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during the initial recovery stages. This chapter has documented the rapid accumulation of external debts beginning in the early 1960s.

The chapter has made four main points. First, most of the debt accumulation took place during 1966–69, 1974–75, and 1979–82. Second, growth of the nominal debt stock overstates the burden of the debt because of the very rapid growth rates of GNP and exports. As we shall see in chapter 7, a substantial portion of Korean growth is attributable to investments financed by foreign borrowing.

Third, Korea's debt has been used primarily to finance current account deficits. For this reason, subsequent chapters will focus on the behavior of domestic savings and investment, recognizing that the excess of domestic savings over investment is the counterpart to a current account imbalance.

Finally, Korea, unlike many other developing countries, has carefully monitored foreign borrowing. Up-to-date and accurate statistics are maintained. In fact, the allocation of foreign (and domestic) credit has played a central role in Korea's growth strategy, facilitating the rapid growth of exports. Comprehensive and current information has also enabled policy-makers to react relatively quickly to external and internal economic developments.

## 4 Three Cycles of Debt Accumulation, 1960–86

This chapter examines Korea's macroeconomic performance and experience with external debt from 1960 to 1986. As pointed out in chapter 3, most of Korea's debt was accumulated during one of three periods: 1966–69, 1974–75, or 1979–81. Each period can be characterized as a cycle in which an initial phase of economic difficulty and growth slowdown was followed by a subsequent recovery with resumed growth. As we shall see, only the economic downturn during the third cycle was severe enough to be classified as a crisis by international standards. However, all three declines in performance were viewed with concern by Korean policymakers. Each of the three cycles also involved important shifts in economic policy as domestic authorities responded to external developments and to changes in domestic macroeconomic performance.

While it is convenient to discuss each cycle separately, it is also important to identify the broad trends which developed throughout Korea's recent history. In particular, when we pick up the story, Korea has a war-devastated economy, heavily dependent on foreign aid. By 1986 it has successfully

weathered the international debt crisis. In sharp contrast to most other developing country debtors in which policy has remained focused on macroeconomic stabilization (balance of payments and/or prices), the focus of Korean policy returned to the issues of long-term growth and structural development. The major external “problem” was a large current account surplus—a problem which placed Korean policy debates much closer to those of Japan than to those of other debtor countries.

#### **4.1 Economic Growth and External Borrowing, 1960–73**

Korea’s first cycle of debt accumulation, crisis, and recovery coincides with a number of changes in the Korean economy. First, shifts in economic policies following the 1961 military coup have generally been identified as the beginning of Korea’s export-oriented growth, with rapid expansions of both exports and GNP. Second, the period follows shortly after the decline in grants and military aid from the United States and the subsequent push for substitute funding by the Korean government.

Third, the growth rate of the Korean capital stock accelerates markedly after 1966 following relatively slow growth during the period 1953–66. On the one hand, the growth rates of exports and GNP responded very favorably, jumping from annual averages of 8 and 3 percent, respectively, during 1953–66 to 37 and 10 percent during 1966–70. At the same time, inflation rates remained stable but quite high (15–16 percent). The period is characterized by rapidly increasing employment, increases in both manufacturing wages and farm incomes, and rising wage-rental ratios. On the other hand, investment exceeded domestic saving, despite the rise in saving following the 1965 financial reforms. Korea ran large current account deficits during the period from 1965 to 1969 and financed the deficits by external borrowing. As a share of GNP, debt rose from 6.9 percent in 1965 to 27.2 percent in 1969.

Severe problems had emerged by 1970. The contributing factors included a sharp drop in private saving rates, an overvalued exchange rate, and rising unit labor costs. By 1973, however, the economy was booming.

We begin with a background review of developments during 1960–65. Section 4.1.2 gives an analysis of the debt accumulation period from 1966 to 1969 leading up to the crisis. Section 4.1.3 provides an examination of the components of the subsequent recovery. In section 4.1.4 we assess the extent to which any underlying structural weaknesses had been addressed, and examine the relative roles of policy, luck, and economic structure in the 1973 performance. The discussion refers to the economic indicators given in table 4.1.

