



## Consulting Assistance on Economic Reform II

# DISCUSSION PAPERS

The objectives of the Consulting Assistance on Economic Reform (CAER II) project are to contribute to broad-based and sustainable economic growth and to improve the policy reform content of USAID assistance activities that aim to strengthen markets in recipient countries. Services are provided by the Harvard Institute for International Development (HIID) and its subcontractors. It is funded by the U.S. Agency for International Development, Bureau for Global Programs, Field Support and Research, Center for Economic Growth and Agricultural Development, Office of Emerging Markets through Contracts PCE-C-00-95-00015-00 and PCE-Q-00-95-00016-00. This paper is funded by Contract PCE-Q-00-95-00016-00, Delivery Order 16. Copyright 1999 by the President and Fellows of Harvard College.

### **The Second Year of the Asian Financial Crisis: Country Strategies and Prospects for Recovery**

**Steven Radelet  
Jeffrey Sachs**



CAER II Discussion Paper 60  
April 1999

The views and interpretations in these papers are those of the authors and should not be attributed to the Agency for International Development, the Harvard Institute for International Development, or CAER II subcontractors.

*For information contact:*

CAER II Project Office  
Harvard Institute for International Development  
14 Story Street  
Cambridge, MA 02138 USA  
Tel: (617) 495-9776; Fax: (617) 496-9951  
Email: [caer@hiid.harvard.edu](mailto:caer@hiid.harvard.edu)

## **The Second Year of the Asian Financial Crisis: Country Strategies and Prospects for Recovery**

Steven Radelet and Jeffrey Sachs<sup>1</sup>  
Harvard Institute for International Development  
April, 1999

---

<sup>1</sup> We would like to thank Susan Baker, Mumtaz Hussain, Yekyu Kim, and Hamza Abdurezak for their excellent research assistance. We are indebted to Jong-Wha Lee and Frank Flatters for valuable inputs. We would also like to thank Orest Koropecy of USAID for his helpful revisions. This work is supported by the Office of Emerging Markets, Economic Growth and Agricultural Development Center, Bureau for Global Programs, Field Support and Research, US Agency for International Development under the Consulting Assistance on Economic Reform (CAER) II Project (Contract PCE-Q-00-95-00016-00, Delivery Order no. 16, "Next Steps in the Asian Financial Crisis"). The views and the interpretation in this paper are those of the authors and should not be attributed to USAID.

## Table of Contents

List of Tables	3
List of Figures	3
I. Introduction	4
II. Evolution of the Financial Crises in Asia	5
III. Macroeconomic Conditions in Early 1999	8
IV. Export Performance	22
V. Bank Restructuring	26
VI. Corporate and Debt Restructuring	33
VII. Next Steps	38
References	41

## List of Tables

1	International claims held by foreign banks	9
2	Targets for fiscal balance under various IMF programs	13
3	Forecasts for economics growth and inflation	13
4	Balance of payments: Indonesia, Korea, Thailand	20
5	Balance of payments: Mexico	21
6	Export value growth: 1998	24
7	Export growth after the Asian Crisis	24
8	Financial institutions suspended or closed in Korea	28
9	Outline of financial sector restructuring in Korea	28
10	Estimated costs of bank restructuring	29
11	Corporate restructuring in Korea: “Big Deal” Plan (October 7, 1998)	34
12	Bank-led workout programs for 35 subsidiaries of 13 groups in Korea	35
13	Debt-equity ratio of top five chaebols	35

## List of Figures

1	Korea. Exchange rate, interest rate, and stock market	10
2	Trade balance	11
3	Manufacturing production index	14
4	Thailand. Exchange rate, interest rate, and stock market	16
5	Indonesia. Exchange rate, interest rate, and stock market	19
6	Real exchange rate	23
7	Monthly real credit index	27

## I. Introduction

The Asian financial crisis is now well into its second year.<sup>2</sup> The volatility and uncertainty that characterized much of the first year of the crisis gave way to a modicum of calm in the second half of 1998. The Korean economy is beginning to rebound, with signs of a return of private capital inflows, renewed economic activity, and improved international credit ratings. Thailand's economy has stabilized, and there are nascent signs of new growth, albeit at a slower pace than in Korea. Indonesia, while not yet experiencing growth, has at least stabilized substantially since the chaos of May 1998 when President Suharto stepped down amid widespread rioting. International financial markets have calmed significantly, thanks in part to interest rate cuts in the United States and other industrialized countries in the fall of 1998.

Although risks remain, it now appears that the worst of the crisis is over. Nevertheless, many difficult tasks lie ahead for the crisis countries. Financial and corporate restructuring are only in their early stages. Foreign debt levels remains high, with relatively little restructuring and burden sharing on the part of foreign creditors. Macroeconomic policy continues to be a key challenge, with important questions about appropriate fiscal, monetary, and exchange rate policies during the recovery process.

This paper provides an overview on the crisis as of early 1999, and provides some recommendations and guidelines for the next steps in the crisis. It focuses mainly on Korea, Thailand, and Indonesia, the three Asian countries hit hardest by the crisis. The three countries are now on different recovery paths, partly because the crises were managed differently in the three countries by their governments and the International Monetary Fund (IMF). The first round of IMF programs was similar in each country, focusing on tight fiscal and monetary policies, and the abrupt closure of financial institutions. Korea quickly changed course, however, and the overriding focus of its programs since the first quarter of 1998 has been to maintain liquidity in the financial and corporate sectors. Foreign creditors rolled over debts owed to them by Korean banks, and in turn the Korean banks rolled over substantial amounts of debt owed to them in 1998 by large and small corporations. The government began to ease fiscal policy and, after some resistance by the IMF, lowered interest rates during the second quarter of the year. The government quickly began to restructure the banking system through mergers and large injections of government capital, and took some initial steps in restructuring large corporations.

Thailand took a somewhat different approach, preferring initially to try to encourage private sector (rather than government) injections of capital into the banking system. There were far fewer debt rollovers, both domestically and internationally. Very little has been done in Thailand to restructure corporate debts or corporate governance structure. In Indonesia, the focus from the beginning of the IMF program was to significantly reduce liquidity by closing commercial banks and maintaining very high interest rates. The IMF hoped that this strategy would renew the confidence of foreign investors in the Indonesian financial system and convince them to restart capital flows to the country. In contrast to Korea, there were no debt rollovers in Indonesia until June 1998, which was long after the initial panic had passed, and by which time a large portion of corporate and bank debt had fallen into default. Partly because of intense political turmoil, the Indonesian financial system virtually collapsed in early 1998, and the government did not begin

---

<sup>2</sup> This report was completed in April 1999. The most recent data entering the analysis are from January 1999.

to take significant steps towards restructuring until early 1999. As a result, Indonesia is far behind Korea and Thailand in its recovery efforts.

This paper begins with a brief outline of the key stages of the evolution of financial crises in Asia and elsewhere. It then provides an review of the macroeconomic situation in early 1999 in Korea, Thailand and Indonesia, focussing on capital flows, the budget situation, inflation, and economic growth. Section four takes a close look at developments in export performance since the beginning of the crisis. Sections five and six present a comparison of the different strategies and progress in each country on bank and corporate restructuring, respectively. The paper concludes with some recommendations for next steps in the crisis, both to ease the immediate crisis and to insure long-term economic growth.

## **II. Evolution of the Financial Crises in Asia**

Financial crises tend to be characterized by five distinct stages:

- (1) the buildup in vulnerabilities before the crisis;
- (2) the rapid withdrawal of capital, usually accompanied by some overshooting of the exchange rate and asset prices;
- (3) return to macroeconomic stability, as the capital withdrawals stop and the exchange rate and asset prices rebound;
- (4) the restructuring and cleanup of impaired banks and corporations; and
- (5) the resumption of economic growth.

Korea and Thailand have passed through the first three stages, and are well into the fourth. Although Indonesia has started the restructuring process of stage four, it has not yet achieved full stability and remains in the third stage, largely because of political uncertainty surrounding the upcoming elections.

In Asia, the first stage—buildup of vulnerabilities—occurred roughly between 1992 and mid-1997. As we have described in detail in previous papers (Radelet and Sachs, 1998a, 1998b), large amounts of capital began to flow into Asia in the early 1990s, primarily in the form of short-term debt owed to foreign commercial banks. Between 1990 and mid-1997, the total amount owed to foreign commercial banks by Indonesia, Korea, and Thailand jumped from \$67 billion to \$232 billion. Short-term obligations increased from \$43 billion to \$151 billion. These large short-term debts greatly exceeded available foreign exchange reserves (which totaled \$86 billion in the three countries in mid-1997), setting the stage for the rapid capital withdrawals that followed. Ironically, as these figures indicate, in a way the crisis can be thought of as a crisis of success: the capital inflows themselves were the result of Asia's long success in sustained economic development. The buildup in short-term capital flows was accelerated by fixed, or nearly fixed, exchange rates in each of the crisis countries. The pledge of fixed rates led creditors and borrowers to relax the normal concerns about exchange rate risks, making foreign inflows of all kinds more attractive, especially short-term inflows. The vulnerability from large capital flows was augmented by weak and under-supervised financial systems in each country. The banking system grew very rapidly, with the stock of private sector credit outstanding reaching over 140 percent of GDP in Korea, Thailand, and Malaysia (although far less in Indonesia). With

poor supervision systems in place, many banks had shaky loan portfolios, were in violation of basic prudential standards, and in some cases were undercapitalized.

The second stage of the crisis—the rapid withdrawal of capital—began first in Thailand, in late 1996 and early 1997. Stock and land prices began to drop, weakening the financial institutions that had lent heavily to these activities. Foreign investors began to withdraw their funds, quickly reducing Thailand's usable foreign exchange reserves. The baht came under attack several times beginning in late 1996. By early July, the central bank's usable reserves had become dangerously low and they were forced to float the baht. Note that the float of the baht did not create the problem; the problem had been created by the fixed exchange rate and the subsequent loss of foreign exchange reserves. Creditors became more nervous about Thailand's neighbors, and the pace of creditor withdrawals quickened dramatically. By August, currencies in Indonesia, Malaysia, and the Philippines were under intense pressure. Indonesia entered stage two at this point, and the government responded to the capital outflows by floating the rupiah in mid-August. Capital withdrawals accelerated throughout the region in September, and as currencies fell, domestic capital flight added to the outflow. By October, the region was in a full-fledged financial panic. Korea's foreign exchange reserves were drained quickly in October and November as a result of major capital outflows, culminating in the huge depreciation of the won in December. Just as the financial markets had been too sanguine about the region during the period of large capital inflows, they now overreacted by withdrawing capital as quickly as possible.

The IMF initially misdiagnosed the problems, and their original prescriptions made a bad situation even worse. The IMF's insistence on tight monetary and fiscal policies, and the immediate closures of financial institutions without well-developed restructuring plans in place accelerated the economic contraction that was already underway and added to the panic.

Stage three—a return to macroeconomic stability—occurs when the panicked capital withdrawals stop. In turn, the panic stops when at least one of four things happens: (1) the short-term debt is repaid; (2) the debt is rescheduled; (3) the debt is defaulted upon; or (4) the financial system receives a large enough cash infusion (usually from a lender of last resort) that creditors become convinced that they do not have to hastily withdraw their loans. In Thailand, most of the debt was repaid. In Korea, the short-term debt was either repaid or rescheduled, and Korea received significant up-front cash inflows from the IMF and the United States. In Indonesia, the main channel of the end of the panic was default.

The first sign of stage three in Asia came on December 24, 1997, when the IMF and the U.S. Treasury dramatically altered their strategy to contain the panic in Korea. The main difference in strategy was in the pressure they put on foreign banks to roll over their credits to Korean banks. Within a few days, negotiations were underway between Korean banks and foreign banks. In the third week of January, they agreed to convert \$22.5 billion in amounts due by Korean banks in the first quarter of 1998 into one-to-three year credits. Also on December 24, the IMF and the U.S. Treasury announced that they would accelerate disbursements under the IMF program and immediately provide Korea with \$10 billion ahead of schedule, in addition to the \$5.6 billion Korea had received in early December when they signed the IMF program. The combination of the debt rollovers and new financing had an almost instantaneous positive effect on Korean financial markets. The won immediately began to appreciate, moving from W/\$ 1960 on December 23, 1997, to W/\$ 1520 on January 30, 1998, and stock prices began to rebound.

Thailand recorded heavy outflows of foreign capital in late 1997 and early 1998 as foreign creditors withdrew their loans. The turning point in Thailand came in mid-January, when the government unveiled its plans to dispose of the assets—both good and bad—of the 56 financial institutions that it had earlier suspended and ultimately closed. About the same time, the government announced a formal guarantee on all deposits and other liabilities (including foreign debts) of Thai financial institutions. Buoyed by these developments and by the rebound in Korea, the baht began to appreciate, and stock prices rebounded somewhat from their extremely low levels.

In Indonesia, following a chaotic period in January 1998 surrounding the signing of the second program with the IMF (and the subsequent market sell-offs), a small measure of stability was achieved when the government announced a “voluntary” suspension on servicing foreign debts in late January. The government also announced that it would guarantee all commercial bank liabilities, both to foreign and domestic depositors and to other creditors. In effect, the announcement provided official recognition, apparently endorsed by the IMF, that Indonesian firms were not paying their debts. These announcements calmed the markets and the rupiah began to appreciate. In the months that followed, political tensions pushed the situation into deeper chaos, culminating in the resignation of President Suharto in mid-May in the midst of violent street protests. Only in June 1998 did the rupiah finally begin to clearly appreciate, and a modicum of stability returned to Indonesian markets.

Stage four of the crisis—the restructuring of impaired banks and corporations—started basically in conjunction with stage three. Indeed, the initial announcements of bank and debt restructuring helped calm the markets and usher in stage three, but stage four will necessarily last much longer. Each of the countries has initiated the process of bank recapitalization by relying heavily on public funds, albeit each has its own strategy to reach its goals. In each country, large portions of the banking sector have effectively become at least partially nationalized, with the governments planning on re-privatizing their equity holdings during the next several years. Korea has taken vigorous steps to remove non-performing loans from bank portfolios, an area where Thailand and Indonesia have made much less progress. Korea has also taken steps towards reorganizing its largest corporations. In terms of debt restructuring, Korea has also made the most progress, led by the \$22.5 billion rescheduling in early 1998.

