



OECD ECONOMIC SURVEYS



1999

SPECIAL FEATURES

Financial Sector Reform
Corporate Restructuring
The Labour Market

KOREA

© OECD, 1999.

© Software: 1987-1996, Acrobat is a trademark of ADOBE.

All rights reserved. OECD grants you the right to use one copy of this Program for your personal use only. Unauthorised reproduction, lending, hiring, transmission or distribution of any data or software is prohibited. You must treat the Program and associated materials and any elements thereof like any other copyrighted material.

All requests should be made to:

Head of Publications Service,
OECD Publications Service,
2, rue André-Pascal, 75775 Paris
Cedex 16, France.

**OECD
ECONOMIC
SURVEYS
1998-1999**

KOREA

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

Pursuant to Article 1 of the Convention signed in Paris on 14th December 1960, and which came into force on 30th September 1961, the Organisation for Economic Co-operation and Development (OECD) shall promote policies designed:

- to achieve the highest sustainable economic growth and employment and a rising standard of living in Member countries, while maintaining financial stability, and thus to contribute to the development of the world economy;
- to contribute to sound economic expansion in Member as well as non-member countries in the process of economic development; and
- to contribute to the expansion of world trade on a multilateral, non-discriminatory basis in accordance with international obligations.

The original Member countries of the OECD are Austria, Belgium, Canada, Denmark, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. The following countries became Members subsequently through accession at the dates indicated hereafter: Japan (28th April 1964), Finland (28th January 1969), Australia (7th June 1971), New Zealand (29th May 1973), Mexico (18th May 1994), the Czech Republic (21st December 1995), Hungary (7th May 1996), Poland (22nd November 1996) and Korea (12th December 1996). The Commission of the European Communities takes part in the work of the OECD (Article 13 of the OECD Convention).

Publié également en français.

© OECD 1999

Permission to reproduce a portion of this work for non-commercial purposes or classroom use should be obtained through the Centre français d'exploitation du droit de copie (CFC), 20, rue des Grands-Augustins, 75006 Paris, France, Tel. (33-1) 44 07 47 70, Fax (33-1) 46 34 67 19, for every country except the United States. In the United States permission should be obtained through the Copyright Clearance Center, Customer Service, (508)750-8400, 222 Rosewood Drive, Danvers, MA 01923 USA, or CCC Online: <http://www.copyright.com/>. All other applications for permission to reproduce or translate all or part of this book should be made to OECD Publications, 2, rue André-Pascal, 75775 Paris Cedex 16, France.

Table of contents

Assessment and recommendations	9
I. The recovery from the crisis	23
The financial crisis at the end of 1997	25
The recession in 1998	33
The factors behind the economic recovery	38
Economic prospects in 1999	45
The prospects for 2000 and beyond	47
II. Monetary and fiscal policies	51
Monetary and exchange rate policy	51
Fiscal policy	63
III. Reforming the financial sector	77
Legal and institutional framework	78
The banking sector	83
Non-bank financial institutions	91
The role of the Korea Asset Management Corporation (KAMCO)	98
Capital markets	101
Overall assessment	103
IV. Corporate restructuring and the governance framework	107
Improving the corporate governance framework	110
Changing intra-group relationships	116
Reforming insolvency procedures	120
Restructuring the corporate sector	121
Scope for further progress	132
V. Labour market trends and policies, and the development of a social safety net	139
Impact of the crisis on the labour market	140
Labour market policies	151
Improving the social safety net	159
Policies to create jobs	164
Scope for further progress	167
Notes	170
Bibliography	177
<i>Annexes</i>	
I. The restructuring of the banking sector	180
II. Agreement for the restructuring of the top five chaebols, 7 December 1998	183
III. Calendar of main economic events	187

Boxes

1. Measures to promote foreign direct investment in Korea	44
2. Monetary policy in Korea	52
3. Key features of public finances in Korea	65
4. Cumulative voting	114
5. The <i>OECD Jobs Strategy</i>	165

Tables

1. Demand and output	24
2. Labour market developments	36
3. The current account	41
4. Short-term prospects	46
5. Sources of growth	48
6. The first stage of foreign exchange liberalisation	62
7. Measures to prevent a foreign exchange crisis	63
8. Central government expenditures by function	65
9. Government revenues	67
10. Government expenditures and budget balance	68
11. Gross public debt	72
12. Privatisation programme	75
13. Fiscal support for financial restructuring in an international perspective	80
14. Profitability of the banking system	84
15. Standards in prudential regulations and supervision	85
16. Loan classification standard and required provisions	86
17. Developments in the banking sector	88
18. Non-performing loans	90
19. Life insurance companies	93
20. Merchant banks	96
21. Purchases of assets by KAMCO	99
22. Measures implemented in the area of corporate governance and restructuring	108
23. Characteristics of the major business groups	111
24. Distribution of shareholding in selected OECD countries	112
25. Minimum ownership to exercise rights	113
26. Intra-group transactions and debt guarantees	118
27. Investigation of intra-group transactions	119
28. Results of corporate re-organisations	120
29. The status of the non-viable companies	122
30. Debt to equity ratios for top thirty business groups	124
31. Progress in reducing debt to equity ratios	125
32. The Big Deals	128
33. Restructuring plans of the top five business groups	129
34. Results of the workout programme	131
35. Characteristics of the unemployed	146
36. The newly-unemployed in 1998	148
37. Changes in income distribution	150
38. Implementing the <i>OECD Jobs Strategy</i> – an overview	152
39. Expenditures on active labour market policies and the social safety net	154
40. Vocational training	155
41. Public and private job placement offices	157
42. Benefits under the Livelihood Protection programme	163
43. Programmes for low-income unemployed	164

Figures

1. Business fixed investment	26
2. Corporate borrowing and debt	27
3. Interest expenses and profitability of the corporate sector	28
4. Insolvencies and dishonoured bills	29
5. Problem loans of commercial banks	29
6. External gross debt and useable foreign exchange reserves	31
7. Asset prices	31
8. The capital account	32
9. The won and the short-term interest rate	33
10. Industrial production, capacity utilisation and inventories	35
11. Contributions to growth	35
12. Price trends	38
13. Competitiveness indicators	42
14. Export performance in manufactured goods	42
15. Foreign direct investment in Korea	43
16. Interest rates	52
17. Exchange rates	53
18. Growth of monetary aggregates	55
19. Growth of bank lending	55
20. Indicators of banks' willingness to lend	56
21. The yield gap	59
22. General government expenditure and revenue	64
23. General government debt	66
24. Central government gross debt and guaranteed liabilities	71
25. Insolvency filings	121
26. Debt to GDP by sector	123
27. Financial expenses to sales	137
28. Unemployment rates	140
29. Wage growth by components	141
30. Change in employment in 1998	143
31. Labour market developments in 1998	144
32. Unemployment rate by age group	145
33. Unemployment rate by level of education	147
34. Labour force participation rates	149
35. Unionisation and labour disputes	158

BASIC STATISTICS OF KOREA

THE LAND

Area (thousand sq. km)	99	Major cities, 1995 (million inhabitants):	
Agricultural area (thousand sq. km)	14	Seoul	10.2
Forests (thousand sq. km)	65	Pusan	3.8
		Taegu	2.5
		Inch'on	2.3

THE PEOPLE

Population, 1998 (million)	46.4	Civilian labour force, 1998 (million)	21.4
Per sq. km, 1998	467	Civilian employment	19.9
Annual rate of change of population, 1998	1.0	Agriculture, forestry, fishing	2.4
		Industry	3.9
		Construction	1.6
		Services	12.0

PRODUCTION

GDP, 1998 (thousand billion won)	449.5	Origin of GDP, 1998 (per cent of total):	
GDP per head (US\$)	6 913	Agriculture, forestry, fishing	5.9
Gross fixed investment, 1998 (thousand billion won)	132.4	Industry	32.2
Per cent of GDP	29.4	Construction	10.5
Per head (US\$)	2 036	Services	51.4

THE GOVERNMENT

Public consumption, 1998 (per cent of GDP)	10.9	Composition of the National Assembly:	<u>Number of seats</u>
Central government revenue, 1998, consolidated basis (per cent of GDP)	21.6	The Grand National Party	136
Central government budget balance, 1998, consolidated basis (per cent of GDP)	-3.2	The National Congress of New Politics	105
		The United Liberal Democrats	54
		Independents	4
			299

FOREIGN TRADE

Commodity exports, 1998, f.o.b. (per cent of GDP)	41.4	Commodity imports, 1998, c.i.f. (per cent of GDP)	29.1
Main exports (per cent of total exports):		Main imports (per cent of total imports):	
Machinery and transport equipment	44.1	Manufactured goods	33.6
Other manufactured goods	49.2	Mineral fuels, lubricants	19.5
Other	6.6	Machinery and transport equipment	33.5
		Other	13.4

THE CURRENCY

Monetary unit: Won		Currency unit per US\$, average of daily figures:	
		1997	951
		1998	1 400
		1999, June	1 169

Note: An international comparison of certain basic statistics is given in an annex table.

This Survey is based on the Secretariat's study prepared for the annual review of Korea by the Economic and Development Review Committee on 1 July 1999.

•

After revisions in the light of discussions during the review, final approval of the Survey for publication was given by the Committee on 16 July 1999.

•

The previous Survey of Korea was issued in September 1998.

Assessment and recommendations

The Korean economy has turned around quickly following its worst recession of the post-war era...

Korea's economy has achieved an impressive recovery from the financial crisis at the end of 1997 and the severe recession during 1998. The crisis, one of the worst ever experienced by an OECD Member country, virtually depleted the country's foreign exchange reserves and led to a record \$57 billion standby agreement with the IMF. Although financial market conditions stabilised in early 1998, the economy entered a deep recession, with output falling by almost 6 per cent for the year. By the end of 1998, though, the economy had stabilised, setting the stage for a resumption of growth in early 1999. During the first three months of the year, output increased by 4.6 per cent from its year-earlier level and was accompanied by a marked improvement in a broad range of indicators. The resulting optimism about Korea's economic outlook is reflected in the surge in the stock price index, which has almost tripled since August 1998.

... thanks to a relaxation of monetary policy...

A key factor behind this turnaround was supportive macro-economic policies, notably the easing in monetary conditions. After peaking at 30 per cent at the end of 1997, the short-term interest rate was kept above 20 per cent through April 1998 in an effort to stabilise the exchange rate. But by the spring of 1998, with the won having recovered to around 1 400 to the dollar, reducing the short-term interest rate became the priority of the central bank. By mid-summer, it had reached its pre-crisis level of around 12 per cent, and fell further to 7 per cent by the end of the year. The easier monetary policy stance helped to reduce the yield on corporate bonds to single digits for the first time ever in the autumn of 1998. While the positive impact of lower borrowing costs was limited by the growing reluctance of banks to

lend in a context of financial instability and a sharp increase in non-performing loans, their reduction was essential for the solvency of Korea's highly-indebted corporate sector.

... support from fiscal policy to alleviate the problems resulting from the crisis...

The problems resulting from the crisis were attenuated by selective increases in government expenditure. One priority was small and medium-sized enterprises, which were most affected by a lack of credit. The government increased its assistance to them by a third, while tripling public guarantees on loans to small firms. In addition, the authorities launched an ambitious programme (see below) to attack the root causes of the credit crunch – the rising level of non-performing loans and the inadequate capitalisation of banks. The interest cost on the debt used to finance this programme was another factor boosting public outlays. Assistance to the unemployed was a third area where spending increased significantly. With the sharp rise in unemployment, government expenditures in this area rose by an amount equal to almost 1 per cent of GDP. As a result, consolidated central government expenditure increased by about 17 per cent in 1998. At the same time, cyclical factors reduced tax revenues despite a rise in some tax rates. Consequently, the central government budget, which had been in balance prior to the crisis, recorded a deficit equivalent to more than 3 per cent of GDP in 1998.

... and the increased confidence resulting from the build-up of foreign exchange reserves and progress in implementing structural reform

In addition to the stimulus from macroeconomic policies, the economic turnaround was due to a recovery in confidence, both within Korea and abroad, as symbolised by the upgrading of Korea's credit rating to investment grade in early 1999. Confidence was restored, in part, by the large rise in foreign exchange reserves to almost \$50 billion by the end of the year – a level substantially higher than the country's short-term external debt. Foreign exchange reserves were boosted by a current account surplus of \$40 billion (12½ per cent of GDP) in 1998, resulting primarily from a collapse of imports during the recession. A second factor boosting confidence was the success in initiating a broad range of structural reforms to rectify the underlying weaknesses that had made Korea vulnerable to a financial crisis. By mid-1998, Korea was widely acknowledged as the front-runner among crisis-hit Asian countries in implement-

ing such reforms. This attracted foreign investment that, in turn, further increased the country's foreign reserves.

The government has achieved considerable progress in introducing structural reforms in the financial sector...

Perhaps the greatest progress to date in structural reform has been achieved in restructuring the financial sector along market-oriented lines. Prior to the crisis, the financial system was characterised by pervasive government intervention and discretionary enforcement of prudential rules. Moreover, the government played a significant role in resource allocation and was responsible for the soundness of individual financial institutions. During the past 18 months, the authorities have moved quickly to lay the foundations of a new system based on strict enforcement of prudential rules by an independent regulator, the Financial Supervisory Commission (FSC). In this new system, market forces are to play the major role in resource allocation as financial institutions seek profit while observing rules of prudential soundness. To establish such a framework, the government has had to deal with a large number of insolvent institutions, including nearly 100 that have been suspended or closed since the crisis. To rehabilitate the financial system, the government launched a W 64 trillion programme (14 per cent of GDP) to address the non-performing loan problem and to re-capitalise viable financial institutions. The most impressive gains thus far have been made in the banking sector, with a rise in the levels of capitalisation and the removal of considerable excess capacity. By early 1999, the remaining banks had reasonably good balance sheets and powerful incentives to remain sound and profitable. In addition, competition will be intensified by the government's decision to sell two troubled domestic banks to foreign investors. The progress to date is allowing the banking sector to start playing an important role in restructuring the corporate sector.

**... in improving
the corporate
governance
and insolvency
frameworks
to facilitate
corporate
restructuring...**

To create a better framework for restructuring the corporate sector, the government introduced important reforms to corporate governance. *First*, transparency has been improved by strengthening auditing procedures and requiring the conglomerates, known as chaebols, to prepare financial statements on a consolidated basis. *Second*, shareholder rights have been strengthened by further easing the requirements for actions such as derivative suits against directors. The recent success of two lawsuits by minority shareholders against company directors has helped to create a surge of shareholder activism. *Third*, listed companies have been required to fill one-fourth of their boards of directors with outsiders and the possibility for cumulative voting has been introduced, allowing minority shareholders, in principle, to elect directors. In addition, the legal responsibility of *de facto* directors, including controlling shareholders, has been established, as has the concept of fiduciary duty on the part of directors. *Fourth*, the market for corporate control has been liberalised with the relaxation of regulations on portfolio and direct investment and the decision to allow hostile take-overs by foreign investors. In this new environment, there are already signs of a shift in the behaviour of chaebol owners to place greater emphasis on profitability. To deal with failed companies, insolvency procedures have been improved, notably by introducing time limits on the proceedings and allowing a greater role for creditors. In addition, the government has taken measures to promote restructuring by prohibiting debt guarantees between chaebol affiliates and encouraging companies to improve their financial structure by reducing debt.

**... and increasing
labour market
flexibility**

Corporate restructuring has also been facilitated by reforms to increase labour market flexibility. While Korea has had a high degree of wage flexibility, strict employment security provisions had impeded downsizing by firms. The most important step in this regard has been a revision of the labour law to allow layoffs for managerial reasons, including mergers and acquisitions. In addition, temporary worker agencies have been allowed since July 1998 in 26 occupations.

An economic recovery has begun, which appears to be led, in part, by stockbuilding...

While the structural reform process is by no means complete (see below), the progress to date has had important confidence-building effects. Given this positive impact and supportive macroeconomic policies, the Korean economy has entered a recovery phase, with output projected to expand around 6½ per cent in 1999. To some extent, growth reflects a technical rebound based on the contribution of stockbuilding. Following a 17 per cent fall in the level of inventories in 1998, a deceleration of inventory de-stocking would be sufficient to provide a substantial boost to growth. Its effect, though, would be partially offset by a rebound in imports, which is likely to be significant after declining more than one-fifth in 1998. Consequently, the current account surplus is projected to decline by half from 12½ of GDP in 1998 to around 6 per cent this year, making the external sector a small drag on growth in contrast to its large positive contribution last year. While stockbuilding is expected to be a leading factor in the recovery this year, private final demand is also on a recovery track. Private consumption increased strongly in the first quarter of 1999, owing in part to pent up demand following its 10 per cent decline in 1998. The wealth effect from the jump in share prices is another factor encouraging consumption. Moreover, equipment investment started to pick up in the first quarter, while construction investment, which continued to decline, may begin to recover later in the year.

... which will wane in 2000, compounding the negative effect of the fiscal consolidation planned to begin that year...

For growth to be sustained, final demand will need to strengthen progressively, as a diminishing contribution from stockbuilding in 2000 and beyond will be compounded by the negative effect of the planned fiscal consolidation. The government has established a target of cutting the consolidated central government budget deficit by half, from 5 per cent this year to 2½ per cent, by 2002 as a first step to bringing the budget back into balance by 2006. Such a gradual approach should reduce the risk of stalling the economic recovery underway. Nonetheless, fiscal consolidation is important to slow the rapid expansion of gross central government debt, which almost doubled in only two years from 11 per cent of GDP in 1997 to an estimated 19 per cent this year. The increase reflects the large budget deficits since the crisis as well as the loans from international

financial institutions. The rise in debt has been accompanied by a marked increase in government guaranteed debt related to the programme to rehabilitate the financial sector. A broader measure of potential central government debt that includes guarantees shows an almost three-fold rise from 14 per cent in 1997 to 39 per cent in 1999. Although the government remains a net creditor due, in part, to the large stock of assets in the National Pension Fund, a continued sharp rise in debt would be worrisome. Given the demographic transition underway, with its likely impact on the cost of providing public pensions, and uncertain but large costs of the eventual economic integration with North Korea, stabilising government debt should be an important national objective. Indeed, if growth is maintained at a rate sufficient to steadily reduce economic slack, the Korean authorities should aim to advance the date of the balanced budget objective.

*... with
a reduction
in the growth
of government
spending*

To achieve its medium-term fiscal objectives, the government should follow through on its plan to limit the rise in spending to around 2 percentage points below the growth in nominal GDP beginning in 2000. Such an approach would bring government spending as a share of GDP back into line with its pre-crisis level by 2006. The government has achieved significant savings during the past few years by cutting the number of government employees and their wages. There is a limit, however, on how much farther such expenditures can be reduced without undermining the morale of the civil service. Spending restraint in areas where the government has identified scope for increasing efficiency – notably agriculture, education and defence – should be a priority. Slowing the growth of public outlays would limit the need for tax increases. To the extent that greater revenue is needed, the first priority should be to close loopholes, improve enforcement and reduce tax evasion – steps that would improve the fairness of the tax system while increasing government receipts. It would also be beneficial to aim at widening the fiscal objective by consolidating local and central government accounts, as well as improving transparency by streamlining special accounts.

In this context, monetary policy should remain flexible...

With fiscal consolidation due to begin in 2000, maintaining a flexible monetary policy will be important to support a recovery led by private consumption and investment. Short-term money market rates have fallen to less than 5 per cent, far below their customary double-digit levels. With expected inflation in the 2 per cent range, the real short-term rate is also substantially below its 6 per cent average during the seven years prior to the crisis. Nevertheless, there appears to be little inflationary pressure at present, given the high level of unemployment and a large output gap. During the first quarter of 1999, consumer prices were only 0.7 per cent higher than their year-earlier level. Moreover, the appreciation of the won – 19 per cent from its 1998 average on a trade-weighted basis – should help check price increases.

... with the central bank using its increased independence to maintain the current low inflation environment

In this context, a continuation of relaxed monetary conditions appears justified to help encourage a sustained recovery. However, with rates at such low levels, there does not appear to be much scope for further declines. Indeed, the fall in the short-term rate from 7 per cent at the end of 1998 to under 5 per cent in the first quarter of 1999 has been accompanied by an increase in long-term bond yields. The gap between the yields on long and short-term government bonds rose from 10 to 170 basis points, suggesting that further cuts in short-term rates would not reduce the borrowing costs of the corporate sector. Looking further ahead, once a full-fledged recovery begins, the central bank should use its recently enhanced independence to ensure price stability, rather than allowing inflation to slip back to the 5 per cent average annual rate recorded between 1991 and 1997.

Further progress in putting structural reforms into practice is the key to a sustained recovery

With less support from monetary policy and the beginning of fiscal consolidation, further progress in structural reform appears to be the key to a sustained recovery in private demand, notably investment. Indeed, it is essential that the relatively rapid turnaround in the economy not foster an attitude of complacency, in either the government or the private sector, about the restructuring process. While much has been accomplished in establishing a new legal

framework, Korea now faces the harder task of putting the new system into practice through changing behaviour.

A key priority is further progress in establishing a market-based financial sector...

Further progress in establishing a market-based financial system is one of the most important tasks. One major challenge is to reduce the currently high level of government ownership in banks. Since the crisis, the government has acquired large equity stakes in a number of banks as a result of rescues of insolvent institutions and the re-capitalisation of weak ones. While its current position may be, to some degree, unavoidable, the government's high degree of ownership inevitably leads to a large role in bank restructuring. Moreover, the government's role in the workout programmes for the companies in the 6 to 64-largest chaebols, primarily through the Financial Supervisory Commission, leads to further involvement. To establish a truly market-based system, it is necessary to reduce the government's role. It may be useful, in this regard, to announce an indicative timetable for the unwinding of the government's ownership position in the banking system.

... which will require overcoming the non-performing loan problem...

In order to reduce government ownership, potential private investors must be convinced that the risk of losses from future non-performing loans has been lowered. The main uncertainty in this regard stems from the planned imposition of stricter supervisory standards and the results of the workout process for chaebol affiliates. However, slowing the workout programme or failing to improve bank supervision standards would undermine the credibility of the reform process. Instead, the objective should be to clarify the full dimensions of the problem in advance and to continue the process of resolving bad loans through the Korea Asset Management Corporation (KAMCO). It is important that KAMCO achieve its target in 1999 of large-scale liquidation of the impaired assets it has acquired from financial institutions to provide additional resources. Nevertheless, additional public resources may be needed to address the non-performing loan problem. Once a solution to this problem is in sight, private investors would be less reluctant to purchase government holdings in commercial banks.

... and resolving problems in the non-bank financial sector

In contrast to the intensive scrutiny of the banking sector, the examination of non-bank financial institutions is at a relatively early stage. There is, though, abundant evidence of severe problems of balance-sheet quality. The best approach for dealing with such institutions would be to apply the principles that have worked well in the banking sector – insisting on maximum transparency, tighter prudential rules and automatic application of “prompt corrective action”. In some sense, the task is easier than in the banking sector, where it was critically important to manage restructuring in a way to ensure that a well-functioning banking system would emerge. In contrast, most impaired non-bank financial institutions should be resolved at the lowest cost to taxpayers, which in many cases would require closure. In particular, the authorities should encourage the exit of all merchant banks that fail to meet prudential standards within the stipulated time frame. In addition, there does not appear to be any justification for public support for investment trust companies, another sector that is facing a widespread insolvency problem. Nor is there a need for public intervention in the securities companies. In the area of insurance, however, the situation is more complex, as a well-functioning insurance sector is vital to a market economy and hence closure cannot be a complete solution. Consequently, the restructuring effort that began in March 1999 should be a comprehensive programme that includes some contraction in capacity, a much stronger supervisory regime and a selective commitment of government resources to assist in the transition.

The rehabilitation of the financial sector needs to be accompanied by a further improvement in the corporate governance framework...

While the establishment of a well-functioning financial system is an essential element in the successful restructuring of the corporate sector, further improvements in the corporate governance framework are also necessary. The development of a code of best practices, using the OECD Principles of Corporate Governance as a benchmark reference, would be beneficial. One principle could be to ensure that the outside directors recently added to company boards have real responsibilities and play an important role in board meetings. Although cumulative voting – an important means of allowing minority shareholders to elect truly independent directors to a board – was recently allowed,

most companies have not included it in their charters. Its inclusion should be encouraged for listed companies. In addition, the practice of major companies holding their annual shareholder meetings on the same day should be discouraged. Moreover, the role and responsibilities of company directors should be more clearly spelled out in the law. Although holding companies have been allowed in principle, the restrictive conditions applied have discouraged them in practice. Given the potential for holding companies to promote restructuring and transparency, easing of some of the conditions for their establishment should be considered. Finally, further improvements in the insolvency procedures are needed to facilitate the restructuring of failed companies. The reform planned for this summer should include a better “trigger” mechanism to provide debtors and creditors with an incentive to initiate re-organisation or composition proceedings prior to the closure of the enterprise and giving a greater role to creditors in the governance of the debtor.

... which should include the privatisation and reform of state-owned enterprises...

The privatisation programme announced in 1998 is an important element in the restructuring of the business sector. In 1998, there were 108 state-owned enterprises employing more than 210 000 workers. Thus far, only three companies out of the eleven included in the 1998 programme have actually been privatised. Further efforts to reduce their role would signal a more complete shift to market-based models of corporate governance and competition and a smaller economic role for the government. Moreover, the revenue generated from privatisation would help in the fiscal consolidation process. Finally, it would provide an opportunity to deepen domestic capital markets, allowing them to play a larger role in overall financing and reducing reliance on bank loans over the longer term. This would complement the expansion of the government debt market, which serves as a benchmark for fixed income securities. The government debt market, which has grown as a result of budget deficits and the financial restructuring programme, should develop further with the decision to introduce primary dealers in 1999.

*... as part
of the process
of reducing the
government's role
in the economy...*

Much of the attention in the area of corporate restructuring has been focused on the so-called "Big Deals" in eight major industries, including cars and semiconductors. These deals, which were announced in September 1998 by the chaebols involved, have proven difficult to implement. The government, concerned that a failure by the conglomerates to follow through on their announced plans would undermine foreign confidence in the progress of restructuring in Korea, has pushed for a completion of the deals. Indeed, it has threatened to cut off bank credit to companies responsible for the failure of the Big Deals. Such government interventions were understandable when Korea's recovery from the crisis was still in doubt. At this point, however, the government's insistence that reluctant companies follow through in implementing the deals makes them appear as non-market solutions and risks giving the impression that the shift to a more market-based approach has been unsuccessful. Moreover, certain elements of the Big Deals themselves raise concern. *First*, they are likely to increase market concentration as the number of producers in each industry is reduced to one or two, thus raising the scope for collusion. This suggests the need to ensure that the market is effectively open to foreign competition and that the Fair Trade Act is strictly enforced. *Second*, the government's involvement in pushing the implementation of the Big Deals, notably in the December 1998 agreement between the government and the top five conglomerates and their creditor banks, risks leaving the government liable if the new arrangements turn out to be unsuccessful. *Third*, it is not clear if the Big Deals will be effective in addressing the key problems in the corporate sector, namely excess capacity and debt. While there have been agreements to reduce capacity in some Big Deal industries, such as aircraft manufacturing and railroad vehicles, management in other industries has yielded to pressure from labour unions against layoffs due to downsizing. In semiconductors, for example, the managers of the combined enterprises have agreed not to lay off any workers in the acquired firm for at least two years.

... which should also make a reduction in debt to equity ratios a priority

As noted above, one of the key priorities in the corporate sector is to reduce the high level of debt. For the top thirty chaebols, the ratio of debt to equity exceeded 500 per cent in 1997, and was one of the factors that made Korea vulnerable to a financial crisis. In this regard, at the initiative of the FSC, the chaebols and their creditor banks agreed that each group's to equity ratio on a consolidated basis would be reduced to less than 200 per cent by the end of 1999. Achieving this objective by the deadline will be a challenge, given that the average ratio was still 380 per cent at the end of 1998 and the government has decided not to allow asset revaluation to count toward reaching the target. Companies that belong to groups that fail to meet this requirement risk losing access to bank credit and having existing loans called in. While reducing debt is an important priority in the post-crisis period, applying a fixed target across groups can only be justified as a transitional measure. As a credit culture develops and corporate restructuring proceeds, banks should be able to judge the appropriateness of the financial structure of each individual borrower.

In the labour market, increased employment flexibility...

Increased labour market flexibility has been essential to the progress of corporate restructuring. In this regard, informal government pressure to limit layoffs may only extend the process and delay a return to faster employment growth. The sharp rise in unemployment generated by restructuring and greater scope for laying off redundant workers has strained an already difficult industrial relations climate. Efforts to restart the Tripartite Agreement should be continued in order to develop a social consensus. A key priority would be to resolve the remaining issue blocking the recognition of the Korea Confederation of Trade Unions and establishing an effective bargaining structure for the period after 2002 when union pluralism at the enterprise level will be allowed.

... has been accompanied by measures to assist the unemployed

The government has responded quickly to the sharp rise in unemployment from 2 per cent prior to the crisis to a peak of 8½ per cent in early 1999. The social safety net has been expanded by extending employment insurance coverage to more than two-thirds of employees. For those who are not eligible for such benefits, a large-scale public works

programme has been established and opportunities for vocational training were greatly increased. Individual profiling is necessary to ensure that each unemployed person has access to one of these labour market programmes, which is most appropriate for that person. In expanding labour market programmes over the long term, care must be taken to not undermine the incentives to work. For those not in the labour force, raising the benefits in the Livelihood Protection programme to subsistence level should be a priority. In the longer term, the keys to the unemployment problem are deregulation to provide new opportunities for job creation in the private sector and education and vocational training to improve labour force skills.

Successfully implementing the wide range of reforms underway will allow Korea to return to its high-growth path

In summary, Korea has been remarkably successful in overcoming the financial crisis at the end of 1997. Supportive macroeconomic policies and the progress in structural reform have laid the foundations for positive growth in 1999. The success to date, however, should not lead to complacency about the necessity of fully implementing the new framework put in place following the crisis and in making additional improvements. In particular, further progress in establishing a healthy financial system that is more market-based is a priority. The corporate sector is another area where much remains to be done, using the new governance framework as the basis for market-based restructuring. Effectively addressing the unemployment problem is also a key to maintaining social cohesion and avoiding a deterioration in income equality. Failure to implement successfully the recent reform strategy would risk an extended period of sub-par growth performance, despite the rapid rebound this year. These reforms hold the potential for greatly enhanced efficiency, which would allow Korea to return to its high-growth path.

I. The recovery from the crisis

At the end of 1997, Korea was hit by one of the most severe financial crises ever experienced by an OECD Member country. With its useable foreign reserves virtually exhausted by November and unable to meet its foreign debt obligations, Korea announced a record \$57 billion standby agreement with the IMF in early December 1997. Before the end of the month, the exchange rate had lost half of its pre-crisis value against the dollar while interest rates more than doubled to about 30 per cent. The impact of the financial crisis on the real economy became apparent early in 1998 as output fell sharply and the bankruptcy rate soared. The heavily-indebted corporate sector scaled back investment and cut labour costs by reducing both wages and employment (Table 1). Consequently, the unemployment rate increased almost four-fold to 8 per cent by the end of 1998, while private consumption declined sharply. With investment and private consumption falling, there was a sharp contraction of imports that contributed to an unprecedented current account surplus equivalent to 12.7 per cent of GDP. Although the economy appeared to stabilise at the end of the year, output declined by 5.8 per cent in 1998, with domestic demand shrinking by almost a fifth.

In the first quarter of 1999, economic output was 4.6 per cent higher than a year earlier. The resumption of growth was made possible by two factors. *First*, the easing of monetary and fiscal policies, combined with measures to overcome the credit crunch, played a key role. Interest rates were lowered to below pre-crisis levels while government guarantees helped restore credit flows, especially to small and medium-sized enterprises (SMEs). At the same time, public expenditure increased significantly to address the problems in the financial sector and to assist the unemployed. *Second*, Korea achieved impressive progress in implementing a broad range of structural reforms which, combined with the rise in foreign exchange reserves, contributed to a restoration of confidence in its economic prospects. This resulted in renewed inflows of foreign capital, particularly direct investment, which helped boost foreign exchange reserves further to over \$56 billion by April 1999 and led to an upgrading of Korea's sovereign credit rating to investment grade. The positive impact of these developments on

Table 1. **Demand and output**
Percentage change from previous year

	1990-96	1997	1998	1998				1999 Q1
				Q1	Q2	Q3	Q4	
Private consumption	7.1	3.5	-9.6	-9.9	-11.2	-10.4	-6.9	6.3
Government consumption	4.6	1.5	-0.2	1.3	-0.7	-0.6	-0.4	-2.2
Gross fixed capital formation	7.7	-2.2	-21.1	-20.6	-23.7	-22.2	-17.9	-4.3
Construction	7.7	2.3	-10.2	-5.9	-7.8	-12.0	-13.7	-13.7
Machinery and equipment	10.1	-8.7	-38.5	-38.3	-46.1	-39.3	-27.4	12.9
Final domestic demand	7.0	1.2	-12.7	-12.4	-14.8	-13.6	-10.2	2.2
Increase in stocks ¹	0.2	-2.0	-5.6	-9.3	-6.4	-5.3	-2.2	5.2
Total domestic demand	7.2	-0.8	-18.7	-21.6	-21.6	-19.4	-12.5	8.7
Exports	13.3	21.4	13.3	25.7	13.2	8.0	8.8	12.4
Imports	13.6	3.2	-22.0	-27.2	-25.5	-25.9	-9.0	27.5
Foreign balance ¹	-0.1	5.7	12.2	18.6	13.0	11.6	6.0	-1.9
Gross domestic product	7.1	5.0	-5.8	-3.6	-7.2	-7.1	-5.3	4.6

1. Contribution to growth.
Source: Bank of Korea.

business and consumer sentiment helped to end the downward spiral in domestic demand.

Output growth of about 6½ per cent is expected in 1999. To some extent, this represents a technical rebound resulting from an easing of the sharp fall in inventories that occurred in 1998. It is likely to be accompanied by a recovery in final domestic demand, notably private consumption. However, the external sector is expected to have a slightly negative impact on growth as imports recover, in part due to the slowdown in de-stocking. As the impact of the inventory adjustment wanes in 2000 and beyond and fiscal policy provides less support, a sustained recovery will depend on external developments and an expansion of private consumption and investment. A sustained recovery in domestic demand appears to hinge on progress in the on-going restructuring of the financial and corporate sectors which is needed to overcome the factors that made Korea vulnerable to financial crisis at the end of 1997. This chapter begins with a review of those factors, which were extensively discussed in the 1998 *Survey*, and of the subsequent recession in 1998, as well as its impact on inflation and the labour market. It then discusses the recovery which is underway. The final sections present short-term prospects through 2000 as well as a medium-term outlook.

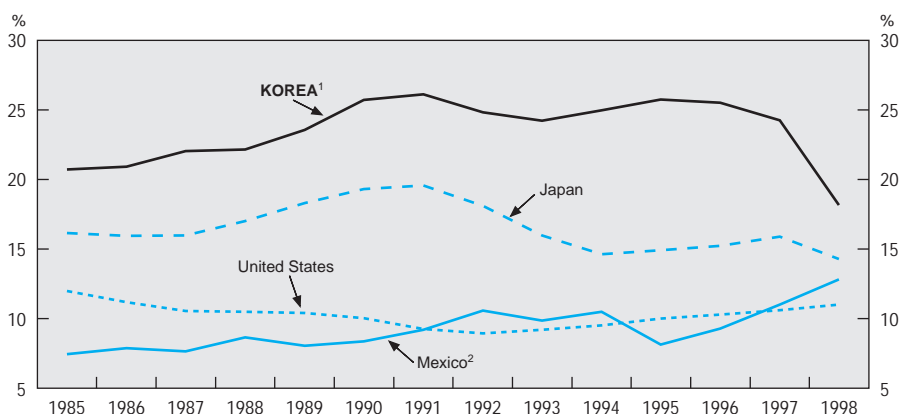
The financial crisis at the end of 1997

Given Korea's long-standing strengths – such as rapid economic growth over the past 35 years, high levels of saving and investment, moderate inflation, small external deficits and government financial surpluses – the crisis was largely unexpected. In retrospect, though, it is clear that certain structural weaknesses had made Korea vulnerable to the financial turbulence sweeping through Asia during 1997. Three such weaknesses appear to have been fundamental. *First*, the corporate sector was characterised by low levels of profitability and high levels of debt, reflecting the tendency of the business conglomerates to diversify into capital-intensive industries. *Second*, Korea had a poorly functioning financial system that was further weakened by a string of major corporate bankruptcies in 1997. *Third*, Korea's short-term foreign debt was high relative to its international reserves, a consequence of its decision to liberalise short-term borrowing rather than direct investment inflows – an approach contrary to advice from the OECD, among others.

Despite these structural weaknesses, the economy appeared to have achieved a soft-landing in early 1997 from the strong expansion that had begun in 1993. That upturn had been led by double-digit growth of exports and investment; by 1995, business investment had returned to the unsustainably high rate of 25 per cent of GDP recorded during the early 1990s – a level far above that in other OECD countries (Figure 1). Increased capital formation boosted production capacity in the manufacturing sector by a full one-fourth in the three years to 1997, with the largest expansions recorded in the motor vehicle and telecommunication equipment industries. Financing the higher level of investment raised total borrowing in the manufacturing sector from 46 per cent of total assets in 1994 to about 58 per cent in 1997 (Figure 2, Panel A). Consequently, the debt to equity ratio, which had been around 300 per cent, soared to almost 400 per cent, more than double the ratios in other OECD countries (Panel B). For the thirty-largest chaebols, the ratio was even higher, at 519 per cent, reflecting weak corporate governance practices and a moral hazard problem created by the implicit guarantee of government rescues of troubled companies and financial institutions.

The higher level of debt increased the financial burden on firms. Despite lower interest rates, interest expenses in the manufacturing sector increased from 5.5 per cent of sales in 1995 to 6.8 per cent in 1997 (Figure 3). This aggravated the profit position of Korean companies, which had a history of low levels of profitability. Between 1986 and 1995, net income to total assets in manufacturing averaged 2.3 per cent, only about half the rate in the United States. Although 1995 was a cyclical peak for profitability, reflecting the rapid growth of the electronics sector, the rise in interest costs made firms more vulnerable to the terms of trade shock that started in 1996, primarily as a result of the collapse in semiconductor prices. Overall, export prices in dollar terms fell 13 per cent in 1996, an amount

Figure 1. **Business fixed investment**
Per cent of GDP at current prices



1. The OECD calculates business investment in Korea as total investment minus residential investment and public investment.

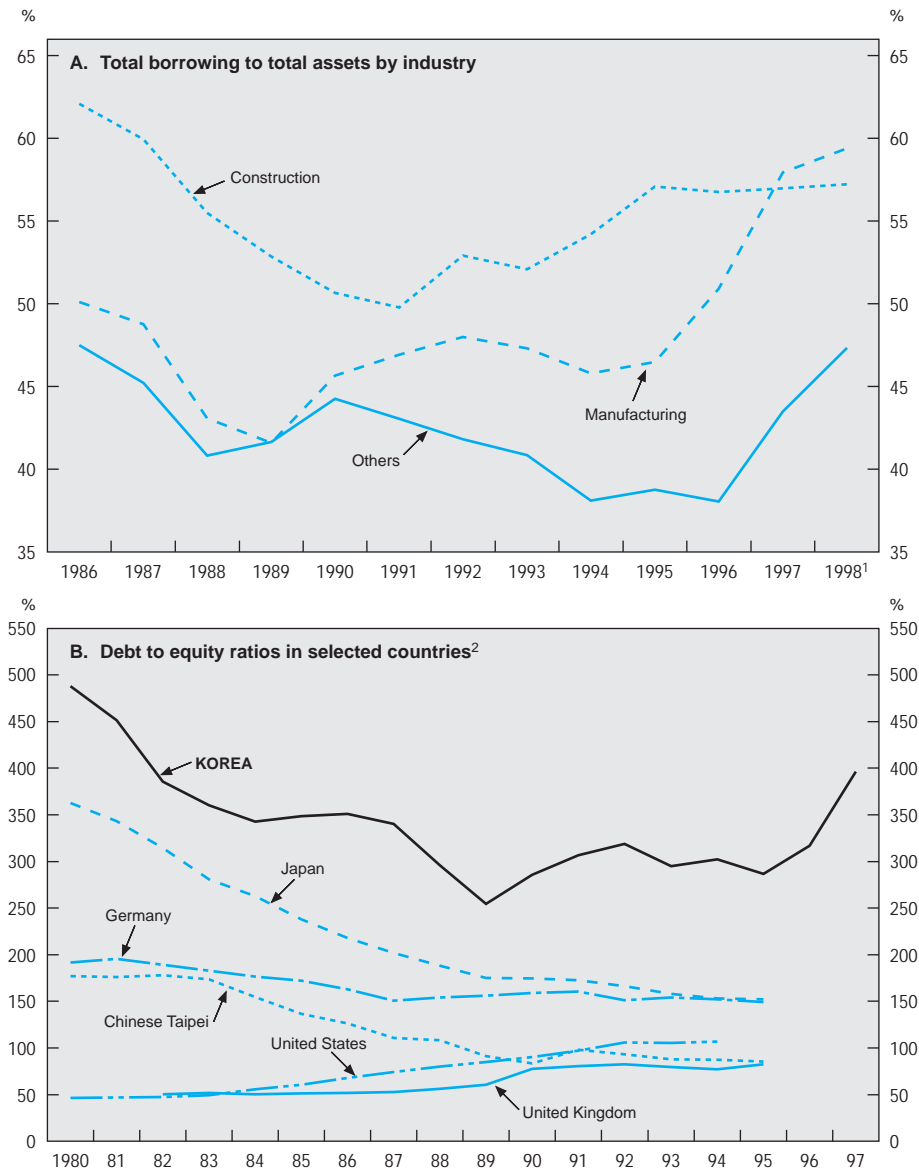
2. OECD projections for 1997 and 1998.

Source: OECD.

equivalent to 4 per cent of national income, and another 16 per cent in 1997. At the same time, export volume growth decelerated. Moreover, restrictions on layoffs of redundant workers made it difficult to reduce labour costs. Faced with slumping operating income and rising financial costs, the corporate sector's net income turned negative in 1997 (Panel B). Consequently, the number of bankruptcies jumped by 50 per cent for the year, while the rate of default also increased sharply (Figure 4). Foreign confidence was particularly weakened by the failure of eight of the top thirty chaebols, including major groups such as Kia, Hanbo and Jinro.

The problems in the corporate sector spilled over to the banks. Non-performing loans of commercial banks rose from a low of 4 per cent of their total credit in 1996 to 6 per cent in 1997 (Figure 5). While the ratio was not especially high by past standards in Korea, the increase was troubling in the context of financial turbulence in Southeast Asian countries with weak financial systems and poor corporate governance practices. Moreover, there was a concern about transparency: the deterioration of the banks' health was not fully reflected in the reported statistics because of loose loan classification standards and accounting rules, only partial recognition of stock revaluation losses and inadequate loan-loss provisions. In addition, the foreign exposure of Korean banks and enterprises

Figure 2. Corporate borrowing and debt

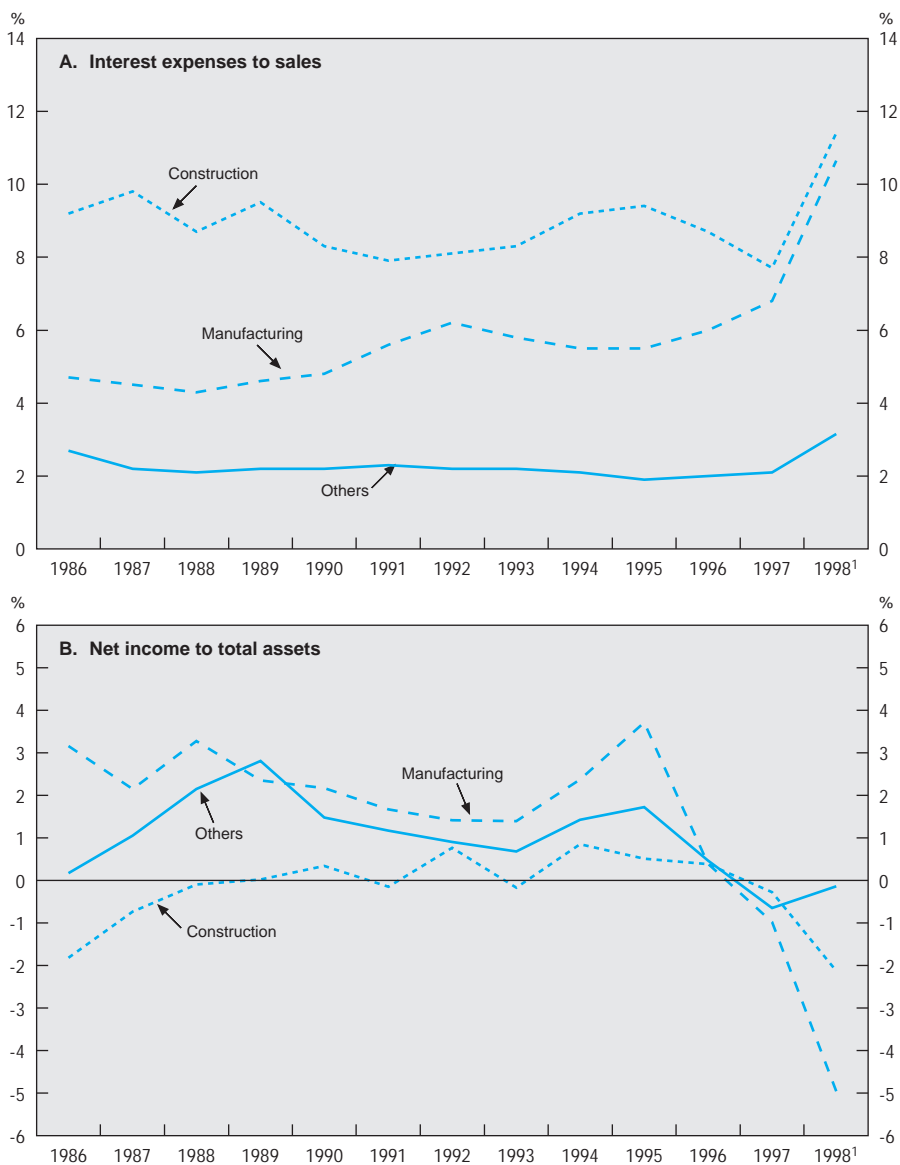


1. First half of the year.

2. For the manufacturing sector in Korea, Japan and Chinese Taipei.

Source: National Information and Credit Evaluation Inc. and Joon-Kyung Kim (1998).

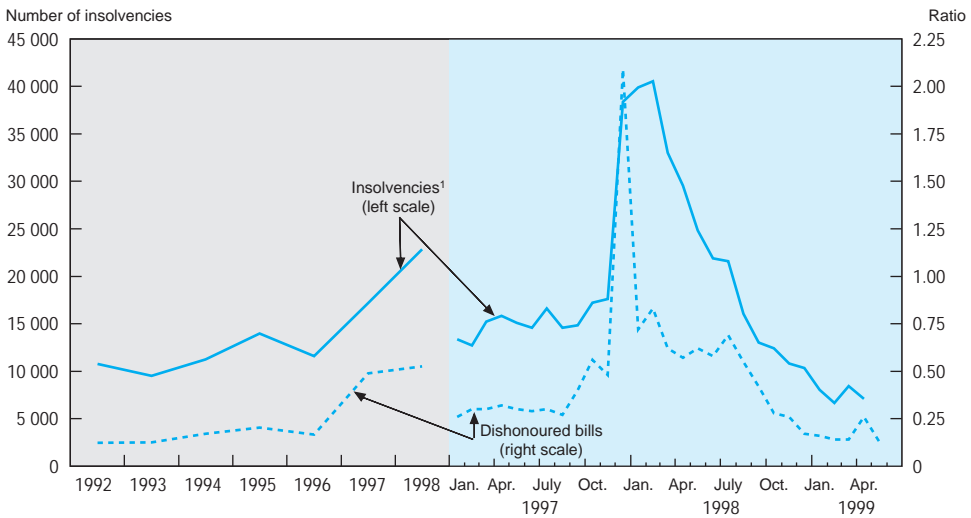
Figure 3. Interest expenses and profitability of the corporate sector



1. First half of the year.

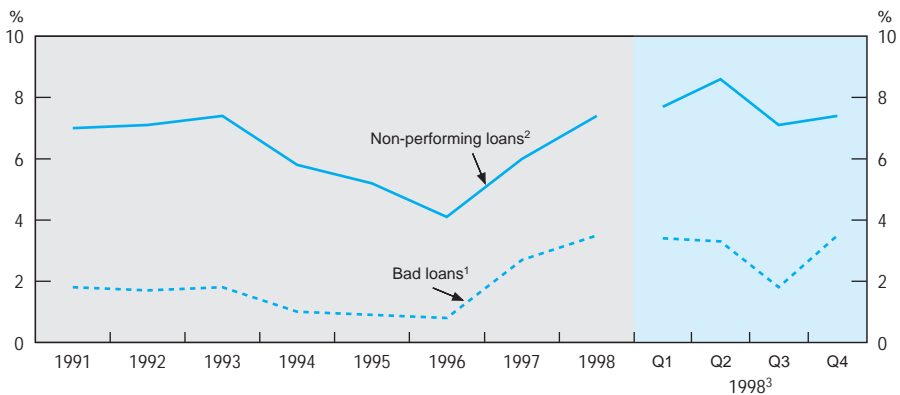
Source: National Information and Credit Evaluation Inc.

Figure 4. Insolvencies and dishonoured bills



1. Number of insolvencies at an annual rate.
 Source: Bank of Korea, *Monthly Bulletin*.

Figure 5. Problem loans of commercial banks
 As per cent of total credit at the end of period



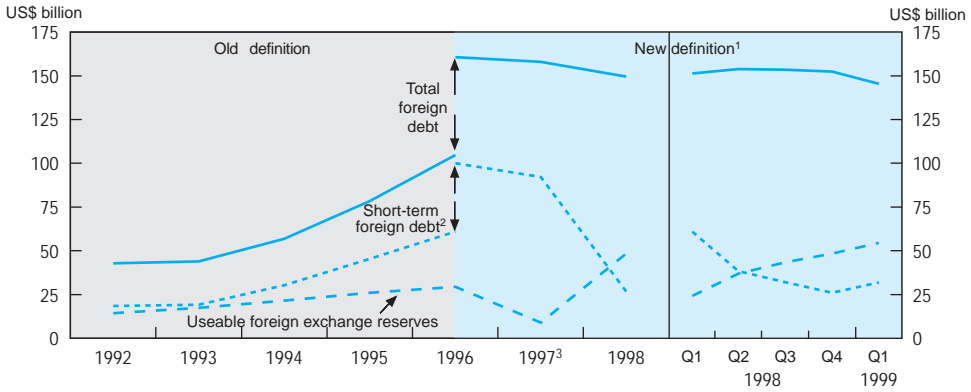
1. Loans classified as "Doubtful" or "Estimated loss".
 2. Bad loans plus substandard loans.
 3. New loan classification standards were introduced in July 1998, which boosted the number of problem loans. KAMCO's purchase of W 44 trillion (equivalent to 14.6 per cent of total loans) of non-performing loans, however, reduced the total.
 Source: Financial Supervisory Commission.

had nearly doubled between 1993 and 1996, reaching almost \$100 billion (Figure 6). Although this was equivalent to about a fifth of GDP, Korea still qualified as a “less-indebted country” according to the World Bank.¹ More problematic was the maturity structure of external debt; short-term borrowing (defined as a maturity of less than one year) accounted for two-thirds of external debt. Using a broader definition adopted after the crisis, short-term foreign debt of the financial and corporate sectors reached \$100 billion in December 1996, accounting for two-thirds of the total external debt of \$150 billion.