##### **4.1.1 Background, 1960–65**

The period 1960–65 was a time of major transitions. At the outset, two critical features of the Korean economy were its trade policy of “import

Table 4.1 Major Economic Indicators, 1964-73

	1964-65	1966-67	1968-69	1970	1971	1972	1973
GNP growth rate	7.7	9.7	12.3	9.7	9.1	5.3	14.0
Export growth rate	42.1	35.4	39.5	34.2	27.8	52.1	98.6
Inflation (CPI)	18.1	11.0	15.5	15.9	13.5	11.7	2.3
Current account (% GNP)	0.3	-3.7	-8.4	-7.7	-8.9	-3.5	-2.3
Fixed investment (% GNP)	15.0	21.1	26.5	24.7	22.5	20.4	23.2
Domestic savings (% GNP)	14.2	17.0	20.8	18.6	16.2	18.3	24.1
M2 growth rate	33.8	61.7	66.7	27.4	20.8	33.8	36.4
Budget deficit (% GNP)	—	—	—	1.6	2.3	4.6	1.6
Growth rates:							
Nominal wages	20.3	19.9	30.6	26.9	16.2	13.9	18.0
Real wages	1.6	8.1	16.9	9.3	2.4	2.0	14.3
Labor productivity							
Valued added	2.9	3.9	13.3	22.3	13.9	5.0	5.0
KPC index <sup>1</sup>	13.2	10.9	23.2	12.7	9.6	8.8	8.8
Terms of trade	84.6	97.1	101.0	100.0	99.2	98.7	93.7
Real effective exchange rate	116.7	104.3	98.0	100.0	105.6	114.1	132.5
Won/\$	263.0	269.0	282.0	310.6	347.2	392.9	398.3

Source: EPB, *Major Statistics of Korean Economy*, review issues, and BOK, *Economic Statistics Yearbook*.

Note: National income data prior to 1970 are based on 1975 constant prices, old SNA. 1970-73 data are based on new SNA.

<sup>1</sup>From Korea productivity center, output per production worker.

substitution of nondurable consumer and intermediate goods behind the protective wall of tariffs and quotas" (Hong 1979, 245) and its overvalued exchange rate. Growth rates were low, however, in contrast to the high inflation in the early 1950s—a financial stabilization program (including quarterly ceilings for the growth of monetary aggregates) combined with restrictive fiscal policy helped to stabilize prices during 1957-61.

Political developments set the stage for a significant policy shift. The student uprising in April 1960 forced the resignation of President Syngman Rhee. The new government, led by Chang Myon, collapsed following a military coup in May 1961 led by General Park Chung Hee. General Park was elected president of a civilian government in 1964. The new government embarked on an active, comprehensive policy of export promotion to encourage growth. Although the policies have also involved some import substitution, and although some measures were undertaken in 1961 (notably the unification of a complex system of multiple exchange rates), we identify 1962 as the beginning of the "export-orientation" phase of Korean development.

The cornerstone of the new approach to economic management has been a series of five-year development plans. As we shall see, the plans have involved shifting combinations of liberalization (particularly in the trade regime), government intervention (most obviously through financial markets), and concern over macroeconomic stability. The mainstay has been a desire to maintain high rates of growth. This has been achieved through

increasingly high rates of capital formation in export industries. Except perhaps in the most recent period, this has put stable, credible incentives for exporters as a top priority.

The first five-year plan (1962–66) targeted fixed capital formation to grow at an average rate of 14.6 percent. However, domestic sources of financing were limited: domestic bank savings were small, and domestic commercial banks were not accustomed to or equipped for long-term loans, unless ordered to undertake them by the government. Hong (1979, 142, 257) estimates that short-term credit for exports and long-term credit for export promotion amounted to only 3 percent and 1–2 percent of total bank loans, respectively. (He uses medium Industry Bank Loans and foreign currency loans to estimate total long-term loans for export promotion.) The major source of domestic long-term funding, the Korea Reconstruction Bank, had access to only limited funds through the government. Furthermore, the slowdown of aid inflows after massive foreign aid during 1957–61 signaled a critical need for alternative financing.