Korea and Thailand showed some signs in early 1999 that they were entering stage five, with a resumption of economic growth. In Indonesia, a return to growth appears to be at least a year away, as investors are likely to remain on the sidelines until well after the elections scheduled for late 1999.

### III. Macroeconomic Conditions in Early 1999

The economy began to stabilize in both Korea and Thailand in the early part of 1998, and by early 1999 both were showing nascent signs of recovery. By the end of 1998, Indonesia had also stabilized relative to late 1997 and early 1998, but stability there seemed less certain in the run-up to the elections in mid-1999. In Indonesia, economic recovery had not yet begun.

#### *Korea*

The Korean won appreciated from its peak of W/\$ 1960 on December 23, 1997 to W/\$ 1390 on April 1, 1998 (Figure 1), and continued to appreciate gradually in the months that followed. As described earlier, the key was the rollover of Korean commercial bank debt, which stopped the panic in Korea's financial markets and took enormous pressure off the won. Stock prices also stabilized in 1998 in after their dramatic falls in late 1997. The main index was up 50 percent (in local currency terms) in Korea for 1998, and rose 68 percent between September 1998 and the end of February, 1999 (85 percent in U.S. dollar terms). The debt rollovers eased the liquidity constraints faced by Korean banks, allowing interest rates to stabilize in early 1998 and decline sharply starting in April. Overnight interbank interest rates fell from 26 percent in late December 1997 to 21 percent in early April of 1998, then declined steadily to 6 percent by the end of the year. Inflation was kept well in hand at 7.5 percent in 1998, despite the large initial depreciation of the won.

Korea's trade balance increased dramatically from a deficit of \$8.5 billion in 1997 to a surplus of \$39.9 billion in 1998 (see Figure 2). This change was due entirely to a collapse of imports, which fell 35 percent (\$51 billion) in 1998. However, the collapse in imports appeared to be over by the end of the year, as imports in the fourth quarter were 15 percent higher than in the third quarter. Exports fell in value terms by about \$2 billion.

Of course, the trade surplus was simply the mirror image of huge capital outflows. IMF balance of payments data through June 1998 show large capital outflows from Korea in the midst of the crisis. The capital and financial account balance shows a combined outflow of \$26 billion in the fourth quarter of 1997 and the first quarter of 1998. Repayments by Korean banks and "other sectors" (mainly private firms) totaled an incredible \$37 billion in the two quarters, offset slightly by new government borrowing. Remarkably, on a net basis, capital outflows appear to have stopped in the second quarter of 1998 (although outflows from private firms were nearly \$3 billion).

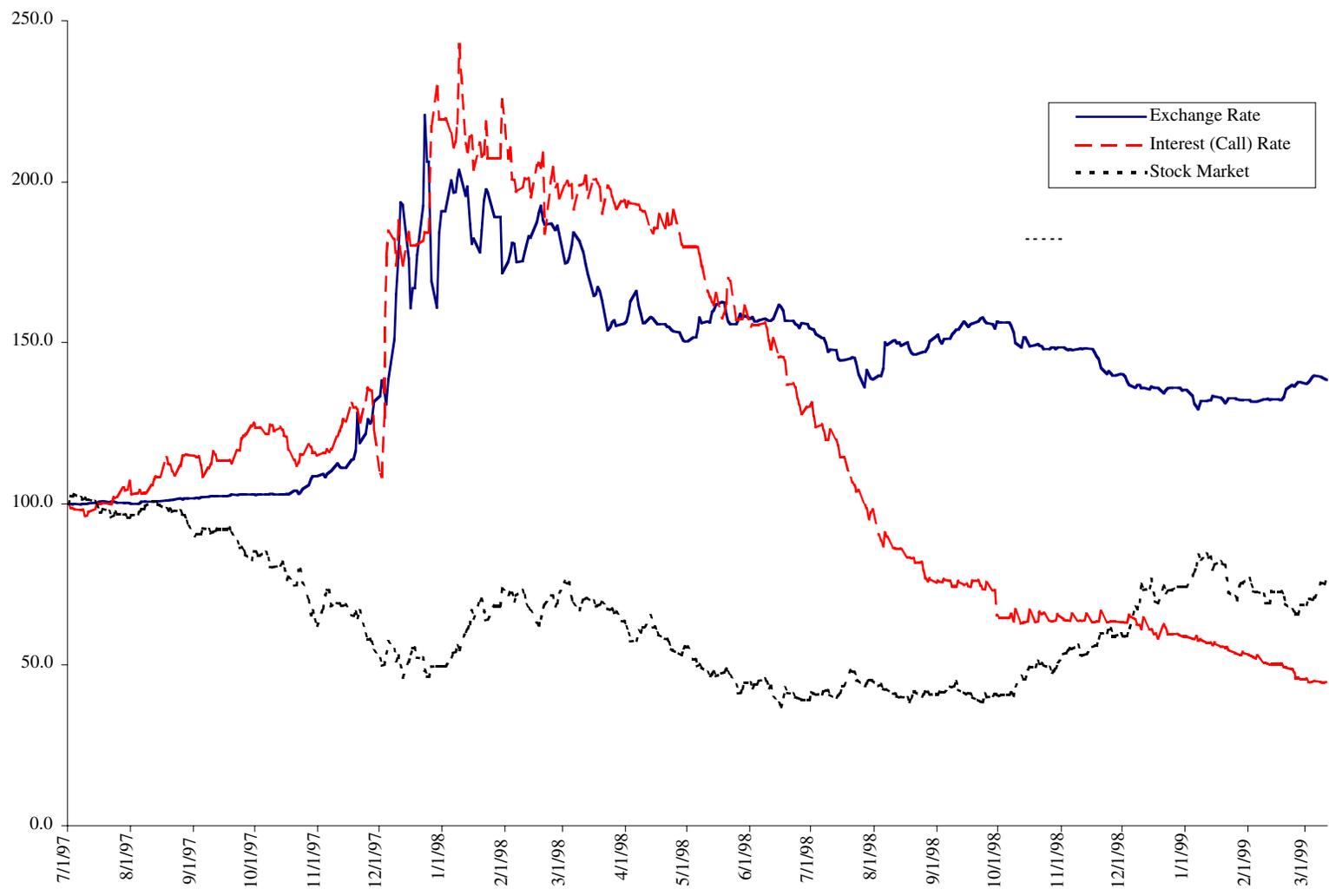
One result of the capital outflows was that Korea substantially reduced its short-term foreign debt outstanding. Between mid-1997 and mid-1998, Korea's debts to foreign commercial banks fell by over \$30 billion, from \$103 billion to \$72 billion (Table 1), with preliminary indications of a further drop of about \$4 billion by September 1998 (BIS/OECD/IMF, 1999). Almost all of the reduction was in amounts owed by Korean commercial banks. The Bank of International Settlements (BIS) attributed the fall to "sharp contractions in available trade credit, and the unwinding of collateralized short-term loans" (BIS, 1998b). In other words, the declines were mainly due to a withdrawal of credit by foreign banks. Korea's short-term debt fell by \$37 billion, from \$70 billion in June 1997 to \$33 billion in June of 1998. Part of this reduction was the result of the rescheduling of Korean commercial banks' short-term loans into longer-term obligations (which reduced short-term debt, but not total debt). At the same time, the central

**Table 1. International claims held by foreign banks. (US \$ billion)**

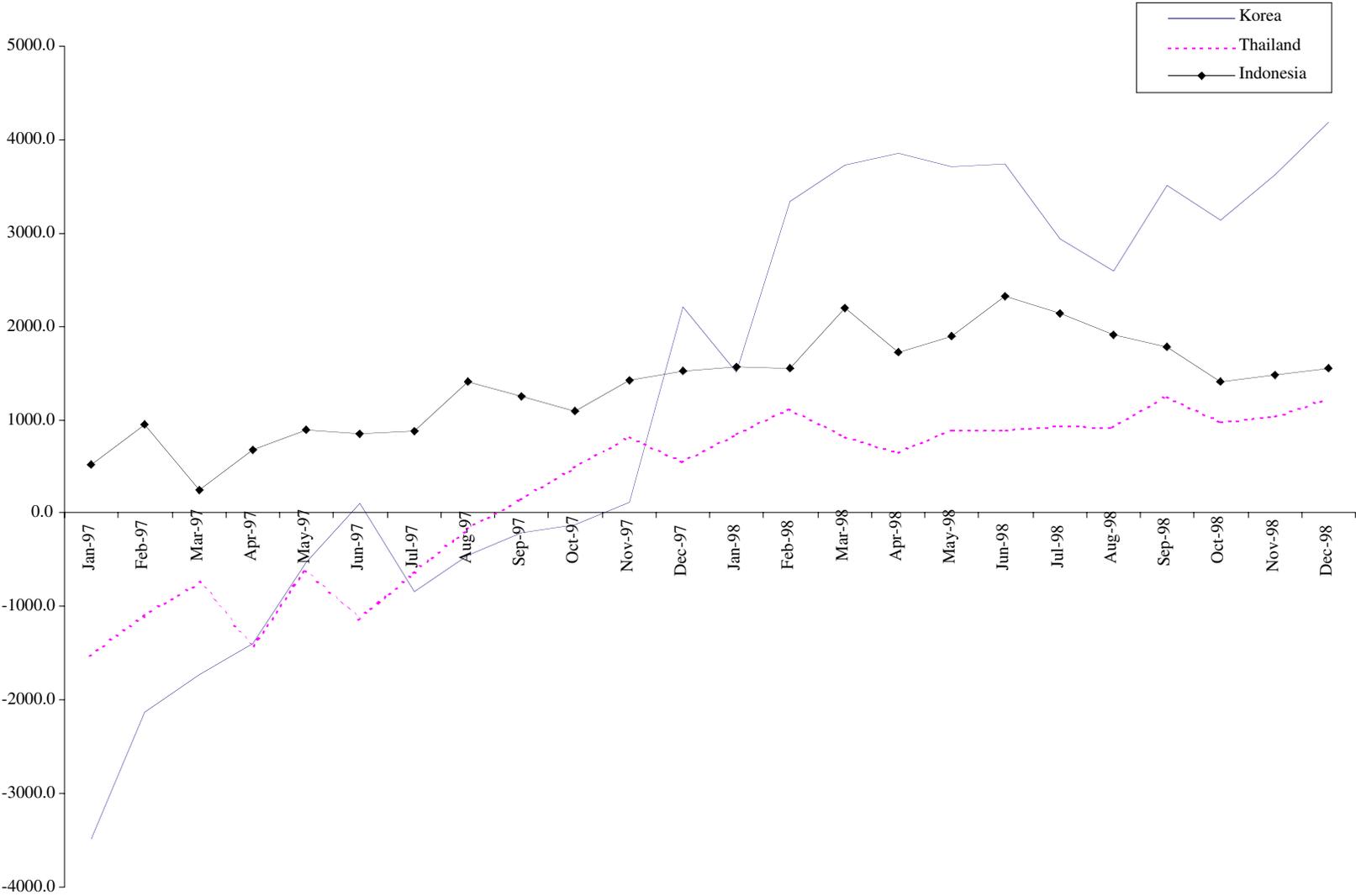
	Total Outstanding	Obligations by Sector			Short Term	Reserves	Short Term Debt/ Reserves
		Banks	Public Sector	Non-bank Private			
<b>C. Mid-1997</b>							
Indonesia	58.7	12.4	6.5	39.7	34.7	20.3	1.7
Malaysia	28.8	10.5	1.9	16.5	16.3	26.6	0.6
Philippines	14.1	5.5	1.9	6.8	8.3	9.8	0.8
Thailand	69.4	26.1	2.0	41.3	45.6	31.4	1.5
Korea	103.4	67.3	4.4	31.7	70.2	34.1	2.1
Total	274.4	121.8	16.7	136.0	175.1	122.2	
<b>D. End-1997</b>							
Indonesia	58.0	11.5	6.8	39.7	35.1	16.6	2.1
Malaysia	27.3	9.7	1.7	15.9	14.4	20.8	0.7
Philippines	19.7	8.9	2.4	8.4	11.9	7.3	1.6
Thailand	58.5	17.5	1.8	39.2	38.5	26.2	1.5
Korea	93.7	55.5	4.0	34.1	58.8	20.4	2.9
Total	257.3	103.1	16.8	137.2	158.7	91.2	
<b>E. Mid-1998</b>							
Indonesia	48.5	6.6	7.6	34.2	26.2	18.0	1.5
Malaysia	22.8	7.0	1.5	14.2	11.0	19.7	0.6
Philippines	17.5	7.9	2.2	7.4	9.9	9.0	1.1
Thailand	46.4	12.0	2.0	32.4	27.4	25.8	1.1
Korea	71.9	40.8	4.8	26.2	32.6	40.8	0.8
Total	207.1	74.4	18.1	114.5	107.2	113.3	

Source: Distribution by maturity and sector. Data on debt are from Bank For International Settlements; and on reserves from International Financial Statistics.

**Figure 1. Korea: Exchange rate, interest rate, and stock market.**  
(index, July 1, 1997=100)



**Figure 2. Trade balance. (US\$ million)**



bank rebuilt its foreign exchange reserves, which had plummeted from \$34 billion in June 1997 to around \$6 billion in early December. By mid-1998, reserves reached \$41 billion, and they climbed further to \$50 billion in March 1998. As a result, the ratio of Korea's short-term foreign debt to reserves dropped from 2.1 in June 1997 to 0.8 in June 1998, and has almost certainly dropped further since then.

