate was allowed. In fact, the permitted daily fluctuation margin had been steadily increased since 1990. By 1996, the daily exchange rate band had been widened to ± 2.25 percent. (In

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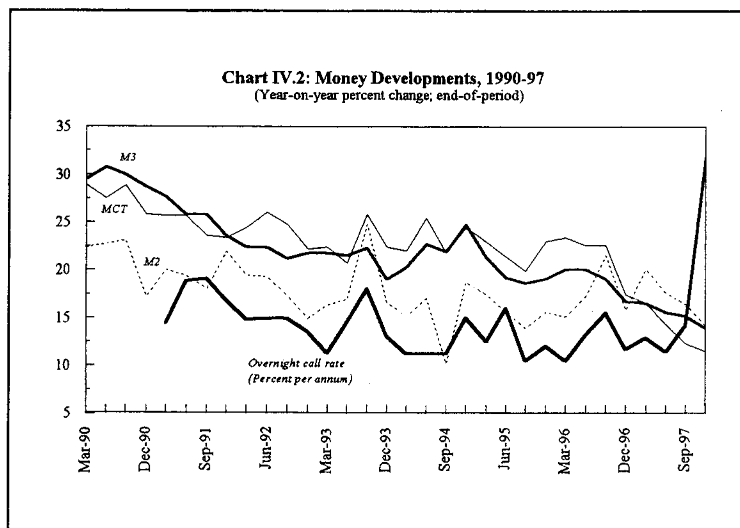
[3] This resulted in interest rates on MSBs being almost 100 basis points higher than government bonds, despite the former's shorter maturity.

[4] Interest rates on demand deposits in checking accounts and on policy loans funded by the government remained regulated and the 25 percent ceiling on interest rates was retained.

November 1997, it was widened to ± 10 percent, before finally being abandoned in mid-December 1997.)

5. **Following a period of rapid monetary and credit growth in the mid-1990s, the authorities began to tighten monetary conditions during the second half of 1996**. During the economic boom in 1994–96, broad monetary aggregates expanded and credit to the private sector grew at an average annual rate of 20 percent. As concern mounted about the inflationary impact of the sustained economic expansion, the authorities attempted to achieve a soft landing by raising short-term interest rates. Inflation was gradually brought down and contained at 4–5 percent annually through 1997. In line with the tighter policy stance, growth in broad monetary aggregates and reserve money declined (Chart IV.2).



6. **Prior to the crisis, there was little evidence that monetary and exchange rate policies were out of line with fundamentals**. The current account deficit averaged 2½-3 percent of GDP in the mid-1990s and the external position was considered sustainable. In real effective terms, the exchange rate had appreciated by about 5 percent between 1994 and 1996, and was not believed to be overvalued.[5] There was some concern over the continued expansion of credit to the private sector at double digit rates but the rate of expansion was not considered excessive compared to regional rates (Table IV.1). Moreover, credit growth had been brought down from over 25 percent in 1994. Nevertheless, to the extent that there was a preference for short-term foreign borrowing, and because of the inflexible exchange rate regime which encouraged a one-way bet on the won, there was an increase in vulnerability of the Korean economy to sudden shifts in market sentiment and a reversal in short-term capital inflows.

7. **Following the decline in the Hong Kong stock market in late October 1997, and the downgrading of Korea's sovereign risk, financial markets in Korea came under increasingly severe pressure.** The early policy responses to this pressure included intervention to support the value of the won, assurances from the Korean government that foreign debt liabilities of financial institutions would be serviced, and a short-lived increase in interest rates

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[5] Empirical studies of the degree of exchange rate misalignment prior to the crisis do not suggest that the won was overvalued. For example, Chinn (1999) finds that the Korean won was substantially undervalued prior to the crisis, while Marquez (1999) finds that the real exchange rate was not misaligned through 1996.

by 100-200 basis points in mid-November. These measures failed to calm markets and the won depreciated by about 22 percent between late October and December 3. Furthermore, the intervention to support the won, together with the fact that an increasing portion of gross official reserves had become unusable as they had been deposited at overseas branches of domestic banks, resulted in the virtual depletion of usable foreign exchange reserves.

Table IV.1: A Regional Comparison of Growth in Private Sector Credit

(year-on-year, in percent, end of period)

	Korea	Indonesia	Malaysia	Philippines	Thailand
1995	19.2	22.6	30.5	45.2	23.8
1996					
Q1	19.5	20.5	30.3	46.0	20.8
Q2	20.8	20.4	29.1	51.9	18.5
Q3	18.8	19.0	29.5	54.0	15.5
Q4	20.5	21.4	24.9	48.7	14.7
1997					
Q1	19.5	23.6	24.9	39.2	13.8
Q2	18.8	25.1	26.2	34.6	10.9
Q3	16.3	35.5	22.0	34.5	17.8
Q4	18.9	29.3	23.2	28.8	22.0
Private Credit/GDP 1/	55 (150)	55.4	93.1	49.0	100.0

Source: IFS (Monetary Survey).
1/ As of end-1996. For Korea, figures in brackets include credit extended by nonbank financial institutions.

B. Policy Responses Following the Crisis and Key Developments in 1998

Stabilizing the exchange rate

8. **The design of monetary policy in the midst of a crisis of confidence is difficult,** requiring a determination of which is likely to be the least costly in terms of foregone output—a rapidly depreciating exchange rate reflecting massive capital outflows, or temporarily higher interest rates. In Korea, as in the other Asian crisis countries, with reserves essentially depleted the choice was made to raise interest rates to restore market confidence and stabilize the exchange market. Monetary tightening to stabilize a currency under severe pressure is generally necessary for the following reasons:

- higher interest rates tend to slow capital outflows by raising the nominal return to investors from assets denominated in the currency, that is, by paying the higher risk premium demanded by investors;
- higher interest rates makes speculation more expensive by raising the cost of going short on the currency;

- tighter monetary policy reduces expectations of future inflation and therefore of future currency depreciation;
- monetary tightening—by lowering expectations of currency depreciation—reduces default risk for those with unhedged foreign currency debt exposure.

9. **Of course, higher interest rates raise the burden on borrowers with a large amount of domestic debt** and may, by raising the default risk on domestic debt, result in a further weakening of the currency.[6] Indeed, it was recognized that in Korea corporations had incurred high levels of domestic debt at variable interest rates, making their "bottom lines" dependent on the level of interest rates. At the same time, however, the high degree of exposure of banks and corporations to unhedged short-term foreign currency borrowing and the increase in financial obligations arising from a depreciation of the currency made it critical to arrest the sharp decline in the exchange rate. Therefore, despite the drawbacks and limitations of monetary tightening, the first priority was to secure exchange market stability and prevent a pervasive loss of confidence. The view taken was that a temporary but forceful increase in interest rates would demonstrate the authorities' determination to maintain monetary discipline and hence be least costly in terms of foregone output.

10. **Interest rates were raised sharply during December 1997.** The legal ceiling on interest rates was raised from 25 percent to 40 percent and subsequently removed in January 1998. The overnight call rate rose from around 12 percent in early December 1997 to 32 percent on December 26. Other market interest rates also increased sharply during this period. In particular, the average bank lending and deposit rates climbed from 12 percent before the crisis to 18 percent and the overdraft lending rate jumped 13 percentage points to 37 percent.

11. **It was recognized that for an interest rate defense to be successful, additional policy measures would be needed.** Toward this end, key measures included: (1) obtaining agreement with external creditors on restructuring short-term debt; (2) provision of liquidity support by the BOK and accelerating the program of capital account liberalization; and (3) structural reforms to address the weaknesses in the financial sector and the high degree of indebtedness in the corporate sector (Chapters VI and VII).

12. **Concerted efforts were made to persuade foreign creditors to roll-over short-term external debt in late 1997.** A formal debt restructuring agreement was signed in early 1998. The agreement to reschedule short-term debts under an explicit guarantee provided by the government was key to easing the foreign exchange constraint by allowing indebted companies breathing space to restructure their operations and to service their foreign debt obligations. In addition, as discussed in Chapter III, the authorities liberalized the policy regime for capital inflows. The conclusion of the debt agreement facilitated an upgrade in sovereign credit ratings by international credit rating agencies, and Korea's return to the international capital market. In

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[6] This is a point emphasized by Sachs and Radelet (1998).

early April 1998, the government placed two sovereign global bond issue totaling $4 billion.[7] The bond offerings were well received and demonstrated a turnaround in investor confidence in the economy. The elimination of restrictions on foreign investment in domestic bonds and other capital account liberalization measures also contributed to a pick-up in portfolio inflows from the first quarter of 1998.

13. **Several measures were implemented to ease the foreign exchange and domestic liquidity constraints.** All restrictions on foreign investment in domestic bonds were eliminated and in 1998, the aggregate ceiling on foreign portfolio investment in Korean equities was lifted. The BOK extended emergency liquidity support to distressed financial institutions, comprising W10 trillion in special loans to domestic financial institutions facing liquidity problems and $23.3 billion of foreign currency support to enable domestic financial institutions to meet their foreign currency obligations. The BOK also placed substantial foreign currency deposits at domestic banks and their branches abroad. The liquidity injection was later absorbed through open market operations.

14. **This multi-pronged approach successfully restored external stability and allowed reserves to be rebuilt.** By mid-1998, the foreign exchange market had stabilized and the exchange rate, while still far below the pre-crisis value, had appreciated quite significantly from the lows recorded in early January (Chart IV.3). By June 1998, the won had appreciated to about W1300-1400 to the dollar, up from the trough of close to W2000 to the dollar in late 1997, and remained broadly stable from about that time. The overnight call rate had begun to be lowered from early 1998 and by mid-1998, interest rates had been brought down to below pre-crisis levels.

15. **Once the task of stabilizing the exchange market was accomplished in early 1998, the stance of monetary policy was progressively eased.** A key question in this regard concerned the pace of the reduction in interest rates. Critics contended that although interest rates may have had to be increased initially, they were kept high for too long, plunging the economy into a vicious cycle of declining output, increasing bankruptcies, and further weakening of the financial sector—all of which served to weaken rather than shore-up investor confidence.[8] Several points are noteworthy in this context:

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[7] They were priced at 355 basis points over US treasuries for the 10-year bond and 345 basis points over US treasuries for the 5-year bond.

[8] A number of studies have tried to assess empirically whether high interest rates have been useful in supporting the exchange rate. In general, the results of the studies are inconclusive. Goldfajn and Gupta (1999) find that tight monetary policy does raise the probability of currency appreciation following an exchange rate crisis but this result is much weaker in cases with weak banking sectors. Goldfajn and Baig (1998) find no evidence that higher interest rates lead to weaker exchange rates and that there are periods where higher rates lead to stronger exchange rates. The evidence on credit crunches is discussed in Box IV. 2.

Box IV.2. Korea: Credit Slowdown or Credit Crunch?

In the aftermath of Korea's economic crisis, there was substantial anecdotal evidence that Korean firms were finding it difficult to obtain credit. Figure 5 confirms that a credit slowdown occurred over the period 1997-98. A credit *slowdown*, however, is a fairly general phenomenon that can be expected to occur during an economic downturn. As firms' confidence decreases and their investment outlays are cut back, the demand for credit would fall. In contrast, a credit *crunch* refers in particular to (a) a reduction in the available supply of credit and/or (b) nonprice allocation of credit (i.e., rationing). A credit crunch can arise through one or more of the following channels:

➢ The **balance sheet channel** focuses on the negative impact of a downturn on borrowers' financial position, which would raise the external finance premium they face, or make it more difficult for them to obtain credit at all. Even without a downturn, monetary tightening could weaken borrowers' balance sheets by increasing their interest expenses or shrinking the value of their collateral, also making them less creditworthy. Small and medium-sized enteprises (SMEs) could be hit especially hard, since they usually have little access to the commercial paper market.

➢ The **bank lending channel** emphasizes reductions in the supply of credit occasioned by monetary tightening or capital build-ups by banks (due to requirements to meet capital adequacy targets; especially relevant in the Korean context). As monetary tightening increases interest rates, depositors shift their funds toward other assets offered by nonbank financial institutions and banks lose deposits. It may not be so easy for banks to replace deposits with, say, new equity issues, or to win back deposits with higher deposit rates (due to the need to hold unremunerated reserves). Furthermore, if banks prefer to hold government securities (which are very liquid and may be regarded as risk-free) rather than loans, they would accommodate the reduction in their liabilities by contracting credit. Since SMEs typically do not have as much clout as the chaebols, would be likely to be penalized as well.

➢ Alternatively, banks may respond not only by reducing credit in general, but also by engaging in a **flight to quality**. That is, they could become more selective regarding their borrowers. This mechanism may in turn trigger a vicious circle (the "financial accelerator"): a downturn leads to tighter credit; tighter credit worsens the downturn; etc.

Several studies have concluded that one or more of the above mechanisms did indeed operate in Korea. Specifically, Domac and Ferri (1998) find that interest rate spreads capturing credit channel effects are significant for predicting real economic activity, and that SMEs suffer more than other businesses do from the adverse effects of credit contraction. Similarly, Ferri and Kang (1999) find that capital-constrained banks experience a more marked slowdown in loan expansion and disproportionately raise their lending rates.

However, identifying the existence of a credit crunch in a given period is difficult, since it requires (a) disentangling the supply from demand effects, and (b) identifying credit rationing. Ghosh and Ghosh (1999) estimate credit supply and demand functions for January 1992-June 1998 to determine whether, in any period, it is the supply or demand for credit which is the constraining factor. They conclude that supply was the constraining factor in Korea during the first half of 1997 (before the crisis broke), and that credit supply was not the constraining factor since then. In contrast, Kim (1999), who also estimates supply and demand functions (using slightly different specifications), concludes that there was excess demand for credit starting in 1997, increasing sharply during the crisis, and continuing through May 1998 (the end of his sample).

Ding et al (1998) use an indirect approach to study the crisis period. They point to the following: the increase in the spread between corporate and government bond yields, as evidence for the balance sheet channel (i.e., a contraction in loan supply to risky borrowers); the increase in the spread between the overdraft lending rate and the yield on corporate bonds, as evidence for the penalty faced by bank-dependent borrowers; and the increase in banks' holdings of government securities as a proportion of their total assets, as evidence for the flight to quality.

On balance, the available evidence on whether Korea experienced a credit crunch in 1997-98, is inconclusive, although it is clear that credit shortages were more pronounced for SMEs. As the recovery proceeds and balance sheets improve, the "financial accelerator" should turn into a virtuous circle.

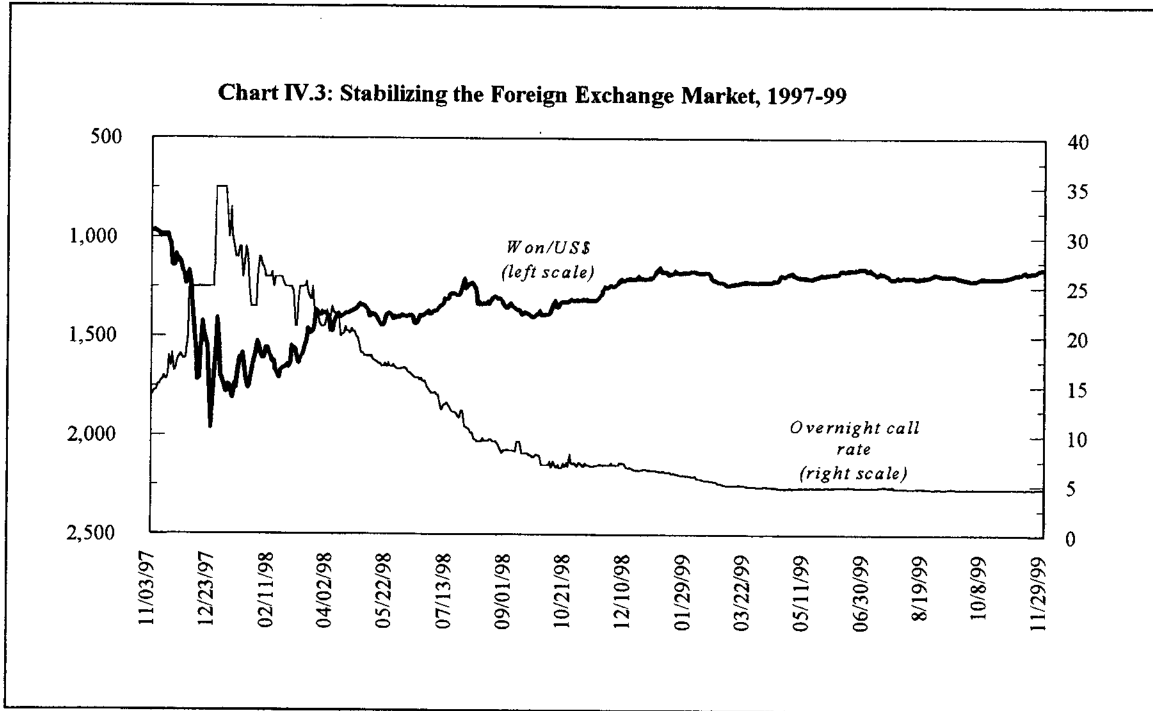


Table IV.2: A Comparison of Real Interest Rates During Crises Period 1/ 2/
(In percent unless otherwise indicated)

Country	Nominal		Real		Threshold 3/	Number of months Real > Threshold
	Min.	Max.	Min.	Max.		
Korea 4/	7.0	27.4	-0.2	19.1	7.7	7/12
Brazil	19.5	43.3	13.8	40.3	17.5	10/12
Thailand	15.6	24.9	7.5	17.7	5.4	12/12
Sweden	8.4	82.4	3.7	80.0	5.0	5/12
Mexico	29.9	70.3	-8.9	40.9	8.7	5/12

1/ Based on average monthly data of overnight interbank/call rate.
2/ The 12-month period for Korea is defined as Dec-97 to Nov-98; for Brazil Sept-98 to Aug-99; for Thailand July 97-Jun-98; for Sweden Sept-92 to Aug-93; for Mexico Jan-95 to Dec-95.
3/ The threshold real interest rate is defined as the average real interest rate during the 24 months preceding the crisis period.
4/ Year-on-year inflation.

- First, there is little evidence that Korea's monetary policy response was unusual. The degree of tightening of monetary policy in Korea—measured by the number of months during which interest rates were maintained above the average level prevailing during the two years prior to the crisis—was not unusual compared to recent experience in other countries facing exchange rate crises (Table IV.2).

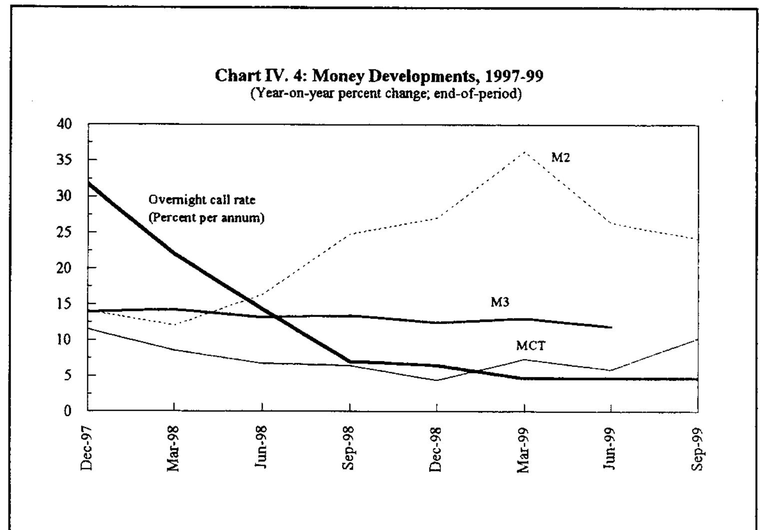
- Second, as discussed below, growth rates of money and credit did slow sharply, but it is difficult to disentangle demand and supply factors contributing to the slowdown. Moreover, studies of the impact of the decline in money and credit growth on economic activity suggest that the deceleration in real money accounted for less than ¼ of the swing in GDP growth rates between 1997 and 1998.[9]

- Third, interest rates began to be cautiously lowered in May 1998. Although the debt restructuring agreement had been signed by late March, continued caution was warranted especially in view of the unsettled global financial markets as well as the uncertain impact of the debt restructuring agreement on investor confidence in Korea. However, by June 1998, interest rates had been brought down to below the level prevailing before the crisis.

16. **In sum, the policies to stabilize the exchange rate were highly successful.** This hard-won stability, together with the replenishment of international reserves with support of the international community, was instrumental in restoring confidence in the Korean economy. Together with the easing of macroeconomic policies to support demand and growth, the improved sentiment has been a major contributor to the quick recovery from the recession in 1998.

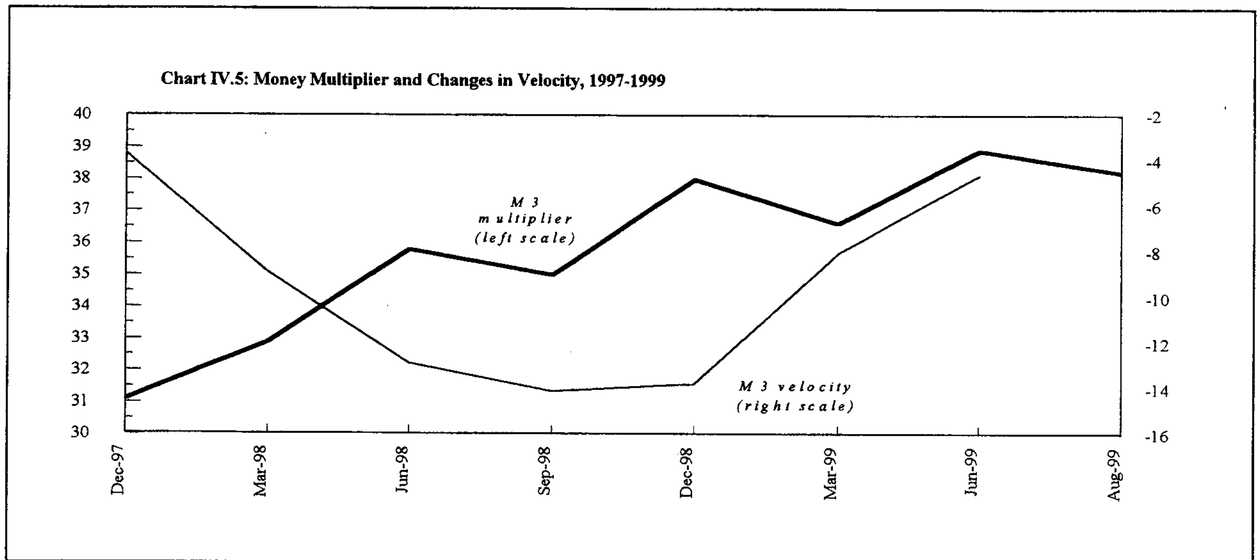
Money and credit developments, 1998

17. **Monetary developments after the crisis were marked by significant portfolio adjustment**. The uncertainty induced by the crisis combined with high interest rates triggered a rise in precautionary savings and a corresponding increase in holdings of financial assets. The lack of private spending reduced cash demand and thus had an impact on reserve money. Although reserve money declined, broad monetary aggregates continued to

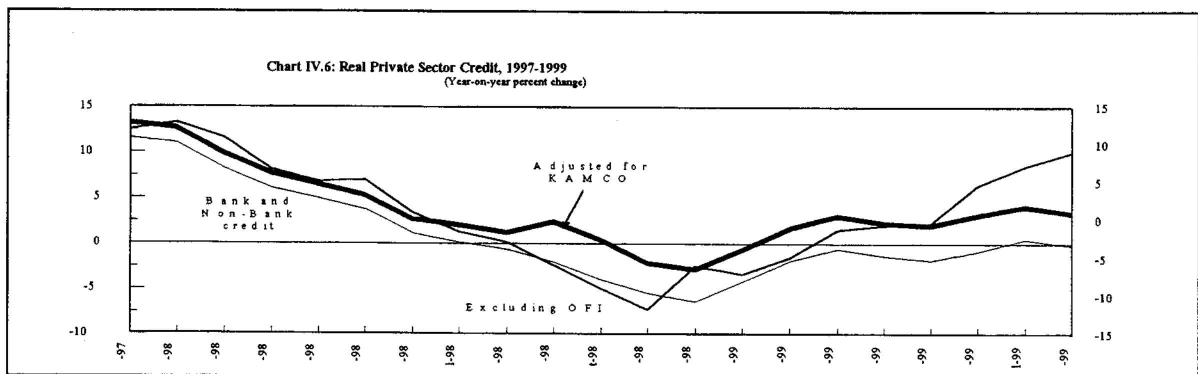


[9] This point is discussed in greater detail in Lane and others (1999).

expand as there was a shift from currency to deposits. On a year-on-year basis, reserve money fell by 8 percent in December 1998; M2 growth surged to 27 percent; while M3 grew at a steady rate of some 13 percent—driven largely by growth in net foreign assets and credit to the public sector. The divergent behavior of the monetary aggregates have implied a significant increase in the money multiplier and sharp declines in velocity in 1998 (Charts IV.4 and IV.5).