The sharp rise in foreign debt was due to four factors. *First*, the government had expanded the scope for short-term foreign currency borrowing in 1993 when it permitted enterprises to borrow from abroad, directly or through Korean banks, to finance imports of capital goods.² While liberalising loans of less than one year, restrictions on long-term overseas borrowing were maintained.³ Consequently, there was a dramatic rise in short-term foreign debts as Korean financial institutions borrowed abroad to finance the investment boom. In contrast to some Southeast Asian countries, however, the increased debt did not lead to a speculative bubble in asset prices in Korea (Figure 7). Land prices, which had risen at a rapid pace in the second half of the 1980s, were basically stable in the 1990s prior to the crisis. Instead, foreign borrowing primarily financed an expansion of industrial capacity that proved to be excessive. *Second*, overseas borrowing was facilitated by a jump in the number of financial institutions dealing in foreign currency following the licensing of 24 merchant banks between 1994 and 1996.⁴ *Third*, the widespread perception that the won was undervalued during much of the 1990s encouraged borrowing from overseas. *Fourth*, the implicit government guarantee of financial institutions created a moral hazard that encouraged high levels of borrowing by Korean banks and lending by their foreign creditors. However, it was not just the rise in short-term debt that left Korea vulnerable to a financial crisis but the fact that it was combined with a lack of sound risk management at banks which were inexperienced in the area of overseas borrowing. The new merchant banks, in particular, took on high levels of liquidity and exchange rate risk.⁵ Moreover, there was a lack of prudential supervision; basic regulations, such as capital adequacy ratios for merchant banks, did not exist.

The accumulation of these problems – the surge in bankruptcies, the deterioration of banks’ balance sheets and the build-up of short-term external debt – in the context of a financial crisis in Southeast Asia from mid-1997 led investors to re-evaluate the risks of investing in Korea. Consequently, the large inflows of loans from 1994 to 1996 turned to an outflow in the second half of 1997 (Figure 8). By the third quarter, portfolio investors were leaving in large numbers. As a result, the overall capital account recorded a large deficit in the last three months of the year (Panel B). Capital flight further reduced foreign exchange reserves, which had been largely depleted by the government’s decision to

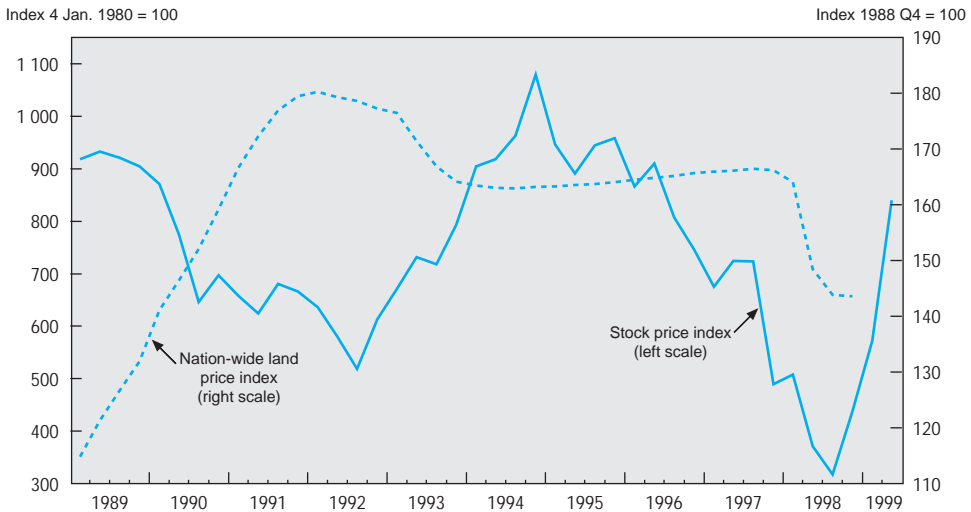
Figure 6. External gross debt and useable foreign exchange reserves
US\$ billion at end of period



1. The definition of external debt has been widened to include:
 - the foreign borrowings of overseas branches and subsidiaries of Korean financial institutions;
 - offshore borrowings of Korean institutions.
2. External debt with a maturity of less than a year.
3. November 1997.

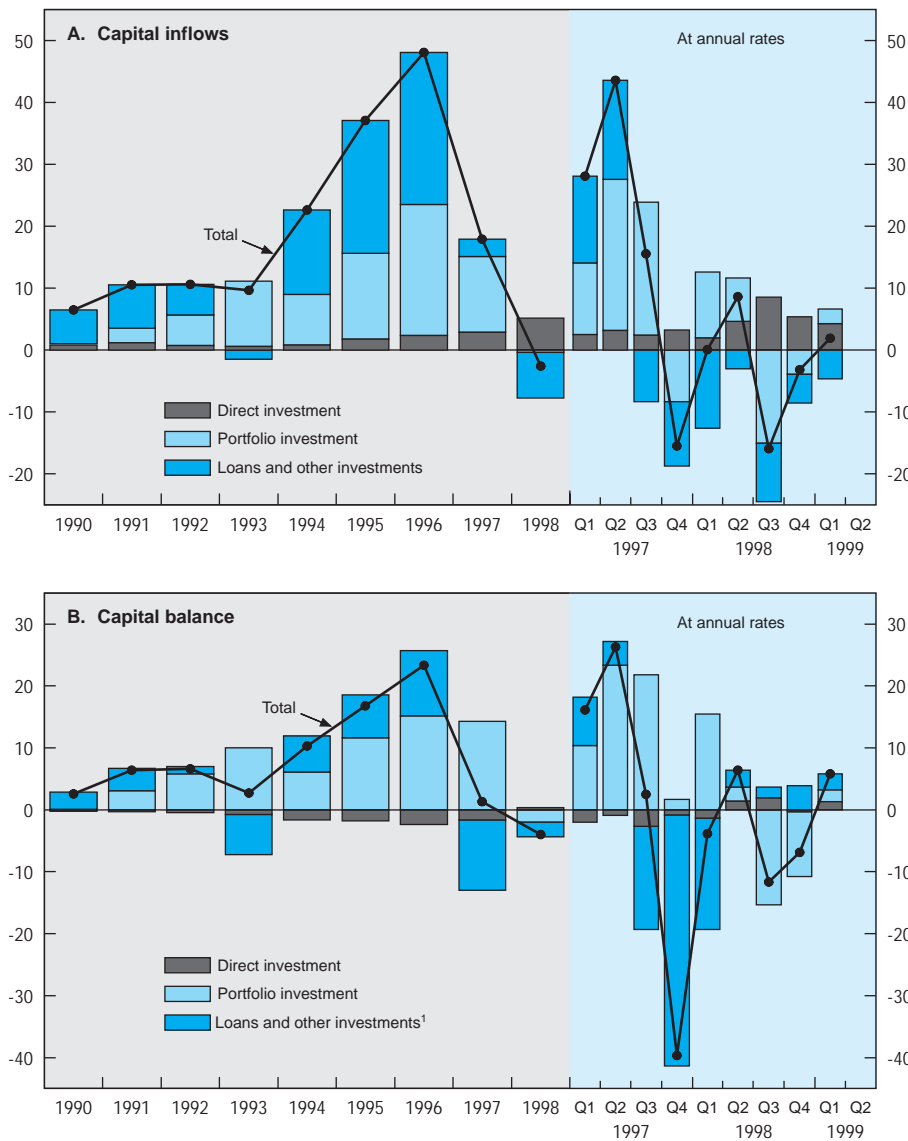
Source: Bank of Korea.

Figure 7. Asset prices



Source: Korea Institute of Finance and Korea Stock Exchange.

Figure 8. **The capital account**
US\$ billion



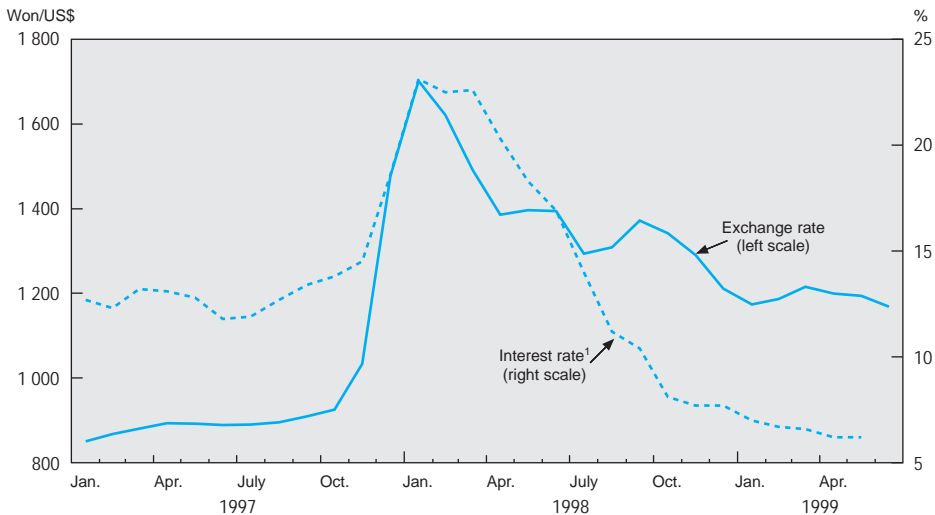
1. Including balance of capital transfers.
Source: Bank of Korea, *Monthly Bulletin*.

supply foreign exchange to companies and financial institutions that faced default on their foreign currency obligations and to sell a considerable amount of reserves in an attempt to defend the value of the won against downward pressure. Consequently, useable reserves in November 1997 had fallen to \$7 billion, a small fraction of the \$100 billion of short-term external debt. When foreign banks refused to roll over their loans, Korea faced the prospect of defaulting on its foreign debt and was forced to turn to the IMF.

The recession in 1998

Following the agreement with the IMF on 3 December 1997, the Bank of Korea raised the repurchase rate from 14 to almost 30 per cent by 23 December in order to stabilise the exchange rate, which declined almost 40 per cent over the same period from W 1196 to W 1 960 to the dollar. Short-term money market rates remained above 20 per cent through April 1998 (Figure 9) and were even higher in real terms since domestic prices and wages began falling in March. The rise in interest rates had a severe impact on the corporate sector. Interest costs surged to 10.7 per cent of sales in the first half of 1998 in the manufacturing sector while

Figure 9. The won and the short-term interest rate



1. Yield on 91-day certificates of deposit.

Source: Bank of Korea.

losses widened to 5 per cent (Figure 3). By February 1998, the number of bankruptcies had soared to more than three times the pre-crisis level (Figure 4). Surviving firms responded to the cash-flow squeeze by slashing investment, reducing inventories and cutting labour costs.

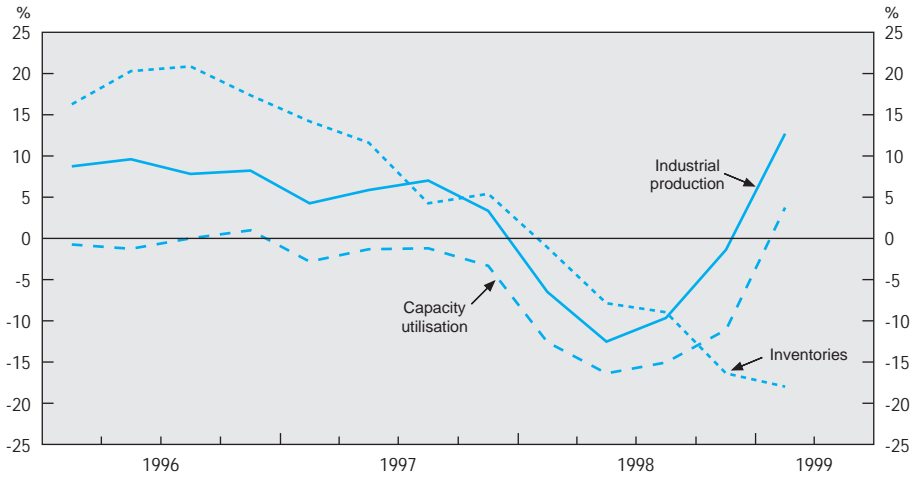
Corporate sector restructuring efforts

Total investment declined by more than a fifth in 1998 (Table 1). In addition to the impact of higher borrowing costs, credit crunch conditions, which emerged as banks changed their lending behaviour in an effort to boost their capital adequacy ratios, limited financing for new investment (see Chapter II). Capital formation was also discouraged by the uncertain economic outlook and the extent of excess capacity in the wake of the collapse of domestic demand. By mid-1998, capacity utilisation was 17 per cent below its year-earlier level (Figure 10). The decline in capital formation in 1998 was concentrated in machinery and equipment investment, which fell by more than a third. Construction investment declined by 10 per cent with the largest reduction recorded in commercial building. Research and development expenditures were also cut in 1998, with outlays in the private sector falling by 8 per cent. The decline in such expenditures has resulted in a 19 per cent drop in patent applications.

A decline in inventory stocks made a large negative contribution of almost 6 percentage points to growth in 1998 (Figure 11). By the end of 1998, inventories had been reduced 18 per cent from the year-earlier level (Figure 10), cutting the inventories to shipment ratio to its lowest point since 1994. The large inventory decline can be attributed to four factors. *First*, the high interest rates prevailing during much of 1998 boosted the cost of holding inventory stock. *Second*, firms in distress in the wake of the crisis sold off inventory to raise cash. *Third*, in the gloomy outlook following the crisis, firms reduced output by more than the fall in demand. *Fourth*, the difficulty of obtaining trade finance (see below) forced producers to run down their inventories of raw materials and intermediate goods. While industrial production declined 7 per cent in 1998, imports of industrial materials and fuels dropped 20 per cent in volume terms.

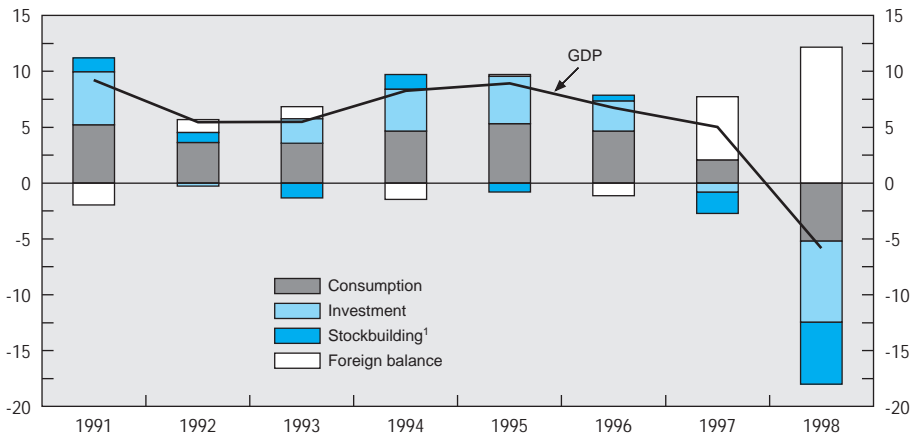
Firms also responded to the crisis by cutting labour costs through reductions in the number of employees, wages and hours of work. Dependent employment declined by almost 8 per cent with the sharpest falls recorded in the manufacturing and construction sectors (Table 2). The drop in employment was facilitated by the February 1998 revision of the Labour Standards Act, which allows layoffs for managerial reasons. During 1998, 120 000 workers (almost 1 per cent of employees) were laid off while another 260 000 opted for early retirement (see Chapter V).⁶ The reduction in employment was accompanied by a 2.5 per cent decline in nominal earnings, reflecting the exceptional degree of flexibility in wages in Korea.⁷ Wage flexibility is primarily due to the importance of overtime

Figure 10. **Industrial production, capacity utilisation and inventories**
Year-on-year percentage change



Source: Bank of Korea.

Figure 11. **Contributions to growth**
Percentage points



1. Including statistical discrepancy.

Source: Bank of Korea.

Table 2. **Labour market developments**

Percentage changes from previous year

	1990-96	1997	1998	1998				1999 Q1
				Q1	Q2	Q3	Q4	
A. Employment	2.3	1.4	-5.3	-3.7	-5.3	-6.4	-5.8	-2.4
By sector								
Agriculture	-4.9	-3.6	5.8	7.1	9.7	4.7	1.4	-13.7
Construction	6.5	1.8	-21.3	-10.2	-21.6	-26.0	-26.4	-23.9
Manufacturing	-0.8	-4.3	-13.2	-10.4	-14.4	-14.9	-13.1	-6.4
Services	5.4	4.5	-1.6	-1.6	-2.1	-2.0	4.8	2.4
By type of employee								
Self-employed	2.3	2.7	-4.8	-3.2	-4.0	-4.5	-7.4	-0.3
Employees	2.9	1.4	-7.8	-5.5	-8.2	-9.2	-8.3	-3.6
Labour force	2.3	2.0	-1.0	-1.0	-0.9	-1.1	-0.9	-0.5
Population 15 years and over	1.7	1.6	1.5	1.6	1.5	1.4	1.3	1.2
Unemployment rate	2.3	2.6	6.8	5.6	6.9	7.4	7.4	8.4
Participation rate	61.2	62.2	60.7	59.6	61.5	61.1	60.6	58.6
B. Wages								
Compensation per employee	12.6	7.0	-2.5	-	-	-	-	-
Real compensation per employee ¹	6.8	2.5	-9.3	-	-	-	-	-
Productivity growth	5.2	3.9	-0.4	-	-	-	-	-
Manufacturing sector								
Earnings	12.6	5.2	-3.1	-	-	-	-	-
Real earnings ¹	6.8	0.7	-9.9	-	-	-	-	-
Unit labour costs	0.9	-4.6	-9.8	-	-	-	-	-

1. Using the consumer price index.

Source: Bank of Korea and National Statistical Office.

and bonus payments, which account for a third of employees' earnings. In 1998, these two components both fell by more than 15 per cent. In addition, the annual economy-wide wage negotiations slowed the growth of regular wages from 9 to 4 per cent. Finally, working hours declined 2 per cent in 1998 due to large cuts in overtime hours.

The impact on households

The decline of employment and wages sharply reduced household income. According to the survey of urban households, income fell 5 per cent in nominal terms and 11 per cent in real terms in 1998. The squeeze on income is reflected in a tenfold rise in the number of individuals filing for bankruptcy in 1998. In addition, household wealth was significantly reduced by a decline of about 13 per cent in land and housing prices (Figure 7).⁸ Although the stock price

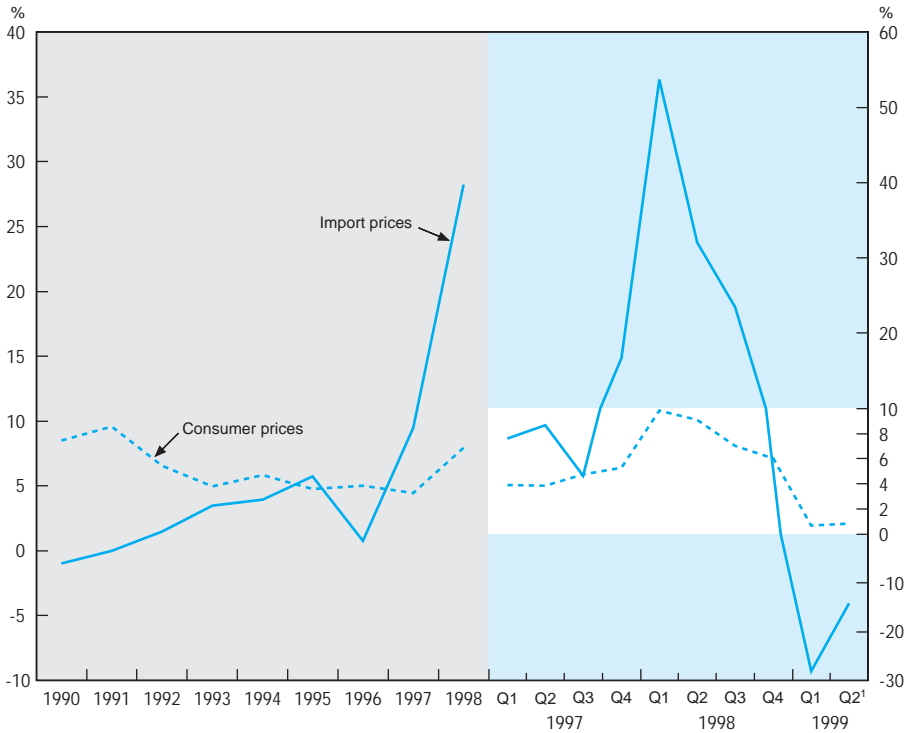
index rose by 50 per cent during the course of 1998, by the end of December, it was still 14 per cent below its year-average in 1997. In any event, stock price movements had a limited impact since only about 4 per cent of the population own equities. Faced with falling income and wealth, households cut consumption expenditures by almost 10 per cent in real terms in 1998, led by a one-third decline in purchases of durable goods. In particular, domestic car sales dropped by half. The overall fall in consumption, though, was moderated by a decline in the household saving rate from an estimated 17 per cent in 1997 to about 14 per cent last year. In contrast, in 1980, the last time GDP contracted, the saving rate fell by nearly 6 percentage points, limiting the decline in private consumption to less than $\frac{1}{2}$ per cent. The more modest adjustment in the saving rate in 1998 may be due to the increased uncertainty resulting from the much sharper deterioration in labour market conditions compared with the previous recession. In addition to the decline in private consumption, housing starts fell by half in 1998, reflecting weak demand and the bankruptcy of more than a tenth of housing construction companies.

The decline in total employment in 1998 almost tripled the average number of unemployed to 1.5 million and boosted the unemployment rate from 2 per cent prior to the crisis to 6.8 per cent. The unemployment problem, however, is even more severe than suggested by these indicators. *First*, the long-term upward trend in the participation rate was reversed last year, reducing the size of the labour force by 1 per cent. *Second*, there was an increase in under-employment. For example, the number of family workers, which had been on a declining trend since 1990, rose 7 per cent in 1998, reflecting higher employment in the agricultural, forestry and fishery sector. *Third*, the government created about 440 000 public works jobs in 1998 (equivalent to 1.2 per cent of the working-age population) to assist the newly unemployed. Nevertheless, the share of the adult population that was employed fell from 60.6 per cent in 1997 to 56.5 per cent in 1998. With the entry of about 400 000 new graduates in the labour market in early 1999, the unemployment rate increased further to 8.4 per cent in the first quarter, before falling to 6.5 per cent in May, though both employment and the labour force continued to decline until that month.

Deceleration of inflation

The large decline in domestic demand helped to limit inflationary pressure from the sharp depreciation of the won at the end of 1997. Although import prices jumped more than 50 per cent (year-on-year) in the first quarter of 1998 (Figure 12), most of the increase was not passed on to consumers. Consequently, the rise in consumer prices in the first quarter of 1998 was contained to 9 per cent (year-on-year), up from 4 per cent prior to the crisis. Moreover, the price level was basically unchanged during the year from February 1998 due to weak demand,

Figure 12. **Price trends**
Year-on-year growth rates



1. Average of April and May.
Source: Bank of Korea.

falling wages, a one-third cut in oil prices and some recovery in the exchange rate. Despite a significant rise in agricultural prices as a result of floods during the summer, the increase in the overall consumer price index was limited to 7.5 per cent for 1998 as a whole. By the first quarter of 1999, the year-on-year inflation rate had fallen to less than 1 per cent.

The factors behind the economic recovery

The resumption of positive growth in the first quarter of 1999 was accompanied by a wide range of positive indicators. Industrial production increased

12 per cent (year-on-year) while the capacity utilisation rate reached its highest level since the crisis (Figure 10). Retail sales also rose, led by a recovery in domestic car sales, while a further drop in the inventory to shipment ratio suggests that the downward inventory adjustment was nearly completed. The early turnaround in Korea, compared to other crisis-stricken Asian economies, was made possible by the easing of monetary and fiscal policies and by the confidence-boosting effects of the large accumulation of foreign exchange reserves and progress in structural reform.

Supportive monetary and fiscal policies

The relaxation of monetary conditions was a key factor in the early recovery (see Chapter II). From a high of 30 per cent at the beginning of 1998, the three-month interest rate fell to its pre-crisis level of around 11 per cent by August and further to 6 per cent in March 1999 (Figure 9). The easier monetary policy stance significantly lowered borrowing costs for firms: the average bank lending rate declined from 17½ per cent in early 1998 to 11 per cent at the end of the year, while the three-year corporate bond yield fell to single-digit levels for the first time ever in September 1998. The sustained decline in interest rates was also a key factor in the recovery in equity prices (Figure 7). In 1998, Korea's stock price index recorded the third-largest increase in the world in local currency terms, with an even larger gain in US dollar terms. The recovery of equity prices, which surpassed their pre-crisis level in April 1999, has encouraged further capital inflows and improved business and consumer sentiment.

The stimulative impact of easier monetary policy, though, was limited by a credit crunch that emerged as banks endeavoured to increase their capital adequacy ratios. However, fiscal policy also supported demand following the July 1998 decision to introduce a supplementary budget. Consequently, the consolidated central government budget deficit was allowed to shift from a small surplus in 1997 to a deficit of 3.2 per cent of GDP in 1998. The larger deficit was due, in part, to increased expenditures to attenuate the credit crunch, notably the interest cost on the programme to address the banks' non-performing loan problem and to re-capitalise viable banks (see Chapter III). Public expenditure to support the unemployed was especially important in sustaining domestic demand. In 1998, more than W 10 trillion (about 2.5 per cent of GDP) was spent on the unemployment problem, with about two-thirds of the total funded directly by the government budget. Finally, increased investment in social infrastructure limited the downturn in the construction sector and created jobs. In addition to this increased expenditure, off-budget measures – particularly the W 64 trillion (14 per cent of GDP) financial sector restructuring plan and W 33 trillion of guarantees on loans to SMEs – played a key role in promoting an economic turnaround.

A restoration of confidence resulting from the rise in foreign exchange reserves

The upgrading of Korea's credit rating to investment grade in early 1999 by three major agencies⁹ symbolised a recovery in the confidence of both domestic and foreign investors in the Korean economy. Moreover, the premium on Korean sovereign bonds had returned to pre-crisis levels by March. These developments were due, in part, to the success in implementing structural reforms in the financial sector (see Chapter III), the corporate sector (see Chapter IV) and the labour market (see Chapter V). The crisis provided Korea with an opportunity to change practices that were no longer suitable to a more competitive global economy. Korea was widely acknowledged as the front-runner in implementing reforms among the Asian countries hit by the crisis. A second factor boosting confidence was the sharp rise in useable foreign exchange reserves from less than \$8 billion at the end of 1997 to over \$50 billion in early 1999 (Figure 6). This increase came from four main sources: loans from international financial institutions, the issuance of dollar-denominated bonds by the government, the large current account surplus and a resumption of capital inflows. As of February 1999, Korea had received \$19 billion from the IMF, \$6 billion from the World Bank and \$3.7 billion from the Asian Development Bank. These funds were supplemented by the flotation of \$4 billion of sovereign bonds in April 1998. The other two sources responsible for the accumulation of foreign exchange – the current account surplus and capital inflows – are discussed below.

A massive current account surplus

Following a deficit of \$8 billion in 1997, Korea recorded a \$40 billion current account surplus in 1998 – a swing of almost \$50 billion in one year (Table 3). The surplus was primarily due to a collapse in imports, leading to a trade surplus equivalent to almost 13 per cent of GDP. Imports fell 36 per cent in dollar value due to a 21 per cent drop in volume and a significant fall in dollar prices,¹⁰ which reflected the lower cost of oil and commodities and weak demand in Korea. In addition, a lack of trade finance limited imports as financial institutions tried to reduce lending.¹¹ By region, the sharpest declines – more than 40 per cent – were recorded for imports from Japan and the European Union. Consumer products were especially hard-hit, with imports of non-durable items falling more than 60 per cent. As noted above, the sharp reduction in imports of oil and raw materials reduced inventories of such items. In addition to the trade balance, two other factors contributed to the large current account surplus in 1998. *First*, a decline in overseas travel by Koreans pushed the non-factor service balance into surplus. *Second*, a jump in private transfer inflows offset the deterioration in the investment income balance. By early 1999, however, imports had begun to increase as output growth resumed.

Table 3. **The current account**
\$ billion

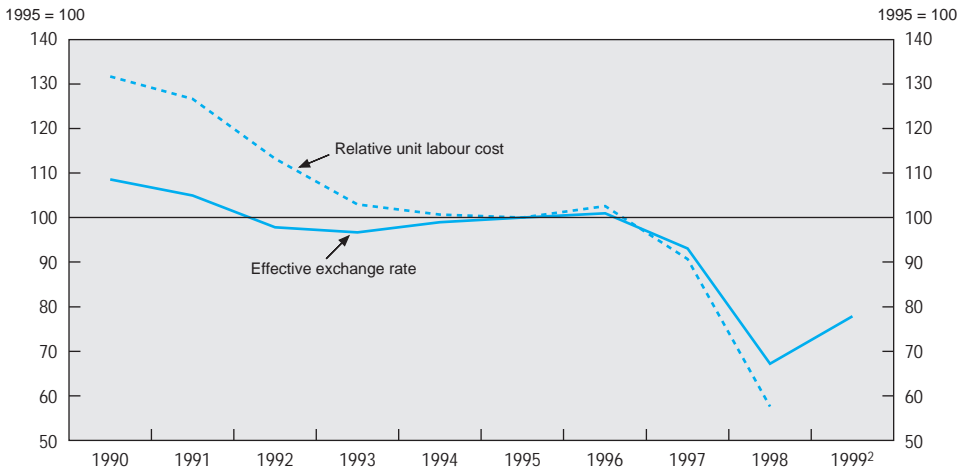
	Average 1990-95	1996	1997	1998	1999 Q1
Trade	-2.7	-15.0	-3.2	41.2	7.1
Exports	85.3	130.0	138.6	131.8	31.7
Imports	88.0	144.9	141.8	90.6	24.6
Non-factor services	-2.1	-6.2	-3.2	0.4	-0.1
Credits	13.8	23.4	26.3	24.6	6.3
Debits	15.9	29.6	29.5	24.2	6.4
Investment income	-0.5	-1.8	-2.5	-4.8	-0.8
Credits	2.8	3.7	3.9	3.7	..
Debits	3.3	5.5	6.3	8.5	..
Transfers	1.0	0.0	0.7	3.3	0.6
Private	1.1	0.3	1.0	3.7	..
Public	-0.1	-0.4	-0.4	-0.4	..
Current balance	-4.3	-23.0	-8.2	40.0	6.8
Per cent of GDP	-1.3	-4.4	-1.5	12.6	7.7

Source: Bank of Korea.

Korean exports increased 17 per cent in volume terms in 1998, sustained by the competitiveness gains resulting from the decline of the currency. In trade-weighted terms, the won fell by 30 per cent in 1998 (Figure 13). The gain in competitiveness was even larger, given the cut in wages; relative unit labour costs, measured in a common currency, decreased by more than a third. Consequently, export prices fell 17 per cent in dollar terms, helping to sustain the volume of shipments overseas. In particular, ships and steel recorded large increases. However, given the large decline in prices, the value of total exports in dollar terms actually fell 5 per cent.

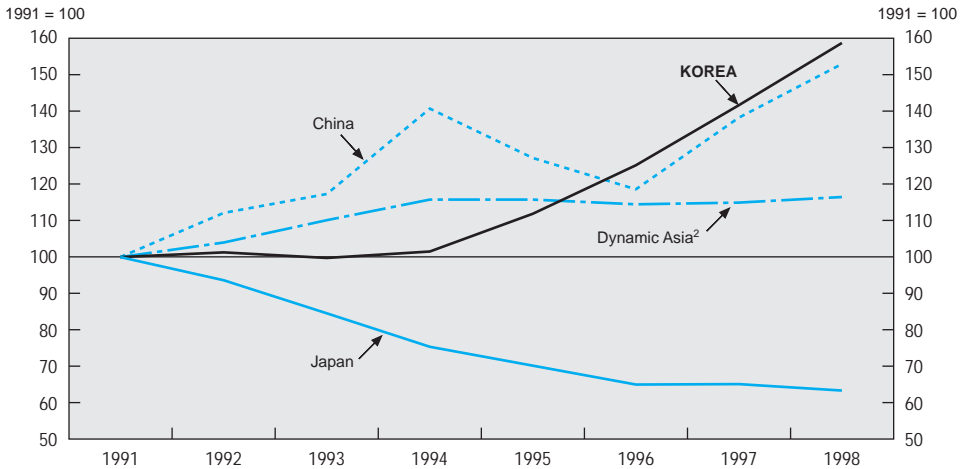
The impact on exports from the improvement in price competitiveness was partially offset by a sharp slowdown in demand in overseas markets. In 1998, Korea's overall export market growth for manufactured products¹² slowed to 2 per cent from 11 per cent the previous year, reflecting the impact of the Asian financial crisis. Asia's share of Korean exports has risen markedly during the 1990s; by 1997, Southeast Asia and China purchased more than a fourth while Japan accounted for another 10 per cent. In the event, Korea's exports to Southeast Asia dropped 25 per cent in dollar terms in 1998, while those to Japan and China fell 17 and 12 per cent, respectively. These declines, though, were partially offset by increased exports to the United States and the European Union. Consequently, Korea's export performance was markedly superior to those of other Asian countries (Figure 14), despite the lack of trade financing and a rise in foreign

Figure 13. Competitiveness indicators¹



1. Calculated *vis-à-vis* forty countries. A decline indicates a gain in competitiveness.
 2. OECD estimate.
- Source: OECD.

Figure 14. Export performance in manufactured goods¹



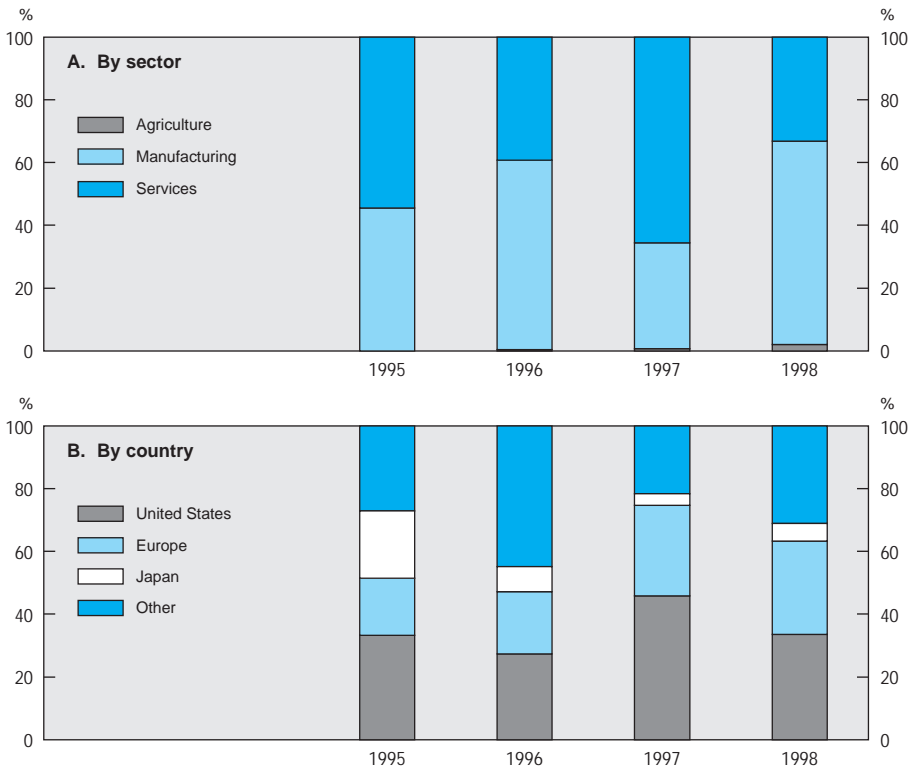
1. Export performance is calculated as the ratio of export volumes to export markets.
 2. Dynamic Asia includes: Chinese Taipei; Hong Kong, China; Singapore; Indonesia; Malaysia; Thailand and the Philippines.
- Source: OECD.

restrictions on Korean exports. During 1998, an additional 21 measures were imposed, including four by the United States and three by the European Union. However, the majority of the new actions were by non-OECD countries. Overall, Korea faces 69 anti-dumping duties and seven safeguard measures, with steel and electronic products accounting for over half of the total.

Renewed inflows of foreign investment

The large current account surplus and the rise in Korea's foreign exchange reserves helped to restore the confidence of foreign investors. In 1996, investment from abroad totalled almost \$50 billion in Korea (Figure 8, Panel A). By the

Figure 15. **Foreign direct investment in Korea**
Per cent of total



Source: Ministry of Finance and Economy.

Box 1. Measures to promote foreign direct investment in Korea

The Foreign Investment Promotion Act (FIPA) of November 1998 changed the legal framework for foreign direct investment in Korea and explicitly established the principle of national treatment. The new law also reduced the number of business areas in which FDI is prohibited or restricted. In addition, it streamlined and simplified the administrative procedures facing foreign investors and widened the scope for incentives to attract them. These legal changes appear to have been accompanied by a genuine change in attitude towards foreign investors.

The number of business lines closed to FDI has fallen from 27 in 1997 to seven – in agriculture, fishing and broadcasting – at the beginning of this year. Over the same period, the number of partially closed business lines was reduced from 26 to 17. The remaining restrictions are in agriculture, water and air transport, telecommunications and broadcasting. In some of these restricted areas, greenfield investment is prohibited by requiring foreign companies to enter into joint ventures. A further reduction in the number of closed and restricted business lines is planned during the next few years. In addition to these regulations, only foreign firms designated as defence industry companies are allowed to invest in Korea's defence industry, which is broadly defined to include 81 companies in heavy industries such as chemicals, cars and machinery. Reducing the remaining restrictions would be desirable in sectors where the concerns underlying the controls could be met by non-discriminatory means.

The FIPA also expanded the scope and generosity of incentives to attract foreign investors. The number of advanced technology businesses eligible for tax exemptions or reductions was boosted from 265 to 436. In addition, nearly 100 business lines in the service sector that were identified as key to the international competitiveness of domestic companies were also made eligible for similar benefits. The duration of these incentives was lengthened from eight to ten years (seven years of complete exemption from taxes and three years of a 50 per cent reduction). Moreover, the rental periods for central and local government property were extended while the fees charged have been reduced or exempted. In addition, local governments are allowed to provide tax reductions and exemptions on local taxes (property, land, acquisition and registration taxes) and to establish Foreign Investment Zones. Such changes introduce an aspect of competition between local governments wishing to attract foreign investors, which is likely to be inefficient from an overall national perspective.

The FIPA has also simplified the administrative process in order to expedite inflows of FDI. The four regulatory procedures previously in place have been reduced to two. In addition, the Korea Investment Service Centre has been established as a one-stop service for foreign investors. It can handle about 90 per cent of the administrative procedures required of foreign investors. Finally, a commission on FDI, chaired by the Minister of Finance and Economy, has been established, reflecting the importance the government attaches to attracting foreign investors. Inflows of foreign direct investment have an important role to play in the restructuring of the Korean economy.

last quarter of 1997, however, this had swung to an outflow of more than \$15 billion at an annual rate and an even larger outflow in the third quarter of 1998 following the crisis in Russia. However, the outflow of foreign investment in 1998 was limited to \$2.6 billion as a sharp rise in foreign direct investment (FDI) almost offset a reduction in foreign loans. In addition to the rise in FDI (see below), foreigners recorded net purchases of \$4 billion of Korean equities in 1998, boosting their holdings to 19 per cent of total market capitalisation and contributing to the recovery in the stock price index in the second half of the year. However, this was more than offset by a reduction in foreign holdings of debt securities, resulting in a small outflow of portfolio investment. By the first quarter of 1999, inflows of foreign capital had resumed. Consequently, Korea's capital account (Figure 8, Panel B), which had swung from net inflows of \$23 billion in 1996 to net outflows of almost \$4 billion in 1998, was once again in surplus.

The surge in FDI was encouraged by government efforts in 1998 to simplify the regulatory and administrative procedures for foreign investors (Box 1). This contributed to a 27 per cent rise in FDI in 1998 on a notification basis to a record high of \$8.9 billion. Much of the increase was concentrated in the manufacturing sector, notably in electronics (Figure 15). The United States and Europe each accounted for about a third of total FDI, while Japan's share remained quite modest. The growing role of foreign firms is likely to intensify competition and lead to significant efficiency gains.¹³

Economic prospects in 1999

Output growth is projected to recover to 6½ per cent in 1999, due in part to a technical rebound (Table 4). The sharp fall in the level of inventories in 1998 has lowered the inventory to shipment ratio to its lowest level since 1994. If the decline in inventories – W 28 trillion in 1998 – were to slow to a W 9.5 trillion pace in 1999, this would be enough to boost GDP growth by 4½ percentage points in 1999. Some of this contribution, though, would be offset by a recovery in imports. Export growth, meanwhile, may slow this year. Although export market growth should pick up with some recovery elsewhere in Asia, Korea's past gains in competitiveness have been partially offset by the effective appreciation of the won, which by June 1999 was 19 per cent above its average last year. Consequently, the contribution to growth from the external balance may be slightly negative while the current account surplus narrows to around \$23 billion. However, private consumption rebounded sharply in the first quarter of 1999 despite a 0.5 per cent fall in the household income of urban workers. The recovery in consumption reflects the wealth effect of rising share prices and pent up demand following the recession – purchases of durable and semi-durable goods fell 30 per cent in 1998. Investment in equipment and machinery also rebounded in the first

Table 4. **Short-term prospects**
Percentage change in constant 1995 prices

	1995 Current prices won trillion	1996	1997	1998	1999	2000
Private consumption	206.4	7.1	3.5	-9.6	5.5	5.5
Government consumption	36.4	8.2	1.5	-0.1	-1.4	4.0
Gross fixed capital formation	138.4	7.3	-2.2	-21.1	0.6	6.0
Construction	54.2	8.5	2.3	-10.2	-6.0	5.0
Machinery and equipment	56.0	9.2	-8.7	-38.5	16.2	10.0
Final domestic demand	381.3	7.3	1.2	-12.7	3.2	5.8
Stockbuilding ¹	1.8 ²	0.6	-2.0	-5.6	4.6	2.2
Total domestic demand	383.1	7.8	-0.8	-18.7	9.0	8.5
Exports of goods and services	114.0	11.2	21.4	13.3	8.0	9.5
Imports of goods and services	119.5	14.2	3.2	-22.0	16.3	19.9
Net exports ¹	-5.6 ²	-1.1	5.7	12.2	-1.0	-1.8
GDP	377.3	6.8	5.0	-5.8	6.5	5.5
GDP implicit price deflator	-	3.9	3.2	5.3	2.0	2.3
<i>Memorandum items:</i>						
Private consumption deflator	-	5.7	5.4	8.6	1.8	2.3
Industrial production	-	8.7	5.3	-7.3	7.5	6.5
Unemployment rate	-	2.0	2.6	6.8	7.0	6.0
Household saving ratio ³	-	17.4	17.3	14.4	14.3	14.5
Current account balance ⁴	-	-4.4	-1.5	12.7	5.6	3.4
Government budget balance ⁵	-	0.3	0.0	-3.2	-4.0	-

1. Contributions to changes in real GDP.

2. Actual amount.

3. As a percentage of disposable income.

4. As a percentage of GDP.

5. Consolidated central government balance as a share of GDP.

Source: OECD.

quarter of 1999. In contrast, construction investment fell sharply, though it is likely to show some recovery in the latter part of the year. Overall, investment is likely to expand in 1999, following two consecutive years of decline.

Although unemployment is declining from its peak in the first quarter, the average for the year may remain around 7 per cent. With considerable slack remaining in the labour market and the appreciation of the currency during the past year, inflation is expected to fall to around 2 per cent in 1999. This scenario of low inflation and a rebound due in part to a deceleration of inventory de-stocking is based on the following assumptions:

- The won exchange rate remains at its current level of W 1 160 per dollar and W 9.5 per yen.
- Growth in Korea's export markets picks up from 2.2 per cent in 1998 to 2.7 per cent this year and 5.3 per cent in 2000.

- Oil prices increase from \$12.58 per barrel in 1998 to \$14.54 in 1999 and \$15.33 in 2000.
- Low interest rates are maintained, with short-term rates around 5½ per cent and long-term government bond yields between 7½ and 8 per cent.
- Fiscal policy remains supportive with consolidated central government deficits of between 3 and 4 per cent in 1999 and 2000.

The major risk to such a rebound in 1999 would be a depreciation of other major Asian currencies and labour unrest, which would reduce the confidence of investors, both domestic and foreign. A second risk would be a slowdown in the US economy, which accounted for almost a fifth of Korean exports in 1998. Despite such downside risks, there would appear to be little chance of another foreign exchange crisis anytime soon. The proportion of foreign bank loans that have been rolled over has risen from 32 per cent at the end of 1997 to the pre-crisis level of almost 90 per cent by November 1998. At the same time, the risk premium – the spread between ten-year bonds issued by the US Treasury and the Korean government – fell from a peak of 10 percentage points in August to 2.5 in March 1999. In addition, Korea's \$56 billion in foreign exchange reserves substantially exceeds short-term external debt, which has fallen to under \$30 billion. Moreover, Korea may further increase its foreign exchange reserves in 1999. It is scheduled to receive another \$5 billion in loans from international financial institutions, while the government has set an objective of attracting \$15 billion in direct investment. With a projected current account surplus of \$23 billion, total inflows may reach \$43 billion, even if portfolio investment inflows turn out to be negligible. This would exceed the \$40 billion in payments on the external debt that are due in 1999. Regarding the projections for 1999, there is an upside risk that economic growth will accelerate even more if consumer and business confidence strengthen more quickly than projected. Having fallen by 14 per cent in 1998, there is a potential for a stronger rebound this year.

The prospects for 2000 and beyond

As the contribution from stockbuilding and fiscal policy wanes, the pace of economic growth in 2000 and beyond will depend on the strength of private consumption and investment. Growth in these components, in turn, will hinge on the success of the financial sector rehabilitation and the speed and depth of corporate restructuring. In the short run, corporate restructuring tends to have a negative effect on growth as firms rationalise their operations, reduce labour costs and improve their financial structure. Although a vigorous restructuring effort in 1999 and 2000 would tend to lower output growth in the short term, it would lay the foundation for more rapid growth over the medium term. In particular, the

development of a well-supervised banking system capable of analysing credit risks would promote growth through a more efficient allocation of capital (see Chapter III). Effective implementation of the new corporate governance framework is a key to effective restructuring (see Chapter IV), while labour market flexibility is an essential aspect of that process (see Chapter V). The economic recovery in 1999 should not reduce the commitment to establish a more market-based paradigm, which would bring enormous benefits in the long run.

Korea's economic development over the past 35 years has been based on roughly equal contributions from growth of inputs and improvements in total factor productivity, according to a recent study published by Korea Development Institute (Table 5). Inputs of capital and labour generated $4\frac{3}{4}$ percentage points of growth per year during the decade 1985 to 1995, while improvements in total factor productivity (TFP) – due primarily to improved resource allocation, economies of scale and advances in knowledge – contributed another 4 percentage points. The contribution from TFP should remain significant since the improved corporate governance framework and better-managed banking system should eventually enhance gains from better resource allocation and economies of scale. The contribution of advances in knowledge, though, might decline gradually as

Table 5. **Sources of growth**
Labour market developments

	1963-95	1985-95	2000-04 ¹
Total factor inputs	4.27	4.76	3.00
<i>Labour</i>	2.96	2.77	2.00
Employment	2.40	2.42	2.00
Average hours	0.19	-0.28	-0.30
Education	0.30	0.40	0.30
Other	0.07	0.23	0.00
<i>Capital</i>	1.31	1.99	1.00
Non-residential structures and equipment	1.10	1.61	1.00
Other	0.21	0.38	0.00
Output per unit of input	3.62	4.05	3.50
Improved resource allocation	0.45	0.41	0.40
Economies of scale	1.44	1.85	1.85
Advances in knowledge	1.47	1.77	1.25
Other	0.26	0.02	0.00
National income	7.89	8.81	6.50
GDP	8.24	8.20	6.00

1. OECD scenario.

Source: Kim and Hong (1997).

the technology gap between Korea and the leading industrial countries narrows. As for the growth of inputs, the expansion of the labour force should remain significant in the early years of the next century. With the working-age population increasing at a 1½ per cent annual rate, a reversal of the decline in the labour force participation rate may allow employment growth of 2 per cent in Korea's relatively flexible labour market. While the downward trend in working hours is likely to continue, it may be offset by the on-going rise in the educational attainment of the working-age population.

There is more uncertainty about the growth of capital inputs. During the decade 1985 to 1995, gross fixed investment in non-residential business averaged 22 per cent of GDP, allowing the stock of capital to rise at a 10 per cent annual rate. This contributed 2 percentage points of growth per year. Following the crisis, firms may be more conscious of the risk imposed by borrowing and may scale back investment accordingly. However, even if business investment remained at the present level of about 16 per cent of GDP, the capital stock would rise about 7 per cent a year, making a significant contribution to growth. Under such a scenario, annual growth of national income (which excludes depreciation and indirect business taxes from GDP) of 6½ per cent would be feasible. This would imply real GDP growth of around 6 per cent per year if the gap with national income remained the same as during the 1985 to 1995 decade. There is a risk, though, that the contribution from improved resource allocation and economies of scale might be somewhat lower during the transition to the new market-based paradigm. Consequently, the key to Korea's growth potential appears to be its success in implementing the reforms in the financial sector, the corporate sector and the labour market that are discussed in the following chapters.

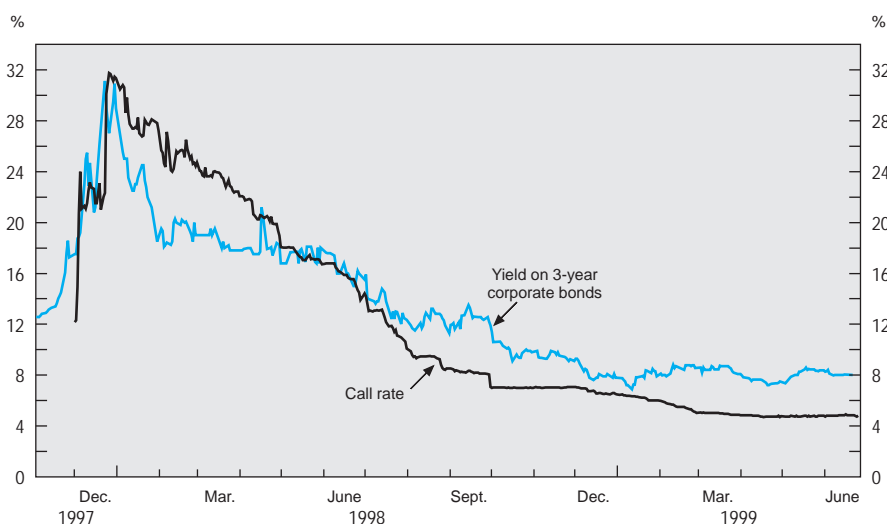
II. Monetary and fiscal policies

The relaxation of macroeconomic policies played a key role in moderating the recession in 1998 and in laying the foundation for an economic recovery in 1999. The tight stance of monetary policy was significantly eased from May 1998 as interest rates were progressively lowered to levels well below those prior to the crisis. Fiscal policy was also supportive of growth following supplementary budgets in July and September of 1998. Consequently, a consolidated central government deficit of more than 3 per cent of GDP was recorded in 1998, with a similar deficit projected for 1999. This chapter begins with a review of monetary policy developments and Korea's shift to a floating exchange rate regime. The second section examines the fiscal policy developments as well as the resulting impact on the level of government debt. The need for consolidation in the medium term is also discussed.

Monetary and exchange rate policy

In the midst of the financial crisis in early December 1997, the Bank of Korea announced a sharp tightening of monetary policy. By 24 December, the short-term interest rate, which had fluctuated around 12 per cent prior to the crisis, had risen to over 30 per cent (Figure 16). Such a high interest rate was intended to limit both inflation and the downward pressure on the won. Nevertheless, the rollover of short-term external debt continued to decline, nearly exhausting useable foreign exchange reserves, while the won fell to its lowest point of W 1 965 per dollar on the 24th – more than 50 per cent below its pre-crisis level. An agreement on the 23rd by private bank creditors to maintain their exposure to Korean banks and to re-schedule their short-term claims proved to be a turning point that stabilised the exchange rate and short-term interest rates.¹⁴ During the crisis, the Bank of Korea maintained its practice of setting monetary growth targets consistent with its inflation objective (Box 2), which was to limit the rise in consumer prices to under 10 per cent in 1998 despite the sharp depreciation of the won.

Figure 16. Interest rates



Source: Bank of Korea.

Box 2. Monetary policy in Korea

The primary objective of monetary policy, as prescribed by law, is price stability. In formulating policy, the Bank of Korea also takes into consideration conditions in the real economy, financial markets and the foreign exchange market. Monetary aggregates are used as the intermediate target in achieving its objective while reserve money is employed as the operational target. The Bank of Korea supplies credit to banks primarily by extending loans against collateral provided by the banks. The Monetary Policy Committee sets an aggregate credit ceiling for the central bank's loans to the banks. Loan ceilings for individual banks are then established based on such criteria as banks' performance in the discount of commercial bills and loans for foreign trade (Bank of Korea, 1998). In addition, the Bank of Korea uses open market operations to influence the level of reserves in the banking system. Reserve requirements are an additional tool to implement its monetary policy. The rate, which was relatively high at 9.4 per cent prior to 1996, has been reduced sharply as the Bank of Korea has shifted to open market operations to implement its policy. Finally, interest rates have become an increasingly important instrument to influence monetary conditions following their liberalisation during the first half of the 1990s.