By the latter half of 1998, there were signs that capital flows were beginning to return to Korea. For example, the successful commercial bank rollover paved the way for Korea to return to the international capital markets. The government floated a strongly oversubscribed bond issue for \$4 billion in early April 1998.<sup>3</sup> Total Korean (private and public) debt securities issued abroad, after falling to \$5.8 billion at the end of 1997, rose to \$10.2 billion at the end of 1998 (BIS/OECD/IMF, 1999). The spread between Korea's dollar-denominated global bonds and comparable U.S. Treasuries went from over 500 basis points in 1998 to 330 at the end of the year to 240 in mid-February 1999. The Korean Development Bank issued \$50 million in commercial paper in March 1999 at 1.67 over the London Interbank Offer Rate, the first time a Korean bank had successfully issued commercial paper in the United States since 1997. The government estimates that rollovers of foreign credits, after falling to around 32 percent in December 1997, rebounded to 93 percent by May 1998. According to the Ministry of Finance, foreign direct investment reached \$1.3 billion in the first two months of 1999, nearly four times the level in the same period of 1998.

A dramatic shift in fiscal policies during 1998 provided the Korean economy with an additional fillip. The first IMF program, signed in early December 1997, called for fiscal policy to achieve "at least balance, and preferably, a small surplus" in the budget. Subsequent programs eased this target, and Korea ultimately ran a deficit of 4 percent of GDP in 1998 (Table 2). The IMF program of March 10, 1999 called for a fiscal deficit of 5 percent of GDP in 1999.

By the latter half of 1998, there were clear signs that the Korean economy had reached bottom and was beginning to rebound. Bank credit to the private sector, after stagnating for much of 1998 in real terms (i.e., after deflating by the CPI), began to grow in August. The index of manufacturing production, after falling 16 percent in the first quarter of 1998, held steady in the second and third quarters and then jumped 15 percent in the fourth quarter. By this index, manufacturing production in late 1998 had nearly recovered to its June 1997 level (Figure 3). Overall, the economy shrunk by about 6 percent in 1998, with most of the contraction in the first six months of the year. Private analysts forecast that the Korean economy will grow by 2.5 percent to 4.0 percent in 1999 (Table 3); the March 1999 IMF program foresees growth of 2 percent.

---

<sup>3</sup> The government issued \$1 billion in five-year notes (priced at 345 basis points over comparable US securities) and \$3 billion in ten-year notes (with a spread of 355 basis points). The government had originally planned to issue a total of \$3 billion in bonds, but increased it to \$4 billion as customer orders topped \$12 billion.

**Table 2. Targets for fiscal balance under various IMF programs.**

IMF Program	Thailand	Korea	Indonesia
First	1.0	0.0	1.0
Second	1.0	1.0	-1.0
Third	-2.0	-0.8	-3.0
Fourth	-3.0	-1.2	-8.5
Fifth	-3.0	-4.0	-8.5
Sixth	-5.0	-5.0	-8.5
Seventh	-6.0	-5.0	-8.5
Eighth			-8.5

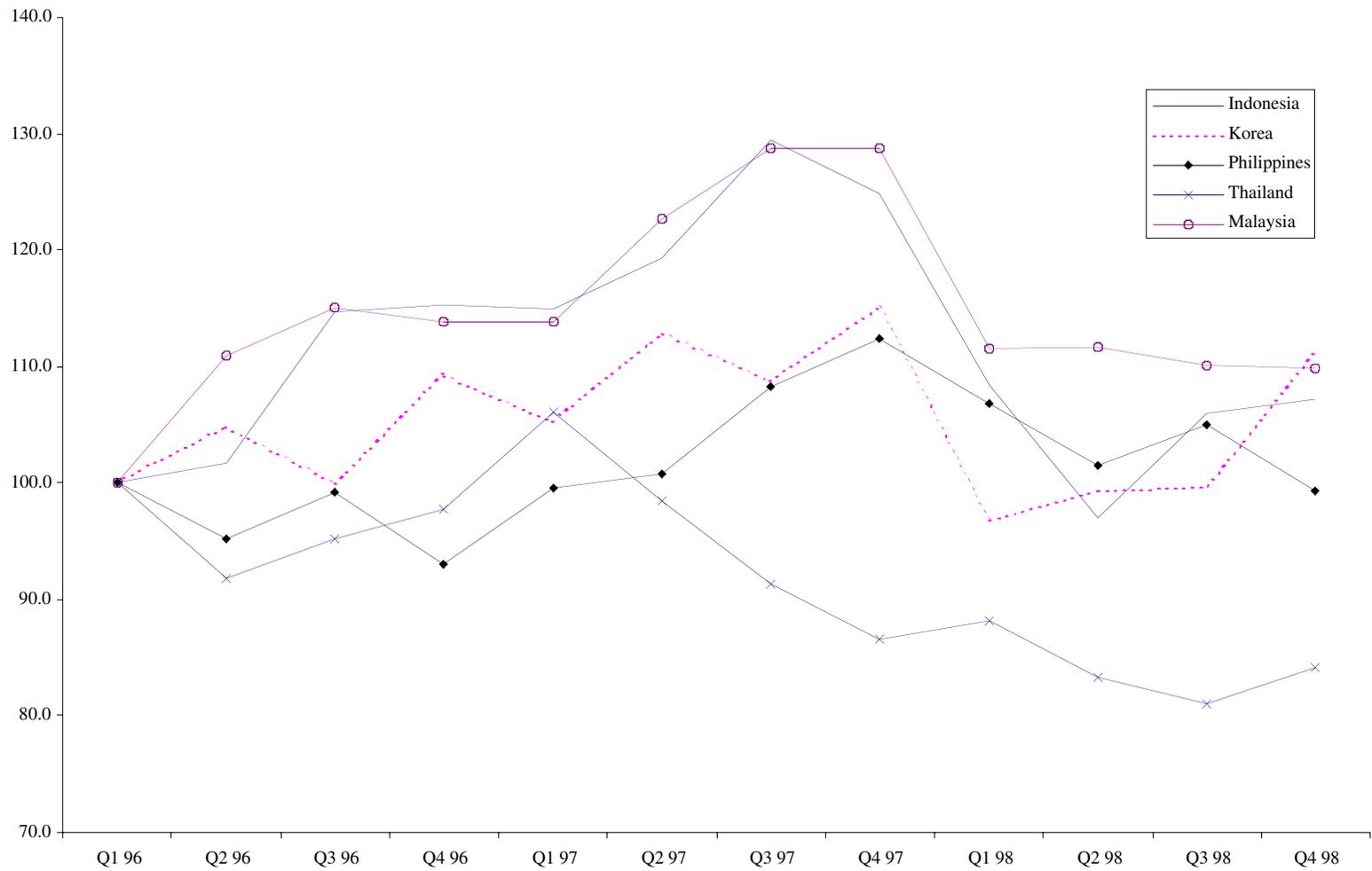
Source: Letters of intent to the IMF of respective countries.

**Table 3. Forecasts for economic growth and inflation.**

		GDP growth (%)			CPI inflation (%)		
		1998	1999	2000	1998	1999	2000
<b>Indonesia</b>							
International Monetary Fund	Dec-98	(15.3)	(3.4)		61.1	26.8	
Goldman Sachs (Asia) L.L.C.	Jan-99	(14.9)	(3.4)	2.0	57.6	32.6	13.0
J.P. Morgan	Mar-99	(13.7)*	(3.4)	5.0	59.5	24.0	14.0
Morgan Stanley	Mar-99	(13.7)*	(4.0)	1.0	58.0	25.0	10.0
EIU forecasts	Sep-99	(13.2)**	0.8	4.1	57.6**	15.0	7.1
<b>Korea</b>							
International Monetary Fund	Dec-98	(7.0)	(1.0)		7.8	3.8	
Goldman Sachs (Asia) L.L.C.	Jan-99	(5.9)	2.7	3.9	7.6	2.0	2.6
J.P. Morgan	Mar-99	(5.7)*	4.0	4.5	7.5**	1.6	3.8
Morgan Stanley	Mar-99	(6.0)*	2.5	4.5	7.5**	3.5	3.5
EIU forecasts	Sep-99	(5.8)**	6.1	5.3	7.5**	1.3	2.2
<b>Thailand</b>							
International Monetary Fund	Dec-98	(8.0)	1.0		8.0	2.5	
Goldman Sachs (Asia) L.L.C.	Jan-99	(7.0)	(0.5)	2.7	8.1	2.4	2.3
J.P. Morgan	Mar-99	(6.5)*	3.0	5.0	8.5	3.4	5.0
Morgan Stanley	Mar-99	(8.0)*	(0.5)	1.5	8.1	3.0	3.0
EIU forecasts	Sep-99	(9.4)**	0.9	2.9	8.1**	2.4	4.7

\*Estimated \*\*Actual

**Figure 3. Manufacturing Production Index.**  
**(1996:Q1=100)**



## *Thailand*

The baht began to appreciate shortly after the won, moving from its peak of B/\$ 56 on January 12 to B/\$ 40 on April 1, 1998. It slowly appreciated during the remainder of the year, and traded at around B/\$ 37 in March of 1999. Stock prices, after a brief rally in February and March, declined through August. Between the end of August, 1997, and the end of February, 1999, the main stock index rose by over 50 percent in local currency terms and 78 percent in U.S. dollar terms (Figure 4). Interbank interest rates, after rising sharply to 25 percent in early January 1998, declined to 19 percent at the end of the month. They continued to decline steadily throughout the rest of the year, and dropped under 3 percent in early 1999. Inflation remained in check, with the CPI rising about 8 percent for all of 1998.

Thailand's trade balance increased from a deficit of \$5.3 billion in 1997 to a surplus of \$11.6 billion in 1998, a one-year turnaround of almost \$17 billion. Imports fell by \$20 billion (30 percent of the 1997 total), with no sign of rebound by the end of the year. Exports dropped in value terms by \$3.3 billion.

Capital outflows started in Thailand in the second quarter of 1997, when the capital account showed a deficit of \$4 billion. In the full year from mid-1997 through mid-1998, the aggregated capital account deficit reached \$23 billion. Surprisingly, according to IMF data both foreign direct investment and portfolio investment remained positive. These inflows were offset by massive repayments of bank loans. During the four quarters, outflows of net "other investment" (which is predominately bank loans) totaled \$31 billion.

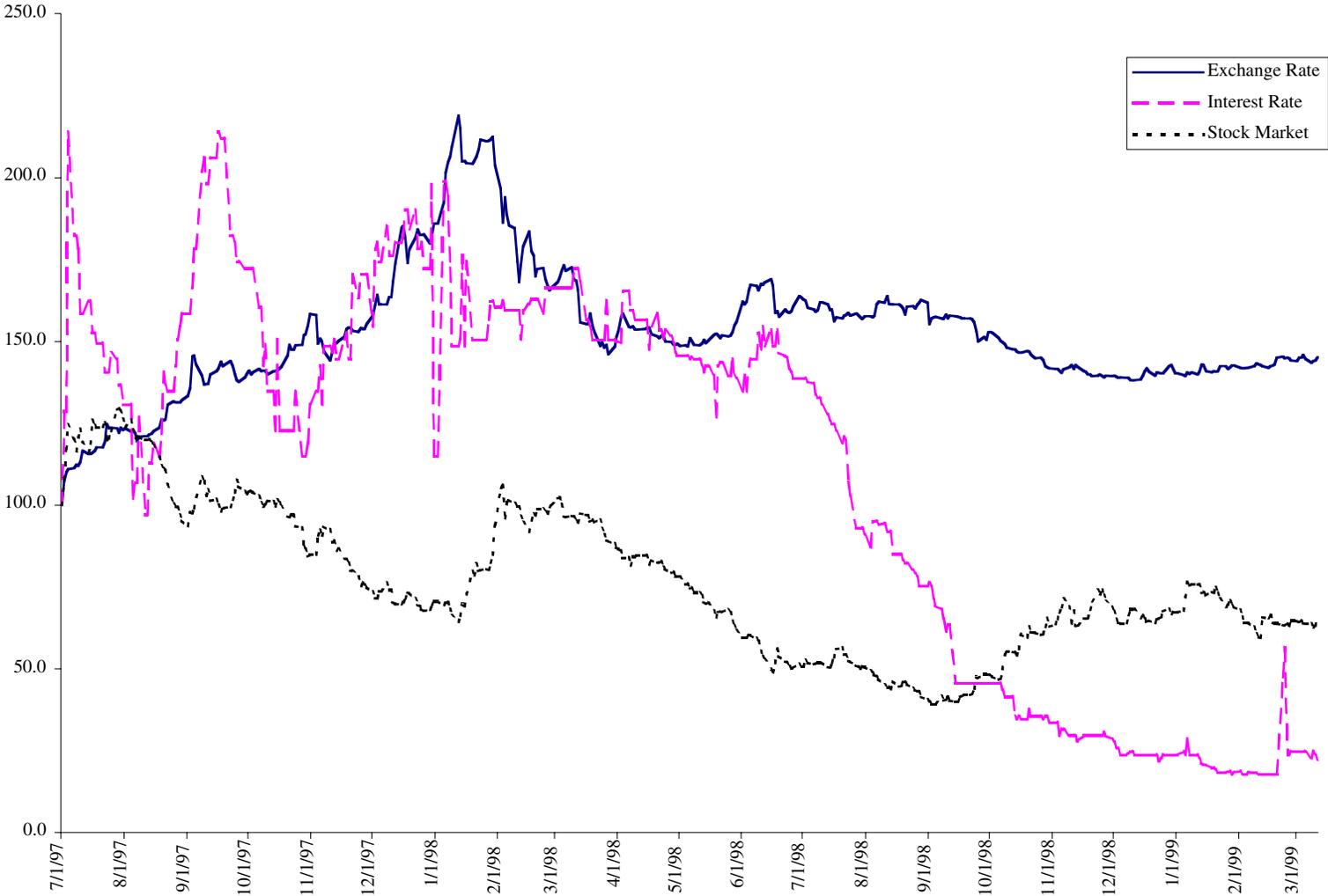
As a result, Thailand's liabilities to foreign commercial banks fell sharply between June 1997 and June 1998, from \$69 billion to \$46 billion, with preliminary indications of a further drop of \$4 billion by September. The reduction was seen both in obligations owed by Thai banks, which fell \$14 billion, and obligations owed by Thai corporations, which fell by about \$9 billion. The drop came despite the fact that Thailand received assurances in August 1997 (at the time it signed its first IMF program) from Japanese creditor banks that they would maintain credit lines of \$19 billion for foreign banks resident in Thailand (IMF, 1999). Thailand's short-term debt outstanding fell from \$46 billion to \$27 billion in June 1998. Apparently, only a small portion of this change was due to debt restructuring. The initial group of 16 financial institutions that were suspended in mid-1997 defaulted on \$2 billion in loans; the other 40 that were suspended exchanged \$2 billion in short-term loans for five year notes (at 5 percent interest) guaranteed by the government (Institute for International Finance, 1999).