18. **There was also a sharp reduction in the growth of bank credit.** After years of double digit growth, the pace of private sector credit expansion was reduced to single digits in the second half of 1998.[10] At end-1998, growth in private credit was 1 percent, down from 21 percent a year ago. In real terms, private credit contracted by nearly 3 percent (Chart IV.6). Several factors contributed to this decline.



- As bank lending rates rose, firms scaled back investment plans and demand for loans fell. A survey conducted by the Korea Institute for Industrial Economics (KIIE) and the

[10] Private sector credit data is adjusted for purchases of nonperforming loans by KAMCO.

World Bank during 1998 of 850 firms in key manufacturing sectors found high interest rates an important factor in raising the cost of loan repayments. This is not surprising given that the corporate sector in Korea has high debt-equity ratios and, indeed, at end-1997 had the highest in the region on average (Table IV.3). In addition, the share of domestic corporate debt to total corporate debt at 73 percent was comparatively high. Assuming the level of debt stays constant, the debt service burden in Korea would have intensified as the average lending rate rose during 1998 (Chart IV.7).

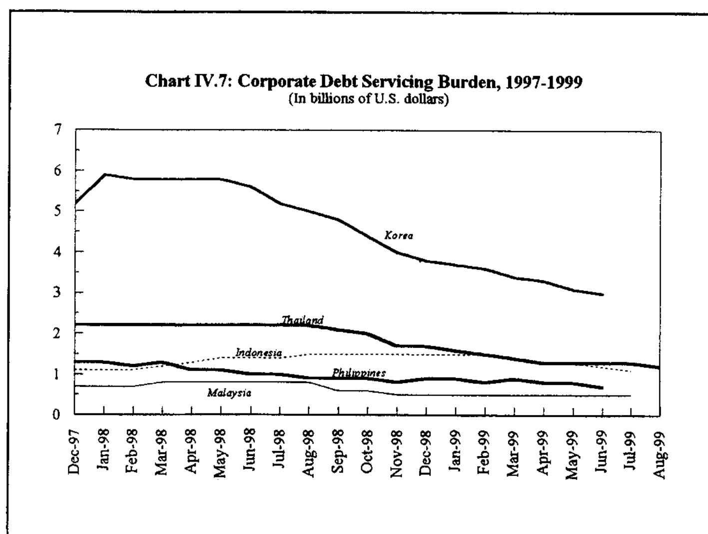
- At the same time, banks were reluctant to extend new loans in light of the greater risk of default and as a result of the deterioration in the capital base.[11] Borrowers who were dependent on bank credit had to pay increasingly higher premiums for their financing relative to firms that could issue debt on the market. The cost of bank borrowing rose as the spread between the average bank lending rate and the yield on commercial paper widened (Chart IV.8). The KIIE survey found that firms encountered difficulty in obtaining bank credit. According to the survey, the share of firms whose loan applications were rejected by financial institutions rose from 14 percent in the first half of 1997 to 38 percent in the first half of 1998. Box IV.2 contains a summary of the evidence on whether there was a credit crunch in Korea.

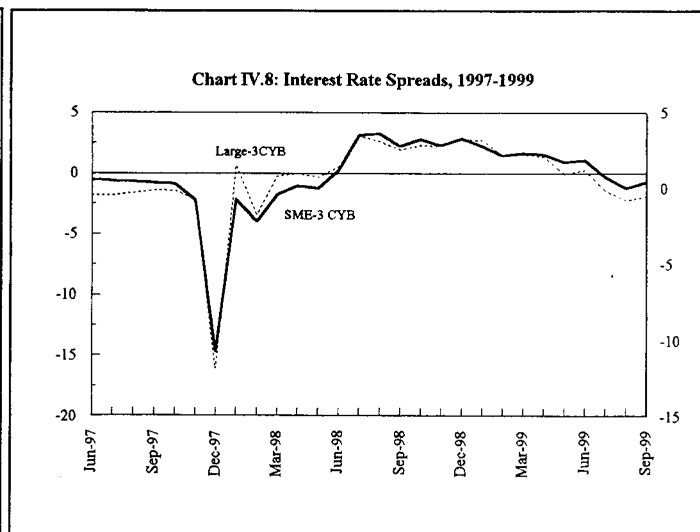
Table IV.3. Composition of Corporate Debt in Selected Countries
(In billions of U.S. dollars, as of end-1997)

	Korea	Indonesia	Malaysia	Philippines	Thailand	Japan	Taiwan
Debt–equity ratio 1/	6.4	2.3	2.2	1.9	4.1	4.3	1.4
Total corporate debt 2/	506.0	118.0	120.2	98.0	204.9	....	....
External debt 3/	99.4	67.1	40.0	23.3	29.5	....	....
Domestic debt	406.6	50.9	80.2	74.7	175.4	....	....
Average lending rate	15.3	25.4	13.3	20.4	8.5	2.0	7.8

1/ Claessens at al (1998); for Philippines, debt-equity ratio is for top 5000 corporations, excluding banks (Philippine Stock Exchange Investment Guide).
2/ World Bank and IMF staff estimates.
3/ For Korea, includes nonresident Korean corporations' borrowing overseas and resident corporations' borrowing denominated in foreign currency. Data for Philippines also includes loans to resident corporations denominated in foreign currency.

[11] In a study of credit developments in Japan, Woo (1999) found a positive correlation between bank capital and lending growth, suggesting that worsening bank capital could act as a constraint to credit growth.





- Small- and medium-sized enterprises (SMEs) were hit harder by the effects of the credit squeeze compared to larger firms. Not only were SMEs operating at lower capacity utilization and experienced significantly steeper drop-off in production than larger firms, they were also more dependent on bank credit financing. SMEs accounted for 73 percent of the total corporate financing by domestic money banks while large firms accounted for only 27 percent. By contrast, large chaebols enjoyed better access to alternative forms of credit that were easily substitutable for bank loans. In fact, gross issuance of bonds by large firms increased 22 percent between 1997 and 1998, with large firms capturing almost 100 percent of the market. Moreover, of the W12.9 trillion in outstanding listed corporate bonds in the local market, the top 5 chaebols accounted for some 60 percent. The major buyer of corporate bonds were investment trust companies, which increased their holdings of corporate bonds by 200 percent in 1998 before the restriction on the single group corporate bond holdings by financial institutions imposed later in the year dampened demand somewhat. As a result, by the end of 1998, the top 5 chaebols increased their total debt by 6 percent, with much of the increase concentrated in Daewoo and Hyundai.

19. **The authorities took a number of steps to ease the financing constraint for SMEs.** In order to increase the guarantee capacity of the credit guarantee funds, the government, with support from the World Bank and AsDB, injected some W7.5 trillion of capital into these institutions. A short-term trade financing facility of $3.3 billion for SMEs and larger enterprises not affiliated with the top five chaebols was established and the BOK provided short-term financing to temporarily illiquid financial institutions through a liquidity support facility with interest charged at the average call rate. Box IV.3 contains a summary of the measures taken to support SMEs. Additionally, the government imposed restrictions on the single group corporate

Box IV.3. Support to Small- and Medium-Sized Enterprises (SMEs) [1]

Following the onset of Korea's financial crisis in late 1997, SMEs suffered a sharp contraction in bank and trade credit because of higher perceived risk. Starting in early 1998, the authorities initiated a number of schemes to address the credit crunch problems of the SMEs.

- In early 1998, the BOK increased its rediscount facility for SMEs by W 1 trillion to W 5.6 trillion. Rediscounts were given in connection with the discount of commercial bills, foreign trade financing, and working capital loans to SMEs.

- BOK established a one-year nonsector-specific US$ 300 million export financing facility under which it rediscounted SME export bills from selected commercial banks. The BOK also deferred by one year $1 billion of refinancing falling due in 1998 from long-term commercial bank foreign currency loans to SMEs.

- In April 1998, the BOK initiated a $1 billion nonsector-specific temporary import financing facility for SMEs. Under the scheme (financed by the World Bank SAL, KDB and KEXIM) credit lines were provided to selected domestic banks to open usance LCs of up to 180 days for raw material imports. The maximum credit to a single company was limited to $10 million.

- In early May 1998, the Banking Supervisory Authorities (BSA) urged banks to roll-over SMEs loans until the end of December 1998 and conduct a "triage" analysis of SMEs with over W 1 billion in outstanding bank credit in order to separate sound companies from those needing restructuring. In early July, banks began to extend financial support to sound SMEs in form of extensions of loan maturities, new money at favorable rates (2 percent above the prime rate), debt-equity swaps and trade financing. In total, between July and end-September, banks rolled over 88 percent of loans and extended W 10.8 trillion in new money to SMEs. The BSA raised the target in new lending to be provided to SMEs by the end of 1998 from W 12.8 trillion to W 14.8 trillion.

- In July 1998, the BOK supplemented the $1 billion import financing scheme operated via KDB/KEXIM with $2 billion from official reserves, and expanded the coverage to include larger firms not affiliated with the top 5 *chaebol*. Of these additional funds, $1 billion is reserved for SMEs.

- In September, the guarantee ceiling of the credit guarantee funds was raised by W 1 trillion through a capital increase funded by the budget. The government plans to allocate $1 billion in capital from World Bank SAL II to the guarantee funds implying a further W 26 trillion increase in the guarantee ceiling. Default ratios of the guarantee funds have risen to about 20 percent from some 5 percent before the crisis.

- Credit guarantees provided by the two publicly supported credit guarantee agencies (the Korea Credit Guarantee Fund and the Korea Technology Guarantee Fund) had been increased sharply to help ease the impact of the recession on the corporate sector. The objective of these funds was to provide credit guarantee services to viable enterprises that lack tangible collateral.

- With a view to reducing the moral hazard inherent in a guarantee system which provides full insurance, the authorities have moved away from the system of full guarantees to one of partial guarantees. Some effort has already been made toward this objective: of the total new guarantees issued in 1998, 2.1 percent were partial guarantees, where the lending institutions took up to 20 percent of the risk. Beginning July 1, 1999 at least 20 percent of the new guarantees, including rollovers, issued by KCGF and KOTEC will cover only 80-90 percent of the value of guaranteed obligations depending on the credit rating of the firm.

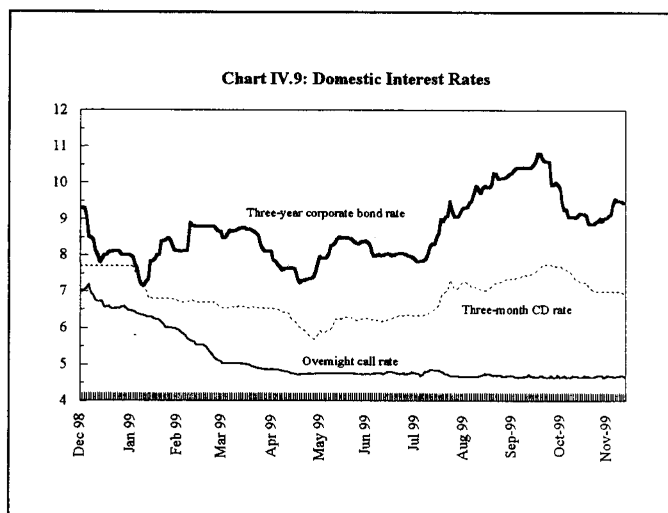
[1]SMEs are defined as enterprises employing less than 300 workers in the manufacturing sector and 20 workers in the service sector.

bond holdings by financial institutions in order to encourage financial institutions to hold bonds issued by smaller firms; this raised the share of bonds issued by smaller firms from 1 percent in the first quarter of 1998 to 9 percent in the fourth quarter. Finally, banks were allowed to phased-in over a period of two years the more stringent capital adequacy ratio requirements.

C. Key Monetary Developments, 1999

20. **In April 1998, the Bank of Korea Act was revised to allow for greater independence of the BOK as well as to transfer the supervisory powers of the BOK to the newly established Financial Supervisory Commission.** The revised Act re-defined the primary objective of monetary policy as promoting price stability and strengthened the role of the Monetary Board, the policymaking body of the BOK. The Board is now a seven-member body, comprising the Governor, three members recommended by government bodies (the BOK, the MOFE and the FSC, respectively) and three members from the private sector. The Governor serves as the chairman of the Board, a position previously held by the Minister of Finance. The independence of the central bank has been further enhanced with the reduction in the number of monetary board members—from five to one—appointed by government ministries. All members of the Board serve on a full-time basis.

21. **Since late-1998, monetary policy has been focused on stimulating and supporting economic recovery.** After a period of sustained reductions in the overnight call rate, which brought down other interest rates across the maturity spectrum, the BOK has kept the call rate essentially unchanged at close to 4.7 percent since May 1999. At the end of June, the 3-year corporate bond rate was 8 percent and the average bank lending rate was 9 percent, down from the highs of around 25 percent in January 1998 (Chart IV.9). As of end-June 1999, the total credit extended by the financial sector increased by close to 4 percent. The increase in bank lending has benefited SMEs to a greater extent than large corporations. Reserve money is also showing signs of recovery following the contraction in 1998. In particular, the transactions demand for cash has strengthened along with the pick up in private consumption. In recent months, reserve money growth has also reflected the shift in deposits from the investment trust sector to commercial banks following the Daewoo crisis. In addition, robust broad money growth combined with the rapid recovery in the economy has moderated the decline in velocity following the sharp fall in 1998.



22. **The policy response to the sharp increase in capital inflows from early 1999 involved a combination of reserve accumulation and exchange rate appreciation.** Given the cyclical

position of the economy in 1999, when the recovery from the recession was just beginning to take hold, the authorities chose to respond to the inflows by keeping interest rates low, allowing the exchange rate to appreciate and intervening in the foreign exchange market to reduce external vulnerability by accumulating reserves and to moderate the pace of appreciation of the exchange rate.[12] The won appreciated by more than 10 percent in real effective terms during the first half of 1999. The pace of appreciation was somewhat slower during the second half of 1999, owing partly to Daewoo-related market jitters and the resultant portfolio outflows, as well as the appreciation of the yen and the euro against the dollar. Through the end of November 1999, the won appreciated by some 5 percent in real effective terms. Usable reserves rose from $48.5 billion at end-1998 to nearly $70 billion at end-November 1999, providing close to full cover for short-term foreign liabilities on a residual maturity basis.

23. **Maintaining stability in financial markets became an additional consideration in the conduct of monetary policy during the third quarter of 1999.** Specifically, following the collapse of the second largest conglomerate in Korea—Daewoo—there was a sharp jump in the 3-year corporate bond rate by about 300 basis points. The increase in bond yields was triggered by investors—nervous about the ability of Daewoo to meet its debt obligations—seeking early redemption of the beneficial certificates issued by investment trust companies. These companies were forced to sell their assets, including bond holdings, to satisfy requests thus pushing up bond yields.[13] The authorities' response to the rise in corporate bond rates was two-pronged. First, the BOK reiterated its intention to provide sufficient liquidity into the system to keep the overnight call rate at around 4¾ percent. Second, the authorities established a Bond Market Stabilization Fund (BMSF), funded with contributions from banks and insurance companies, to support bond prices and push down bond yields. Chapter VI contains a more detailed description of the impact of the BMSF.

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[12] To minimize the injection of liquidity in the system, the intervention amount was partly sterilized through the issuance of MSBs.

[13] Investment trust companies have roughly 10 percent (W 25 trillion) of their total assets exposed to Daewoo.

V. THE FISCAL POLICY RESPONSE TO THE CRISIS[1]

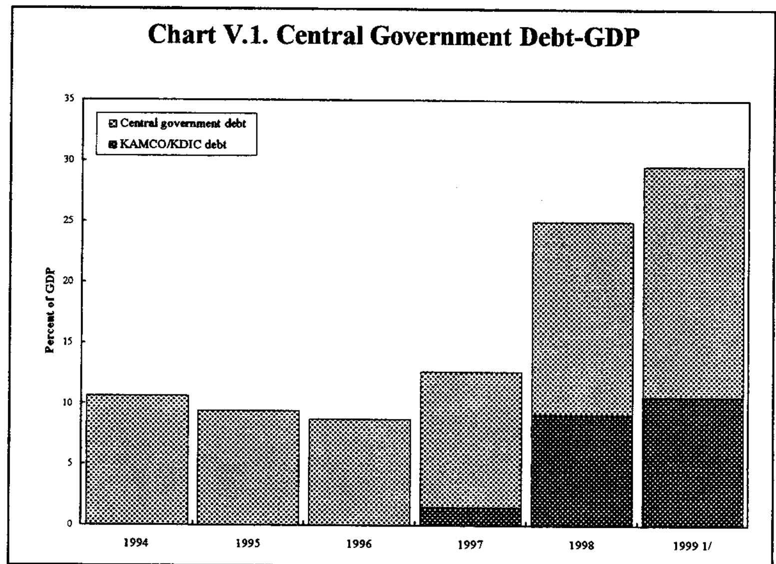
1. **In the last two years, there has been a major shift in the way the state interacts with the private sector in Korea.** In the area of fiscal policy, this change is manifested in the increased use of an activist fiscal policy to support economic activity during the severe economic downturn; the greater role of the state in providing income security for those who have lost their jobs or are in need of social support; and the provision of significant public resources to restore stability in the Korean financial sector. This chapter describes these developments. Section A provides a general overview of the evolution of fiscal policy following the financial crisis. Section B and C then highlight two particular aspects of this policy that deserve separate mention—the tax policy response to the crisis, and the reform of the social safety net to lessen the adverse distributional effects of the ensuing economic downturn. The issues relating to the costs and design of financial sector restructuring are dealt with in Chapter VI.

A. A Chronology of Fiscal Developments

Background

2. **Before the financial crisis, fiscal policy in Korea had been dominated by a culture of fiscal prudence** with the financial position of the consolidated central government remaining in balance since 1993.[2] Indeed, it has long been a common practice in Korea not to undertake spending commitments until the revenues that finance them have been received. During the 1990's the government has consistently reduced its sovereign indebtedness with the central government debt falling to a low of 9 percent of GDP by 1996. As a result, responding to the unprecedented economic downturn of 1998 required a major change of focus and attitude in fiscal policy. Instead of a fiscal policy directed towards budget balance in a time of high growth, the government has had to shift to a more supportive stance that would provide temporary demand stimulus to a worsening economic downturn.

Chart V.1. Central Government Debt-GDP



[1] The principal author of this chapter is Nigel Chalk.

[2] The consolidated central government includes the general account, 18 special accounts, and 25 extra budgetary funds. In this chapter the consolidated central government deficit and other fiscal aggregates are presented excluding privatization revenues which are treated instead as a financing item.

Table V.1. Korea: Consolidated Central Government Key Aggregates, 1995-99

	1995	1996	1997	1998	Proj. 1999
	(In percent of GDP)				
Total revenue	19.3	20.4	20.6	21.5	21.6
Tax revenue	15.0	15.5	15.4	15.1	14.7
Social security contributions	1.4	1.8	1.9	2.3	2.6
Nontax and capital revenue	2.8	3.1	3.3	4.1	4.3
Total expenditure and net lending	19.0	20.4	22.3	25.7	26.2
Current expenditure	13.2	13.4	13.9	16.0	17.8
Interest	0.6	0.5	0.5	1.1	2.3
Non-interest	12.6	12.9	13.4	15.0	15.5
Capital expenditure	3.5	4.1	4.1	4.5	4.5
Net lending	2.3	2.9	4.3	5.2	3.9
Balance	0.3	0.0	-1.7	-4.2	-4.7
Primary balance	0.9	0.5	-1.2	-3.2	-2.4
Memorandum items					
Overall balance (incl. Privatization)	0.3	0.3	-1.5	-4.2	-3.9
Cyclically neutral balance	0.6	0.6	0.4	-1.5	-0.7
Fiscal Impulse	0.2	0.4	1.5	0.6	1.5

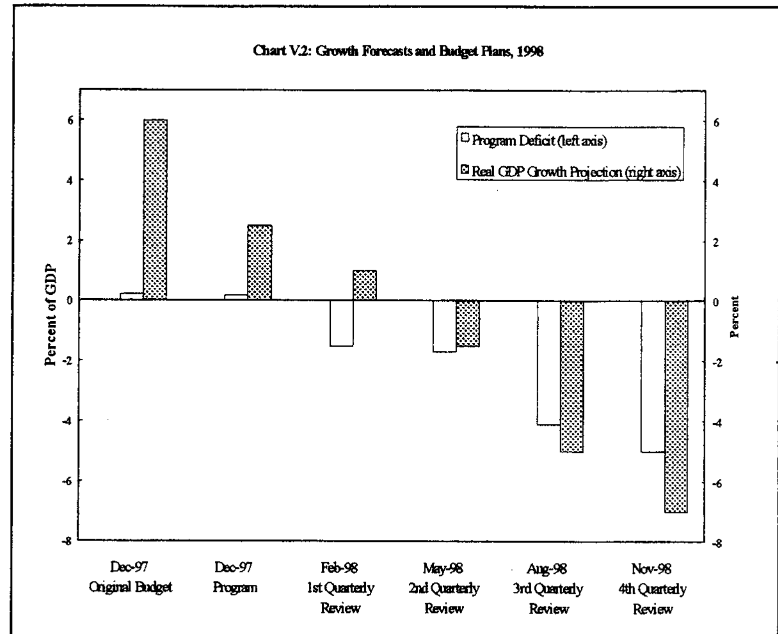
Sources: Ministry of Finance and Economy; and staff estimates.

3. **When the financial crisis hit, there was initially a general belief that the policy of fiscal conservatism should be continued**. The reasons were three-fold: First, the authorities believed that a worsening fiscal position would have placed a greater burden on monetary policy in the overall macroeconomic adjustment. Second, the expected contingent liabilities from the costs of financial sector restructuring would require an offsetting policy response in other components of the fiscal balance. Third, a tight fiscal policy would provide a positive signal to financial markets and foster a return of confidence. However, as discussed in greater detail below, the fiscal stance was adjusted in early 1998 to take account of the weaker growth outlook and the need to strengthen the social safety net.

Fiscal policy in 1998

4. **In the initial stages of the crisis, the government's priority for fiscal policy was to avoid a worsening of the fiscal position as a result of the economic downturn.** The original 1998 budget, passed on November 17, 1997 before the crisis became full blown, was predicated on real growth of 6 percent and targeted a budget surplus of ¼ percent of GDP. By early December 1997, however, growth estimates had been

downgraded to 3 percent (Chart V.2). Under this revised macroeconomic outlook, the overall balance was expected to worsen to a deficit of around ½ percent of GDP. In addition, the interest costs of financial sector restructuring were projected to add a further ¾ percent of GDP to the deficit. Faced with the prospects of a significant turnaround in the overall deficit the authorities decided to undertake offsetting policies aimed at restoring fiscal balance. Measures were introduced in late 1997 to increase excise and oil taxation, expand tax bases, freeze civil service salaries, and reduce current expenditures. In addition, the government also prepared contingency measures to increase consumption taxes and further cut discretionary expenditure should the fiscal position continue to worsen.



5. **By the end of December 1997 the extent of the crisis was becoming more clear, including its implications for activity.** This led to a reconsideration of the appropriateness of the initial fiscal policy response. In late December, the government's economic program adopted a more flexible position. Rather than trying to maintain fiscal balance the revised program focused on allowing the automatic stabilizers to operate and tolerating a deficit in the short-term. It was likely that even this policy stance would have provided only a modest stimulus to the economy as the effect of the automatic stabilizers was likely to have been weak given the high proportion of indirect taxes in revenue and the meager social safety net. As Chart V.2 shows, as the extent of the crisis slowly became apparent, greater fiscal support for the economy was programmed.

6. **By spring of 1998, the government changed the goals of its fiscal policy putting greater emphasis on providing fiscal stimulus and lessening the consequences of the crisis on the poor and the unemployed.** On February 5, 1998 the government concluded an agreement, as a part of the Tripartite Accord, that increased unemployment-related spending by about ½ percent of GDP. This effort, as well as other increases in safety net spending included in the March 1998 supplementary budget, resulted in an increase in the deficit to a projected 1½ percent of GDP. This change in fiscal stance provided a needed temporary fiscal stimulus to the ailing economy, and also, in the context of the Tripartite agreement, helped maintain social consensus and support for the government's economic program in the face of social and economic hardships that were already becoming increasingly apparent.