Relaxation of monetary policy in 1998

The monetary authorities initially adopted a cautious approach to allowing interest rates to normalise. Short-term rates declined only modestly, remaining above 20 per cent through April. The extended period of exceptionally high interest rates contributed to the sharp contraction of the economy as noted in Chapter I: the number of bankruptcies in the first quarter of 1998 was almost triple its year-earlier level while industrial production fell 8 per cent. Moreover, consumer prices began falling in March and the won had strengthened to around W 1 380 to the dollar (Figure 17). With the strengthening of the won and a massive current account surplus of 14 per cent of GDP, the emphasis shifted in May to reducing interest rates to limit the depth of the recession. By July, short-term rates had declined to their pre-crisis level and were reduced further to 7 per cent by the end of the year. With easier monetary conditions, the lending rate of commercial banks fell from 17½ per cent at the beginning of 1998 to about 11 per cent at the end. The decline in short-term rates was accompanied by a fall in the three-year corporate bond yield to single digits in the autumn of 1998. The easing of monetary policy was accomplished while boosting the level of useable foreign

Figure 17. Exchange rates



Source: OECD.

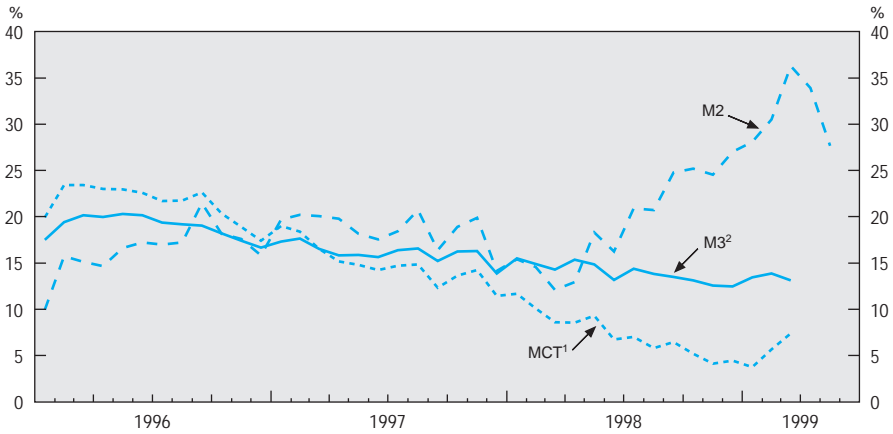
exchange reserves, which had been virtually depleted in the wake of the financial crisis, to \$48.5 billion by the end of 1998 – significantly higher than the \$30 billion of short-term foreign debt.¹⁵

In 1998, the central bank decided to shift its monetary target from M2 to M3, a measure of total liquidity that includes the liabilities of non-bank financial institutions, and is consequently almost triple the size of M2. The use of a broader measure was thought to be necessary in view of distortions in narrower money supply definitions during the process of financial restructuring. To achieve its inflation objective, the Bank of Korea targeted a slowdown in M3 growth from 16.3 per cent in 1997 to 13.5 per cent in 1998. In the event, it succeeded in limiting the growth of M3 to 12.5 per cent (Figure 18). As expected, there were sharply divergent trends in narrower definitions of the money supply. In particular, M2, which consists primarily of deposits at commercial banks, slowed in the first half of the year, as new types of money trust accounts attracted funds. This situation was reversed as from mid-year following the closure of five banks. As the public became keenly aware that bank trust accounts were not covered by deposit insurance, there was a shift of funds to bank deposits, thus accelerating the growth of M2. In contrast, the growth of MCT (a broader measure that includes M2, CDs and money in trust accounts) slowed, as some of the money that had been in trust accounts did not go to bank deposits but instead to bond-based investment funds, which are managed by investment trust companies and are not included in MCT.

Although M3 grew at a rate close to its target level, bank lending decelerated significantly during 1998 (Figure 19). By the third quarter of the year, the amount of loans by deposit money banks had fallen 2.5 per cent below the year-earlier level, with the largest declines recorded in lending to the manufacturing sector and to households. Small and medium-sized enterprises (SMEs), in particular, found their access to credit limited as banks preferred to lend to more established companies, particularly those belonging to the top chaebols, which were viewed as “too big to fail”. During recessions, reduced demand for credit by firms and households typically leads to a slowdown in bank lending. However, the extent of the decline in 1998 led to concerns about a “credit crunch” in which the supply of credit is restricted below the range usually identified with prevailing market interest rates and the profitability of investment projects.¹⁶

There are several indicators suggesting that a credit crunch did, in fact, occur in Korea during the first part of 1998. *First*, there was a sharp increase in the premium on corporate debt, as measured by the gap between the yields on government and corporate bonds (Figure 20, Panel A). This gap, which had averaged less than 100 basis points in the first half of 1997, jumped to 800 basis points at the end of the year and remained above its pre-crisis level through July 1998. *Second*, the wedge between the interest rates charged by banks and the yield on

Figure 18. **Growth of monetary aggregates**
Year-on-year percentage changes

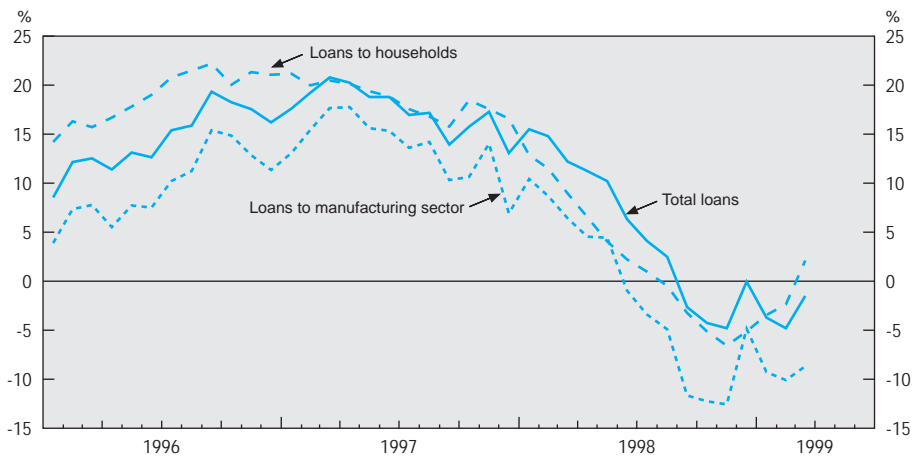


1. MCT = M2 + CD + Money in trust.

2. M3 = M2 + OFI deposits + debentures issued + commercial bills sold + CD + RP + cover bills.

Source: Bank of Korea, *Monthly Bulletin*.

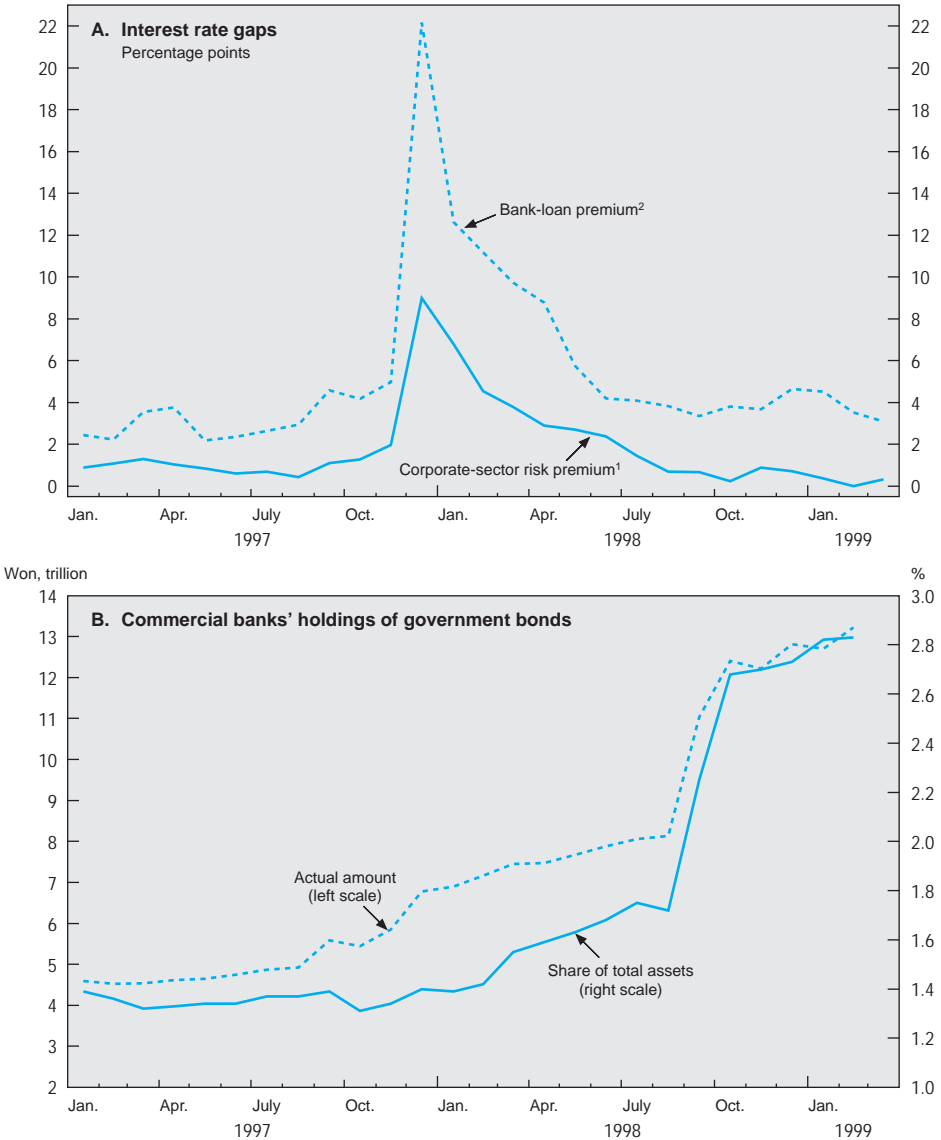
Figure 19. **Growth of bank lending¹**
Year-on-year percentage changes



1. Loans and discounts of deposit money banks.

Source: Bank of Korea, *Monthly Bulletin*.

Figure 20. Indicators of banks' willingness to lend



1. Yield on three-year corporate bonds minus that on five-year national housing bonds.
 2. Rate on overdrafts charged by commercial banks minus the yield on five-year national housing bonds.
 Source: Bank of Korea, *Monthly Bulletin*.

government bonds also increased sharply at the end of last year. The average wedge in the first half of the year was nearly 900 basis points – more than triple the year-earlier level. Although the gap has declined significantly, it remained large at the end of 1998 compared to the pre-crisis level. *Third*, there was a flight to quality in bank assets. While loans declined in absolute terms, the commercial banks' holdings of government bonds doubled both in absolute terms and as a share of total assets (Panel B). The increased share of risk-free assets likely reflects a decline in banks' willingness to lend (Ding, Domac and Ferri, 1998). *Fourth*, econometric evidence suggests that the decline in bank lending in 1998 was due in part to their reluctance to lend (Cho and Kang, 1999). Such a result is consistent with developments during past periods of financial instability, when the close link between money supply expansion and bank lending was disrupted (Baek, 1999).

The change in bank lending behaviour was due, in part, to the severity of the recession. Given the sharp rise in the bankruptcy rate, the risk of loans becoming non-performing increased significantly. A second factor was the increased emphasis on the capital adequacy ratios of banks. At the end of 1997, only about half of the commercial banks met the 8 per cent ratio, even using the lax standards in effect at the time for loan-loss reserves and losses in banks' securities holdings. Following the crisis, these standards were brought up to international norms (see Chapter III). In addition, the authorities announced in December 1997 that merchant banks would have to meet a 4 per cent capital-asset ratio by March 1998, 6 per cent by June 1998 and 8 per cent by June 1999. As for the commercial banks, the government decided in February 1998 that they would have to submit re-capitalisation plans to reach an 8 per cent ratio within a time frame of six months to two years. The decision to close five under-capitalised banks in June 1998 underlined the importance placed on this objective. To meet the stricter standards, banks limited their lending and even began to call in existing loans.

In such conditions, simply increasing the money supply was not sufficient to boost bank lending and stimulate the economy. To overcome the credit crunch – a key to economic recovery – the government has enacted several policies. *First*, it launched an ambitious programme to re-capitalise viable banks and cover their losses. By the end of 1998, W 14 trillion of public money had been used for this purpose, in addition to W 7 trillion to cover the losses at the banks which acquired the closed banks. Another W 20 trillion had been spent to purchase non-performing loans (see Chapter III). Consequently, nearly all of the remaining commercial banks met the 8 per cent capital adequacy ratio by early 1999. *Second*, the government instructed banks to roll over their loans to SMEs, except for a small proportion (about 5 per cent of the total) categorised as non-viable (see Chapter IV). Given the burdens imposed by the restructuring of large corporations, bank management was thought to be incapable of adequately evaluating

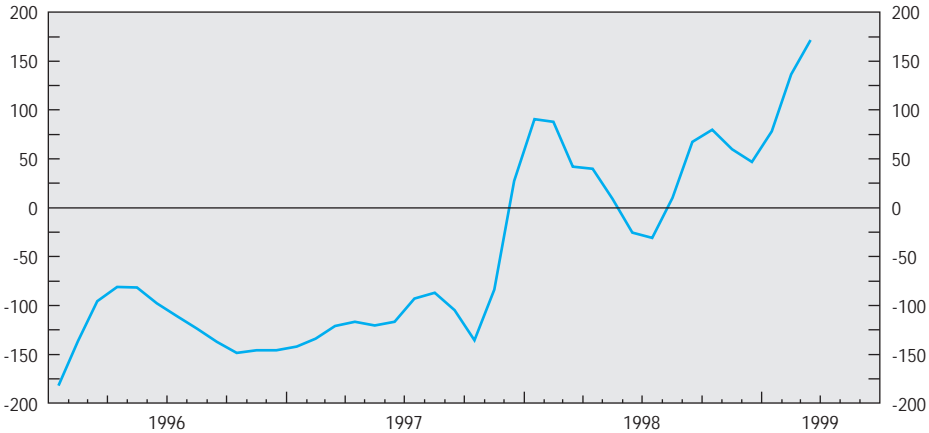
the credit risks of SMEs. *Third*, the government provided W 33 trillion of guarantees for loans to SMEs. These policies have helped to ease the credit crunch. By the end of 1998, bank lending had reached its year-earlier level.

The stance of monetary policy in 1999

The central inflation target for 1999 is a 3 per cent rise (on a yearly average basis) in the consumer price index, with a range of 1 per cent on either side. According to the Bank of Korea, an increase in the money supply (M3) of between 13 and 14 per cent is consistent with such a target in a context of a continued decline in the velocity of money. Short-term interest rates have been lowered further to support a recovery in economic activity, with the overnight rate falling below 5 per cent in April. Nevertheless, inflation is likely to undershoot the central target for 1999 given the downward pressure on prices from the rise in the exchange rate, slack labour market conditions and weak commodity prices, excluding oil (see Chapter I). As of May 1999, the CPI was 0.8 per cent above its year-earlier level. In addition to limiting inflation, the government has set an objective of further increasing foreign exchange reserves by \$5 billion by the end of 1999.

Several indicators suggest that the current level of short-term interest rates is supportive of an economic recovery. *First*, the gap between yields on short-term and long-term government bonds indicates that the stance of monetary policy is somewhat expansionary.¹⁷ This gap increased sharply during the second half of 1997 (Figure 21), as the authorities relaxed monetary policy in an effort to sustain growth in the face of the failure of several large chaebols. The tightening of policy in early 1998 following the financial crisis led to a negative gap, with the yield on five-year bonds below that on one-year bonds. With the relaxation of policy in the second half of the year, short-term yields declined more than longer-term ones, resulting in a positive gap. By March 1999, the gap had reached 170 basis points. *Second*, real interest rates have fallen to below 3 per cent, significantly below the 6.4 per cent average recorded between 1991 and 1997. *Third*, the easing of monetary policy has been a key factor in the explosive rise in the stock market price index since the autumn of 1998 (Figure 7) – underpinning the growing confidence of households and firms. In addition, the fall in land prices has been reversed by a 0.35 per cent rise in the first quarter of 1999. With the interest rate on time deposits falling from 17 to 7 per cent over the past year, savers have been shifting their funds from banks to investment trust companies and securities firms. The restoration of the stock price index to its pre-crisis level in the context of the economic recovery does not appear to be symptomatic of a speculative price bubble. Moreover, it is helping the corporate sector improve its financial structure through new share issues. A further reduction in interest rates, though, could accelerate the rise in stock prices, leading to

Figure 21. **The yield gap¹**
Basis points



1. A three-month moving average of the difference between the yields on five-year and one-year government bonds.
Source: Bank of Korea, *Monthly Bulletin*.

concerns about speculative bubbles. However, an increase in interest rates appears premature at present given the high level of excess capacity. On balance, the present stance of monetary policy appears appropriate.

Longer-term issues in monetary policy

As part of the government's programme of structural reform, the central bank was granted increased independence by the amendment of the Bank of Korea Act in April 1998. It designated the governor of the Bank of Korea as chairman of the Monetary Policy Committee, the body responsible for setting monetary policy. Prior to 1998, the Minister of Finance and Economy had served as chairman of this Committee. The Ministry of Finance and Economy (MOFE), though, still recommends one of the seven members on the committee.¹⁸ All members serve four-year terms and cannot be dismissed by the government. Despite its increased independence, the central bank works closely with the government to co-ordinate monetary and fiscal policies. While the Financial Supervisory Commission (FSC) replaced the Bank of Korea as the principal supervisor of banks in April 1998, the bank can require the FSC to include its representatives in the examination of banking institutions.

In the wake of the crisis, the Bank of Korea has given more priority to the level of interest rates in carrying out its monetary policy objectives. Given the increased uncertainty about the link between monetary aggregates and inflation, central banks in some OECD countries have shifted to a policy of inflation targeting, primarily through setting interest rates. However, such a shift in Korea appears pre-mature for several reasons.¹⁹ *First*, the central bank's ability to influence the call rate would need to be improved. As a first step, the Bank of Korea's lending rate would need to be raised to market levels so that it would have a signalling effect. Such a change would allow an end to the ceilings on aggregate credit, allowing banks to borrow from the central bank on a commercial basis. In addition, the further development of the government bond market will facilitate open market operations to influence the call rate. *Second*, there remains considerable uncertainty regarding the timing and impact of changes in short-term rates on long-term rates and hence on economic activity. This reflects the segmentation of financial markets and firms' past disregard of maturity structures in financing. Improving the transmission mechanism would require increasing the types and maturities of financial instruments. Given the difficulties of shifting to an interest rate-based policy, the priority at present should be to improve the implementation of policy by increasing transparency and accountability (Mishkin, 1998). In this regard, the central bank has tried to improve the transparency of its actions by clearly announcing its policies and formally reporting them to the National Assembly, beginning in 1998. Moreover, it hopes to improve the implementation of monetary policy by developing a proxy for M3, the intermediate target, which, at present, is available only with a delay of two months.

Recovery of the exchange rate

After having lost a considerable amount of foreign exchange by trying to support the won in the months leading up to the financial crisis, Korea adopted a floating exchange rate policy in December 1997 and eliminated daily fluctuation bands. Government intervention in the exchange market has since been limited to smoothing volatility. During 1998, the won appreciated 22 per cent against the dollar and 10 per cent against the yen (Figure 17). The key factors were the large current account surplus and inflows of foreign investment, which boosted demand for won-denominated financial instruments. After some decline during the July to September quarter – a period of turbulence in emerging markets – the won resumed its upward trend in the latter part of 1998. This continued into 1999, with the currency strengthening to less than W 1 200 per dollar in January and again in April. However, on a trade-weighted basis, the won remains about 18 per cent below its pre-crisis level. Nevertheless, the government has expressed concern about the strength of the currency and recommended that state-owned enterprises accelerate their repayment of foreign debt to reduce the supply of dollars.

In early May, domestic banks were encouraged by the authorities to repay in 1999 external debts of \$17.6 billion that will come due in 2000 and 2001.

Although the Bank of Korea no longer intervenes to maintain an exchange rate target, its influence over the value of the currency *via* domestic interest rates has been enhanced with the opening of the capital account. In the wake of the crisis, Korea acted quickly to remove remaining barriers to capital inflows, including restrictions that had been scheduled to be lifted much later. Major steps included:

- all regulations on foreign purchases of debt securities were eliminated in December 1997;
- as of July 1998, all domestic enterprises, regardless of size, were allowed to borrow without limit from overseas as long as the maturity exceeds one year;
- the limits on shareholding by non-residents, which had been set at 50 per cent for an individual investor and 55 per cent overall, were abolished in May 1998;
- foreign investment in money market instruments, such as commercial paper and trade bills, was completely liberalised by May 1998.

Korean residents have been able to purchase any type of foreign securities since April 1996.

The liberalisation of restrictions on capital flows was accompanied by a relaxation of rules governing the use of foreign exchange. The first phase of the new Foreign Exchange Transactions Act, which took effect in April 1999, was intended to establish a simple and transparent framework to replace the cumbersome laws and regulations that had governed such transactions. In particular, it replaced the positive list system with a negative list, which allows all capital account transactions except those expressly forbidden by law and presidential decree. The rule requiring that derivative transactions be based on real demand has been lifted. This far-reaching liberalisation is important in bringing Korea closer into line with OECD principles. The government had three main objectives in introducing the new system: *i*) reducing the financial costs of domestic corporations by allowing them to diversify their fund-raising sources; *ii*) increasing the competitiveness of domestic financial institutions; and *iii*) improving the credit standing of the government in international financial markets (MOFE, 1999). In addition, it may encourage foreign investment by facilitating foreign exchange transactions by companies that locate in Korea.

The new system is to be implemented in two stages, April 1999 and the end of 2000, in order to allow sufficient time to upgrade prudential, regulatory and accounting standards before full liberalisation. In particular, the government wants to improve the prudential regulations covering the foreign liabilities of Korean banks, an area where supervision was insufficient prior to the crisis.

Table 6. **The first stage of foreign exchange liberalisation**

Area	Liberalisation measures
Current account transactions	– Abolition of restrictions on companies' current account transactions with foreigners
Transition from a positive list to a negative list system	<ul style="list-style-type: none"> – Abolition of restrictions on the use of loans borrowed by the foreign subsidiary of a domestic company – Companies are allowed to borrow overseas at maturities of less than one year and issue overseas securities – Deposits by non-residents with maturities of more than one year and their investment in trust funds are allowed – Removal of restrictions on foreign direct investment abroad by companies and financial institutions (including the unrestricted establishment of overseas branches) – Companies' and financial institutions' investment in foreign real estate is permitted – Investment in overseas securities by domestic institutional investors is allowed – Domestic issuance of securities by foreigners is allowed – Companies' transactions of financial derivatives through domestic foreign exchange banks is permitted – Abolition of the real demand principle
Foreign exchange dealing	<ul style="list-style-type: none"> – All types of domestic or foreign financial institutions can deal in foreign currencies – Establishment of money exchange booths is allowed

Source: Ministry of Finance and Economy.

Responsibility in this area was given to the FSC at the beginning of 1999. The first stage of the new law eliminated the one-year limit on commercial loans while liberalising various short-term capital transactions by corporations and financial institutions (Table 6). Moreover, foreign exchange business will be opened to all financial institutions within the areas directly related to their own business. In addition, the government has established a system to monitor comprehensively short-term capital movements and an “early warning system” to prevent another foreign exchange crisis (Table 7). To limit the risk of a systemic crisis, the liberalisation of short-term capital transactions has been limited to “financially-sound companies”. The new law also establishes a safeguard system to be used if such a crisis does occur. Thus far, though, the foreign exchange law has had little impact, given the sharp decline in short-term lending rates in Korea to around 7 per cent. Consequently, there is little incentive to borrow overseas since Korean institutions must pay a 3 percentage point premium over the LIBOR, which is currently around 5 per cent.

Table 7. **Measures to prevent a foreign exchange crisis**

Area	Measures
Establishment of a monitoring system	<ul style="list-style-type: none"> - Creation of a computer system to monitor speculative transactions in the foreign exchange, stock, bond and futures markets - Establishment of an "International Financial Centre" to provide an early warning system against a foreign currency crisis
Precautionary measures	<ul style="list-style-type: none"> - Restrictions on short-term overseas borrowing by financially unsound companies - Restrictions on foreigners' borrowing of more than W 100 million at a maturity of less than one year - Requirement that securities with less than one-year maturity issued domestically by foreigners be approved by MOFE
Emergency measures	<ul style="list-style-type: none"> - Partial or complete freeze on foreign exchange transactions - Concentration of foreign currencies in the central bank - Capital transaction authorisation system - A variable deposit requirement on capital inflows

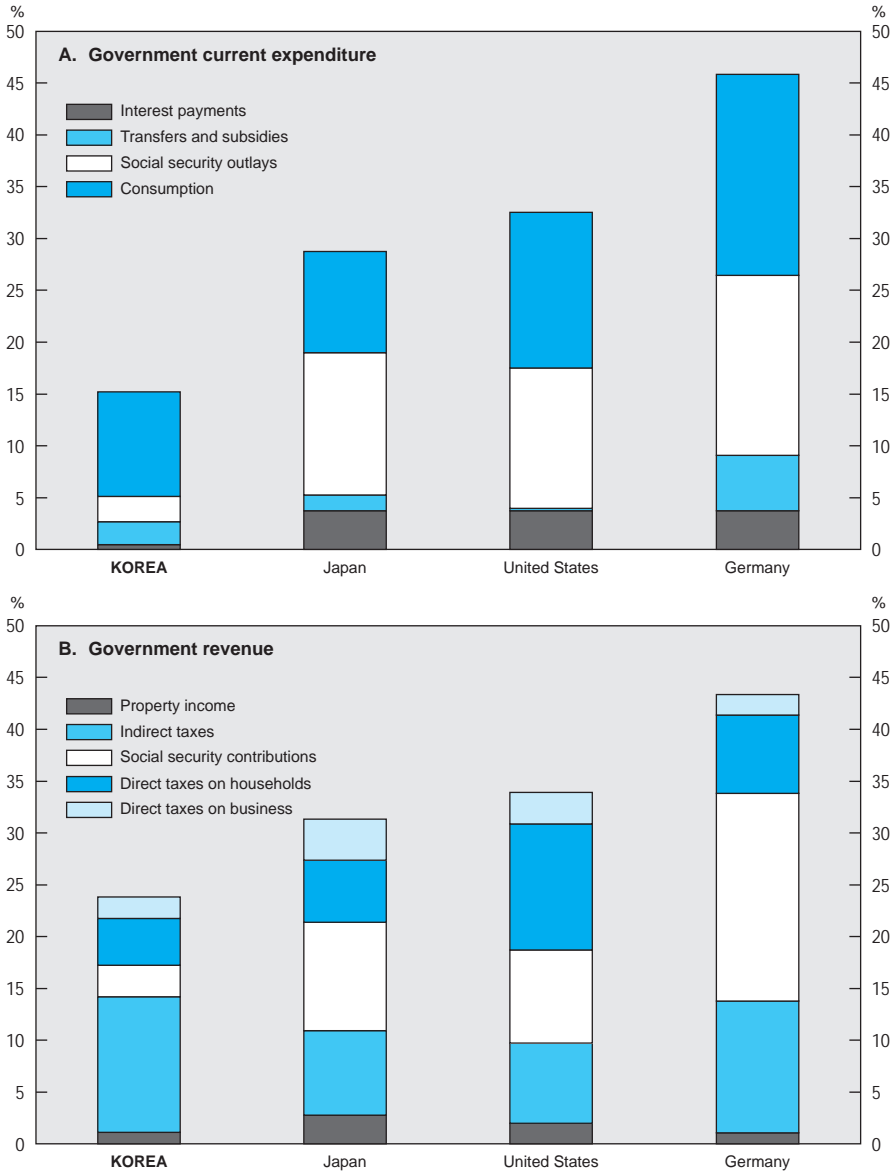
Source: Ministry of Finance and Economy.

Fiscal policy

The use of fiscal policy in 1998 to limit the downturn

Korea achieved its objective of balancing the consolidated central government budget during the four years prior to the financial crisis (Box 3). In the wake of the crisis, the government initially announced a tight fiscal policy aimed at achieving a budget balance or even a small surplus in 1998. Consequently, a supplementary budget was introduced in March 1998 to raise W 4 trillion (about 1 per cent of GDP) of revenue through higher taxes on energy and an increase in the withholding tax on interest income.²⁰ In addition to providing additional revenue, these measures were intended to encourage energy conservation and improve the equity of the tax system. The higher withholding tax on interest income, combined with the extraordinarily high level of interest rates in the first half of the year, resulted in a rise in income tax receipts despite the decline in nominal wages (Table 9). In total, the tax changes implemented in 1998 raised about W 2 trillion of additional government revenue.²¹ This was more than offset, however, by the impact of the recession on revenue. The decline in private consumption, in particular, led to a sharp fall in VAT and special consumption tax receipts, while the contraction of imports reduced customs duties. As a result, total tax revenue declined by 3 per cent.²²

Figure 22. **General government expenditure and revenue**
As a share of GDP in 1997



Source: OECD.

Box 3. Key features of public finances in Korea

The size of government is relatively small in Korea compared to the most advanced OECD countries. Current public expenditure was only 15 per cent of GDP in 1997 – about half the level in the United States and Japan and a third of that in Germany (Figure 22). The small size of government is due, in part, to the low level of social security outlays in Korea, where the pension system was only introduced in 1988 and has few beneficiaries to date. Another factor is interest payments; such outlays accounted for only ½ per cent of GDP in Korea, reflecting the small amount of gross public debt, compared to almost 4 per cent in the three major OECD countries. Looking at central government expenditure (including capital outlays) by function shows that economic-related activities are a priority (Table 8). In addition, educational expenditures by the government account for 3½ per cent of GDP, with most spending focused on pre-primary and primary schools. Outlays for defence are relatively high at 3 per cent, exceeding spending on health, social security and welfare. The relatively low level of expenditures in this area reflects the young population and the absence of an extensive social safety net.

Government revenue in Korea is marked by a heavy reliance on indirect taxes, which account for more than half of revenues compared to only a fourth in the major

Table 8. Central government expenditures by function

1997		
	Per cent of total	Per cent of GDP
Economic services	24.2	5.4
Fuel and energy	1.4	0.3
Agriculture, forestry and fisheries	8.0	1.8
Industrial sector	3.2	0.7
Transport and communications	10.2	2.3
Other economic services	1.3	0.3
Education	16.1	3.6
Pre-primary and primary	13.8	3.1
Secondary and tertiary	1.9	0.4
National defence	13.1	2.9
Health, social security and welfare	10.3	2.3
Housing and community amenities	6.7	1.5
Public order and safety	4.8	1.1
General public services	4.2	0.9
Foreign aid	0.2	0.0
Transfers to lower levels of government	3.3	0.7
Other	17.4	3.8
Total	100.0	21.9

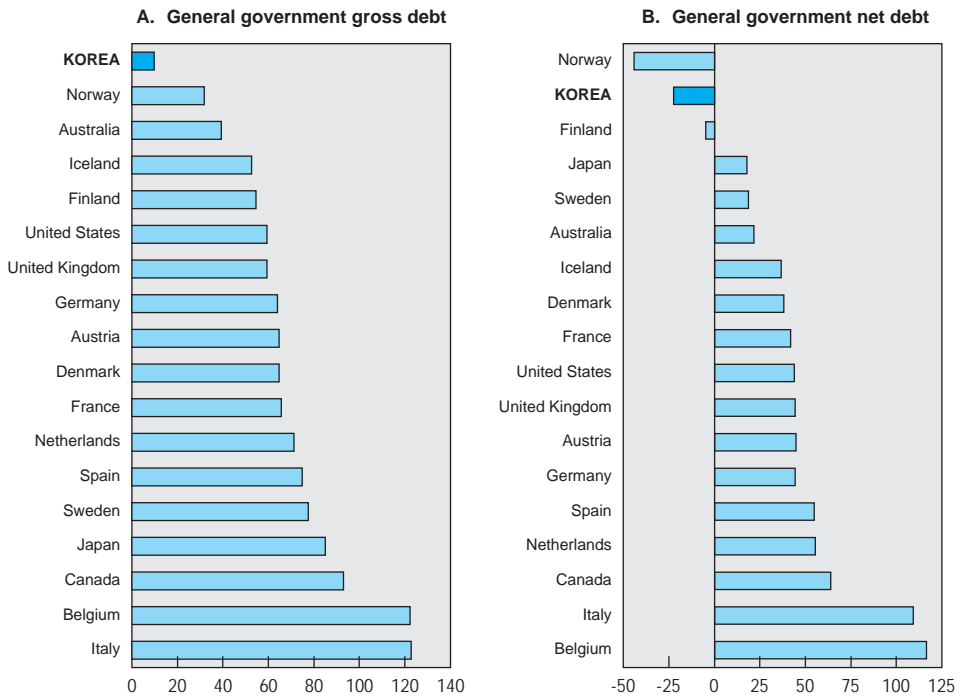
Source: Ministry of Finance and Economy.

(continued on next page)

(continued)

OECD countries (Figure 22, Panel B). Indirect taxes include a value-added tax set at 10 per cent and special consumption taxes imposed on cars, consumer electronics and luxury items. Direct taxes on households and business (including social security contributions) are relatively less important in Korea. Although there are four income tax brackets ranging from 10 to 40 per cent, only about half of the labour force is subject to income tax. Government spending tends to be adjusted to the level of revenues in order to balance the consolidated central government budget, resulting in a low level of public debt. As of 1997, the government's gross financial liabilities were equivalent to 11 per cent of GDP, the lowest in the OECD area (Figure 23, Panel A). In addition, the government has acquired a large amount of assets, due in part to the immaturity of the national pension system. As a result, Korea is one of only three OECD countries in which the government is a net creditor (Panel B).

Figure 23. **General government debt**¹
Per cent of GDP in 1997



1. For the 18 OECD countries for which general government net debt is available.
Source: OECD, *National Accounts*.

Table 9. **Government revenues**

Trillions of won

	1997	1998 ¹	Percentage change	1999 ²	Percentage change
A. Total tax revenue	69.9	68.5	-3.0	71.2	5.0
Income tax	14.9	17.2	15.4	15.5	-9.9
Corporation tax	9.4	10.8	14.9	8.3	-23.1
Inheritance tax	1.2	0.7	-41.7	0.9	28.6
VAT	19.5	15.7	-19.5	18.6	18.5
Special consumption taxes	3.0	2.2	-26.7	2.1	-4.5
Transportation tax	5.5	6.5	18.2	8.8	35.3
Customs duties	5.8	3.8	-34.5	5.4	42.1
Other taxes	10.6	10.9	2.8	11.5	5.5
B. Social security contributions	8.5	10.5	23.5	11.0	4.8
C. Non-tax revenue	13.6	17.5	28.7	17.3	-1.1
Interest	5.6	9.9	76.8		
Fines and penalties	5.0	4.6	-8.6		
Other	3.0	3.0	0.0		
D. Capital revenues	1.3	0.9	-30.8	1.5	66.7
E. Privatisation revenues	0.6	0.3	-50.0	2.1	700.0
Total	93.9	97.0	3.6	103.1	6.3
Per cent of GDP	20.7	21.6		21.2	

1. 1998 figures are actual.

2. Figures for 1999 are based on the first supplementary budget.

Source: Ministry of Finance and Economy.

Although tax revenue fell, there were two special factors that boosted government revenue in 1998. *First*, there was a W 4.3 trillion rise in the interest receipts of the government, which has a substantial stock of financial assets (Table 9). *Second*, social security contributions generated an additional W 2 trillion. Together, these factors increased revenue by almost 1½ per cent of GDP. Consequently, total government revenue increased by 3.6 per cent, boosting its share of GDP from 20.7 per cent in 1997 to 21.6 per cent in 1998.

As the depth of the recession became evident, however, the government changed its deficit objective for 1998 to allow increased spending to address pressing social demands. The deficit target was widened to 1 per cent of GDP in May and further to 4 per cent in July. Following the passage of the second supplementary budget in September, the deficit objective was raised to 5 per cent of GDP. Spending was to be increased in the following areas:

- W 3.6 trillion was to be spent to cover the interest payments on bonds issued by the Korea Deposit Insurance Corporation (KDIC) and the Korea Asset Management Company (KAMCO), which were authorised

to issue W 64 trillion of publicly-guaranteed bonds to rehabilitate the financial sector²³ (see Chapter III);

- W 3.9 trillion was allocated to assist SMEs faced with a credit crunch (see Chapter IV);
- W 3.8 trillion of extra spending was to be used to assist the unemployed and expand the social safety net (see Chapter V).

In the event, spending to support financial sector restructuring was only W 1.3 trillion in 1998, reflecting the decline in interest rates and the fact that KDIC and KAMCO together had only issued W 40 trillion of bonds by the end of the year. In addition, increased outlays in these areas were partially offset by a 15 per cent decline in the number of public servants and a 10 to 20 per cent cut in their pay. Nevertheless, consolidated central government spending increased by an estimated 17 per cent in 1998 – considerably more than the 6 per cent rise planned in the initial budget for the year.²⁴ As a share of GDP, outlays jumped almost 4 percentage points to 25.7 per cent (Table 10).

Table 10. **Government expenditures and budget balance**

Trillions of won

	1998	1999 ¹	Percentage increase
Financial restructuring	3.6	5.3	47.7
Unemployment and social safety net	5.7	9.2	63.2
Culture and art	0.4	0.5	34.0
Small and medium-sized enterprises	3.9	4.0	3.5
Law and order	0.8	0.9	10.2
Investment in infrastructure	11.5	12.2	6.0
Science and technology	3.6	3.8	5.1
Environment	1.8	1.8	2.5
National defence	13.8	13.7	-0.4
Education	17.5	17.5	-0.2
Agriculture, forestry and fishery	8.5	8.1	-5.1
Civil service salaries	14.4	13.6	-5.7
Consolidated central government¹	115.7	129.3	11.8
Per cent of GDP	25.7	26.6	..
Budget balance	-14.3	-24.5	71.3
Per cent of GDP	-3.2	-5.2	..

1. Derived from the first supplementary budget. With the acceleration of economic growth, the government now expects a deficit of around 4 per cent of GDP in 1999.

Source: Ministry of Finance and Economy.

Consequently, the consolidated budget deficit widened significantly to 3.2 per cent of GDP in 1998. While it was below the revised deficit target of 5 per cent, the stance of fiscal policy appeared broadly neutral, according to Secretariat calculations,²⁵ given the depth of the recession. Moreover, the areas of increased spending – the interest costs of the financial restructuring programme, funds for SMEs hurt by the credit crunch and assistance to the unemployed – played a key role in ending the contraction in output by early 1999. Including off-budget measures, notably the W 64 trillion financial restructuring programme and the credit guarantees for loans to SMEs, the overall effect of public-sector operations was clearly expansionary.

Fiscal policy in 1999

The stance of fiscal policy appears to be somewhat expansionary in 1999. The consolidated deficit was expected to widen further, from W 14.3 to W 24.5 trillion, increasing to around 5 per cent of GDP (Table 10). Including the first supplementary budget, government spending on a consolidated basis will rise by 12 per cent in 1999. The major expenditure increases will be in the priorities that emerged in last year's budget – financial sector restructuring, the unemployed and SMEs. The interest costs on public bonds issued by KDIC and KAMCO for the rehabilitation of the financial sector are projected to almost double to about W 6.9 trillion in the initial budget. Spending to help the unemployed, social welfare and assistance for SMEs will also increase sharply once again. In contrast, outlays for defence, education and agriculture – areas where increased efficiency is thought to be possible – are to be reduced.²⁶ In addition, the government wage bill is to be cut by another 6 per cent in 1999. Government receipts are projected to rise by 6.3 per cent in 1999 on a consolidated basis despite expected declines in two of the largest tax categories – the income and corporation taxes. The reduction in income tax receipts, despite a likely recovery in wages, reflects a fall in interest income in the current low interest rate environment. The decline in corporate tax revenues is due to the poor results recorded during 1998. However, government receipts are expected to be sustained by large increases in indirect taxes and privatisation revenues.

The supplementary budget in April 1999 added W 2.6 trillion of expenditure to support the unemployed, improve the social safety net and to promote job creation. These outlays are to be financed by extra revenue from the central bank's surplus and the downward revision of the projected interest cost of financial restructuring. Given the decline in interest rates on three-year public bonds to around 6½ per cent, outlays in this category have been revised down to W 5.3 trillion. The deficit in 1999 is now expected to be around 4 per cent of GDP, primarily reflecting higher tax revenue due to the faster-than-expected recovery and the widening of the tax base. In addition, some expenditures, such as those

to support the unemployed, can be reduced from the level set by the initial budget, given the economic recovery underway.

The impact on government debt

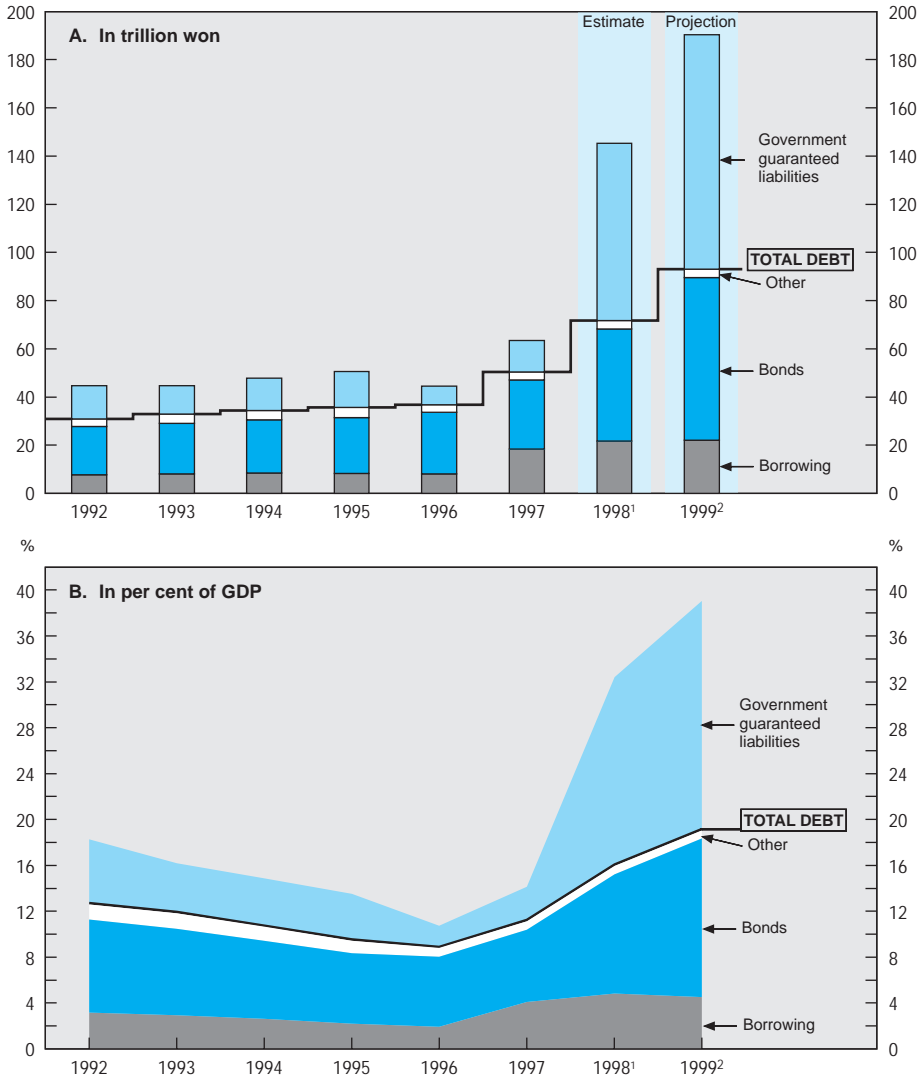
The financial crisis and the resulting fiscal deficits have almost doubled the central government's gross debt from 8.8 per cent of GDP in 1996 to an estimated 16 per cent in 1998 (Figure 24). Government borrowing was increased by loans from the World Bank at the end of 1997. In addition, government bond issues have risen due to the large fiscal deficit in 1998 and the issue of \$4 billion of bonds to boost foreign exchange reserves. With another substantial budget deficit planned for 1999, total central government gross debt is projected to reach 19 per cent of GDP (Table 11). Trading in government bonds has increased sharply owing to the rise in debt and steps to increase liquidity (see Chapter III). In addition to the central government debt, local governments are allowed to borrow in order to fund investment. As of the end of 1998, they had W 16 trillion (4 per cent of GDP) of debt, mainly in the form of loans. Consequently, general government gross debt has risen from about 12 per cent in 1996 to 20 per cent in 1998, with a further increase to 22 per cent expected this year.

The rise in debt was accompanied by a sharp expansion in government guaranteed debt from less than 3 per cent of GDP in 1997 to more than 16 per cent in 1998 (Table 11). One factor was the decision to guarantee about \$22 billion of external debt of banks. In addition, the financial sector rehabilitation programme has led to a large rise in guaranteed bonds. As of the end of 1998, W 21 trillion of bonds had been issued by the KDIC to re-capitalise viable banks and to offset the losses incurred by strong banks that absorbed weak ones (see Chapter III). Meanwhile, KAMCO issued W 19 trillion of bonds to address the non-performing loan problem. The sum of central government gross debt and guaranteed liabilities increased from 14 per cent of GDP in 1997 to 32 per cent in 1998 and is projected to rise further to 39 per cent this year, assuming that KAMCO and KDIC increase their bond issues to the level authorised by law (Figure 24). Including local government debt would boost the total to 42 per cent. However, the government holds a significant stock of assets, due in part to the accumulated surpluses in the social security system,²⁷ making it a net creditor on a general government basis (see Box 3). This remains the case in 1999, although its net creditor position, which was equal to almost a fourth of GDP in 1997, may have been reduced by half.

Fiscal policy in 2000 and beyond

Although the government's financial position remains relatively healthy compared to the average of other OECD countries, a continued run-up in debt would raise several concerns. *First*, the total cost of restructuring the financial

Figure 24. Central government gross debt and guaranteed liabilities



1. Estimate by the Ministry of Finance and Economy.
 2. Projection of total debt by the Ministry of Finance and Economy. For government guaranteed liabilities, it is assumed that bond issues by KDIC and KAMCO reach the full amount authorised and other guarantees remain unchanged.
 Source: Ministry of Finance and Economy.

Table 11. **Gross public debt**

Trillions of won

	1997	Per cent of GDP	1998	Per cent of GDP	1999	Per cent of GDP
Central government ¹	50.5	11.1	71.7	16.0	93.0	19.0
Borrowing	18.5	4.1	21.7	4.8	22.1	4.5
Domestic	3.2	0.7	2.9	0.6	2.5	0.5
External	15.3	3.4	18.8	4.2	19.5	4.0
Bonds	28.6	6.3	46.6	10.4	67.6	13.8
Won-denominated	28.6	6.3	42.5	9.5	63.6	13.0
Dollar-denominated	0.0	0.0	4.1	0.9	4.0	0.8
Other	3.4	0.8	3.4	0.8	3.4	0.7
Local government	16.2	3.6	16.2	3.6	16.2	3.3
Won-denominated	15.0	3.3	15.0	3.3	15.0	3.1
Dollar-denominated	1.2	0.3	1.2	0.3	1.2	0.2
Government guaranteed debt ²	13.0	2.9	73.6	16.4	97.3	19.9
In won	11.5	2.5	42.9	9.5	66.7	13.7
KDIC	7.0	1.5	21.0	4.7	31.5	6.4
KAMCO	0.0	0.0	19.2	4.3	32.5	6.7
KDB	3.7	0.8	1.9	0.4	1.9	0.4
Other	0.8	0.2	0.8	0.2	0.8	0.2
In foreign currency	1.5	0.3	30.6	6.8	30.6	6.3
External debt of private banks	0.0	0.0	26.7	5.9	26.7	5.5
Other	1.5	0.3	3.9	0.9	3.9	0.8
Total	79.7	17.6	161.5	35.9	206.5	42.3
Won-denominated	61.7	13.6	106.7	23.7	151.2	30.9
Dollar-denominated	18.0	4.0	54.7	12.2	55.3	11.3

1. Estimate for 1998 is by the Ministry of Finance and Economy (MOFE). Projection for the central government in 1999 is by MOFE and no change in local government debt is assumed.

2. Assumes that bond issues by KDIC and KAMCO reach the full amount authorised and that all other guarantees remain unchanged.

Source: Ministry of Finance and Economy.

sector is still uncertain and may rise further. *Second*, Korea is facing a rapid demographic transition that will more than double the percentage of the population over the age of 65 from 6.6 per cent in 1999 to 14.3 per cent by 2022. As the public pension system, which was established on a pay-as-you-go basis in 1988, reaches maturity, government expenditures on pensions will rise sharply.²⁸ *Third*, the on-going economic implosion of North Korea raises the spectre of a sudden collapse that would impose enormous burdens on the South. The difficulties of such a challenge would be exacerbated by a high level of government debt. These considerations make a medium-term plan to bring the government budget back into balance a priority.

The government has, in fact, announced a fiscal plan for the period 1999 until 2002, its last year in office, as the basis for balancing the budget in the year 2006. This would imply that central government debt peaks at 24 per cent of GDP in 2002. The plan calls for limiting the growth in spending to about two percentage points below that of nominal GDP. This implies considerable restraint, as government spending expanded at an average of 3 percentage points above nominal GDP growth in the decade prior to the crisis. The preliminary guidelines for the 2000 budget impose continued spending restraint on agriculture, defence, education and civil servant salaries. In addition, the plan to re-organise the government is expected to further reduce the number of civil servants. With nominal GDP projected to expand at about 8 per cent annually, government expenditure growth of around 6 per cent a year would reduce its share of GDP from 25.7 per cent in 1999 to about 22½ per cent in 2006. Given the accelerating pace of the economic recovery, the government now expects fiscal balance to be achieved one to two years before 2006.

Achieving a balanced budget in 2006 would thus require some rise as well in government revenues from the 21.2 per cent of GDP level projected for this year. Such a rise, though, should not necessitate a large rise in tax rates. Instead, expanding the tax base by reducing exemptions and loopholes could play the major role in boosting revenue. The government plans to introduce a “sunset clause” that would phase out tax exemptions after two to five years. In addition, it is important to improve tax collection through computerisation and better management of the system. In particular, it is estimated that only about half of the income of the self-employed was reported in 1994, suggesting an underground economy equivalent to about 10 per cent of GDP (Yoo, 1997). Finally, the special treatment granted to the self-employed and small proprietors under the VAT system could be reduced.

Increasing the transparency of fiscal policy would help achieve fiscal consolidation. Although fiscal policy targets the consolidated central government balance, the annual budgets prepared before each fiscal year do not include projections of planned expenditures of the central government on a consolidated basis. This is due, in part, to the numerous special accounts that complicate the budget system. Many of these are funded by earmarked taxes. As these funds operate independently, it is difficult to implement a coherent fiscal policy. Reducing the number of special accounts by consolidating funds with similar functions and abolishing those that have outlived their purpose would improve the transparency of fiscal policy. It would also help the government achieve its objective of more timely reporting of fiscal data. The authorities have promised that monthly data on revenue, expenditure and financing on a consolidated central government basis will be made available with a lag of less than one month beginning in mid-1999. It would also be beneficial to aim at broadening the fiscal objective by consolidating local and central government accounts.

Privatisation

State-owned enterprises (SOEs) remain an important part of the Korean economy even after the implementation of a series of privatisation programmes in the early 1990s. The remaining 108 SOEs still employed more than 210 000 people in 1998, with a combined budget of close to W 100 trillion.²⁹ Although Korean SOEs have a reputation for profitability and financial soundness, this is due, to a large extent, to the monopolistic privileges enjoyed by most of them. Reform and privatisation of SOEs should thus be an integral part of the effort to introduce appropriate corporate governance practices and to restructure the corporate sector.

A law passed at the end of 1997 attempted to improve corporate governance and transparency by implementing a “private management system” that granted the SOEs more autonomy. The system was initially applied to four major SOEs; Korea Tobacco and Ginseng Corp., Korea Gas Corp. (KOGAS), Korea Telecom Corp. and Korea Heavy Industries and Construction Co (Hanjung). Under this law, the CEO, who is to be hired after a search that includes advertising in daily newspapers, is allowed more autonomy in personnel and budget affairs. Moreover, the CEO is assisted by independent directors. In general, however, opposition from the SOEs themselves and labour unions appears to be slowing the pace of restructuring and privatisation.