The central bank's official foreign exchange reserves declined from \$31 billion in June 1997 to \$26 billion in June 1998. However, *usable* reserves appear to have increased during the period. In June 1997, the Central Bank of Thailand had approximately \$23 billion in forward swaps outstanding, so much of the \$31 billion was actually not available to defend the baht.<sup>4</sup> By June 1998, these forward transactions had been liquidated, so essentially all of the \$26 billion in reserves was actually available for use. By March 1999, foreign exchange reserves had risen further to \$29 billion. Because Thailand's short-term foreign debt probably declined in the last

---

<sup>4</sup> Of course, it did not stand to lose all of the \$23 billion, but it could lose the difference between the forward rates and the future spot rates at the time that the forward positions would be liquidated. Moreover, some of the forward contracts were dated as much as one year forward, so the losses would not be realized immediately.

**Figure 4. Thailand: Exchange rate, interest rate, and stock market.**  
(index, July 1, 1997=100)



half of 1998 from the \$27 billion recorded in June, it appears that Thailand's foreign exchange reserves in early 1999 were larger than its outstanding short-term debt.

Fiscal policy eased considerably in Thailand during 1998. The original IMF program called for a fiscal surplus of 1 percent of GDP for fiscal year 1997/98 (Thailand's fiscal year begins October 1), and each successive program scaled back on that target. The actual outturn for 1997/98 was a deficit of 2.4 percent of GDP. The March 23, 1999 IMF program targeted a budget deficit of 6 percent of GDP for 1998/99, a figure that does not include the costs of financial sector restructuring (estimated to be about 2 percent of GDP). About half of the stimulus will come in the form of tax reductions, including a reduction in the basic value added tax rate from 10 percent to 7 percent. The other half will come through increased expenditures, including cash payments made directly to rural communities (aimed at avoiding bureaucratic delays with central government expenditures). The intent is to jump-start domestic demand to try to achieve the government's growth target of 1 percent in 1999. On the strength of the newly announced fiscal measures, one international investment bank revised its 1999 GDP growth estimate for Thailand by 1.4 percentage points.

Thailand's economic contraction appeared to be nearly over by the end of 1998, although the rebound seemed to be less strong than in Korea. Thailand's index of manufacturing activity, which fell 23 percent between the first quarter of 1997 and the third quarter of 1998, rose 3.7 percent in the final quarter of 1998 (Figure 3). Credit to the private sector (from both banks and financial institutions, and measured in real terms), dropped sharply in early 1998, but then remained fairly stable through the end of the year. GDP shrunk by about 8 percent in 1998. Most analysts predict zero or slightly positive growth in 1999, with J.P. Morgan the most bullish with its forecast of 3 percent growth (Table 3). The March 1999 IMF program predicts growth of 1 percent in 1999.

### *Indonesia*

The Indonesian economy was the most volatile in the region during 1998, and continued to be fragile in the early part of 1999. In early 1998, Indonesia's economic crisis cascaded into a major political crisis, with President Suharto resigning in mid-May in the midst of violent street riots. The new government under President B.J. Habibie is not widely popular, and has a weak mandate to push through change. New parliamentary elections are scheduled for June 1999, with presidential elections currently scheduled for November. As a result of the political uncertainty, the economic environment remains unsettled, both because the current government has had some difficulty in pushing through strong reform programs, and because investors are waiting to see what kind of government will emerge.

The rupiah fell dramatically from Rp/\$ 2500 before the crisis to Rp/\$ 15,000 in late January 1998. Between February and May, it oscillated between Rp/\$ 8000 and Rp/\$ 11,000 as the political situation deteriorated, then briefly jumped to Rp/\$ 17,000 in the aftermath of the May riots and Suharto resignation. The economy finally began to stabilize in September and by the end of October the rupiah had dipped below Rp/\$ 8,000. In the six-month period between mid-September 1998 and mid-March 1999, it fluctuated within a relatively narrow band between Rp/\$ 7,000 and Rp/\$ 9,000. Stock prices jumped 43 percent in rupiah terms between September 1998 and March 1999, although they were still 47 percent below their pre-crisis level, and an extraordinary 85 percent below in U.S. dollar terms. Inflation soared to 80 percent on an annual

basis in the early part of 1998 because of the huge depreciation of the rupiah, the extension of large liquidity credits by the Central Bank to try to keep commercial banks afloat, and a severe drought that hit Indonesia in tandem with the financial crisis which pushed rice prices very high. However, inflation eased considerably beginning in September 1998. In the six-month period ending in February 1999, inflation was 20 percent on an annual basis (Figure 5). As the rupiah appreciated and inflation fell, interest rates finally began to fall, with the rate on Bank Indonesia's one-month paper dropping from 70 percent in early September 1998 to 37 percent in March 1999.

Indonesia's trade surplus increased sharply in 1998, but not by as much as either Thailand's or Korea's. The trade surplus jumped to \$21.4 billion in 1998, compared with \$11.7 billion in 1997. (Indonesia has run a surplus in the balance of trade for many years, offset by a deficit on the invisible account.) Imports fell by \$14 billion (35 percent) and exports fell (in value terms) by about \$4.6 billion.

As in Korea, Indonesia's capital outflows were concentrated in the fourth quarter of 1997 and the first quarter of 1998, according to data from the IMF (Table 4). The cumulative capital account deficit for those two quarters was \$14.6 billion. The IMF data suggest that the largest outflows came in the form of portfolio equity, which recorded an outflow of about \$9 billion over the two quarters. Outflows of "other investment" (mainly repayment of debts to foreign banks) from Indonesian banks and corporations totaled \$5.9 billion, with a further outflow of \$3.2 billion in the second quarter of 1998. Remarkably, the IMF data indicate that net capital outflows stopped in the second quarter of 1998 (including a small net inflows of foreign direct investment), although this seems difficult to believe in the context of the riots that shook Jakarta in May. All data indicate there was little capital flow in late 1998 and early 1999. Spreads on Indonesian paper were 800-1000 basis points (relative to similar U.S. Treasuries) in early 1999.

Indonesia's debt outstanding to foreign commercial banks fell by much less than in Korea and Thailand. Total obligations fell by \$10 billion—from \$59 billion in June 1997 to \$49 billion in June 1998—and preliminary estimates suggest a decline of \$2 billion more by September 1998. This small decline was split evenly between amounts owed by commercial banks and by private firms. Indonesian short-term debt fell only slightly, from \$35 billion to \$26 billion. The drop in foreign exchange reserves was likewise small, changing from \$20 billion in June 1997 to \$18 billion in June 1998. In March 1999, reserves reached \$25 billion. Thus, Indonesia's total short-term debt remains in excess of its foreign exchange reserves, contributing to Indonesia's continuing vulnerability.

Indonesia's major debt restructuring came in June 1998, when foreign banks exchanged \$9 billion in short-term debts owed by Indonesian commercial banks into new loans of maturity between one and four years. All the new loans were guaranteed by the Indonesian Central Bank. The restructuring, while generally seen as successful as far as it went, came eight months after the first IMF program, which was way too late to help stave off the panic. On March 29, 1999, foreign banks restructured an additional \$3.5 billion in Indonesian bank debt that would fall due before the end of 2001.

**Figure 5. Indonesia: Exchange rate, interest rate, and stock market.**  
(index, July 1, 1997=100)



**Table 4. Balance of payments. (US \$ Million)**

	1996	1997 Q1	1997 Q2	1997 Q3	1997 Q4	1998 Q1	1998 Q2
<b>Indonesia</b>							
Current Account Balance	-7,663	-2,193	-1,103	-1,393	-201	1,002	668
Capital and Financial Account Balance	10,847	3,859	2,226	1,790	-8,482	-6,202	204
Direct Investment (net)	5,594	2,214	1,242	1,375	-336	-507	354
Portfolio Investment (net)	5,005	1,009	1,103	646	-5,390	-3,548	1,840
Equity Securities	1,819	372	245	-181	-5,423	-3,548	-848
Debt Securities	3,186	637	858	827	33	0	2,688
Other Investment (net)	248	636	-119	-231	-2,756	-2,147	-1,990
Govt. & Monetary Authorities	-663	-558	362	-191	122	870	1,242
Banks	-758	-244	-99	709	-642	-840	-1,064
Other Sectors	1,669	1,438	-382	-749	-2,236	-2,177	-2,168
Net Errors and Omissions	1,319	-920	1,119	-1,687	-896	321	189
Financing	-4,503	-746	-2,242	1,290	9,579	4,879	-1,061
Reserve Assets	-4,503	-746	-2,242	1,290	6,554	4,879	-2,047
Use of Fund Credit & Loans	0	0	0	0	3,025	0	986
<b>Korea</b>							
Current Account Balance	-23,006	-7,353	-2,723	-2,053	3,962	10,828	10,909
Capital and Financial Account Balance	23,327	4,038	6,572	618	-21,030	-4,996	111
Direct Investment (net)	-2,345	-507	-226	-661	-212	-340	339
Portfolio Investment (net)	15,185	2,595	5,829	5,444	428	3,871	572
Equity Securities	5,301	536	2,543	505	-1,379	2,991	6
Debt Securities	9,884	2,058	3,285	4,939	1,807	880	566
Other Investment (net)	11,085	2,128	1,124	-4,021	-21,116	-8,478	-1,165
Govt. & Monetary Authorities	-1,065	-108	-96	-59	4,721	3,106	137
Banks	1,778	806	422	-1,734	-17,615	-3,600	1,633
Other Sectors	10,372	1,430	798	-2,227	-8,223	-7,985	-2,935
Net Errors and Omissions	1,095	5	144	-1,151	-4,008	-514	-1,630
Financing	-1,416	3,310	-3,993	2,586	21,076	-5,317	-9,389
Reserve Assets	-1,416	3,310	-3,993	2,586	9,972	-9,357	-11,265
Use of Fund Credit & Loans	0	0	0	0	11,104	4,040	1,876
<b>Thailand</b>							
Current Account Balance	-14,691	-2,098	-3,134	-697	2,906	4,172	2,798
Capital and Financial Account Balance	19,486	2,484	-3,982	-5,825	-8,488	-5,203	-3,577
Direct Investment (net)	1,405	539	289	1,500	1,016	1,415	1,544
Portfolio Investment (net)	3,544	164	1,689	2,061	446	216	115
Equity Securities	1,123	415	881	1,677	479	456	85
Debt Securities	2,421	-251	808	384	-33	-240	30
Other Investment (net)	14,537	1,781	-5,960	-9,387	-9,949	-6,834	-5,237
Govt. & Monetary Authorities	-58	769	-3,296	-1,429	-5,004	-803	-1,808
Banks	5,650	2,612	251	-3,615	-4,137	-1,968	-4,336
Other Sectors	8,945	-1,600	-2,915	-4,343	-808	-4,063	908
Net Errors and Omissions	-2,627	-486	1,233	-195	33	-985	-654
Financing	-2,167	100	5,883	6,717	5,549	2,015	1,434
Reserve Assets	-2,167	100	5,883	1,953	1,963	-506	891
Use of Fund Credit & Loans	0	0	0	1,625	813	269	133
Exceptional Financing	0	0	0	3,140	2,773	2,253	409

Source: IFS.

As in Korea and Thailand, fiscal policy became much more expansionary during 1998. The original IMF program called for a fiscal surplus equivalent to 1 percent of GDP. Successive programs eased the fiscal targets, and the 1998/99 budget ended with a deficit of 4 percent of GDP. The March 1999 IMF program called for a deficit of 6 percent of GDP in 1999/2000. The large budget deficit is partly by design, in order to stimulate demand, but it also reflects real constraints that the government faces in terms of raising revenues. Financing the deficit will present a major challenge to Indonesia in the near future, especially given the size of the government's foreign debt before the crisis.

Overall, the Indonesian economy contracted by 13.7 percent in 1998. Most private analysts forecast a continued contraction in 1999, on the order of 3 percent, perhaps with the beginning of a rebound in the latter half of the year. The March 1999 IMF program forecast zero growth for the fiscal year, which runs from April 1, 1999 through March 30, 2000. There were only two bright spots in the Indonesian economy in 1998. Agricultural production rebounded after the disastrous 1997 drought, with big gains in certain cash crops, including rubber, cashews, cloves, coffee, and pepper. More broadly, exports grew rapidly in the first half of 1998, at least in volume terms, as we explore in more depth in the next section.

### *A Brief Comparison with Mexico*

Mexico's external adjustment following its 1994 crisis followed a somewhat different pattern than the Asian countries (Table 5). Mexico's current account deficit shrunk dramatically from \$30 billion in 1994 to \$2 billion in 1995. However, the bulk of the adjustment was not in a fall in imports as in Asia, since imports fell just 9 percent, from \$79 billion to \$72 billion. Rather, Mexico's main adjustment came through a surge in exports, which jumped by over 30 percent from \$61 billion in 1994 to \$80 billion in 1995, and continued to increase to \$96 billion in 1996,

**Table 5. Balance of payments. (US \$ Million)**

<b>Mexico</b>	1993	1994	1995	1996	1997
Exports	51,885	60,882	79,542	96,000	110,432
Imports	65,366	79,347	72,453	89,469	109,808
Current Account Balance	-23,400	-29,662	-1,576	-2,330	-7,453
Capital and Financial Account Balance	33,760	15,787	-10,487	6,133	18,898
Direct Investment (net)	4,389	10,973	9,526	9,186	12,477
Portfolio Investment (net)	28,355	7,415	-10,377	13,961	4,330
Equity Securities	10,716	4,084	519	2,801	3,215
Debt Securities	17,639	3,332	-10,896	11,160	1,115
Other Investment (net)	1,016	-2,601	-9,637	-17,013	2,091
Govt. & Monetary Authorities	-1,136	-2,385	-4,198	-10,281	-1,260
Banks	1,939	1,914	-6,807	-3,777	-563
Other Sectors	213	-2,130	1,368	-2,955	3,914
Net Errors and Omissions	-3,128	-3,323	-4,248	60	2,552
Financing	-7,232	17,199	16,312	-3,863	-13,997
Reserve Assets	-6,057	18,398	-9,648	-1,806	-10,513
Use of Fund Credit & Loans	-1,175	-1,199	11,950	-2,057	-3,485
Exceptional Financing	0	0	14,010	0	0

Source: IFS.

showing a 58 percent increase in just two years. Capital flows dropped from an inflow of \$34 billion in 1993 to an inflow of \$16 billion in 1994 (with the decline financed by drawing down reserves) to an outflow of \$10 billion in 1995. There were large outflows for repayments of bonds and commercial bank loans, and from capital flight. However, Mexico benefited from a huge inflow of \$25 billion from the IMF and the U.S. government, far more up-front financing than was provided to any of the Asian countries.