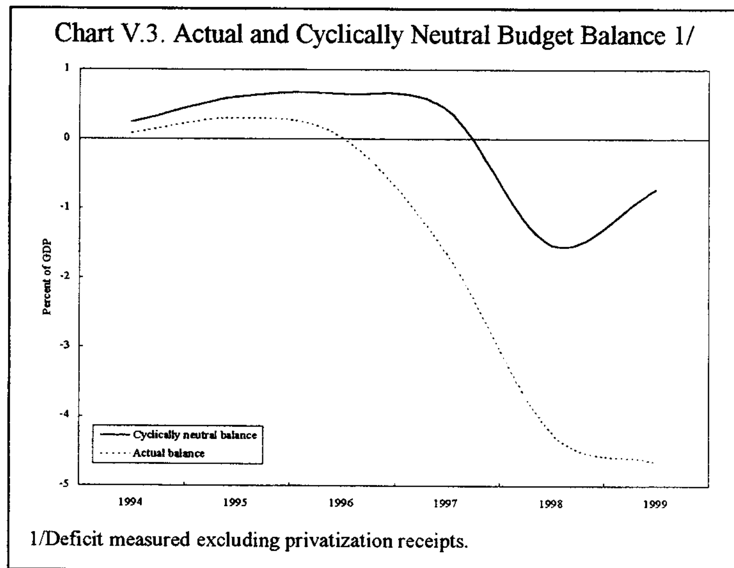
7. **Despite the deeper than expected economic downturn and the shift in the official position on fiscal policy, the first quarter actual budgetary outturn was one**

of fiscal balance. Both current and capital outlays were well below projections. In part, this slow disbursement of budgetary funds reflected difficulties in executing several of the newly implemented social safety net programs and bottlenecks in capital projects that were to be implemented by local governments. However, the balanced budget also reflected the traditional reliance on securing revenues prior to making expenditures; it soon became clear that this past practice would need to be quickly abandoned.

8. **By July 1998, the sharp drop in economic activity and an increase in social pressures led the authorities to dramatically shifting gears** with the introduction of a second supplementary budget (which was passed in September). This budget aimed to support economic recovery by further increasing spending on social safety nets by W 3.8 trillion and W 3.4 trillion in assistance to SME's through guarantees and net lending. This additional spending was partially offset by reductions in the size and salaries of the civil service and by savings from lower than expected costs of financial restructuring.[3] At the same time a package of revenue measures was introduced that increased the tax on interest income and oil products, while reducing taxes on consumer durables and automobiles. Although the thrust of the budget was appropriate, increasing the stimulus at a time of a collapse in domestic demand, some elements of the package were questionable. Specifically the introduction of higher tax rates was perhaps unnecessary at a time when economic prospects were far from certain. In addition, the initiatives on spending could have been better directed towards consumption-generating programs and the further development of the social safety net rather than the package of net lending.

9. **By the third quarter of 1998, the economic downturn had moderated and, following the approval of the supplementary budget, government expenditures began to pick-up.** Safety net programs in particular were rapidly disbursed with funds being shifted away from programs with low take-up (e.g. wage subsidy programs to prevent layoffs and subsidized lending to the unemployed) and towards faster-disbursing programs. In addition, public works programs were redesigned and, as a result, became more popular among the unemployed. By the end of the year expenditure had risen from 22 percent to almost 26 percent of GDP and the fiscal deficit reached 4.2 percent of GDP which, although less than the budgeted level, still provided considerable fiscal stimulus to the economy. As

Chart V.3. Actual and Cyclically Neutral Budget Balance 1/



1/Deficit measured excluding privatization receipts.

[3] Specifically, interest payments were less than initially estimated because bonds for bank restructuring were issued later than expected and at lower interest rates.

Chart V.3 shows, although the economic downturn would, in the absence of offsetting policy action, have resulted in the budget moving into a deficit about 1½ percent of GDP, the actual deficit was much larger. The fiscal impulse provided in 1998 is estimated to be 0.6 percent of GDP.[4]

Fiscal policy in 1999

10. **In 1999, the government intended to continue the expansionary fiscal stance instituted in 1998.** Initially a fiscal deficit, including privatization receipts, of around 5 percent of GDP was targeted. This involved increased spending on the social safety net, greater support for SME's, and additional interest payments associated with bonds issued for financial sector restructuring. At the same time spending on public sector employment was reduced and other categories of spending were depressed moderately in real terms. The intention was to front-load capital expenditures into the first half of the year in order to offset the usual seasonality of the budget and to provide the greatest demand stimulus when it was most needed. Facing a rapidly rising level of unemployment at the start of 1999, the authorities introduced in March a supplementary budget aimed at reinforcing measures for job creation and protection for the unemployed. The supplement planned an increase in spending of around 1 percent of GDP that was offset by lower than expected interest expenditures and increased revenues from the Bank of Korea profits. The net effect on the budget was an increase in the deficit (and also of stimulus) of 0.4 percent of GDP.

11. **By mid-1999, it was clear that the automatic stabilizers associated with the rapid economic recovery were going to result in a budget deficit that was well below the level targeted at the start of the year.** In June, the government decided to announce a second supplementary budget which added ¾ percent of GDP to the deficit. This supplementary budget was aimed in part at shoring up political support for the reform process. Measures included increased deductions and allowances for the personal income tax, corporate tax incentives and preferences, spending to encourage business start-ups, increased funding for subsidized lending and the credit guarantee fund, and expanded programs of free food provision to the needy. In the wake of Typhoon Olga, the National Assembly also approved additional spending of W 1.5 trillion (¼ percent of GDP) to assist victims of flood-related disasters. The net effect of the improved economic outlook, together with the supplementary budget, imply a deficit of 4.6 percent of GDP. The fiscal impulse in 1999 is estimated to be 1½ percent of GDP.

The outlook for the 2000 budget

12. **In 2000, with a strong economic recovery under way, the Korean authorities intend to redirect fiscal policy towards the process of medium-term fiscal**

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[4] Measures of the fiscal stance and the fiscal impulse (the change in the fiscal stance) are based on assumptions about potential (or noninflationary) growth. Given the difficulties in estimating potential output in the midst of major structural changes, these estimates are subject to more than the usual degree of uncertainty.

consolidation. Given the increased debt burden implied by the financial sector restructuring (see Chart V.1) as well as demographic factors, the authorities believe that the focus now should be one of reducing the stock of public debt and achieving fiscal balance by 2004. To achieve this medium-term goal the government plans to restrain the growth of nominal spending to 2 percent below that of nominal GDP. However, it is likely that expenditure restraint alone will prove insufficient to achieve the government's medium-term goals. Hence, efforts will also be required on the revenue side, such as phasing out tax exemptions and expanding the tax bases, as well as improving tax administration particularly for the self-employed.

13. **The 2000 Budget targets a deficit for the consolidated central government of 3¾ percent of GDP.** Public salaries are to be increased by an average of 9.6 percent during the year while public employment will be reduced by 1.7 percent. In addition, budgetary allocations to local governments will be increased from 13 to 15 percent of national tax revenues. To accommodate these higher expenditures while remaining on a path of fiscal consolidation, the government plans to limit the increase in Social Overhead Capital (i.e., infrastructure) spending to 5 percent, to reduce net lending programs to SMEs and the unemployed, and to dramatically reduce expenditure on publics works programs.

B. The Tax Policy Response to the Crisis

14. **In the wake of the financial crisis the government implemented a number of tax measures** with multiple, and often competing, aims such as to encourage corporate and financial restructuring, to encourage inward investment, to support regionally balanced economic development, to broaden the tax base and raise revenues, and to provide fiscal stimulus.

- **To encourage restructuring,** profits from the revaluation of assets following mergers or acquisitions received corporate tax deferrals; capital gains tax was deferred for gains accruing from restructuring; and capital gains accruing on assets that were sold to repay debts were exempt from taxation. In addition, the tax treatment of loan loss provisioning for banks was made consistent with financial accounting rules prescribed in prudential regulations.[5]

- **In an effort to attract investment,** a number of tax preferences and incentives were introduced or expanded, including various tax holidays and exemptions for import duties on capital goods. Preferential tax treatment was also introduced for performance-related pay schemes such as employee stock options, and investment

[5] Previously the banks were able to only use the general reserve method whereby 2 percent of the total loan portfolio could be deducted from taxable income. In 1997 the rules were changed allowing the taxpayer to either continue to use the general reserve method or to deduct from taxable income those provisions for nonperforming loans made in accordance with financial regulations issued by the FSC.

tax credits were expanded to encourage various forms of corporate behavior (such as investing in machinery or relocating companies to outside of the capital).

- Although some tax rates were reduced during mid-1998—such as the excise on automobiles and the tax on capital gains—steps were also taken **to protect budget revenue and broaden the tax bases**. Specifically, tax rates on cigarettes, alcohol, petroleum products, and some luxury goods were increased; VAT exemptions for professional services were eliminated; and a withholding tax on interest income was introduced (initially at 22 percent and later increased to 24.2 percent).

- **To provide fiscal stimulus and encourage private consumption,** the second supplementary budget for 1999 introduces a number of further changes to the tax law. These include an increase in personal income tax deductions and allowances; the introduction of a new deduction for credit card purchases;[6] an expansion in the eligibility for tax-free savings; and further increases in preferential tax treatment for newly established SMEs, for investment in venture enterprises, for SMEs that relocate outside of the capital, for the acquisition of new homes, and for investment in machinery.

15. **Overall, the immediate response to the unfolding crisis these tax measures provided a necessary reduction of the tax burden and removed many tax disincentives to corporate and financial restructuring.** However, in many cases the tax policy efforts, while often appearing appropriate individually to mitigate the effects of the financial crisis, have lead to a complication of the tax system, an increase in the number of tax exemptions, and, ultimately, a loss of revenue. What is now needed, given the current more stable environment, is a comprehensive review of the tax system that would aim to simplify and expand the tax bases, reduce distortions, lower rates, and ultimately improve the simplicity, efficiency, and fairness of the tax system. Looking forward, some of the areas for tax reform that could be considered include a repeal of the Asset Revaluation Tax, simplifying the VAT regime for small businesses, improvements in the current system of capital income taxation, unification of the corporate income tax at a common rate, simplifying the schedule of income tax deductions, allowances, and credits, and limits on the number of tax incentives and tax preferences.

16. **In the 2000 budget the government plans to take the first few steps towards streamlining the Korean tax system.** The VAT system for small businesses will be simplified, the special excise tax will be eliminated from a number of goods, and the withholding rates on capital income will be unified at a common 20 percent. In addition, the system of tax concessions on special savings accounts will be simplified and the

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[6] An individual will be allowed to deduct from the personal income tax base up to W 3 million for credit card purchases that are in excess of 10 percent of an individual's income. The tax authorities hope to encourage the use and reporting of credit card transactions by wage workers and then to be able to use this information to reduce tax evasion by the self-employed.

system of inheritance and gift taxation will be made more progressive and its administration will be tightened.

C. The Expansion of the Social Safety Net

17. **In the aftermath of the crisis, one of the most dramatic changes in Korea's fiscal policy was the concerted effort directed at putting in place a working social safety net.** It became clear early on that the needed financial and corporate sector restructuring was likely to lead to a major increase in unemployment and a deterioration in income distribution. Indeed, unemployment rose to 8½ percent by early 1999, labor force participation fell, and real incomes declined. The government's efforts at instituting a safety net focused on two aspects. First, providing support for those that had been made redundant and facilitating their rapid return to the workforce. Second, providing a minimum level of income for the most needy in society including the aged, children of the unemployed, and those unable to work. As a result, expenditure priorities have changed substantially in the last two years as shown in Table V.2.

Table V.2. Korea: Current Expenditure 1997-99
(in percent of GDP)

	1997	1998	1999 Proj.
Noninterest current expenditure	13.4	15.0	15.8
of which:			
Social safety net outlays	0.6	1.3	1.9
Wages and salaries	2.2	2.2	2.0
Interest expenditure	0.5	1.1	2.3
Total current expenditure	13.9	16.0	18.1

Assistance to the unemployed

18. **To deal with the increase in unemployment, in March 1998 the government expanded the coverage of the employment insurance system (EIS) to include all enterprises with 5 or more employees.** (Box V.1 contains a comparison of unemployment insurance in Korea with those in selected OECD countries.) In October 1998, the EIS was expanded further to cover enterprises with less than 5 workers, part-time workers, and temporary workers. As a result the proportion of wage workers covered by the unemployment insurance system rose from 33 percent to 70 percent. In addition to increasing benefit coverage, the government also doubled the minimum

duration of benefits to 60 days and extended the maximum duration of benefits from 7 to 9 months. This increased coverage and duration of the insurance provided valuable support to the casualties of the restructuring process.

Box V.1. Unemployment Insurance—Comparison with Selected Countries

The authorities have taken measures to expand the coverage, duration, and benefit level of the unemployment insurance scheme. A comparison with some selected OECD countries suggests that the Korean scheme is similar to schemes in other countries in terms of the minimum contribution period and level of benefits. However, coverage and duration of benefits are lower than the norm.

Coverage

Korea	Excludes employees in firms with less than 5 workers (prior to 1998, coverage was limited to enterprises of 30 or more employees), temporary, part-time and daily workers, self-employed and public sector employees (about 70 percent of the labor force);
Japan	Excludes older workers employed at age 65+ and seasonal workers working less than 4 months of the year. Coverage is voluntary in agriculture, forestry, fisheries, and in firms with less than 5 employees;
Portugal[1]	Excludes the self-employed, domestic employees, temporary, and occasional workers;
United States	Excludes casual employees, family labor, about 60 percent of agricultural employees, and the self-employed.

Minimum contribution period

Korea	6 months of contributions (lowered from 12 months in March 1998);
Japan	6 months of contributions during the past 12 months;
Portugal[1]	18 months contributions during the past 24 months;
United States	Varies by state; generally in the range of 4-5 months contributions during past 12 months.

Duration of benefits

Korea	Minimum: 2 months (raised from 1 month in March 1998). Maximum: 9 months (raised from 7 months in March 1998);
Japan	2-10 months; depending on length of insurance, age group, and employment prospects;
Portugal[1]	10-30 months depending on age of insured;
United States	6 months, with an additional 3 months in states with high unemployment.

Level of benefits

Korea	50 percent of average wage. Minimum benefit: 70 percent of minimum wage;
Japan	60-80 percent of wages (higher percentage for lower earners);
Portugal[1]	65 percent of wage. Minimum benefit: 100 percent of minimum wage
United States	About 50 percent of earnings, according to differing state formulas.

[1] The per capita GDP (PPP-adjusted) of Korea and Portugal are almost equivalent.

19. **The government also attempted to avoid dismissals by providing support to firms that retain employees.** This support typically involved subsidies for up to 6 months (later expanded to 8 months) for employers who use temporary closures, paid leave, and reductions in working hours to avoid lay-offs. For example, half to two-thirds of an employee's wages were paid to those companies that retained workers on paid leave, for firms that close for more than 2 days per month, or for firms that send workers for training. In addition, subsidies were provided for firms that hire workers that have recently been laid-off and, in July 1998, the Wage Claims Guarantee System was introduced to ensure that workers in bankrupt firms would receive pay for their last

3 months of work. To facilitate the return of the unemployed back into the workforce, the government also introduced a program of loans, up to W 30 million, to support small business start-ups.

20. **Another component of the authorities' activist labor market policies was to expand their program of state-funded vocational training.** These programs include re-employment training for those covered by the EIS and employment promotion for those not covered by the EIS. The trainee is permitted to take up to 3 courses that can last from 1 month to 1 year in total; the government pays the full cost of the first course, 50 percent of the second course, and 1/3 of the final course. In 1998 the number of participants in these programs rose to 340,000 (almost 8 times the enrollment in the previous year) at a budgetary cost of W 0.7 trillion. This level of support will continue during 1999 with 280,000 persons expected to enroll in government sponsored vocational training programs. One shortcoming of the program, however, has been the low proportion of trainees finding jobs at the end of the program (currently around 20 percent) despite subsidies of between a third and a half of the wage cost for firms who employ graduates from these training programs.

Safety net protection

21. **The government has also aimed to increase its efforts in providing more direct aid for those most needy in society** who are left without support due to the incomplete coverage of unemployment benefits and the inability of firms to continue their past practice of providing social assistance to laid-off workers. This has become a particularly salient issue since much of the burden of the adjustment has fallen on those most vulnerable in society. As Table V.3 shows, the crisis has led to a significant widening in the income distribution with the income of the very poorest falling 17 percent in 1998, with incomes of the urban poor falling even further.

Table V.3. Korea: Changes in the Income Distribution

Income Quintile	Lowest	Lower Middle	Middle	Upper Middle	Highest	Average
Change in nominal income in 1998	-17.2	-11.8	-9.9	-8.0	-0.3	-6.7
Change in nominal income in Q1 1999	-2.0	-4.7	-3.8	-2.8	4.0	-0.5

Source: Data provided by the Korean authorities.

22. **Public works programs have been an important component of the safety net strategy** with the government drawing from the pool of unemployed—particularly those whose benefits have expired—to perform tasks such as caring for public lands and maintaining public infrastructure, as well as more skilled jobs aimed towards unemployed university graduates. In 1998 such programs cost the budget over W 1 trillion and

employed 440,000 persons. Following the March 1999 supplementary budget the allocation for public works programs in 1999 rose still further to W 2.5 trillion.

23. **More direct social assistance has been made available through the livelihood protection program for those who are unable to work and have low income and few assets.** This is a means-tested program that provides a below-subsistence level of income support (in 1998 this amounted to up to W 152,000 per month plus assistance in paying for medical and education costs) for those unable to work such as the disabled elderly and children. In addition, a variety of programs have been instigated to assist low income able-bodied persons such as the temporary livelihood protection program and the support for living costs program (although these one-time benefits are relatively small).

24. **Finally, the government has adopted a number of other programs of social assistance** such as providing tuition support for children of unemployed persons, housing subsidies, assistance in paying for medical insurance premiums, and free food programs for children, the elderly, and disabled persons.

25. **Overall, the government's expenditure on unemployment and safety net benefits will total around 2 percent of GDP in 1999 up from 1¼ percent of GDP in 1998 and ½ percent of GDP in 1997.** Looking forward, the government plans to maintain spending at a level sufficient to ensure a strong safety net, but to move away from being the employer of last resort and a provider of subsidized loans, and towards providing greater opportunities for the unemployed through job training and assisting workers in finding new employment. As a result, in the 2000 budget, the government expects to dramatically reduce the budgetary allocation for public works programs and to phase out the programs for lending to the unemployed. The government will, however, continue to fund job matching programs and provide vocational training as well as aiming to improve the coverage of unemployment benefits.

VI. FINANCIAL SECTOR RESTRUCTURING[1]

1. **Restructuring of the financial sector is central to the structural reform program in Korea.** This chapter outlines the strategy underlying the reform program. Section A contains a brief description of the structure of the financial structure before the crisis and identifies some of the key weaknesses; Section B describes the main elements of the reform program; Section C outlines the progress to date in financial sector restructuring; and finally Section D reviews key items of the remaining agenda.

A. The Financial System Before The Crisis

2. **The Korean financial system is diverse, consisting of commercial banks, a number of government owned specialized and development banks, and a variety of nonbank financial institutions.**[2] At end-1997, there were 26 commercial banks and, including their trust account business, they accounted for 51 percent of total financial system assets. Of these, seventeen were nationwide commercial banks and nine were regional or local banks. Nationwide banks are a dominant presence, controlling more than two-thirds of the total assets of commercial banks and a large network of branches across the country. Regional banks are similar in structure to nationwide banks but conduct most of their business with small and medium-sized enterprises and have very little foreign exchange business. There are 52 foreign banks in Korea but their market share is small about 3 percent of total financial system assets and 9 percent of assets of the banking system. Foreign banks have been largely engaged in wholesale banking.

3. **In addition to commercial banks, there were four specialized banks and two development banks.** These institutions were established in the 1950s and 1960s to provide financial support for certain underdeveloped industrial and agricultural sectors. For example, Korea Development Bank, which was set up in 1954, supplies medium and long-term credit to key export and technology industries. At end-1997, specialized and development banks accounted for 16 percent of total financial system assets. Specialized banks rely heavily on deposits while development banks issue bonds domestically and abroad to meet funding needs.

4. **A variety of other financial institutions have also developed, and many became an important source of financing for large chaebols.** These consist of investment institutions, which include merchant banks, investment trust companies, investment trust management companies and securities companies; savings institutions; and insurance companies. At end-1997, nonbank financial institutions comprised 30 percent of total financial system assets. Investment institutions particularly merchant banks were by far the most influential of these

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[1] The principal author of this chapter is Cheng-Hoon Lim.

[2] See Baliño and Ubide (1999) for a detailed description of the financial development and the prudential regulatory and supervisory framework before the crisis.

institutions. Merchant banks were first established in the 1970s as part of the attempt to reduce the role of the curb or informal market for credit. Most of the merchant banks in operation in 1997 were owned by the chaebol and were subject to easier regulations than commercial banks.

5. **Structural weaknesses in the financial and corporate sectors were at the heart of the Korean financial crisis.** The financial system had long been an instrument of industrial policy, with government regulations and incentives designed to direct credit to preferred sectors. The government protected corporations from competition and influenced the price and allocation of bank credit to chaebols by administering interest rates and directly intervening in bank management, even after banks had been privatized. The result was a tightly controlled system characterized by passive and subservient banks with underdeveloped risk management and credit analysis skills.

6. **Government intervention in financial and business decision making was common** and financial institutions, lacking independence, did not develop strong credit risk management structures. Lending decisions tended to be centralized in senior management and relied on collateral and inter-company guarantees rather than projected cash flows. Banks did not follow proper loan review processes and management information systems were rudimentary.

7. **Prudential regulations were lax and fell short of international best practice.** The standards for loan classification and provisioning were considerably more lax in Korea than in many OECD countries and did not conform with international best practice. Loans were considered nonperforming if they were in arrears for six months or more. Published figures for bad loans included only doubtful and loss categories. Moreover, the loan classification and provisioning rules were based on the loan's servicing record and the availability of collateral without regard to the borrower's future capacity to repay. Loose limits on banks' risk concentration facilitated the highly leveraged corporate financial structure. In addition, accounting and disclosure standards were weak. Market value accounting was not widely practiced and there were no consolidated statements encompassing the parent bank or financial institution and its subsidiaries.

8. **The supervision of the financial sector was fragmented, giving rise to the regulatory arbitrage opportunities.** The supervision of commercial banks was under the direct authority of the Office of Banking Supervision at the Bank of Korea, while that of specialized banks and nonbank financial institutions were under the authority of the Ministry of Finance and Economy (MOFE). The lack of a unified system of supervision combined with the poor supervision of the nonbanks created scope for regulatory arbitrage and the development of high risk practices. Banks set up trust accounts to circumvent restrictions, while merchant banks became very aggressive lenders, assuming much higher credit and exchange rate risk than commercial banks. Furthermore, there was a widespread perception that banks and corporations would be bailed out if they encountered difficulties while pursuing government directed initiatives.

9. **Competition from the nonbank sector squeezed the profitability of the banking sector.** Less stringent regulatory requirements compared to the banking sector triggered rapid expansion in the intermediary activities of the nonbank sector. Merchant banks, which are

wholesale financial institutions engaging in underwriting primary capital market issues, leasing and short-term unsecured lending and are owned by the large chaebols, competed directly with commercial banks. Merchant banks also became the dominant lenders in the issuance and discounting of commercial paper. They funded themselves by issuing bonds and notes, through interbank deposits and by borrowing abroad. In addition banks faced stiff competition in their trust account business, which are collective investment management services carried off-balance sheet, from the investment trust industry.

10. **The jostling for market share led to an "overbanked" financial system, an erosion of lending margins, and a rise in lending to risky borrowers.** The capital base of banks had been severely weakened in 1997 by a string of corporate bankruptcies and their exposure to merchant banks in the call market, and a number banks had capital adequacy ratios significantly below the minimum level of 8 percent. At end-1997, fourteen of the 26 commercial banks had capital adequacy ratios below 8 percent.

B. Reform Objectives and Program Implementation [3]

11. **The financial restructuring program in Korea was designed to meet four broad objectives**:

- to quickly restore stability to the financial system through liquidity support, a blanket guarantee, and closures of unviable institutions;
- to restructure the financial system (by intervening banks, purchasing non performing loans—NPLs—and recapitalization)
- to strengthen the institutional framework by bringing prudential regulations and supervision in line with international best practices; and
- to enhance supervisory oversight and in this connection eliminate the functional and institutional rigidity that earlier characterized the financial system.

12. **The first priority was to maintain public confidence in the banking system.** Prior to the onset of the crisis, in January 1997, the authorities introduced a deposit insurance scheme funded by low premium contributions from banks. The scheme provided for full coverage of all deposits not exceeding W 20 million per individual depositor. In mid-November 1997, the government announced that it would guarantee all deposits of financial institutions until end-2000, and would provide liquidity support to banks as necessary. With the return of stability to financial markets in mid-1998, the government announced that for deposits opened after

[3] A detailed discussion of the reform program is contained in EBS/99/154, *Financial Sector Crisis and Restructuring—Lessons from Asia—Background Studies*

August 1, 1998, the deposit insurance coverage would revert to the previous upper limit of W 20 million.

13. **Regarding the restructuring of the financial system, the first task was the identification and separation of nonviable financial institutions from viable but weak institutions.** For nonviable institutions, exit strategies, mergers, sales or liquidation—were developed and applied. For viable institutions, rehabilitation plans specifying in detail measures to achieve minimum capital adequacy (including fresh capital contributions from new or existing shareholders) and to restructure operations were required. Failure to comply with the performance targets triggered prompt corrective action procedures, including suspension and eventually closure. To minimize the use of public funds for restructuring, support was provided only to the extent necessary to facilitate the liquidation of failed institutions and the restructuring of viable banks.