The government had begun a concerted effort to encourage foreign loans and investments in 1960. The Foreign Capital Inducement and Promotion law, the first of a series of new laws and regulations, focused on foreign loans, foreign direct or joint investments, and capital and technology inducements. It granted a number of special incentives, including special income tax provisions for interest earnings arising from foreign loans. Foreign investment businesses were allowed exemptions on income and corporate taxes and on tariffs on their imports of capital equipment (Hong 1979, 141). In 1962 the government instituted the system of guarantees to foreign lenders and investors. As described in chapter 3, each private loan or project was examined individually. Those which were authorized also received a guarantee of repayment from the KDB and BOK, together with a guarantee of repatriation of funds.

Two problems emerged in 1963: a resurgence of inflation and a deterioration in the balance of payments. A number of factors contributed. Macroeconomic policies had been very expansionary during the military government of 1960–61—large fiscal deficits were financed through borrowing from the BOK. There were two poor agricultural harvests—rice in fall 1962 and barley in spring 1963. U.S. aid flows declined substantially.

Multiple exchange rates were reintroduced during 1963, and import controls were tightened. However, it is important to note that incentives to exporters were kept relatively constant during this period (Frank, Kim, and Westphal 1975). A joint U.S.-Korea stabilization agreement during 1963–64 reduced the fiscal deficit, introduced credit ceilings, and controlled lending to the private sector. It is also notable that Korea began its industrialization with a period of wage restraint. Real wages fell by over 10 percent between 1962 and 1964. Available evidence suggests that labor productivity increased strongly during the same period.<sup>1</sup>

A series of reforms were instituted following the 1964 election. Under U.S. pressure, the exchange rate was devalued and import controls were reduced. Beginning in 1964 the exchange rate took on a more prominent role in Korean economic management. Measures were undertaken to increase both public and private savings. Partly in response to these contractionary measures, in 1964 there was an improved current account, a sharp decline in imports, and reduced industrial growth. That year also seems to have marked the beginning of a more active role for unofficial financial markets.

In 1965 the government undertook a major interest rate reform. Some authors have cited this as the reason for the dramatic increase in domestic (private) savings in the late 1960s.<sup>2</sup> However, our analysis of savings in the more recent period finds interest rates to be of little importance (see ch. 8). This finding is consistent with Giovannini's (1983) conclusion that interest rate elasticities of savings are small in developing countries and with work by van Wijnbergen (1983b).

At the same time, diplomatic and commercial relations with Japan were normalized, generating a renewed inflow of funds which partially substituted for the decline in foreign aid from the United States. From 1966 on, for the first time commercial banks were allowed to issue foreign loan guarantees, and a series of strong incentives were put in place for exporters to invest and to borrow abroad.

To summarize, three critical developments had occurred by 1964–65. First, the shift to export promotion as the means to economic growth elevated capital formation to top priority. Second, changes in government policy and external environment had set the stage for heavy reliance on external debt as a source of finance. Finally, the five-year plans identified an important role for government intervention in the allocation of resources, setting the stage for government control over (organized) financial markets and, therefore, the allocation of domestic and foreign finance. This was in marked contrast to the period prior to 1961 in which the United States played the major role in allocating foreign capital inflows. During 1964–65 growth of output and exports had resumed, the current account deficit had fallen to a manageable 0.3 percent of GNP, and the 1964 devaluation together with real wage declines had resulted in a competitive labor force.

#### 4.1.2 Rapid Growth, 1966–69

The years 1966–69 were a period of high growth and stable inflation. However, increasing external imbalance and the rapid accumulation of external debt presented potential difficulties for the macroeconomy. As was shown in tables 3.1 and 3.3, external debt jumped from \$392 million in 1962 (10.7 percent of GNP) to \$1800 million at the end of 1969 (27.2 percent of GNP). Many factors facilitated these massive inflows. On the foreign lenders' side, risk was substantially reduced because of the loan guarantee

system. In addition, many borrowers received guarantees from their own domestic governments.