The new government announced a relatively ambitious privatisation programme in 1998 for eleven large SOEs and 61 subsidiaries (Table 12). Five of the companies and 21 subsidiaries were to be privatised immediately. Some of these companies had already been partly opened to the public, although with no managerial control implications. The rationale for privatisation is to enhance economic efficiency, improve the quality of services, reduce the government’s involvement in commercial activities and to generate revenue to pay for restructuring. The urgent need for foreign exchange in the wake of the financial crisis was also a motivation for this plan, which is directed by the Ministry of Planning and Budget.³⁰ As the external position of the economy stabilised, however, implementation of the programme fell short of initial announcements. The government has sold only three out of the eleven enterprises included in the 1998 programme for a total of W 550 billion in 1998. The pace, however, has accelerated with sales of W 2.3 trillion already in 1999, surpassing its target of W 2.1 trillion for the year. Moreover, it plans to sell another W 1.8 trillion of assets during the remainder of 1999.

Privatisation will be driven in 1999 by the goal of increasing corporate efficiency rather than foreign exchange earnings. Six companies are expected to see at least some shift in their control and corporate governance structure as a result of privatisation: KOGAS will sell around 48 per cent of its capital in making strategic alliances; all assets of the Korea General Chemistry Corporation are

Table 12. **Privatisation programme**¹

	Timetable for sale	Government- controlled shares ² (per cent)	Shares planned for sale ³	Participation by foreign investors ⁴
Korea Tobacco and Ginseng Corporation	1998-1999	42.5	25.0	25% aggregate limit
Korea Telecom Corporation	1998-2000	71.2	37.8 ⁵	33% aggregate limit
Korea Electrical Power Corporation (KEPCO)	1998-1999	62.4	5.0	30% aggregate limit
Daehan Oil Pipeline Corporation	By 2000	51.7	48.8	No restriction
Korea District Heating Corporation	By 2001	86.2	51.0 or more	No restriction
Korea Gas Corporation (KOGAS)	By 1999	85.7	48.4 ⁶	30% aggregate limit
Pohang Steel and Iron Corporation (POSCO)	1998-	26.7	26.7	30% aggregate limit
Korea Heavy Industries and Construction Company Limited (Hanjung)	1999	84.3	51.0 or more	No limit on foreign ownership
Korea Technology Banking Corporation	1998	10.2	10.2	No restriction
National Textbook Corporation ⁷	1998	86.5	86.5	No restriction

1. Announced in July and August 1998.

2. Includes the shareholdings of the government-capitalised public enterprises.

3. Actual share to be sold may be subject to small changes without impairing the intent of the programmes.

4. Limits on individual ownership, ranging from 7 to 15 per cent, were also imposed on the five companies with ceilings on foreign ownership.

5. Issuance of 10 per cent of new shares and public offering of 30.6 per cent of KT shares.

6. Public offering of new shares amounting to W 250 billion.

7. Completely sold in November 1998.

Source: Planning and Budget Commission.

expected to be sold and the company will be liquidated; a 15 per cent stake in Korea Telecom will be sold to a strategic investor; POSCO and Hanjung will be completely privatised through the capital market or open bidding; and a stake of more than 25 per cent in Korea Tobacco and Ginseng is expected to be sold. The rest of the SOEs will be tapping the capital markets for equity with only minor consequences for their control structure. In the case of five of the SOEs to be privatised, including POSCO and Korea Telecom, ceilings have been imposed on individual holdings (by nationals as well as foreigners), in addition to an overall limit on foreign ownership. Further accelerating the pace of privatisation and reform of SOEs would bring several benefits:

- opening up areas of the economy which hitherto have functioned outside markets would signal a deeper, longer-term commitment to reforms that would replace the old pattern of government involvement with a shift to market-based models of corporate governance and market competition;
- it would provide an opportunity to deepen domestic capital markets with securities from large, non-chaebol corporations; privatisation has been driving the impressive growth of equity markets in some other major OECD economies, such as Italy, Spain and France (OECD, 1999);
- it could prove to be an opportunity to enhance worker participation in corporate reforms by providing for employee share ownership plans and increasing employee stakes in the result of privatisation.

In addition to these structural benefits, privatisation would generate government revenue during a period in which Korea is facing budget deficits and large liabilities resulting from the costs of financial sector restructuring.

III. Reforming the financial sector

Since late 1997, the government has faced two serious challenges in the financial sector that had to be addressed simultaneously. First, it had to deal with Korea's financial crisis. Beginning in early 1997, a chain of bankruptcies in non-financial companies has had serious repercussions on the financial sector. Virtually all financial institutions have suffered declines in balance-sheet quality, pushing a large part of them to and, in some cases, beyond the brink of insolvency, and threatening a systemic crisis in the financial system. At the end of 1997, two of the country's largest banks were insolvent while the rise in non-performing loans (NPLs) threatened the solvency of an even larger number of banks. In addition, a number of non-bank financial institutions, such as merchant banks, securities companies, insurance companies and leasing companies, were also found to be insolvent. The authorities have been developing a strategy to restore the financial system to a prudentially sound basis, an effort that has already required large expenditures.

The second challenge, which is of a more long-term nature, has been to bring about a profound change in the way that financial institutions and markets operate, moving from a system with an extremely high level of state guidance to a market-based system. In the past, the financial system, and especially the banks, had been used by government planners as a means to channel financial resources to targeted activities. By relegating profitability and prudential soundness to the ranks of secondary considerations, this policy approach left financial institutions with few incentives to control costs, develop innovative products or to build strong credit cultures. The tacit policy of never allowing financial institutions to fail exacerbated these tendencies. The ability of firms to expand without facing adequate discipline from the credit markets also weakened responsibility in the corporate sector. Financial institutions' inability to act independently and to monitor the corporate sector no doubt contributed to some of the weaknesses, such as excessive leverage, the development of excess capacity in many industrial sectors and declining profitability, which made the economy more vulnerable to crisis (see Chapter I).

This chapter reviews the progress in rehabilitating the financial sector over the past 18 months and the key problems facing the Korean authorities. The first section provides an overview of the legal and institutional framework of reform. The following sections examine developments in the commercial banking and non-bank financial institution sectors. The role of the Korea Asset Management Corporation in addressing the non-performing loan problem is discussed in the fourth section, followed by a review of efforts to develop capital markets. The chapter concludes with an assessment of progress to date and remaining issues.

Legal and institutional framework

The administration elected in December 1997 responded to the crisis with a comprehensive programme of market opening and deregulation, which included an acceleration of financial reform.³¹ The latter included measures to improve the legal framework, financial supervision and accounting and disclosure rules.

The legal underpinning of financial reform

The adoption of 15 major pieces of financial reform legislation in December 1997 is transforming the institutional and regulatory basis of the financial system by bringing it closer in line with the consensus among OECD countries. Most notably, the General Banking Law and the Financial Industry Restructuring Act allowed the formation of firms offering a wide range of financial services, thus eliminating many functional and institutional rigidities. Legislation also established more clearly the governance framework for financial institutions and authorised the introduction of new products. A second wave of legislation in September 1998 strengthened procedures for restructuring financial institutions and introduced asset-backed securities and collective investments (mutual funds). In addition, it refined the Depositor Protection Act and laws related to the investment trust business.

These reforms were accompanied by a redistribution of functions and responsibilities among the various official bodies involved in financial-sector issues. The Ministry of Finance and Economy (MOFE) retains overall responsibility for the legal framework, as well as the licensing of financial institutions, but has given up most of its supervisory functions. The Bank of Korea, which was previously responsible for the supervision of commercial banks, now focuses more narrowly on the formulation of monetary policy, while maintaining its role as the lender of last resort to ensure systemic stability. Supervisory power has been vested in a single agency – the Financial Supervisory Commission (FSC) – which

has a strong legal mandate to enforce rigorous prudential rules and to take charge of the restructuring of financial institutions (see below).

Two other institutions were given important tasks in financial restructuring. *First*, the Korea Asset Management Corporation (KAMCO) was assigned the task of purchasing impaired assets from financial institutions and of disposing of those assets. Prior to February 1998 it purchased impaired assets without conditions in order to ease the burden of financial institutions. Since then, however, such purchases have been limited to operations approved by the FSC to restructure financial institutions. The liquidation of assets, which began on a small scale in 1998, is expected to expand sharply in 1999. *Second*, the Korea Deposit Insurance Corporation (KDIC) was created to introduce a system of deposit insurance based upon limited guarantees for depositors, with premia based upon the prudential soundness of each insured institution. In order to preserve confidence in the banking system and prevent a run on deposits, the government provided a blanket guarantee covering all bank deposits, as well as some other liabilities of financial institutions, in 1997. After 2001, this system will revert to a partial deposit insurance system. The KDIC has also participated in the restructuring process by providing funds for re-capitalisation of banks and the reimbursement of depositors in other financial institutions. The activities of KAMCO and KDIC have required significant expenditures, which have been raised by the issue of government guaranteed bonds. Between late 1997 and the end of 1998, expenditures for the purchase of impaired assets, re-capitalisation of financial institutions and reimbursement of depositors amounted to some W 41 trillion (Table 13),³² concentrated in the commercial banks. Total authorised expenditures of W 64 trillion amount to 14 per cent of GDP, putting the cost on par with that in Mexico.

Financial supervision

Supervisory practices in most areas lagged considerably behind those in more advanced OECD countries, thus creating a number of weaknesses in the financial system. The establishment of the FSC in April 1998 marked an important turning point. The four existing agencies, which supervised banks, securities companies, insurance firms and merchant banks, were unified into the Financial Supervisory Service (FSS), the executive body of the FSC. In addition to the FSS, which operates on an institutional basis, the Securities and Futures Commission (SFC) oversees practices in markets such as securities and exchange-trade derivatives. The FSC, located in the prime minister's office, has considerably more independence than supervisory agencies in the past. In addition, the president issued a decree reaffirming the important role of supervision and guaranteeing the independence of supervisors. The new unified approach will help overcome the problems related to the fragmented approach used prior to 1998, which had resulted in inconsistent treatment of various institutions. Indeed, some segments

Table 13. **Fiscal support for financial restructuring in an international perspective**

Trillions of won

	Before May ¹ 1998	May to December 1998	Planned	Total	As per cent of GDP
A. Korea					
KAMCO purchases of NPLs	7.5	12.4	12.6	32.5	7.2
Recapitalisation of banks and deposit repayments by KDIC	6.5	14.5	10.5	31.5	7.0
Total	14.0	26.9	23.1	64.0	14.2
Crisis period				Cost as share of GDP	
B. In other countries					
OECD countries					
Finland	1991-93			8	
Norway	1987-89			3-4	
Sweden	1990-93			4-6	
United States	1984-91			2-5	
Hungary	1991-95			10-11	
Mexico	1995-97			14	
Asia					
Indonesia	1992-94			2	
Malaysia	1985-88			5	
Philippines	1981-87			3	
Latin America					
Argentina	1980-82			55	
Chile	1981-83			32-41	
Columbia	1982-87			5	
Uruguay	1981-84			7	
Venezuela	1994-95			13	
Others					
Estonia	1992-94			1-2	
Kazakhstan	1991-95			3-6	

1. The W 64 trillion financial restructuring plan was announced in May 1998. It is financed by publicly-guaranteed bonds, with the interest costs, which totalled W 1.3 trillion in 1998, borne by the central government budget.
Source: Financial Supervisory Commission and Deutsche Bank (1997).

of the financial system had developed mainly in response to the regulatory constraints imposed on other institutions. The FSC, as the single regulator, is in a position to provide comparable regulation of similar products and of institutions engaged in similar activities. For example, prudential rules applied to commercial banks will be extended to other types of banks. Moreover, the FSC can ensure that no financial institutions are subjected to lax supervisory regimes. In recent years, a number of other OECD countries have opted for a single regulator, recognising that the differences between various types of financial products have

already narrowed and are likely to narrow further with continued deregulation. In addition, a unified supervisory approach appears most appropriate for the increasing number of multi-purpose financial institutions offering a mix of banking, investment and insurance products.

The FSC has attempted to follow four principles in dealing with the impact of the crisis on the financial system. The *first* is to adopt a broadly similar approach in all sectors, even though there are differences in the applications between sectors. The *second* is to avoid direct interference in the decision making of institutions while requiring that they meet high prudential standards. The *third* is to utilise the best supervisory techniques as defined by international organisations of supervisory authorities, including the BIS, the IOSCO and the IASA. This includes applying quantitative standards of risk, such as the BIS capital adequacy ratio for banks and merchant banks, the operational net capital ratio for the securities companies and internationally recognised measures of solvency for insurance companies. The information content of these ratios is to be improved by the inclusion of measures of market risk (see below).

A fourth principle is to refrain from regulatory forbearance. Under the new Prompt Corrective Action (PCA) system, supervisors are obliged to act when the quantitative risk indicators for financial institutions mentioned above fall below specific thresholds. PCA consists of three sets of progressively more stringent corrective procedures applied to unsound financial institutions:

- *management improvement recommendations*: a warning to the institution and its senior management that includes orders to improve staff or organisation of management, change the level of capital, restrict dividends or undertake special provisioning;
- *management improvement requirements*: this step can include the merger or closure of establishments, the sale of risky assets and subsidiaries, change of senior management and partial suspension of operations;
- *management improvement orders*: in the case of seriously unsound financial institutions, the FSC can order actions including the reduction and merger of shares, the removal or suspension of senior management and appointment of an acting manager, transfer of operations, and merger or Purchase and Assumption (P&A) agreements.

During 1998, the FSC has used these procedures extensively in the banking sector, helping to achieve a major consolidation, a re-capitalisation and an improvement of bank balance sheets. It is possible that these powers will be used more extensively in the non-bank financial sector in the future.

In addition to these publicly available quantitative measures, the FSC has developed a management rating system in which the supervisor rates institutions on a number of quantitative and qualitative criteria. It determines a composite numerical rating, which is confidential and is used as a basis for discussion

with the financial institutions. The ratings were initially based on the CAMEL system, under which banks are evaluated on their Capital, Asset quality, Management, Earnings and Liquidity. This was subsequently changed to CAMELS to include Sensitivity to market risk.

The FSC intends to supplement traditional static on-site inspections with off-site surveillance using electronic techniques, ongoing assessment of management capability and continual consultation with management concerning areas in which improvement is needed. One important element in assessing managerial capability is the effectiveness of in-house risk management systems. In the past, financial supervision relied mainly on static standards based on balance-sheet items such as capital adequacy ratios for the maintenance of solvency and liquidity regulation. However, movements in asset prices are also an important element in the overall risk exposure of an institution. The FSC is preparing a guideline on risk control that will cover the basic objectives of risk management, the responsibilities of management and boards of directors in establishing risk management systems and procedures for risk control. In addition, the FSC is directing each individual financial institution to establish an in-house risk control system, which it will evaluate as part of the management rating system.³³

Improved accounting and disclosure standards

An important step in upgrading supervision is the introduction of mark-to-market accounting which values securities at fair value at the date of the financial statement. This accounting procedure adjusts the book value and recognises the gains or losses from the difference. The new method has been adopted by all financial institutions, including banks, this year. In addition, accounting standards for public disclosure and those for supervision, which had been the same, will be separated and administered separately. The FSC will be responsible for supervision standards while those for public disclosure will be handled by the SFC. The frequency of regular disclosure has been increased from once to twice a year (quarterly disclosure will be introduced for banks in September 1999 and for listed and registered companies in 2000). Although, the public disclosure system has been imposed so far only on banks, securities companies and insurance companies, it will be applied to all kinds of financial institutions including mutual savings and finance companies, financial companies specialising in loan business, credit unions and branches of foreign banks. Financial institutions will be obliged to observe the disclosure requirements of International Accounting Standards (IAS), as regards off-balance-sheet transactions including derivatives, asset classification and special disclosure items such as those related to unusual losses, and contingent liabilities.

The banking sector

Given the crucial importance of commercial banks in the functioning of all market economies, the rehabilitation of the banking system has been given the highest priority in Korean financial reform to date. The underlying problem is that most banks in Korea have little experience as profit-seeking entities that were expected to adhere to stringent prudential standards. Although the banks were privatised in the early 1980s, the government continued to exert a high degree of influence over management. Strong governance practices failed to emerge in the banks, which were required to meet a number of objectives. Moreover, non-bank financial institutions (NBFIs) were permitted to enter into direct competition with banks in the 1980s and 1990s while banks remained subject to comparatively tight restrictions. In addition, their limited control over costs, combined with regulations on product innovation, tended to depress bank profitability further.

Korean banks were characterised by low and declining profitability even before the 1997 crisis (Table 14). The sharp deterioration in the financial health of the corporate sector in 1997, including the bankruptcies of a number of major corporate borrowers, had serious repercussions on the banks. Government policy in the early months of 1997 had been aimed at mitigating the contractionary effect of the decline in bank balance-sheet quality in order to prevent banks from reducing credit to troubled firms and aggravating the credit crunch. Thus, the authorities encouraged firms and banks to enter into bankruptcy avoidance agreements, while KAMCO eased pressures on financial institutions by purchasing impaired loans with minimal conditionality. The Asian crisis later in the year put additional strains on corporate balance sheets. Profitability was further compressed, with several banks showing large losses. Between the end of 1996 and the end of 1997, NPLs at commercial banks rose from W 11.9 trillion (4.1 per cent of total loans) to W 22.7 trillion (6.0 per cent). In two of the largest banks, Korea First Bank and Seoul Bank, NPLs virtually wiped out the banks' capitalisation. Moreover, NPLs were serious enough to make 12 of the other 27 banks fall below the minimum 8 per cent capital adequacy ratio, even using the relatively lax classification standards in effect at the time.

By the beginning of 1998, there were indications that NPLs would increase much further given the sharp decline in output, the impact of high domestic interest rates on financing costs and the effect of the depreciation of the won on corporations which had taken on large amounts of foreign currency debt. Faced with such prospects, the government adopted a new policy of simultaneously applying tougher prudential standards while trying to resolve the problems of declining balance-sheet quality in banks. Moreover, to build a sound banking system over the longer term, the government adopted a strategy which includes the closure of weak institutions, consolidation around institutions that are well

Table 14. **Profitability of the banking system**

	Average 1990-93	1994	1995	1996	1997	1998
Return on assets (per cent)						
Nation-wide banks	0.51	0.40	0.28	0.23	-0.90	-2.99
Regional banks	0.84	0.53	0.56	0.47	-1.17	-5.83
All banks	0.56	0.42	0.32	0.26	-0.93	-3.15
Return on equity (per cent)						
Nation-wide banks	6.30	6.17	3.91	3.49	-14.09	-48.63
Regional banks	6.70	5.73	5.63	5.41	-14.77	-87.40
All banks	6.40	6.09	4.19	3.80	-14.18	-52.53
Net interest margin (basis points)						
Nation-wide banks	2.31	1.21	2.40	2.98	2.03	0.94
Regional banks	4.37	4.30	3.76	3.99	2.32	0.95
All banks	2.72	1.74	2.68	3.18	2.07	0.94
Non-performing loans at commercial banks						
In billion won	9 394	11 390	12 484	11 874	22 652	22 225
As a per cent of total loans	7.3	5.8	5.2	4.1	6.0	7.4
Capital adequacy ratios of banks (per cent)						
Nation-wide banks	9.39	10.19	8.97	8.97	6.66	8.22
Regional banks	13.95	13.11	11.44	10.15	9.80	8.31
All banks	10.00	10.62	9.33	9.14	7.04	8.23
Employees (1990 = 100)						
Total	104.8	106.1	125.6	126.4	138.7	92.40

Source: Financial Supervisory Service.

capitalised and managed and the application of strong conditionality in the use of public funds to support the rehabilitation of troubled financial institutions.

Specific aspects of bank supervision

The FSC decided to apply in 1999 the Basle Committee's 25 core principles of banking supervision which emphasise strict enforcement of rules on transparency and financial soundness. Major banks are already expected to have an 8 per cent capital adequacy ratio and the FSC recommends 10 per cent. For regional banks that do not engage in international business or make large corporate loans, the ratio had to reach 4 per cent by March 1999, 6 per cent by March 2000 and 8 per cent by December 2000. The authorities have been proactive in requiring banks to report their financial situations accurately and obliging those that were deficient to take corrective action. When capital adequacy

ratios fall below stipulated levels, banks have been ordered to engage in Prompt Corrective Action (PCA) usually beginning with management improvement recommendations and often culminating in mergers, sales of assets and removal of management.

The FSC has been imposing exacting standards of transparency and disclosure and increasingly stringent loan classification standards and provisioning requirements (Table 15). New regulations encompassed: *i*) the deduction of all substandard assets from tier 2 capital; *ii*) the introduction of mark-to-market accounting for all positions in traded securities other than hedging assets valued at historic cost; and *iii*) full disclosure to trust beneficiaries of any agreements by

Table 15. **Standards in prudential regulations and supervision**

Objectives	Measures	Schedule
Mark-to-market for securities	Introduction of mark-to-market for securities. Change in securities' classifications from categorisation by currency (domestic, foreign currency) to maturity (investment securities, marketable securities).	June 1998 – completed
Banking sector disclosure	More information to be disclosed to meet the international accounting standard.	December 1998 – completed
Loan classification and provisions	Revision of loan classification procedures to fully reflect capacity to repay and not simply past performance.	June 1999 – effective from December 1999
Improvement in BIS capital ratio calculation	Deduction from tier 2 capital of all provisions except those with respect to assets classified as normal and precautionary.	January 1999 – completed
Prudential rules for foreign exchange liquidity and exposure	Risk management for short-term foreign currency risk (short-term assets of less than 3-month maturity of at least 70 per cent of short-term liabilities). Report maturity mismatches for sight to 7 days; 7 days to 1 month; 1 to 3 months; 3 to 6 months; 6 months to 1 year; and over 1 year. Management of country exposures (set exposure limits for each country based on international credit ratings).	July 1998 – completed
Trust accounts	Introduction of rules providing full disclosure to trust beneficiaries and precluding any possibility of payment by managing banks to make good or guarantee any loss. Introduction of restrictive rules to be applied to all trust accounts ensuring segregation for management as well as accounting purposes.	January 1999 – completed January 2000

Source: Financial Supervisory Commission.

Table 16. **Loan classification standard and required provisions**

	Prior to July 1998	Since July 1998
Definition¹		
Normal	–	–
Precautionary (special mention)	3-6 months past due	1-3 months past due
Substandard	More than 6 months past due, secured	More than 3 months past due, secured
Doubtful	More than 6 months past due, unsecured	More than 3 months past due, unsecured
Estimated loss	Expected losses	Expected losses
Loan loss reserve requirement		
Normal	0.5 per cent	0.5 per cent
Precautionary (special mention)	1.0 per cent	2.0 per cent
Substandard	20.0 per cent	20.0 per cent
Doubtful	75.0 per cent	75.0 per cent
Estimated loss	100.0 per cent	100.0 per cent
Provisioning for outstanding guarantees	Not required	20.0 per cent of “substandard”, 75.0 per cent of “doubtful” and 100.0 per cent of “estimated loss” ²

1. By the end of June 1999, the FSC will announce a more rigorous loan classification standard that is based on the ability of debtors to generate sufficient future cash flows rather than on their past payment histories.

2. Required from January 1999.

Source: Financial Supervisory Commission.

managing banks to offset or guarantee losses to market participants. All trust accounts with guarantees were considered to be on-balance sheet and weighted at 50 per cent by January 1999 and 100 per cent by January 2000. Rules requiring the segregation of trust accounts were made more rigorous, and loan classification and provisioning regulations have been toughened (Table 16). In addition, commercial banks will be required to observe increasingly strict limits on large exposures. From January 2000, the maximum permitted total exposure to single borrowers will be reduced from 45 per cent of total capital to 25 per cent. In addition, exposures to single borrowers will be redefined so as to include off-balance-sheet exposure. Procedures will be established under which any exposures exceeding this limit are to be brought within allowable limits.

One of the major objectives of the FSC is to strengthen the governance systems of banks. The earlier system functioned with limited transparency and without clearly focused lines of accountability. Similarly, the need to meet other objectives, such as maintaining employment or supporting industrial policy, contributed to the poor profitability performance. The FSC has been seeking to emphasise the accountability of the boards of banks and their senior management for attaining adequate profitability and maintaining high prudential standards to ensure that banks are acting in accordance with the new market-based principles. The number of objectives that banks are expected to achieve has been reduced drastically, with profitability and prudential soundness now established as the primary concerns. With significant portions of key banks now under the control of foreign investors, the pressures to seek shareholder value are sure to mount.

The FSC has begun to publish regular reports of the governance practices of banks. One means to enhance the monitoring capability of boards is to increase the number of outside directors and introduce rules to enhance their independence. The FSC now publishes information on the number of outside directors, their independence from the chairman of the board and the frequency of board meetings. Banks are expected to form committees to improve risk management, nominations, management development, compensation and ethics. The appointment of independent auditors is also an area that is seen as critical to improved functioning. In addition, the use of stock options is thought to be a means to align the interests of managers and shareholders. Some of the agreements with restructured banks specifically call for the introduction of corporate governance practices that are in line with international best practices.

Resolution of weak or insolvent institutions

One of the urgent tasks was to address the problem of banks whose balance sheets had deteriorated badly, beginning with the two banks – Korea First Bank and Seoul Bank – that had become insolvent. The government

Table 17. **Developments in the banking sector**

End of 1998

Name of institution	FSC action	Net income ¹	Non-performing loans ²	Capital adequacy ratio		Number of staff	Governmental participation	Foreign participation
				End-1997	End-1998			
Korea First ³	Nationalised	-2 614.9	20.4	-2.7	-1.5	4 853	93.8 ⁴	0.1
Seoul ³	Nationalised	-2 242.4	17.9	1.0	-0.9	4 803	93.8 ⁴	0.1
Daedong	Closed	..	..	..	..	..	..	..
Dongnam	Closed	..	..	..	..	..	..	..
Dongwha	Closed	..	..	..	..	..	..	..
Peace	Conditional approval	-428.5	12.0	5.5	-1.8	1 315	..	..
Chohung	Conditional approval	-1 970.8	5.3	6.5	0.9	5 803	91.0 ⁵	5.8
Korea Exchange	Conditional approval	-843.5	4.8	6.8	8.1	5 889	33.6 ⁶	34.9
Hanil	Conditional approval/merged to form Hanvit	..	..	6.9	..	5 762	..	..
CBK	Conditional approval/merged to form Hanvit	..	..	7.6	..	5 768	..	..
Hanvit	Nationalised	-1 643.8	5.4	..	12.1	11 530	94.8	..
Koram	Assume Kyongki	53.4	3.0	8.6	15.2	2 849	34.7	16.8
Hana	Assume Chungchong/merged	110.8	3.1	9.3	13.1	1 558	57.5	11.7
Boram	Merged with Hana	-391.1	4.2	9.3	2.7	1 202	..	6.1
Kookmin	Assume Daedong and merged	73.4	5.9	9.8	10.1	11 960	21.5	21.8
Housing	Assume Dongnam	-291.3	8.0	10.3	10.8	8 517	49.6	27.1
Shinhan	Assume Dongwha	59.0	4.4	10.3	14.7	4 555	25.0	16.3
All nation-wide banks		-10 129.7	7.2	..	8.2	64 834	..	..
Kangwon	Conditional approval	-311.0	24.6	5.4	-10.7	675	..	3.7
Chungbuk	Conditional approval	-242.6	19.4	5.9	-4.6	694	..	..
Kyongki	Closed	..	..	6.7	..	..	..	..
Chungchong	Closed	..	..	7.0	..	..	..	..
Pusan	Management improvement recommended	-438.9	5.6	9.7	9.3	2 059	..	8.8
Kwangju	..	-299.4	3.9	10.7	10.1	1 748	..	3.2
Daegu	..	-482.8	7.5	11.3	11.4	2 486	..	5.6
Cheju	Management improvement recommended	-107.0	22.2	12.1	9.7	614	..	57.3
Kyungnam	Management improvement recommended	-334.9	8.1	12.3	11.9	1 692	..	6.3
Chonbuk	..	-164.1	9.4	13.3	12.9	786	..	1.0
All regional banks		-2 380.7	9.1	..	8.3	10 754	..	..
All commercial banks		-12 510.4	7.4	7.0	8.2	75 588	..	..

1. Net income in 1998 in billion won.

2. As per cent of total loans.

3. Newbridge Capital and Hong Kong and Shanghai Banking Corporation are negotiating to buy majority stakes in Korea First Bank and Seoul Bank, respectively.

4. Including 46.9 per cent participation by Korea Deposit Insurance Corporation (KDIC).

5. As of March 1999.

6. Participation by the Bank of Korea.

Source: Financial Supervisory Commission.

acquired 94 per cent of the equity in each of the two institutions in January 1998 and announced plans to find foreign strategic partners by the end of the year to inject new capital and management capability (see Annex I for details). Indeed, the government signed a memorandum of understanding on the last day of 1998 with Newbridge Capital to open negotiations for the sale of Korea First Bank, with a final purchase agreement expected by April or May of 1999. By early July, however, no agreement had been reached. As for Seoul Bank, the government signed a memorandum of understanding in February 1999 with the Hong Kong, China and Shanghai Banking Corporation for the sale of a controlling interest. The end of May 1999 deadline for reaching an agreement has been extended for one month. The entry of foreign banks is essential to boost competition by establishing an international benchmark. If the current negotiations with the two foreign institutions are not successful, it is important that the government still follow through on its commitment to sell Korea First Bank and Seoul Bank to foreign investors.

The twelve other banks that had capital ratios of less than 8 per cent at the end of 1997 were required to prepare rehabilitation plans by April 1998 under which adequate capitalisation will be achieved within two years. In June 1998, the rehabilitation plans of five of the banks were rejected by the FSC on the grounds that there was little possibility of actually reaching adequate capitalisation in the specified time frame. Each of these banks was to be acquired in a Purchase and Assumption (P&A) agreement by one of the few well-capitalised banks (Table 17), which had developed good credit assessment techniques and better governance arrangements. The authorities agreed to sell all NPLs of the acquired banks to KAMCO and to inject enough capital to bring the capital adequacy ratio of the newly merged bank to the level of the acquiring bank. P&A agreements also obliged the government to purchase NPLs that were discovered during later months.

Restructuring of healthy banks

The plans of the other seven banks that had capital ratios of less than 8 per cent at the end of 1997 were tentatively judged to be credible and received conditional approval to continue operations. A contract was signed with the FSC in which each bank committed itself to achieving specified goals, including cost reductions through branch closures, cutting personnel and other operational savings, according to an agreed timetable. A number of "voluntary" mergers among healthy banks were announced, supported by government injections of capital and purchases of impaired assets (see Annex I for details). Consequently, the government is a major owner of a significant number of the nation-wide commercial banks (Table 17). Hanvit Bank, for example, which was formed by the merger of Hanil Bank and Commercial Bank of Korea in September 1998, received

Table 18. **Non-performing loans**
Trillions of won

	December 1997			March 1998			June 1998			September 1998			December 1998			March 1999 ¹		
	Total	NPLs	Ratio %	Total	NPLs	Ratio %	Total	NPLs	Ratio %	Total	NPLs	Ratio %	Total	NPLs	Ratio %	Total	NPLs	Ratio %
Banks	518.6	31.6	6.1	512.1	38.8	7.6	471.6	40.0	8.5	464.6	35.0	7.6	443.3	33.7	7.6	442.3	37.5	8.5
Commercial banks	375.8	22.7	6.0	365.1	28.0	7.7	322.5	27.8	8.6	314.5	22.4	7.1	300.5	22.2	7.4	299.1	25.8	8.6
Specialised and development banks	142.8	8.9	6.2	147.0	10.8	7.3	149.1	12.2	8.2	150.1	12.6	8.4	142.8	11.5	8.1	143.2	11.7	8.2
Merchant banks	24.1	1.0	4.1	23.1	2.0	8.7	25.9	2.4	9.3	35.4	5.0	14.1	28.0	5.6	20.0	22.6	2.8	12.4
Insurance companies	51.7	4.8	9.3	50.4	5.8	11.5	47.8	6.7	14.0	41.9	3.8	9.1	38.8	3.4	8.8	42.4	5.2	12.3
Mutual savings and loan companies	28.1	3.3	11.7	25.5	4.0	15.7	25.0	4.7	18.8	24.0	5.5	22.9	22.0	5.3	24.1	21.0	8.4	40.0
Credit unions	12.7	1.3	10.2	12.6	1.5	11.9	12.4	1.7	13.7	11.8	2.9	24.6	11.2	2.5	22.3	10.8	2.9	26.9
Leasing companies	n.a.	n.a.	n.a.	35.5	5.9	16.6	34.4	5.9	17.2	32.4	9.7	29.9	25.8	7.8	30.2	24.7	6.1	24.7
Securities companies	12.1	1.6	13.2	9.2	1.6	17.4	7.7	2.2	28.6	7.2	2.2	30.6	7.3	1.9	26.0	7.7	2.4	31.2
Total	647.3	43.6	6.7	668.6	59.6	8.9	624.8	63.6	10.2	614.3	64.0	10.4	576.4	60.2	10.4	571.5	65.3	11.4

1. Non-performing loans had been reduced by the W 44 trillion in purchases by KAMCO by March 1999.

Source: Financial Supervisory Commission.

W 3.3 trillion from the KDIC and is now 95 per cent government-owned. Strict conditions, though, were attached to some of these mergers. Hanvit must raise its return on assets to over 100 basis points and its return on equity to 15 per cent by 2000, while reducing its cost ratio to 40 per cent.

Stronger banks were able to increase their capital by attracting foreign investment or by issuing new equity. During 1998, five banks were able to increase capital by \$678 million through the injection of funds by foreign investors despite the concern about the economic outlook. Foreign investors, who are interested in obtaining a competitive return on their investment, will place pressure on banks to upgrade their management and governance practices, making foreign-affiliated institutions benchmarks for Korean banks. In addition, banks issued new equity amounting to W 14 trillion in 1998. These measures have helped boost the average capital adequacy ratio for the nation-wide banks from 7 per cent at the end of 1997 to 8.2 per cent a year later.³⁴ Thus far in 1999, another W 2 trillion of new equity has been issued.

While the reforms should ultimately result in improved bank performance, both return on assets and return on equity remained strongly negative in 1998 following a poor performance in the preceding year. Despite a significant rise in operating profits,³⁵ net losses of Korean banks widened from W 3.9 trillion in 1997 to a record W 14.5 trillion in 1998 because of very large losses from sales of bad assets and the need to increase loan-loss reserves. Purchases of impaired assets by KAMCO, however, helped reduce NPLs from W 28 trillion in June 1998 to W 22 trillion by the end of 1998 (Table 18). The year-end NPL ratio of 7.4 per cent was down somewhat from the peak in June 1998. Banks' provisions for bad loans, which were equal to 26 per cent of NPLs at the end of 1997, rose to 66 per cent a year later. By March 1999, though, NPLs had risen to almost W 26 trillion, accounting for 8.6 per cent of total loans.

Non-bank financial institutions

While the authorities have concentrated their efforts in the banking sector, they are now addressing serious problems in the non-bank financial sector as well. Indeed, the volume of NPLs in the NBFIs in March 1999 exceeded those in the commercial banking sector and was more than twice as high as a share of total loans (Table 18). Furthermore, since the measurement of problem loans appears to be less reliable than in the banking sector, there is more potential to discover significant amounts of new impaired assets. In addition, problem loans in some cases reflect the close ownership linkages between NBFIs and the chaebols, in contrast to the banking sector, where such linkages are tightly restricted. Consequently, many of the NBFIs have been used to provide credit to affiliated companies.

It is important to note that NBFIs are not a homogenous category. Some types have developed primarily because of regulatory rigidity in other sectors. In many cases, the best solution for a troubled institution in this category would be closure. Other categories, notably insurance, play an indispensable social role and hence the authorities must ensure that a functioning industry emerges from the restructuring. It will be costly to address these problems and the development of an adequate legal and regulatory framework to prevent a recurrence is an important priority. This section discusses insurance companies, merchant banks, securities companies, investment trust companies and other NBFIs.

Insurance companies

Korea has one of the largest life insurance markets in the world, ranking sixth in terms of premium income. Endowment products account for some 60 to 70 per cent of the business of life insurance products, with term and group insurance accounting for the remainder. Insurance companies intend to become active in the pension field as the country is introducing a system of funded corporate pensions. As in other sectors of the financial services industry, the insurance sector has been characterised by low profitability, excess capacity, poor risk management and inadequate supervision. Life insurance companies are not publicly listed and thus are not subject to public disclosure requirements like other institutions. These features were visible well in advance of the 1997 crisis but became more pronounced afterwards.

Through the 1980s, there were only six life insurance companies in operation in Korea, but a number of new companies have since been formed, including several foreign-affiliated companies. Many of the newer entrants were unable to compete with more established participants and have been unable to develop distinctive market niches in terms of products or specific market sectors for distribution. In this regard, they have been hindered by heavy government interference in product design and portfolio allocation, while premiums were heavily regulated. Similarly, no company appears to have had much success in realising cost savings. Thus, the established companies remained profitable while the newer entrants have struggled. Insurance companies sought to offset the lack of opportunities for profitable investment by offering loans in competition with banks. Consequently, loans account for almost half of their assets. The insurance companies, however, had minimal credit skills and faced interference from both the government and from affiliated chaebol companies, who used them as captive funding sources. Since 1994, the life insurance sector as a whole has been operating in the red, with the losses of the newer companies more than offsetting the profits of the more established ones.

With the onset of the economic crisis, the performance of the life insurance sector worsened further. In keeping with the goal of introducing greater

transparency and stricter prudential standards on all financial institutions, a programme aimed at rehabilitating the life insurance sector was introduced in August 1998. The Appraisal Committee for Rehabilitation made the following decisions concerning the life insurance companies with negative solvency margins:³⁶

- i) Four companies were closed with their business transferred to sounder companies in August 1998.
- ii) Seven companies were required to reduce their solvency margin shortages to 10 per cent by March 1999 and to zero per cent by September 2000.
- iii) Seven other companies were ordered to submit management improvement plans.
- iv) Three companies with foreign affiliations received no specific target, but it was expected that the foreign partners would be asked to inject new capital into these companies.

With the exception of the five largest companies, most had negative solvency margins (Table 19).³⁷ Moreover, 10 of the 14 companies had not complied with the order to improve their solvency ratios. With negative net income through the end of 1998, the combined solvency margin of these companies had deteriorated from -11.7 to -15.2 per cent. The FSC, concluding that many of these companies had problems of management performance, began an investigation of these companies in February 1999 under Prompt Corrective Action procedures and made a preliminary assessment of which companies were viable.

Table 19. **Life insurance companies**
Trillions of won

	Total assets ¹	Premiums written ²	Solvency margin ³
Top five	77.4	32.3	8.3
Companies ordered to submit improvement plan ⁴	6.6	4.0	-8.3
Companies ordered to reduce solvency ratio to -10 ⁴	6.1	3.9	-20.4
Other companies ⁵	2.4	1.1	3.7
Total	92.5	41.3	-4.2

1. February 1999.

2. April 1998 to January 1999.

3. December 1998. A positive solvency margin shows the per cent by which assets, adjusted for NPLs, exceed liabilities.

4. Seven companies in each of these two groups. There are 27 in all.

5. Most of the eight companies in this group have foreign affiliations.

Source: Financial Supervisory Commission.

In its March 1999 strategy to rehabilitate the life insurance sector, the FSC indicated that a restructuring comparable to that in the banking sector in 1998 was necessary. In effect, non-viable institutions would be acquired by viable institutions. In the meantime, buyers, including foreign investors, will be sought for those institutions targeted for closure. By mid-April, five companies had been opened to international bids, the preferred method for liquidating unsound companies. The government is willing to inject money into rehabilitation plans by foreign companies that want to gain a strategic foothold in the large Korean domestic market despite its current difficulties. In addition to foreign companies, the chaebols were permitted to bid for control of insurance companies and will be allowed free entry in April 2003. Chaebol-affiliated insurance companies would need to be closely supervised to prevent the problems of captive lenders noted above.

In addition to closing non-viable institutions, reporting procedures, risk management systems and techniques to supervise insurance companies need to be strengthened. The size of the problem of balance-sheet quality in the insurance sector is likely to rise this year as the authorities begin to align its accounting and reporting procedures with the stricter financial norms being imposed in the banking sector. In 1999, insurance companies will begin to report their securities holdings on a mark-to-market basis, which may reveal considerable concealed losses due to the decline in their market values. In addition, 12.3 per cent of loans by life insurance companies were categorised as non-performing at the end of March 1999 (Table 18). As with banks, the loans of insurance companies in workout agreements, which are currently classified as performing, will be downgraded. Finally, preliminary reviews of the adequacy of procedures used in private companies suggested that actuarial assumptions are outdated and that interest rates used in simulations are unrealistic.

The review of the insurance industry since the onset of the crisis in 1997 has identified areas in which supervision needs to be improved. Although prudential requirements have obliged life insurance companies to maintain positive solvency margins, investigations by the FSC have revealed that some companies were technically insolvent for several years before any action was taken. To prevent such problems, the PCA framework for the insurance industry will be strengthened to require supervisors to initiate action when insurance companies fall below thresholds of prudential adequacy. In addition, the FSC announced in March 1999 that rules which had been applied to banks in the areas of loan classification, connected lending, large exposures and disclosure would be applied to insurance companies. Ceilings will also be introduced in equity holdings and total lending. All life insurance companies will gradually be required to maintain solvency margins of 4 per cent of policy reserves based upon EU standards, plus 0.3 per cent of sums at risk. The 4 per cent target is ambitious, given the negative margins prevailing in most companies at present. Moreover, all

companies that do not have a positive solvency margin by the end of September 1999, will be subject to progressively stricter provisions, which can end in closure or sale.

A moderate amount of public funds has been provided for the rehabilitation of the insurance industry. KAMCO bought W 1.4 trillion in impaired assets from the two companies specialised in surety and guarantee business, while KDIC has been obliged to provide resources for loss coverage. Given the fact that much of the insurance industry is insolvent and that the amount of impaired loans is likely to rise, the rehabilitation of the insurance industry may entail further costs.

Merchant banks

Merchant banks are wholesale financial institutions which engage in underwriting primary capital market issues, leasing and short-term unsecured lending. Thus, they would be more appropriately called short-term finance companies, as they were in the past. The merchant banks were regulated by MOFE rather than the Bank of Korea, which oversaw the commercial banks. In fact, the merchant banks faced far fewer controls than commercial banks and were not obliged to engage in policy lending. Unlike the commercial banks, where concentration of ownership was forbidden, they were frequently controlled by outside parties, either foreign interests or by the large conglomerates. Moreover, merchant banks had far greater capability to control their own costs and were not required to maintain large branch networks. However, the merchant banks also had some distinct vulnerabilities. Under a relatively easy regulatory regime, merchant banks were permitted to assume much higher interest rate and currency risk than the commercial banks and thus became very aggressive lenders, with many relying heavily on funding in foreign currency. Lending concentration inside affiliated groups was greater. Moreover, lending often took place without collateral, leading to less protection in case of default. Internationally, the merchant banks developed considerable exposure to borrowers in Southeast Asia and other emerging markets that were adversely affected by the Asian financial crisis of 1997. Many also had large net equity positions.

Merchant banks have experienced severe losses since the crisis. With losses of W 337 billion in 1998 (Table 20), the return on both equity and assets was negative in 1998. Unlike the case of commercial banks, the authorities have shown little hesitation in closing merchant banks; of the thirty in operation at the end of 1997, 16 have been closed, two were merged and one was suspended, leaving only 11 in normal operation. When a merchant bank is closed, its assets and liabilities are transferred to Hanarum, the bridge merchant bank that arranges payments to depositors and assumes performing loans. KAMCO purchased W 2.7 trillion in NPLs from the merchant banks in November 1997, but nothing since then. However, KDIC reimbursed some merchant bank depositors.

Table 20. **Merchant banks**
1998

	Billions of won
A. Loans	
Total loans	27 968.1
Non-performing loans	5 586.0
Per cent of total loans	20.0
Loan-loss reserve	1 071.5
Loans in workout	1 904.6
B. Capital adequacy ratio (per cent)	
	7.7
C. Profitability	
Net income	-337.0
Return on equity (per cent)	-5.0
Return on assets (per cent)	-0.4

Source: Financial Supervisory Commission.

Merchant banks were required to meet a minimum capital adequacy ratio of 6 per cent by March 1999 and 8 per cent by June 1999, in addition to adopting internationally accepted accounting principles by April 1999. If a merchant bank falls below this standard, it will be required to submit a rehabilitation plan and to write off losses in quarterly instalments through March 2002. Banks failing to meet performance criteria are subject to progressively stricter penalties culminating in closure. As of March 1999, two of the remaining eleven merchant banks fell short of the 8 per cent requirement. Although the number of NPLs has declined from its peak at the end of 1998³⁸ (Table 18), they still accounted for 12.4 per cent of total loans. Since much of the lending by merchant banks is not collateralised, a decline in credit quality can render loans worthless very rapidly. In addition, merchant banks which are able to meet capital requirements only by excluding funds in corporate restructuring will be required to write off these losses in quarterly instalments through the end of the first quarter of 2002. These institutions will be prohibited from engaging in international activities and will be subject to additional constraints on business activities.

A more positive development is the increase in the capital of merchant banks from W 1.6 trillion to W 3.8 trillion during 1998, as the owners of some merchant banks increased their capital contributions. The remaining merchant banks seem relatively sound, with an average capital adequacy ratio of over 10 per cent, but it is unclear whether their NPL problems have been fully resolved. Looking into the future, it is uncertain what role the merchant banks will play. They originally developed because heavy regulation had created market segments in which they could operate profitably. However, the deregulation

since 1997 has removed many market niches such as commercial paper, which has now been opened to competition from other institutions. The merchant banks may have to either become full-fledged commercial banks or develop into investment banks specialising in capital market operations such as underwriting, mergers and acquisitions and proprietary trading.

Securities companies

Some securities companies have also sustained significant losses, mostly arising from proprietary trading and guarantees they extended to support bond issues. As a result, six securities companies have exited and two more are required to submit a rehabilitation plan to the FSC. No such guarantees have been issued since a law severely limiting this practice was passed in 1998. It is unclear how significant the impact of mark-to-market valuation of positions will be on the portfolios of securities companies. Planned reforms in the supervision of the securities companies call for mechanisms to ensure the effective segregation of customer funds and limits on proprietary trading based upon the capitalisation of the company.

Rapid modernisation of securities companies is likely as the restructuring and liberalisation of the financial system continue. These companies are likely to become active in trading government securities, futures and options, primary market issuance and M&A activities. Korea has a high savings rate but the range of investment products available to domestic savers has been relatively narrow. With deregulation, the securities companies are likely to tap Korea's large savings pool by developing products such as mutual funds and retirement savings products. There will be many complementarities with insurance products, making it all the more urgent to press ahead with reform in the insurance sector (see above). As part of the restructuring of the chaebols, some securities companies that were owned by the business groups have been sold. Some of these companies have been acquired by foreign interests and are refocusing on retail distribution of investment products.

Investment trust companies

Two of the eight investment trust companies (ITCs) in operation in 1997 have been closed. ITCs function somewhat like mutual funds and similar collective investment instruments in other countries. However, unlike mutual funds, which closely link investor return and the performance of the underlying portfolio very closely, the ITCs apparently have not separated funds invested in various portfolios. Thus, securities were carried at historic cost and were moved among various portfolios in the ITC in order to assure desired returns to investors. Given the lack of mark-to-market valuation, it may have been possible to continue making payments to investors even as the underlying portfolio contained

significant concealed losses. Indeed, it is alleged that ITCs made payments to investors that were not fully justified by the performance of the underlying portfolio. As a result, the portfolios of ITCs will be exposed to serious losses as market-to-market valuation is applied. In addition, ITCs have many bridge transactions between their various accounts. These transactions, which were used to subsidise certain accounts, have resulted in a significant number of non-performing assets. Moreover, since some of these trust accounts are guaranteed and funds of investors may not be fully segregated from the funds of sponsoring institutions, a significant liability may be concealed in this sector. According to the FSC, the ITCs had a negative net worth of W 3.5 trillion at the end of 1998.

The ITCs will face competition from mutual funds, which were authorised in 1998 and recently began operating. Thus far, only closed-end funds have been formed, but foreign mutual funds will soon be introduced. Bridge transactions by the ITCs were to be reduced by 35 per cent by March 1999 and plans for the elimination of all remaining bridge transactions were required. External audits of the ITCs are to be made, beginning in October 1999, with the results disclosed to investors. By July 2000, ITCs will be required to mark all funds to market. The key issues are the funding gap in the ITCs and the need to free these companies from the customary practices that have characterised them in the past.

Other NBFIs

In addition to the categories of NBFIs specifically discussed in the preceding sections, large amounts of NPLs are found in mutual savings and loan companies, credit unions and leasing companies. For example, the NPL ratio of leasing companies was 25 per cent in March 1999 while that of credit unions and mutual savings associations was even higher. Since many of these institutions have been subject to less careful scrutiny than commercial banks, there is a substantial risk of additional problems of balance-sheet quality, with an attendant increase in the cost of financial restructuring. The authorities face a challenge in redefining the role of these institutions in the new, more deregulated environment and adapting the legal and regulatory structure to accommodate these institutions.

The role of the Korea Asset Management Corporation (KAMCO)

KAMCO has the critical task of disposing of impaired assets acquired from financial institutions. The effective liquidation of impaired assets is crucial for at least two reasons. *First*, the total cost of restructuring is reduced by the income generated from asset sales. *Second*, effective implementation of an asset liquidation programme is an important discipline for the restructuring programme in the

financial and corporate sectors and reinforces the credibility of the programme. If assets are purchased at unrealistically high prices, banks will have an incentive to unload assets on KAMCO as a relatively low-cost funding alternative. The planned rapid liquidation of companies acquired by KAMCO gives corporate managers strong incentives to accelerate restructuring. If, on the other hand, it tends to retain assets for a long time, one of the main pressures on the corporate sector to accelerate restructuring will be absent. KAMCO's commitment to rapid asset sales is also important for the development of the secondary market in impaired debt. Moreover, resources that are sitting idle as collateral for NPLs can be brought back into use.

KAMCO had purchased W 44 trillion won of NPLs (face value) for approximately W 20 trillion by the beginning of March 1999 (Table 21). Two-thirds of total purchases were from commercial banks. Assets purchased by KAMCO fall into two categories. *Ordinary assets*, which are loans in default, totalled W 17.6 trillion, about half of which are collateralised. *Special assets*, which are acquired through court approved re-organisation or composition proceedings totalled W 26.5 trillion, of which W 18.7 trillion are secured. Initially, KAMCO purchased assets for a tentative price which was later adjusted after due diligence on the loan. Since September 1998, purchases have been set at 45 per cent of face value for collateralised loans and 3 per cent for loans without collateral. For special assets, the price is determined by a court-approved estimate of the present value of projected cash flows. KAMCO plans to spend the remaining W 12.6 trillion of its authorised W 32.5 trillion in 1999.³⁹ Assuming the 45 per cent average price on collateralised assets, KAMCO will be able to buy another W 28 trillion of impaired assets. A large share of this amount is already committed to the purchase of future NPLs from Korea First Bank and Seoul Bank, as well as from the banks acquired in the mergers that have occurred since June 1998. Consequently, its purchases of impaired assets will total W 72 trillion by the end of 1999.

Table 21. **Purchases of assets by KAMCO**

Trillions of won as of March 1999

	Face value	Purchase price
Commercial banks	29.7	14.0
Merchant banks	2.7	1.8
Fidelity securities	5.9	1.4
Specialised and development banks	4.7	2.2
Other	1.2	0.5
Total as of March 1999	44.2	19.9
Planned purchases in 1999	28.0	12.6
Total	72.2	32.5

Source: Financial Supervisory Commission.