#### **IV. Export Performance**

The huge currency depreciations in Korea, Thailand, and Indonesia in late 1997 and early 1998 were expected to stimulate rapid export growth, which would in turn lead to economic recovery. Before examining the export numbers, however, it is worth taking a closer look at exactly how much the Asian currencies depreciated in real terms, after accounting for domestic inflation. Patterns in the real exchange rate (RER) are shown in Figure 6.<sup>5</sup> Initially, the huge nominal depreciations led to large real depreciations by the end of 1997. However, the rebound in nominal rates combined with higher domestic inflation led to a reversal of the trend in the RER in each country, as shown in Figure 6. By the end of 1998, the won had depreciated about 22 percent in real terms relative to its pre-crisis level. Relative to 1990, the won had depreciated 7 percent in real terms.<sup>6</sup> Similarly, the baht depreciated about 27 percent in real terms between June 1997 and the end of 1998. The RER index for the baht is now below its 1990 level, indicating a net appreciation of about 5 percent since the beginning of the decade. The rupiah depreciated about 68 percent between June 1997 and December 1998, indicating the extent to which higher inflation in Indonesia eroded the potential gains in competitiveness from the large depreciation. Relative to 1990, the rupiah had depreciated by about 30 percent in real terms by the end of 1998.

Of course, these simple indices do not necessarily tell us the extent to which the Asian currencies may be overvalued or undervalued. These measures do not capture the equilibrium exchange rates in each country, which undoubtedly have changed during the crisis. Nevertheless, they do provide insight on the extent to which the movements in nominal exchange rates and prices have affected the incentives for export production.

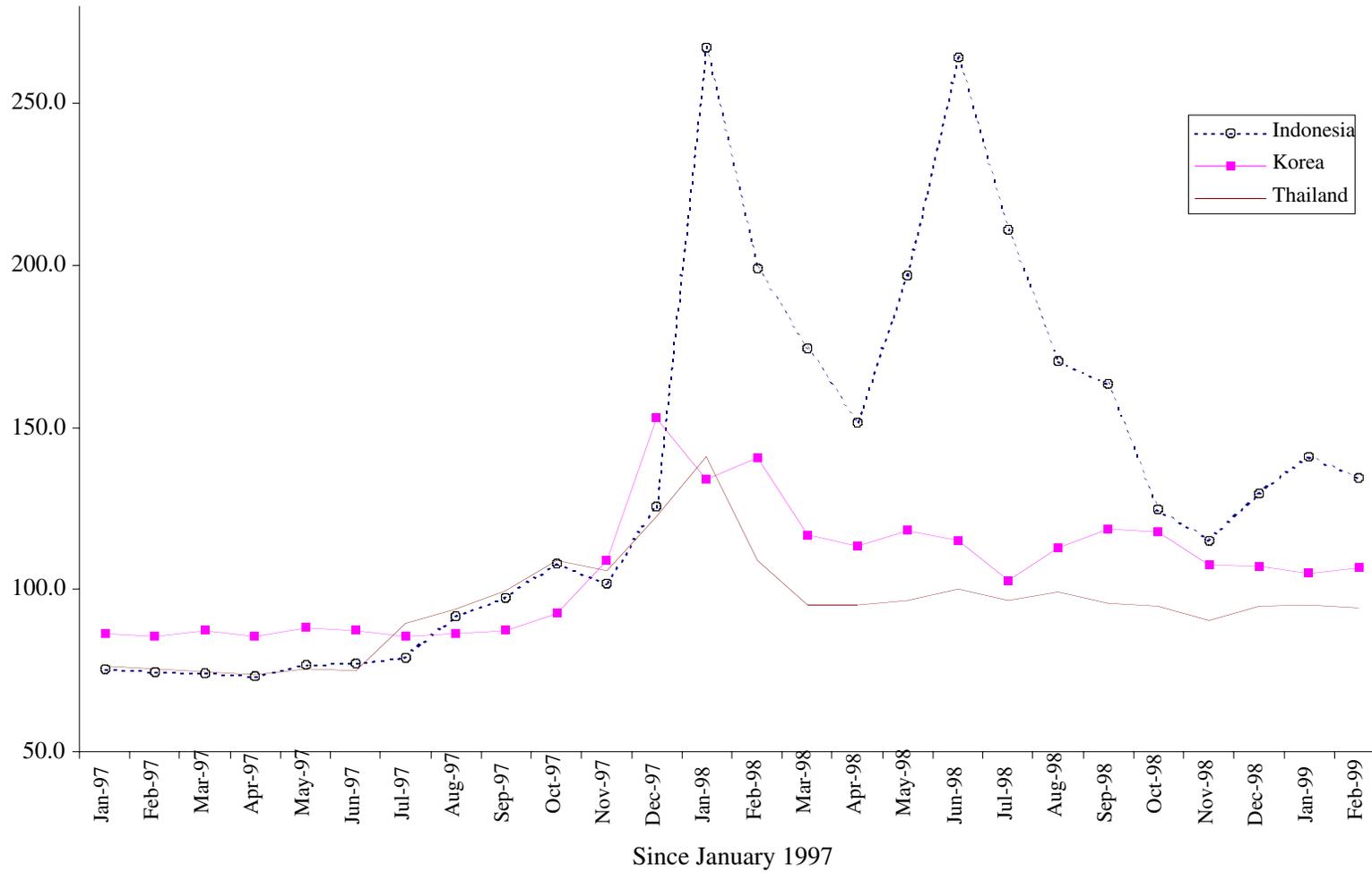
At first glance, it appears that export performance was very weak after the crisis, at least when exports are measured in U.S. dollar value terms. Export values were lower in most of the crisis

---

<sup>5</sup> These indices are trade-weighted real exchange rates, using the trading partners' wholesale price indices as the index of tradables prices, and the domestic consumer price index as the index for non-tradables prices. An increase in the index indicates a real depreciation.

<sup>6</sup> The use of 1990 as a reference year is somewhat arbitrary, but it was a period in which export growth was high and current account deficits and capital inflows were much more moderate (and therefore presumably more sustainable) than they were in the mid-1990s.

**Figure 6. Real exchange rate.**  
(WPI based, 1990=100)



countries in 1998 relative to 1997, as shown in Table 6. In Thailand, export values fell 2 percent in 1998, while in Korea they dropped 7 percent. Indonesia, however, experienced a modest growth in exports.

**Table 6. Export value growth: 1998.**

Exporter	USA	Japan	Rest of Industrial World	China	NICs	ASEAN	World
Indonesia	19.1	-20.9	15.7	-1.0	5.4	-0.9	3.2
Korea	4.5	-21.2	0.0	0.4	-38.1	-36.1	-7.4
Malaysia	10.9	-21.4	7.8	17.3	-20.9	-14.9	-4.5
Philippines	11.4	-7.5	9.4	57.0	13.0	29.8	7.3
Thailand	12.9	-12.6	10.5	21.4	-24.9	2.1	-1.8

Measured in volume terms, however, export performance was much stronger than the value figures indicate (Hussain and Radelet, 1999). According to data from the IMF, from the fourth quarter of 1997 through the third quarter of 1998, the volume of exports from Korea was 22 percent higher than the same period of the previous year (Table 7). Results for Thailand were not nearly as strong, with an increase of 12 percent in volume terms between the fourth quarter of 1997 and the third quarter of 1998. Indonesia recorded an even stronger performance than Korean did, posting an increase in volumes of 28 percent. Indonesian exports of paper and pulp, furniture, jewelry, chemicals, certain minerals, and some agricultural products performed especially well. Exports of textiles and apparel also grew quickly, at least in the early part of 1998. Note that export volumes grew by much less in other economies in the region where exchange rate depreciations were smaller, including Taiwan, Singapore, and Hong Kong. In fact, export volumes from Hong Kong actually fell 7 percent in the third quarter of 1998.

**Table 7. Export growth after the Asian crisis.**

Country	1997:Q3		1997:Q4		1998:Q1		1998:Q2		1998:Q3		1998:Q4	
	Value (US\$)	Volume										
China,P.R.	20.5	...	14.0	...	12.6	...	2.5	...	-2.0	22.1*	-7.3	...
Hong Kong	2.5	4.4	7.4	9.6	-0.9	1.4	-3.2	-0.5	-10.4	-7.1	-13.7	-9.6
Indonesia	9.6	33.5	2.4	33.0	0.9	32.8	-8.4	19.1	-9.4	27.6	-16.8	...
Korea	16.1	35.3	4.4	23.2	8.4	32.6	-1.9	20.6	-10.8	11.4	-5.5	8.6
Malaysia	2.6	...	-5.4	...	-10.8	...	-9.1	...	-10.0	...	5.3	...
Philippines	24.3	...	19.6	...	23.5	...	14.4	...	39.9	...	-28.6	...
Singapore	3.2	10.5	-3.9	7.8	-6.6	7.6	-13.9	-0.2	-14.8	-0.7	-12.4	-3.7
Taiwan	17.1	9.7	7.1	11.4	-0.3	3.8	-7.5	0.8	-9.6	...	-12.9	...
Thailand	5.4	11.7	4.3	16.3	-1.8	14.1	-6.9	12.8	-6.2	5.7	-6.5	1.0

Source: Export volumes are from World Economic Outlook and IFS, except for China, which is from News Media reports. Export value data are from IFS. Taiwan's data are from WEO.

Notes: \* Percent change during first 10 months over the same period in 1997.

Unfortunately, the relatively solid export volume performance has been offset by very weak export prices. The price declines are partly due to the crisis itself, both because demand is weak

in the region and because currency depreciation has made Asian export prices much cheaper in dollar terms. Prices for a wide range of commodities and manufactured goods plummeted in 1997 and 1998. A recent World Bank report estimated that in the first ten months of 1998, world energy prices fell 26 percent, agricultural prices fell 18 percent, and metals and minerals prices fell 16 percent. Prices for Indonesia's oil and gas exports fell 40-50 percent. These price drops hit Indonesia especially hard, because oil and gas sales accounted for about one-quarter of both export receipts and government revenues before the crisis.

Export volume performance has also been hurt by weak demand within the region. During the 1980s and early 1990s, Asian countries themselves became an increasingly important destination for each other's exports (Hussain and Radelet, 1999). For example, in 1980, just 18 percent of exports from Indonesia, Thailand, Malaysia and the Philippines went to each other or to China, Hong Kong, Singapore, or Korea. By 1996, this share had risen to 33 percent. An additional 18 percent of exports from these four countries went to Japan. Thus, in 1996, 51 percent of exports from the four large Southeast Asian countries went to other countries in East and Southeast Asia, including Japan. As the whole region began to suffer the effects of the economic contraction that started in mid-1997, demand for exports from the crisis countries fell sharply.

Thailand's modest export volume expansion stands in contrast to that of Korea and Indonesia. Two factors have probably contributed. First, even with the depreciation of the baht during the crisis, in real terms the baht appreciated by a cumulative 5 percent since 1990. The sustained appreciation of the baht after January 1998 undoubtedly helped the balance sheets of Thai banks and corporations. However, it weakened the competitive position of Thai exporters, which appear to again be less competitive than they were in 1990. Second, Thailand's weaker performance in 1998 may reflect a continuation of problems that have affected Thai exporters for several years, and that contributed to the substantial slowdown in Thai exports that preceded the crisis. For example, in 1996, Thai exports were actually lower in both value and volume terms than the level recorded in 1995. The volume of export declined by 10% in 1996. Previous analyses have pointed to a range of constraints faced by Thai exporters, including low levels and quality of education, deficiencies in infrastructure, and—because of protection—high costs for a range of domestic inputs, including services such as telecommunications (Flatters, 1999; Dollar and Hallward-Dreimer, 1998). Many of these constraints continued to impinge on exporters even after the depreciation of the baht.

Unfortunately, preliminary data indicate that Indonesia's strong export volume performance weakened considerably in the second half of 1998. Apparently, following the violent May 1998 riots which led to the resignation of President Suharto, foreign buyers for certain manufactured products decided that Indonesia was too risky to depend on as a secure and timely production site, and they switched their orders to factories in other countries. Textile and apparel factories appear to have been particularly affected. This drop in orders is likely to appear in the export figures for the last few months of the year. Volume data for the last quarter of 1998 is not yet available, but initial value data suggest that this problem indeed slowed manufactured exports in late 1998. It probably had less effect on exports of minerals, agricultural products, and other commodities. The buyers of manufactured exports are unlikely to return until the political situation in Indonesia clarifies; even then it may be difficult to convince them to switch back from their new production sites. Political uncertainty and continuing violence are likely to continue to slow Indonesia's exports through 1999.

Thailand's performance in particular raises a more fundamental issue about Asian exports: can manufactured exports continue to be the main driver for growth in the Asian countries? Even before the crisis, export performance weakened considerably across the region, especially in 1996 (and especially in Thailand). To some extent, Asian exports were displaced by exports from China, Mexico, and other emerging markets in the early 1990s, although the effect was not huge (Radelet and Sachs, 1998b). Moreover, Asia's exports contributed to a worldwide glut in some manufactured products, such as semi-conductors.