Domestic borrowers were given strong incentives. In practice, applications for loans to fund investment in priority sectors were encouraged and usually approved. As discussed in chapter 3, the interest cost of domestic bank loans exceeded the average cost of borrowing abroad by 14.1 percent during 1966–70, and loans from the curb market were considerably more expensive. The real private cost to borrowing abroad was –5.1 percent. At a time when domestic bank loans were strictly rationed, the Foreign Capital Inducement law in 1966 introduced a more flexible process for foreign loan approval.

Total loan guarantees grew at an average annual rate of 5 percent during this period as compared to average growth rates of 30 percent for bank credit to the public and private sectors. The foreign capital inflows sustained high investment. Nearly 40 percent of total foreign loans during 1966–70 were allocated to manufacturing, with another 40 percent to social overhead investments, 11 percent to agriculture, and 6.5 percent to services.

Gross fixed investment jumped from less than 15 percent of GNP in 1965 to 20 percent in 1966, and then to 26 percent in 1969. As we have already seen, 83.8 percent of the increase in external debt can be accounted for by the current account deficit. Reserve accumulation amount to 20.2 percent of the increase.

Three other developments occurred during the period. In 1967 there was a liberalization of the trade regime as the government switched from a positive to a negative list for restricting imports. Second, the Law for Fostering Capital Markets in 1968 was the first in a series of measure to encourage public borrowing.

It is also important to stress the developing role of financial policies. The years 1965–70 were a period of rapid growth of commercial and specialized banks. Interest rate subsidies on foreign loans also increased markedly after 1966. Hong (1979, 260–61) estimates that tariff exemptions were much less important than interest rate subsidies on loans as an incentive for investment.

#### 4.1.3 Economic Downturn and Recovery, 1969–73

By 1969–70 Korea was faced with four major difficulties. The first was the precipitous rise in the burden of external debt. Despite the exemplary export performance, the debt service ratio (long term) escalated from 7.8 percent in 1969 to 18.2 percent in 1970.

A second difficulty was that domestic savings dropped by 3 percent of GNP between 1969 and 1970. One reason cited for the decline is the reduction in real interest rates as a result of increasing overvaluation (Y. C. Park 1985c). However, an alternative explanation begins by pointing out that the real question may be not why saving rates fell in 1970, but why they

were so high in 1969. In 1970 saving rates returned to their 1968 level and remained roughly constant for three years. A sensible answer to the latter question is based on the dramatic jump in real growth rates during 1968–69.<sup>3</sup> Domestic residents may well have perceived these rates as temporary so that one would expect little adjustment of consumption. In fact, this rationale also helps to explain the 1974 “drop” in savings to 19.9 percent of GNP. Savings had jumped from 16.5 percent of GNP in 1972, with a 5.3 percent growth rate, to 22.8 percent in 1973, with a 14.0 percent growth rate.

The third factor was consistently high investment relative to domestic savings. Although fixed investment declined slightly as a share of GNP during 1970 and 1971, inventory accumulation jumped sharply in 1969, remaining high through 1971. Much of the 1969 increase in inventories was from the accumulation of agricultural products arising from high grain imports and from a large rice harvest. The increases in 1971–72 were primarily in manufactured goods, presumably in response to the increasing overvaluation and expected depreciation.

The fourth problem arose from wage and exchange rate developments. During 1966–70 nominal wages rose by over 160 percent, implying a 65 percent increase in domestic real wages. However, the nominal exchange rate (won/\$) depreciated by less than 15 percent. The result was a deterioration in international competitiveness. The extent of the loss depends on which measure of labor productivity is used. Using the KPC measure, productivity rose by 101.1 percent during the period, implying a 14.4 percent rise in unit labor costs measured in dollars. However, using the value-added index, productivity grew much more slowly, implying a 50.8 percent increase in dollar unit labor costs.