14. **The second task was to apply a differentiated approach based on the systemic importance of the financial institutions, starting with the most serious problems.** This implied giving priority to the insolvent merchant banks and commercial banks. Once these institutions were dealt with, attention would shift to the specialized and development banks and other nonbank financial institutions.

15. **The third task was to strengthen financial institutions' balance sheets and resolve nonperforming loans.** In view of the history of regulatory and supervisory forbearance, it was critical to give clear signals of forceful action in this regard in order to restore confidence. The immediate step was to promote greater transparency by reporting data on all non-performing loans (NPLs) rather than only on bad loans as was done previously. The role of the Korean Asset Management Company was expanded to allow the agency to purchase impaired assets from all financial institutions (Box VI.1). To allow for proper loss recognition and provisions, more stringent rules on the classification and provisioning of non-performing loans in line with international best practices were introduced.

16. **The fourth task was to transform the institutional and regulatory foundation of the financial system.** Legislation passed in December 1997 consolidated all financial sector supervision and prudential regulation in a single institution: The Financial Supervisory Service, and its policy formulating wing the Financial Supervisory Commission. The BOK relinquished its direct supervisory role in the banking system but retained joint supervisory responsibility with the FSS for bank inspection and, as lender of last resort, retained responsibility for systemic stability. The Korea Deposit Insurance Corporation (KDIC) was established by merging together existing deposit insurance protection agencies and empowered with the authority to guarantee deposits in failed financial institutions as well as to provide recapitalization funds.

Box VI.1. The Korea Asset Management Corporation

1. Organization

The Korean Asset Management Corporation (KAMCO) was initially set up in 1962 to manage and dispose of the impaired assets of the Korea Development Bank. Its function has been increasingly expanded over the years and in November 1997, legislation was passed to entrust KAMCO with the administration of a Non-Performing Asset Management Fund (NPA Fund). The objective of the NPA Fund is to purchase and dispose of NPLs of all financial institutions covered by a deposit guarantee as efficiently as possible. In August 1998, the reorganization of KAMCO as a "bad bank" was completed and KAMCO adopted a structure similar to the U.S. Resolution Trust Company. In addition to its core business of purchasing and liquidating NPLs, KAMCO can also provide workout programs for impaired assets. In order to enhance transparency, KAMCO has been required to audit and publish its accounts on a semiannual basis.

The NPA Fund was established with contributions from financial institutions, loans from the BOK and KDB, and proceeds from government guaranteed bond issues. Initially, KAMCO was authorized to issue W 32.5 trillion in NPA Fund Bonds between 1997 and 1999; and by end-June 1999 it had issued W 20.3 trillion of such bonds. In July 1999, however, its borrowing authority on the remaining W 12.2 trillion was transferred to the KDIC.

2. Operations

KAMCO pays a fixed price of 45 percent of the book value of the underlying collateral for secured loans and 3 percent for unsecured loans. The prices paid on "ordinary" NPLs, that is NPLs of companies currently operating, are final. For secured NPLs of companies under court receivership or "special" NPLs, the initial purchase price is subsequently adjusted to reflect the present value of the court settlement. Prices paid for unsecured special NPLs, however, are not adjusted.

As of June 1999, KAMCO had purchased NPLs with a face value of W 46 trillion for W 20.3 trillion. Seventy percent of the impaired assets purchased are of the "special" category. In late December 1998, KAMCO issued U.S. dollar denominated bonds of $513 million to purchase foreign currency denominated NPLs from 19 commercial banks. On a small amount of NPLs purchased, KAMCO has the right to exercise put back options against the selling financial institutions in cases of default by the borrowers.

KAMCO has sought to dispose of the acquired assets as rapidly as possible in a manner that maximizes recovery value. So far, KAMCO has sold acquired assets to international investors, foreclosed on NPLs and sold the underlying collateral, sold NPLs in public auctions and collected on loans. As of end-June 1999, KAMCO had recovered W 8.8 trillion from loans with a face value of W 16½ trillion.

Disposition and Sale of KAMCO NPLs
(In trillions of won, as of June 1999)

Sales Method	Face value of NPLs	Purchase Price	Amount Recovered
International sale	2.9	1.1	1.2
Foreclosure auction	2.1	1.0	1.0
Public sale	0.3	0.1	0.1
Collection	11.3	5.9	6.5
Total	16.5	8.1	8.8

Source: KAMCO

C. Progress in Financial Sector Restructuring

17. **Good progress has been made in consolidating the financial system and strengthening prudential regulations and oversight.** The overall strategy on the commercial banks was to remove the nonviable banks from the system, and recapitalize and restructure the rest. The recapitalization involved mergers with stronger institutions, additional shareholder capital, and considerable use of public funds.

Table VI.1: Progress in Financial Sector Restructuring

Financial Institutions	Percent of total assets end-1997	Total number of institutions end-1997	Closed	Merged with closure	Total number of institutions end-June 1999	Percent of total assets end-March 1999	Institutions currently under rehabilitation
Commercial Banks	36.1	26	5	3	18	32.9	6
Nationwide	28.3	17	3	3	11	27.3	4
Local	4.4	9	2	....	7	3.2	2
Foreign	3.4	....	....	....	50	2.4	....
Trust Accounts	15.1	....	....	....	42	10.4	....
Specialized Banks	6.7	4	....	....	4	7.4	....
Development Banks	9.5	2	....	....	2	9.8	....
Merchant Banks	5.8	30	17	2	11	3.4	11
Life Insurance Companies	7.6	34	4	...	30	7.4	16
ITCs and ITMCs	7.6	31	7	....	24	17.4	....
Mutual Savings	2.7	230	26	....	204	2.1	31
Credit Unions	1.4	1653	115	....	1538	1.4	...

Source: Data provided by the Korean authorities.

Banks

18. The first wave of public support was targeted at resolving problems with potential systemic consequences.

- Two large commercial banks (Korea First Bank and Seoul Bank) were taken over by the government on January 31, 1998 with a 94 percent equity stake in each of the banks.

- In July 1998, five small banks with negative capital ratios (ranging from minus 4 percent to minus 11 percent and negative net worth of W 920 billion) were closed. Their operations were transferred to five stronger banks under purchase and assumption agreements.

- The remaining seven undercapitalized banks were required to take remedial action under approved rehabilitation plans. On January 1, 1999, two of these banks (Hanil and Commercial Bank of Korea) merged to form Hanvit Bank, the largest bank in Korea in terms of assets. On April 30, 1999, Chungbuk merged with Cho Hung under government pressure. Public funds were used to facilitate these mergers. On September 14, 1999 Cho Hung merged with Kangwon (Kangwon had earlier merged with Hyundai International Merchant Bank in February 1999).

- The other two banks, the Korea Exchange Bank has been recapitalized with funds from the BOK and Commerz Bank; and Peace Bank, a small regional bank, raised capital from shareholders that was matched by public funds.

- Banks that were not undercapitalized at end-1997 have undergone diagnostic reviews. Three have been placed under prompt corrective action while the rest are undergoing various forms of restructuring, including mergers (four banks), downsizing and raising additional private capital.

19. **Progress is also being made in the restructuring of bank operations.** About a quarter of the workforce has been cut, along with branch closures, and remaining employees have had to accept salary reductions. Further operational restructuring is anticipated in the coming months; in particular, banks plan to close more branches, improve risk management, and tie compensation and promotion of staff more directly to performance. Banks which received government support are required to set specific goals for staff reductions and branch closures, as well as performance benchmarks (such as minimum required returns on assets and equity) for the next three years.

20. **Following this recapitalization effort, with both private and public money, banks have continued to strengthen their capital base.** As detailed in Box VI.2, foreign investment has also played a role in the recapitalization of the banking system. By June 1999, the aggregate capital adequacy ratio has risen to 8.3 percent, with only one small private bank still below 6 percent (Table VI.2). The government has nationalized four banks. In addition, it owns a sizeable proportion of shares in 7 other commercial banks.

Box VI.2. Korea: Foreign Investment in the Financial Sector

Foreign investment has been a notable element in the recapitalization of the Korean banking sector.

- In June 1998, the International Finance Corporation, invested $152 million in Hana Bank and $25 million in KLTCB. Germany's Commerzbank invested $249 million in Korea Exchange Bank, acquiring a stake of 30 percent, mainly by converting existing credits to this bank into equity.
- In December 1998 a U.S. consortium (Newbridge Capital) agreed, subject to due diligence, to purchase a 51 percent stake in Korea First Bank. "Terms of investment" for this sale were agreed in September 1999.
- In April 1999, Goldman Sachs announced that it would invest $500 million to acquire a 17 percent stake in Kookmin Bank.
- In the same month, Shinhan raised US$400 million through global depository receipts.
- In July 1999, ING Group acquired a 10 percent stake in Housing and Commercial Bank for about $280 million.
- Also, in July 1999, New York Life and the International Finance Corporation signed MOUs to purchase a two-thirds stake in Kookmin Life Insurance for $105 million.

Table VI.2. Domestic Banks: Ownership and Capital Ratios

Name	Government owned shares (in percent)	Risk-weighted ratios	
		Dec. 1998	June 1999
Cho Hung 1/	82	0.93	13.09
Hanvit	95	12.05	11.57
Korea Exchange	30	8.06	10.96
Korea First	94	-1.47	-14.00
Seoul	94	-0.88	-10.00
Kookmin	22	10.09	11.64
Housing and commercial	50	10.79	12.43
Shinhan	20	14.69	15.03
KorAm	35	15.21	15.95
Hana 2/	46	13.10	13.74
Boram 2/	...	2.67	...
Peace	42	-1.79	8.88
Taegu	...	11.42	12.45
Pusan	...	9.25	12.62
Kwangju	...	10.12	13.00
Cheju	...	9.65	8.61
Jeonbuk	...	12.94	13.92
Kangwon 1/	...	-10.65	-0.93
Kyungnam	...	11.87	14.15
Choongbuk 1/	...	-4.63	...

Source: Data provided by the Korean authorities.

1/ Kangwon and Choongbuk Bank were merged with Cho Hung Bank on September 15 and March 3, 1999, respectively.

2/ Boram Bank was merged with Hana Bank on January 1, 1999.

21. **Bank profitability improved during the first half of 1999 as a result of the resumption in economic growth and gains in the stock market.** The combined net profit of the 18 commercial banks was W 442 billion in the first half of this year compared to a loss of W 6.8 trillion a year earlier. However, since mid-1999, bank stocks have fallen more sharply than the overall stock price index owing to fears of deepening fragility of the investment trust industry and its implications for the health of the financial sector (Chart VI.1).

22. **An important remaining task is to complete the resolution process of the two large commercial banks owned by the government,** Korea First Bank (KFB) and Seoul Bank, and prepare plans for the privatization of other government-owned banks. After protracted negotiations, the terms of investment for the sale of a 51 percent stake in KFB to Newbridge Capital for $417 million were agreed in mid-September. Discussions are proceeding to complete the sale contract as soon as possible. In order to normalize operations at KFB, the government injected W 5.1 trillion (including W 0.9 trillion to purchase NPLs) in July 1999. Further injection of public funds may become necessary when the full extent of Daewoo related losses becomes known.

23. **Negotiations to sell Seoul Bank to Hong Kong and Shanghai Banking Corporation, however, have broken down.** Points of difference included asset valuation, the future role and focus of the bank's operations. The government declared Seoul Bank non-viable on September 3, 1999, ordered a capital reduction and injected W 4.5 trillion (including W 1.1 trillion to purchase NPLs), effectively wiping out the equity of minority shareholders. However, the government has indicated that it remains committed to selling Seoul Bank to foreign investors, and in the interim would appoint an international CEO and management team to take management control of Seoul Bank and prepare it for early privatization.

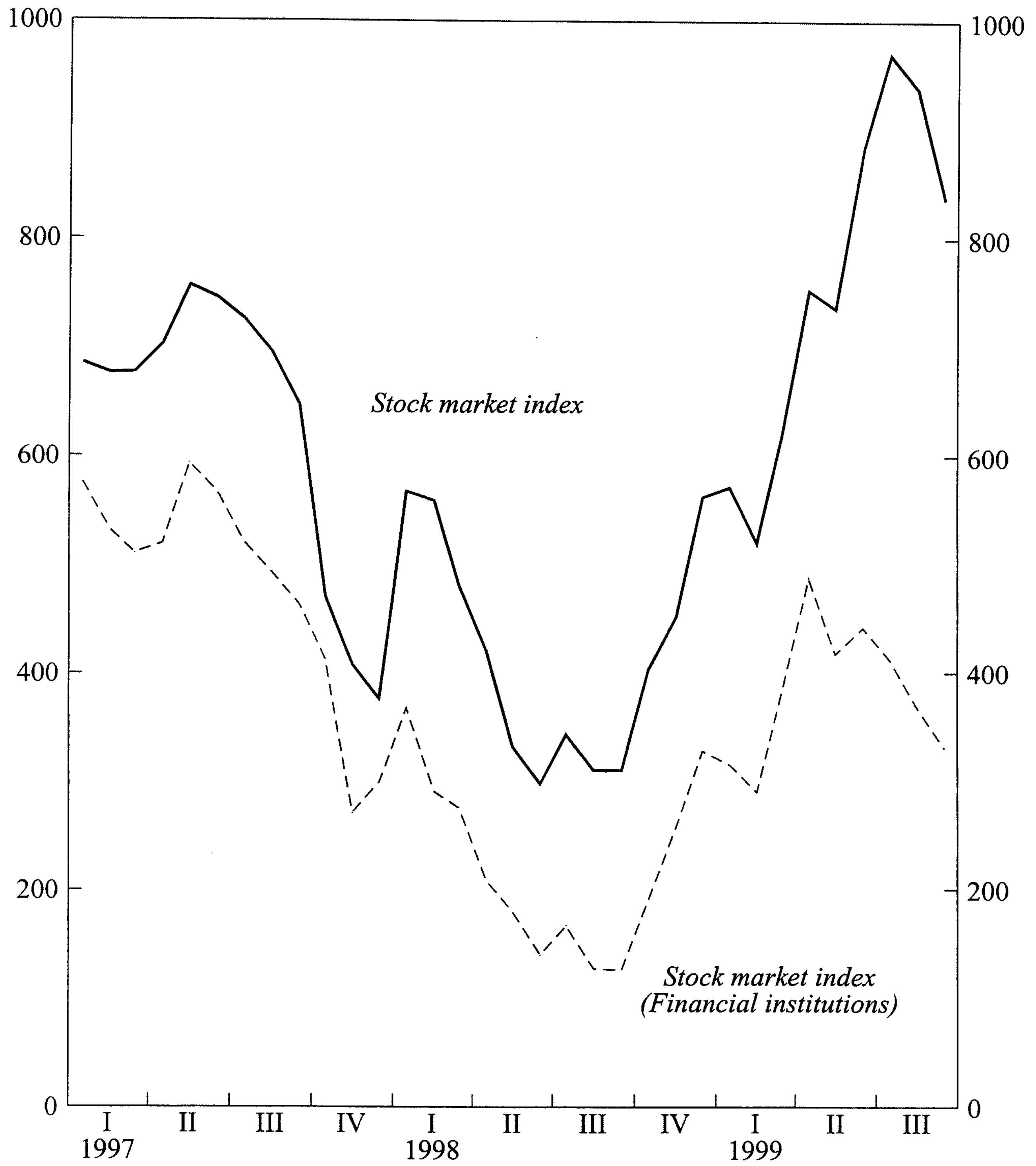
24. **The government has also recapitalized the specialized and development banks,** whose portfolios had deteriorated significantly, and made them subject to regulations in line with those applied to commercial banks. Recapitalization was done by buying equity in the banks and paying for it with government shares in public enterprises. A total of more than W9 trillion has been injected into these banks.

25. **The year ahead will be a challenging one.** The introduction of the forward looking criteria for loan classification at the end of 1999 is likely to lead to shortfalls in required provisions as loans are evaluated and classified properly. Banks will be allowed to phase in the provisioning over a period of two years; they will be required to charge at least 50 percent of the additional provisions by end-1999. There is also an element of uncertainty with regard to the impact of corporate restructuring on loan losses. For example, banks generally treat their exposures to Daewoo as precautionary (Table VI.3). By end-December, however, they will need to be treated as substandard or doubtful, unless workout agreements have been signed. In the latter case, the full loss (that is, the difference between the current book value and the net present value of the restructured debt) will have to be taken as a charge against profits. Further losses in

Chart VI.1

Korea

Stock Market Developments, 1997 - 1999



Source: Korean Stock Exchange.

the banking system may be revealed as several of the agreed debt workouts of the 6–64 chaebols are revisited to reduce debt to a more sustainable level. It will be important for the FSC to continually monitor the performance targets of banks to ensure that minimum capital adequacy ratios and other performance targets are being met. Further discussion of the important links between financial sector restructuring and corporate restructuring are contained in Box VI.3.

Table VI.3. Main Credit Exposure of the Banking System to Daewoo
(In billions of won, as of end-June 1999)

Bank	Loans	Commercial Paper and Bonds	Total
Hanvit	2530	1230	3760
Korea Exchange	2470	400	2870
Korea First	2080	760	2840
Cho Hung	1740	450	2190
KorAm	830	480	1310
Hana	530	520	1050
KDB	3900	130	4030
KEXIM	2300	....	2300
Kookmin	380	670	1050

Source: Data provided by Korean authorities; and Thomson Financial BankWatch.

Nonbank financial institutions

26. **Amongst nonbank financial institutions, priority was initially given to resolving problems in the merchant bank sector given their sharply deteriorating condition in late 1997.** The large concentration of credit risk to the troubled chaebols and their affiliates, together with the exposure to currency, bond and equity markets, led to widespread distress in this sector. A bridge merchant bank (Hanaerum Merchant Bank) was formed on December 3, 1997 to assume the responsibility of paying depositors in merchant banks and disposing off the assets of closed institutions.[4] So far, seventeen merchant banks have been closed and three have merged with commercial banks and securities companies. The rest have been placed under rehabilitation, and are closely monitored by the FSC. The remaining 10 merchant banks (out of 30 before the crisis) have been performing better than expected—as of end-June 1999, their capital adequacy ratios ranged from 8.5 percent to 14.5 percent. However, these ratios could be affected once the new loan classification and provisioning standards come into effect in mid-2000.

27. **The insurance sector in Korea is large and, in general, is not profitable.** Total assets of insurance companies (life and nonlife) stood at W 98 trillion (20 percent of GDP) at end-September 1999. Korean life insurance companies take deposits and make loans and have tended to be used as a source of funds to their parent companies. The low level of reserves in the industry is a major concern; seven out of the fourteen life insurance companies that were required to submit rehabilitation plans in 1998 have negative net worth.

[4] To date, almost all of the depositors have been repaid with the exception of W 4.4 trillion mainly comprising deposits of financial institutions. Although sale of assets has been minimal, the bridge bank has collected close to 30 percent of its domestic and foreign currency assets.

Box VI.3 The Link Between Corporate and Bank Restructuring

Corporate and bank restructuring are particularly closely linked in Korea, because of the limited size of the equity cushion in most corporate entities, and their consequently heavy reliance on debt finance, principally provided by the banks. Gearing was very high and interest cover very low. This has meant that the banks were essentially taking much of the risk that in other countries would have been taken by shareholders. As the banks entered the crisis with such large holdings of corporate debt, including substantial off-balance sheet exposure, the debt servicing problems that many chaebol and smaller companies experienced in 1997 quickly spilled over to bank balance sheets.

Even so, the full scope of the deterioration in credit quality was not immediately clear. Weak accounting standards, poor credit risk management, and inadequate supervision allowed widespread underprovisioning in the Korean financial system. By keeping loan losses hidden, bank capital was consequently overstated. Banks often avoided loss recognition, and the need for additional provisioning, simply by extending new money so that borrowers would not default on existing debt.

The authorities have started to address these structural weaknesses. Accounting standards are being raised closer to international best practice, and loan classification and provisioning rules are being tightened. The increased provisioning requirement in turn lowers apparent capital adequacy ratios, but has made those ratios more credible.

It was clear from the outset that strengthening prudential standards would affect the net worth not only of banks but also the viability of corporations. To rebuild their own balance sheets banks became more restrictive in their corporate lending practices, intensifying the pressure on the already highly leveraged chaebol, leading to a greater propensity to default. It thus became critically important that banks' capital base be strengthened. Given the scale of the bad loan problem, and the difficulties unprofitable banks faced in raising private capital, it was recognized that this process would require large sums of public money and time would be needed to meet the tighter and more credible capital standards.

It was also clear that bank soundness could not be permanently restored without putting corporate finances on a healthier footing. Without resolving problem loans, bank restructuring would ultimately fail and require further rounds of recapitalization. Given the lack of risk management skills in both corporate borrowers and in the banks, the conventional approach adopted in Korea of making banks responsible for restructuring troubled chaebol was bound to be difficult and time consuming. Corporate restructuring—using an out-of-court workout framework—would have to include restoring the capacity to repay by reducing debt to sustainable levels.

There was some concern that banks would be reluctant to participate in workouts if they were forced to restructure debt and write down losses, since this would not only threaten their reported capital base but could also lead to the supervisors being forced to invoke statutory "prompt correction action"procedures. The authorities faced a choice. They could enforce the stricter standard, requiring that banks immediately recognize the losses resulting from restructuring corporate debt, and be prepared to recapitalize the banks themselves. Or, they could allow banks to gradually phase in losses, or allow them more time to reach the minimum 8 percent risk-weighted CAR. In the end, the decision was taken to require commercial banks to recognize

restructuring losses immediately,and to be prepared for the government to provide capital where he market was not able to do so. Some modest forbearance was offered in respect of the rate of implementation of new standards, but it is not yet clear whether many banks will want to take advantage of it as such use will need to be fully disclosed

Review of the workouts indicated that banks preferred to restructure debt—by reducing interest rates, extending maturities, converting some debt to equity or to convertible bonds—rather than writing off debt outright. To be sure, to the extent that debt restructuring lowers the net present value of the loan, banks have to recognize the difference and charge this against earnings. However, given the extent of the debt overhang it has not always been clear that the extent of restructuring has been adequate to ensure borrowers' ability to service remaining debt in the future.

Banks were allowed initially some regulatory forbearance on how they could treat their reduced claims. There was some concern that Korean banks were underproviding against their exposure to the workout companies, especially since it was generally agreed that the workouts may not have gone deep enough to restore capacity to repay, and that in several cases, banks may have to revisit the plans. Moreover, since there was still considerable room for improvement in credit risk assessment in Korean banks, the general view was that it would be better to err on the side of prudence and that banks should adopt a sound system for managing their credit exposure.

In Korea, banks were initially only required to classify restructured loans as "precautionary" involving only modest provisioning, to minimize the impact on their CAR. In most OECD countries, banks are required to classify such loans using methods that take into account the doubts about restructured companies' capacity to repay. Banks in OECD countries therefore typically classify restructured loans as substandard or worse until the borrower demonstrates over a period of time adequate ability to service its debt, although there are no "international standards" on treatment of restructured loans except that the evaluation should be based on an assessment of the borrower's creditworthiness. Practices vary from country to country and bankers are generally allowed discretion in provisioning decisions against restructured loans. In Korea, it was agreed that with the introduction of the new "forward looking criteria" principles for loan classification to be introduced at end-1999, at the same time as new accounting standards, banks would have to assess borrowers' capacity to repay and evaluate and classify (and thus provision) more appropriately their exposure to workout companies.

The authorities originally took a somewhat more lenient approach towards the merchant banks. These banks were heavily exposed to the chaebol largely because of more lax prudential and supervisory standards on loan classification and provisioning and large exposure rules than commercial banks. Because they were undercapitalized, debt restructuring would have led to large scale insolvency. For instance, alone the write-offs of debts owed to two bankrupt chaebol—Kia and Halla—were expected to reduce CAR by 1-5 percentage points. In this context, there was considerable concern that the merchant banks could thwart the corporate restructuring process. To address this problem, merchant banks were allowed to phase in losses from debt restructuring. However, in fact no merchant bank used this facility; they either succeeded in raising new capital or left the sector.

28. **Initial steps have begun to be taken to strengthen the sector.** The EU solvency margin standard for life insurance companies was adopted in April 1999, to be phased in over a period of 5 years, and plans to liberalize the pricing of insurance products after April 2000 were announced.

29. **In addition, the government is preparing to implement a number of measures to strengthen the industry.** These include a tightening of investment guidelines for insurance companies aimed at curtailing bank-like lending activities. The government is also pursuing the sale of weak companies. The FSC has put up the seven distressed life insurance companies for international bidding but there has been little interest from foreign investors. So far, only one Memorandum of Understanding has been signed with a consortium led by New York Life International and the International Finance Corporation for the sale of Kookmin Life. The third international bidding for Korea Life was canceled and the FSC has deemed the company nonviable.