## **V. Bank Restructuring**

### *Korea*

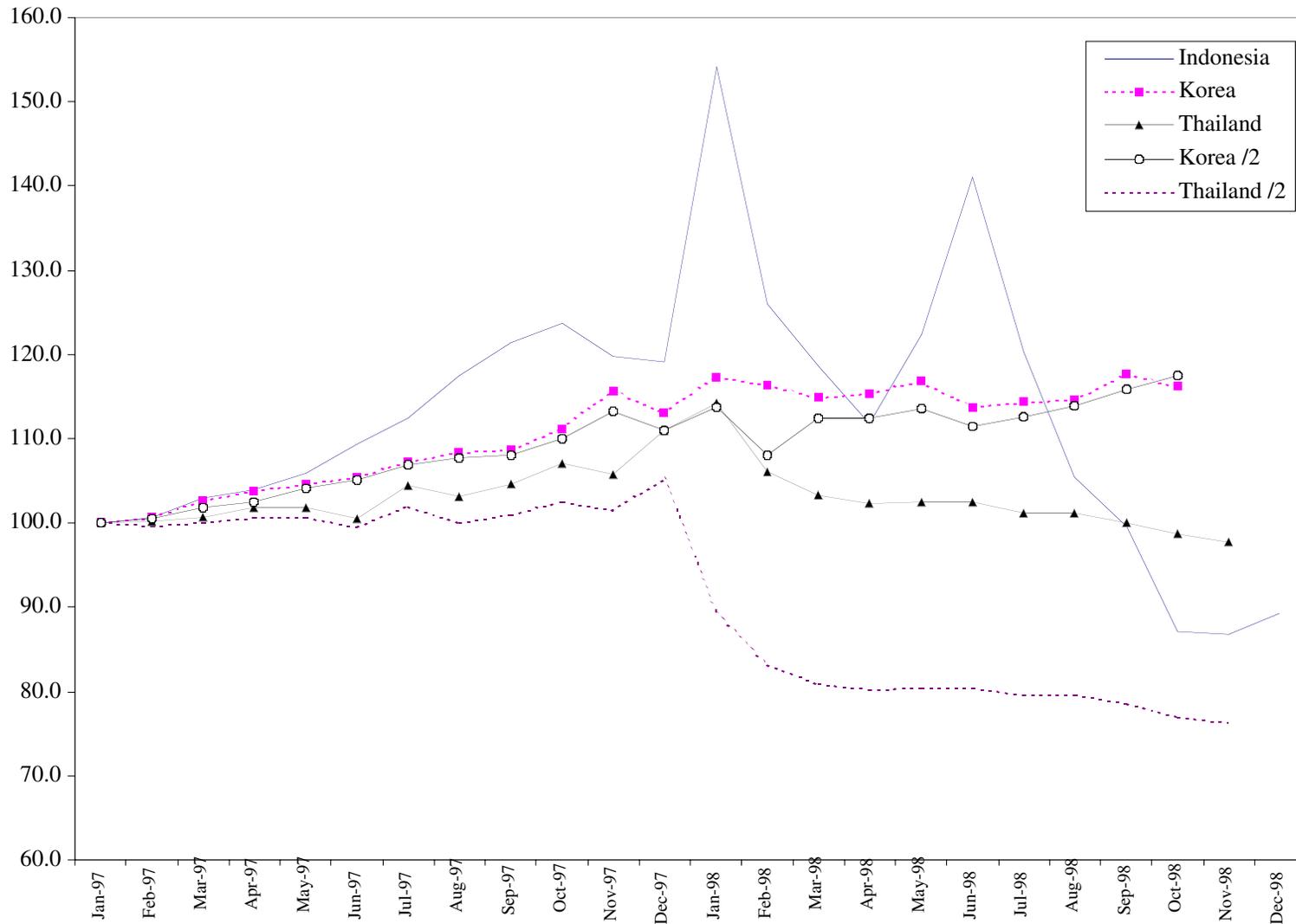
Bank restructuring in Korea has proceeded much more quickly than in either Thailand or Indonesia. The government has been heavily involved in closing unviable institutions, providing public funds for both recapitalization, and cleaning up nonperforming loans (NPLs). Korea is the only one of the three countries in which the government is actively purchasing NPLs, and it has gone further than the other two countries in recapitalizing its banks.

Bank restructuring got off to a much better start in Korea than in the other crisis countries through the rollover of \$22.5 billion in debts owed by Korean banks to foreign creditors in the first quarter of 1998, as discussed earlier. The rescheduling provided the banks (as well as the economy as a whole) with breathing room at the height of the panic, allowing banks to remain more liquid than they otherwise would have been and therefore to continue their lending operations. Debt rollovers were also an important part of the domestic credit story. In late June 1998, the government announced that all businesses not belonging to the top 67 chaebols (excluding unviable firms) would be eligible for an extension on all loans due for the remainder of 1998. The rollover covered loans worth approximately W84 trillion (\$64 billion).

Both the foreign and domestic debt rollovers helped to keep credit flowing in Korea to a larger extent than was possible in the other crisis countries. Other measures also kept credit lines open. The government apparently pressured banks to extend upwards of W3 trillion in emergency loans to the top ten chaebols during the crisis. An additional \$3.3 billion in special trade financing was made available to small and medium scale enterprises. As shown in Figure 7, although there was very little growth in lending to the private sector (in real terms) in Korea in 1998, the value of loans outstanding did not fall sharply as it did in Thailand and Indonesia.

In the initial stages of the crisis, the Korean government closed 14 merchant banks. The government resisted pressure from the IMF to close two large commercial banks (Korea First Bank and Seoul Bank), and instead chose to temporarily nationalize these banks. Both because Korea had established a deposit insurance system before the crisis and because it limited the immediate closures to merchant banks (which do not take deposits), Korea faced fewer bank runs than the other crisis countries (especially Indonesia). After the initial panic had subsided in mid-1998, the government closed two more merchant banks and five commercial banks. It also closed several credit unions, finance companies, and other institutions (see Table 8). The government spent W7.8 trillion to cover the deposits of closed institutions between end-November 1997 and the end of 1998. It expects to spend an additional W6.2 trillion for the same purpose in 1999.

**Figure 7. Monthly Real Credit Index.**  
**(Jan-97=100)**



**Table 8: Financial institutions suspended or closed in Korea.**

	Total No. of Institutions (end-1997)	License Revoked	Suspended	Total Suspended or Closed
Commercial Banks	26	---	5	5
Merchant Banks	30	16	---	16
Securities Companies	34	2	4	6
Insurance Companies	50	---	4	4
Investment Trust Companies	8	1	1	2
Mutual Savings and Finance Companies	230	1	21	22
Credit Unions	1,653	12*	27	39
Leasing Companies	25	---	---	---
<i>Total</i>	2,063	32	62	94

Source: KIEP. Data as of September 1998. \* Bankruptcy

From the outset of the crisis, the government used public funds to recapitalize the banks. Between November 1997 and the end of 1998, it injected approximately W13.2 billion to recapitalize banks, and it expects to inject an additional W4.3 trillion in 1999 (see Table 9). Approximately W3 trillion was injected into the two nationalized banks in order to prepare them for privatization, a process that was near completion in early 1999. As one step in this direction, the government eliminated the ceiling on foreign equity ownership of banks in May 1998. A consortium led by Newbridge Capital and GE capital signed a memorandum of understanding with the government to purchase 51 percent of Korea First Bank. This deal marks a turning point, as it will be the first time that foreign investors will hold a controlling share of a Korean bank. As part of the agreement, the government will transfer the bank's bad assets off the books, and will continue to do so for the next two years. In February, the government signed a memorandum of understanding with Hong Kong & Shanghai Banking Corporation, which would allow them to acquire a 70 percent share of Seoul Bank.

**Table 9. Outline of financial sector restructuring in Korea. (in trillion won)**

Category	Amount Injected Nov. 1997-Dec. 1998	Amount to be Injected by 1999	Total
Purchase of NPLs	19.9	12.6	32.5
Recapitalization and Loss Coverage	13.2	4.3	17.5
Deposit Payment	7.8	6.2	14.0
<i>Total</i>	40.9	23.1	64.0

Source: KIEP.

A key component of the Korean strategy was to aggressively remove NPLs from the books of viable banks. Dealing with NPLs in Korea is likely to be easier than in Thailand, since a significant portion of Korea's lending was for tradable manufacturing activities, rather than for real estate as in Thailand. Korean NPLs reached 20 percent of the outstanding portfolio in 1998, and some analysts expect them to grow to 30 percent by the end of 1999. The Korean Asset

Management Company (KAMCO) spent W20 trillion to purchase NPLs with face value of about W44 trillion in 1998, implying an average discount rate of about 55 percent. KAMCO expects to spend an additional W13 trillion to purchase NPLs in 1999. Initially, KAMCO purchased the NPLs with few conditions on the banks. Beginning in mid-1998, however, it only purchased NPLs from banks with approved rehabilitation plans. KAMCO has purchased about half of the NPLs from these banks, leaving the banks to deal with the other half through loan collection or foreclosure. KAMCO auctioned off a small amount of its assets in September 1998 at a recovery rate of about 12 percent of face value. In December, it auctioned W541 trillion of assets at a price equivalent to 36 percent of face value.

The IMF expects the total cost of bank restructuring in Korea to reach W75 trillion (\$60 billion), equivalent to 18 percent of current GDP. Annual interest costs will be the equivalent of about 2 percent of GDP (Table 10).

**Table 10. Estimated costs of bank restructuring.**

	Local Currency Cost /1	U.S. Dollar Equivalent (U.S. \$ billions)/2	Percent of GDP
<b>Interest Costs</b>			
Indonesia	40 trillion	5.4	3.5
Korea	8 trillion	6.4	2.0
Thailand	143 billion	4.0	3.0
Malaysia	3.5 billion	0.9	1.25
Philippines	11.9 billion	0.3	0.25-0.5
Total		17.0	
<b>Total Costs</b>			
Indonesia	300 trillion	40	29
Korea	74.7 trillion	60	18
Thailand	1583 billion	43	32
Malaysia	48.4 billion	13	18
Philippines	110 billion	3	4
Total		159	

*Source:* International Monetary Fund, "World Economic Outlook: Interim Assessment," December 1998.

Notes:

1. IMF staff estimates as of November 30, 1998. The estimates include both budgetary and extra-budgetary costs and are intended to measure the up-front financing costs.
2. Converted at exchange rates on November 30.

## *Thailand*

Broadly speaking, Thailand has attempted to use a somewhat more market-based approach to financial sector restructuring than Korea did. It first tried to encourage a completely private sector approach to bank recapitalization before deciding to use public funds in mid-1998. It has also decided against having the government buy NPLs from banks and financial institutions, at least so far. Partly as a result, progress has been slower than in Korea, which chose a strategy based on somewhat more aggressive government intervention.

The first component of the reorganization of Thailand's financial system was the closure of unviable financial institutions. In June 1997 the government suspended the operations of 16 of the country's 91 financial institutions. In August 1997, when it signed its first program with the IMF, the government suspended 42 more institutions. The government announced a blanket guarantee for the depositors and creditors of the 33 financial institutions that were not suspended, and a more limited guarantee for the liabilities of the 58 suspended institutions. In October 1997, the government established the Financial Restructuring Authority to oversee the rehabilitation and/or liquidation of the suspended institutions (Meecharoen, 1999). In December 1997, the Financial Restructuring Authority announced that 56 of these 58 financial institutions would be liquidated.

The Financial Restructuring Authority took over about 860 billion baht worth of assets from the closed financial institutions for eventual auction. In the initial series of auctions, the assets were sold for an average of about 25 percent of their book value. The December 1998 auction did not go well, with the Financial Restructuring Authority pulling most of the assets after the bids it received were deemed to be too small. In a subsequent auction, many of the assets were purchased by another government agency, the Asset Management Corporation, which acts as a last-resort buyer to support the bidding prices. As a result, these assets remain in government hands for later resale, and there is concern that the auctions are not establishing accurate market prices that can be used to benchmark other debt restructurings.

The original government strategy on recapitalization was to rely completely on private funds from existing owners, new domestic investors, or foreign investors. During the first half of 1998, majority shares of two banks were sold to foreign banks (ABN-AMBRO and the Development Bank of Singapore). Otherwise, few new investors showed interest as the financial sector continued to weaken. The government took over four commercial banks in January and February 1998, and two more in August. It intervened seven additional financial institutions in May, and an additional five in August. All of these nationalized banks and financial institutions either will be privatized, closed, or absorbed into other banks.

In mid-August 1998 the government switched strategies and decided to use public funds to partially recapitalize the banks. Banks were given two broad options. In the first, the government would inject all of the capital needed to bring the banks' capital adequacy ratio (CAR) up to 2.5 percent. It would then provide additional tier 1 capital (i.e., direct equity) for half of the additional capital necessary to bring the CAR up to the current minimum standard of 4.25 percent. Banks have been reluctant to take part in this scheme, mainly because the government maintained the right to convert the shares into common equity, so that management might be replaced and the current owners might lose control of the banks.

In the second option, the government would offer the banks tier 2 capital (i.e., mainly subordinated debt) in an amount determined by the banks' debt write-downs and its new lending. Specifically, banks will receive a government capital injection equal to 100 percent of the debts that they write down (in excess of previous provisioning) plus 20 percent of the value of new loans (net) extended to the private sector. The idea is to provide the banks with extra incentives to both restructure nonperforming loans and to provide new credit to the private sector. To encourage the banks to act quickly, the government announced a schedule of deadlines such that the longer the banks waited to recapitalize, the less government funds would be available.

By early 1999, two banks had applied for tier-1 capital injections, and three had applied for tier-2 capital. According to the March 1999 IMF agreement, of the 13 remaining commercial banks in Thailand, six have been judged to have adequate capital. Of the five state-owned and/or recently nationalized banks, the government plans to privatize three of them in 1999. The fate of the remaining 24 financial institutions will be decided by June.