In considering its strategy for asset disposal, KAMCO first decides whether to attempt a quick sale or to retain the assets in the hope of augmenting their value through workouts or other procedures. Asset disposal amounted to W 1.5 trillion through March 1999. About one-third of this amount was resolved through recovery from the original debtor. Another W 250 billion was sold as individual assets, either through public auction or through court-ordered foreclosure proceedings. In addition, two packaged loan sales in October and December 1998 raised another W 770 billion.⁴⁰

By the end of 2003, KAMCO plans to dispose of W 69 trillion of the W 72 trillion in NPLs that it will have purchased by the end of this year. As a first step, it intends to dispose of NPLs in monthly auctions amounting to W 16 trillion in face value in 1999, a tenfold increase over sales in 1998. The sales will be made through: *i*) foreclosure auctions; *ii*) sale of individual assets; *iii*) sales of structured loan packages, which contain agreements to distribute profits from improved cash flows on loans between KAMCO and the purchaser; *iv*) securitisation; and *v*) equity partnerships, which are closely related to securitisation.⁴¹ The technique actually used will depend on market conditions. With two offerings of packaged loans successfully completed in the spring of 1999, KAMCO will begin another round of asset sales, including one (KAMCO 99-2) using a special purpose vehicle (SPV), which would open the possibility for securitisation. Improving the performance of underlying assets will be one of the keys to developing investors' interest in KAMCO products and to activating the secondary market in impaired assets. In addition to its role of buying impaired assets and disposing of them, it has been proposed that KAMCO become a workout agency that will hold impaired assets for long periods and help restructure companies.

At the end of 1998, NPLs totalled about W 104 trillion (23 per cent of GDP), with W 60 trillion on the books of financial institutions (Table 18) and W 44 trillion purchased by KAMCO. The amount of NPLs on the books of financial institution reached W 65.4 trillion in March 1999 and could increase further. *First*, the tightening of loan classification standards at the end of the year will boost the number of loans classified as non-performing. *Second*, as noted above, rehabilitation efforts to date have focused primarily on the commercial banks. The detailed examination of the non-bank financial sector may lead to a greater-than-expected rise in the number of NPLs. However, the economic recovery underway will tend to reduce the number of NPLs. As noted above, KAMCO plans to purchase an additional W 28 trillion of impaired assets this year. The planned liquidation of W 69 trillion of KAMCO's assets by 2003 will provide additional funds to address the NPL problem. However, the KDIC, which provides funds for the re-capitalisation of banks and reimburses deposits at closed institutions, has used almost all of its budgetary appropriation and may need additional public resources. The Korean government is committed to providing sufficient funds for financial restructuring.

Capital markets

There are no problems of widespread insolvency in the capital markets comparable to those in the banking and non-bank financial sectors. Thus, there is little need to commit massive amounts of resources and there is no resistance by entrenched interests. At the same time, a major objective of the reform is to revitalise the capital market in order to enable it to play a larger role in overall financing. As a step in that direction, the government is trying to build liquidity in the government debt market which serves as a benchmark for fixed income securities in most major markets.

In the past, very little trading in government bonds took place, reflecting the government's strong fiscal position. At the end of 1997, central government debt outstanding amounted to only 11 per cent of GDP, well below the average of about 70 per cent in other OECD countries. Structural characteristics of the market have led to additional losses of liquidity. Auction procedures limited the amount of price flexibility, leading to mandatory allocations of government debt to institutions in the issuing syndicate. Additionally, several categories of bonds were traded with different maturity dates and other characteristics, resulting in insufficient homogeneity in the market. In particular, bonds with similar maturities had different interest payment schedules and the issuing calendar tended to be irregular. The primary market techniques led to a disparity between the prices in the primary and secondary markets. As a result, relatively little trading took place and most investors tended to hold bonds until maturity. Lack of information on prices and quantities on offer, the under-development of the credit rating system and the lack of market makers in bonds were other indications of the lack of depth in the bond market.

Some advances were made in modernising the government bond market in 1998. Reflecting a large government budget deficit and the costs of financial restructuring, the amount of government paper traded has increased at least five times. The five types of government bonds were to be consolidated into a single type, with the National Debt Management Fund becoming the predominant issuer, in order to develop issues with sufficient size to enhance liquidity. In September 1998, competitive bidding procedures were introduced in government securities auctions, which unified prices in the primary and secondary markets. Trading in government bonds, which had previously accounted for only about 1 per cent of total bond trading, accounted for 12 per cent at the end of 1998 and 30 per cent in April 1999. The most liquid bond tends to have a three-year maturity, but one and five-year paper is also becoming widely traded. The government will promote the three-year bond as the benchmark issue, with about half of all new issues expected at this maturity. However, the government began to issue bonds with longer maturities as well.

The market is expected to become even more liquid in 1999 as primary dealers in government securities are named. About 60 institutions have applied to be primary dealers, with about twenty expected to be chosen. The authorities are currently considering exactly what the responsibilities and privileges of primary dealers will be, but it is clear that these institutions will be leading purchasers in the primary market and will be expected to make markets in government paper. In addition, bid and offer prices will be posted on screens, and primary dealers will be expected to trade near those prices. A delivery versus payment settlement for OTC bond transactions will be set up by establishing a link between the Korea Securities Deposit settlement system and the Bank of Korea's payment system. Finally, futures contracts on three-year government bonds will be introduced in July 1999.⁴²

The largest amount of bonds issued prior to 1998 were corporate bonds "guaranteed" by commercial banks, merchant banks and insurance and securities companies. The final buyers of corporate debt were usually ITCs and bank trust accounts. Since it was widely understood that the government would never allow these financial institutions to fail, the corporate bond market contained significant moral hazard. However, as financial institutions came under solvency pressure, the share of non-guaranteed debt climbed from 10 per cent at the end of 1997 to 95 per cent in October 1998. Despite the widespread decline in credit quality in the private sector through most of the year, the top five chaebols continued to issue large amounts of bonds, which allowed them largely to escape the credit squeeze that occurred as banks reduced the volume of lending. Apparently, investors were willing to continue buying corporate bonds, either because the main intermediaries lacked independence from the issuers or because of the understanding that the largest chaebols would not be allowed to fail. Until recently, credit ratings have played a relatively small role in private bond markets and the domestic rating agencies have little credibility. In early 1999, a joint venture between a Korean rating agency and a major international agency was announced, while the International Finance Corporation has made a major investment in a rating agency. It is expected that, as the fixed income market becomes more active and investors gain greater independence from issuers, greater attention will be paid to the creditworthiness of borrowers, and investors will acquire more skills in pricing assets in line with underlying risks.

Steps have been taken to develop the necessary legal framework for a mortgage-backed securities market based on a specialised institution to securitise residential mortgages, but the details of how it will operate are not known. Experience in other countries suggest that this tool will allow banks to raise profitability by removing assets from their balance sheets while still earning considerable fees from the underlying transaction. Similarly, the legislation that permitted the issuance of asset-backed securities will enable Korean banks to use their capital more efficiently and enhance earnings. However, in order for

both of these systems to become effective, domestic investors will have to become more familiar with comparatively sophisticated products. Moreover, financial institutions will have to develop management information and risk management systems to enable securitisation to proceed.

Overall assessment

After 18 months of reform, it is possible to identify some tentative successes as well as a number of remaining challenges. The government has moved quickly to establish a more market-oriented system based on strict enforcement of prudential rules. The creation of an integrated and independent supervisor, the Financial Supervisory Commission, was a key step in this regard. Moreover, the authorities have gained considerable credibility by frankly acknowledging the size of the problems of balance-sheet quality and by requiring the management of private financial institutions to take corrective action. A large programme, equivalent to 14 per cent of GDP, has reduced the levels of NPLs and helped to re-capitalise the banks. This has resulted in increased confidence among foreign investors and should lead to a modification in the behaviour of non-financial corporations. Much remains to be done, though, in the banks, the non-bank financial sector and in the specialised and development banks.

The greatest progress has been achieved in the banking sector. The number of commercial banks declined from 27 to 17, and the number of their employees had fallen by one-third. Nearly all of the remaining banks have capital adequacy ratios that meet or exceed BIS norms, with an increase in the average from 7 per cent at the end of 1997 to 8.2 per cent a year later. The rise reflected official injections of capital and a reduction of assets; commercial bank lending fell by 25 per cent in 1998. With the initial re-capitalisation and consolidation effort nearing completion, the coming months will reveal whether the banks are capable of generating positive operating earnings on a sustained basis. While the measures taken by the government show great determination to proceed rapidly with the reform, there are serious risks.

A major challenge facing the authorities as they seek to build a market-based financial system is to reduce the current high share of government ownership in banks acquired over the past year. As a result of the insolvency of Korea First Bank and Seoul Bank, the government acquired 94 per cent of the equity of each institution. The government also owns more than 90 per cent of Hanvit and Chohung Banks, two of the banks that received conditional approval from the FSC and later merged with other banks. In addition, the KDIC injected capital into the strong banks that acquired the five weak banks in 1998, and thus has stakes ranging from 31 to 55 per cent in these banks. The significant ownership position,

combined with the high degree of informal pressure being exerted by the government in managing the bank rehabilitation and the workout plans of the 6 to 64-largest chaebols, diminishes the degree to which the financial system is actually operating under market conditions. While the government's current position may be defensible given present circumstances, it would be desirable for the authorities to reduce progressively their direct involvement in decision making and implement an exit strategy to complete the reform. In particular, it should follow through on its commitment to sell two of the weakest banks, Korea First Bank and Seoul Bank, to foreign investors, which would help improve the performance of Korean banks by raising the standard of competition. Moreover, reducing the government's stake would limit the need for additional public resources to complete the financial restructuring process. Reducing government ownership will require convincing private investors that the risk of losses from future NPLs has been contained and that a resolution of this problem is in sight.

There is a risk, though, of a significant rise in non-performing assets. Workout programmes that result in debt reductions or debt/equity swaps would require asset write-downs by the banks. In addition, the loans under workout programmes, some of which are currently classified as normal, will be automatically classified as precautionary or worse beginning in mid-1999. Consequently, the amount of precautionary loans, which already accounted for about 20 per cent of all loans at the end of 1998,⁴³ will rise further. In addition, the FSC will adopt a more rigorous loan classification standard later in 1999 that is based on the prospects of debtors to generate sufficient future cash flows rather than on their past payment histories. Following the introduction of this forward-looking standard, a substantial proportion of precautionary loans may become non-performing.⁴⁴ The new standards will be announced at the end of June 1999 and implemented on an experimental basis during the second half of the year, with full application of these standards from the end of 1999. A large increase in NPLs would undermine the authorities' goal of rehabilitating the banking sector with only limited infusions of additional public money. Nevertheless, it is important to move ahead with corporate restructuring and the improvement in bank supervision standards to avoid undermining the credibility of the reform process. Moreover, the FSC must stick to its commitment to avoid any regulatory forbearance by strictly adhering to the PCA framework.

KAMCO, which has already purchased W 44 trillion of impaired assets, remains a key participant in reform. The restructuring process can only be sustained if it succeeds in disposing of the large stock of assets it has acquired, thus generating additional resources. KAMCO has, in fact, set an objective of achieving large-scale asset liquidations in 1999. Although it has recently been assigned the role of a workout agency to hold impaired assets, it may be more efficient for KAMCO to sell assets as quickly as possible and allow final investors to concentrate on enhancing the value of impaired assets. It is important, therefore, for

KAMCO to establish a good track record in asset disposal, which requires the development of a market for impaired debt, before taking on additional functions.

There has been less progress in addressing the problems in the non-bank financial sector. As noted above, the NPL ratio in this sector is more than twice that of banks and, since measurement of asset quality has been less rigorous, the potential for future increases is considerable. Both the risk management of NBFIs and official supervisory oversight were ineffective in the past. The government will have to give increasing attention to issues of balance-sheet quality in this sector. This will require an accelerated effort to improve the quality of disclosure and reporting by the NBFIs and a more comprehensive restructuring programme. This challenge, though, is somewhat easier than in the banking sector, given the key importance that an operational banking system emerge from the restructuring. In the case of NBFIs, in contrast, impaired institutions should be resolved at the lowest cost to taxpayers, which, in most cases, implies closure. The merchant banks, in particular, no longer have a clearly identifiable function. Following deregulation and the introduction of a uniform supervisory regime, few differences will remain between the merchant banks and commercial banks. Thus, the authorities should encourage the exit of all merchant banks that fail to meet prudential standards within the stipulated time frame. Another priority should be to resolve the problems among the investment trust companies, which face an uncertain future as they face competition from the newly authorised mutual funds. Given their widespread insolvency problems, it is likely that the investment trust companies will require considerable attention from the authorities. Finally, the securities companies appear less threatened by insolvency than other types of institutions. Thus, while some realignment is likely in the wake of deregulation, there is little need for official involvement.

In the area of insurance, however, the situation is far more complex. The public has placed a significant amount of institutional savings and a large number of government guarantees have been extended to the insurance industry in Korea, which is already one of the largest in the world. Moreover, a well-functioning insurance sector is vital to a market economy and hence closure cannot be a complete solution. Consequently, the restructuring effort that began in March 1999 should be a comprehensive programme that includes some contraction in capacity, effective application of the stronger supervisory regime, sales to foreign investors and a selective commitment of government resources to assist in the transition.

In addition to the commercial banks, a number of specialised and development banks, which were subject to separate supervisory regimes in the past, have considerable significance. This group, which includes the Korea Development Bank, Eximbank, the Industrial Bank of Korea and national co-operatives for

agriculture, fisheries and livestock, had total loans of W 143 trillion at the end of 1998 – about half that of the commercial banks (Table 18). Their NPLs were also about half as large. The FSC, which assumed responsibility for the oversight of these banks in May 1999, will make recommendations concerning the need for remedial action by these banks. Their securities have been valued on a mark-to-market basis and the value of collateral against loans was appraised. The same loan classification rules applied to commercial banks will be imposed on the specialised and development banks this summer and examiners will begin to review the practices of each bank to assure that loans have been properly classified. In addition, these banks will be obliged to publish accounts on a fully consolidated basis by the end of the year. Limits on large group exposures and rules regarding guarantees extended to trust accounts and the segregation of customer funds will be made comparable to those applied to commercial banks, and the specialised and development banks will be required to establish the same type of risk management procedures.

While a stronger supervisory regime would help avoid future NPL problems, it may be appropriate to reconsider more fundamentally the role of these institutions in the new financial system. Most of these banks have specialised in targeting funds to particular activities that the commercial banks were incapable of servicing. However, with the development of deeper capital markets, the rationale for these institutions may be weaker than in the past. In any case, a stronger supervisory regime should be accompanied by a reformed governance system to assure that these institutions are managed in a more market-oriented way.

IV. Corporate restructuring and the governance framework

As noted in Chapter I, high levels of corporate debt, resulting from the debt-financed expansion by the conglomerates known as *chaebols*, was one of the factors that made Korea vulnerable to a financial crisis at the end of 1997. Implicit risk-sharing by the government and the lack of adequate corporate governance encouraged the large business groups to make excessive investments while discouraging financial institutions from adequately monitoring the soundness of the loans they made. In the wake of the crisis, corporate restructuring to deal with the large number of insolvent firms and to improve the financial structures of surviving firms has become a major priority. In January 1998, then President-elect Kim Dae Jung met with the leaders of the major conglomerates to establish five tasks for the corporate sector:

- strengthening the accountability of controlling shareholders and management to improve corporate governance;
- enhancing the transparency of management;
- eliminating cross debt guarantees between firms affiliated with the chaebols;
- improving the capital structure of firms;
- focusing the conglomerates on core activities;

The principal objective was to bring business practices into line with international best practices, thereby enhancing the competitiveness of Korean firms. Major creditor financial institutions are to take the lead in reforming the business sector. Consequently, the restructuring of the corporate and financial sectors are closely linked and the success of one depends on the other.

The government has launched a variety of reforms, summarised in Table 22, to achieve its objectives in this area. The chapter begins with a discussion of measures taken to improve the corporate governance framework. The following sections examine regulations governing the relationship between affiliated companies in the chaebols, including debt guarantees, and the improvement in insolvency procedures to facilitate the prompt liquidation or restructuring of failed enterprises. The fourth section looks at the three-track approach

Table 22. **Measures implemented in the area of corporate governance and restructuring**

Topic	Actions taken	OECD assessment/recommendation
Transparency	<ul style="list-style-type: none"> - Chaebols are required to prepare combined financial statements beginning in 1999. - External auditors and corporate accounting officers are subject to stiffer penalties. 	<ul style="list-style-type: none"> - Further measures to increase the independence of auditors would be beneficial.
Shareholder rights	<ul style="list-style-type: none"> - Minority shareholder rights strengthened by lowering the shareholding threshold for various initiatives (see Table 25). - The shadow voting requirement was abolished. 	<ul style="list-style-type: none"> - The top chaebols' practice of holding their annual shareholder meetings on the same day should be prohibited.
Company directors	<ul style="list-style-type: none"> - Listed companies were required to fill one-fourth of their boards of directors with outsiders beginning in 1999. - <i>De facto</i> directors, including controlling shareholders, face the same liability as elected directors. - The fiduciary duty of corporate directors was introduced. - Cumulative voting for directors was made possible. 	<ul style="list-style-type: none"> - Outside directors should be given important responsibilities by assigning them to committees on audits and remuneration. - Introduction of a legal tool to "pierce the corporate veil" would promote restructuring. - A clearer statement of their responsibilities and liabilities is needed. - This should be made a listing requirement for the stock exchange.
Intra-group relations	<ul style="list-style-type: none"> - New debt guarantees between chaebol subsidiaries prohibited in 1998; existing guarantees are to be eliminated by March 2000. - The 25 per cent ceiling on equity investments by chaebol subsidiaries was lifted. - Holding companies allowed subject to restrictive conditions. - Investigation of intra-group transactions led to the imposition of fines. 	<ul style="list-style-type: none"> - In the long-run, the issue of debt guarantees should be left to banks and companies. - The conditions restricting the formation of holding companies should be eased to allow chaebols to use this approach to restructuring. - The government role should focus on increasing transparency and facilitating redress by shareholders.
Insolvency procedures	<ul style="list-style-type: none"> - Introduced economic criteria in evaluating applications for corporate re-organisation and introduced time limits. 	<ul style="list-style-type: none"> - Additional reforms to establish a better trigger, a more unified approach and a larger role for creditors would be beneficial.

Table 22. **Measures implemented in the area of corporate governance and restructuring** (cont.)

Topic	Actions taken	OECD assessment/recommendation
Encouraging foreign in investment	<ul style="list-style-type: none"> - Ceiling on foreign shareholdings in individual companies was abolished May 1998. - All forms of M&A, including hostile takeovers by foreigners, permitted. - Number of business lines where foreign direct investment is restricted was reduced from 53 to 24 (see Box 1). 	
Other	<ul style="list-style-type: none"> - The ceiling on banks' equity investments in individual companies was temporarily boosted from 10 to 15 per cent. - From 2000, the corporate tax system will not allow interest payments on any debt exceeding five times equity capital to be deducted from taxable income. - The Corporate Restructuring Fund was established in October 1998 with W 1.6 trillion to assist SMEs. 	

Source: OECD.

implemented by the government to promote restructuring of the top five chaebols, the smaller conglomerates and small and medium-sized enterprises (SMEs). The chapter concludes with an assessment of the scope for further progress.

Improving the corporate governance framework

Ownership of the corporate sector is concentrated in the founding families of the chaebols (Table 23). Although their direct share has fallen below 10 per cent, shareholding by affiliated companies gives the owners effective management control of the conglomerates. Outside monitoring of companies tends to be weak. The capital market is relatively undeveloped and firms have relied primarily on debt finance for expansion. In addition, financial institutions, which are powerful corporate governance agents in many countries as major shareholders or debt providers, play only a small role in Korea. Although banks hold about a tenth of shares outstanding (Table 24), they do not monitor firms as closely as “main banks” do in Japan. Other financial institutions hold 16 per cent of shares, significantly lower than in other OECD countries. Their corporate governance role is further limited by the fact that a large portion of these shares are held by securities companies, merchant banks and insurance firms affiliated with the chaebols. Moreover, a regulation mandating “shadow voting” required financial institutions to vote along with major shareholders on all but the most important issues. In contrast to financial institutions, shareholding by non-financial corporations and the government is relatively high in Korea.

The largest group of shareholders in Korea is households, reflecting the large holdings of the founding families of the chaebols. Persons with more than 10 000 shares – less than 2 per cent of all shareholders – owned more than four-fifths of shares in 1996. Protection of minority shareholders tended to be weak. There were typically no outside members on boards of directors, which were entirely appointed by the controlling shareholders. In the wake of the crisis, the reform of the corporate governance framework has become one of the top priorities of the government (see 1998 *Survey* for details). Since then, there has been significant progress in three areas. *First*, the rights of shareholders were strengthened, particularly those with minority holdings in a company. *Second*, listed companies were required to appoint outsiders to fill one-fourth of their board seats. *Third*, transparency was increased by improving auditing and accounting standards and requiring the largest chaebols to prepare combined financial statements starting in fiscal year 1999.

Table 23. **Characteristics of the major business groups**

Group	July 1997					
	In-group ownership ¹	<i>of which:</i> Family ownership	Number of subsidiaries	<i>of which:</i> Listed	Number of industries in which they operate ²	Number of financial subsidiaries
	(Per cent)					
1 Hyundai	56.2	14.6	57	20	39	5
2 Samsung	46.7	4.2	80	16	31	5
3 LG	40.1	6.1	49	11	28	2
4 Daewoo	38.3	7.1	30	10	26	6
5 SK	44.7	14.6	46	6	26	2
6 Ssangyong	42.0	4.5	25	11	32	3
7 Hanjin	41.4	21.1	24	9	26	3
8 Kia	30.6	21.0	26	6	17	1
9 Hanwha	33.0	6.3	31	7	26	4
10 Lotte	22.8	3.4	30	4	22	3
11 Kumho	40.1	2.3	26	4	19	1
12 Halla	49.5	19.0	18	4	17	1
13 Dongah	54.2	12.0	19	4	15	1
14 Doosan	49.7	13.8	25	8	27	2
15 Daelim	34.2	9.1	21	5	19	1
16 Hansol	37.3	4.1	23	7	16	2
17 Hyosung	44.9	14.2	18	2	16	0
18 Dongkuk	51.0	18.5	17	7	16	0
19 Jinro	45.8	17.5	24	4	16	5
20 Kolon	45.1	8.6	24	4	21	3
21 Kohap	39.4	8.6	13	3	11	0
22 Dongbu	47.8	14.6	34	6	18	0
23 Tongyang	50.1	6.1	24	4	17	2
24 Haitai	30.9	6.0	15	3	12	0
25 Newcore	98.7	36.4	18	0	7	0
26 Anam	42.0	10.0	21	2	15	4
27 Hanil	37.4	12.2	7	2	14	0
28 Keopyung	59.0	17.5	22	5	19	4
29 Kiwon	52.5	16.3	25	5	15	2
30 Shinho	36.9	13.6	25	6	11	2
Average	43.0	9.3	27.2	6.2	19.8	2.1
Total			817	185		64

1. In-group ownership is the average, weighted by capital, of family ownership (shown in second column) in each company in the group plus the shares of subsidiaries.

2. At the K SIC 3-digit level.

Source: Fair Trade Commission.

Table 24. **Distribution of shareholding in selected OECD countries**

Per cent in listed companies at end of 1996

	Korea	United States	Japan	Germany	France	United Kingdom ¹	Sweden	Australia ²
Financial sector	26	46	42	30	30	68	30	37
Banks	10	6	15	10	7	1	1	3
Non-bank financial institutions	16	40	27	20	23	67	29	34
Insurance companies and pension funds	7	28	12	12	9	50	14	25
Investment funds	6	12	..	8	11	8	15	..
Other financial institutions	3	1	15 ³	–	3	9	–	9 ²
Non-financial enterprises	21	–	27	42	19	1	11	11
Public authorities	7	–	1	4	2	1	8	–
Households	34	49	20	15	23	21	19	20
Rest of the world	12	5	11	9	25	9	32	32
Total	100	100	100	100	100	100	100	100
Stock market capitalisation as a share of GDP	29	114	66	28	38	142	95	80

1. United Kingdom figures are for end-1994.

2. Australian figures are for end-September 1996. Investment funds are included in other financial institutions.

3. For Japan, pension and investment funds are included in other financial institutions.

Source: Nestor and Thompson (1999).

Strengthening the voice of shareholders

The reform of the Commercial Code in December 1998 has facilitated further the exercise of the rights of minority shareholders, helping to protect them from expropriation by dominant shareholders and managers. Self-dealing and other conflict-of-interest transactions are one of the main problems in the corporate governance framework in Korea. With the revision of the Code, the ownership thresholds required to launch such actions as derivative suits and the inspection of company accounts are much lower (Table 25). The thresholds had already been reduced for listed companies, particularly those with paid-in capital of more than W 100 billion. Shareholders have begun to take advantage of these provisions as illustrated by two recent cases. *First*, a derivative suit against the directors of Korea First Bank by a group of minority shareholders resulted in damages of W 40 billion to be paid by former officials (two presidents, a director and an auditor) to the Bank for wrongful behaviour and managerial failures. *Second*, Samsung Electronics had to pay damages of W 3 billion for its refusal to allow inspection of its accounts. These court decisions will force managers to pay greater attention to their accountability to minority shareholders.

The removal of the “shadow voting” requirement in September 1998 has allowed institutional investors to vote freely on such matters as mergers, business transfers and the election of directors and auditors. In addition, there has been a surge of investor activism in the wake of the crisis. Minority shareholders, led by citizen’s groups, such as the People’s Solidarity for Participatory Democracy, have prompted many long and animated discussions at annual general meetings, which were typically brief, formal procedures in the past.⁴⁵ By actively participating in the annual meetings of chaebol flagships and other major companies, minority

Table 25. **Minimum ownership to exercise rights**
Share of common stock in per cent

	Former commercial code	New code	For listed companies ¹	
			Small	Big
Judicial removal of a director	5	3	0.5	0.25
Right to injunction	5	1	0.5	0.25
Right to file derivative suit	5	1	0.01	0.01
Shareholder’s proposal in statements	–	3	1	0.5
Demand for convocation of SGM	5	3	3	1.5
Right to inspect account books	5	3	1	0.5
Right to inspect affairs and company property	5	3	3	1.5
Removal of liquidator	5	3	0.5	0.25

1. Small companies are those with paid-in capital of less than W 100 billion.

Source: Nam *et al.* (1999).

shareholders have managed to prevent some moves by the groups to reassign assets to the detriment of shareholders and have scrutinised management proposals and intentions thoroughly. Although their efforts have not always succeeded, minority shareholders appear to be emerging as an important voice in Korean corporate politics. However, major companies have tried to avoid discussions in annual general meetings by scheduling them all for the same day.⁴⁶

Enhancing the role of company directors

The amendment of the Commercial Code in December 1998 also clarified the responsibility of directors and widened the definition of the position. The new Code establishes the fiduciary⁴⁷ duty of directors and reinforced their liabilities. In addition, *de facto* directors – any person who exercises a direct decision-making function in a corporation while not a formal board member – are now subject to the same legal obligations as elected directors.

Perhaps the most important step in 1998 towards better corporate governance was the introduction of at least one outside director on the boards of listed companies. Moreover, most listed companies have complied with the requirement to appoint outsiders to fill one-fourth of their board seats beginning in 1999. While the inclusion of independent members is intended to change the way boards operate, there has been anecdotal evidence of outside directors resigning after discovering that they only have a minor role to play, but still face a potential liability. In addition, there are reports of *de facto* two-tier boards, with the

Box 4. Cumulative voting

Cumulative voting is a method of electing directors that affords minority shareholders a possibility to elect some of their representatives to the board. Under the more common system of non-cumulative voting, the election of each individual director is usually based on a one share, one vote approach, which allows the majority to elect all of its candidates. In cumulative voting, in contrast, the number of votes one shareholder may cast corresponds to the number of his/her common stock shares multiplied by the number of seats on the board. The entire board is elected in one round of voting, allowing the votes to be concentrated on one candidate and giving the minority the possibility of electing directors.

Cumulative voting is the default voting method in the US Model Business Corporation Act as well as in the corporate law of Delaware and New York, where the majority of large US corporations are registered. Several listed corporations elect their boards through cumulative voting. However, only a few states, including California, have made it a mandatory requirement. Among civil law countries, Italy recently introduced a weaker form of cumulative voting. The only country that has introduced a fully mandatory requirement for cumulative voting in its company legislation is Russia.

insiders meeting and deciding on the main issues in advance of the formal board meeting. Even in the best environment, however, outside directors are far from a perfect monitoring solution, as their independence cannot be guaranteed and they can be captured by insiders. As long as outside directors rely on insiders for their nomination, they will not be truly independent. Instead, cumulative voting (see Box 4), which enables minority shareholders to elect directors who represent their interests, may be the most effective solution in the case of Korea. The amendment of the Commercial Code in December 1998 allows cumulative voting beginning in June 1999. However, most listed chaebol affiliates, including each of the core companies at the top five groups, have amended their charters to prevent cumulative voting, in spite of objections by minority shareholders at the general meetings. Even some of the major state-owned companies, which have floated part of their equity, have refused to accept this form of electing directors. Overall, 130 of the 516 listed firms have allowed cumulative voting.

Enhancing transparency

Transparency is at the core of good governance as it allows shareholders and creditors to monitor management and to prevent managers and controlling shareholders from taking actions in their own interest at the expense of that of the company. The key element of the government's drive for increased transparency is the introduction of mandatory combined financial statements for the largest chaebols starting in 1999 and quarterly reporting in 2000. Combined statements are similar to consolidated financial statements, as their main purpose is to net out intra-group transactions.⁴⁸ A unique aspect of Korea's approach is the broad definition of joint control or common management in the combined statements, as defined by the Fair Trade Commission. At the same time, the combined statements will include disclosure of intra-group transactions and individual affiliate information in the footnotes of the statement, as well as segmented reporting (also known as business-line accounting). The definition in the new law, which is based on the concept of "effective control" used in the International Accounting Standards, appears sufficient to catch all chaebol subsidiaries. As effective control-based financial statements are prepared, intra-group transactions will become open to the public. One problem with the approach adopted, however, is that it might result in the consolidation of "subsidiaries" that actually have, or may develop, an arm's length relationship with the group and have significant minority shareholding. The current approach, which may be the second-best choice, is expected to be replaced by consolidated statements once ownership consolidation advances, intra-group guarantees are eliminated and intra-group transactions become more open to outside challenge.

The government has taken measures to increase the independence of external auditors. Since April 1998, listed companies and firms affiliated with the

top thirty chaebols have been required to form external auditor selection committees, that include outside directors and major creditors and shareholders. The amendment of financial accounting standards in December 1998 brings Korean practices into line with international accounting standards. Major changes include: the elimination of deferred assets and liabilities; the introduction of new rules for the accounting of derivatives; the adoption of limits on asset revaluation; and a reduction in the scope for shifting between different accounting standards in corporate accounts. In addition, listed companies with assets of more than W 100 billion are now required to appoint a full-time statutory auditor.

Changing intra-group relationships

The introduction of a holding company structure would enhance transparency and accountability, while promoting corporate restructuring by encouraging the sale of non-core businesses. Moreover, it might also attract foreign investment. Such companies were allowed in April 1999 subject to certain conditions. A holding company:

- must have a debt to equity ratio of less than 100 per cent;
- must own a majority share of its subsidiaries (30 per cent in the case of listed companies);
- cannot include the subsidiary companies of its subsidiaries;
- must eliminate any debt guarantees between member companies (applies to holding companies that include affiliates of the top thirty chaebols);
- cannot include both financial and non-financial enterprises among its subsidiaries.

These conditions are so restrictive as to discourage the creation of holding companies. The major obstacle seems to be the requirement that the debt to equity ratio must be below 100 per cent, even though a higher level of debt does not seem to pose any systemic risks. These conditions are intended to prevent a greater concentration of economic power, and the government considers that some of these conditions can only be eased once the corporate governance of chaebols visibly improves. However, discouraging the formation of holding companies appears to slow progress toward the rationalisation of ownership structures, which would enhance transparency and accountability. Indeed, the rationalisation of ownership structures was the objective of several recent measures, such as the abolition of the ceiling on investment by a chaebol-affiliated firm in another company.

Following an agreement with the government in January 1998, the chaebols have downsized their "Planning and Co-ordination Offices" and trans-

formed them into “Restructuring Offices”. In the past, these offices played the role of *de facto* holding companies by determining the objectives and strategies of the business groups and allocating workers and resources among affiliates (Yoo, 1999). The elimination of these offices is intended to encourage managers at the individual firm level to pursue independent strategies based on efficiency and competitiveness, thus doing away with the group-style management that focused on supporting affiliated firms. In some conglomerates, at least, the change in the name of the office appears to have been accompanied by a shift in its functions. For example, the restructuring office in LG, the fourth-largest group, has only a tenth as many staff as before and is taking the lead in consolidating control of some core companies. In line with the new objectives, members of the founding families have assumed responsibility as chairmen of an increasing number of affiliated companies in many of the chaebols.

The interests of minority shareholders may also be damaged by preferential transactions between affiliates of the same chaebols. Intra-group transactions accounted for about a fourth of sales and purchases by the listed companies of the top thirty groups in 1997 (Table 26). In some cases, the share of these transactions was over half. A provision added to the Fair Trade Act in 1996 made illegal “undue provision of money, assets, labour and other transactions involving significant preferential treatment”, with undue defined as a substantial deviation from the expected result of an arm’s length relationship in the market. The Fair Trade Commission (FTC) can impose fines on companies that violate this provision.

The FTC launched two rounds of investigations in 1998 on intra-group transactions among the top five chaebols. It reported that 113 firms had provided a total of W 5.5 trillion of support to 56 affiliates (Table 27). The first round investigation found that all but six of the 33 companies providing support had had profits during the preceding three years. Of the 21 beneficiaries, 17 (including four that were insolvent) recorded losses during that period. These results appeared to confirm suspicions that the owners of the conglomerates were trying to support weak firms by cross-subsidising them with funds from affiliated companies.⁴⁹ The FTC imposed W 91 billion of fines on the five conglomerates. In a sense, the fines made shareholders suffer twice, since they had already been injured by the decline in the profits of the firms which provided subsidies. The FTC launched an intensive probe in May 1999 of financial transactions between 25 companies affiliated with the top five chaebols.

Debt guarantees between chaebol affiliates are another important form of intra-group transactions. Following the regulation of such guarantees by the amendment of the Fair Trade Act in 1993, intra-group debt guarantees by the top thirty conglomerates had fallen from 342 per cent of their equity capital to under 40 per cent in 1998 (Table 26). Nevertheless, the continued reliance on such

Table 26. **Intra-group transactions and debt guarantees**

As of March 1998

Group	Intra-group transactions ¹	Cross-debt guarantees (W trillions)	Per cent of equity capital ²	Per cent of guarantees by core companies ³
1 Hyundai	34.9	3.2	30	76
2 Samsung	30.7	2.3	17	89
3 LG	18.9	3.7	41	78
4 Daewoo	29.2	1.6	18	90
5 SK	35.4	0.4	7	100
6 Hanjin	4.8	0.7	36	90
7 Ssangyong	31.6	1.1	38	90
8 Hanwha	31.6	1.3	146	88
9 Kumbo	10.1	0.9	88	100
10 Dongah	3.1	1.0	51	100
11 Lotte	13.1	0.5	20	100
12 Halla	21.1	0.6	-99	95
13 Daelim	25.3	0.8	74	100
14 Doosan	17.5	0.4	41	86
15 Hansol	36.8	0.5	37	100
16 Hyosung	13.8	0.2	18	100
17 Kohap	52.3	0.4	41	100
18 Kolon	5.8	0.6	71	99
19 Dongkuk	3.6	0.3	50	100
20 Dongbu	13.1	0.5	46	99
21 Anam	48.8	0.4	157	100
22 Jinro	27.0	0.4	-48	..
23 Tongyang	6.2	0.4	66	100
24 Haitai	7.6	0.3	126	..
25 Shinho	15.2	1.2	319	92
26 Daesang	34.0	0.5	119	99
27 Newcore	na	0.6	410	..
28 Keopyung	26.4	0.5	111	100
29 Kangwon	na	1.0	186	..
30 Saehan	22.2	0.6	108	..
Total	27.7	26.9	39	94.8

1. As a per cent of total transactions of listed companies in the same group in 1997.

2. Of the company extending the guarantee.

3. Top three companies in each chaebol.

source: Goldman Sachs Investment Research (1998).

guarantees reflects the weak credit culture of Korean banks, which make loans on the basis of promises by affiliated companies rather than on the business risks and prospects of the borrowing company. The guarantees are provided largely by the core companies in each group; in 1997, the top three firms in each conglomerate accounted for 95 per cent of guarantees granted by the chaebol as a whole (Table 26). Such contingent liabilities appear to lower the stock prices of these

Table 27. **Investigation of intra-group transactions¹**

Group	Number of subsidising companies	Number of subsidised companies	Estimated subsidy (W trillions)	Surcharges imposed by FTC (W billions)
Hyundai	48	18	1 119.1	31.8
Samsung	9	12	920.0	13.4
Daewoo	17	10	464.4	13.3
LG	23	8	1 125.5	12.4
SK	16	8	1 890.0	20.5
Total	113	56	5 519.0	91.4

1. These are the totals from the first round investigation of 80 companies in May and June 1998, and the second round of 33 companies in June and July 1998.

Source: Fair Trade Commission.

major companies. The share prices of the firms that held the largest debt guarantees in each of the top 27 chaebols show that 19 under-performed the Korea Stock Exchange price index in 1998.⁵⁰ In addition, such guarantees create the risk of chain bankruptcies. In 1997, there were 78 companies that had given debt guarantees that exceeded their own equity. Many firms, particularly those outside of the top five chaebols, found that loan guarantees increased their own debts as affiliated companies defaulted during 1998.

Following the crisis, the Fair Trade Act was amended to prohibit new debt guarantees among chaebol subsidiaries and to require that existing guarantees be phased out by March 2000.⁵¹ In addition, banks had to lift immediately any guarantees that exceeded the loan amount. The elimination of the cross debt guarantees between companies is expected to facilitate the restructuring process. About half of the guaranteed loans reach maturity before 2000. However, the removal of guarantees on some of the 30 per cent that expire in 2000 and all of the remaining 20 per cent that expire in 2001 or beyond will require negotiations between banks and the firms extending the guarantees. Various methods used to unwind these guarantees include imposing additional interest on the loan, requiring early repayment of principal, conversion into real estate-secured loans and guarantees from the owner of the company. The schedule was further accelerated in October 1998 when the government instructed affiliates of the top five chaebols to remove their guarantees between affiliates in different industries, which were thought to complicate corporate restructuring. These policy changes have reduced the amount of outstanding guarantees from W 26.9 trillion in April 1998 to an estimated W 12.3 trillion by the end of the year.

Reforming insolvency procedures

As discussed in the 1998 *Survey*, Korea's insolvency procedures include three formal procedures: *bankruptcy* (liquidation); *composition* (re-organisation of small viable firms) and *re-organisation* (for large enterprise that are viable). Prior to the crisis, though, the legal framework was inadequate. Although there were more than 17 000 bankruptcies in 1997, only 492 cases were filed before the courts. One weakness of the legal procedure was its length. More than half of the re-organisation cases completed during the period 1993 to 1995 had been initiated more than five years earlier (Table 28). In addition, the rules allowed significant scope for abuse by debtor firms. Only a fourth of the firms emerged successfully from re-organisation procedures during the 1993 to 1995 period. In the context of close links between banks and firms, many distressed firms and their creditors preferred to re-schedule debt rather than go through the lengthy legal procedures. Moreover, the government tended to bypass the formal procedure by bailing out firms that had followed its industrial policy in the 1970s and 1980s (Nam *et al.*, 1999).

The legislation governing re-organisations was amended in February 1998. The major changes included:

- *Firm time limits*: the courts must issue the order to preserve assets within two weeks of the filing of the petition, a re-organisation plan should be submitted within four months of the filing, and the courts should conclude the proceedings within one year.
- *Reliance on experts*: an administrative committee, composed of accountants and lawyers with experience in corporate re-organisation, has been created to advise judges in complex cases.
- *Use of an economic test*: re-organisation is only allowed for firms if the liquidated value of their assets is less than their value as a going concern.

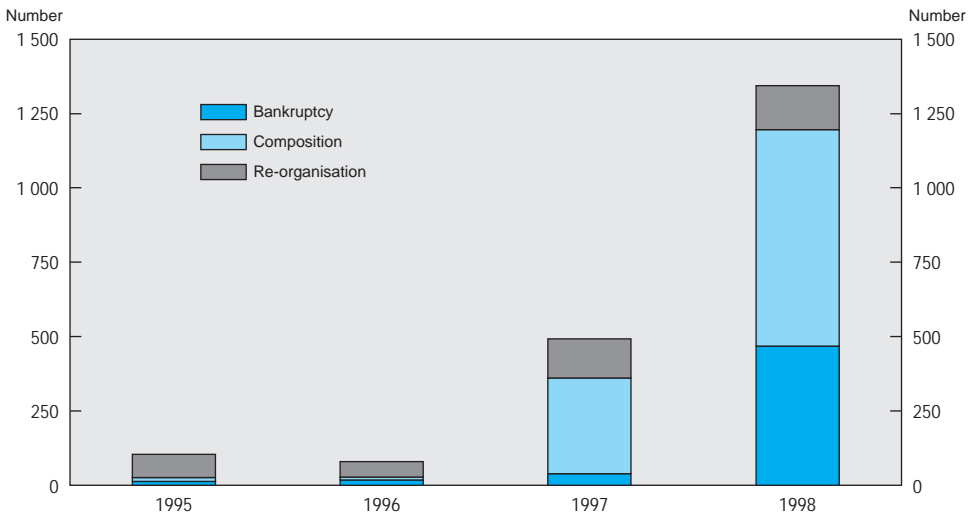
Table 28. **Results of corporate re-organisations**

1993 to 1995

Result	Number of years since filing of case						Total
	Less than 3	4-5	6-7	8-10	11-15	16-20	
Successful turnaround	1	1	2	6	7	1	18
Failure	17	12	10	8	5	0	52

Source: Nam *et al.* (1999).

Figure 25. Insolvency filings



Source: Ministry of Finance and Economy.

- *Greater role for creditors*: a committee of creditors is created in each case to channel information on the proceedings to the creditors on a regular basis. Creditors may also petition for termination of the procedure.

These improvements helped the legal system handle the threefold rise in the number of insolvency filings from 490 in 1997 to 1 343 in 1998 (Figure 25). A majority of the cases were filed in the first quarter of the year when the bankruptcy rate was nearly three times above its year-earlier level. The number of cases, though, was limited by the use of informal workout proceedings for companies belonging to the smaller chaebols (see below). The courts managed to complete a record 1 073 cases in 1998.

Restructuring the corporate sector

As noted above, the government set up three different approaches tailored to the restructuring needs of affiliates of the top five chaebols, companies of smaller conglomerates and SMEs. The top five chaebols – Hyundai, Samsung, Daewoo, LG and SK – together account for about one-tenth of value-added in the Korean economy. These groups were allowed to pursue “self-directed business

restructuring”, as they have the capacity to absorb the resulting losses. In contrast, the SMEs, which are thought to be too weak to bear the costs of restructuring, were to be supported by their creditor financial institutions. In the middle, viable companies in the 6 to 64-largest chaebols were to enter into “debt work-outs” with financial institutions, based on the principle of burden-sharing, as these groups do not have the ability to restructure successfully on their own. To facilitate the rehabilitation of the business sector, the government introduced two reforms. *First*, all forms of mergers and acquisitions (M&As), including hostile takeovers, were liberalised in May 1998. The possibility of a takeover is an effective deterrent against management incompetence. Moreover, M&As can replace bad management and help to restructure companies. Although there have not yet been any hostile takeovers, the number of domestic M&As increased by 16 per cent to 486 in 1998. In addition, efforts to boost foreign direct investment contributed to a sevenfold rise in the number of M&As by foreign companies, which accounted for a fifth of all such deals in Korea in 1998. *Second*, the 25 per cent ceiling on equity investment by a chaebol-affiliated company in another firm was lifted. This regulation, which had been aimed at limiting the expansion of the conglomerates, was no longer considered necessary in the context of greater competition and increased transparency. Moreover, it was an obstacle to restructuring, in addition to being discriminatory against domestic firms given the fact that foreign firms could buy 100 per cent of Korean enterprises. However, the ban on mutual shareholding between chaebol affiliates, which was implemented in 1987, remains in effect.

To establish a framework for restructuring, the government required each of the top 64 business groups to complete agreements, called “Capital Structure Improvement Plans (CSIPs)”, with their lead creditor banks between February and April 1998. These agreements specified annual debt to equity ratio targets for

Table 29. **The status of the non-viable companies¹**

At the end of 1998

	Top 5 chaebols	6-30 chaebols	Other companies	Total
Liquidation	6 (1)	15 (0)	4 (0)	25 (1)
Sale	8 (4)	3 (2)	4 (1)	15 (7)
Merger	6 (6)	4 (0)	1 (1)	11 (7)
Court receivership	0 (0)	1 (0)	3 (0)	4 (0)
Total	20 (11)	23 (2)	12 (2)	55 (15)

1. Refers to the 55 companies selected by the “Corporate Viability Assessment Committees” in May 1998. The number of companies for which the planned action has been completed is shown in parentheses.

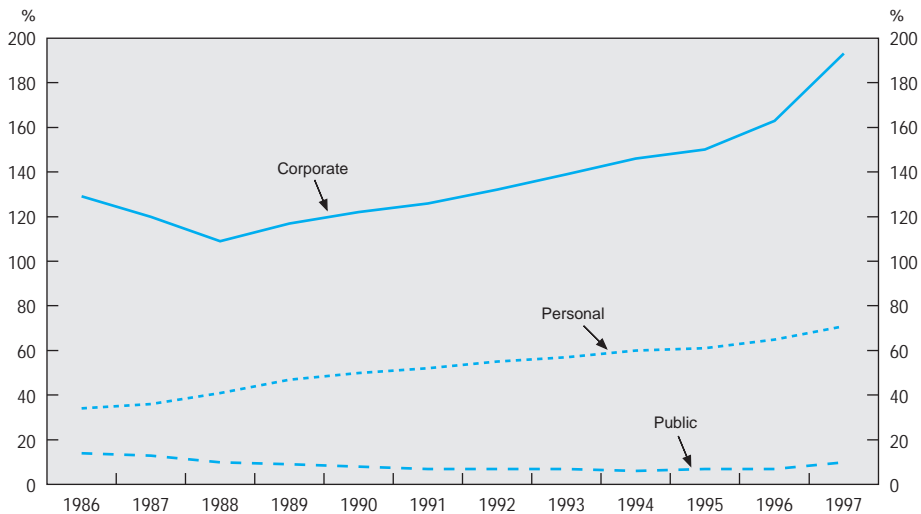
Source: Financial Supervisory Commission.

each chaebol, identified its core business areas and established divestiture plans for companies in other business segments. Corporate restructuring is based on the principle that assistance should be limited to viable companies, while those determined to be non-viable should exit promptly. In line with this principle, “Corporate Viability Assessment Committees” were created in each bank in May 1998. After examining 313 companies, they concluded that 55 of them, including 20 affiliated with the top five chaebols, were non-viable and should be liquidated, sold, merged or put into court receivership (Table 29). By the end of 1998, the fate of 15 of these companies had been resolved. The remainder of this section first examines progress in reducing debt to equity ratios. It then discusses developments specific to the top five chaebols, the workout programmes for companies affiliated with medium-sized conglomerates and finally the policies for SMEs.

Reducing debt to equity ratios

As noted in Chapter I, corporate debt has increased substantially in recent years. By 1997, it was approaching 200 per cent of GDP (Figure 26). For the top thirty chaebols, the debt to equity ratio reached a peak of 519 per cent at the end of 1997 (Table 30). The December 1998 agreement with the top five groups

Figure 26. Debt to GDP by sector



Source: Bank of Korea.

Table 30. Debt to equity ratios for top thirty business groups¹

Group	1995	1996	1997	1998 ²	Change from 1995 to 1998
1 Hyundai	376.4	436.7	578.7	508.1	131.7
2 Samsung	205.8	267.2	370.9	321.4	115.6
3 LG	312.8	346.5	505.8	481.7	168.9
4 Daewoo	336.5	337.5	472.0	406.9	70.4
5 SK	343.3	383.6	468.0	378.6	35.3
6 Ssangyong	297.7	409.4	399.7	395.5	97.8
7 Hanjin	621.7	556.6	907.8	632.5	10.8
8 Kia	416.7	516.9	n.a.	n.a.	n.a.
9 Hanwha	620.4	751.4	1 214.7	1 108.0	487.6
10 Lotte	175.5	192.1	216.5	203.5	28.0
11 Kumho	464.4	477.6	944.1	1 120.9	656.5
12 Doosan	622.1	688.2	590.3	610.9	-11.2
13 Daelim	385.1	423.2	513.6	472.2	87.1
14 Hanbo	674.9	n.a.	n.a.	n.a.	n.a.
15 Dongah	321.5	354.7	359.9	502.3	180.8
16 Halla ³	2 855.3	2 065.7	..	n.a.	n.a.
17 Hyosung	315.1	370.0	465.1	463.5	148.4
18 Dongkuk Steel	190.2	218.5	323.8	261.9	71.7
19 Jinro ³	2 441.2	3 764.6	..	n.a.	n.a.
20 Kolon	328.1	317.8	433.5	412.7	84.6
21 Tongyang	278.8	307.8	404.3	342.9	64.1
22 Hansol	313.3	292.0	399.9	532.7	219.4
23 Dongbu	328.3	261.8	338.4	279.5	-48.8
24 Kohap ⁴	572.0	590.5	472.1	..	..
25 Haitai ⁴	506.1	658.5	1 501.3	..	..
26 Sammi	3 244.6	n.a.	n.a.	n.a.	n.a.
27 Hanil	936.2	576.8	n.a.	n.a.	n.a.
28 Kukdong	471.2	n.a.	n.a.	n.a.	n.a.
29 Newcore	924.0	1 225.6	1 784.1	n.a.	n.a.
30 Byucksan	486.0	n.a.	n.a.	n.a.	n.a.
Anam ⁵	n.a.	478.5	1 498.5	1 713.7	1 235.2
Shinho ⁶	n.a.	490.9	676.8	..	..
Kabool	n.a.	n.a.	n.a.	937.3	n.a.
Saehan	n.a.	n.a.	419.3	431.4	n.a.
Dongkook Trade	n.a.	n.a.	n.a.	592.5	n.a.
Samyang	n.a.	n.a.	n.a.	206.6	n.a.
Total	347.5	386.5	519.0	458.2	110.7

Note: n.a. means that the group no longer qualifies for the list of the top thirty groups.

1. Debt to equity ratios for non-financial companies. If financial companies were included, the average ratio would be 603.6 per cent in 1998.

2. As of the end of June. The ratio for the end of the year was 379.8 per cent.

3. Negative equity in 1997 and did not qualify for the list in 1998.

4. Negative equity in 1998.

5. Anam was the 15th-ranked chaebol in 1998.

6. Shinho, the 20th-ranked chaebol in 1998, had negative equity that year. Tongil, the 29th-ranked chaebol in 1998, also had negative equity.

Source: Nam *et al.* (1999).

(discussed below) called for revising their capital restructuring plans (CSIPs) with their creditor banks to ensure that each chaebol reaches the 200 per cent target for debt to equity ratios on a consolidated basis by the end of 1999. This objective is also included in the CSIPs of the smaller chaebols. In addition, the Financial Supervisory Commission (FSC) will monitor the progress of the conglomerates in reducing their debt on a regular basis – monthly for the top five chaebols and semi-annually for the others. The FSC has ruled out asset revaluation and investment in kind (the payment for equity issues by non-monetary means) as means of reaching the 200 per cent target. Given the gap between the book value of assets and their current market value, adopting a “mark-to-market” approach would lower the debt ratios of manufacturing firms by a substantial 120 percentage points according to one estimate.⁵² Asset revaluation, though, is prohibited on the grounds that it is merely an accounting device that does not result in an inflow of new cash, thus leaving the level of debt unchanged.

Despite not allowing revaluations of assets or investments in kind, the top thirty groups were able to reduce their debt to equity ratios substantially from 519 per cent at the end of 1997 to 458 per cent in mid-1998 and further to 380 per cent at the end of the year (Table 31). The decline was due to a 40 per cent jump in equity. The top five chaebols, which were able to lower their average ratio to 335 per cent, accounted for most of the new rights issues. Progress in

Table 31. **Progress in reducing debt to equity ratios**

Trillions of won

	December 1997	December 1998	Percentage change	Achieving 200 per cent target through:			
				Equity increases	Percentage change	Asset sales	Percentage change
A. Top thirty groups							
Assets	435.3	472.8	8.6	472.8	0.0	299.1	-36.7
Equity	68.8	96.6	40.3	183.5	89.9	96.6	0.0
Liabilities	357.3	366.9	2.7	366.9	0.0	193.2	-47.3
Debt to equity ratio (per cent)	518.9	379.8	-26.8	200.0	-47.3	200.0	-47.3
B. Top five groups							
Assets	272.8	310.9	14.0	310.9	0.0	216.4	-30.4
Equity	46.8	70.0	49.5	117.3	67.5	70.0	0.0
Liabilities	221.4	234.5	5.9	234.5	0.0	140.0	0.0
Debt to equity ratio (per cent)	472.9	335.0	-29.2	200.0	-40.3	200.0	-40.3

Note: The information for 1997 and 1998 is from the Fair Trade Commission. The other numbers are based on calculations by the OECD Secretariat.