30. **Amongst the nonbank financial intermediaries, the investment trust industry is perhaps the weakest and poses the most significant systemic risk.** This industry—consisting of investment trust and investment management trust companies—faces twin problems of liquidity and capital deficiency (Box VI.4). In particular:

- **The three largest ITCs are insolvent** and although it is illegal they have been borrowing indirectly from their trust funds to finance operations. The amount of such bridge loans outstanding is about W 4 trillion. The huge losses in their proprietary trading accounts were incurred in the late 1980s when the government instructed the ITCs to intervene in the stock market to support falling stock prices.

- **Most of the bond funds of ITCs and ITMCs are not marked to market and inter-fund transfers are common given the lax supervisory oversight.** With declining interest rates, managers transferred higher yielding paper to new funds in order to offer above-market rates of return and thus attract a growing amount of investments. The bottoming out of interest rates and gradual increase in bond rates since April 1999 has meant that unrecognized losses are mounting.

- **The marketing agents of investment trusts essentially offer a guarantee on the funds' rate of return even though this practice is illegal.**

- **There has been an increasing maturity mismatch in the asset and liabilities of the ITCs** and ITMCs, including in money market funds. In mid-1999, the average maturity of liabilities was 4½ months compared to the average maturity of assets of 16 months.

Box VI.4. The Investment Trust Industry in Korea

1. The industry

Investment trust companies (ITCs) were established in the early 1970s to help develop the Korean capital market. There are currently 6 ITCs and more than 20 ITMCs, offering both bond and equity open-ended funds. ITCs are different from the smaller Investment Trust Management Companies (ITMCs), which were established only in 1996, in two ways. First, ITCs can engage in proprietary trading while ITMCs are prohibited from this activity by law. Second, ITCs can sell beneficial certificates directly to investors while ITMCs can only sell through sales agencies, including banks and securities companies. ITCs and ITMCs are largely owned by major chaebols, banks or securities companies. Of the three largest ITCs, Hyundai ITC (which has been recently converted into an ITMC) is owned by Hyundai while the majority shareholders of Korea ITC and Daehan ITC are the recently nationalized banks.

2. The size of the investment trust industry

The total assets of investment trusts have increased dramatically in the last two years. Between end-1997 and end-June 1999, the total assets of ITCs and ITMCs rose from W 84 trillion (19 percent of GDP) to W 251 trillion (52 percent of GDP, about the same size as commercial bank deposits at end-June). About 89 percent of these assets are in bond type funds and the rest in equity type funds. Taken together, the industry's holdings of corporate paper account for about 40 percent of the total listed bond issues while their trading activities account for about 30 percent of the average stock market trading volume. The exceptional growth of the trust assets in the last two years has been driven in part by the sharp reduction in interest rates in the latter half of 1998. As interest rates fell, the substantial capital gains earned on existing bond holdings allowed the trust companies to offer very attractive rates of return to investors on new bond funds. In view of a lack of alternative investment choices, substantial resources were shifted into the investment trust funds. Currently, about 50 percent of investors in the investment trust industry are financial institutions. Other institutional investors account for 20 percent of investments, and the rest are retail investors. Two years ago, institutional investors accounted only for about 30 percent of investors.

- **ITCs and ITMCs hold a significant proportion of the outstanding debt of the top five chaebols,** including some W25 trillion of exposure to Daewoo (37 percent of total Daewoo debt and more than 80 percent of Daewoo's domestic bonds and commercial paper), and an estimated 25 percent of Hyundai's debt. Banks' large investments in the industry (which they treat as liquid assets) raises the risk of systemic effects from distress in the investment trust industry.

- **There is a large gap between promised redemption values of beneficiary certificates (which are based on the historical cost of the underlying assets) and the market value of the underlying assets.** Increasing awareness on the part of investors of these unrecognized losses is, in large part, the reason for the redemption pressures being faced by the ITCs/ITMCs.

31. **The recent liquidity problems facing the industry was triggered by Daewoo's debt servicing problems in late July.** As the extent of Daewoo's problems became widely known, investors—nervous about the ability of Daewoo to meet its debt obligations—sought early redemption of the beneficial certificates issued by ITCs and ITMCs. The redemption pressure was unprecedented and ITCs and ITMCs were forced to sell their assets to satisfy investor demands. Investments in fixed income funds hence fell sharply from W 208 trillion (42 percent of GDP or $175 billion) at the end of June 1999 to W 152 trillion (31 percent of GDP) by the end of October.

32. **The authorities have taken a number of steps to deal with the liquidity crisis in the investment trust industry.** These include:

- In mid-August, restrictions were imposed on ITC fund redemptions. Specifically, financial institutions were prohibited from redeeming funds that contain Daewoo paper until July 2000. Individuals and corporations can redeem funds containing Daewoo paper but receive

  ➢ only 50 percent of the Daewoo portion of their investments if withdrawn before November 10, 1999;

  ➢ only 80 percent of the Daewoo portion of their investments if withdrawn after November 10, 999;

  ➢ only 95 percent of the Daewoo portion of their investments if withdrawn after February 9, 2000.

- In mid-September, the government announced the creation of a "Bond Market Stabilization Fund" (BMSF) to be funded with contributions from banks and insurance companies. The government has announced that the size of the fund would be sufficiently large to maintain single-digit bond rates. The fund was originally allowed to buy Treasury bonds (the benchmark bond), monetary stabilization bonds, and corporate bonds

with rating higher than BBB-. In mid-October, the purchase of lower rated bonds was also permitted, and banks have pledged to fund an unlimited amount of bond purchases.

- The FSC lifted the limit of 10 percent—imposed in October 1998—on banks' total holdings of bonds issued by conglomerates.

- In addition, the BOK has indicated its willingness to provide liquidity support through open market operations.[5]

33. As for the impact of these measures, net redemptions from bond funds slowed immediately after the announcement of the graduated Daewoo redemption scheme; however, since late September they have picked up again. The BMSF has begun purchasing bonds, and has spent about W 10 trillion to date. Corporate bond rates have come down by about 110 basis points to about 9½ percent (Chart VI.2).

34. **The second round of reforms included the acceleration of the due diligence exercises for Daewoo affiliates and the announcement, on November 4, 1999, of the principles of loss sharing between the various players in the sector.** The preliminary results of the due-diligence indicated an estimated loss of 55 percent on Daewoo bonds.

- For investment trust and securities companies with major shareholders, the government announced that it would facilitate management normalization by inducing recapitalization using additional shareholder funds. Specifically, IT(M)Cs and securities companies, who are the sales representatives, have agreed to share losses based on the proportion of the fee income they received from the sale of the beneficiary certificates. They are expected to shoulder the burden with their own equity, sales profits, and, if necessary, recapitalization by majority shareholders.

- For the two largest institutions in the industry—Korea ITC and Daehan ITC —which do not have major shareholders, the government announced that they would be rehabilitated with an injection of W 3 trillion (0.6 percent of GDP) of public funds.

- For Seoul Guarantee Insurance Corporation (which had guaranteed a large portion of Daewoo bonds), the government will inject public funds if needed to honor the guarantee on Daewoo bonds.

- Plans were also announced to strengthen transparency in asset management and improve governance in general.

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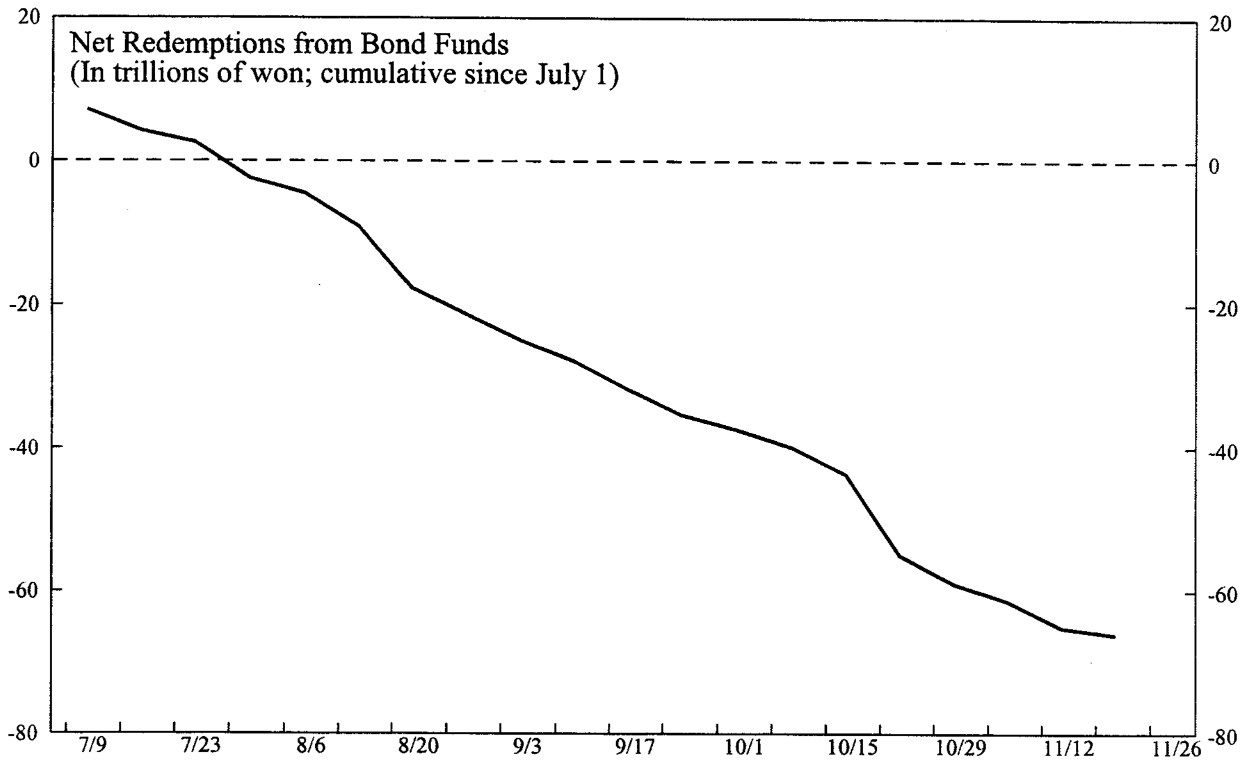
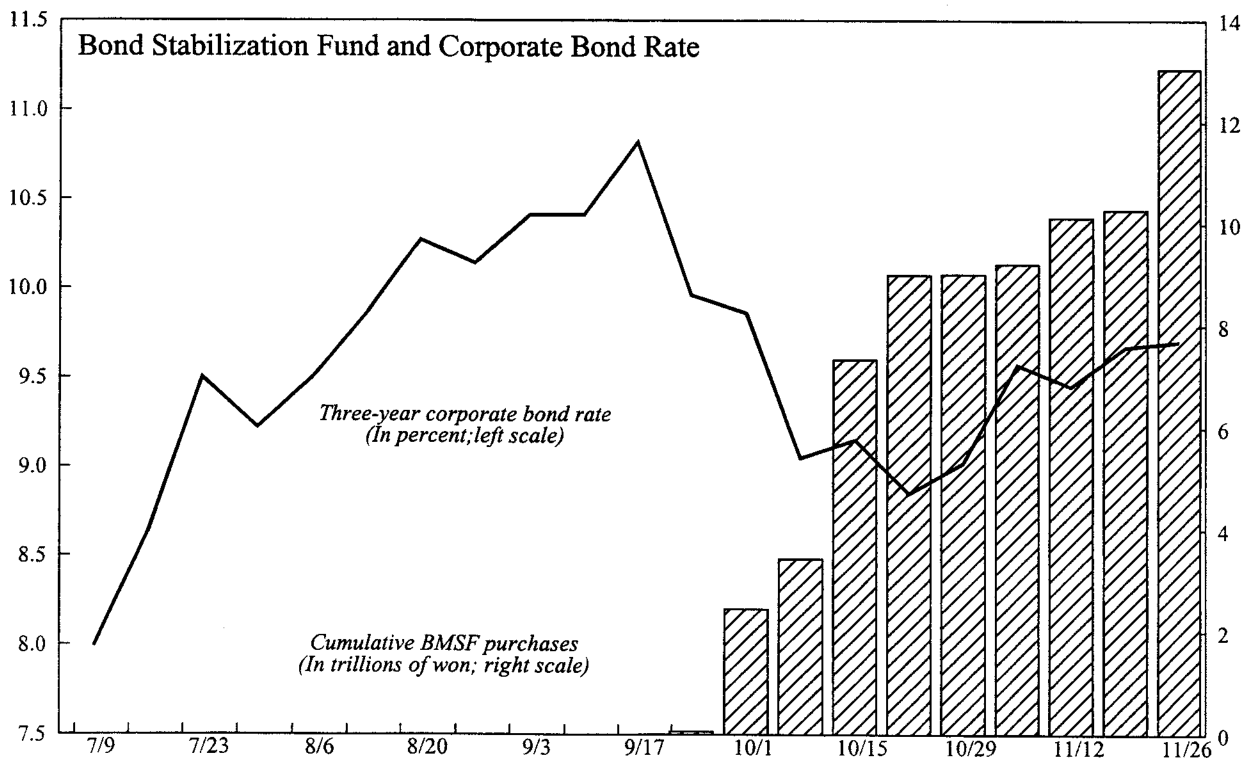
[5] ITMCs were allowed to participate in BOK open market operations beginning August 26, 1999. Prior to this, only commercial banks, securities companies, merchant banks and ITCs were allowed to participate.

Chart VI.2

Korea

ITC Fund and BSF Activity, July 1999 - October 1999





Source: Korean authorities.

- The government has also announced that, from July 1, 2000, all investments in funds that are not marked-to-market will be prohibited. In addition, plans were announced to encourage the development of new products such as "high yield" bond funds to entice money to be reinvested into the new funds that are marked to market.

Market sentiment improved following the announcement this package. Redemptions from bond funds have remained at manageable levels. In addition, net portfolio capital inflows picked up and the stock market rose some 20 percent in November. Bond interest rates appear to have stabilized at just below 10 percent, although the bond market is relatively thin with the BMSF being the only active player in recent months.

Prudential regulations and supervision

35. **Supervisory oversight has been significantly strengthened and prudential regulations have been brought closer in line with international best practice.** Supervision has been consolidated into a single independent agency, the FSC, which began operating under the Prime Minister's office in April 1998. On January 1, 1999, the Financial Supervisory Service (FSS) was formed as the executive body of the FSC. The passage of legislation in April 1999 strengthened the independence of the FSC/FSS. The FSC now has supervisory as well as regulatory authority for all bank and nonbank financial institutions, the specialized and development banks. In addition, the new legislation makes the FSC (rather than the Ministry of Finance and Economy) responsible for issuing and revoking licenses of all financial institutions. By consolidating many supervisory functions in one agency, the potential for regulatory arbitrage, a problem in the past, has been reduced. It is also consistent with the experience of other OECD countries (OECD 1998) where deregulation had resulted in multi-purpose financial institutions which required consolidated supervision and comparable regulation for similar products. In Korea, this is equivalent to ensuring that commercial banks, merchant banks, securities companies, investment trust companies are treated equally on both regulatory and supervisory terms.

36. **Prudential measures introduced so far have addressed a wide range of concerns,** including loan classification and provisioning standards, capital adequacy, accounting and disclosure standards, connected lending, cross guarantees, foreign exchange liquidity, and exposure. Most of the regulatory changes were introduced during 1998–99 with the aim of bringing Korea's prudential regulations closer to international best practice as expressed in the Basle Committee's Core Principles:

- More stringent rules on the classification and provisioning of non-performing loans have been introduced. All loans overdue by 90 days (previously 180 days) are now classified as substandard or lower; the provisioning rate for precautionary assets has been increased from 1 percent to 2 percent; and all provisions, except those in respect of normal and precautionary assets, have been deducted from Tier 2 capital. In September 1999, the FSC introduced a system of loan classification based on forward looking criteria and on the capacity of the

borrowers to service all obligations. In the case of commercial banks, these rules become effective with the accounts for the end of 1999.

- Legislation to redefine single borrower and group exposure limits and large exposures to include all off-balance sheet exposures for commercial banks and merchant banks have been passed.

- Prudential requirements for commercial banks have been extended to specialized and development banks. The regulations will parallel those for commercial banks except as regards the treatment of large exposures. Korea Development Bank will be given more time than commercial banks (specifically, until the end of 2004 rather than the end of 2002) to comply with maximum exposure limits because of the much longer maturity of this bank's loans.

- The limit of 25 percent of equity capital for lending to large shareholders and their affiliates and other restrictions on connected lending have been applied to commercial banks and merchant banks. The excess over 25 percent will be progressively reduced over the next two years. In addition, all connected lending and the terms on which it is provided will be audited and disclosed in annual financial statements starting in 1999.

- Mark to market accounting has been introduced in selected areas, including on new funds invested in ITCs, and on all traded securities and derivative positions other than hedging assets valued at historical cost.

- Accounting and disclosure standards for banks, securities companies and insurance companies now fully comply with the requirements of the International Accounting Standards (IAS 30). Where IAS is silent, the US GAAP will be used as the alternative benchmark. These requirements have been extended to merchant banks since April 1, 1999.

- All inter sub-industry cross guarantees have been eliminated for the top five chaebols and the reduction in remaining cross guarantees within sub-industry are being closely monitored.

- Guidelines requiring commercial banks to maintain short-term assets (less than 3 months) of at least 70 percent of short-term liabilities and long term borrowing (more than 3 years) in excess of 50 percent of long term assets have been implemented. Merchant banks are required to maintain short term assets in excess of 50 percent of short-term liabilities. In addition, internal liquidity controls based on a maturity ladder approach have been introduced for these institutions. To further improve Korea's external debt profile, the monitoring of external debt and reserves has been strengthened through more frequent reporting and improved coverage.

37. **To ensure that the financial system continues to strengthen**, the FSC is preparing to introduce new regulations and guidelines in a number of areas, including on financial transactions between related parties—here disclosure arrangements will also need to be

improved so as to reduce the incentive for managers to enter into transactions that benefit affiliates or shareholders—and on the lending policy of the insurance industry.

Nonperforming loans of the financial system

38. **The size of nonperforming loans remains large but is stabilizing.** As of end-June 1999, nonperforming loans of the financial system amounted to W 63.4 trillion or 11.3 percent of the total loans of the financial system (equivalent to 13 percent of GDP) (Table VI.4). By regional standards, the ratio in Korea is substantially higher than in Singapore, Taiwan and Hong Kong, but lower than in Thailand, Indonesia and Malaysia. More recent data are only available for commercial banks (Table VI.5).They show a marked reduction in commercial bank nonperforming loans in September 1999, in large part, owing to the purchase by KAMCO of NPLs from Korea First Bank and Seoul Bank. However, looking ahead to the next few months, NPL ratios at banks are expected to rise as the Daewoo groups workouts are finalized and some loans which are currently classified as precautionary are reclassified as nonperforming. In addition, the introduction of stricter loan classification rules at the end of this year will force a more appropriate classification of loans and more provisioning against these loans.

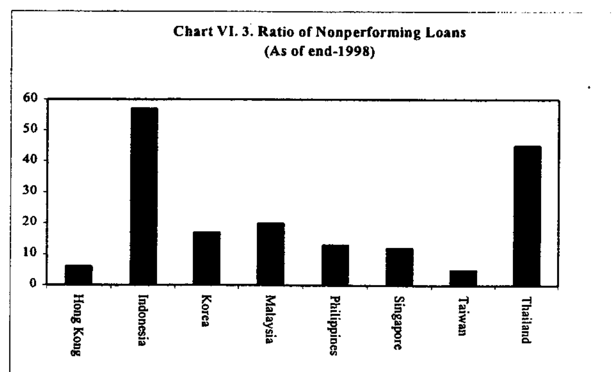


Table VI.4. Total NPLs at Korean Financial Institutions 1/
(In trillions of won, unless otherwise specified)

	Banks		Nonbanks		Total	
	Dec-98	June-99	Dec-98	June-99	Dec-98	June-99
Total loans	443.4	441.7	133.0	120.6	576.5	562.3
NPLs	33.6	37.6	26.6	27.8	60.2	63.4
NPLs/Total loans	7.6	8.4	20.0	21.8	10.5	11.3

1/ Source: FSC. Banks include commercial, specialized, and development banks.

Table VI.5. Commercial Bank NPLs 1/
(In trillions of won, unless otherwise specified)

	Dec-96	Dec-97	Dec-98	June-99	Sep-99
Total loans	311.7	375.8	300.6	298.8	309.4
NPLs	12.3	22.7	22.2	25.9	19.0
NPLs/Total loans	3.9	6.0	7.4	8.7	6.2

1/ Source: FSC. Excluding specialized and development banks.

Public funds

39. **The use of public funds for financial restructuring, amounted to W 74 trillion or about 15 percent of 1999 GDP, as of end-October 1999.** Of the W 74 trillion spent through the end of October, W 55½ trillion involves the issuance of government bonds, with the remainder financed through other means (primarily asset swaps). Some W 60 trillion was allocated to the banking sector, and the rest to the nonbank sector (Table VI.6). The government had obtained authorization from the National Assembly to issue bonds of W 64 trillion for financial sector restructuring. Thus, of the authorized amount of bond issuance, some W 8½ trillion remains. Recoveries by KAMCO via sale and collection of assets amount to W 11 trillion. The public funds have been used to recapitalize commercial banks, purchase impaired assets, provide loss coverage and depositor insurance, and to purchase equity in financial institutions and subordinated debt.

Table VI.6 Use of Public Funds in Financial Sector Restructurin
(In trillions of won)

	Original Plan	Actual Up to Oct. 1999
Financed with KDIC bonds	43.5	35.1
Of which:		
Recapitalization	...	16.6
Loss coverage in P&A	...	9.2
Depositor insurance	...	9.3
Financed with KAMCO bonds:		
Purchase of NPLs	20.5	20.4
Subtotal	64.0	55.5
Recapitalization 1998-99 budget	1.3	2.0
Financed by asset swaps: 1/		
Equity injections	4.5	10.9
Purchase of subordinated debt	4.4	5.5
Total	74.2	73.9

Sources: FSC, MOFE and staff estimates.
1/ Swaps of government-held shares or bonds of public enterprises or subordinated debt of banks.

40. **The ultimate cost of financial sector restructuring is difficult to determine with any degree of certainty**. In particular, the final tally will depend on a number of factors, including (i) the speed with which the economy continues to recover; (ii) the impact of tightened prudential regulations, specifically the introduction of the forward looking criteria for loan classification at the end of 1999; (iii) the results of ongoing corporate restructuring; (iv) the ability of banks to raise private capital; and (v) the performance of KAMCO in disposing purchased assets.

D. The Remaining Agenda

41. **Much has been accomplished in restructuring and strengthening the financial sector in Korea but much more remains to be done to put the sector on a sound and stable footing.** The main achievements include the consolidation and recapitalization of the banking system, strengthening prudential regulation and supervision including through the consolidation of supervisory authority into a single, independent agency (the Financial Supervisory Commission), and measures to deepen capital markets to move reduce corporate dependence on the banking system. However, much more remains to be done in the resolution of weak financial institutions and in strengthening the regulatory and institutional framework for nonbank financial intermediaries. The links between corporate and financial sector restructuring also need to be strengthened.

42. **The main elements of the remaining agenda are focused on completing the process already started and changing the culture of the links between industry, government and the financial sector in Korea.** In particular, they include:

- Restructuring of the nonbank financial sector, in which the highest priority needs to be given to the investment trust sector. A comprehensive set of reforms is necessary to address not only the immediate liquidity crisis, but also to deal with the deeper problems of insolvency, structural weaknesses, lax supervision and regulation. Key reforms must include the adoption of mark-to-market valuation of bond holdings in the portfolios of investment trust industry, tightening regulations to limit *chaebol* ownership and other avenues for related party transactions, and ensuring that managers and trustees honor their fiduciary responsibilities.

- For balance sheet improvements to be sustained, it will be imperative for banks to also improve business practices, especially better risk analysis, and lending practices. Priority also needs to be given to accelerating the privatization of the large equity shares acquired during the process of recapitalization of commercial banks, including through greater foreign participation. Although some progress has been made in increasing foreign presence in the banking sector, so far it has thus far been in the form of minority stake holding. For there to be a marked change in business practices and attitudes in the financial system—and for Korean banks to be able to compete in a more open, liberalized financial environment—more significant involvement by foreign investors will be beneficial.

- A strategy to increase asset restructuring and disposal by KAMCO so that its role as an asset warehouse is minimized. This element of the strategy is especially important in light of the fact that the adoption of the more stringent loan classification guidelines that are to be adopted by the end of 1999 will require banks to recognize and resolve an additional amount of nonperforming loans. Greater encouragement should be given to the pursuit of bad asset resolution strategies outside KAMCO, including through participation by foreign investors experienced in asset restructuring and disposal strategies.