Nonperforming loans in Thailand reached 44 percent (equivalent to over 50 percent of GDP) in early 1999, according to official estimates. NPLs in the state-owned banks reached 63 percent. Working out the NPLs has been made more difficult by the fact that a substantial share of the loans went to property and real estate, so the current market value is but a fraction of the book value. By contrast, many of Korea's NPLs are with manufacturing groups engaged in production of tradable goods, so there is a better chance of returning the firms to profitability. The government's strategy to date is to leave the resolution of the NPLs to negotiations between the banks and the debtors such that banks can set up their own private asset management companies to remove some NPLs from their books. There is currently no plan for the government to purchase any of the NPLs, although the Minister of Commerce recently suggested that the government consider purchasing 10 percent of the NPLs. The government is wary of being seen as going too far to bail out private banks and firms. However, because the banks' capital base has been so severely eroded, few banks have the capacity to write off or even writedown a significant amount of loans. Moreover, it seems that some debtors who are able to pay are simply refusing to do so, recognizing that the creditors can do little about it. These "strategic NPLs" are especially attractive for more liquid firms that can either self finance their current operations, or are able to obtain working capital from other sources (perhaps from offshore parents).

With the recapitalization process incomplete and the high level of NPLs, banks have extended very little credit, despite the sharp drop in interest rates (Figure 7). Banks generally claim that they cannot find enough high-quality borrowers, and that they are wary of lending more money to firms that are struggling to pay their current debts. The government hopes that two recent steps will encourage the banks to resume lending. First, a new bankruptcy law was passed by the parliament in March 1999. The law strengthens the ability of lenders to foreclose on bad loans, and thus better protects new lending. Second, the government clearly hopes that the large fiscal stimulus in the budget will make it more attractive for banks to lend to firms that will benefit from renewed demand.

## *Indonesia*

Indonesia's financial system effectively ceased to operate in any meaningful way during 1998, with most banks illiquid and undercapitalized, and with very little new lending. As shown in Figure 7, real lending in Indonesia dropped sharply in the last half of 1998. The initial burst of new credit in late 1997 and early 1998 was due to central bank liquidity credits to commercial banks facing bank runs; otherwise real lending would have showed a decline in early 1998.

The first step in Indonesia's bank restructuring was the abrupt closure of 16 commercial banks mandated by the IMF on November 1, 1997. As we have explained elsewhere, the bank closures were a serious mistake (Radelet, 1999; Radelet and Sachs, 1998a and 1998b). The closures ignited a series of bank runs that seriously undermined other private banks (as well as confidence in the IMF program). Moreover, in response to the bank runs, the central bank began to issue large amounts of liquidity credits to keep troubled banks open. These credits, which eventually reached Rp 130 trillion (around \$13 billion), added substantially to monetary growth and helped ignite inflation in early 1998. The government closed ten more banks in 1998 and an additional 38 in March 1999, bringing the total to 64. Eleven banks have been nationalized, and dozens of others are under the supervision or management of the Indonesian Bank Restructuring Agency. In January 1998, at the height of the panic, the government announced a blanket guarantee on all commercial bank liabilities. In effect, a large portion of the Indonesian banking system has been at least temporarily nationalized.

In September 1998, the government announced its basic strategy to recapitalize the most viable segments of the banking system. Banks will be separated into three groups. First, banks with a CAR of less than -25 percent will be closed. Second, those banks with a CAR greater than 4 percent will be allowed to operate normally, and will be expected to increase their CAR to 8 percent over the next several years. Third, banks with CAR between -25 percent and 4 percent will be able to apply for government recapitalization funds. To be eligible for the funds, these banks must meet certain requirements and be able to immediately provide 20 percent of the funds necessary to increase the CAR to 4 percent. The government will supply the remaining 80 percent of the recapitalization funds. The owners of the banks will have the option to repurchase the government's shares within 3 years, and will have the right of first refusal to buy the shares through 5 years.

In mid-March 1999, the government announced that 73 banks (accounting for about 5 percent of all bank deposits) had achieved CARs of 4 percent or more, and would not participate in the recapitalization program. Nine banks (accounting for 12 percent of deposits) with CARs less than 4 percent met the eligibility requirements for the recapitalization scheme. The government plans to issue Rp 300 trillion (about \$35-\$40 billion) in bonds by the end of April 1999 to recapitalize these banks (along with seven state banks, 14 regional banks, and 11 recently nationalized banks). Half of these bonds will carry a fixed interest rate of 3 percent; the other half will carry a rate of 3 percentage points about the rate of inflation. The budgetary costs for interest payments on these bonds will amount to about 3 percent of GDP. As shown in Table 10, bank recapitalization costs in Indonesia are expected to be about the same as those in Thailand, and significantly higher than in Korea or Malaysia.

In addition, the government will create a new bank, Bank Mandiri, which will absorb four large state-owned banks. The bank, which will comprise 30 percent of banking system deposits, will be capitalized in phases between May 1999 and March 2000.

Nonperforming loans in early 1999 reached as high as 60-75 percent, by some estimates. The government is beginning to take some steps to resolve outstanding NPLs. The nonperforming corporate loans of the four state banks being folded into Bank Mandiri were transferred to Indonesian Bank Restructuring Agency's Asset Management Unit at book value in March 1999, as were the nonperforming loans of three other state banks. In addition, the nine banks that are eligible for the new recapitalization program will be able to remove some of the NPLs off their books by exchanging them for government bonds. Any amounts the banks collect on these loans can be used to buy back the government's capital share.

Even with the recapitalization, bank activity is likely to remain subdued in 1999. Many banks remain illiquid, and those with funds available have little incentive to start lending in the run-up to the elections. Interest rates on one-month Bank Indonesia certificates remain over 30 percent, so most banks would prefer to put the limited available funds they have in these instruments rather than extend new loans.

## **VI. Corporate and Debt Restructuring**

### *Korea*

The Korean government passed a series of laws and regulations governing the process of corporate restructuring in February 1998. The legislation provided tax breaks for restructuring, relaxed rules on foreign direct investment, liberalized mergers and acquisitions activities, and prohibited new cross debt guarantees (in which affiliated companies guarantee each other's debts) between chaebol affiliates and subsidiaries.

The government is following somewhat different restructuring strategies for three different groups of private firms: the five largest chaebols, the mid-sized chaebols (from 6<sup>th</sup> largest to 64<sup>th</sup> largest), and small and medium scale enterprises. The broad outlines of the reform process for the five largest chaebols was determined in an agreement on February 6, 1998, between four of the chaebols and President-elect Kim. There were five main parts to the agreement.

*1.) Focus on core business.* The chaebols agreed to focus on core businesses through a process of asset swaps and joint ventures in seven different sectors. In October, the government reached an agreement with these chaebols on the modalities of this restructuring in what was called the "Big Deal," as outlined in Table 11. In some instances, the government has had to forcefully push the specifics of the reorganization, as for example in the dispute between Hyundai Electronics and LG Semiconductor.<sup>7</sup> In addition, the chaebols agreed to dispose of a variety of subsidiaries through mergers, liquidations, and sell-offs. In

---

<sup>7</sup> A major dispute broke out between Hyundai Electronics and LG Semiconductor when the government "selected" Hyundai to takeover LG's operations. In December 1998, when LG resisted the proposed takeover, the government instructed banks to stop providing credit to LG. A dispute about the eventual sales price erupted in February, with LG complaining that the price offered was too low because Hyundai was the only bidder. The dispute went to arbitration and was decided in Hyundai's favor.

1998, 35 subsidiaries were sold to foreign companies, and an additional 91 sales are expected to occur in 1999 (Table 12).

2.) *Eliminate cross-debt payment guarantees.* New guarantees were prohibited as of April 1998, and existing guarantees were assigned a deadline such that they must be eliminated by March 2000.

3.) *Strengthen capital structure.* The five largest chaebols are heavily leveraged, with debt/equity ratios of between 300-450 before the crisis (other chaebols recorded even higher ratios; see Table 13). The five chaebols agreed to reduce their debt/equity ratios to a maximum of 200 percent by the end of 1999 by selling assets, attracting new investors, contributing new capital, and restructuring loans with creditor banks.

4.) *Improve management transparency.* The five chaebols will consolidate their financial statements by the end of 1999, and will increase monitoring by outside directors and independent auditors.

5.) *Shareholder and manager accountability.* Voting rights of minority shareholders were strengthened, along with several other related actions.

**Table 11. Corporate restructuring in Korea: “Big Deal” Plan (October 7, 1998).**

<b>Industry</b>	<b>Company</b>	<b>Post Restructuring</b>
Semiconductor	Samsung Electronics Co. Hyundai Electronics Ind. LG Semiconductor Co.	Samsung Electronics Co. Merged as Hyundai Electronics Ind.
Power-generation equipment	Hyundai Heavy Industries Co. Korea Heavy Industries & Construction Co. Samsung Heavy Industries Co.	Hyundai Heavy Industries Co. Merged as Korea Heavy Industries & Construction Co.
Petrochemical	SK, LG, Daelim, Lotte, Hanwha Hyundai Petrochemical Co. Samsung General Chemical Co.	SK, LG, Daelim, Lotte, Hanwha Merged with third party professional manager
Aircraft Manufacturing	Korea Air Line Co. Samsung Aerospace Industries Co. Daewoo Heavy Industries Co. Hyundai Space & Aircraft Co.	Korea Air Line Co. Merged with third party professional manager
Railway vehicles	Hyundai Precision & Ind. Co. Daewoo Heavy Industries Co. Hanjin Heavy Industries Co.	Hyundai Precision & Ind. Co. Merged with third party professional manager
Ship engines	Hyundai Heavy Industries Co. Korea Heavy Industries & Construction Co. Samsung Heavy Industries Co.	Hyundai Heavy Industries Co. Merged as Korea Heavy Industries & Construction Co.
Oil refining	SK, LG, Ssangyong Hyundai Oil Co. Hanwha Energy Co.	SK, LG, Ssangyong Acquisition by Hyundai Oil Co.

Source: Federation of Korean Industries, Korea Daily (10/8/98) reproduced by Seong Min Yoo.

**Table 12. Bank-led Workout Programs for 35 subsidiaries of 13 groups in Korea.**

Creditor Bank	Group	Rank	Subsidiaries under Workout Program	Standstill of Creditor Claims
Chohung Bank	Keopyung	26	3	Applied for mediation by Committee on Corporate Restructuring (Sept. 14) July 18 – Oct. 17 (3 months) July 18 – Oct. 17 (3 months)
	Sepoong	48	2	
	Kangwon Industries	45	4	
Commercial Bank of Korea	Kabool	23	2	July 14 – Oct. 13 (3 months) with 1 month extension
	Byucksan	32	3	Aug. 6 – Nov. 5 (3 months)
Korea Exchange Bank	Shin Won	41	3	July 18 – Oct. 17 (3 months)
First Bank	Shinho	20	3	July 9 – Oct. 8 (3 months) with 1 month extension
	Tongil	29	4	July 20 – Oct. 19 (3 months)
Hanil Bank	Kohap	17	4	July 6 – Oct. 1 (3 months), applied for mediation by Committee on Corporate Restructuring (Oct. 1)
Seoul Bank	Jindo	34	3	July 14 – Oct. 13 (3 months) with 1 month extension
	Woobank	31	1	July 16 – Oct. 15 (3 months) with 1 month extension
	Dong Ah	-	1	Aug. 6 – Sept. 20 (1 month)
Daegu Bank	Daegu Department Store Co.	66	2	Sept. 1 – Nov. 30 (3 months)

Source: Office of Bank Supervision, reproduced by Seong Min Yoo, KDI (modified).

**Table 13. Debt-equity ratio of top five chaebols**

Group	1996		1997		1998	
	Non-financial	Total	Non-financial	Total	Non-financial	Total
Hyundai	376.4	377.0	436.7	458.8	578.7	685.8
Samsung	205.8	369.7	267.2	458.9	370.9	597.0
Daewoo	336.5	309.6	337.5	314.7	472.0	462.1
LG	313.2	323.1	346.5	373.3	505.8	542.8
SK	329.8	333.5	383.6	391.1	468.0	480.4

Source: Lee, Jae Hyung (1997), Fair Trade Commission reproduced by Seong Min Yoo, KDI.

The basic strategy for the medium-sized chaebols is to facilitate voluntary workouts with their creditors through debt/equity swaps, restructuring loans, and the like. The Corporate Restructuring Agreement, signed by 208 financial institutions in June 1998, provides basic guidelines for debt restructuring, including taking disagreements to arbitration. A large number

of workouts are now under way. A common feature of many of the workouts has been a standstill on creditor claims, usually for three months. Such formal standstills, which are at the core of bankruptcy proceedings in most industrialized countries, have been largely absent in Thailand and Indonesia.

Korea has instituted several special programs for small and medium scale enterprises, over 20,000 of which have gone out of business since the beginning of the crisis. The major focus has been to facilitate continued credit flows to these enterprises. As mentioned previously, in June 1998 the government announced an automatic rollover of up to W 84 trillion in debts owed by viable firms outside the top 67 chaebols through the end of 1998. In addition, the repayment of about \$1 billion in foreign currency loans owed by the small and medium enterprises (SMEs) to commercial banks in 1998 was delayed for one year. The government also made \$3.3 billion available in special trade financing.

### *Thailand*

Very little progress was made on corporate debt restructuring in Thailand during the first year of the crisis. There was no strategy for dealing with the issue in the IMF programs, and the bankruptcy and foreclosure laws on the books at the time were very poor. The first significant movement on the issue came in August 1998 when a coalition of four institutions established a Corporate Debt Advisory Committee (CDRAC) in conjunction with the Bank of Thailand.<sup>8</sup> The CDRAC established a framework for debt negotiations outside of bankruptcy court, aimed primarily at restructuring companies, rather than liquidating them.

The CDRAC initially targeted 200 cases for debt restructuring involving 353 companies with obligations of B 674 billion. By early 1999, a total of 67 cases were negotiating restructuring under the CDRAC framework, involving total obligations of B 158 billion. 21 cases worth B 86 billion (\$2.3 billion) have so far been resolved (Meecharoen, 1999). This represents about 13 percent of the value of the loans targeted by CDRAC. The government anticipates that the process will be accelerated during 1999, especially with the passage of the new bankruptcy and foreclosure laws in March. The CDRAC will target another 600-700 cases for 1999, each of which is a relatively large debtor with loans outstanding of B 100 million or more.