Source: OECD estimates.

reducing the ratio, though, was slowed by a rise in debt, particularly among the largest conglomerates. The increase in debt occurred despite substantial asset sales to foreigners that totalled almost W 10 trillion (more than 2 per cent of GDP) in 1998. The ratio would have fallen further to 285 per cent for the top five groups at the end of 1998 if both asset revaluation and investment in kind had been allowed.

Despite the progress thus far, reducing the ratios to the 200 per cent target for the end of this year appears to be a challenging task. Companies that belong to groups that fail to achieve this objective risk being refused additional loans from the banks, which, moreover, may call in existing loans. This target can be achieved through a contribution of rights issues and asset sales. The five largest groups, for example, could achieve the target by reducing through sales of 15 per cent of assets and boosting equity by a third through rights issues. Moreover, to the extent that the value of assets is based on book rather than market value, there is the possibility of capital gains that would reduce the extent of required asset sales.

Enterprises belonging to the top five business groups

By the end of 1998, the government had become dissatisfied with the pace of “self-directed restructuring” by the top five chaebols. A December 1998 agreement between those conglomerates, their creditor banks and the government stated that the “restructuring of the top five chaebols had fallen behind in producing concrete evidence compared to other corporate categories”, meaning the smaller chaebols and the SMEs. The relatively slow progress reflected the largest conglomerates’ continued access to financial resources, which helped to insulate them from pressures for change. *First*, they received over 30 per cent of total loans from the banking system in 1998, considerably above their 10 per cent share of GDP. *Second*, listed companies belonging to the top five groups were able to raise an estimated W 23 trillion through rights offers, accounting for 84 per cent of the total by affiliates of the top thirty chaebols. *Third*, they were able to issue W 11.6 trillion of corporate bonds during the same period, dominating that market as well with a 77 per cent share. The government, though, limited this last option by putting a ceiling on financial institutions’ purchases of bonds issued by the top five groups.

The December 1998 agreement included twenty points (see Annex II). Two of the major aspects, the “Big Deals” and the detailed restructuring plans of the five top groups, are outlined below. In addition, it stressed the reduction of debt to equity ratios, as discussed above. Other points in the agreement include the exit of non-viable firms, independent management of chaebol affiliates, the elimination of intra-group debt guarantees and the transparency of corporate management. These points were subsequently incorporated in the revised capital

structure improvement plans between the top five chaebols and their main creditor banks. Creditor banks are to have the primary responsibility in following the progress made in implementing the agreement, which will also be monitored by the FSC, given its role in assuring the soundness of financial institutions. In addition, the top five chaebol leaders and the creditor banks will meet every quarter with President Kim to review progress in implementing the plan.

Big Deals

The Big Deals have been developed as part of the solution to excessive competition, excess capacity and high debt to equity ratios. In August 1998, the Ministry of Trade, Industry and Energy identified ten industries that were in need of restructuring to reduce excess capacity, five of which were accepted by the conglomerates. The top five conglomerates announced plans in September 1998 in these industries (Table 32): semiconductors, power-generating equipment, petrochemicals, aircraft manufacturing and railroad vehicles. Two industries – ship engines and oil refining – were added on the initiative of the chaebols. The Big Deals were formally incorporated into the agreement between the government, the chaebols and creditor banks in December 1998. In each industry, the major producers are combined, leaving only one or two companies. In aircraft manufacturing, for example, companies affiliated with Samsung, Daewoo and Hyundai are to be combined into one enterprise. Perhaps the most significant deal in an international perspective is the merger of the semiconductor companies of Hyundai and LG to create the largest producer of DRAM chips in the world. The December 1998 agreement between the government, the chaebols and their creditor banks specified that ownership would be divided in a 7 to 3 ratio, giving one company managerial control. In three of the other deals – petrochemicals, aircraft manufacturing and railroad vehicles – the domestic companies' ownership was to be limited to half, leaving the remainder open to foreign investors. It was also agreed that the debt to equity ratios of some of the new companies would be reduced to 200 per cent by the end of 1999. The agreement added an eighth Big Deal: the swap of Samsung's car company for Daewoo electronics business. The government announced that it would reduce or exempt taxes resulting from the deals. Related tax laws were subsequently revised to support Big Deals while ensuring that no firm receives any special tax treatment. In the case of capital gains, corporate taxes will be deferred while those on individuals will be cut by half. In addition, the transactions and acquisition taxes on securities will be exempted for major shareholders.

By the end of 1998, however, there was some doubt as to whether the planned deals would actually be carried out. Fearing that a failure to follow through on these widely publicised Big Deals would undermine foreign investor confidence in Korea, the government has encouraged the banks and the conglomerates to fulfil their plans. The government naturally has a big interest in the

Table 32. **The Big Deals**
September 1998

Industry	Plan	Controlling body
Semiconductors	Samsung Electronics Co. Hyundai Electronics Ind. LG Semiconductor Co. } combine →	Samsung Electronics Co. Hyundai Electronics Ind. (Agreement reached in January 1999)
Power-generating equipment	Hyundai Heavy Industries Co. Korea Heavy Industries & Construction Co. Samsung Heavy Industries Co. } combine →	Korea Heavy Industries & Construction Co.
Petrochemicals	SK, LG, Daelim, Lotte, Hanwha Hyundai Petro-chemical Co. Samsung General Chemical Co. } combine →	SK, LG, Daelim, Lotte, Hanwha New entity
Aircraft manufacturing	Samsung Aerospace Industries Co. Daewoo Heavy Industries Co. Hyundai Space & Aircraft Co. } combine →	New entity
Railroad vehicles	Hyundai Precision & Ind. Co. Daewoo Heavy Industries Co. Hanjin Heavy Industries Co. } combine →	Third-party professional manager
Ship engines	Hyundai Heavy Industries Co. Korea Heavy Industries & Construction Co. Samsung Heavy Industries Co. } combine →	Hyundai Heavy Industries Co. Korea Heavy Industries & Construction Co.
Oil refining	SK, LG, Ssangyong Hyundai Oil Co. Hanwha Energy Co. } combine →	SK, LG, Ssangyong Hyundai Oil Co.
Cars ¹	Hyundai Motors ² Daewoo Motors ³ Samsung Motors } combine →	Hyundai Motors ² Daewoo Motors

1. Added in December 1998.

2. Hyundai Motors acquired Kia Motors earlier in 1997.

3. Daewoo Motors acquired Ssangyong Motors in 1997.

Source: Yoo (1999).

speed and intensity of economic restructuring, given its importance in overcoming the crisis. Accordingly, the December agreement required that detailed implementation plans for the Big Deals be included in each chaebol's revised CSIP. In addition, Hyundai and LG were warned that if they could not agree on who would have control of the new semiconductor producer, creditor banks would stop providing new loans and would call in existing loans to the company responsible for the impasse. In January 1999, LG decided to turn the business over to Hyundai which will fully control the consolidated entity.

Restructuring programmes

The December 1998 agreement between the government, creditor banks and the top five conglomerates specified the core industries for each group and the number of affiliates (Table 33). Hyundai, for example, is to concentrate on cars, construction, electronics, chemicals and financial services. The number of companies in the group is to be reduced by about half from 63 to 30, while for the five groups combined, it is to fall from 264 to 130. The two most indebted groups, Hyundai and Daewoo, responded to pressure in early 1999 to develop more ambitious plans. Daewoo's revised plan envisages the sale of all but eight of its 34 affiliates to pay off two-thirds of its debt. This includes the sale of profitable units such as its shipbuilding affiliate (Daewoo Heavy Industries) and Daewoo Telecom. Hyundai, as well, plans to sell off more affiliates to reduce its debt to equity ratio from 508 per cent in 1998 to 199 per cent at the end of this year. In practice, it will be difficult to achieve such a large number of sales in the next six months given the lack of buyers, domestic and foreign, willing to pay the prices

Table 33. **Restructuring plans of the top five business groups**¹

Group name	Core industries	Number of subsidiaries	
		End-1998	Objective
Hyundai	Cars, construction, electronics, chemicals and financial services	63	30
Samsung	Electronics, financial services and trade/service	65	40
Daewoo	Cars, heavy industry, trade, construction and financial services	41	10
LG	Chemical/energy, electronics/telecommunications, construction, distribution and financial services	53	30
SK	Energy, chemicals, telecommunications, construction, distribution and financial services	42	20

1. Based on the 7 December 1998 agreement between the government, the top five chaebols and their creditor banks. Source: Financial Supervisory Commission.

asked by the conglomerates. The sale of such a large number of firms in a short period of time puts the sellers at a big disadvantage. Finally, the opposition of labour unions to such deals may pose another obstacle. The proposal to sell Daewoo's shipbuilding company to a Japanese enterprise led to a strike at the Korean facility. In summary, the implementation of these programmes will be difficult to achieve in a short time period.

Debt workouts for companies affiliated with mid-sized conglomerates

A programme of workouts has been established to assist the restructuring of viable companies belonging to the 6 to 64-largest chaebols that face temporary management and financial problems. This approach, which requires creditor financial institutions to work closely with and provide support to companies in difficulty, differs from bailouts aimed at preventing the exit of failing companies. More than 200 financial institutions signed the "Corporate Restructuring Agreement" in July 1998, which specified the procedures for workouts. The FSC stressed the importance of finishing workouts expeditiously to avoid letting problems worsen, raising the eventual cost of restructuring. Consequently, a three-month time limit was imposed, with a one-month extension possible. Debt restructuring devices were to include debt/equity swaps, term extensions, deferred payment of principal or interest, interest rate cuts and provision of new credits. The resulting losses were to be shared fairly among the creditor financial institutions. If creditors were unable to reach agreement, arbitration was to be provided by the "Corporate Restructuring Co-ordination Committee". Favourable tax treatment of the measures adopted is possible in some cases. In a debt/equity swap, for example, a bank acquiring shares is exempt from the acquisition tax. In addition, when a firm sells real estate holdings to reduce its debt, taxes are not imposed.

Fifteen chaebols among the top 6 to 64 had entered into the workout process by March 1999. Of the 248 companies in these groups, 12 were financially healthy while 198 were resolved *via* mergers, liquidation or sale. The 38 remaining firms were judged to be viable and were thus eligible for the programme. An additional 28 firms from smaller chaebols and 12 independent enterprises entered the workout programme.

By March 1999, workout programmes had been completed for 72 companies with a total of W 33 trillion in loans (Table 34). The banks granted W 2.1 trillion in additional credit. Moreover, some type of concession was offered on 92 per cent of the total amount of loans outstanding, primarily through interest rate cuts. Nevertheless, the rate remained above the prime rate in most cases. Although debt/equity swaps have been frequently cited as an effective option for reducing corporate debt, only about a tenth of the loans outstanding were converted into equity. This reflects the problems inherent in such arrangements for both banks

Table 34. **Results of the workout programme**
As of the end of March 1999¹

	W trillion
Amount of loans on which concessions were offered	30.7
Interest rate cuts	21.7
Debt/equity swaps	3.7
Waiver of interest payments	5.3
Provision of new credits	2.1
New loans	1.3
Trade financing	0.8
Repayment of loans	0.1
<i>Memorandum item:</i>	
Total loans outstanding to companies in workouts	33.3

1. The results of the 72 workout plans completed by the end of March 1999.

Source: Corporate Restructuring Co-ordination Committee.

and firms. Banks are reluctant to exchange debt for equity, which is a riskier asset than secured loans. Moreover, they prefer interest income and are inexperienced in equity management. On the other hand, firms are hesitant to exchange equity for debt since they risk losing control to a bank, which, moreover, may be government-owned. The capital reductions carried out as part of restructuring have put management control at risk, in addition to hurting shareholders. However, management is not required to resign in the case of a debt/equity swap and, thus far, only four firms have agreed to surrender managerial control. Moreover, the FSC requires that the banks dispose of equity gained through such swaps within three years. No debt/equity swaps have occurred among companies belonging to the top five chaebols.

Small and medium-sized enterprises

SMEs, defined as firms with less than 300 employees in the manufacturing sector and fewer than 20 in the service sector, were especially hard-hit by the 1998 recession. In particular, they were seriously affected by the credit crunch as banks reduced their lending and gave an increased share to larger firms. In addition, SMEs were hurt by their links to larger firms, which increased greatly during the past decade. As the gap between wages at small and large firms widened from 1987 onwards, big firms increased the amount of work sub-contracted to SMEs in order to remain competitive. In the wake of the crisis, though, a significant number of firms delayed their payments to their sub-contractors, which are typically made in the form of drafts. Although the Fair Trade Act limits such drafts to 60 days, their average maturity rose to between 90 and 120 days in 1998 (Joo Hoon Kim, 1998). Faced with these problems, the SMEs

accounted for a large proportion of the sharp rise in the bankruptcy rate recorded last year.

The government responded with a variety of measures to support SMEs, notably by helping them to obtain credit. A first step was to establish a special task force in each bank in May 1998 to analyse the situation of smaller firms. By the end of June, they had completed a triage analysis of all SMEs with bank credits of over W 1 billion – more than 36 000 firms in total. The firms were classified into three groups; priority support (38.9 per cent), conditional support (55.6 per cent) and others (5.5 per cent). For firms in the first two categories – almost 95 per cent of SMEs – banks were instructed to roll over automatically their loans maturing by December 1998 in order to alleviate the credit crunch. Firms classified in the category of conditional support, though, were required to make efforts to reduce their debt to equity ratios and to improve their capital structure by disposing of real estate holdings.

In addition to directing the banks to roll over loans to SMEs, the government provided direct assistance. Most importantly, it provided W 33 trillion of guarantees for loans to small firms. Additional budgetary support of W 2.2 trillion was provided through a variety of programmes, including the Creation of Small Enterprise Fund, the Technology Credit Guarantee Fund and the Enterprise Promotion Fund for Software. Moreover, 25 financial institutions established the Corporate Restructuring Fund and raised W 1.6 trillion to assist small companies. In addition, \$3.4 billion from a World Bank loan and foreign currency reserves were used to help small firms open letters of credit to import raw materials. The central bank contributed to this effort by changing its criteria for setting credit ceilings to encourage banks to support small firms. Under the new system, which was established in November 1998, the performance of individual banks in supporting SMEs will be evaluated and used by the Bank of Korea as a criterion in setting their individual credit quotas. In addition to measures to increase access to credit, small firms were granted tax benefits. The income tax or corporate tax will be reduced by half for newly established SMEs during their first five years, and tax benefits associated with facility investment were made more generous.

Scope for further progress

The corporate governance framework

Given the role of corporate governance failures in the 1997 crisis, the government has placed great emphasis on improving the governance framework. However, reform in this area cannot be expected to produce quick results. Instead, improving the corporate governance framework requires creating a long-term institutional and legal environment that will encourage a shift in the

priorities of Korean firms from over-investment and relentless expansion to producing more shareholder value. While the results of corporate governance reforms should not be expected to emerge overnight, their consistent pursuit should be a high priority of policymakers and regulators. Substantial work is still needed in Korea to improve the legal framework of corporate governance and to enhance the capacity of institutions, such as the courts and the FSC, to implement it. The fundamental objective should continue to be a shift in the focus of the corporate control system from government fiat to market-based full disclosure.

The preparation of a code of best practices by the Committee for Corporate Governance Improvement, which consists of important professional players and market institutions, is also a welcome development. In this respect, the 1999 OECD Principles of Corporate Governance could play a central role as a framework for the debate and a benchmark from an international perspective. Finally, there might be more scope to include labour in the effort to improve governance and control structures in corporations by instituting a dialogue on the major reform issues and strategies. In some cases, ownership could be extended to employees as part of the restructuring effort.

The definition of the role of company directors and their legal responsibility remains weak even after recent changes in the legal framework. A more detailed definition of the duties of directors that goes beyond the December 1998 amendment, which established their fiduciary duty to the corporation, is needed along with better enforcement. A further strengthening of director responsibility could be achieved by a clear statement of their civil, and in some cases, criminal liabilities and the conditions for the award of damages due to a breach of fiduciary duties to the corporation, including self-dealing and other conflict-of-interest transactions. To avoid discouraging entrepreneurial initiative, though, these should be accompanied by a narrowly defined “safe harbour” test for managers, such as the business judgement rule. Finally, the provision concerning the legal responsibilities of *de facto* directors should be effectively implemented, despite the difficulties that Korea’s civil law tradition may pose.⁵³

It is also important to ensure that outside directors are active players in corporate governance by giving them real responsibilities and a non-trivial role in board meetings. Outside directors, for example, could be assigned to powerful internal committees such as those on audits, remuneration and nominations. In addition, cumulative voting is an important method of placing truly independent directors on the board. One solution might be to adopt cumulative voting as a listing requirement, while leaving it optional for unlisted companies. While more sophisticated equity markets may effectively leave the choice of the system to elect directors to the market, a stronger approach might be more effective in the case of Korea. Finally, meeting the urgent training needs for outside directors is another priority that needs to be addressed.⁵⁴

In addition, measures to enhance transparency are important. The practice of having annual general meetings on the same day to avoid difficult questions from shareholders should be strongly opposed by the supervisor of the securities market. The government is expected to announce an array of measures to enhance further the independence of the auditing profession by considerably increasing the responsibilities of auditors and severely sanctioning failure. The establishment of an independent professional organisation by June 1999 to set accounting standards should also be beneficial. Transparency could also be enhanced by allowing holding companies through an easing of the stringent conditions that prevent their formation at present. Holding companies should be accompanied by a clear signal that the principle of limited liability in joint stock companies cannot be used as a shield for opportunistic behaviour by major shareholders. A formal legal tool to “pierce the corporate veil” could provide powerful incentives to abandon cross-corporate linkages and promote direct ownership by chaebol families.

Intra-group transactions

The government is concerned with aspects of intra-group transactions that distort competition. The top five chaebols were penalised in 1998 for transactions that were judged to differ from the expected results of arms-length agreements in the market. It could be argued on efficiency grounds that firms should be free to internalise transactions and take advantage of a group structure as long as there is no negative impact on competition. In practice, though, preferential transactions between companies affiliated with a chaebol can distort competitive conditions. Historical aspects of the group structure have hampered the development of more transparent and flexible market institutions. In such a context, the role of the government should be to encourage transparency in intra-group transactions and to facilitate the redress of shareholders who have been adversely affected, while ensuring competition in the market.⁵⁵ Moreover, the company law is still in need of a more systematic, detailed approach to increase the transparency of these transactions, as well as the possibility of shareholder monitoring *ex ante* to prevent self-dealing and other conflict-of-interest transactions. Regarding intra-group debt guarantees, the ban on new guarantees and the phasing out of existing ones may be the only method of overcoming the negative consequences of this deeply entrenched practice. However, having no guarantees may not be the optimal solution either as it may create other market distortions. In the long run, the issue should be a matter for shareholders and creditors to decide.

The insolvency framework

Although the 1998 reforms improved the insolvency framework, further changes are needed in this area. Indeed, a new insolvency code may be brought

to the National Assembly during the summer. Such a revision should include at least three elements. *First*, it should establish a more streamlined trigger mechanism and a swifter commencement of the proceedings which would provide debtors and creditors with an incentive to file for re-organisation early and thus preserve value. *Second*, the procedure for moving from one insolvency procedure to another should be simplified; in this respect, a “unified” procedure, which would enhance the flexibility of restructuring efforts, might be considered. *Third*, the revision should allow a greater role for the creditors in decision making and the governance of the debtor.

Restructuring the corporate sector

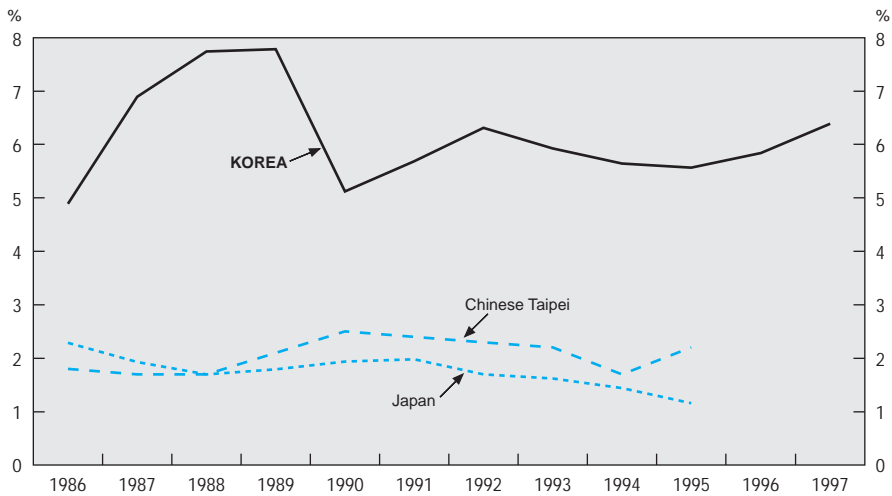
Restructuring in the corporate sector appears to have advanced less quickly thus far than that in the financial sector, which was the first priority following the crisis. Indeed, an operational financial system is, to some extent, a prerequisite for rehabilitating the business sector. The linkages run in the other direction as well: given the banks’ high level of loans outstanding to the chaebols, the collapse of major business groups would swamp the banks with non-performing loans, endangering their survival. The efforts to restructure the corporate and financial sectors are thus closely linked and one cannot succeed without the other. With their own survival at stake, the banks have a strong incentive to prop up non-viable firms by making “anti-bankruptcy” or “co-operative” loans. In a situation where the banks are hostages to the continued survival of the chaebols, the banks alone are incapable of assuring successful restructuring. As a result, there is a role to be played by the government, which has a strong interest in the progress of restructuring. In particular, its role as supervisor of the banking system requires it to be involved in the restructuring process. In addition, the government’s status as the major owner of several commercial banks and a significant owner in others gives it a voice in the process.

The need for government involvement was greatest in the wake of the crisis, given the need to boost investor confidence by demonstrating progress in reforming the highly-indebted business sector. With the economic recovery and the normalisation of financial markets, the rationale for government action to jump-start the corporate restructuring process and to attenuate the crisis has been greatly reduced. Indeed, the perception of significant government involvement may now be counter-productive as it suggests a continuation of past interventionist industrial policies and a failure to implement the new market-based approach. In particular, the government’s insistence on requiring the chaebols to implement the Big Deals announced last September makes these appear, to some extent, to be a non-market solution. Given changing market conditions and the difficulty of valuing assets in these complex deals, a business plan created last year may no longer be attractive to the companies involved.

Allowing the chaebols to back out of these deals would not necessarily undermine the currently high level of confidence about Korea, both domestically and among foreign investors. Instead, it might show that the dirigiste approach of the past is finished and the government is more concerned with correcting the underlying fundamentals – the corporate governance framework, insolvency procedures and the weak financial system – factors that let serious problems develop in the first place.

Encouraging greater concentration in core activities has long been an objective of government policies towards the chaebols. The specialisation policy of the early 1990s, for example, exempted the conglomerates from existing regulations on investment and credit control in their core industries. The Big Deals are aimed at consolidating excessive and duplicative investments, thus resulting in significant economies of scale. Some aspects of these deals, however, are troublesome. *First*, the creation of duopolies in the eight industries will significantly boost industrial concentration,⁵⁶ raising concerns about the level of competition. Ensuring that these markets are open to foreign products should be a priority to maintain competition. In addition, increased emphasis on strict enforcement of the Fair Trade Act to prevent collusion among the remaining producers is called for. *Second*, there is a risk that the government will be held liable for the failures resulting from the Big Deals. In the past, companies that followed the guidelines of industrial policy were implicitly guaranteed a government bailout in case of difficulty. Although the present government has clearly stated that no bailouts will be provided, the explicit inclusion of the government in the December 1998 agreement requiring the implementation of the Big Deals may serve to strengthen this implicit liability. In any case, the involvement of the government has politicised the issue. *Third*, the mergers of chaebol affiliates as such do not necessarily address the fundamental problems of excess capacity and debt. In this regard, the agreement of Daewoo Motor Company to continue producing Samsung vehicles during the two years following the takeover appears to undermine the rationale for Big Deals. Moreover, Hyundai Electronics agreed to keep all LG Semiconductor employees for a period of two years.

Reducing debt to equity ratios is an important aspect of corporate restructuring. As noted in Chapter I, the high level of debt and the resulting interest cost burden were factors that made Korea vulnerable to contagion during the Asian crisis. Financial expenses as a share of sales are much higher in Korea than in Japan or Chinese Taipei, for example (Figure 27). Consequently, at the initiative of the FSC, the top 64 chaebols and their creditor banks agreed that the debt to equity ratio for each group, calculated on a consolidated basis, would be reduced to below 200 per cent by the end of 1999. While reducing debt to equity ratios is an important objective, setting a fixed target can only be justified as a transitional measure in the post-crisis period. As the restructuring of the corporate sector proceeds and a credit culture develops in the banking system, banks

Figure 27. Financial expenses to sales¹

1. Manufacturing sector.

Source: Bank of Korea.

should have the capability to determine the appropriateness of the financial structure of each individual borrower.

As noted above, workouts have been used for companies belonging to the 6 to 64-largest chaebols. Although the workout plans for the initial 72 companies were completed by the end of March 1999, the government plans to continue this approach to assist ailing companies. It has been more advantageous to the banks in terms of loan classification and provides for a more flexible, creditor-led framework for the restructuring of the debtor. However, several aspects of the workout approach are unpopular with the banks and the companies themselves. The informal nature of this approach provides a lower level of legal certainty as they can be challenged and undone by courts. From the perspective of firms, entering into a workout hurts their image and makes it more difficult for them to get financing from the capital market, though the impact is much less severe than if they entered into insolvency proceedings. As noted above, the incumbent management remains in place in most workouts, largely because of the inadequate supply of professional managers. Still, the intervention in management affairs by the creditor banks is not welcome by the firms, which complain that workout officials dispatched from banks are amateurs at running companies. However, one company, Kyonggi Chemical, which resisted its creditors' demands for a capital reduction and a debt/equity swap, found its workout plan cancelled and

was forced to file for court receivership. From an efficiency perspective, it is important that workouts be limited to companies that are truly viable in order to avoid transferring more funds from the banks to firms that will eventually fail, thus aggravating the non-performing loan problem.

Regarding the restructuring of smaller enterprises, the numerous programmes described above have been successful in assisting existing SMEs and supporting the creation of new ones. By December 1998, the number of bankruptcies had fallen to nearly a third below its level in December 1996 while the number of new firms created had risen by a fourth. However, the policies used to support SMEs may impose high efficiency costs. The rollover of loans to nearly all small firms may have sustained enterprises that ideally should have exited from the market. The end result may be a diversion of funds from more efficient uses and a reliance on public funds to cover guaranteed loans that eventually become non-performing. With the credit crunch apparently waning and the economy recovering, there appears to be less justification for using such policies to limit the decline in employment and production. Moreover, the general principle that banks should bear a large portion of the cost of restructuring of SMEs seems inconsistent in a long-run perspective with efforts to create independent banks with the ability to analyse credit risks. However, phasing out these measures to boost credit to SMEs should be accompanied by steps to boost their access to bank loans, which may be improved with the end of cross debt guarantees, which had favoured the affiliates of chaebols. In this regard, the development of credit rating agencies (see Chapter III) would help qualified small firms to obtain credit. Finally, the central bank's decision to base credit ceilings for individual banks on their performance in lending to SMEs appears to go against the desired shift to a more market-based approach to implementing monetary policy.

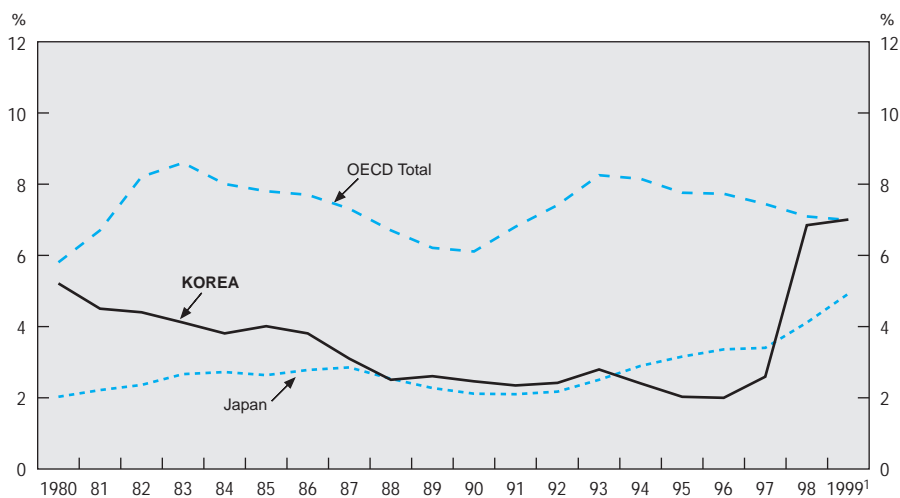
In summary, it appears that three principles should underlie the corporate restructuring process. *First*, it should be clear that the pattern of government intervention of the past has been replaced by a more market-oriented approach in which the government's major role is to establish the proper framework. This includes further improving the corporate governance system and the exit mechanism and rehabilitating the financial system. Such an approach requires some patience on the part of the government to allow the restructuring process to work itself out rather than trying to establish fixed deadlines by when the process should be completed. *Second*, funds should not be wasted to extend the lives of non-viable firms. Instead, an effective exit mechanism should help recycle assets from failing companies. *Third*, the threat of bankruptcy should be a fundamental factor driving restructuring. It should be clear that no enterprise or chaebol is too big to fail, even though the resulting rise in non-performing loans may require further efforts by Korea Asset Management Corporation to deal with the consequences for banks.

V. Labour market trends and policies, and the development of a social safety net

The financial crisis at the end of 1997 has had severe consequences for the labour market. Faced with falling demand and high interest rates, firms cut both employment and nominal wages, resulting in a sharp decline in real income for workers. Employment adjustment was facilitated to some degree by legal changes that expanded the scope for layoffs of redundant workers. As a result, the unemployment rate, which had averaged less than 2½ per cent during the past ten years (Figure 28), soared to 8½ per cent by the beginning of 1999, surpassing the average of the OECD area at the beginning of 1999. The deterioration of labour market conditions was even more pronounced than suggested by the rise in unemployment as it was accompanied by a significant fall in the labour force participation rate and increased farm employment. Moreover, the proportion of the jobless who are between the ages of 30 and 50 and the head of a household rose substantially. The increase in unemployment was accompanied by a decline in nominal wages in 1998.

The labour market situation poses a severe challenge to the authorities in Korea, where full employment had long been the norm and the social safety net was very limited in scope. The 1998 *Economic Survey of Korea* included a chapter on *Implementing the OECD Jobs Strategy*, which analysed the Korean labour market in the aftermath of the financial crisis and provided detailed policy recommendations for overcoming recent problems. The government has, in fact, made rapid progress in putting these recommendations into practice. The labour law revision of February 1998 allows firms to shed redundant workers. This greater employment flexibility was accompanied by W 10 trillion of expenditure (2 per cent of GDP) in 1999 to assist jobless persons. Increased outlays have been used to broaden the coverage of employment insurance and to lengthen the duration of benefits, expand vocational training programmes and create public works jobs. Moreover, temporary work agencies were allowed and regulations on private job placement firms were relaxed, while the Public Employment Service has been improved. Finally, a programme of regulatory reform has been initiated, in part to attract inflows of foreign direct investment and promote job creation.

Figure 28. Unemployment rates



1. OECD projections.

Source: Ministry of Labour; OECD.

The increased number of jobless and inactive has boosted poverty and worsened income distribution, while labour adjustment has strained industrial relations in Korea. Unemployment appears to have peaked in the first quarter of 1999, traditionally the time of year with the highest jobless rate as new graduates enter the job market. Although it had fallen to 6.5 per cent in May, employment and the participation rate both continued to fall during the first four months of the year. Further declines in the unemployment rate may be more gradual, thus making the labour market a major concern both this year and in the future. This chapter begins with an overview of the impact of the crisis on the labour market. The following sections review government policies to address the labour market problems, to expand the social safety net and to encourage job creation. The chapter concludes with a discussion of the scope for further progress.

Impact of the crisis on the labour market

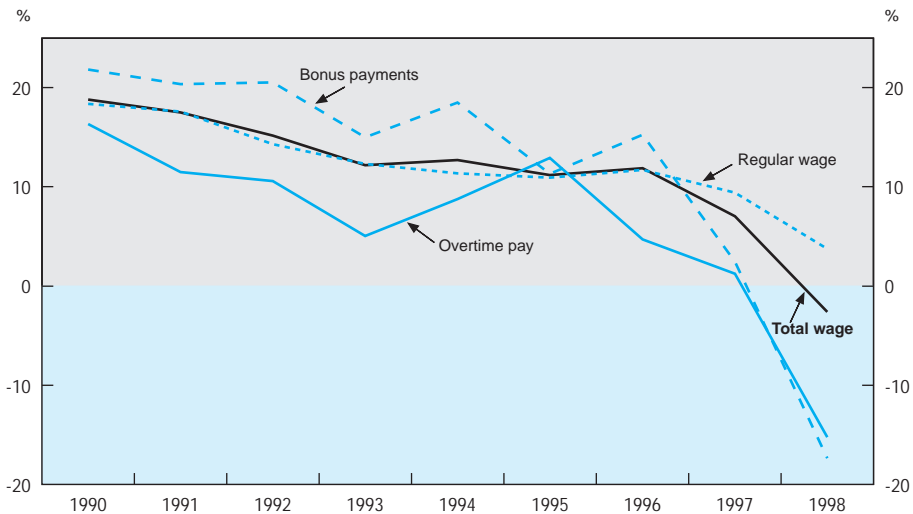
The labour market problems that emerged following the crisis differed significantly from past experience in Korea. The generally low number of unemployed had been concentrated among young persons, many of whom were looking for their first job. While the unemployment rate increased sharply for this

group in 1998 despite a large fall in the participation rate, it was accompanied by a substantial rise in joblessness among the 30 to 50 age group. Consequently, the characteristics of the unemployed had shifted to include more persons with work experience, particularly as production workers in the industrial sector. Finally, the extent of the deterioration in the labour market was somewhat masked by the decline in participation concentrated among women and young persons.

Falling wages...

Nominal wages fell by an average of 2.5 per cent in 1998, the first decline since 1970, in the face of a 7.5 per cent rise in the consumer price index. As noted in Chapter I, declines in nominal wage levels are rare in OECD countries, even during recessions. The flexibility of wages reflects the structure of employee compensation; bonus and overtime payments,⁵⁷ which account for a third of total pay, are particularly sensitive to economic conditions. Indeed, bonus payments declined by 17 per cent in 1998, while overtime pay fell by 15 per cent as the large declines in production reduced working hours (Figure 29). Consequently, total working time fell 2 per cent to an average of 45.9 hours per week, the lowest since 1970.

Figure 29. Wage growth by components



Source: Ministry of Labour.

In addition to bonus and overtime payments, the practice of annual wage negotiations at the enterprise level has been a source of flexibility. Regular wages had increased at double-digit rates during the decade prior to the crisis. During the spring 1998 wage bargaining, however, many workers agreed to freeze or even cut regular wages in an effort to limit the fall in employment. Consequently, the growth of regular wages slowed to less than 4 per cent for 1998 as a whole. The largest reductions in compensation were recorded in the construction and financial sectors, reflecting the efforts to restructure weak financial institutions. The decline in the manufacturing sector was concentrated on production workers rather than on white-collar employees.

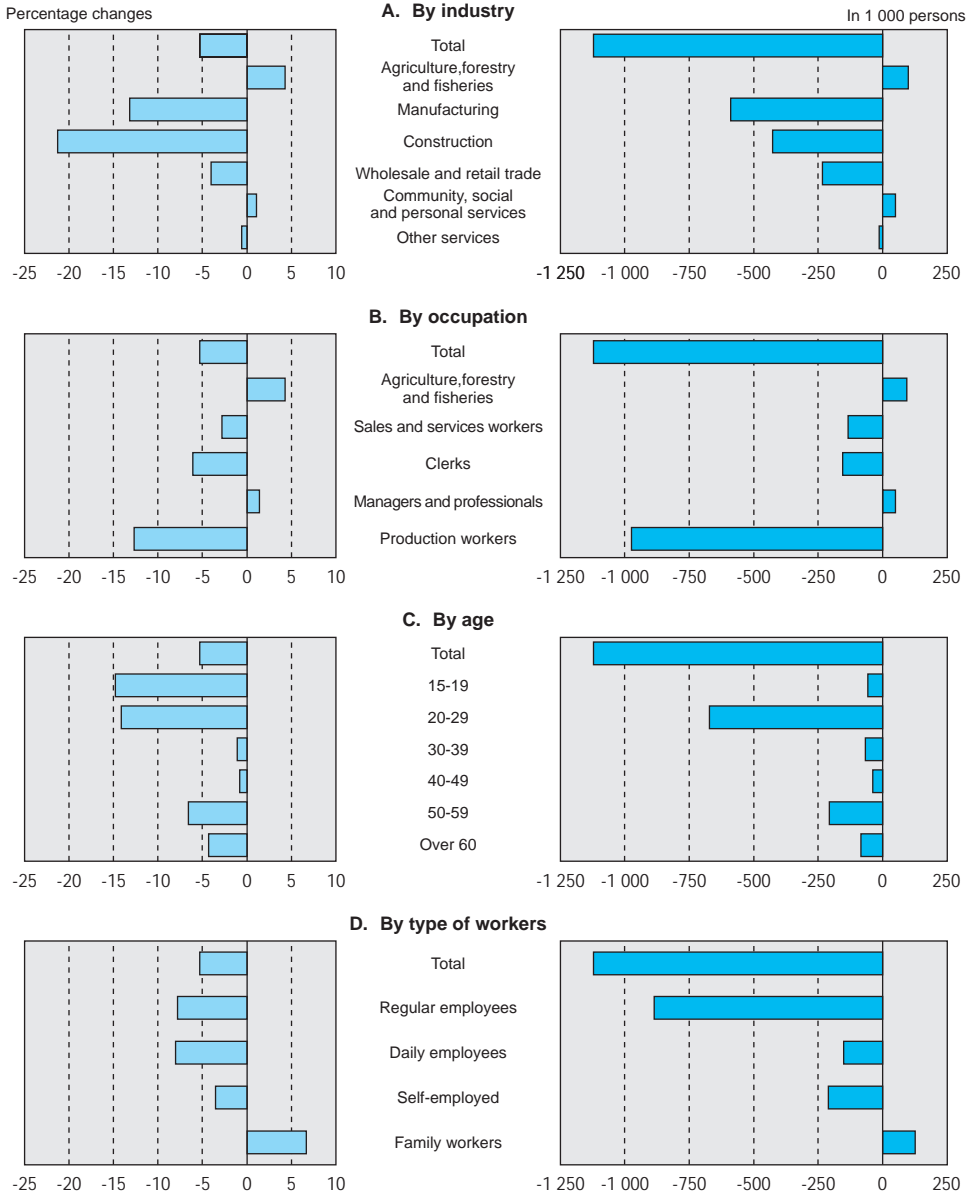
Workers have demanded substantial increases in regular wages in 1999 to recover some of the pay cut that they accepted in 1998. The two national labour federations have set targets for wage increases of between 5.5 and 7.7 per cent, implying a significant rise in real terms in the context of subdued inflation. The employer federations, however, have insisted on a wage freeze. As of the end of May 1999, almost two-thirds of the settlements had either cut or frozen wages.⁵⁸ Nevertheless, a rise in overtime and bonus payments led to a 5.6 per cent year-on-year rise in total compensation in the first quarter of 1999.

... have been accompanied by declining employment...

The 5.3 per cent fall in total employment in 1998 – a total of 1.1 million persons – was concentrated in the manufacturing and construction sectors (Figure 30, Panel A). The falling trend, though, was partially offset by two special factors. *First*, there was a significant rise in the agriculture, forestry and fishery sector as some urban unemployed returned to the countryside. This increase, which boosted the number of family workers, suggests a rise in under-employment. *Second*, the creation of public works jobs increased the number of daily workers providing community, social and personal services, offsetting a decline in the number of regular workers in this category.⁵⁹ Without these two factors, total employment would have fallen by 6½ per cent in 1998. The year-on-year decline in employment continued in the first quarter of 1999 (Table 2).

Other features of the employment decline in 1998 are evident from Figure 30. *First*, most of the fall resulted from a cut in the number of production workers (Panel B). In contrast, the number of managers and professionals actually increased, along with agricultural employment. *Second*, the decline in employment was concentrated among young persons (Panel C). The number of employed persons under the age of 30 fell 14 per cent, accounting for two-thirds of the total fall in employment in 1998. The 50 to 59 age category also recorded a significant reduction as firms offered early retirement to their workers. In contrast, employment in the prime working age of 30 to 50 fell by only 1 per cent.

Figure 30. Change in employment in 1998



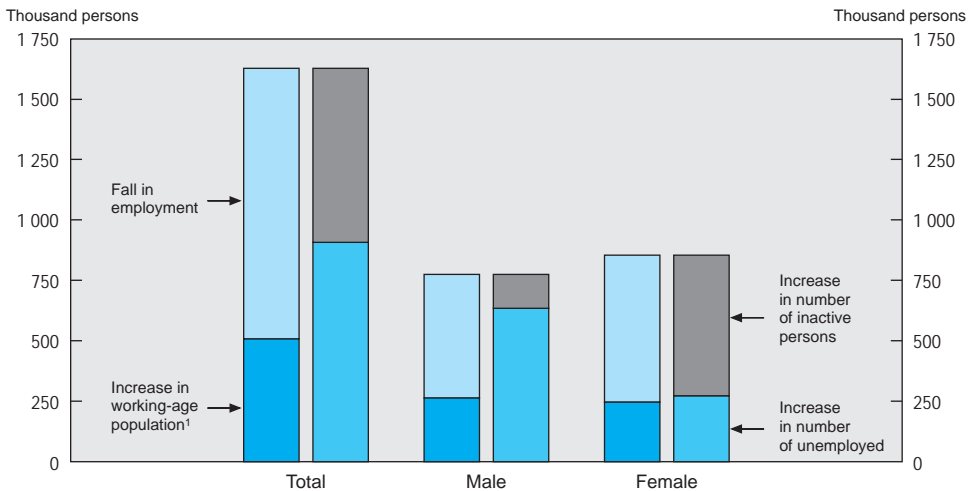
Source: Ministry of Labour.

The number of “regular employees” – permanent workers and those with fixed-term contracts of up to one year – and daily workers both fell by almost 8 per cent (Figure 30, Panel D). The 0.9 million decline in the number of regular employees is unprecedented in Korea where the ability of firms to dismiss workers was limited prior to the labour law revision in early 1998 (see below). The Employment Insurance System (EIS), which administers the unemployment benefit system, reported that firms laid off 120 000 workers in 1998. However, some laid-off workers may not have registered with the EIS, as less than a fifth of the unemployed were receiving benefits in December 1998. Early retirement (260 000 persons) and the sharp rise in bankruptcies also accounted for much of the decline in the number of regular employees in 1998.

... which has boosted the unemployment rate...

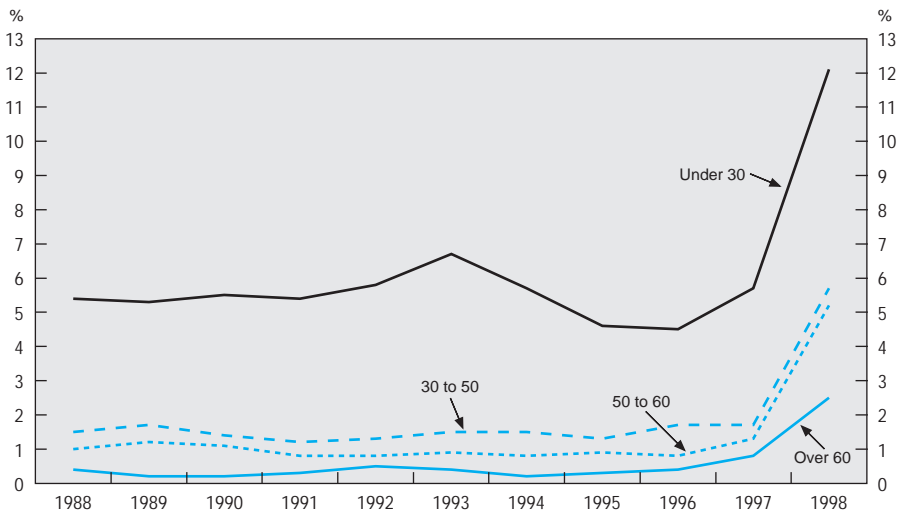
Korea’s working-age population (defined as over age 15) increased by ½ million persons in 1998 (Figure 31). Combined with the 1.1 million fall in employment, there were thus an additional 1.6 million potential job seekers.⁶⁰ Slightly more than half of the latter remained in the labour force and were thus counted as unemployed. As a result, the unemployment rate jumped from 2.6 per cent in 1997 to 6.8 per cent in 1998, exceeding the previous high of 5.2 per cent

Figure 31. Labour market developments in 1998



1. Over age of 15.
Source: Ministry of Labour.

Figure 32. Unemployment rate by age group



Source: Ministry of Labour.

recorded in 1980. Moreover, in Korea, only those who looked for work during the previous week are counted as unemployed. Using the standardised OECD definition, which includes those who looked for work during the preceding four weeks, the unemployment rate would have been higher.⁶¹

Prior to the crisis, unemployment was primarily concentrated among young persons. In 1997, the unemployment rate was 5.7 per cent for the under 30 age group (Figure 32), which accounted for more than half of the 0.6 million jobless persons (Table 35). The rate for the 30 to 50 age group, in contrast, was under 2 per cent. Following the crisis, however, a serious unemployment problem has emerged in this older age cohort, which is expanding very rapidly in size by more than 5 per cent a year. In 1998, the unemployment rate rose to almost 6 per cent in the 30 to 50 age group, which accounted for almost half of the unemployed in 1998. The emergence of a significant degree of joblessness in this older group has magnified the social consequences. The number of unemployed family heads more than tripled in one year to 668 000 in 1998. Consequently, family heads accounted for almost half of the total 1.5 million unemployed.

The sharp decline in employment of persons under the age of 30 noted above pushed the unemployment rate for this age group to over 12 per cent in 1998. However, the extent of the unemployment problem in this age group was

Table 35. **Characteristics of the unemployed**

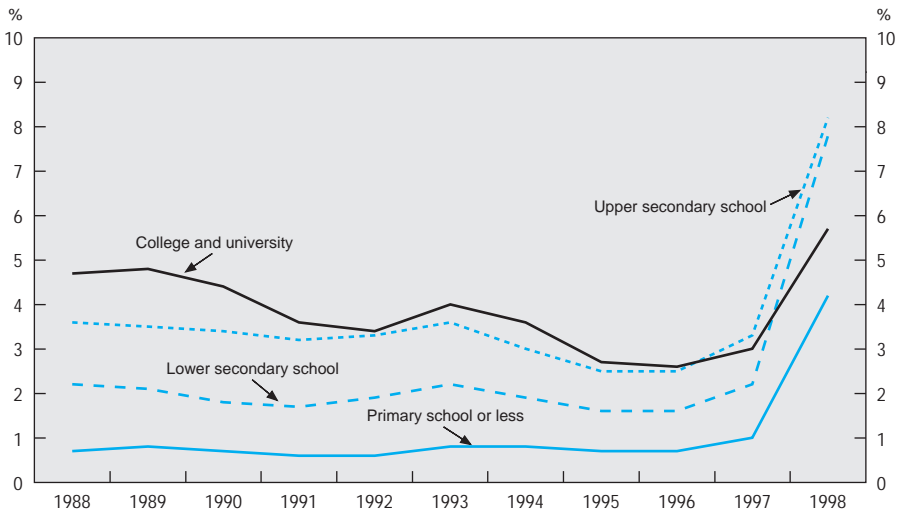
	Thousand persons		Per cent of unemployed	
	1997	1998	1997	1998
A. Age group				
15-29	313	613	56.3	41.9
30-49	187	642	33.6	43.9
50-59	40	161	7.2	11.0
Over 60	16	47	2.9	3.2
B. Gender				
Male	352	986	63.3	67.4
Female	204	477	36.7	32.6
C. Education				
Lower secondary school or below	119	410	21.3	28.0
Upper secondary school graduates	308	767	55.3	52.4
College/university graduates	130	286	23.4	19.5
D. Head of household	192	668	34.5	45.7
E. New entrants unable to find job¹	237	116	42.6	7.9

1. The decline in this category reflects, in part, a change in the definition to exclude those with past work experience.
Source: National Statistical Office.

moderated by two factors. *First*, in contrast to the 30 to 50 age group, the 15 to 29 population cohort fell by 0.7 per cent in 1998. *Second*, the proportion of graduates of upper secondary schools, colleges and universities entering the labour force declined as a larger share chose to continue their education or begin military service in the context of depressed economic conditions. This has contributed to a reported fall in the number of unemployed who are seeking their first job, reducing their share of total unemployment to less than 10 per cent in 1998 (Table 35).⁶²

The pattern of unemployment by level of education has also changed somewhat following the crisis. Between 1984 and 1996, the unemployment rate was highest among university and college graduates and lowest among the least educated (Figure 33). This was due, in part, to the concentration of joblessness among the under 30 age group, which is more highly educated. With the surge in unemployment among the 30 to 50 age population – a group with less education on average than the under 30 age group – the unemployment rate for persons with an upper secondary school diploma was the highest in 1998 at over 8 per cent. In addition, there has been a sharp expansion in the number of unemployed with little education, a group which had had abundant job opportunities in the so-called “3-D” industries (dirty, dangerous and difficult) in the manufacturing

Figure 33. Unemployment rate by level of education



Source: Ministry of Labour.

and construction sectors. The number of unemployed with a lower secondary school education or less more than tripled in 1998. Meanwhile, the unemployment rate for graduates of tertiary education jumped to 5.7 per cent – almost 300 000 persons (Table 35). The extent of unemployment among highly educated workers in Korea is unusual; in all other OECD countries except Greece, the level of unemployment is highest among the least educated.

About four-fifths of the unemployed in 1998 were persons with work experience who had been without a job for less than one year. Indeed, about half of this group – 1.2 million persons in all – had worked previously in the manufacturing or construction sector and the other half in the service sector (Table 36). Production workers accounted for about half of the group out of work less than one year, while sales and service employees accounted for another quarter. Almost one-fourth of the newly unemployed had been regular employees, who had previously enjoyed implicit job guarantees for life. However, non-regular employees – daily workers or those on fixed-term contracts – were the largest group among the newly unemployed.

Table 36. **The newly-unemployed¹ in 1998**

	Thousand persons	Per cent of total
By industry		
Agriculture, forestry and fisheries	17	1.4
Manufacturing	279	23.4
Construction	299	25.1
Wholesale and retail trade	346	29.0
Community, social and personal services	173	14.5
Other services	79	6.7
By occupation		
Agriculture, forestry and fisheries	10	0.9
Sales and service workers	266	22.3
Clerks	128	10.7
Managers and professionals	157	13.1
Production workers	632	53.0
By type of employee		
Regular	257	21.6
Temporary ²	398	33.3
Daily	345	29.0
Self-employed	175	14.6
Family workers	18	1.5

1. Those with work experience who have been unemployed for less than one year. In 1998, 1.19 million persons were in this category.