A series of adjustments were undertaken beginning in 1970. In accordance with an IMF standby arrangement, medium-term loans were strictly limited, slowing the growth of external debt. Monetary expansion was also tightened.

By 1971 a slowdown in economic activity was evident. Real growth rates declined as did the growth of imports, particularly capital goods imports, resulting in a dampening of capital formation. Authorities were reticent to pursue expansionary monetary or fiscal policies for fear of worsening the current account.

In June 1971 the exchange rate was devalued in hopes of expanding the economy, without deteriorating the external balance, by stimulating exports. After an initial 13 percent devaluation relative to the dollar, the won was gradually devalued until June 1972 when the exchange rate was fixed at 400 won/\$. There were also adjustments of the dollar vis-à-vis other major currencies during 1972–73.<sup>4</sup> In real terms the won depreciated by 11.9 percent during 1970–72 and by an additional 15.6 percent during 1973. Nominal wage growth slowed. Consequently, although unit labor costs continued to rise when measured in won, when measured in dollars they fell



by 19 percent from 1970 to 1973 using the KPC index, or by 5 percent using the value-added index.

In fact, both monetary and fiscal policies were loosening during 1971–72. Two developments contributed to this policy shift. Agricultural production (in particular, food grains) was low throughout 1970–73, with the yield of 1971 crops especially disappointing. As a result, there were large deficits in the government's Grain Management Fund financed by domestic credit expansion.

Second, there was a financial crisis in 1972.<sup>5</sup> Because of devaluation and export difficulties, many firms with foreign debts were forced close to bankruptcy. To avoid jeopardizing Korea's standing in international credit markets, the government elected to bail out these firms from their difficulties. Outstanding guarantees on foreign loans fell in 1972, and few new ones were issued.

The government instituted measures to restrict the expansion of the unofficial financial market. A presidential decree, announced on 3 August 1972, is especially notable because it reversed almost all of the financial liberalizations that had been instituted since 1965. The decree replaced all existing agreements between firms and unofficial lenders with new ones more favorable to borrowers. For example, many short-term, high interest loans were replaced by longer term, low interest rate ones. The measure mitigated the difficulties of many debt-ridden firms and effectively shifted adjustment to the financial crisis to the crub market. The unofficial market almost disappeared in the aftermath of the crisis and was not revived until after the 1973 jump in oil prices.

Overall, 1970–78 was a period of slowed growth of the banking system. Emphasis was placed on the partially regulated nonbank financial institutions, especially investment and finance corporations, which were given incentives and encouraged to grow.

In 1972 inflation accelerated and real growth slowed even further, despite improved export performance and the more expansionary macroeconomic policies. The primary factors seem to have been, on the demand side, a drop in private consumption, and on the supply side, poor performance in services and manufacturing as well as agriculture. On the brighter side, the substantial improvement in the current account position is primarily attributable to export growth and not to a contraction of imports. To further encourage investment the government took a more active role. On 12 October 1972 explicit priority sectors were introduced for the inducement of foreign investments.<sup>6</sup>

Nineteen seventy-three was an extremely favorable year for the Korean economy. Exports and GNP boomed. The debt situation improved. The current account deficit relative to GNP fell even further, as domestic saving rates soared. There was some decline in inflation, and the growth in real wages resumed, exceeding the rise in labor productivity.

Why was 1973 such a good year? Three factors were the very strong world economy, the lagged impact of real depreciation and expansionary macroeconomic policies, and the favorable private savings outturn. However, an important point is that Korea avoided more substantial macroeconomic stabilization measures because of its history of well-placed investments which enabled it to resume the high growth rates of the 1960s as soon as favorable external conditions returned.

#### 4.1.4 The Korean Economy in 1973

We end this section by asking whether the 1973 boom signified a complete recovery from the problems which emerged during the early 1970s, or whether underlying weaknesses remained. There is considerable evidence (high and growing investment with high rates of return, rising labor productivity, a competitive real exchange rate) that it would be difficult to dispute the very favorable prospects for rapid continued growth. Certainly, this was one important strength.