Outside of the CDRAC, financial institutions are involved in a relatively large number of simpler debt restructurings. As of January 1999, 12,000 cases totaling B 187 billion had been resolved. An additional 9,800 cases are in process comprising loans worth B 717 billion. Between the CDRAC and these smaller financial institutions loans, restructurings worth B 273 billion (\$7.4 billion) had been resolved, equivalent to 11 percent of the outstanding nonperforming loans of the banking system.

---

<sup>8</sup> The four institutions were the Board of Trade of Thailand, the Federation of Thai Industries (representing debtor companies), the Thai Bankers' Association, and the Foreign Banks' Association.

## *Indonesia*<sup>9</sup>

The short-term foreign debt of Indonesian firms was at the epicenter of Indonesia's financial panic, but very little action was taken on the issue for the first six months of the crisis. The first IMF program completely ignored the short-term debt issue, and the second program in January 1998 gave it very little attention. The first action was in late January, when the government announced a "voluntary" suspension of foreign debt service payments. The announcement, while doing little more than confirming what was already happening (since few debts were being paid), calmed the markets, especially when it became clear that the IMF would not object to the measure.

In June, the government and a group of foreign creditors reached agreement on restructuring part of Indonesia's debt. The agreement had three components. First, Indonesian commercial banks repaid \$6 billion in trade credit arrears, in return for which foreign banks agreed to maintain trade credits at the (already depressed) April 1998 level. Bank Indonesia guaranteed all of the new trade credits. Second, about \$9 billion in debts owed by Indonesian commercial banks due before March 1999 were exchanged for new loans of maturity between one and four years, also guaranteed by Bank Indonesia. At the end of March 1999, the creditors agreed to restructure an additional \$3.5 in short-term debts owed by Indonesian banks and falling due before the end of 2001. Third, Indonesia established the Indonesian Debt Restructuring Agency (INDRA) to facilitate repayment and restructuring of an estimated \$64 billion in corporate debt. INDRA is designed to be an intermediary agency between creditors and debtors that was to provide protection against further real depreciation of the rupiah (i.e., a rate of depreciation exceeding the inflation rate). However, INDRA's planned mechanisms did not provide any cash relief for debtors, since they were obliged to continue to make rupiah payments. It also gave the creditors little incentive to write down their loans.

In September 1998, in an attempt to further encourage restructuring, the government announced the Jakarta Initiative. This initiative offers guidelines on the formation of creditor committees, standstill arrangements, exchange of information, subordination of old loans to new credits, and other related issues. However, it did not address the fundamental problem of burden sharing between debtors and creditors.

Very little progress was made on debt restructuring in 1998. At the end of June 1998 (the last available data), Indonesian firms owed about \$36 billion to foreign banks, down only slightly from the \$40 billion owed just prior to the crisis (see Table 1). Indonesia's short-term debt fell from \$35 billion in June 1997 to \$27 billion in June 1998. Thus, even after a full year, a large amount of short-term debt remained outstanding, both because debtors were unable to pay the debts and because creditors were unwilling to reschedule them. The amount of debt undoubtedly fell after June 1998, but the burden remains very high.

Indonesia adopted a new bankruptcy law in April 1998, but problems with its implementation have contributed to the delays in both foreign and domestic debt workouts. Very few cases have been formally decided, partly because of the inexperience of judges, lawyers, and others involved in the cases. Many of the decisions that have been reached have been highly criticized. At best, given the enormous number of distressed firms, case-by-case bankruptcy proceedings for all affected firms will take many years to sort out.

---

<sup>9</sup> This section draws from Radelet (1999).

Another complication hindering Indonesian debt restructuring during 1998 and early 1999 was apparent extreme reluctance of Japanese banks to offer any substantial relief on Indonesian debt. Japanese banks are by far the largest of Indonesia's creditors. Many Japanese banks had weak financial positions before the crisis, with inadequate provisioning to write off substantial amounts of Asian debt. Apparently, although other creditor banks were willing to make significant concessions on Indonesian debt, Japanese banks would not follow suit. In the end, there is unlikely to be any significant progress in solving Indonesia's corporate debt problem unless there is more active participation and assistance by the Japanese government to prod and assist Japanese banks in debt restructuring.

Despite these issues, there was a little progress in dealing with some of Indonesia's corporate debt in late 1998 and early 1999. According to the IMF, by the end of March 1999, 125 firms had entered negotiations under the framework of the Jakarta Initiative covering \$17.5 billion in foreign debt and Rp 7.8 trillion in domestic debt. Agreements were reached with 15 companies covering about \$2 billion in foreign debt and Rp 600 billion in rupiah debt (IMF, 1999b). While this progress is welcome, it is as yet just a tiny fraction of the amount outstanding.

## **VII. Next Steps**

As of early 1999 it appears that the worst of the Asian financial crisis is over. Exchange rates have rebounded from the overshooting of late 1997 and early 1998, interest rates have declined substantially, and prices have stabilized. The sharp fall in output is over, and there are signs of increased economic output, especially in Korea. Positive economic growth is likely in 1999 for Korea, and probably for Thailand as well. The Indonesian economy will probably not register positive growth, but at the same time it is unlikely to contract significantly as long as the election process scheduled for later in the year goes smoothly. Real recovery in Indonesia probably will not begin until 2000.

### *Macroeconomic Policy*

All three economies should support continued recovery by maintaining flexible exchange rates, low interest rates, and the provision of adequate liquidity to the economy. Interest rates in Korea and Thailand are now at reasonable levels. In Indonesia, short-term interest rates of 37 percent are well above the current inflation rate, so there is considerable room for further reductions. Running fiscal deficits is the appropriate strategy in these kinds of crises, and in 1998 each country moved to deficits after the IMF's initial misguided attempt to tighten fiscal policy. However, at this stage care must be taken to ensure that the deficits do not become so large that they are unsustainable, particularly in Indonesia and Thailand where current targets are for deficits as large as 6 percent of GDP. Indonesia especially cannot afford to take on additional foreign debt, even obligations with long term maturities, to finance a large budget deficit. At this stage, in all three countries economic recovery should be based more on export-led growth more than excessive deficit-financed domestic spending.

### *Bank Restructuring*

The banking systems in all three countries continue to need urgent care and long-term rehabilitation. The goals are adequate liquidity in the short run to support a restoration of lending; improved capital positions in the medium term, and a more efficient, transparent, better-regulated and supervised system in the long term. The international community, especially the IMF, World Bank, and G-7 countries,<sup>10</sup> should work to support the continued rollover and stretch-out of debts owed by the domestic banking system to international banks. In addition, the international community should work together with national country regulators in the creditor countries to help ensure that international short-term credits lines are reestablished, especially trade credits. In turn, within the crisis countries, monetary authorities and bank regulators should continue to work with domestic banks to ensure that credit lines are reestablished, particularly for SMEs and exporting firms. In addition to restoring credit lines, corporate debts owed to the banking systems should be rolled over as much as possible. The Korean government has supported across-the-board six-month reschedulings of SME corporate debts owed to domestic banks. Indonesia and Thailand should explore this option as well, at least for a subset of corporate debtors.

These steps, of course, will require even more urgent action on bank recapitalization in all three countries. Of course, some banks are unviable, and those should be closed or merged (now that the panic is over, bank closures will not cause the chaos they created in Indonesia early in the crisis, if the closures are carefully planned and well executed). The primary source of new bank capital will be the government, since few private investors are willing to invest in Asian banks. Of course, private investment in banks should be encouraged as much as possible. But in the end, large portions of the financial system in each of the crisis countries will be owned by the government, with the crisis ironically resulting in a nationalization of large swaths of the banking systems in Asia. As a result, these governments should devise clear strategies to sell off their shares in the banks within a reasonable time frame (2-3 years) to foreign and domestic investors, including in some cases to the current owners of the banks.

### *Debt Restructuring*

The process of corporate debt restructuring lags far behind the rehabilitation of the banking sectors. This is a result of three factors: (1) there is less, if any, injection of public funds in the case of corporate debt restructuring; (2) the corporate debt restructuring process inevitably requires a detailed case-by-case approach; and (3) debtors and creditors play a war of attrition, as each side waits for improved terms in the workout process. The end result is widespread bankruptcies and insolvencies, effectively wiping out the remaining value of many firms.

The debtor and creditor governments, supported by the IMF and World Bank, should work towards guidelines for more efficient corporate debt workouts. These will involve a *compromise* between debtor and creditor interests, with a partial write-down of debts combined in many cases with a partial conversion of debt into corporate equity. These guidelines will help to break problems of holdouts by individual creditors that are unwilling to participate in a workout arrangement. Because of their own financial weakness, many Japanese creditors are reportedly reluctant to sign on to debt workout arrangements agreed by banks in other countries. Whether or

---

<sup>10</sup> The G-7 consists of the United States, the United Kingdom, Germany, France, Japan, Canada, and Italy.

not this is true, the international community should work towards a common standard for a fair and equitable sharing of losses, both among creditors and between creditors and debtors.

So far, the adjustment process has heavily favored the international creditor banks, especially those that lent to Asian banks rather than corporations. The international banks have rolled over much of the debt owed to them by domestic banks at higher interest rates than on the original loans. Furthermore, they have received debtor government guarantees for virtually all claims on the domestic banking systems in the three countries. They have also been the indirect beneficiaries of the IMF bailout funds, which have been used in part to maintain debt servicing to the international commercial banks. The burden of adjustment between creditors and debtors should be changed in the future to ensure a more even sharing of the burdens and risks. This is not only equitable but also more efficient, since it reduces the moral hazards associated with the recent bailout packages.

Burden sharing could come in at least three forms. First, the international community should partially cancel the debts owed to it by some or all of the debtor countries. For example, Indonesia's Paris Club debts are likely to have to be reduced substantially in the future through outright debt reduction. Second, the international banks should agree to a more generous schedule of repayments of outstanding loans on a concerted, voluntary basis. This kind of voluntary agreement was recently announced in the case of Brazil. Third, the international banks should accept a reduction of claims on the corporate sectors of the Asian debtor countries, in a timely way and in the manner discussed earlier.

#### *Long Term Competitiveness and Risk Reduction*

To reduce the risk of a recurrence of a financial panic, the debtor countries should continue to build foreign exchange reserves, in part through long-term borrowing in order to build short-term reserves. Official funds could be used to support long-term borrowing (e.g., by guaranteeing a part of the long-term borrowing) in order to reduce the costs of long-term debt. The buildup of reserves in excess of total short-term debt will reduce the vulnerability of each country to a new round of speculative attack.

In addition, the crisis has exposed the gradual threats to long-term export competitiveness of the East Asian economies. All of these economies have experienced substantial terms of trade losses reflecting, at least in part, growing competition from other parts of the world and a general glut of labor-intensive products on world markets. The only long-term solution to this growing pressure on labor-intensive manufactures is continued progress in technological upgrading and product differentiation, which in turn will require a long-term focus on technology, improved research and development, and strengthened institutions of higher education. For their part, the advanced economies should move to block creeping protectionism aimed at emerging markets, such as the recent U.S. limitations on steel imports from Asia, Russia, and Brazil. These actions only hinder the export-led recoveries of the Asian economies and prolong the adverse effects of the crisis.

## References

- Bank of International Settlements/Organization for Economic Co-Operation and Development (OECD)/International Monetary Fund, 1999. "Joint BIS-IMF-OECD-World Bank Statistics on External Debt" (March).
- Bank of International Settlements. 1998a. "The Maturity, Sectoral, and Nationality Distribution of International Bank Lending." Basle (various issues)
- Bank of International Settlements. 1998b. "International Banking and Financial Market Developments." Basle (August).
- Dollar, David, and Mary Hallward-Driemeier. 1998. "Crisis Adjustment and Reform: Results from the Thailand Industrial Survey" (World Bank).
- Flatters, Frank. 1999. "Thailand," in *The Asian Competitiveness Report 1999*, World Economic Forum (Geneva), January.
- Hussain, Mumtaz, and Steven Radelet. 1999. "Exports and Asia's Recovery," in *The Asian Competitiveness Report 1999*, World Economic Forum (Geneva), January.
- Institute for International Finance. 1999. "Report of the Working Group on Financial Crises in Emerging Markets" (January).
- International Monetary Fund. 1999. "IMF-Supported Programs in Indonesia, Korea, and Thailand: A Preliminary Assessment" (Washington, D.C.: IMF).
- J.P. Morgan. 1999a. "Asian Financial Markets: First Quarter 1999." Morgan Guaranty Trust Company, Economic Research Department, Singapore (January 29).
- J.P. Morgan. 1999b. "Restructuring Progress in Korea and Thailand." Morgan Guaranty Trust Company, Economic Research Department, Singapore (January 29).
- Meecharoen, Kiettisak. 1999. "Banking and Financial Sector Reform: The Case of Thailand." Paper presented at the Asian Development Bank Workshop on the Asian Financial Crisis, Tokyo, March 1999.
- Radelet, Steven. 1999. "Indonesia: Long Road to Recovery." Draft paper prepared for the Brookings/CIER conference on the Asian Financial Crisis (April).
- Radelet, Steven and Jeffrey Sachs. 1998a. "The Onset of the East Asian Currency Crisis." CAER II Discussion Paper No. 27 (March), available from the HIID CAER II project website: [www.hiid.harvard.edu/projects/caer/pubs.html](http://www.hiid.harvard.edu/projects/caer/pubs.html). Also available as NBER Working Paper No. 6680 (April).

Radelet, Steven and Jeffrey Sachs. 1998b. "The East Asian Financial Crisis: Diagnosis, Remedies, Prospects." CAER II Discussion Paper No. 29 (April), available from the HIID CAER II project website: [www.hiid.harvard.edu/projects/caer/pubs.html](http://www.hiid.harvard.edu/projects/caer/pubs.html). Also published in *Brookings Papers on Economic Activity*, 1998:1, pp. 1-74.