- Links between financial sector restructuring and corporate restructuring can be further strengthened by issuing and enforcing guidelines for the treatment of restructured debt that provides incentives for meaningful corporate restructuring, and tightening regulations on connected lending and large exposure limits to tighten *chaebol* access to finance and increase pressure on them to restructure.

43. **Finally, the authorities need to continue to strengthen the enforcement of the tightened prudential regulations through consistent and close supervision.** This will enable the "culture of banking" in Korea to change, whereby there are no longer close, noncommercial ties with industry and the government, and the financial sector can focus on the task of efficiently allocating scarce resources.

VII. Corporate Sector Reforms[1]

A. Introduction

1. **Korean corporations played a pivotal role in the country's financial crisis and are at the fore of the government's reform agenda.** Problems in the corporate sector, especially among the large conglomerates, or *chaebol*, began surfacing as early as January 1997 with the bankruptcy of Hanbo Steel, Korea's second largest steelmaker and fourteenth largest *chaebol*. Five more *chaebol* bankruptcies followed before the financial crisis struck in November 1997.[2] These large bankruptcies had devastating repercussions for the heavily exposed banking sector. Corporate losses quickly spilled over to banks, causing rising loan losses and a deterioration in balance sheets.

2. **The Korean economy is dominated by the large *chaebol*.**[3] The top 30 *chaebol* dominate every sector of the economy except agriculture. They are also less prominent in the service sector they control. Roughly two-thirds of the 100 largest manufacturing firms. In 1995, the top 30 *chaebol* produced 16 percent of Korea's GDP and accounted for 41 percent of manufacturing GDP, roughly half of exports, but only 5 percent of employment. Of this group, the top four—Hyundai, Samsung, LG, and Daewoo—clearly stand out. Hyundai is the largest in terms of assets. All four are highly leveraged and diversified.

3. **Corporate distress was caused by excessive debt and low profitability and was not limited to a few large conglomerates** (Chart VII.1 and VII.2).[4] The *chaebol* had undertaken ambitious investment projects and diversification drives between 1993 and 1996, financed largely by aggressive short-term borrowing from banks, with an increasing share from merchant

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[1] The principal author of this chapter is Jeanne Gobat.

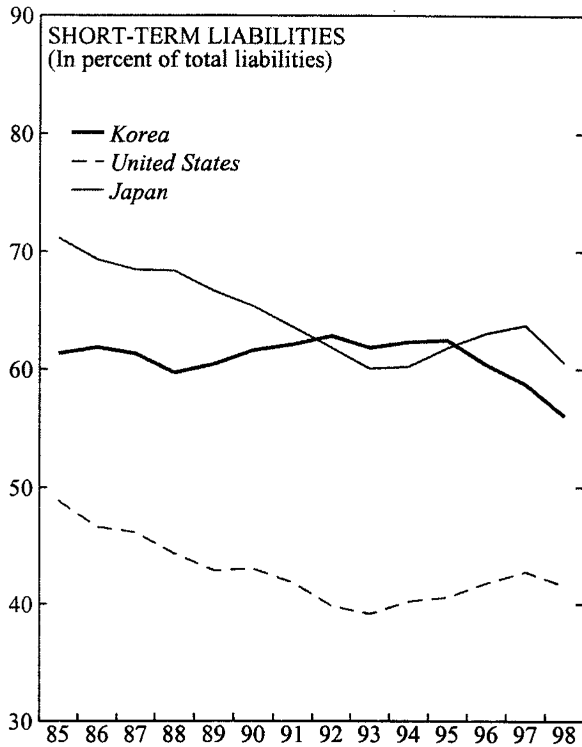
[2] Of the top 30 *chaebol,* seven went bankrupt in 1997. Six were bankrupt before the financial crisis—Hanbo (the fourteenth largest *chaebol* in 1997), Sammi (26), Jinro (22), Kia (8), Haitai (24), New Core (27). Halla (12 largest) went bankrupt in December 1997, immediately after the crisis broke out at end-November 1997.

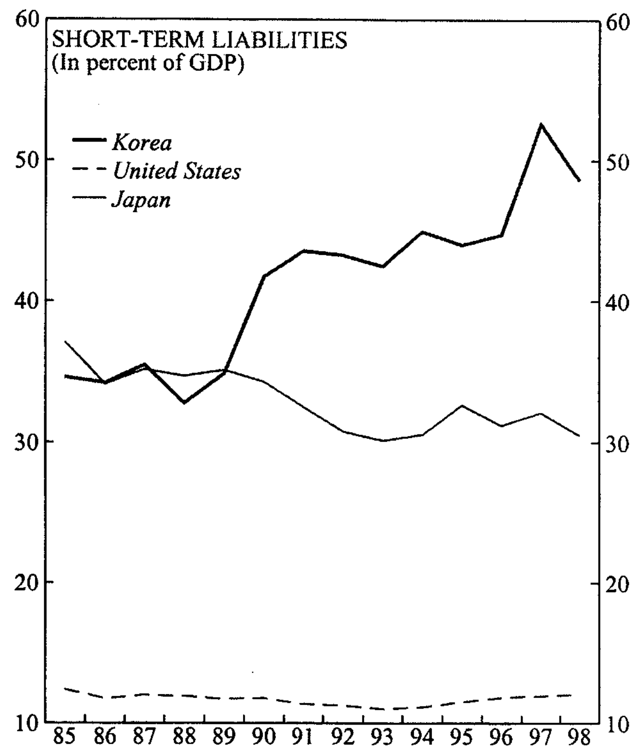
[3] Although holding companies are prohibited in Korea and each company is legally independent, *chaebol* resemble group-like structures. Companies are linked through cross-equity investment. The strongest companies—in terms of sales, cash flow and profit—tend to act as de facto holding company for the group. They include a central planning and coordination unit which typically controls the group internal financial transactions (OECD, 1998, and Min and Lim, 1997).

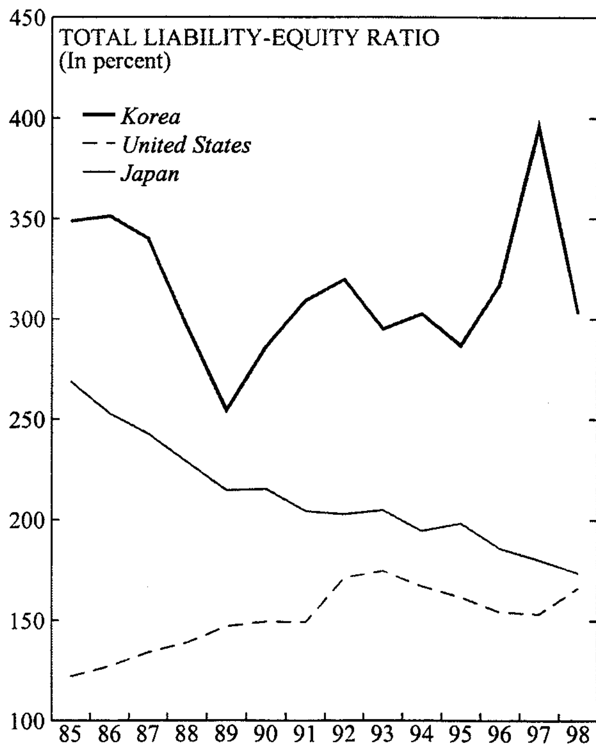
[4] Lieberman and Mako (1998).

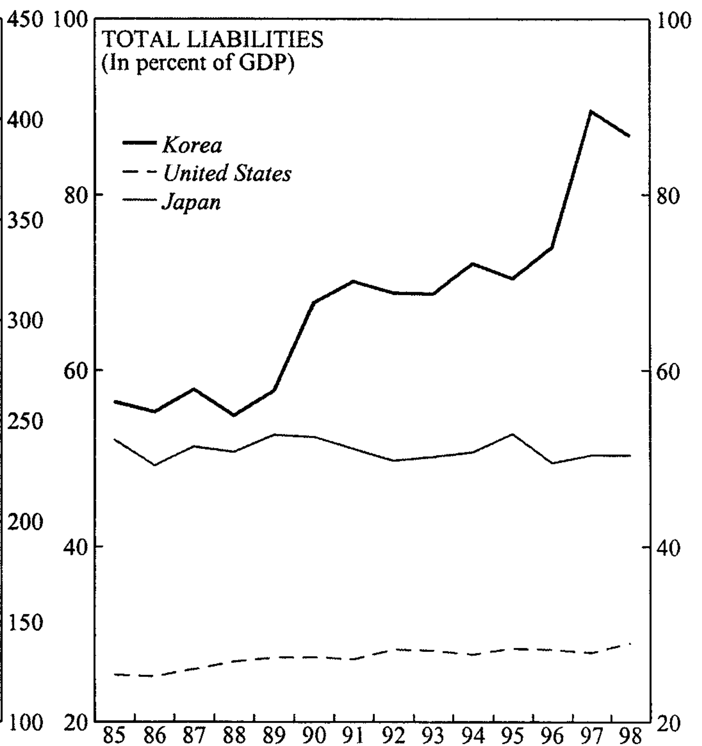
Chart VII.1
Korea

Structuring of Liabilities: Manufacturing Sector, 1985-1998





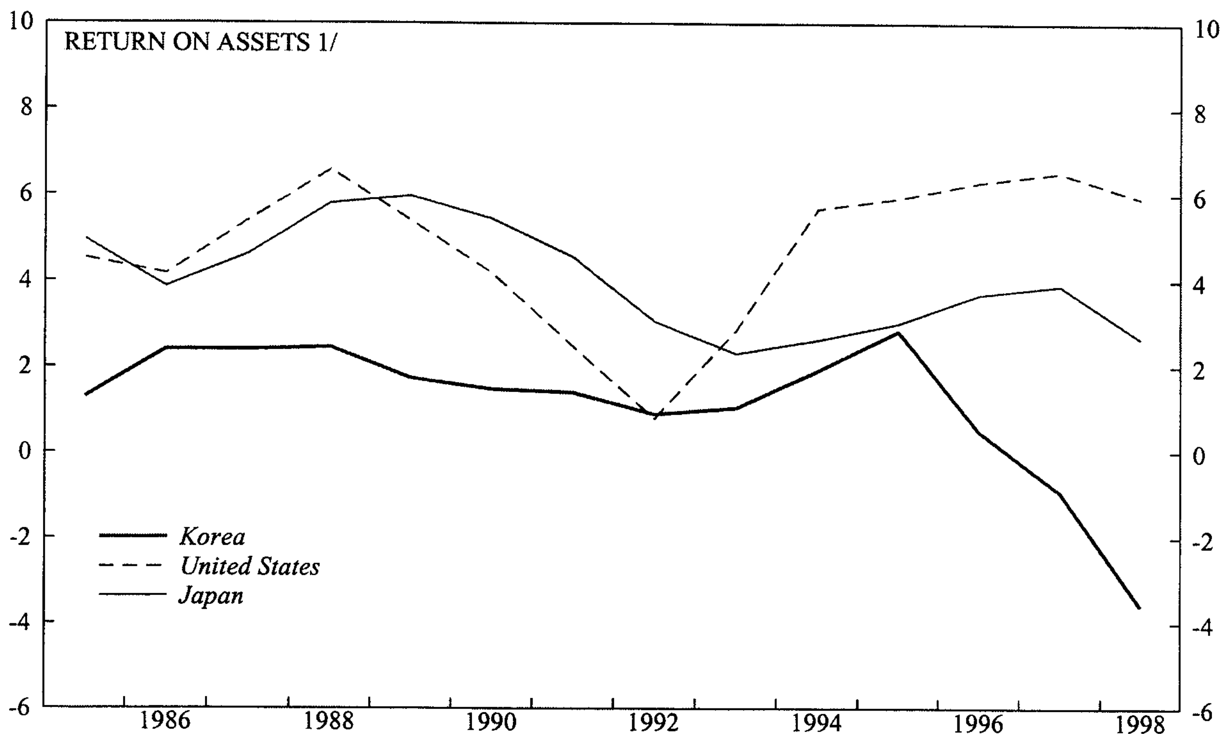


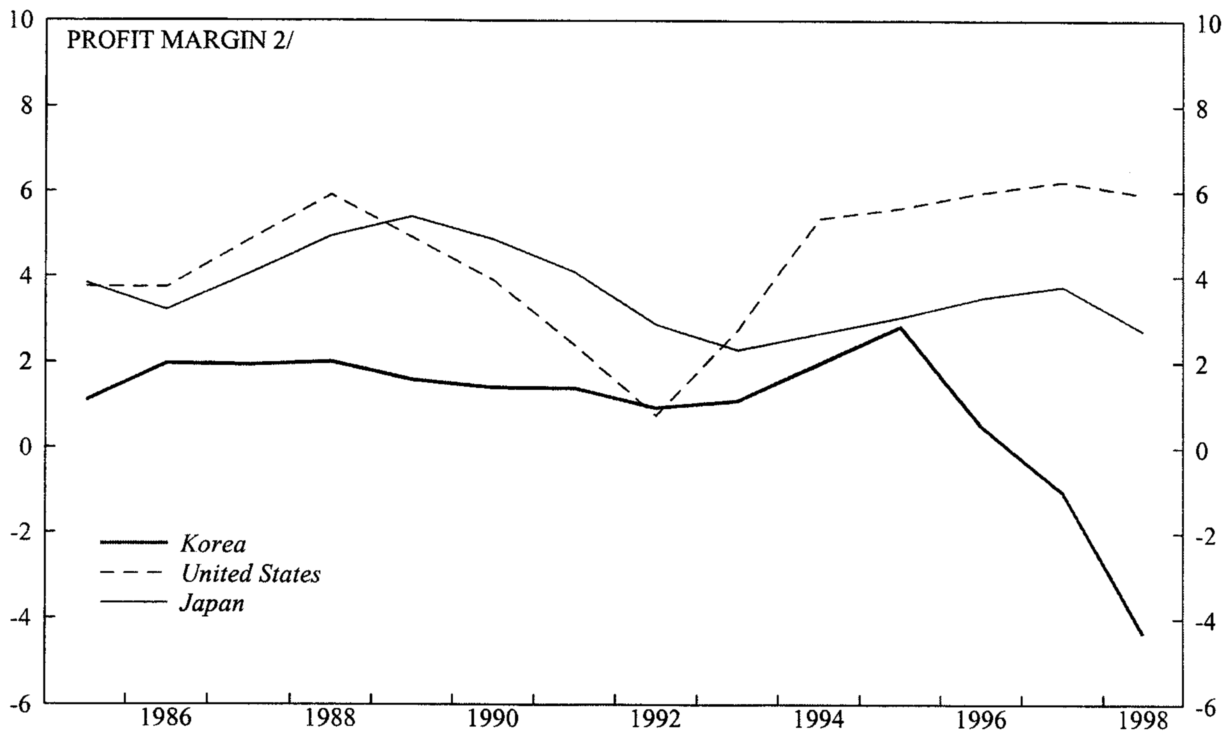


Sources: Data provided by the Korean authorities; Japan: Ministry of Finance, Nomura database; U.S. Census Bureau, Quarterly Financial Report for Manufacturing, Mining and Trade Corporations.

Chart VII.2
Korea

Profitability Indicators: Manufacturing Sector, 1985-1998
(In percent)





Sources: Data provided by the Korean authorities; Japan: Ministry of Finance, Nomura database; U.S. ensus Bureau, Quarterly Financial Report for Manufacturing, Mining and Trade Corporations.

1/ Defined as net income as percent of total assets.
2/ Defined as net income as percent of sales.

banks. But the investments failed to deliver adequate returns to cover the cost of capital.[5] Excess capacity and strong competition eroded already thin profit margins, further aggravated by a slump in demand and a sharp decline in semiconductor prices in 1996 and 1997. The earnings shortfall fueled further bank borrowing, mostly short-term. The debt-to-equity ratio in manufacturing—for large firms and SMEs—jumped 100 percentage points to 400 percent between 1996 and end-1997, double the OECD average (Chart VII.3). Debt ratios for the top 30 *chaebol* rose to 518 percent from 387 percent at end-1996.[6] Bank lending to the top 30 rose 43 percent in 1997. The rising debt burden imposed onerous servicing costs on corporate cash flow. As profits fell, the *chaebol* strategy of debt-financed growth and diversification grew increasingly risky, making the corporate sector vulnerable to a cyclical downturn and changes in interest rates.

4. **Poor corporate governance practices and implicit risk-sharing arrangements among government, business and banks contributed to weaknesses in the corporate sector.**[7] High leverage, excessive diversification and low profitability were mirror images of a poorly functioning corporate governance system where managers, directors and owners were shielded from market discipline. Corporate boards and creditors were ineffective in monitoring company operations, and financial reporting fell far short of international standards, masking the fragile state of *chaebol* balance sheets. The government's history of intervening in the market, bailing out corporations, directing lending and appointing bank managers had undermined banks' ability to appraise credit and market risk, retarded the development of an efficient bankruptcy system and exit market for non-viable companies, and led to excessive corporate risk-taking. Government restrictions on capital markets and foreign direct investment further narrowed corporations' recourse to non-bank funding, while protecting existing management and limiting competition. Outside acquisitions were rare because of regulations limiting takeovers.

5. **In the wake of the crisis, the government made corporate restructuring a priority of its reform agenda.** The main objectives were to restore corporate creditworthiness and competitiveness and reduce the potential for another systemic crisis. Unlike past interventionist policies, the government limited its role to reforming the institutional framework to enable a market-based restructuring of corporations. Specifically, the government adopted a three-pronged approach:

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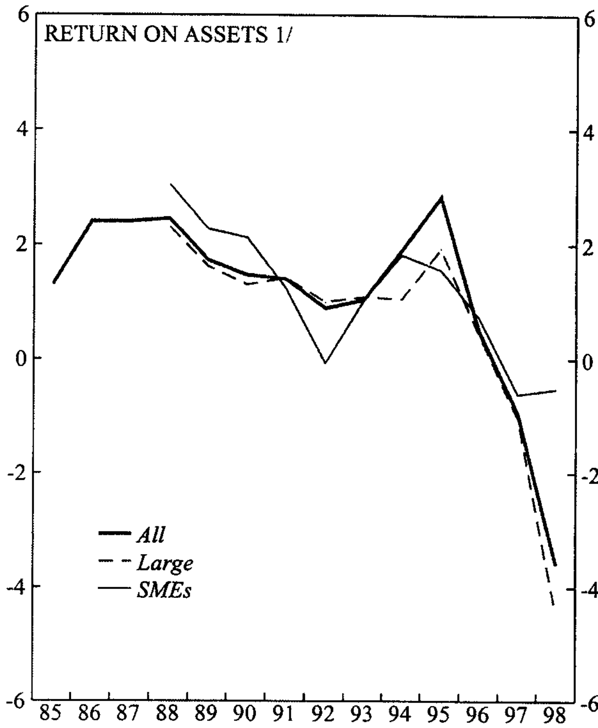
[5] From 1993-1995, pre-tax rates of return on capital of industrial companies were below pre-tax cost of debt. Only the steel industry realized profits exceeding debt charges for 1993-1995. See OECD (1998) and Pomerleano (1999).

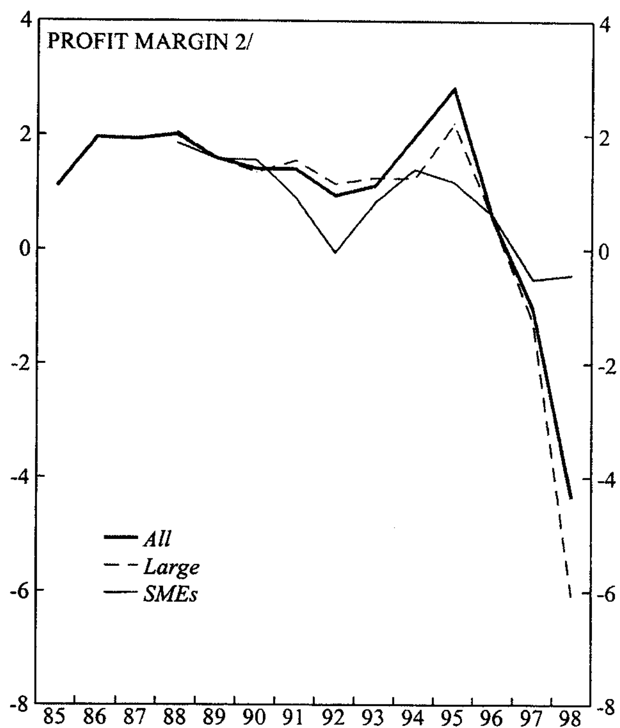
[6] Claessens, Djankov, and Lang (1998).

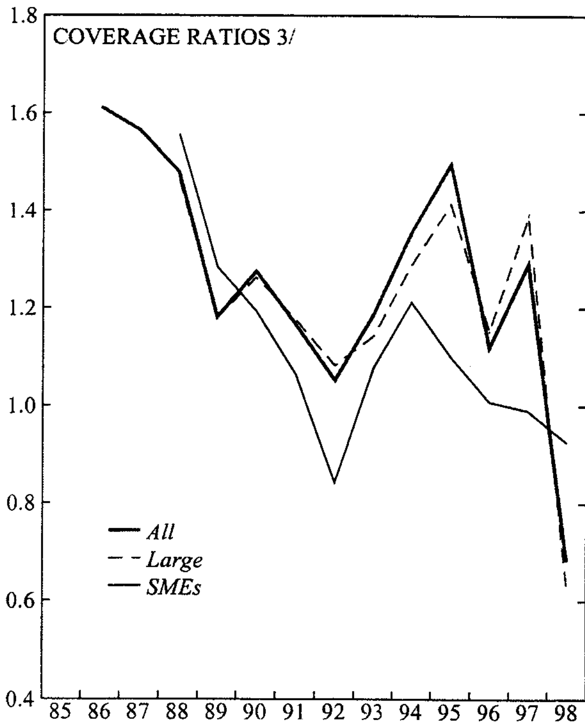
[7] For an overview of the structural weaknesses in the corporate sector, in particular weaknesses in corporate governance practices in Korea, see OECD (1998) and Gobat (1999). For a comprehensive overview of the Korean government's past policies toward the *chaebol* and the current restructuring agenda, see Yoo (1998).

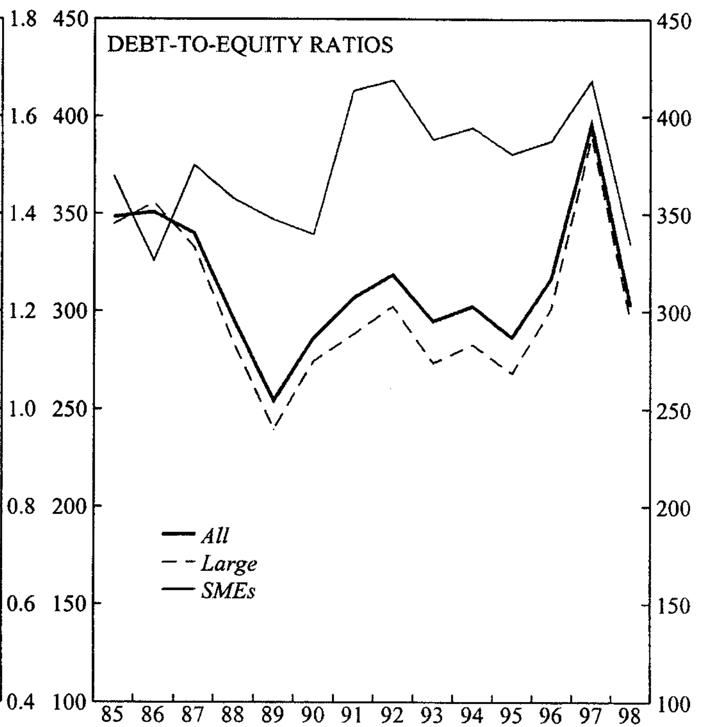
Chart VII.3
Korea

Profitability and Debt Indicators: Manufacturing Sector, 1985-1998
(In percent)









Sources: Data provided by the Korean authorities; Japan: Ministry of Finance, Nomura database; U.S. ensus Bureau, Quarterly Financial Report for Manufacturing, Mining and Trade Corporations.

1/ Defined as net income as percent of total assets.
2/ Defined as net income as percent of sales.
3/ Defined as operating income as percent of interest expense.

- **Market-opening measures to improve competitiveness**. Reforms would focus on opening markets to more competition—domestic and foreign—by strengthening the role of the FTC and liberalizing foreign investment.

- **Overhaul the corporate governance system** by enhancing investor rights, transparency, owner and manager accountability, and the effectiveness of the bankruptcy system.

- **Improve the pricing of credit and market risk and resource allocation** by bolstering the capital base and governance practices of financial institutions, bringing prudential and supervisory regulations in line with international best practice, and liberalizing capital markets.