However, some aspects of Korea's structure left the economy particularly sensitive to unfavorable external developments. Investment rates targeted in the economic growth plans exceeded realistic forecasts of domestic savings. The high investment and shifting economic structure implied increasing dependence on imports of raw materials and capital goods. Furthermore, GNP growth was closely linked to the growth in world demand for Korean exports.

Difficulties emerged when savings fell relative to investment. Given the high fixed investment, the problem was overly variable saving and inventory behavior. The larger current account deficit required additional external borrowing, increasing the burden of debt. The problem could then be exacerbated by external factors, namely higher interest rates or a world recession which slowed the growth of exports. It could also be exacerbated by internal factors such as a rise in the (planned) capital formation component of investment. With variations, these are exactly the elements of both the second and the third crises.

From this perspective, it is sensible to ask whether Korea would have been better off overall by choosing somewhat smaller investment targets. Potential advantages would have been a reduction in the sensitivity to unexpected internal and external developments. With a smaller trend current account deficit and less accumulation of external debt, the economy might have been able to weather a jump in inventories or a drop in savings.

However, this view is misleading. As we argue in chapter 7, foreign borrowing contributed significantly to the growth of output. A ballpark estimate is that the economy would have grown only half as quickly during 1961–71 without the external finance, and only two-thirds as quickly during 1972–76. Frank, Kim, and Westphal (1975) reach similar conclusions in their estimates of the costs of lower investment. It is economically sensible for an economy with very profitable investment opportunities to supplement

domestic savings with external funds. During 1962–72 Korea very successfully encouraged industries for export-oriented growth.

## 4.2 The Second Period of Rapid Debt Accumulation, 1974–78

We turn next to the second period of difficulty, 1974–75, and subsequent recovery, 1976–78. Just as in the first episode, this period coincides with a major shift in economic policy and a significant increase in fixed capital formation.

At the beginning of the 1970s, Korean policymakers saw a decline in competitiveness which they felt necessitated further structural shifts in order to maintain future growth prospects. They felt that the rising real wages and capital intensity in manufacturing undermined Korea's ability to compete in light manufacturing and signaled a shift in its comparative advantage toward higher skill-intensive and technology-intensive products. The U.S. decision to reduce the number of troops stationed in Korea reinforced the desire of policymakers to invest more heavily in defense. As a consequence, a massive investment program was initiated in 1973 to develop heavy and chemical (HC) industries. The program remained in effect through 1979.

A primary difference between the second period of rapid debt accumulation and the first is that, in addition to internal factors, the economy was forced to adjust to unfavorable external developments—the jump in oil prices followed by the slowdown in world activity.

The major facts to be explained are as follows. During 1974–75 there was a drop in real growth rates, a jump in inflation, and a substantial increase in external borrowing. During 1976–78, however, Korea was able to resume its high growth rates and to improve its debt position. In addition, there was some reduction in inflation at first (1976–77), but a resurgence in 1978.

Section 4.2.1 examines the period of poor performance, assessing the relative importance of internal and external factors. Section 4.2.2 turns to the recovery period and to a discussion of the strengths and weaknesses of the economy in 1978, the threshold to the third and most serious crisis. Throughout the discussion, we refer to the economic indicators in table 4.2.

### 4.2.1 The Problem Years, 1974–75

Table 4.2 shows that economic performance deteriorated in 1974. By Latin American standards, the outturn, with its real growth rate in excess of 8 percent, can hardly be called a crisis. But Korean policymakers were quite concerned about the developments.