2. Fixed-term contracts of less than one year.

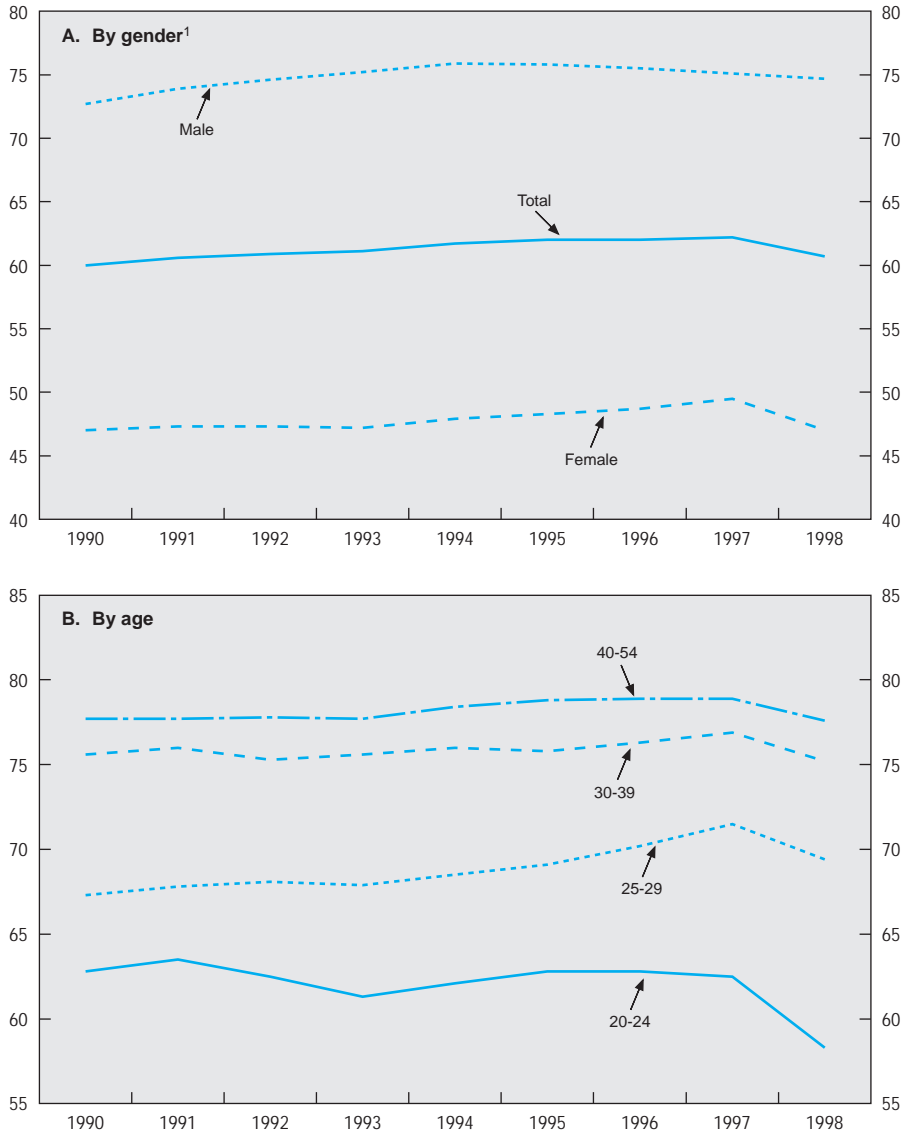
Source: National Statistical Office.

... and lowered the participation rate...

The 0.9 million rise in unemployment was almost matched by the withdrawal of more than 0.7 million workers from the labour force (Figure 31). The sharp increase in inactivity reduced the labour force participation rate, which had been on a rising trend, to 60.7 per cent, its lowest level since 1991 (Figure 34). Without the fall in participation, the unemployment rate would have been significantly higher in 1998. By age group, the 20 to 24 cohort experienced the largest decline in participation (Panel B) as a larger proportion chose to delay their entry into the labour force as noted above. Overall, the rise in unemployment and the fall in labour force participation reduced the employment to population ratio from 60.6 in 1997 to 56.5 in 1998.

Labour market developments in 1998 show marked differences between men and women. While women accounted for only 40 per cent of the labour force prior to the crisis, they absorbed 54 per cent of the decline in employment (Figure 31). In contrast to men, most women who were unable to find jobs

Figure 34. Labour force participation rates
Percentage of population in each category



1. Over age of 15.

Source: National Statistical Office.

withdrew from the labour force. Consequently, women accounted for 80 per cent of the decrease in the labour force, reducing the female participation rate by 2.5 percentage points in 1998 (Figure 34). This limited the rise in the female unemployment rate from 2.3 per cent in 1997 to 5.6 per cent in 1998. The increase for men was much larger – 2.8 to 7.7 per cent in 1998 – since fewer men withdrew from the labour force. As a result, the male labour force participation rate, which had been drifting downwards since 1994, fell by only 0.4 percentage points in 1998.

... with negative consequences for income equality

The decline in wages and employment, combined with other developments in the wake of the crisis, adversely affected income distribution. In the first half of 1998, the income of the top quintile of urban households increased while that of all the lower quintiles declined, reflecting the concentration of unemployment among production workers in the industrial sector (Table 37). Moreover, wealthier households benefited from the high level of interest rates in 1998. Consequently, the emerging recovery in private consumption appears to be driven primarily by high-income households. Income statistics also show that the lower the income level, the steeper the fall in income.⁶³ According to the Korea Development Institute (KDI), a public-sector research organisation, the percentage of urban households below the poverty line increased from 3.5 per cent in the first quarter of 1997 to 6.4 per cent a year later and further to 7.5 per cent in the third quarter of 1998.⁶⁴ The sharp rise in poverty had negative social consequences. In particular, a survey of low-income, unemployed households reported that about 10 per cent have withdrawn their children from school.⁶⁵ In addition, property and other non-violent crimes rose almost 20 per cent in the first 10 months of 1998.

Table 37. **Changes in income distribution**

Percentage change by income quintile¹

	Lowest	Lower middle	Middle	Upper middle	Highest
Nominal income	-14.9	-8.8	-6.9	-5.5	2.3

1. In first half of 1998, from year earlier.

Source: National Statistical Office.

Labour market policies

The government has responded to these problems in the labour market with a wide range of policies. As recommended in the 1998 *Survey*, the layoff provision in the new labour law to increase employment flexibility has been effectively implemented (Table 38). In addition, temporary worker agencies have been allowed to operate since July 1998, while regulations on private job placement agencies have been eased, enabling them to assist the sharply increased number of unemployed. These moves have been accompanied by measures to expand the Public Employment Service and to make it more efficient. At the same time, vocational training has been significantly expanded to help the unemployed prepare for new jobs. Policies to improve the social safety net are discussed in the following section.

Measures to increase employment flexibility

The labour law revision of 1998 established the right of firms to lay off workers in cases of “urgent managerial need”,⁶⁶ including mergers and acquisitions. Prior to layoffs, though, firms must make maximum efforts to avoid dismissals through such measures as reducing wages and bonus payments, suspending recruitment, cutting working hours, closing temporarily, dispatching workers to affiliated firms, reducing the number of temporary employees and early retirement of consenting workers. Wage subsidies are available in some cases for firms that choose these options (see below). In addition, management must notify workers’ representatives sixty days prior to any layoffs. During that period, it is required to have consultations aimed at minimising layoffs and establishing a fair and reasonable procedure for choosing the employees to be dismissed. Discrimination on the basis of gender is strictly prohibited. Firms are required to notify the Ministry of Labour if layoffs exceed:

- 10 employees in a workplace with less than 99 workers;
- 10 per cent of employees in a workplace with between 100 and 999 employees; or
- 100 employees in a workplace with more than 1 000 workers.

The reporting procedure is intended to enable the government to provide timely support for dismissed workers and to encourage management to comply with the above conditions.⁶⁷ Finally, firms must provide the normal severance payment and have a moral obligation to re-hire laid off workers if they expand their work force during the two years following the dismissals. Moreover, under the EIS programme, two-thirds of wages (one-half in the case of large firms) is provided to firms that hire workers dismissed as a result of employment adjustment (see below).

Table 38. **Implementing the OECD Jobs Strategy – an overview**

Jobs Strategy proposal	Actions taken	OECD assessment/recommendation
<p>I. Increase the flexibility of employment</p> <ul style="list-style-type: none"> – Effectively implement the layoff provisions in the new labour law to allow firms the flexibility to shed redundant workers. – Allow temporary worker agencies. 	<ul style="list-style-type: none"> – Employment flexibility increased under new law – Allowed since July 1998 for 26 occupations. 	<ul style="list-style-type: none"> – Preference for early retirement may be counterproductive. – Easing the restrictions on occupations would be beneficial.
<p>II. Taxes and transfers</p> <ul style="list-style-type: none"> – Expand the social safety net while being careful, in the long term, not to undermine the incentives to work and to save. 	<ul style="list-style-type: none"> – The coverage of Employment Insurance System has been extended to 70 per cent of employees, while the duration of benefits has been lengthened. Training programmes and public works jobs have also been used to provide income support. Livelihood Protection programme has been expanded. 	<ul style="list-style-type: none"> – Complete profiles of each unemployed person to ensure that they have access to the most appropriate form of government assistance. Growing use of employment subsidies may generate dead-weight costs while favouring certain groups of unemployed.
<p>III. Active labour market policies</p> <ul style="list-style-type: none"> – Remove the remaining restrictions on private-sector job placement agencies. – Improve the Public Employment Service (PES). – Expand vocational training programmes. 	<ul style="list-style-type: none"> – Deregulation of such agencies has allowed them to play a larger role. – PES has been expanded and integrated with other services to make it a “one-stop shop”. – The number of unemployed being trained at public expense has increased from 42 000 to 340 000. 	<ul style="list-style-type: none"> – Completing profiles of each unemployed person would help the PES provide appropriate services. – Establish closer link between training and skills demanded by the business sector.
<p>IV. Enhance product market competition</p> <ul style="list-style-type: none"> – Accelerate deregulation, focusing on entry barriers and regulations that limit price competition. – Quickly remove remaining trade barriers, notably the various regulatory standards that act as barriers to imports. 	<ul style="list-style-type: none"> – Almost half of the 11 000 existing regulations have been eliminated by the new administration. – The Import Diversification Programme was abolished at the end of June 1999. 	<ul style="list-style-type: none"> – Focus on reforming regulations that act as barriers to the creation of new enterprises. – Ensure that regulatory standards do not act as import barriers.
<p>V. Increase labour force skills</p> <ul style="list-style-type: none"> – Reform the educational system along the lines proposed by the presidential commission. 	<ul style="list-style-type: none"> – No action. 	
<p>VI. Technology and innovation</p> <ul style="list-style-type: none"> – Improve the efficiency of public spending on technology. 	<ul style="list-style-type: none"> – No action. 	

Source: OECD.

In 1998, 115 companies notified the Ministry of Labour of their intentions to lay off almost 12 000 workers, a figure far below the 120 000 (about 2 per cent of regular employees) reported by the Employment Insurance System. This suggests that most layoffs involved too few employees to require notification of the government. As noted above, early retirement is an alternative to layoffs that is preferred by the government. In 1998, 260 000 workers retired “at the recommendation of the employer”.⁶⁸ In addition to the workers who were either laid off or retired early, another 0.9 million employees lost their jobs in the year after the crisis. Many of these were temporary or daily workers whose contracts were not renewed or employees who worked at firms that went bankrupt.

Employment flexibility has also been enhanced by the decision to allow temporary worker agencies since July 1998. By the end of the year, 789 such agencies had been established, employing a total of 42 000 “dispatched workers”.⁶⁹ Such workers are allowed to join firms for up to two years in 26 occupations that require special expertise and experience. In addition, dispatched workers may be used in all occupations to replace absent regular workers in temporary or occasional situations, such as those due to injury or illness. The rules governing dispatched workers are more flexible than in some other OECD countries; in Germany and France, for example, the maximum period allowed for the employment of such workers is limited to 12 and 18 months, respectively. However, there are no limits in a number of other OECD countries. Moreover, dispatched workers in Korea are not permitted in sectors deemed to be dangerous, such as construction or the railways, and are never to replace employees that have been laid off or are absent due to labour disputes.

Measures to encourage firms to retain workers

The government provides various wage subsidies to firms that retain redundant workers. Support is provided for six months in the following cases:

- Subsidies equivalent to one-half to two-thirds (depending on the size of the company) of wages are available to firms that grant paid leave of at least one month to its employees, transfer their workers to affiliates or switch to a new line of business while retaining 60 per cent of their employees.⁷⁰
- Firms that close for at least two days a month can receive one-half to two-thirds of the temporary shutdown allowance that must be paid to employees.
- Firms that reduce regular working hours by more than 10 per cent can receive a tenth of the wage bill prior to the reduction.
- Firms that provide training to workers receive one-half to two-thirds of the payments made to workers, in addition to being reimbursed for training expenses.

Table 39. **Expenditures on active labour market policies and the social safety net**¹

	Spending in 1998 (W billion)	Number of beneficiaries (thousands)	1999	Percentage change	Number of beneficiaries (thousands)	Duration (months)
Vocational training and job placement services	901.1		1 031.1	14.4		
Vocational training for the unemployed	737.7	340	879.5	19.2	341	1 to 12
Job search network	66.0		103.6	57.0		
Support for highly-educated unemployed	81.0	25	70.0	-13.6	24	3 to 6
Vocational training and job placement for women	16.4	16	14.0	-14.6	9	1 to 6
Support to firms that retain employees	122.4	781	491.5	301.6	827	
Social safety net	3 599.3		5 492.9	52.6		
Unemployment benefits	850.0	441	1 501.2	76.6	529	4 to 9
Livelihood protection programme	1 379.1		1 453.1	5.4	1 160	Indefinite
Temporary livelihood protection	216.0	310	627.6	190.6	760	Indefinite
Other programmes ²	964.2		1 911.0	98.2		
Wage claim guarantees	190.0		0.0	-100.0		
Public works projects	1 044.4	440	2 492.4	138.6	1 187	3 to 12
Total ^{3, 4}	5 667.2		9 543.9	68.4		

- Expenditures are financed by various funds, such as the Employment Insurance Fund and the World Bank, as well as direct government budget outlays.
- Other programmes for low-income unemployed persons. These are shown in detail in Table 43.
- In 1998, an additional W 3.8 trillion was spent on job creation, including investment in social overhead capital and support for venture enterprises. An additional W 2 trillion was spent to support SMEs.
- A supplementary budget has been proposed to spend an additional W 6.4 trillion in 1999 to create jobs, W 103 billion on vocational training, W 721 billion on the social safety net and W 1.05 trillion on public works jobs. This additional spending brings total labour market-related expenditures to W 18 trillion, almost 4 per cent of GDP.

Source: Ministry of Labour.

After receiving such a subsidy for 180 days, a firm is ineligible to receive another subsidy for six months.

In 1998, 4 200 companies received such subsidies covering a total of almost 0.8 million workers (Table 39). These subsidies were funded by a tax on employers equal to 0.2 per cent of their payroll. The programme has been expanded in 1999 by allowing firms to receive a separate subsidy for each of the categories listed above, rather than limiting them to one subsidy at a time. Consequently, outlays from the EIS Fund are scheduled to increase four-fold to almost W 500 billion (0.1 per cent of GDP) to subsidise the wages of over 0.8 million workers, while the payroll tax rate is boosted to 0.3 per cent. In addition, the duration of subsidies will be temporarily increased from six to eight months during the first half of 1999.

Expanding vocational training

Vocational training has been expanded sharply following the crisis. Around 340 000 unemployed persons received such training at government expense in 1998, approximately eight times more than during the preceding year (Table 40). Those receiving training represented almost a quarter of all the unemployed. Training is essential, particularly in light of the increased unemployment

Table 40. **Vocational training**

	1997	1998		
	Number of participants	Budget (W billion)	Number of participants	Proportion finding jobs at end of training (per cent)
Re-employment training ¹	1 949	178.5	162 383	21.2
Employment promotion ²	25 789	96.9	96 573	19.3
Training for return to agriculture	0	1.2	4 082	n.a.
Training for newly unemployed	0	46.1	36 577	n.a.
Training for business start-ups	0	4.8	11 773	4.9
Manpower development training	14 444	69.6	28 436	36.0
Other	0	340.6	0	n.a.
Total	42 182	737.7	339 824	19.8

1. Unemployed who have worked for firms covered by the Employment Insurance System.

2. Focused primarily on disadvantaged persons who did not work for firms covered by the Employment Insurance System.

Source: Ministry of Labour.

among persons over the age of 30. Moreover, the significant restructuring in such areas as the industrial and financial sectors has left many unemployed who need to learn new skills in different areas. Funding is provided, in part, by a payroll tax on employers set at 0.1 to 0.5 per cent of their payroll, depending on the size of the firm. This was supplemented by budget outlays of W 220 billion in 1998. Together, expenditures on training accounted for 13 per cent of total outlays on unemployment measures (Table 39). The top rate of the payroll tax has been raised to 0.7 per cent to cope with the increased number of workers being trained. The expanded efforts in this area have allowed colleges, universities and other educational institutions to become more involved in training activities.

About half of the unemployed who received training had worked at enterprises covered by the EIS and were thus eligible for Re-employment Training. Such persons are allowed to take up to three courses, which last from one month to one year, between the time they become unemployed until they find a new job. However, training allowances are cut in half during the second course and are eliminated during the third. Those trainees who do not qualify for unemployment insurance receive a monthly benefit of W 0.2 to 0.3 million (equal to 60 to 90 per cent of the minimum wage) during the training, including special allowances for transportation, family support and childcare. Trainees who are learning skills used in “3-D” industries, which still face a labour shortage, receive an additional bonus. Similar training opportunities and benefits are offered to the unemployed not covered by the EIS. The number of trainees in 1999 is scheduled to remain around 340 000 (of which 200 000 are under the EIS) while the training budget rises by 19 per cent (Table 39). In 1998, only about a fifth of the 134 000 trainees who had finished their courses were hired. To improve the proportion finding jobs, the “tailor-made training system” was introduced in March 1999 to better link training with the needs of business. Under the new plan, if an institution places at least 80 per cent of its trainees in employment, it will receive a bonus equal to 10 per cent of training costs. In addition, firms that hire trainees that have been laid off by other firms will be paid a recruitment subsidy equal to between one-third and one-half of the new employees’ wages for six months.

A pilot programme of vouchers to pay for training was launched in 1998. The objective of the vouchers is to provide more choice to the unemployed and to promote competition among institutions providing training. In addition, the use of electronic card vouchers makes it possible to monitor registration and course attendance. Despite some early confusion in the programme, it was decided to extend the pilot programme to all of Choong-Chung province, which has a population of 3.6 million, in the first half of 1999. After an evaluation at the end of the year, nation-wide implementation will be considered.

Strengthening job placement

The Public Employment Service (PES) was integrated with vocational training, employment insurance and other services to create a “one-stop service” in August 1998. In addition, the PES system has been expanded; the number of offices more than doubled from 53 in 1997 to 119 in 1998, while the number of staff increased by 2½ times. The PES is concentrated in the seven largest cities where four-fifths of the unemployed reside. Nevertheless, the number of staff remains low relative to the size of the labour force.⁷¹ Given the sharp rise in unemployment, the number of persons who registered at PES offices increased eightfold to 1.4 million (Table 41). The PES was able to place 130 000, more than four times as many as during the previous year, though the placement rate fell by almost half to under 10 per cent. One challenge was finding workers for “3-D” companies looking for additional employees. Low wages and poor working conditions have made it difficult for the PES to place the unemployed in such firms. Consequently, the inflow of foreign workers, which was reversed following the crisis, has resumed. The number of illegal foreign residents in Korea is estimated at more than 100 000.

Private agencies continue to play the major role in providing employment services, accounting for over 90 per cent of placements in 1998. Fee-charging agencies, in particular, were able to place 83 per cent of their clients. The role of private job placement agencies is likely to increase further following the revision of the regulations that govern such firms. Since the end of 1998, the limitations on job categories where private job placement firms could operate were removed, the approval system for new agencies was changed to registration, the rule

Table 41. **Public and private job placement offices**

Thousand persons and per cent in 1998

	Public employment service	Private agencies ¹		Total
		Fee-charging	Free	
Number of offices/agencies	119	1 688	120	1 927
Job seekers	1 416.8	1 434.9	227.6	3 079.3
(Per cent of total)	(46.0)	(46.6)	(7.4)	(100.0)
Placement	129.6	1 200.0	100.0	1 429.6
(Per cent of total)	(9.1)	(83.9)	(7.0)	(100.0)
Placement ratio (per cent) ²	9.1	83.6	43.9	46.4

1. Government estimate of job seekers and placement by private agencies in 1998 based on data through August 1998.

2. Through August 1998 for private agencies.

Source: Ministry of Labour.

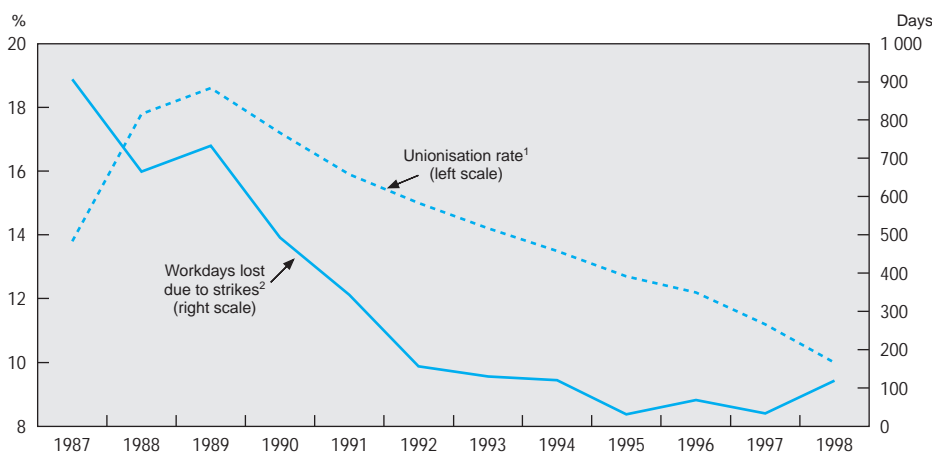
specifying the minimum office space was lifted and firms will no longer have to renew their business permits every three years.

Industrial relations issues

The decline in the number of union members, which began in 1990, accelerated in 1998 as a result of industrial restructuring. Consequently, the percentage of the workforce that is unionised has fallen from 17 per cent at the beginning of the decade to an estimated 10 per cent in 1998, the second-lowest figure among OECD countries after France (Figure 35). In the wake of the crisis and the reform of labour laws, industrial relations were confrontational in 1998. Labour disputes jumped to their highest level since 1993, while the number of workdays lost as a result increased significantly. The number increased further in the first few months of 1999 due to strikes at companies that are to be merged as part of the planned “Big Deals”. To counter the sustained decline in union membership, the labour unions are attempting to transform their organisational structure from the current enterprise-based system to industrial or regional unions.

In addition to the increased number of labour disputes, the Tripartite Commission, which consists of representatives of government, employer groups

Figure 35. Unionisation and labour disputes¹



1. Number of union members divided by total number of employees at the end of each year; 1998 figure is an estimate.

2. Per 1 000 employees.

Source: Korea Labour Institute.

and the two national labour federations, has temporarily ceased to function. The Commission had proven to be effective in developing a consensus on difficult issues. In particular, it reached an agreement in February 1998 to allow firms to lay off workers for managerial reasons, while expanding employment insurance.⁷² Labour, however, has become increasingly dissatisfied, complaining that the rise in unemployment was forcing workers to bear an unfair share of the cost of restructuring. Consequently, the Korea Confederation of Trade Unions (KCTU) withdrew from the Commission in February 1999 and demanded direct negotiations with the government on suspending economic restructuring, reducing working hours and replacing enterprise-level with industrial-level bargaining. The larger national labour organisation, the Federation of Korean Trade Unions (FKTU), withdrew in April 1999 when the government failed to take action in certain areas. Their demands included an end to layoffs, the introduction of a job-sharing system and a legal guarantee allowing unions to participate in management. The repeal of a new law forbidding companies from paying full-time union officials after 2002 is also a priority for the FKTU. According to the FKTU, with more than 8 000 union representatives presently on company payrolls, this rule would significantly weaken union activity. Employers, however, insist on ending the practice of paying union officials, which would become even more expensive once multiple unions at the enterprise level are allowed in 2002. No other OECD country has a legal ban on companies paying union officials, who, nevertheless, are not paid by firms in most Member countries. Another important issue is the imprisonment of union officials.

Despite the current difficulties in industrial relations, some positive steps have been taken. *First*, civil servants were allowed to form workplace associations beginning in 1999. *Second*, teachers' unions were permitted beginning in July 1999, thus eliminating one of the obstacles to the official recognition of the KCTU, which includes a teachers' union. However, a second obstacle to recognition of the KCTU – a rule preventing dismissed workers from being members of unions – has not been resolved. Despite an agreement on this issue in the Tripartite Commission in early 1998, a bill to allow dismissed workers to be members of industrial or regional unions beginning in 2000 was rejected by the National Assembly. *Third*, the decision to grant legal status to the Tripartite Commission may encourage the return of the labour and management groups that have withdrawn. This would allow the Commission to address the outstanding issues.

Improving the social safety net

In Korea, business enterprises have traditionally been the major provider of social benefits. In particular, firms provide severance pay – generally one month's pay for each year of service – to departing employees. In the wake of the

crisis and the high rate of bankruptcy among enterprises, the government has increased its efforts in this area, notably by expanding the coverage of the EIS. In addition, a large-scale public works programme has been created to provide employment. The vocational training system described above has also provided income support to the unemployed in a potentially productive way. Finally, the Livelihood Protection programme, aimed at helping those unable to work, has expanded its coverage to include low-income unemployed persons.

The expansion of the Employment Insurance System

The EIS, which was established in 1995, was initially limited to workers in firms with more than thirty employees. Consequently, only a third of employees were covered when the crisis struck. In March 1998, though, the EIS was extended to workplaces with at least five employees, while the minimum contribution period to qualify for benefits was shortened from one year to six months. Consequently, another two million workers became eligible to receive unemployment benefits in the autumn of 1998. The coverage of the EIS was further expanded in October 1998 to employees in firms with less than five workers, temporary workers employed at least one month and part-time employees who work more than 18 hours a week. This latest change brings an additional 2.3 million workers into the EIS. At present, almost 8.6 million workers – 70 per cent of all employees – are covered by employment insurance.⁷³ The benefit is equal to half of the worker's previous salary, with the minimum set at W 240 000 a month (70 per cent of the minimum wage) and the maximum at W 1.05 million (about 80 per cent of the average manufacturing wage).

Although the benefit level is comparable to that in other OECD countries, the duration of benefits is relatively short. Prior to the crisis, it was set at between 30 and 210 days depending on age and length of enrolment in the EIS. As noted in the 1998 *Survey*, this reflects the government's view that benefits should encourage job search rather than provide long-term income support. It has, though, taken two steps to lengthen the duration of benefits. *First*, the minimum benefit period was doubled in 1998 to 60 days. *Second*, unemployed persons whose benefits expire between July 1998 and June 1999 are eligible for a special two-month extension.⁷⁴ Almost 0.3 million workers are expected to benefit from this extension. The government recently decided to prolong the two-month extension until December 1999.

Despite the expanded coverage, only 266 000 persons – 16 per cent of the unemployed – received benefits in December 1998. However, the proportion is likely to rise steadily as the six-month qualifying period has been reached for the 2.3 million new employees who joined the EIS in October 1998. The sharp increase in unemployment has necessitated a rise in the premiums charged for the three major programmes in the EIS. The premium for unemployment benefits

was boosted from 0.6 to 1 per cent of wages, divided equally between employer and employee. The payment of such benefits from the EIS Fund is projected to rise from W 850 billion in 1998 to W 1.5 trillion in 1999 (Table 39). The contribution rates on the payroll taxes used to finance the other two EIS funds were also boosted. The rate for "job security activities", which includes employment subsidies and the PES, was raised from 0.2 to 0.3 per cent, while, as noted above, the top rate for vocational training was raised from 0.5 to 0.7 per cent.

The Wage Claims Guarantee System was established in July 1998 to protect workers at bankrupt firms. This fund assures that workers will receive their wages for their last three months of work and retirement pay for the last three years. The system was financed by a levy imposed on firms that is set at 0.2 per cent of their wage bill in 1998, as well as a W 190 billion budget outlay. As of February 1999, W 21 billion had been paid to almost 6 000 workers. The levy has been increased to 0.3 per cent in 1999.

Public works jobs

Given the limited coverage of unemployment benefits, the government created a large number of public works jobs to assist the unemployed. A total of 440 000 persons participated in this programme in 1998, including 130 000 employed by the central government. This programme was essential in keeping the average number of unemployed below 1.5 million persons in 1998. Participants, drawn primarily from the large pool of unemployed daily workers who had been employed in the industrial sector, performed such tasks as taking care of forest land, environmental protection and repairing buildings, such as schools and hospitals. In contrast to public works elsewhere, a significant portion of the jobs, such as those involving the computerisation of government records, were designed to take advantage of the skills of the large number of unemployed university graduates in Korea. Even though the priority is income support for the unemployed, these projects have thus made a positive contribution to public infrastructure. The wages paid for these jobs vary according to the type of work; skilled jobs pay up to W 0.9 million a month (about two-thirds of the average manufacturing wage), while outdoor jobs pay up to W 0.6 million. Even the low-paying public works jobs, however, pay more than 50 per cent above the minimum wage. Budget expenditures for these jobs totalled about W 1 trillion in 1998 (Table 39).

Priority for participation in the public works programme in 1998 was given to persons: *i)* with low income and few assets; *ii)* with ability and experience in the type of work to be undertaken; *iii)* between 30 and 55 years of age who are the heads of households with dependants; and *iv)* with dependants. Some of the jobs have been reserved for unemployed university graduates, a group that has also benefited from the creation of 62 000 government-paid internships at private

companies.⁷⁵ There has been criticism that some of the jobs have been taken by persons who are ineligible. To focus the benefits on those most in need, the criteria have been changed to give priority to persons with many dependants. The total number of posts is to be expanded in 1999 to provide 1.2 million persons with jobs that last at least six months, with the W 2.5 trillion budget split between central and local governments. Projects have been concentrated in the first quarter of the year, when unemployment was at a peak. The government hopes to provide projects this year that are more beneficial to society. One such project, the profiling of unemployed persons, should help target government assistance to where it is most useful and needed and prevent people from drawing double benefits from the government.

Expansion of social assistance

The Livelihood Protection programme provides support to those who are unable to work, such as the handicapped, the elderly and children. Able-bodied persons of working age, in general, are not eligible. To qualify for assistance, income cannot exceed W 230 000 (18 per cent of the average manufacturing wage). In addition, they are subject to a limit on their assets as well as a family-support test, which restricts benefits to those without family members capable of providing assistance. In 1998, 1.2 million persons received benefits (Table 39), with total spending of W 1.4 trillion (about 0.3 per cent of GDP). The average benefit, which has no time limit, appears to be below the subsistence level of income. A single person with an income of less than W 40 000 per month would receive a benefit of about W 150 000. This would be equivalent to \$4 a day or about 13 per cent of the average manufacturing wage (Table 42).

The Livelihood Protection programme is not intended for the unemployed, who by definition are capable of working. Instead, support for the unemployed is based first on unemployment insurance, which lasts from four to six months in most cases.⁷⁶ At the expiration of benefits, the unemployed are eligible for public works jobs and vocational training. If each lasted for six months on average, a total of up to 18 months of assistance would be potentially available for each unemployed person. An extended period of assistance is important because the proportion of the unemployed that have been out of work for more than one year rose from 4 per cent of total unemployed in 1996 to 15 per cent at the end of 1998. In all, there were a quarter of a million long-term unemployed. In practice, however, such an extended period of assistance has not been available to most unemployed. Excluding the persons seeking their first jobs, there were 1.35 million unemployed persons with work experience in 1998. The total number of persons receiving unemployment benefits, public works jobs and vocational training totalled 1.2 million. Moreover, some persons participated in more than one programme at a time. The unemployed, for example, are allowed to enrol in

Table 42. **Benefits under the Livelihood Protection programme**

Income level (in thousand of won)	Number of persons in the household					
	1	2	3	4	5	6
A. Monthly payment in US dollars per person¹						
Less than 40	124	109	99	91	83	76
40 to 80	106	93	84	77	71	63
80 to 120	89	79	71	65	60	55
120 to 160	75	73	66	55	50	46
160 to 200	73	71	65	53	49	45
200 to 230	65	63	57	53	48	44
B. Total income as per cent of average manufacturing wage²						
Less than 40	13.4	11.2	9.9	9.0	8.2	7.3
40 to 80	14.8	11.2	9.6	8.5	7.7	6.7
80 to 120	16.3	11.4	9.4	8.2	7.3	6.5
120 to 160	18.1	12.4	10.0	8.0	7.0	6.2
160 to 200	21.0	13.8	10.8	8.6	7.5	6.6
200 to 230	22.9	14.4	11.1	9.2	8.0	7.0

1. At the exchange rate of W 1 225 = \$1.

2. Assuming that income is at the midpoint of each income range.

Source: Ministry of Health and Welfare (1999), *Saenghwal Boho*, Saob Anneh.

training courses while receiving unemployment benefits. In addition, a portion of the public works jobs reportedly went to ineligible persons. In summary, the three major programmes were not large enough to cover all of the unemployed in 1998. Moreover, even if a person were included in one of the programmes, the benefits lasted only up to six months on average. A survey by a public research institute reported that half of the unemployed relied on support from families, while another third borrowed money. Only 16 per cent were able to support themselves on savings and severance/retirement pay.

The government has created a variety of programmes to assist low-income, unemployed households. The two most important are the *Temporary Livelihood Protection* scheme and *Support for Living Costs*, which will assist a total of more than 1.9 million persons this year (Table 43). While this should ensure that all of the unemployed receive at least some assistance, the one-time benefit in these programmes is rather small at about W 0.9 million, equivalent to 70 per cent of the average manufacturing wage for one month. There are other schemes that pay the secondary school tuition fees for the children of unemployed persons and provide school lunches. In addition, the government provided loans of up to W 5 million for living costs, W 10 million for housing or W 30 million to start a business.⁷⁷ Around 135 000 unemployed persons received such loans in 1998.

Table 43. **Programmes for low-income unemployed**

	Spending in 1998 (W billion)	Spending in 1999 (W billion)	Number of beneficiaries ¹ (thousands)	Amount per beneficiary (W million) ²
Temporary livelihood protection	216.0	627.6	760	0.8
Support for living costs	39.8	234.0	260	0.9
Loans for the unemployed	750.0	1 138.2	170	6.7
Support for school expenses	100.0	200.0	300	0.7
Support for business start-up ³	22.0	21.0	2	10.5
Provision of school lunches	7.4	46.3	151	0.3
Measures for daily workers	45.0	0.0		
Total spending	1 180.2	2 267.1		

1. In 1998.

2. As a reference, the average manufacturing wage in 1998 was W 1.28 million per month.

3. For people returning to farming or fishing: a total of 100 are expected to receive benefits in 1999.

Source: Ministry of Labour.

In 1999, the loans are to be restricted to supporting the living costs of the unemployed who have at least two dependants and houses smaller than a certain size.

Policies to create jobs

Eighteen months after the crisis, the priority of the government is shifting from assisting the unemployed to creating jobs. The government's objective is to limit the number of unemployed to an average of 1.5 million persons in 1999. Already by May, the number had fallen to 1.4 million, accounting for 6.5 per cent of the labour force. This decline, though, was due to a further 0.7 percentage point fall in the participation rate from its level a year earlier. Indeed, employment continued to fall on a year-on-year basis in the first four months of 1999 before increasing in May. Employment growth generally resumes with a delay following the start of a recovery since firms tend to increase working hours before hiring new employees. Moreover, with the restructuring of the corporate sector continuing, the number of laid off workers is likely to remain high in the short run, although the higher pace of creation of new companies (see below) will tend to increase employment. On the supply side, the number of discouraged workers is likely to diminish as the recovery takes hold, thus accelerating the growth of the labour force. These factors suggest that the decline in the unemployment rate may be gradual.

The *OECD Jobs Strategy* has identified ten policies that promote job creation (Box 5). Judged by these criteria, Korea's policies appear appropriate for encouraging increased employment. Its macroeconomic policies are conducive to returning to a high growth path (see Chapter II). Moreover, Korea has relaxed employment security provisions and introduced a "Flexible Work Hour System" in 1997. The educational level of Korean workers is among the highest in the world and is being further upgraded by the large-scale training programme underway. In addition to training, there has been increased emphasis on other active labour market policies, notably job placement. The social safety net is still being developed while tax rates are low. Consequently, the interaction of the benefit and tax systems does not appear to have much negative impact on work incentives. Product market competition has been increased with the reduction of trade barriers and the elimination of the Import Diversification Plan in June 1999. Wages are flexible, as demonstrated by their nominal decline in 1998, and the minimum wage is not a serious obstacle to the employment of low-skilled workers. The minimum wage, which applies to workers in all industries at firms with more than

Box 5. *The OECD Jobs Strategy*

- Set macroeconomic policy such that it will both encourage growth and, in conjunction with good structural policies, make it sustainable, *i.e.* non-inflationary.
- Enhance the creation and diffusion of technological know-how by improving frameworks for its development.
- Increase flexibility of working-time (both short-term and lifetime) voluntarily sought by workers and employers.
- Nurture an entrepreneurial climate by eliminating impediments to, and restrictions on, the creation and expansion of enterprises.
- Make wage and labour costs more flexible by removing restrictions that prevent wages from reflecting local conditions and individual skill levels, in particular of younger workers.
- Reform employment security provisions that inhibit the expansion of employment in the private sector.
- Strengthen the emphasis on active labour market policies and reinforce their effectiveness.
- Improve labour force skills and competencies through wide-ranging changes in education and training systems.
- Reform unemployment and related benefit systems – and their interactions with the tax system – such that societies' fundamental equity goals are achieved in ways that impinge far less on the efficient functioning of the labour markets.
- Enhance product market competition so as to reduce monopolistic tendencies and weaken insider-outsider mechanisms while also contributing to a more innovative and dynamic economy.

ten employees, was set at a level equivalent to 27 per cent of the average manufacturing wage in September 1998. Less than 23 000 workers – 0.4 per cent of those subject to the law – are actually paid the minimum wage. However, the coverage of the minimum wage law is to be extended in September 1999 to firms with between five and nine employees.

In addition, the Korean government has taken specific steps to accelerate the growth of employment. *First*, investment in social overhead capital (which is *not* related to public works jobs) is to be increased by about 10 per cent in 1999 to W 12.2 trillion. Each W 1 trillion of investment is thought to create about 30 000 jobs. At least 70 per cent of the funds are to be spent in the first half of the year when unemployment is at its peak. *Second*, the government has taken a variety of measures to encourage inflows of foreign direct investment. The objective is to increase such inflows from the record \$8.8 billion in 1998 (on a notification basis) to \$15 billion in 1999. *Third*, the government has created a foundation for overseas employment to provide a wage subsidy for Korean construction workers abroad and to support foreign language study. The objective is to help 20 000 Koreans find jobs in foreign countries in 1999. *Fourth*, as noted above, the EIS has provided subsidies since July 1997 to firms that employ workers that have been laid off. If a firm hires five workers that have been laid off by other companies, the government will pay one-third to one-half of the wages for six months. A total of W 5.8 billion was provided in 1998 to 101 firms that re-hired 5 181 workers. There was a sudden surge in the number of companies taking advantage of this subsidy in early 1999. By April 1999, the number of firms benefiting from these subsidies had surpassed 1 300, suggesting that the deadweight costs may be substantial. This reflects increased awareness of the programmes, the economic recovery, more generous payments and easier qualifying conditions.⁷⁸

Deregulation is another priority to encourage job creation. In one year, the administration reported that it has eliminated about half of the existing 11 000 regulations since coming into office in February 1998. A priority is to reform regulations that hinder the development of service industries. Deregulation has been accompanied by funds to promote the creation of new SMEs and support existing ones (see Chapter IV). These measures, combined with the guarantees on loans to SMEs, were effective in the wake of the crisis in reducing the bankruptcy rate while boosting the creation of new firms. With the economic recovery in 1999, the number of new firms created in April and May (at an annual rate) was 26 per cent above 1997. However, the deadweight costs of the programmes to support SMEs are likely to have been significant. In 1999, W 6.45 trillion is to be spent to promote job creation through the start up of new companies and investment in housing. According to the Minister of Labour, 1.5 million jobs could be created over the next three years with more generous budget assistance. It is anticipated that most jobs would be in such sectors as communications, tourism, culture,

health and medicine. Achieving this objective is expected to reduce the unemployment rate to below 5 per cent by 2002.

Scope for further progress

Labour market flexibility has clearly increased during the past year following the reform of the labour law. However, the preference for early retirements rather than layoffs appears misguided. To a firm, the difference appears to be minimal, as it has to provide severance payments in either case. Statistically, early retirement limits the reported rise in the unemployment rate. Against this somewhat artificial advantage, other OECD countries have found that policies to reduce the labour supply through early retirement are shortsighted. In particular, when incentives for early retirement are strong, firms are reluctant to train older workers, which, in turn, increases the likelihood of early retirement. Finally, easing the occupational restrictions on the use of dispatched workers would further enhance labour market flexibility.

The government has acted promptly to improve the social safety net and limit the rise in poverty following the crisis. In particular, employment insurance, public works jobs and vocational training have been greatly expanded. Consequently, assistance through one of these three programmes should, in principle, be available to each unemployed person in 1999. Completing the profiling of each person looking for work should help ensure that this is the case and increase the efficiency of government measures against unemployment, while eliminating any abuses. Given that the duration of unemployment benefits, public works jobs and vocational training are limited, some unemployed persons will need additional help to make it through the year. Assistance to low-income unemployed persons, such as that through the Temporary Livelihood Protection programme, should be expanded as necessary to maintain social cohesion. Finally, the authorities should consider raising the benefits provided for persons unable to work, notably through the Livelihood Protection programme, to subsistence level. In expanding labour market programmes over the long term, it is important not to undermine the incentives to work and save.

Further improving the industrial relations framework is also important to maintain social cohesion. Korea has made progress in this area since joining the OECD. In particular, trade union pluralism has been introduced at the national and regional level and will be extended to the firm level in 2002. Teachers' unions have been allowed and the ban on third-party intervention has been removed. Nevertheless, there are remaining issues to be resolved to bring the industrial relations system fully into line with practices prevalent in other OECD countries. A priority should be to resolve the issue of allowing unemployed workers to be members of unions and thus allow the KCTU to be officially recognised as a

labour organisation. The issue of imprisoned labour leaders should be dealt with quickly in due process to facilitate a constructive dialogue between the social partners. In this context, it would also be desirable to resume the work of the Tripartite Commission, which was useful in developing a social consensus on controversial issues in 1998. This would require concessions from each of the social partners. The unions, for example, could help by taking a realistic attitude and drop such conditions as ending layoffs and restructuring. The Tripartite Commission should also address remaining industrial relations issues, such as the right of civil servants to organise and the scope of “essential services” where strikes are not allowed. It should also help develop a bargaining framework for after 2002 when union pluralism at the enterprise level will be allowed.

For firms with bright long-term prospects but short-term financial difficulties, temporary wage subsidies to maintain employment levels may be beneficial in reducing adjustment costs. In particular, it can limit the loss of human capital that would occur in the case of layoffs. However, it is important that these subsidies are of limited duration. The decision to lengthen the subsidy period to eight months and to allow firms to collect more than one subsidy at a time may increase the deadweight cost of this programme and may slow restructuring by encouraging firms to retain redundant workers. Moreover, the fact that companies that have already received subsidies become eligible for new subsidies after only six months may allow them to become dependent on such assistance. Finally, the subsidy paid to enterprises that hire workers that have been laid off by other firms appears to unduly favour one segment of the unemployed. The sharp rise in the number of firms receiving subsidies in early 1999 magnifies these concerns. The subsidy programmes have also contributed to a rise in the payroll tax imposed on firms. Under the EIS, large firms had paid 1 per cent of their payroll to pay for training activities, unemployment benefits and job security activities. This has been doubled to 2 per cent by the payroll taxes to fund wage subsidies and the higher rates for training and unemployment benefits.

Vocational training remains a priority with expenditures in this area set to rise by almost 19 per cent in 1999. A major concern of the government is the low percentage – 20 per cent – who found employment after completing training in 1998. However, such programmes provide income support to the unemployed while maintaining their human capital and thus may be beneficial even if they do not result in immediate re-employment. Moreover, the low figure, which reflects depressed economic conditions, can be expected to rise as the economic recovery strengthens. The government has set an objective of boosting the proportion that find jobs in 1999 to 50 per cent of those who complete training. The new subsidies introduced for firms that hire trainees are intended to help achieve this objective. However, as with the subsidy to promote the hiring of laid off workers, this programme may unduly favour a particular segment of the unemployed. Finally, the voucher system could be expanded to a nation-wide basis if it is

shown to improve significantly the choices provided to the unemployed and promotes competition between training institutions.

The government's priority has shifted to job creation. It is clear, though, that the number of new jobs will depend primarily on the pace of corporate restructuring and the strength of the economic recovery. Prompt restructuring will reduce the uncertainty that makes firms reluctant to expand employment, while boosting confidence among foreign investors, thus favouring job-creating flows of investment. Policies to support various firms should be pursued cautiously to avoid the mistakes that have arisen in other countries, as well as during past episodes of activist industrial policy in Korea. With the rehabilitation of the banking sector, the justification for an important government role in providing capital is weakened. Instead, policies that provide new opportunities to the private sector, notably through deregulation, should be a priority.

Notes

1. The World Bank classifies countries with external debt of less than 48 per cent of GDP as “less-indebted”.
2. This move reflected the government’s strategy of beginning capital account liberalisation with trade-related financial flows, which were not considered to be a threat to the conduct of monetary policy based on quantity controls. Direct overseas borrowing was limited to four categories of borrowers: SMEs, companies investing in public infrastructure projects, subsidiaries of foreign companies in technology-based business areas and companies paying foreign debt prematurely. For indirect borrowing through Korean banks, SMEs could borrow 100 per cent of the value of capital good imports. For large firms, borrowing was limited to 90 per cent in manufacturing and 80 per cent in services until May 1995, when the ceiling was lowered to 70 per cent.
3. Those wishing to obtain long-term foreign loans had to provide detailed information and obtain the approval of the Ministry of Finance and Economy, while short-term borrowers faced no such requirement.
4. The merchant banks had previously operated as finance companies, which were not allowed to deal in foreign currencies. After becoming so-called merchant banks, they continued to operate as short-term finance companies. In addition, commercial banks opened 28 foreign branches between 1994 and 1996.
5. The liquidity risk reflected a maturity mismatch – a high ratio of short-term liabilities to assets. For the merchant banks, 64 per cent of their borrowings were short-term while 85 per cent of their loans were long term (Chang, Park and Yoo, 1998). The foreign exchange risk was due to the failure of most corporations to hedge their foreign currency loans. Consequently, the depreciation of the won resulted in a deterioration in the banks’ balance sheets.
6. The positive impact on company balance sheets, though, was limited by the large increase in severance payments.
7. Nominal wage declines are rare in OECD countries. For example, nominal wages in Finland continued to increase in 1991 and 1992, while real GDP fell more than 10 per cent. Even in Japan, where wage-setting patterns most resemble those in Korea, manufacturing wages increased slightly during 1998, when Japan experienced a 2.8 per cent fall in real GDP.
8. The wealth decline reduced private consumption by 2 percentage points according to an estimate by KDI.
9. The upgrading of Korea by IBC Fitch on 19 January 1999 was followed by Standard and Poors on 25 January and Moody’s on 12 February.

10. As a result, import prices in won terms rose 19 per cent, implying that about 40 per cent of the won's depreciation was passed through. For exports, 42 per cent of the depreciation was passed through into dollar prices.
11. Letters of credit, which were about 80 per cent of the value of imports in 1997, fell to 60 per cent in 1998.
12. Manufactures account for 93 per cent of Korea's merchandise exports.
13. According to a private-sector research institute, labour productivity at foreign-owned companies in Korea is 40 per cent higher than at domestic firms (Samsung Economic Research Institute, 1998). Moreover, the ratio of financial expenses to sales is only half as high at foreign-owned firms.
14. These events are described in Lane *et al.* (1999).
15. Korea over-achieved its target announced in May 1998 of boosting useable foreign exchange reserves to \$41 billion by the end of the year.
16. In other words, it appeared that the relationship between credit availability and interest rates had been altered by a leftward shift of the credit supply curve.
17. The gap between five and one-year government bonds has demonstrated predictive power for future inflation following the liberalisation of interest rates in 1993 (Oh, 1998). It is difficult, though, to develop a full yield curve given the lack of liquid markets over a wide range of maturities in Korea.
18. The other five members are proposed respectively by the governor of the Bank of Korea, the chairman of the FSC, the Korea Chamber of Commerce and Industry, the Korea Federation of Banks and the Korea Securities Dealers Association. The terms of the members are staggered, with three expiring in April 2000 and four (including the chairman) ending in April 2002.
19. This section draws on Ahn and Oh (1998) and Oh (1999).
20. The tax on gasoline was raised 52 per cent in two steps to W 691 per litre, while that on light oil was raised 88 per cent to W 160 per litre. The withholding tax on interest income was boosted from 20 to 22 per cent.
21. The increased taxes on energy and the withholding tax raised W 3.3 trillion but were partially offset by a cut in July 1998 on special consumption taxes on cars and consumer electronics.
22. Tax revenue in 1998 fell far short of the W 78.7 trillion planned in the initial budget for the year, which was based on 6.5 per cent real GDP growth and 4.5 per cent inflation.
23. While the interest payments are included in the budget, the W 64 trillion of bonds is not included.
24. The initial budget included a 6 per cent rise in expenditures of the general and special fiscal lending accounts. Central government spending also includes 21 special accounts, which are financed by transfers from the general account, earmarked tax revenue and borrowing. Consolidated figures, which net out intra-government transfers, are not available in the initial budget.
25. The OECD Secretariat estimates cyclically-adjusted government balances, sometimes referred to as structural balances, by calculating the level of revenues and expenditures that would be expected if output were at its potential level. The impact of cyclical factors – the output gap – on the level of revenues and expenditures is estimated using the elasticity of revenue and current primary (non-interest) expenditure with respect to nominal output (see Suyker, 1998). In the case of Korea, a tax

elasticity of 1.2, the average of the past ten years, has been used. An elasticity of 0.4, near the norm of OECD countries, has been assumed for the elasticity of primary expenditure. Finally, if the Korean economy is assumed to have been at potential output in 1997 – just before the crisis hit – and if potential output growth was zero in 1998, then the output gap would have been 6 per cent. Based on these assumptions, the shift in the central government consolidated budget from balance to a deficit of 3.2 per cent of GDP between 1997 and 1998 appears to be cyclically neutral. Needless to say, estimates of structural budget positions are subject to large margins of uncertainty, particularly in the case of an economy like Korea, which has experienced a severe shock.

26. The decline in defence spending is the first since the creation of the Republic of Korea in 1948.
27. The social security system includes the National Pension Fund (W 37.5 trillion in reserves), the Employment Insurance Fund (W 21.7 trillion) and the Industrial Accident Insurance Fund (W 7.5 trillion). Together, they hold reserves of W 66.7 trillion, equivalent to 15 per cent of GDP. The reserves of the National Pension Fund are used to provide government loans for social overhead capital projects and to purchase public bonds.
28. According to one estimate (Heller, 1997), demographic changes will boost government expenditure on pensions by 4 percentage points of GDP by 2025 and outlays on health care by 1 percentage point. In 1999, the coverage of the public pension system was extended to the self-employed and workers at firms with less than five employees.
29. SOEs are divided into two categories: “state-capitalised enterprises”, which function more or less as commercial enterprises with the state (or other SOEs) as the major/controlling shareholder; and “state-invested enterprises”, which are subject to a special corporate governance regime. Most of the latter are not currently included in the government’s privatisation programme. Some SOEs in Korea operate in areas, such as highway management, coal production and water utilities, which have been transferred to the private sector in many other OECD countries. In the electricity sector, some of the generating plants of the vertically-integrated Korea Electric Power Company (KEPCO) have been divested, but it will not face competition in distribution for at least another decade.
30. This Ministry was created by a merger of the Planning and Budget Commission and the Office of the National Budget in May 1999.
31. For several years prior to 1997, policy makers were gradually coming to accept the proposition that a basic change in the financial system was overdue. In the event, only modest steps to implement the reform were actually taken. In June 1997, the Presidential Commission for Financial Reform issued a report calling for a general acceleration in the process of reform and liberalisation that had begun in the early 1990s. However, this overdue initiative was overtaken by the financial crisis that began to unfold later that year.
32. The interest cost on the bonds used to finance these outlays increased government expenditures by W 1.4 trillion in 1998. Interest costs are expected to rise to W 5.3 trillion in 1999.
33. In particular, the FSC is helping financial institutions implement their own internal models in order to measure and control market risk using a standard method or VAR provided by the BIS for strengthening supervision on market risk such as exchange

rate, interest rate and price fluctuations. The priority is to establish such systems in large financial institutions while allowing smaller ones a grace period of up to one year depending on their computer systems and management circumstances.