6. **Within this approach, the government recognized that it would need to jump start the process of deleveraging and bringing business practices in Korea in line with international best practice.** Toward this end, the government established a five-point restructuring agenda for the *chaebol*. Specifically, the government asked the *chaebol* and other large corporations to: (1) improve corporate governance; (2) eliminate cross guarantees among affiliates; (3) reduce debt levels and improve capital structures; (4) concentrate on core businesses; (5) and strengthen the accountability of management and major shareholders. The *chaebol's* Capital Structure Improvement Plans (CSIPs) would reflect their restructuring intentions along the government's five point agenda.

7. **The rest of the paper is organized as follows**: Section B looks at the impact of the crisis on the corporate sector; Section C describes the reforms in corporate governance; Section D outlines the key initiatives in strengthening the corporate restructuring framework; Section E describes the progress that has been made restructuring the top 5; Section F reviews Daewoo's collapse and its handling; Section G describes the progress made in restructuring the *chaebol* ranked 6 to 64 and other large corporations; and Section H contains concluding remarks.

B. Impact of the Financial Crisis on the Corporate Sector

8. **The financial crisis in late 1997 had a severe impact on the corporate sector** and undermined its already tenuous financial situation. The financial crisis also threatened the existence of viable companies.[8] Plummeting sales, a spike in interest rates, and steep foreign exchange losses squeezed corporate cash flows and made debt-servicing difficult.[9]

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[8] Hahm, Ferri and Bongini (1998)

[9] According to estimates, the combination of interest rate and currency shock left up to 49 percent of Korean firms illiquid and 40 percent technically insolvent. See Claessens, Djankov, and Ferri (1998).

9. **Corporations responded by slashing capital spending, inventories and labor costs, all of which had the effect of intensifying the economic downturn.** Inventories adjusted dramatically. Stocks, especially raw material and intermediate manufacturing goods, were cut roughly 45 percent in 1998 as *chaebol*, facing severe shortages in working capital and trade financing, tried to free up resources. Labor costs were cut through attrition, downsizing management and boards, and reducing wages and hours worked. Layoffs were facilitated by the revisions to the Labor Standards Act in early 1998. Nominal manufacturing wages fell 3 percent on average due to cuts in the overtime and bonus payments which account for one-third of employee salaries. High wage flexibility allowed companies to lower operational costs quickly.[10]

10. **With the exception of the top five *chaebol*, which retained access to outside financing, the corporate sector was on the brink of collapse.** A broad swathe of companies could not generate enough cash to service their debt. As a consequence of low returns on assets and high indebtedness, the interest coverage ratio (earnings before interest expense and taxes to net interest expense) was roughly three to five times lower than the OECD average.[11] It was clear that the most troubled corporations needed rapid debt restructuring to restore viability. Most assessments suggested that for a large number of companies, market-based "flow" solutions—operational restructuring, new foreign investment and rights issues, and asset sales—could not reduce debt to sustainable levels.

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[10] Wage flexibility in Korea is high because overtime and bonus payment account for one third of a worker's salary. In 1998, these two components declined by more than 15 percent. By comparison, nominal wages during the financial crisis in Finland continued to increase in 1991 and 1992 while GDP fell by more than 10 percent. See OECD (1999).

[11] The interest coverage (in this case, ratio of operating income before interest and taxes to net interest payments) of Korean manufacturing corporations was already declining progressively and was about 135 percent in second half of 1997. Staff estimates indicate that for every one-percentage point increase in domestic interest rate, interest coverage in Korea falls by about 3–4 percentage points. Hahm et al., (1998) found that the interest coverage for stand-alone Korean companies is negatively related to the probability of default, reflecting that a high interest coverage enhances firms' ability to absorb a shock. They find, however, that this does not hold for *chaebol* affiliated firms probably because of their ability to finance themselves within the group.

11. **Commercial banks continued to extend emergency syndicate loans to troubled *chaebol*, which further undermined bank solvency** (Table VII.1). Banks extended roughly W 2.4 trillion in emergency loans between October 1997 and end-April 1998. During the first quarter of 1998, such "anti-bankruptcy loans" came to W 1.1 trillion, or roughly 15 percent of new bank lending. Some loans were extended at below-market rates.[12] Most of these highly indebted *chaebol* had dubious prospects for remaining solvent without comprehensive debt and operational restructuring. Yet to avoid reclassifying their large exposures to these companies as non-performing (as Korea requires loans to bankrupt companies to be classified immediately as substandard or doubtful), banks kept them afloat to avoid taking a huge loss.

Table VII. 1 Emergency Loans

	Debt ratio End-97 (in percent)	Emergency Loan Amount (Wn bn)	Date
Haitai	1501	130	14-Oct-97
New Core	1786	54.5	20-Oct-97
Jindo	n.a.	106	19-Nov-97
Shinho	661	80	27-Nov-97
Hanwha	1008	300	17-Dec-97
Hanil	n.a.	50	31-Dec-97
Dongha Construction	585	220	10-Jan-98
Kohap	511	300	30-Jan-98
Hanwha	1008	442	10-Feb-98
Woobang Constuction	n.a.	110	03-Mar-98
Dongha Construction	585	600	24-Apr-98
Total		**2392.5**	

Source: Authorities and Warburg Dillon and Read

12. **In contrast, the small- and medium-sized enterprises (SMEs)—which account for roughly half of Korea's GDP—faced a serious credit shortage.** The SMEs also were closely linked, often as suppliers, to the troubled *chaebol*.[13] Banks curtailed overall lending (aside from emergency loans to their largest customers) given the heightened credit risks and the need to strengthen their capital adequacy ratios (Table VII. 2).[14] SMEs were particularly hard hit given their strong reliance on bank financing and their difficulty in attracting funding from alternative sources. Their chief source of funds was commercial paper and promissory notes discounted by merchant banks, many of which failed at the onset of the crisis. As heightened credit risks pushed discount rates to over 20 percent, and terms on promissory notes—widely used to settle trade accounts—

Table VII. 2. Bank Lending, by Company Size
(In trillions of won: number in parentheses are shares)

	1997	1998				1999	
	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Borrowing from DMBs	112.6	120.0	116.0	111.0	111.2	115.1	120.0
Large firms	(26)	(29.7)	(29.1)	(28.9)	(27.5)	(28.1)	(27.1)
SMEs	(74)	(70.3)	(70.9)	(71.1)	(72.5)	(71.9)	(72.9)

Source: Bank of Korea

[12] For example, W 400 billion loan by Hanil Bank to the Hanwha Group in February 1998 carried a 14½ rate of interest compared to the average bank rate of 17 percent for general loans to enterprises. New borrowing rates were much higher.

[13] Roughly 85 percent of SMEs are estimated to have some commercial ties with the *chaebol*.

[14] Banks shifted to safer assets such as government bonds in part because they carry lower risk weighting, and thus help to improve their BIS ratios.

lengthened markedly, SME working capital dried up.[15] Most of the 4,000 bankruptcies per month that occurred in early 1998 were SMEs.

C. Strengthening the Corporate Governance Framework

13. **Reforming corporate governance was one of the government's top priorities.** At the outset of the crisis, the legislature enacted significant market-opening measures—covering foreign investors' rights, shareholder rights, management accountability, transparency and insolvency procedures—all aimed at enhancing the ability of investors and creditors to monitor firms, allocate resources more efficiently, and expose Korean corporations to more competition. The government also addressed a host of other institutional issues such as legal, regulatory or tax impediments to mergers and acquisitions, asset sales and spin-offs, and debt write downs or restructuring by banks, with the aim to establish an institutional setting that would facilitate market-based corporate restructuring. The main initiatives were:

- **Liberalizing capital markets and foreign direct investment**. The government liberalized capital markets and its foreign investment regime in late December 1997.[16] The aim was to encourage corporations to tap the equity and corporate bond markets to reduce their reliance on bank and non-bank lending and create a more balanced capital structure, as well as to improve market discipline and resource allocation:

    - Ceilings on foreign investment in equity, bond and money markets were completely eliminated.
    - Restrictions on corporate borrowing abroad were lifted.
    - Foreign ownership in most industries, including financial industries, was fully liberalized.
    - A "one-stop service" was established to simplify the approval process for foreign investment.
    - Hostile takeover rules and other anti-takeover devices to protect existing management were removed.
    - Asset-backed securitization vehicles and mutual funds were permitted.

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[15] In Korea, a customer typically settles an invoice by issuing a promissory note. The company then would have its bank, often a merchant bank, swap the note for cash at a discount that varied depending on the credit status of the company and customer who issued the note. The company—not the customer—guarantees payment to the bank. This financing mechanism compounded the financial crisis. As customers came under stress, they extended payment terms on their notes or outright defaulted, leaving the company liable to the bank. Companies came under a severe liquidity pressure when banks, because of higher credit risks and financing costs, raised discount rates.

[16] See Chapter III for a more comprehensive discussion on the liberalization of the capital account.

- Restrictions on foreign investors to purchase land for investment projects were eliminated.

- **Accountability.** Several laws and regulations were amended to increase the accountability of management and Board of Directors vis-à-vis outside investors:
  - The Korean Stock Exchange (KSE) required that effective February 1998 all publicly traded companies have at least one outside board director, and by end of 1999 fill a quarter of their boards with outsiders.
  - The KSE required that all listed companies disclose the election and dismissal of any outside director.
  - The Commercial Code was reformed to clarify the fiduciary role of boards. Class action suits against directors will be permitted as of 2000.

- **Shareholders' rights:** Significant steps have been taken to strengthen the rights of minority shareholders to counterbalance the leverage of the large inside shareholders.
  - The Commercial Code and Securities and Exchange Act were reformed in February 1998 to strengthen the rights of minority shareholders.[17]
  - Voting right restrictions for institutional investors were removed in September 1998.
  - Cumulative voting was introduced in December 1998.

- **Transparency.** The government has taken several steps to improve the quality and timelines of financial disclosure:
  - As of 1999, all financial statements of listed companies must be prepared and audited in accordance with international standards (IASC). Financial disclosure standards are also being brought in line with international best practice as of FY 1999.
  - The top 30 *chaebol* are required to produce consolidated group financial statements—which nets out intra-group transactions—starting in April 2000.
  - Quarterly reporting will be required for listed companies beginning 2000.
  - Audit committees were established within the board of directors.
  - The role of KICPA (Korea Institute of CPAs) as an independent professional body for auditing and setting standards has been enhanced. KICPA will be made responsible for regulating and monitoring the auditing standard in the profession.

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[17] The rights of minority shareholders have been substantially strengthened by lowering the threshold for exercising rights related to: the right to file derivative suits; the right to make proposals at a general shareholder meeting; the right to call for a general shareholder meeting; the right to inspect company's financial accounts; and the right to request dismissal of directors or internal auditors.

- The government prohibited all new debt guarantees across affiliates effective April 1, 1998. All existing cross-debt guarantees must be wound down by March 2000.

- **Insolvency laws.** The existing insolvency laws were amended in February 1998 to provide a better balance between debtors' and creditors' rights, to improve the speed and efficiency of the system, improve courts ability to handle insolvency cases:
  - To strengthen creditors' rights, creditors' committees are now mandatory. In addition, the court appointed administrator must consult the creditors' committees on major issues affecting the administration of the debtor company.
  - An economic test was introduced to judge debtor's viability for the commencement of the reorganization process.
  - Time limits were imposed to expedite the reorganization process. Proceeding must commence within one month of filing and be completed with one and half year after filing.
  - If the process is repealed or a reorganization plan is rejected, this automatically triggers bankruptcy (i.e., liquidation).
  - A specialized bankruptcy court was established in Seoul District with judges assigned predominantly to insolvency work

D. Strengthening the Corporate Restructuring Framework

14. **The authorities realized that the changes to the legal and regulatory framework would have little immediate effect on improving companies' capital structure and profitability.** Having made substantial institutional reforms, the government shifted its focus to more urgent problems, namely the corporate debt overhang, "emergency" lending to bankrupt *chaebol,* and the SME credit crunch.

15. **In May 1998, the government requested that banks make viability assessments of 313 corporations**. The aim was to limit debt restructuring to viable enterprises. Banks identified 55 companies as nonviable, but this was largely a symbolic gesture, since these were marginal companies with just W 17 trillion in liabilities employing 8,000 workers, less than 1 percent of the top 30 *chaebol* payrolls.

16. **The government decided to separate corporations into three tiers that mirrored the structure of the Korean economy**. At the top was the small cluster of powerful conglomerates, the so-called Top Five, that controlled a vast share of the country's productive and financial resources; next, a large group of overextended medium-sized *chaebol* (ranked 6 to 64 by average size) carrying enough debt to drag down the banking system; and finally, the cash-strapped SMEs. Each group suffered similar distress symptoms, but differed in size, indebtedness, financial and operational complexity, and access to capital.

17. **From the outset, the government felt that the Top Five *chaebol*—Hyundai, Daewoo, Samsung, SK and LG—while heavily indebted, still commanded enough resources to absorb losses and restructure on their own.** They account for roughly 9 percent of GDP,

27 percent of manufacturing GDP, 12 percent of manufacturing sector employment, and 30 percent of corporate sales. Their cash flow was generally better than the smaller *chaebol*, they enjoyed superior access to bank loans and the capital market, and they had well established names that could help them attract foreign capital and sell assets to domestic and foreign investors.[18]

18. **The government also felt that while a number of affiliates needed debt restructuring, the Top Five were too large, complex and economically powerful to voluntarily submit affiliates to the workout framework**. Instead, the government would push the Top Five restructuring through their voluntary restructuring plans. The main banks were to review these plans and work with the *chaebol* to prepare final plans by mid-December 1998. The government also announced its proposal to use mergers and swaps—the so-called Big Deals — among the Top Five to consolidate overlapping subsidiaries in key manufacturing industries plagued by low profitability and excess capacity (aircraft, autos, petrochemicals, power generation, rolling stock, semiconductors and ship engines). The FTC was to crack down on illegal intra–*chaebol* transactions.

19. **For the most troubled and heavily leveraged second tier 6-64 *chaebol*, the government established an out-of-court workout process.** Many were highly leveraged, with debt exceeding in some cases 1,000 percent of equity, and were recipients of emergency syndicate loans. They owed a wide range of creditors and held a variety of debt instruments. They also had complex capital structures with non-transparent collateral pledges and a tangle of cross-debt guarantees that threatened to undermine the core companies. It was widely accepted that creditors had to address the debt overhang, including cross-debt guarantees, among the most troubled *chaebol*. The workout framework was modeled along the Bank of England's London Approach. The Corporate Restructuring Agreement (CRA), which commits all creditors to abide by specific workout procedures, was signed by over 200 financial institutions and went into effect in June 1998. Other large corporations could apply for workouts as well.

20. **The government set up several schemes to help SMEs obtain working capital and trade credit.** The government was keen to support the SMEs both for political reasons and as a counterweight in an economy top heavy with large conglomerates (see Chapter IV for details). The government ordered banks to roll over SME loan payments and working capital maturities by six months, and subsequently by another six months, essentially guaranteeing the loans. Banks were also instructed to evaluate the status of roughly 22,000 SMEs with outstanding loans of more than W 1 billion. Banks classified roughly 40 percent of these as viable, selecting several as candidates for workouts and setting up individual workout departments to review their restructuring plans.

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[18] The top five absorbed alone 70 percent of new bank loans in 1997. Perceived as too big to fail, their sheer size gave them access to external financing.

E. Progress in Restructuring the Top Five

21. **Because of their strength and influence, and the weakness of banks, the Top Five were initially largely able to avoid serious restructuring.** As their liquidity was restored through an emerging recovery and ample access to the capital markets, their incentives to restructure diminished. They circumvented tighter bank credit limits by borrowing extensively in the commercial paper and corporate bond market, accounting for 72 percent of corporate bond issues in 1998. Their continued access to funding reduced pressure to restructure and did little to reduce their debt burden (Table VII.3).

Table VII. 3 Private Securites Issues by Company Size
(In trillions of won: number in parentheses are shares)

	1997	1998				1999	
		Q1	Q2	Q3	Q4	Q1	Q2
Corporate Bond Issues	34.3	9.7	5.1	19.4	21.8	11.1	9.5
Large firms	(93.7)	(99.1)	(99.0)	(99.5)	(97.8)	(94.3)	(88.6)
SMEs	(6.3)	(0.9)	(1.0)	(0.5)	(2.2)	(5.7)	(11.4)
Top 5 Chaebol	(51.8)	(87.5)	(61.1)	(78.8)	(61.0)	(27.4)	(37.6)
Public and rights issues	3.2	1.5	3.6	4.3	4.0	6.1	11.3
Large firms	(73)	(98.8)	(97.2)	(99.7)	(96.2)	(99.5)	(98.6)
SMEs	(27)	(1.2)	(2.8)	(0.3)	(3.8)	(0.5)	(1.4)

Source: Bank of Korea

22. **The Top Five's superior access to the bond market in part reflected their better credit rating and investor perception that they were too big to fail.** And through their controlling ownership of a large number of non-bank financial institutions—such as securities and insurance companies and investment trust companies (ITCs)— the large *chaebol* could channel vast sums into their groups, by directing these financial affiliates to purchase the bonds and commercial paper issued by their weaker subsidiaries. [19]

23. **In September 1998**—after several rounds of delays by the Top Five in submitting their revised CSIPs, backpedaling on promised restructuring efforts, and with no progress on the Big Deals—the government issued an ultimatum. Failure to move on their restructuring plans would result in credit sanctions. The government also increased pressure on the Top Five to finalize the Big Deals, which were stalled over asset valuation differences, lack of viable business plans, and insufficient foreign capital (Box VII.1).

[19] As of late 1997, more than 74 nonbank financial institutions (mainly securities companies, life insurances, merchant banks, and short-term finance companies) were controlled by the top 30 *chaebol*, up from 64 financial institutions in 1993.

Box VII.1 Big Deals

"Big Deals" are mergers and acquisitions among corporations affiliated with the top 5 *chaebols*. They are meant to address overcapacity problems among Korean producers in key sectors, and where predatory competition has led to substantial losses. These deals have been worked out under government pressure as part of a larger effort to get *chaebol* to focus on core businesses and restore profitability. The Big Deals started out as proposed swaps of business lines among the top 5 *chaebol*, but following initial resistance by the *chaebol* and negotiation with the government, have evolved into mergers and acquisition agreements.

The top 5 *chaebol* announced early September 1998 agreements on the general terms of mergers and acquisitions of 17 companies operating in seven core industries: aerospace, oil refining, petrochemicals, power generators, rolling-stock, semiconductors, and ship engines. The car industry was left out initially, but subsequently added as Daewoo and Samsung began discussing ways to sort out their problems in their electronics and car businesses.

Progress in finalizing the deals has been slow because of disagreements over valuation, labor issues, and management control. Talks have also stalled because of disagreement over various details involved in the business plans. In all cases, companies were required to submit their plans to their main banks and the Evaluation Committee (EC) headed by the Chairman of the Corporate Restructuring Coordination Committee. The EC requested revisions to several plans mainly to reflect fairer burden sharing arrangements, more realistic assumptions, and higher foreign capital inducement. Several initial proposals were considered unacceptable since they were highly concessionary, involving substantial debt restructuring and new loans. The main banks, together with their foreign advisors, were asked to demonstrate that the business plans were based on commercial principles and assess: (1) feasibility of the proposed combination; (2) adequacy of due diligence; (3) soundness of the proposed capital structure; (4) whether plans involved real restructuring measures to reduce excess capacity and restore operating profitability. Meanwhile, a number of transactions have been completed:

⇒ **Aerospace:** No agreement has been reached. Samsung Aerospace, Daewoo Heavy and Hyundai announced plans to merge, but the Evaluation Committee considered the plans unrealistic and inadequate to restore competitiveness, and requested that they involve a foreign strategic partner.

⇒ **Car industry**: No agreement. Although Samsung initially agreed to transfer its car company—Samsung Motors—to Daewoo Motors and in return receive Daewoo Electronics in late June 1999, it decided instead to place its ailing car company under court receivership. Samsung agreed to pay down the car company's non-guaranteed debt of W 2.5 trillion by transferring 4 million shares in unlisted Samsung Insurance to its creditors (estimated value: W 2.8 trillion).

⇒ **Oil refining**. Hyundai Oil bought Hanwha Energy's oil refining unit for W 2.9 trillion in 1998. In October 1999, a petroleum company from the United Arab Emirates acquired half a stake in Hyundai Oil for $500 million.

⇒ **Petrochemicals**: No agreement has been reached. Samsung General Chemical and Hyundai Petrochemical agreed to merge and find a foreign partner. A Japanese manufacturing company signed a Memorandum of Understanding in November 1998.

⇒ **Power generation**: Samsung Heavy Industries, Hyundai Heavy Industries and state-run Korea Heavy Industries & Construction finalized an agreement on their power generation businesses in November 1999, after negotiating for over a year. According to the final pact, Hyundai will transfer its specialized power generation equipment business to Korea Heavy. Samsung agreed to transfer its power generation business lines and all related assets and facilities to Korea Heavy and assume special losses incurred by its division over the next five years.

⇒ **Rolling-stock**: Daewoo Heavy and Hanjin Heavy agreed to merge into a single rolling-stock company.

⇒ **Ship Engine**: Samsung Heavy and state-run Korea Heavy Industry agreed early November 1999 to separate their respective shipping engine businesses and set up a separate company merging the two operations. Korea Heavy would have a controlling stake of 60 percent in the new firm and Samsung would retain the remaining 40 percent.

⇒ **Semiconductors**: Hyundai Electronics acquired LG Semicon for W 2.6 trillion.

It is too early for a definitive assessment of the Big Deals. A number of them still need to be fully consummated and benefits will be realized over time. The Evaluation Committee made a positive contribution to the strengthening of the plans, thereby enhancing the credibility of the deals. The verdict is still not in on whether the deals will restore profitability, reduce overcapacity, and lower leverage. This will depend largely on whether the merged companies will continue to restructure their operations. In principle, they should benefit from greater operational efficiencies and cost-saving synergies. It is also clear that the Big Deals themselves are only a small part of the fundamental restructuring that is needed for the top 5 *chaebol* to restore profitability.

24. **In the second half of 1998, the government also increased pressure on the Top Five by tightening regulatory instruments and leveraging its ownership of the core banking system.** First, the FTC levied fines on *chaebol* found to be supporting unprofitable affiliates.[20] It accelerated the unwinding of cross debt guarantees, another important source of intra-group support. The FSC announced in October 1998 that cross guarantees among subsidiaries and affiliates operating in unrelated industries would be eliminated by December 1998. By March 2000, all remaining cross guarantees would be removed. In addition a number of prudential regulations went into effect aimed at tightening credit availability to the *chaebol*.[21] These appear to have had an impact on bank and non-bank financial institutions lending behavior in the second half of 1998 and first half of 1999 (Table VII.4). The drop is even sharper when guarantees are included. Net lending, including guarantees, from commercial banks to the Top Five dropped from W 81 trillion at end-1997 to W 58 trillion at end-June1999.[22]

Table VII. 4. Net Bank and Nonbank Lending to the top Chaebol
(End period, in percent)

	Banks			Nonbank Financial Insitutions		
	Dec-97	Dec-98	Jun-99	Dec-97	Dec-98	Jun-99
Top 5 chaebol	11.4	8.3	7.8	36.1	22.7	19.0
Hyundai	3.0	2.4	2.2	11.4	7.1	6.6
Daewoo	2.3	2.3	2.5	8.4	5.6	5.1
Samsung	3.1	1.8	1.3	8.1	5.4	4.2
LG	2.2	1.3	1.3	4.9	3.0	2.2
SK	0.8	0.5	0.5	3.2	1.6	1.0
Top 30 chaebol	20.0	16.5	15.1	62.1	40.3	34.9
Top 66 Chaebol	22.6	19.3	17.2	67.2	45.0	37.9
Total bank lending 1/	100.0	100.0	100.0	100.0	100.0	100.0
Total lending (in tr wn)	370	353	359	96.6	70.7	65.3

Source: Korean Federation of Banks, Bank of Korea
1/ Excluding guarantees

[20] The FTC launched two rounds of investigations in 1998 on intra-group transactions among the top five *chaebol*. It found that over 113 firms had provided a total of W 6 trillion won of support to 56 affiliates. Support mostly comes in the form of purchases of a troubled units' subordinated or convertible bonds at prices higher than market values. Interestingly, the first round of investigation found that all but six of the 33 companies providing support earned profits between 1995-1997. Of the 21 beneficiaries, 17 had recorded losses during that period, confirming government and investor concern that resources were used to prop up weaker affiliates. In response, the FTC imposed W 93 billion in fines on the Top Five.

[21] Banks were required to: (1) include in their calculation of single borrower and group exposure limits all off-balance sheet exposures (including guarantees); (2) reduce their exposure to a single borrower and group from 45 percent to 25 percent of their equity by the end of 1999; (3) reduce their single group exposure to large shareholders and their affiliates from 45 percent to 25 percent of their equity effective January 2000.

[22] Data on total guarantees for banks and non-bank financial institutions are not available. But to put the figures in perspective, net lending, including guarantees, to the top five *chaebol* in percent of total bank lending fell from 52 percent at end of 1997 to 38 percent at end-June 1999.

25. **The government also imposed prudential limits on non-bank and bank financial institution holdings of Top Five commercial paper and corporate bonds.** Top Five ownership of a large number of these financial institutions was raising serious governance and efficiency concerns, with potential distortionary effects on the allocation of household savings. At the end of October 1998, the ITCs —which bought most of the paper—could no longer hold more than 15 percent of their total corporate bond holdings in a single group or conglomerate. For the commercial banks the ceiling was set at 10 percent.

26. **In December 1998, under government and public pressure, the Top Five submitted their revised CSIPs**. These were approved by the government and the lead banks in January 1999. The *chaebol* agreed to:

- focus on four or five core businesses;
- halve the number of subsidiaries and affiliates from 264 to 130;
- reduce their total debt-to-equity ratio to below 200 percent by the end of 1999;
- eliminate cross debt guarantees; and
- improve their corporate governance practices and enhance transparency.

To meet the debt ratio, they indicated their intention to raise roughly W 13 trillion through new rights issues in 1999 and attract $13.6 billion in foreign capital, including $6.5 billion in FDI. Creditors were to evaluate progress quarterly. The FSC announced that it would monitor progress and hold bank managers accountable for the failure to enforce agreements.

27. **The first quarterly review for January-March 1999 was completed in April 1999**. The FSC announced that the Top Five have made satisfactory progress in reducing cross-debt guarantees and improving corporate governance standards, but that progress in other areas was unsatisfactory. The FSC found that the Top Five had not met their pledges on asset sales, divestitures, foreign capital inducement and debt reduction. Hyundai and Daewoo failed to meet most of their commitments.

28. **The results also indicated that the capital structure of the Top Five *chaebol* in 1998 did not improve**. Debt grew by 7 percent to W 234 trillion at end-1998. Excluding asset revaluations, there was no improvement in capital structure. Daewoo's debt soared by 40 percent to W 60 trillion at end-1998 and Hyundai's by 18 percent to W 73 trillion. Excluding asset revaluation effects, Hyundai's debt-to-equity ratio rose to 600 percent, and Daewoo's to 500 percent, raising concerns about their financial stability.

29. **Reacting to the pressure to improve their financial structure, the Top Five increased rights offerings, with heavy subscriptions by affiliates.** Consequently, equity holdings rose by W 11.5 trillion to W 22.8 trillion by April 1999 (Table VII.5). Out of the W 12.2 trillion in equity raised by the top 30 *chaebol*, new rights offerings made up W 8.8 trillion, and of that, the Top Five accounted for 90 percent. Cross-ownership among Top Five affiliates rose sharply.[23] In essence, the *chaebol* substituted cross shareholdings of weak affiliates for debt guarantees—which they could no longer use—to the detriment of minority shareholders. Without consolidated financial statements, cross-shareholding reduces *chaebol* debt ratios. (Consolidated financial statements are to be introduced in April 2000, on the basis of FY 1999.)

Table VII. 5. Cross Ownership of Top 5 Chaebol

	Equity Holdings (in tr wn)1/		Shares held by Affiliates (in percent)	
	Apr-98	Apr-99	Apr-98	Apr-99
Hyundai	3	7	42	51
Daewoo	2	5	33	48
Samsung	3	4	41	39
LG	3	4	36	48
SK	2	3	46	59
Top 5	11	23		

Source: Fair Trade Commission

30. **Concerned about these first-round results, the FSC**: (1) instructed Hyundai and Daewoo to revise their CSIPs to outline a more drastic restructuring; (2) told main banks to move from quarterly to monthly reviews and sanction non-compliance (imposing penalty rates on loans, withdrawing credit, forcing affiliates into the workout program, or pushing for bankruptcy); (3) increased supervision of bank monitoring of the CSIPs, holding bank managers responsible for any neglect of duty; and (4) required the Top Five to show progress on restructuring before investing in new businesses.[24]

31. **The FSC also announced that it would rule out accounting gimmicks such as asset revaluation when calculating the debt ratio,** arguing that such revaluations do not reflect a legitimate improvement in *chaebol* capital structure and cash flow. Under more lax accounting guidelines, a large number of firms revalued their assets in 1998 in order to reduce their debt ratio to below the government's 200 percent target of end-1999. According to the Korea Stock Exchange, a total of 265 listed companies revalued their assets, generating W 30 trillion in revaluation profits. Hyundai topped the list with asset revaluations amounting to W 11 trillion, followed by Daewoo with W 8.5 trillion.

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[23] The *chaebol* took advantage of a FTC ruling that removed a restriction on *chaebol* equity investment in affiliates that was intended to encourage corporate restructuring through mergers and acquisitions.

[24] Flexing its regulatory muscle, the FSC is reported to have prevented LG Group's bid to take over Korea Life Insurance. LG had entered the first round of bidding, which was cancelled by the government.

32. **The August review (based on first half 1999 financial statements) indicated that all except Daewoo were roughly on track in meeting their restructuring pledges.** The average debt ratio fell to 302 percent, below the target rate of 336 percent for the first half of 1999 (Table VII.6). The improvement was mainly due to substantial resort to rights issues to raise equity financing and an increased willingness to sell assets and stakes to foreign investors and spin off smaller sized companies. Although 1998 was a record year in raising equity capital through rights issuance, the first half of 1999 with W 21 trillion has already far surpassed the 1998 total of W 11.8 trillion. The top five have also spun-off 451 firms where they had a minority stake between January 1998 and end-June 1999. These were mostly small-sized non-core companies with an average of W 1.4 trillion in capital and 40 employees, and operated mostly in parts production.[25]

Table VII. 6. Top 5 Chaebol Debt Development, 1997-1999

	Debt (in trillion won; end period)				Debt to Equity Ratio 1/ (in percent)				
	97	98	99 H1	99 target	97	98	99 H1 target	99 H1 actual	99 target
Hyundai	61	69 2/	65 2/	45	572	449	374	341	199
Daewoo	43	60	62	28	474	527	512	588	182
Samsung	50	45	39	37	366	276	234	193	194
LG	43	36	35	28	508	341	286	247	200
SK	24	23	21	18	466	355	314	227	200
Top five	221	233	223	157	470	386	336	302	198

Source: Financial Supervisory Commission
1/ Excluding asset revaluation
2/ Includes W 7.5 of Kia debt Hyundai assume through the acquisition.

F. Daewoo's Collapse

33. **In mid-July 1999, Daewoo narrowly averted a default after its domestic creditor banks agreed to restructure its short-term debt.** Daewoo has long been considered the most vulnerable of the Top Five and the most reluctant to restructure. It is Korea's second largest chaebol, and its output accounts for roughly five percent of Korea's GDP and a tenth of total exports.

34. **Daewoo resisted restructuring throughout 1998, failing to address its core problems of low operational cash flow, excessive leverage, and scattered loss-making businesses.** Instead, it acquired debt-laden Ssangyong and borrowed aggressively, boosting its debt to equity ratio to 527 percent at end-1998 from 474 percent at the end of 1997. Daewoo's financial condition worsened in 1999. In April, Standard and Poors downgraded the group's parent company, Daewoo Corporation. Domestic creditors began reducing their exposure and shortening terms. Daewoo had trouble raising cash on the booming stock market and began turning to the costly overnight market. Ultimately Daewoo could no longer sustain its debt profile. Delays in restructuring led to a deterioration in asset quality which in turn made subsequent efforts at voluntary restructuring more difficult.

35. **Fearing that a Daewoo bankruptcy could undermine financial stability, the government urged creditors to roll-over Daewoo's short-term debt in return for a workout in mid-July 1999.** Daewoo's 69 domestic creditors agreed, against collateral purportedly valued

[25] In total, the top 30 *chaebol* spun off 484 firms between January 1998 and end-June 1999.

at W 10 trillion, to extend payment deadlines on short-term debt and to provide new money. Six main banks, all government owned, were to oversee Daewoo's restructuring. In mid-August, these lead banks and Daewoo's management agreed on a revised CSIP that would change the group ownership structure, leaving it with its passenger car, machinery and trading operations while the remaining operations—shipbuilding, commercial-vehicle, construction, securities and electronics businesses—would be sold. In the end, the group would be downsized from 25 to six companies.

36. **Nonetheless, Daewoo's financial situation continued to deteriorate rapidly**. Affiliates were finding it difficult to raise working capital. In late August 1999, creditors placed 12 Daewoo affiliates (covering over 90 percent of the group's liabilities and assets) under the FSC's workout program and agreed on a three-month standstill on debt service. Creditors took control over Daewoo's restructuring, appointed outside auditors, and extended a trade credit line. Workouts were to be formulated by early November. To expedite the process and avoid undue market disruptions, including disruptions related to problems faced by the investment trust industry, affiliates were addressed individually.

37. **The domestic creditors announced the debt workouts for the twelve affiliates in early November.** The plans include debt for equity swaps, a freeze of principal payments (typically until 2004), lower interest rates, and swapping debt for convertible bonds. Of the W 61 trillion in total debt restructured, 41 percent is being converted to equity (W 6 trillion through straight debt to equity swap and the rest through convertible bonds). In addition, W 5 trillion in new money is being provided, largely to normalize Daewoo Motors. For the largest affiliates—Daewoo Corporation, Daewoo Heavy Industry and Daewoo Motors—creditors mainly swapped debt for equity and convertible bonds. Details on operational restructuring and creditors' exit plans are still to be announced. Daewoo's Chairman and all CEOs have resigned. Creditors further revealed that due diligence estimates indicate that total debt for the group was 15 percent higher than first estimated (W 87 trillion, equivalent to one fifth of Korea's GDP) and net asset value turned out to be negative W 24½ trillion. To date, five workout plans have been approved (Orion, Kyungnam, Daewoo Motor Sales, Daewoo Electronic Component, Ssangyong Motors). For those affiliates that have not had their workout plans approved yet, creditors extended the deadline on the three-month standstill for another month until the end of December 1999.

38. **However, substantial risks remain.** Foreign creditors—who are owed $6.8 billion of which $5.1 billion is borrowed by the four leading subsidiaries (Daewoo Corporation, Daewoo Motor Company, Daewoo Electronics Company, and Daewoo Heavy Industry Ltd.)—have not yet agreed to the workout plans, potentially leading to complications if they decide to take legal action against Daewoo. The foreign creditors comprise over 200 financial institutions, most with small exposures; the top ten hold roughly half of Daewoo's debt. Further, due diligence now reveals that Daewoo's net worth is markedly lower than originally estimated. Creditors could face difficulties selling the companies if more hidden losses come to light. In addition, the main creditors may be reluctant to sell the assets at a substantial discount and thereby fail to normalize the companies quickly.

39. **The other major question is whether more collapses are in the pipeline.** SK, LG and Samsung, all with strong operating cash flow, have made good progress in restructuring and focusing on core strengths, and are largely on track to meet the 200 percent debt-equity target by the end of 1999. LG and Samsung have sold off a number of profitable businesses and used these proceeds to lower their debt. For instance, in May 1999 LG Electronics sold half of its stake in LG-LCD to Philips Electronics, the Dutch group, for $1.6 billion, one of the largest investments by a foreign company in South Korea since the outbreak of the financial crisis. By contrast, Hyundai is highly leveraged and increased its debt burden by acquiring bankrupt Kia, money-losing LG Semicon, and Hanwha Oil Refinery. Nonetheless, most market analysts consider Hyundai to be in far better shape than Daewoo and unlikely to face similar market pressures: it has better management, higher-quality assets, bigger profit margins on core operations, and it successfully raised over W 10 trillion in new capital so far in 1999 through rights issue and domestic asset sales. Further, it has raised $1.9 billion in foreign capital by selling its two U.S. subsidiaries, listing a third on the U.S. Nasdaq, and selling half of Hyundai Oil to a petroleum company from the United Arab Emirates. Hyundai could, however, encounter some problems meeting its year-end targets because its restructuring plans are heavily backloaded to the fourth quarter.

G. Restructuring Second-tier *Chaebol* and Other Large Corporations

40. **The second-tier *chaebol* ranked 6–64 were also struggling under exorbitantly high debt.** Unlike the Top Five, however, they lacked access to bank credit or the capital markets and started restructuring far earlier and more aggressively to raise desperately needed cash. Several managed to undergo a sweeping overhaul of their businesses. The number of affiliates were reduced dramatically; businesses and real estate were sold to repay debt; and management and workforces were streamlined to reduce labor costs. Overall, given the dire situation most faced at the start of 1998, they have made substantial progress. Still, much remains be done to restore creditworthiness and profitability. The 6–64 *chaebol* can be divided into three groups: (i) those restructuring under a new workout framework; (ii) those restructuring on their own terms under the CSIP and outside the workout framework; and (iii) those restructuring under court protection.

41. **In July 1998, the FSC initiated a loan workout program for the most troubled *chaebol* that still were considered economically viable.** The objective was to restore a company's creditworthiness and competitiveness through debt and operational restructuring. Overall, the workout program has worked well to advance restructuring and stabilize companies' financial situation. Tight timetables helped get the process moving, and stringent guidelines on emergency loans encouraged distressed *chaebol* to apply for workouts. The creation of an arbitration committee (the Corporate Restructuring Coordination Committee, or CRCC) to resolve disputes kept inter-creditor or creditor-debtor disputes from stalling the process.

42. **As of end-July 1999, creditors approved workout plans for 79 companies.** Of these, 38 are affiliates of 15 *chaebol*, 26 are large firms outside the top 6–64, and 14 are SMEs with

debts over W 50 billion. Seven companies were rejected from the workout process.[26] The CRCC arbitrated in 15 percent of the workouts. Kohap was the first *chaebol* to apply and Dong-Ah Construction the first to agree on a workout. In both cases, workout negotiations were competed in less than three months, in contrast to an average of two years for court reorganizations. All 79 companies are now in the course of implementing their workout plans.[27]

43. **Given the debt overhang, the emphasis of the workouts was more on financial than operational restructuring**. A total of W 33½ trillion of outstanding debt (7 percent of GDP),of which 64 percent was bank debt, has been restructured. The restructuring terms emphasized reducing interest rates (for 69 percent of the transactions), capitalizing interest, and deferring principal. Very little debt was written down or converted to equity (Table VII.7). Creditors granted roughly W 3 trillion in new money. Unsecured debt was typically converted to equity or convertible bonds. Creditors wrote off most of the outstanding debt guarantees. Owners retained control and contributed negligible new equity.

Table VII.7. Summary of Debt Restructuring Methods and Application

Method	Total won amount (in trillions)	Typical Application
Interest rate Cut	21.9	Secured debt
Interest rate Exemption	5.5	
Debt-equity Swap	1.5	Unsecured debt/junior debt
Convertible Bond Conversion	2.1	Unsecured debt/junior debt
Debt Forgiveness	0.6	Cross-debt guarantees
Others	2.1	
Total Loans Outstanding	33.6	
New Money	2.9	

Source: FSC and World Bank

44. **In return, workout companies agreed to restructure and downsize their operations.** Workout plans typically have a horizon of as much as three years. Workout companies agreed to sell W 4.6 trillion of assets, including surplus real estate, cut their workforce by 15 percent and dispose of 112 non-core affiliates. In many cases, progress is satisfactory, with implementation of proposed business restructuring measures broadly on track.

45. **Early evidence suggests, however, that debt restructuring in several cases may not have gone deep enough, and a second round may be needed.** Progress on reducing the debt overhang and restoring balance-sheet solvency remains limited. All too often, creditors rescheduled loans instead of writing off debt. The three-to-four-year average on rescheduling of principal assumes that most of these companies will be able to grow out of their financial woes fairly quickly. Furthermore, companies may face more debt servicing problems simply because little attention was given to spreading out maturity structures, with most debt repayments bunched in 2001/02. The workouts were also all very similar, indicating that banks did not tailor

[26] These included four companies from the Tongil group, Anam Electronics, Kyungki Chemical and Dal Jae Chemical.

[27] This does not include the twelve affiliates of Daewoo that were placed under the workout framework at end of August 1999.

them to the individual companies' specific conditions. Several of the early workouts have failed to normalize operations, and banks are in many cases revisiting projections. Five cases completed in 1998—Sepoong, Kohap, Shinwoo, Ildong Pharmacy, Shin Won—have been revisited. The FSC and banks have identified weakness in the framework and are working to address them.

46. **Several candidates for workouts among the 6-64 *chaebol* decided to restructure on their own and not apply for a workout.** Creditors have been reviewing their progress on a semi-annual basis. Several (Hanwha, Daesang and Ssangyong) are being touted as the best examples of successful restructuring (Box VII.2). A number of these benefited from starting their restructuring early in 1998 and so are more advanced than others. Nonetheless, the April 1999 creditor review (based on 1998 financial statements) indicated that most of the 6–64 *chaebol* were making unsatisfactory progress under the CSIP framework and have failed to meet their targets. The strong economic recovery, stock market boom, and improving liquidity appear to have relieved pressure to restructure. The FSC asked banks to strengthen monitoring and sanction companies found to be backtracking on their pledges. Banks were also urged to be more proactive and pressure laggard *chaebol* to apply for a workout.

Box VII.2. Restructuring of 6-64 *Chaebol*: Hanwha

Hanwha has been restructuring since the onset of the crisis and the results are already visible. On the brink of bankruptcy at the end of 1997, Hanwha– Korea's eighth largest *chaebol*–has since reduced its subsidiaries to 15 from 32 and cut its debt ratio from over 1,200 percent to 350 percent at end-1998. To pare down its debt load, Hanwha sold off its profitable ball-bearing operations, stakes in five joint ventures, its securities business, an oil refining unit, 32 real estate parcels, a loss-making daily newspaper and an automotive parts unit. It attracted foreign capital for three joint ventures in the retail and hotel business. Through these sales, Hanwha cut its debt in half, from W 8 trillion to W 4.4 trillion at end-1998. More importantly, Hanwha returned to profitability on lower sales volume—from a negative 2.9 percent on W 11 trillion sales for 1997 to a positive 1.8 percent on W 5.6 trillion sales for 1998. The group now plans to focus on its core business: chemicals, retail distribution and hotels. Of the nine *chaebol* that received emergency loans, Hanwha is the only one that has paid back creditors.

47. **Thirteen *chaebol* began restructuring under court-supervised reorganization in 1997**. Most are under court receivership and are being managed by a court-appointed administrator. Although several group affiliates have been sold (e.g., Kia and Asian Motors from the Kia group, Jinro Coors from the Jinro Group, Korea Tungsten from the Keopyung group, Halla Pulp and Paper from the Halla group), creditors have in general made slow progress in selling bankrupt companies and normalizing company operations. Of the almost 60 companies that filed for court protection (affiliates of the 13 bankrupt *chaebol*), 85 percent are still under court protection, to the detriment of these companies. Their uncertain status severely hampers their ability to raise capital and get new orders. By contrast, Kia Motors—which went bankrupt in October 1997—after it was bought by Hyundai Motors late in 1998 was quickly able to normalize its operations. After a record loss in 1998, the company returned to profitability in the first half of 1999 and is planning a rights issue of roughly W 800 billion in November 1999 to bring its debt ratio down to below 200 percent at the end of 1999. In a number of cases (e.g., Haitai), sale talks have collapsed because creditors could not agree on the sale price.

H. Concluding Remarks

48. **Almost two years into the corporate reform program, the key question is whether Korean corporations are in fact restructuring.** Here some perspective is essential. Korea's corporate debt problem was unprecedented. The industrial sector was on the verge of a systemic collapse, so it is unrealistic to expect that its restructuring can be completed in one or two years. The market in any event could scarcely have absorbed the asset sales that would have been necessary to raise sufficient cash to eliminate the debt overhang. Nor would it have been politically or socially feasible to shut down industrial plants en masse, liquidating hundreds of companies and laying off thousands of workers. Any assessment of what has been achieved and what remains to be done requires an understanding of where the process started.

49. **Much improved market conditions since the onset of the financial crisis have helped corporations.** Lower interest rates, a stable won, and a booming stock market have helped restore corporate liquidity. The surprisingly strong recovery combined with lower labor costs have improved profitability. After a record loss in 1998, corporate earnings for listed companies turned positive for the first half of this year. Corporations have contained their capital expenditures, aiding their de-leveraging. Overall, the widespread default risk that prevailed in the spring of 1998 has been removed.

50. **The institutional setting has also been greatly strengthened, which should aid a market-based restructuring**. Markets are more open; corporate governance and financial disclosure have been strengthened; prudential regulations have forced banks to improve their lending practices and risk assessment; and a specialized bankruptcy court in the Seoul District has been installed.

51. **There are signs that reforms have already altered the way companies are managed and monitored**. Several *chaebol*—Ssangyong, Daesang and Hanwha—have embarked on a voluntary and so far successful restructuring strategy. Even among the Top Five, LG and Samsung have downsized and improved their capital structure through both debt reduction and capital increases, and are increasingly focusing on their core strengths. A large number of domestic mergers have been consummated, rationalizing overhead costs and capacity. The largest and most notable of these was Hyundai Electronics' acquisition of LG Semicon.

52. **Foreign capital inflows have helped recapitalize heavily leveraged corporations**. A large number of foreign companies have either bought Korean companies, entered new joint ventures, or increased their stakes in existing ones. Foreign direct investment (FDI) has surged reflecting in part the positive effects of the government's liberalization policies and Korean corporations' thirst for capital. Major cross-border deals have been consummated. More than half of several publicly traded blue-chip companies is in foreign hands—a level that not long ago was considered unthinkable. Foreign investors now hold more than 26 percent of outstanding shares in roughly 50 companies (i.e., in about 7 percent of listed companies). These holdings will affect company management and board composition.

53. **Shareholder activism is on the rise, spearheaded by People's Solidarity for Participatory Democracy (PSPD), a citizen organization.** Korean courts held management of Korea First Bank liable for lending money in defiance of shareholder objectives. The bank's directors were ordered to compensate shareholders for losses incurred by bad loans to Hanbo Steel. This ruling is expected to set a precedent for other small corporate shareholders. PSPD and three large foreign funds (Tigers, Scudder and Oppenheimer) won a proxy contest against SK Telecom's board and management. Three outside directors were nominated to the board, including two appointed by the foreign funds. These directors also received veto power on such key issues as financial transactions with affiliated companies.

54. **Corporate deleveraging is progressing**. Debt to equity ratios have fallen for the top 30 *chaebol* and for listed companies, owing largely to asset sales, rights issues, higher corporate savings, but also because of accounting gimmicks such as asset revaluation. The debt to equity ratios have indeed fallen, but they primarily reflect higher equity, rather than lower debt. The corporate debt level remains unchanged at W 180 trillion since end-1997 (although as a percentage of GDP corporate debt fell from 179 percent at end-1997 to 164 percent at end-June 1999), meaning that corporations on average remain vulnerable to changes in macroeconomic conditions and loss of investor confidence. Also, recourse to rights issues may accelerate deleveraging, but it dilutes shareholders' holdings as well. And, if the cash raised is not invested in value-enhancing projects or used to retire excessive debt, the rights issues will have contributed little to enhancing long-term profitability and shareholder value.

55. **Better risk pricing is evident.** Spreads have emerged between the corporate bonds of weak and strong affiliates. Probable causes include the removal of the cross guarantees within *chaebol* and a retreat by banks from guarantees on corporate bonds. Importantly, companies with higher credit risk are finding it more difficult to raise capital either through debt or equity, as was the case for Daewoo.

56. **The out-of-court workout process has progressed reasonably well under difficult conditions.** Transparent, impartial and fair rules govern the restructuring process. Debt restructuring takes place within a formulated business plan and after viability has been assessed. The approach is a break from the simple bailouts of the past. While the government's 200 percent debt-to-equity target may have been overly ambitious, given that the ratios were over 500 percent at the beginning of 1999, it moved the process forward.

57. **On balance, the Korea government has laid the foundation for sound restructuring.** The government has opened capital markets, liberalized foreign direct investment, tightening prudential regulations, upgraded corporate governance standards and pushed corporate restructuring through the banks. Restructuring, however, is an ongoing process. It will take several years before true changes in governance practices will begin to surface and change the way corporations are managed.

58. **Paradoxically, the risk now is that with the worst of the crisis over, and with ample liquidity and a strong stock market, the pressure on corporations to address the root problems that caused the crisis will ease.** During the crisis, the government rightly stepped in

to lead corporate restructuring by establishing a framework that would permit a marked-based restructuring. At this stage, markets and managers have to pick up the reins. The government is not in a position to make company level decisions and should avoid directing corporate restructuring from the top down. Where it has tried this approach, as with the Big Deals, the results have been poor. The key now is effective implementation and transparency at the company level. Restructuring must now be driven from the bottom up, by managers and owners. Having well-managed banks that can help corporations compete in a more globally oriented environment will help. Companies will need to continue to shift their focus to the bottom line, enhancing profitability through cost-cutting, sales of non-core assets, strategic alliances, and improved disclosure. The extent to which this occurs will serve as an indication of whether Korea's corporate restructuring will prove a success over the long term. In the end, markets must be allowed to function, prices to find their level, sellers to find buyers, and new owners and capital to emerge and drive the process.

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