34. The average ratio had reached 9.2 per cent at the end of June 1998. It declined in the second half of the year due to tightened standards on loan-loss provisions and discounted dispositions of NPLs.
35. Operating profits rose from W 3.1 trillion in 1997 to W 4.8 trillion in 1998.
36. A positive solvency margin indicates that an insurance company's assets are large enough to cover its liabilities. The assets, which can be marked-to-market or valued at acquisition cost, are adjusted for NPLs. This is balanced against a projection of the company's liabilities.
37. The non-life sector, which includes car, surety, casualty, fire and marine insurance, has had a somewhat better record of profitability, with ten of the 17 companies showing profits in the year ending in March 1998. In addition, 13 had positive solvency ratios. However, the surety segment, which involves financial guarantees provided to non-financial companies, became a major source of loss in 1997. Two companies, which had large losses due to such guarantees, were merged into a single entity while two other companies were ordered to meet minimum solvency requirements.
38. NPLs peaked at W 5.6 trillion at the end of 1998. This includes W 3.3 trillion caused by the application of loan classification and provisioning rules comparable to those imposed on commercial banks. Under the old rules, the NPLs of merchant banks amounted to W 2.3 trillion at the end of 1998.
39. In addition, KDIC had spent a total of W 21 trillion won through the end of 1998 for the re-capitalisation of banks and deposit repayments. This left approximately W 10 trillion of the authorised W 31.5 trillion.
40. The first was the sale of W 208 billion in unsecured loans to Goldman Sachs, which paid W 25.4 billion or 12.25 per cent of face value. KAMCO has retained some upside potential in the transaction; cash flows above the cost of funds collected by Goldman will be shared between Goldman (43 per cent) and KAMCO (57 per cent). In the second sale, the Lone Star Fund bought W 565 billion of NPLs for W 201 billion or 36 per cent of face value. A joint "special purpose vehicle" (SPV) was established, with Lone Star holding 70 per cent of the equity. An asset management company will manage the funds, with revenues divided between KAMCO and Lone Star according to a negotiated formula.
41. In both securitisation and equity partnerships, a special purpose vehicle (SPV) is created, which owns the underlying assets. In the equity partnership arrangement, KAMCO sells an interest in the assets to an investor who will often seek managerial control over the assets. KAMCO and the purchaser will agree to a formula under which the profits realised from improved cash flows on the assets are to be divided. The SPV can be used to issue asset-backed securities (ABS), although none have been issued thus far.
42. The Korea Futures and Options Exchange was opened in April 1999. This institution trades foreign exchange and interest rate futures and options. In June, a futures contract on government bonds will be launched (equity index futures are already traded on the Korea Stock Exchange).
43. The FSC does not publish data on precautionary loans. This estimate is based on information from the banks.

44. According to some estimates, 30 per cent or more of precautionary loans may become non-performing.
45. The 1998 meeting of Samsung Electronics, for example, lasted a record 13 hours and 20 minutes.
46. The core companies at the top five chaebols all held their annual shareholders meeting on 20 March 1999.
47. A fiduciary is “a person having a legal duty, created by his undertaking, to act primarily for the benefit of another in matters related to his undertaking. For example, a trustee has fiduciary obligations to the beneficiary of the trust and acts as a fiduciary in his management of the trust property” (Barron’s Law Dictionary).
48. Korean regulations appear to mandate statements that fall somewhere between combined and consolidated statements. They are not aimed at accounting for a one-off business combination, the normal function of combined statements. On the other hand, they are not consolidated statements, as there is no “parent” company – an integral part of the definition of consolidation.
49. It may also reflect an effort to evade taxes through transfer pricing.
50. The average price in the Korea Stock Exchange rose 12.8 per cent from the beginning of 1998 until 24 November. The average price of the 27 companies fell 17.5 per cent over that period according to Goldman Sachs Investment Research (1998).
51. At the same time, the Credit Management by Financial Institutions Law was changed in April 1998 to prohibit financial institutions from demanding debt payment guarantees.
52. The estimate, by the Federation of Korean Industries, was cited in Yoo (1999).
53. A civil law tradition implies that the judiciary has less leeway in interpreting broad legal provisions, such as those relating to shadow (or *de facto*) directors. Consequently, they are likely to apply it very narrowly, making it of little use for the plaintiff (the shareholders).
54. Professional organisations, such as the Australian Institute of Company Directors, have organised training programmes for outside directors.
55. The FTC is primarily responsible for ensuring competition. As for protecting public/minority shareholders, this should fall under the jurisdiction of the equity market watchdog. Of course, if intra-group transactions lead to tax evasion, the appropriate tax authorities should be the agency concerned.
56. According to the FTC, products in which the top three firms have a combined market share of more than 75 per cent are concentrated. The share of product markets classified as concentrated fell from 88 per cent in 1981 to 76 per cent in 1994. By reducing the number of producers, however, the Big Deals are likely to reverse this decline.
57. Compensation consists of three components; regular wages (69 per cent in 1997), bonus payments (23 per cent) and overtime (8 per cent).
58. By the end of May 1999, 30.6 per cent of the companies with more than 100 workers had concluded wage bargaining.
59. A total of 440 000 public work jobs of four to five months duration were created in 1998. The average for the year was about 160 000.

60. Had the trend increase in the participation rate – about 0.35 percentage points annually since 1990 – continued, there would have been an additional 175 000 job seekers.
61. Studies are underway at the National Statistical Office to resolve technical problems related to the adoption of the OECD definition.
62. However, this fall appears to be mostly due to a change in the definition of the unemployed seeking their first job to exclude those with past work experience who are re-entering the labour force after a period of inactivity.
63. As a result, the Gini coefficient of income equality among urban households, which had declined from 0.39 in 1976 to 0.28 in 1997, jumped up to 0.32 in the six months following the crisis.
64. The KDI study may underestimate the extent of poverty as it excludes unemployed persons.
65. In Korea, public schools at the middle and upper secondary school levels charge fees.
66. Examples of urgent managerial need that have been recognised in court decisions include deteriorating business conditions that may force a firm into bankruptcy, re-organisation to increase labour productivity and new technology that justifies a reduction in the workforce.
67. Employers that have laid off workers unfairly are subject to imprisonment of up to five years or a fine of up to W 30 million. In most cases, only a fine is imposed to allow the company to continue functioning. The government has found that 1 242 companies had laid off a total of 2 553 employees unfairly under the new law. About a fourth of the companies failed to comply with re-instatement orders and were prosecuted for violation of the Labour Standards Act.
68. Some firms are encouraging older workers to retire early by giving their children preference in hiring. A poll by the Korea Employers Federation found that 13 per cent of firms give such preferences to the children of retired staff members.
69. They are termed “dispatched workers” since they are employed by the temporary worker agency and dispatched to work at another firm.
70. In the case of the reassignment of workers, subsidies are paid for one year following the completion of the transfer.
71. In Korea, there are more than 8 000 workers per PES staff, almost double the number in Japan, four times that in the United States and ten times that in Germany.
72. The Commission also agreed on the introduction of temporary work agencies, a loan programme for unemployed persons and the introduction of a Wage Claim Guarantee System to assist workers at companies that have gone bankrupt.
73. Those not covered – besides temporary workers employed less than one month and part-time employees who work less than 18 hours a week – include government employees, postal service workers, private-school teachers and workers over the age of 65.
74. As of January 1999, W 85 billion had been spent to extend unemployment benefits to 135 000 persons whose benefits had expired.
75. If training programmes for the highly educated are included, at least one form of government assistance will be available in 1999 to almost all of the 0.3 million unemployed university graduates.

76. A person in the 30 to 50 age group who has been in the EIS since its inception in 1995 would receive benefits for four months, plus the two-month extension, for a total of six months. However, a person under the age of 30 with less than three years in the EIS would only get benefits for a total of four months, including the extension.
77. The interest rate is near the prime rate charged to major firms; 8.5 per cent for living expenses and 9.5 per cent for the other types of loans.
78. Between February and June 1999, the support level was higher at two-thirds of wages for SMEs and one-half for large firms. Moreover, firms only have to hire one laid off worker each month to qualify.

Bibliography

- Ahn, Se-II and Soo-Nam Oh (1998),
 “The Use of Interest Rates as an Operating Target for Monetary Policy in Korea”,
Economic Papers, Bank of Korea, Vol. 1, No. 2.
- Baek, Ehung Gi (1999),
 “Effects of Financial Uncertainty on the Korean Business Cycle”, *Economic Papers*, Bank
 of Korea, Vol. 2, No. 1.
- Bank of Korea (1998),
Financial System in Korea, Seoul.
- Chang, Ha-Joon, Hong-Jae Park and Chul Gyue Yoo (1998),
 “Interpreting the Korean crisis: financial liberalisation, industrial policy and corporate
 governance”, *Cambridge Journal of Economics*, Vol. 22.
- Cho, Dongchul (1999),
 “A Year After the Korean Economic Crisis: What Next?”, paper presented at the
 Korean-American Economic Association meeting, New York, January.
- Cho, Seong-Jei and Jongku Kang (1999),
 “The Impact of Monetary Policy on Bank Lending Behavior”, *Economic Papers*, Bank of
 Korea, Vol. 2, No. 1.
- Deutsche Bank (1997),
 “Aktuelle Themen”, *Deutsche Bank Research*, 23 December, Frankfurt.
- Ding, Wei, Ilker Domac and Giovanni Ferri (1998),
 “Is There a Credit Crunch in East Asia?”, *World Bank Working Paper* No. 1959, August.
- Federation of Korean Trade Unions (1998),
The Economic Crisis and the Trade Union Response, Seoul.
- Federation of Korean Trade Unions (1998),
Labour problems and perspectives in Korea, Seoul.
- Goldman Sachs Investment Research (1998),
 “Korea Chaebol Restructuring II”, mimeo.
- Hahn, Joon-Ho (1998),
 “Debt and Financial Instability in Korea”, *Korea Development Institute Working Paper*
 No. 9802, February.
- Heller, Peter S. (1997),
 “Aging in the Asian ‘Tigers’: Challenges for Fiscal Policy”, *International Monetary Fund*
Working Paper No. WP/97/143, October.
- Hyun, Jin Kwon (1999),
 “Tax Administration in Korea: Policy Issues and Directions for Reform”, paper pre-
 pared for a conference at the Korea Institute of Public Finance in February, Seoul.

- Kim, Joo Hoon (1998),
“Financial Crisis and the SME in Korea”, *Korea Development Institute Working Paper* No. 9809, December.
- Kim, Joon-Kyung (1998),
“Debt and Financial Instability in Korea”, *Economic Planning Agency Working Paper* No. 69, November.
- Kim, Joon-Kyung and Deockhyun Ryu (1998),
“Debt and Financial Instability in Korea”, *Korea Development Institute Working Paper* No. 9808, November.
- Kim, Kwang Suk and Sung Duk Hong (1997),
Accounting for Rapid Economic Growth in Korea, 1963-1995, Korea Development Institute, Seoul.
- Koo, Bonchum (1998),
“Corporate Restructuring and Financial Reform in Korea”, *Korea Development Institute Working Paper* No. 9807, November.
- Korea Employers Federation (1998),
Industrial Relations and the Labour Market in Korea, Seoul.
- Korea Institute of Public Finance (1998),
“The Medium Term (1998-2002) Fiscal Outlook and Policy Direction”, mimeo, Seoul.
- Korea International Labour Foundation (1998),
A Better Understanding of the Korean System of Employment Adjustment, Seoul.
- Korea International Labour Foundation (1998),
Handbook of the Social Agreement and New Labour Laws of Korea, Seoul.
- Korea International Labour Foundation (1999),
Introduction to the Rules of Employment in Korea, Seoul.
- Lane, Timothy *et al.* (1999),
IMF-Supported Programs in Indonesia, Korea and Thailand: A Preliminary Assessment, International Monetary Fund, Washington, DC.
- Lee, Young Ki (1996),
Hankuk Kiop Soyu Chibe Kucho, Korea Development Institute, Seoul.
- Lee, Young Ki (1998),
Corporate Governance: The Structure and Issues in Korea, Korea Development Institute, Seoul.
- Ministry of Finance and Economy (1998),
Challenge and Chance: Korea's Response to the New Economic Reality, June, Seoul.
- Ministry of Finance and Economy (1999),
“First Phase Foreign Exchange Liberalization Measures”, *Economic Bulletin*, February.
- Ministry of Labour (1999),
Comprehensive Unemployment Policy, Seoul.
- Mishkin, Frederic S. (1999),
“International Experiences with Different Monetary Policy Regimes”, *NBER Working Paper* No. 7044, Cambridge.
- Nam, Il Chong *et al.* (1999),
“Corporate Governance in Korea”, paper prepared for an OECD conference in Seoul, March.

- National Pension Corporation (1999),
Guide of the New National Pension Scheme, Seoul.
- Nestor, Stilpon and John Thompson (1999),
“Corporate Governance Patterns in OECD Economies: Is Convergence Under Way”,
paper prepared for an OECD conference in Seoul, March.
- OECD (1998),
Economic Survey of Korea, Paris.
- OECD (1999),
“Privatisation trends”, *Financial Market Trends*, No. 72, March.
- Oh, Junggun (1998),
“Interest Rate Spreads and Monetary Policy in Korea”, *Economic Papers*, Bank of Korea,
Vol. 1, No. 1.
- Oh, Junggun (1999),
“Inflation Targeting, Monetary Transmission Mechanism and Policy Rules in Korea”,
Economic Papers, Bank of Korea, Vol. 2, No. 1.
- Planning and Budget Commission (1999),
Summary of the Mid-term Fiscal Plan, 1999-2002, Seoul.
- Samsung Economic Research Institute (1998),
Korean Economic Trends, 9 January, Seoul.
- Samsung Economic Research Institute (1998),
One Year After the IMF Bailout, Seoul.
- Shin, Sangdal (1998),
“Macroeconomic Forecast for 1998/1999 and Policy Directions”, *Korea Development Institute Working Paper* No. 9806, October.
- Shin, Inseok and Joon-Ho Hahm (1998),
“The Korean Crisis – Causes and Resolution”, *Korea Development Institute Working Paper*
No. 9805, July.
- Suyker, Wim (1998),
“Structural budget balances: the method applied by the OECD”, paper prepared for a
Bank of Italy workshop, November.
- Yoo, Ilho (1997),
“An Estimate of the Tax Evasion in Korea: Income and Value Added Taxes”, *Korea
Institute of Public Finance Working Paper* No. 93-03, August.
- Yoo, Seong Min (1999),
“Corporate Restructuring in Korea: Policy Issues Before and During the Crisis”, *Korea
Development Institute Working Paper* No. 9903, February.

*Annex I***The restructuring of the banking sector**

Two of the largest commercial banks – Korea First Bank and Seoul Bank – became insolvent in the wake of the crisis. In January 1998, they were ordered to reduce their paid-in capital from W 820 billion to W 100 billion. The government and the Korean Deposit Insurance Corporation (KDIC) both invested W 750 billion in each bank, giving the government a 94 per cent of the equity in these two institutions. The authorities announced a plan to find foreign strategic partners by the end of 1998 who would inject new capital and management capability.

In the event, the government signed a memorandum of understanding (MOU) at the end of 1998 with Newbridge Capital to open negotiations for the sale of Korea First Bank, with a final purchase agreement expected by April or May of 1999. Under the agreement, Newbridge would take a 51 per cent stake, with the price equivalent to 51 per cent of the net asset value needed to bring the BIS ratio of the bank up to a targeted level. Newbridge would be prohibited from selling its stake of the bank without permission of the government for a period of two years. The Korean government would delegate the voting rights for its 49 per cent share to Newbridge. The government would also share in the upside potential of the bank through warrants worth 11 per cent of its stake as premium. Bad assets and a portion of liabilities of the bank would be transferred to a bank scheduled to be closed. A full put-back option would be available for new NPLs identified during the first year, with a partial put-back option available up to a certain amount for the second year. It was widely expected that Newbridge, a US investment consortium formed to invest in undervalued assets, would hold its stake for a comparatively short time in order to engineer a “turnaround” in the bank and that the bank might eventually be returned to Korean investors. By early July, however, no agreement had been reached.

In the case of Seoul Bank, the government signed a MOU in February 1999 with the Hong Kong and Shanghai Banking Corporation (HSBC) for the sale of a controlling interest. Subsequent to the outcome of due diligence, a definitive agreement was expected to be signed by the end of May 1999 but the deadline has been extended by a month. Preliminary conditions of the operation included the following:

- i)* HSBC will acquire an initial 70 per cent stake for approximately \$700 million;
- ii)* the government of Korea will maintain a 30 per cent stake in the bank and receive additional warrants equivalent to 19 per cent of the shares outstanding at the closing date, allowing it to recoup a substantial portion of the cost of the support package;
- iii)* HSBC will be given a call option to acquire the shares and the warrants owned by the government during a specific period of time. The govern-

- ment, in turn, will have a put option to HSBC in the event the call option is not exercised within the agreed time frame;
- iv) HSBC will make an initial facilitation payment to the government of \$200 million;
 - v) certain assets, including non-performing assets, and liabilities will be separated and transferred to a separate asset management company (AMC);
 - vi) Seoul Bank will receive the option of transferring to the AMC incremental non-performing assets for a period of one year after closing without any limit;
 - vii) the government will not take any part in the management of the bank and will retain voting rights relating only to issues that materially impact its economic position; and
 - viii) HSBC will probably change the bank's name to HSBC after the completion of the transaction.

As for the twelve other banks that had capital ratios of less than 8 per cent at the end of 1997, they were required to prepare rehabilitation plans by April 1998 under which adequate capitalisation would be achieved within two years. The plans could include some combination of: *i)* flotation of new equity or of second-tier capital through public offerings; *ii)* mergers with other domestic institutions; *iii)* strategic alliance or merger with a foreign partner; *iv)* asset revaluation; and *v)* cost reductions. The plans were reviewed by a bank appraisal committee consisting of 12 members, including lawyers, accountants from internationally recognised firms, academics, consulting firms and an international expert.

The FSC rejected the rehabilitation plans of five of the banks in June 1998 on the grounds that they were unlikely to achieve adequate capitalisation in the specified time frame. Each of these banks was to be acquired by one of the few well-capitalised banks, which had developed good governance arrangements and credit assessment techniques. The acquiring banks were selected under four criteria: *a)* a capital adequacy ratio of at least 9 per cent at the end of 1997; *b)* an assessed capability to improve the management of the target bank; *c)* a capability to re-capitalise the new bank in the medium term through securities issues or an alliance with foreign strategic partners; and *d)* some complementarity in line of business. The good assets and almost all liabilities of the acquired banks were taken over by the acquiring bank under a Purchase and Assumption (P&A) agreement. The government agreed to sell all of the NPLs of the acquired bank to KAMCO and inject enough capital to bring the capital adequacy ratio of the newly merged bank to the level of the acquiring bank. The authorities also guaranteed that they would purchase NPLs that were discovered later.

The rehabilitation programmes of the other seven banks that had capital ratios of less than 8 per cent 1997 were tentatively judged to be credible and these institutions received conditional approval to continue their operations. Each bank signed a contract with the FSC in which it promised to achieve specified goals, including cost reductions through branch closures, cutting personnel and other operational savings, according to an agreed timetable. These plans had to include increases in capital if deemed necessary by the FSC, owing to recommendations following diagnostic reviews commissioned by the FSC or to compensate for any further decline in asset quality. In addition, these plans had to indicate how management would be improved, including in some cases a replacement of senior personnel. Progress in this regard has been monitored in the quarterly management improvement plans submitted by the banks. The capital of these banks was reduced to reflect the difference between net capital as of March 1998 and paid-in capital. Finally, the banks had to demonstrate that they have taken effective measures to prevent increases in

NPLs. Subsequently, some of the seven banks were ordered to sign Management Improvement Agreements or to merge.

A number of "voluntary" mergers among healthy banks have taken place. The distribution of equity between the merger partners was determined by an inquiry into the assets and liabilities of each bank that was conducted by an independent accounting firm. Government injections of capital and purchases of impaired assets supported these mergers. In the case of Kookmin Bank and Long-Term Credit Bank, KAMCO purchased W 239 billion of impaired assets. The new bank, which combined LTCB's strength in corporate lending with Kookmin's large retail branch network, strong deposit base and a smaller, highly productive staff, continued to look for foreign strategic partners. A merger between Hana Bank and Boram Bank was announced in September 1998. However, the independent appraisal revealed that Boram Bank's balance sheet was much weaker than originally estimated, making the operation an effective acquisition by Hana. This operation was supported by a capital injection of W 330 billion by KDIC.

The Commercial Bank of Korea and Hanil Bank, both of which were among those given conditional approval by the FSC, also merged in January 1999 to form the Hanvit Bank. The conditions imposed upon this operation, in a MOU with the FSC, were far more onerous than those on the mergers of relatively strong banks. The board of the bank is responsible for achieving specified targets in terms of profitability, post-merger management and reduction of excess capacity over the next two years. Hanvit's articles of incorporation mandate governance structures based upon international best practices. In the merger, the existing capital of the bank was reduced, while KDIC provided a capital injection of W 3.3 trillion at the end of September. Following three months of intensive consultations with international consultants and legal experts at the end of 1998, an agreement between Hanvit Bank, the FSC and the KDIC was signed in order to achieve an early rehabilitation of the bank. The government, which stated its intention of reducing its equity holdings by 2002, also encouraged Hanvit to find a foreign strategic partner. A merger between Chohung Bank, Kangwon Bank (a regional bank) and Hyundai Merchant Bank was announced in December 1998. While the merger of Kangwon with Hyundai was realised in February 1999, that between Chohung and Kangwon was delayed. However, Chungbuk bank, another regional bank which had obtained conditional approval from the FSC in June 1998, merged with Chohung in May 1999. In February 1999, the FSC had declared Chungbuk an ailing bank and ordered it to merge with another commercial bank by the end of April 1999. Finally, Peace Bank is also in the process of implementing a Management Rehabilitation Plan.

There has been foreign investment in Korean banks, in addition to the planned purchase of majority shares in Korea First Bank and Seoul Bank discussed above. Goldman Sachs announced in April 1999 that it would invest \$500 million to acquire 20 per cent of the capital in the expanded Kookmin Bank. Under the plan, Goldman Sachs will purchase \$300 million of newly issued shares of common stock and \$200 million of convertible subordinated bonds with a maturity of six years. This would make the US investment bank the largest single shareholder of Kookmin and give it a seat on the board of directors. The investment will strengthen Kookmin's capability to pursue its business expansion plans while further improving the governance of the institution. In addition, Commerzbank increased its share of Korea Exchange Bank from W 350 billion to W 610 billion, partly through preferred share purchases. As a result of these operations, several important banks now have significant foreign ownership, thus helping to re-capitalise the banking sector after the losses of capital during 1997 and 1998. Foreign investors, who are interested in obtaining a competitive return of their investment, will push boards and manage-

ment to upgrade their practices. As a result, foreign-affiliated institutions are likely to become benchmarks for Korean banks.

*Annex II***Agreement for the restructuring of the top five chaebols
7 December 1998**

This twenty-point agreement was signed by the government, the top five chaebols (Hyundai, Samsung, Daewoo, LG and SK) and their main creditor banks.

Business restructuring, focusing on core competence***Exit of non-viable affiliates***

1. Those non-viable affiliates with large capital losses or which cannot earn sufficient operating profits to cover their financial cost should exit or be restructured.
2. Creditor banks should stop providing new loans to non-viable affiliates in the same way that new loans were suspended to companies that were designated as being non-viable on two other separate occasions.

Business restructuring to promote core competence

3. The top five chaebols will restructure their businesses to make them focus on core competence through the sell-off of affiliates or business sections unrelated with core-competence, spin-offs involving management or employees, mergers, or separation from the chaebol. Each chaebol will restructure their business structure as follows:
 - Hyundai will designate automobile, construction, electronics, chemical, and financial/service as its core competence. It will also separate out affiliates belonging to the group among brothers of the owners' family, and will transform its automobile business into an independent sub-group as a more mid-term task. The number of affiliates will be reduced from 60 to about 30.
 - Samsung will promote electronics, financial services, and trade/service as its core competence and the number of affiliates will be reduced from 65 to about 40.
 - Daewoo will promote automobile, heavy industry, trade/construction and financial/service as its core competence and the number of affiliates will be reduced from 41 to about 10.
 - LG will designate chemical/energy, electronics/telecommunications, service, and financial services as its core competence and the number of affiliates will be reduced from 53 to about 30.

- SK will promote chemical/energy, telecommunications, construction/distribution, and financial services as its core competence and the number of affiliates will be reduced from 42 to about 20.

4. The top five chaebols will aim at building an independent management system founded on transparency and responsibility to each affiliate.

Completion of voluntary business restructuring of excessive investment

5. With respect to business restructuring (the so-called "Big Deal") proposed by the top five chaebols as a voluntary agreement, creditor banks and the top five chaebols will conclude a feasible implementation plan and incorporate it into the "Corporate Structure Improvement Plans (CSIPs)" by 15 December 1998. The implementation plan will be based on the following principles:

Petrochemicals, aircraft and railroad vehicles

- Participants in the newly-established business entities will divide ownership on a pro-rata basis according to their net asset. Total amount of domestic companies' ownership will be limited to 50 per cent, leaving the rest open to foreign investors.
- The debt to equity ratio of the newly established corporation will be reduced to below 200 per cent by the end of 1999 through the inducement of foreign investment and the conversion of creditor banks' debt into equity.

Power generation facility and ship engines

- Hyundai Heavy Industry and Samsung Heavy Industry will transfer to Korea Heavy Industry, according to the previous agreements, relevant assets and debt including machinery, land and others related to power generation facility and ship engines.

Semiconductors

- Participants in the newly-established business entity will divide the ownership stake at 7:3 as already agreed, and the core management entity will be determined by 25 December 1998 based on a consulting firm's assessment. If this is not successfully completed, creditor banks will stop providing new loans to and withdraw existing loans from the corporation responsible for the unsatisfactory outcome.
- The debt to equity ratio of the newly established corporation will be reduced to below 200 per cent by the end of 1999. To achieve this goal, the two corporations will share at least half of related expenses and creditor banks will provide financial support including debt/equity swap.

Oil refining

- Creditor banks will support financial restructuring through debt/equity conversion and debt rescheduling on the condition that foreign capital is induced.

6. For the restructuring of the automobile and electronics sectors, which was agreed between the two business groups separately from the other agreements, Samsung and Daewoo will finalise an implementation plan, which will in effect transfer Samsung's auto-

mobile business to Daewoo and Daewoo's electronics business to Samsung by 15 December 1998.

Elimination of cross guarantees

7. The top five chaebols will eliminate cross guarantees as scheduled by the end of March 2000.
8. Creditor financial institutions and the top five chaebols will unwind cross guarantees between different business sectors by the end of 1998.
9. Creditor financial institutions and the top five chaebols will neither require nor provide any new cross guarantees between different business sectors.

Substantial improvement of capital structure

10. The top five chaebols and their lead creditor banks will revise the Capital Structural Improvement Plans (CSIPs) by 15 December 1998, which aim to lower the debt to equity ratio of each chaebol enough to warrant access to the international financial market at reasonable cost.

11. The revised CSIPs will include details of the implementation plans for voluntary business restructuring and the unravelling of cross guarantees based on the following principles:

- Funds (about W 20 trillion) raised by self-rescue efforts, including sales of non-core affiliates will be mainly used to repay debt to financial institutions.
- To improve the core competence of each group, details of a workout plan including debt/equity swaps will be included in the revised CSIPs on the condition of satisfactory self-rescue efforts. If needed to induce foreign direct investment, debt/equity conversion will be executed simultaneously with foreign direct investment.

12. After the debt/equity swap, creditor financial institutions will not directly engage in the management of the firm as long as management is satisfactory. Instead of directly involving themselves, creditor financial institutions will enhance surveillance of management by designating external directors and independent auditors.

13. To ensure thorough and timely implementation of the CSIPs, the top five chaebols and their lead creditor banks will disclose major contents of the CSIPs, including annual reduction of the debt to equity ratio, and quarterly implementation status.

14. When the CSIPs are not carried out promptly or there are signs of violation of the CSIPs, creditor financial institutions will evaluate the viability of related companies, and enforce tighter restructuring plans, including transfer of management control or exercise of claims.

Enhancement of transparency of corporate management

15. The top five chaebols are committed to undertaking measures to enhance the transparency of management, as scheduled, based on the agreed five principles of corporate restructuring. The implementation will be focused on the following points:

- The top five chaebols will thoroughly prepare for the combined financial statement, which start in financial year 1999.
- Management control of the top five will be shifted to the Board of Directors with the adequate monitoring of outside directors and independent auditor.
- The top five will focus on their core competence, and respect the rules of fair competition by eliminating inappropriate internal transactions to subsidise affiliates.

Role of government and creditor financial institutions

16. To monitor implementation of the top five groups' restructuring plans, chaebol groups, government and creditor banks will hold quarterly conferences, at which President Kim will preside.

17. Creditor banks will have primary responsibility for examining and monitoring implementation. Also, the creditor banks shall carry out pledges toward providing support for restructuring, such as debt/equity swaps.

18. The Financial Supervisory Commission will monitor implementation of the agreed restructuring plans from the viewpoint of upholding the soundness of financial institutions.

19. The Fair Trade Commission will vigilantly watch the chaebol groups' internal transactions out of concerns that they may delay or distort corporate restructuring. However, the FTC will allow some internal transactions inevitable for the fair loss-sharing in the context of corporate restructuring. But they will be kept at a minimal level.

20. In the process of implementation, the government will support the restructuring efforts of the corporate sector and financial institutions. Especially, the government will closely listen to suggestions from the business community, and accommodate them into institutional improvements consistent with international practices and conventions.

*Annex III***Calendar of main economic events****1998****August**

A merger of two of the largest commercial banks, Hanil and Commercial Bank of Korea, is announced. The new institution, Hanvit Bank, receives W 3.3 trillion from the Korea Deposit Insurance Corporation.

A three-month strike at Hyundai Motor Co. ends as the company agrees to limit layoffs to 277 workers.

The FSC orders four ailing life insurance companies to shut down while ordering seven others to implement rehabilitation plans.

Heavy flooding kills 164 persons and causes W 2 trillion of property damage.

The government announces that it will develop rationalisation plans in ten industries – cars, semiconductors, steel, petrochemicals, shipbuilding, power-generating equipment, aircraft, liquid crystal displays, railroad vehicles and cement – that have excess capacity.

September

The top five chaebols announce “Big Deals” to restructure seven industries – semiconductors, petrochemicals, ship engines, power-generating equipment, aircraft, railroad vehicles and oil refining. An eighth industry – cars – is later added.

The government presents an economic stimulus plan that includes W 4 trillion of additional housing loans and an increase in the money supply.

Merger plans are announced by Hana Bank and Boram Bank and by Kookmin Bank and Long-term Credit Bank of Korea.

The government introduces the “Foreign Investment Inducement Act” to encourage foreign investment.

October

Hyundai wins the international auction for Kia Motors and its affiliate, Asia Motors, which went bankrupt.

The FSC imposes limits on financial institutions’ holdings of bonds issued by the five largest chaebols. Such bonds are limited to 10 per cent of the bond portfolios of commercial banks and insurance companies.

In the fourth quarter review between the IMF and the government, an agreement limiting the increase in the money supply is rescinded.

The FSC orders the top five chaebols to eliminate cross debt guarantees among affiliates in unrelated industries by the end of 1998. All guarantees are to be removed by March 2000.

November

The government decides to allow debt to equity swaps by affiliates of the five largest chaebols.

Hyundai Group begins sightseeing tours to Mount Kumgang in North Korea. This is the biggest inter-Korean business venture since the division of the country in 1945.

The FTC imposes fines of W 20.9 billion on affiliates of the five largest chaebols for illegal intra-group transactions.

December

The government, the five-largest chaebols and their creditor banks announce a 20-point agreement on corporate restructuring (*Annex II*). This is followed by a revision of the “Capital Structure Improvement Plans” for the top five chaebols.

The government signs a memorandum of understanding with Newbridge Capital for the sale of 51 per cent of Korea First Bank, which is currently 94 per cent government-owned.

The government announces that it will inject W 2.1 trillion in five commercial banks that have acquired weak banks.

The ban on imports of 32 Japanese products under the Import Diversification Programme is lifted.

1999

January

Two international credit-rating agencies – IBC Fitch and Standard and Poors – upgrade Korea’s credit rating to investment grade. Moody’s Investors Service takes a similar action the following month.

The Planning and Budget Commission and the Ministry of Finance and Economy establish the Medium-Term Fiscal Plan, with an ultimate objective of balancing the budget by 2006.

Foreign exchange reserves surpass \$50 billion, a record high.

February

The FSC classifies Chungbuk Bank as non-viable and orders it to merge with another bank. It agrees to merge with Chohung Bank.

The government repays \$1 billion of IMF loans.

The Korea Confederation of Trade Unions withdraws from the Tripartite Commission after the government fails to meet its demands.

The government signs a memorandum of understanding to sell 70 per cent of Seoul Bank to Hong Kong Shanghai Banking Corp. for \$700 million.

March

A plan to re-structure the government is approved by the Cabinet.

*BASIC STATISTICS:
INTERNATIONAL COMPARISONS*

BASIC STATISTICS: INTERNATIONAL COMPARISONS

	Units	Reference period ¹	Australia	Austria	Belgium	Canada	Czech Republic	Denmark	Finland	France	Germany	Greece
Population												
Total	Thousands	1996	18 289	8 060	10 157	29 964	10 316	5 262	5 125	58 380	81 877	10 465
Inhabitants per sq. km	Number	1996	2	96	333	3	131	122	15	106	229	79
Net average annual increase over previous 10 years	%	1996	1.3	0.6	0.3	1.3	0	0.3	0.4	0.5	3	0.5
Employment												
Total civilian employment (TCE) ²	Thousands	1996	8 344	3 737 (94)	3 675 (95)	13 676	4 918	2 593	2 087	21 951	35 360	3 824 (95)
of which: Agriculture	% of TCE	1996	5.1	7.2 (94)	2.5 (95)	4.1	6.3	4	7.1	4.6	3.3	20.4 (95)
Industry	% of TCE	1996	22.5	33.2 (94)	26.7 (95)	22.8	42	27	27.6	25.9	37.5	23.2 (95)
Services	% of TCE	1996	72.4	59.6 (94)	71.4 (95)	73.1	51.7	69	65.3	69.5	59.1	56.4 (95)
Gross domestic product (GDP)												
At current prices and current exchange rates	Bill. US\$	1996	398.9	228.7	268.2	579.2	56.2	174.9	125.1	1 536.6	2 353.5	91.2 (95)
Per capita	US\$	1996	21 812	28 384	26 409	19 330	5 445	33 230	24 420	26 323	28 738	8 722 (95)
At current prices using current PPPs ³	Bill. US\$	1996	372.7	172.4	222	645.1	..	118	96.7	1 198.6	1 736.1	133.5
Per capita	US\$	1996	20 376	21 395	21 856	21 529	..	22 418	18 871	20 533	21 200	12 743
Average annual volume growth over previous 5 years	%	1996	3.9	1.6	1.2	2.2	2	2.2	1.6	1.2	1.4	1.3 (95)
Gross fixed capital formation (GFCF)												
of which: Machinery and equipment	% of GDP	1996	20.3	23.8	17.3	17.7	33	16.7	16.1	17.4	20.6	17 (95)
Residential construction	% of GDP	1996	10.2 (95)	8.8 (95)	7.5 (95)	6.6	7.9 (95)	7.9 (95)	6.4 (95)	7.8	7.6	7.7 (95)
Average annual volume growth over previous 5 years	%	1996	4.6 (95)	5.9 (95)	4.6 (95)	5.4	..	3.2 (95)	3.5 (95)	4.4	7.3	3.3 (95)
	%	1996	5.6	2.1	0.3	2.2	9.4	2	-4.1	-1.5	0.2	0.5 (95)
Gross saving ratio ⁴	% of GDP	1996	18	21.9	22.2	17.8	..	17.6	19.6	18.7	20	16 (95)
General government												
Current expenditure on goods and services	% of GDP	1996	17	19.8	14.5	18.7	21.5	25.2	21.9	19.4	19.8	20.8 (95)
Current disbursements ⁵	% of GDP	1995	35.6	48.6	52.2	45.8	..	59.6	55.9	50.9	46.6	52.1
Current receipts	% of GDP	1995	34.9	47.4	49.9	42.7	..	58.1	52.8	46.9	45.9	45
Net official development assistance	% of GNP	1995	0.36	0.33	0.38	0.38	..	0.96	0.32	0.55	0.31	0.13
Indicators of living standards												
Private consumption per capita using current PPPs ³	US\$	1996	12 596	12 152	13 793	12 959	..	12 027	10 282	12 506	12 244	9 473
Passenger cars, per 1 000 inhabitants	Number	1994	460	433	416	466	282	312	368	430	488	199
Telephones, per 1 000 inhabitants	Number	1994	496	466	449	576	209	604	551	547	483 ⁸	478
Television sets, per 1 000 inhabitants	Number	1993	489	479	453	618	476	538	504	412	559	202
Doctors, per 1 000 inhabitants	Number	1995	2.2 (91)	2.7	3.7 (94)	2.2	2.9	2.9 (94)	2.8	2.9	3.4	3.9 (94)
Infant mortality per 1 000 live births	Number	1995	5.7	5.4	7.6 (94)	6.3 (94)	7.7	5.5	4	5.8 (94)	5.3	8.1
Wages and prices (average annual increase over previous 5 years)												
Wages (earnings or rates according to availability)	%	1996	1.7	5.2	2.7	2.4	..	3.2	3.8	2.6	4.2	11.8
Consumer prices	%	1996	2.4	2.9	2.2	1.4	11.9	1.9	1.5	2	3.1	11.6
Foreign trade												
Exports of goods, fob*	Mill. US\$	1996	60 288	57 870	170 223 ⁷	202 320	21 910	51 030	40 576	288 450	521 263	11 501
As % of GDP	%	1996	15.1	25.3	63.5	34.9	39	29.2	32.4	18.8	22.1	12.9 (95)
Average annual increase over previous 5 years	%	1996	7.5	7.1	7.6	9.7	..	6.2	12.1	6.3	5.4	5.8
Imports of goods, cif*	Mill. US\$	1996	61 374	67 376	160 917 ⁷	170 931	27 721	44 987	30 911	271 348	455 741	27 402
As % of GDP	%	1996	15.4	29.5	60	29.5	49.3	25.7	24.7	17.7	19.4	30.4 (95)
Average annual increase over previous 5 years	%	1996	9.7	5.9	5.9	7.7	..	5.6	7.3	3.9	3.3	6.6
Total official reserves ⁶												
As ratio of average monthly imports of goods	Ratio	1996	10 107	15 901	11 789 ⁷	14 202	8 590	9 834	4 810	18 635	57 844	12 171
	Ratio	1996	2	2.8	0.9	1	..	2.6	1.9	0.8	1.5	5.3

* At current prices and exchange rates.

1. Unless otherwise stated.

2. According to the definitions used in OECD *Labour Force Statistics*.

3. PPPs = Purchasing Power Parities.

4. Gross saving = Gross national disposable income minus private and government consumption.

5. Current disbursements = Current expenditure on goods and services plus current transfers and payments of property income.

6. End of year.

7. Data refer to the Belgo-Luxembourg Economic Union.

8. Data refer to western Germany.

9. Including non-residential construction.

10. Refers to the public sector including public enterprises.

Sources: Population and Employment: OECD, *Labour Force Statistics*. GDP, GFCF and General Government: OECD, *National Accounts*, Vol. I and *OECD Economic Outlook*, Historical Statistics. Indicators of living standards: Miscellaneous national publications. Wages and Prices: OECD, *Main Economic Indicators*. Foreign trade: OECD, *Monthly Foreign Trade Statistics*, Series A. Total official reserves: IMF, *International Financial Statistics*.

BASIC STATISTICS: INTERNATIONAL COMPARISONS (cont'd)

	Units	Reference period ¹	Hungary	Iceland	Ireland	Italy	Japan	Korea	Luxembourg	Mexico	Netherlands	New Zealand
Population												
Total	Thousands	1996	10 193	270	3 621	57 473	125 864	45 545	418	96 582	15 494	3 640
Inhabitants per sq. km	Number	1996	77	3	52	191	333	458	161	48	380	14
Net average annual increase over previous 10 years	%	1996	-0.3	1.1	0.2	0	0.4	1	1.3	2	0.6	1.1
Employment												
Total civilian employment (TCE) ²	Thousands	1996	3 605	142	1 307	20 036	64 860	20 764	212 (95)	32 385 (95)	6 983	1 688
of which: Agriculture	% of TCE	1996	8.4	9.2	10.7	7	5.5	11.6	2.8 (95)	23.5 (95)	3.9	9.5
Industry	% of TCE	1996	33	23.9	27.2	32.1	33.3	32.5	30.7 (90)	21.7 (95)	22.4	24.6
Services	% of TCE	1996	58.6	66.2	62.3	60.9	61.2	55.9	66.1 (90)	54.8 (95)	73.8	65.9
Gross domestic product (GDP)												
At current prices and current exchange rates	Bill. US\$	1996	43.7 (95)	7.3	70.7	1 214.2	4 595.2	484.8	17	329.4	396	65.9
Per capita	US\$	1996	4 273 (95)	27 076	19 525	21 127	36 509	10 644	40 791	3 411	25 511	18 093
At current prices using current PPPs ³	Bill. US\$	1996	..	6.3	68.8	1 148	2 924.5	618.5	13.5	751.1	324.5	63.6
Per capita	US\$	1996	..	23 242	18 988	19 974	23 235	13 580	32 416	7 776	20 905	17 473
Average annual volume growth over previous 5 years	%	1996	-2.4 (95)	1.5	7.1	1	1.5	7.1	4.8	1.7	2.3	3.7
Gross fixed capital formation (GFCF)												
of which: Machinery and equipment	% of GDP	1996	19.3 (95)	17.5	17.2	17	29.7	36.8	20.8	18	19.7	20.9
Residential construction	% of GDP	1996	..	6.7	5.5 (95)	8.8	10.1 (95)	13	..	8.8	9.4	10
Average annual volume growth over previous 5 years	%	1996	-0.9 (95)	3.9	4.9 (95)	4.5	5.3 (95)	7.6	..	4.7	5	5.6
Gross saving ratio ⁴	% of GDP	1996	..	-1.4	6	-1.4	1.3	6.9	0.2	-0.7	2.2	9.6
General government												
Current expenditure on goods and services	% of GDP	1996	24.9 (95)	20.8	14.1	16.4	9.7	10.6	13.6	9.7 ¹⁰	14	14.4
Current disbursements ⁵	% of GDP	1995	..	35.1	39.2 (94)	49.5	28.5	15.1	..	..	51.8	..
Current receipts	% of GDP	1995	..	36	39.3 (94)	44.5	32	25.1	..	..	50	..
Net official development assistance												
	% of GNP	1995	..	..	0.29	0.15	0.28	0.03	0.36	..	0.81	0.23
Indicators of living standards												
Private consumption per capita using current PPPs ³	US\$	1996	..	14 244	10 020	12 224	13 912	7 354	17 811	5 045	12 477	10 895
Passenger cars, per 1 000 inhabitants	Number	1994	212	434	264	517	342	115	544	91	383	457
Telephones, per 1 000 inhabitants	Number	1994	170	557	350	429	480	397	564	93	509	470
Television sets, per 1 000 inhabitants	Number	1993	427	335	301	429	618	215	261	150	491	..
Doctors, per 1 000 inhabitants	Number	1995	3.4	3.9 (94)	3.4	3.0 (94)	1.7	1.6 (92)	1.8 (94)	1.1	2.2 (93)	1.6
Infant mortality per 1 000 live births	Number	1995	11	6.1	6.3	6.6 (94)	4.3	9	5.3 (94)	17 (94)	5.5	7.2 (94)
Wages and prices (average annual increase over previous 5 years)												
Wages (earnings or rates according to availability)	%	1996	..	..	3.7	3.5	1.8	..	..	-1.6	2.4	1.5
Consumer prices	%	1996	23.2	2.6	2.2	4.5	0.7	5.3	2.4	19.7	2.5	2
Foreign trade												
Exports of goods, fob*	Mill. US\$	1996	15 674	1 891	48 416	250 842	411 067	129 715	..	96 000	203 953	14 316
As % of GDP	%	1996	35.9	26	68.5	20.7	8.9	26.8	..	29.1	51.5	21.7
Average annual increase over previous 5 years	%	1996	8.9	4	14.8	8.2	5.5	12.5	..	17.6	8.9	8.2
Imports of goods, cif*	Mill. US\$	1996	18 105	2 032	35 763	206 904	349 149	150 340	..	89 469	184 389	14 682
As % of GDP	%	1996	41.4	27.9	50.6	17	7.6	31	..	27.2	46.6	22.3
Average annual increase over previous 5 years	%	1996	9.6	3.4	11.5	2.5	8	13.9	..	12.4	7.8	11.8
Total official reserves⁶												
As ratio of average monthly imports of goods	Ratio	1996	6 812	316	5 706	31 954	150 663	23 670	..	13 514	18 615	4 140
	Ratio	1996	..	1.9	1.9	1.9	5.2	..	..	1.8	1.2	3.4

* At current prices and exchange rates.

1. Unless otherwise stated.

2. According to the definitions used in OECD *Labour Force Statistics*.

3. PPPs = Purchasing Power Parities.

4. Gross saving = Gross national disposable income minus private and government consumption.

5. Current disbursements = Current expenditure on goods and services plus current transfers and payments of property income.

6. End of year.

7. Data refer to the Belgo-Luxembourg Economic Union.

8. Data refer to western Germany.

9. Including non-residential construction.

10. Refers to the public sector including public enterprises.

Sources: Population and Employment: OECD, *Labour Force Statistics*. GDP, GFCF and General Government: OECD, *National Accounts*, Vol. I and *OECD Economic Outlook*, Historical Statistics. Indicators of living standards: Miscellaneous national publications. Wages and Prices: OECD, *Main Economic Indicators*. Foreign trade: OECD, *Monthly Foreign Trade Statistics*, Series A. Total official reserves: IMF, *International Financial Statistics*.

BASIC STATISTICS: INTERNATIONAL COMPARISONS (cont'd)

	Units	Reference period ¹	Norway	Poland	Portugal	Spain	Sweden	Switzerland	Turkey	United Kingdom	United States
Population											
Total	Thousands	1996	4 370	38 618	9 935	39 270	8 901	7 085	62 695	58 782	265 557
Inhabitants per sq. km	Number	1996	13	123	108	78	20	172	80	240	28
Net average annual increase over previous 10 years	%	1996	0.5	0.3	-0.1	0.2	0.6	0.8	2	0.3	1
Employment											
Total civilian employment (TCE) ²	Thousands	1996	2 110	14 977	4 475	12 394	3 963	3 803	20 895	26 088	126 708
of which: Agriculture	% of TCE	1996	5.2	22.1	12.2	8.7	2.9	4.5	44.9	2	2.8
Industry	% of TCE	1996	23.4 (95)	31.7	31.4	29.7	26.1	27.7	22	27.4	23.8
Services	% of TCE	1996	71.5 (95)	46.2	56.4	61.6	71	67.4	33.1	71	73.3
Gross domestic product (GDP)											
At current prices and current exchange rates	Bill. US\$	1996	157.8	117.9 (95)	103.6	584.9	251.7	294.3	181.5	1 153.4	7 388.1
Per capita	US\$	1996	36 020	3 057 (95)	10 425	14 894	28 283	41 411	2 894	19 621	27 821
At current prices using current PPPs ³	Bill. US\$	1996	106.7	..	130.1	587.2	171.4	180.6	383.3	1 095.5	7 388.1
Per capita	US\$	1996	24 364	..	13 100	14 954	19 258	25 402	6 114	18 636	27 821
Average annual volume growth over previous 5 years	%	1996	4.1	2.2 (95)	1.5	1.3	1	0.1	4.4	2.2	2.8
Gross fixed capital formation (GFCF)											
of which: Machinery and equipment	% of GDP	1996	20.5	17.1 (95)	24.1	20.1	14.8	20.2	25	15.5	17.6
Residential construction	% of GDP	1996	8.4	..	11.7 (93)	6.1 (95)	7.9	9.3	11.9	7.6	8.3 (95)
Average annual volume growth over previous 5 years	% of GDP	1996	2.6 (94)	..	5.2 (93)	4.3 (95)	1.9	11 ⁹	8.4 (95)	3	4.1 (95)
Gross saving ratio ⁴	% of GDP	1996	2.8	5.4 (95)	2.2	-1	-2.6	-0.8	6.9	1.3	6.9
General government											
Current expenditure on goods and services	% of GDP	1996	20.5	16.9 (95)	18.5	16.3	26.2	14.3	11.6	21.1	15.6
Current disbursements ⁵	% of GDP	1995	45.8	..	42.5 (93)	41.2	63.8	47.7	..	42.3 (94)	34.3
Current receipts	% of GDP	1995	50.9	..	39.8 (93)	37.9	57.5	53.8	..	37.2 (94)	32.1
Net official development assistance											
	% of GNP	1995	0.87	..	0.27	0.24	0.77	0.34	0.07	0.28	0.1
Indicators of living standards											
Private consumption per capita using current PPPs ³	US\$	1996	11 593	..	8 522	9 339	10 096	15 632	4 130	11 865	18 908
Passenger cars, per 1 000 inhabitants	Number	1994	381	186	357	351	406 (93)	451	47	372	565
Telephones, per 1 000 inhabitants	Number	1994	554	131	350	371	683	597	201	489	602
Television sets, per 1 000 inhabitants	Number	1993	427	298	190	400	470	400	176	435	816
Doctors, per 1 000 inhabitants	Number	1995	2.8	2.3	3	4.1 (93)	3.1	3.1 (94)	1.2	1.6 (94)	2.6 (94)
Infant mortality per 1 000 live births	Number	1995	4	13.6	7.4	6 (94)	4	5	46.8 (94)	6.2 (94)	8 (94)
Wages and prices (average annual increase over previous 5 years)											
Wages (earnings or rates according to availability)	%	1996	3.2	..	..	5.8	4.8	..	..	4.9	2.7
Consumer prices	%	1996	1.9	..	5.6	4.7	2.7	2.2	81.6	2.7	2.9
Foreign trade											
Exports of goods, fob*	Mill. US\$	1996	49 576	24 417	24 614	102 067	84 836	79 581	23 301	259 941	625 075
As % of GDP	%	1996	31.4	20.7	23.8	17.5	33.7	27	12.8	22.5	8.5
Average annual increase over previous 5 years	%	1996	7.8	..	8.6	11.2	9	5.3	11.1	7	8.2
Imports of goods, cif*	Mill. US\$	1996	35 575	37 185	35 192	121 838	66 825	78 052	43 094	287 033	795 289
As % of GDP	%	1996	22.5	31.5	34	20.8	26.5	26.5	23.7	24.9	10.8
Average annual increase over previous 5 years	%	1996	6.9	..	6.1	5.5	6	3.2	15.1	6.5	10.3
Total official reserves⁶											
As ratio of average monthly imports of goods	Ratio	1996	18 441	12 409	11 070	40 284	13 288	26 727	11 430	27 745	44 536
	Ratio	1996	6.2	..	3.8	4	2.4	4.1	3.2	1.2	0.7

* At current prices and exchange rates.

1. Unless otherwise stated.

2. According to the definitions used in OECD *Labour Force Statistics*.

3. PPPs = Purchasing Power Parities.

4. Gross saving = Gross national disposable income minus private and government consumption.

5. Current disbursements = Current expenditure on goods and services plus current transfers and payments of property income.

6. End of year.

7. Data refer to the Belgo-Luxembourg Economic Union.

8. Data refer to western Germany.

9. Including non-residential construction.

10. Refers to the public sector including public enterprises.

Sources: Population and Employment: OECD, *Labour Force Statistics*. GDP, GFCF and General Government: OECD, *National Accounts*, Vol. I and *OECD Economic Outlook*, Historical Statistics. Indicators of living standards: Miscellaneous national publications. Wages and Prices: OECD, *Main Economic Indicators*. Foreign trade: OECD, *Monthly Foreign Trade Statistics*, Series A. Total official reserves: IMF, *International Financial Statistics*.

OECD PUBLICATIONS, 2, rue André-Pascal, 75775 PARIS CEDEX 16
PRINTED IN FRANCE
(10 1999 39 1 P) ISBN 92-64-16991-1 – No. 50819 1999
ISSN 0376-6438