The growth rate dropped by nearly 40 percent. Inflation surged to 24.3 percent. Even more striking was the unprecedented increase in the current account deficit, which jumped from 2.3 percent to 10.8 percent of GNP within one year. External debt grew by 37 percent from \$4.3 to \$5.9 billion. However, the debt GNP ratio rose only marginally from 31.5 percent to 32

Table 4.2 Major Economic Indicators, 1973–78

	1973	1974	1975	1976	1977	1978
GNP growth rate	14.1	8.5	6.8	13.4	10.7	11.0
Export growth rate	98.6	38.3	13.9	51.8	30.2	26.5
Inflation (CPI)	3.1	24.3	25.3	15.3	10.1	14.4
Current account (% GNP)	-2.3	-10.8	-9.1	-1.1	0.0	-2.1
Fixed investment (% GNP)	23.2	25.6	25.3	24.4	27.3	31.3
Domestic savings/GNP	22.8	19.9	19.1	23.9	27.5	28.5
M2 growth rate	36.6	24.0	28.2	33.5	39.7	35.0
Budget deficit/GNP	1.6	4.0	4.6	2.9	2.6	2.5
Growth rates:						
Nominal wages	18.0	35.3	27.0	34.7	33.8	34.3
Real wages	14.3	8.8	1.4	16.8	21.5	17.4
Labor productivity						
Value added	5.0	2.4	2.2	2.4	10.3	12.6
KPC index <sup>1</sup>	8.8	11.4	11.6	7.5	10.5	11.9
Terms of trade	136.2	110.9	100.0	114.1	122.0	127.9
Real effective exchange rate	117.1	101.1	100.0	93.6	94.6	97.8
Won/\$	398.3	404.5	484.0	484.0	484.0	484.0

Source: Economic Planning Board and Bank of Korea.

Note: Based on new SNA method.

<sup>1</sup>From Korea Productivity Center, output per production worker.

percent. The debt service ratio fell slightly to 14.4 percent, substantially below its 1971 level of 21 percent. More worrisome developments were the rise in the share of short-term debt to nearly 21 percent. It is noteworthy that all of this rise was in loans to the banking sector. Unlike short-term loans to the private sector, which fell between 1973 and 1974, these “accommodating” capital inflows can be considered unplanned. Total long-term loans grew more slowly during 1974 than they had during 1973, again except for a jump in long-term loans to the banking sector.

Referring to the decompositions given in chapter 7, poor performance in construction and manufacturing accounts for a 4 percent decline in GNP growth, with most of the rest due to slower growth of other services. On the demand side, most of the slowdown is attributable to exports.

The jump in inflation is not surprising. Domestic credit expansion averaged 35 percent during 1972–73 compared to only 24 percent during 1970–71. There was also a large shock from external price increases (Korea imports oil as well as primary commodities). Unit import prices rose by 55 percent between 1973 and 1974. In addition, nominal wages rose by 35 percent (a real wage gain of 8.8 percent), while labor productivity increases amounted to less than 12 percent (less than 3 percent using the value-added index). The rapid nominal wage growth has been attributed to tight labor markets in the mid 1970s, as the Big Push created an excess demand for many types of skilled labor.

The counterpart to the current account deficit was increased fixed and inventory investment combined with a drop in savings (relative to output). The rise in fixed capital formation was to be expected given the shift in development strategy. As an indication of the magnitudes of the shifts during the early seventies, it is interesting to compare the sectoral allocation of loans. Although the share of total foreign loans which went to manufacturing fell slightly from 39.8 percent during 1966–70 to 38.8 percent during 1971–75, the percentage of these going to HC industries rose from 57 to 68 percent. Most of this increase is accounted for by changes in allocation during 1973–75. It is also likely that investment in HC industries during 1971–75 was concentrated in 1974, because investors anticipated a devaluation in the wake of the first oil shock that did not occur until December 1974.

It is interesting that fixed capital formation grew more quickly during the third five-year plan (1972–76) than had been targeted: 13.2 vs. 7.6 percent. Part of the explanation for this may be the increase in investment expenditures on residential construction between 1973 and 1974 which accounted for nearly half of the increased fixed capital formation, the remainder being attributed primarily to an increase in investment expenditures on transport equipment.

A second factor was the decline in domestic savings. Y. C. Park (1985c, 304) writes that “mostly as a reflection of the short-run difficulty in the adjustment of consumption to a lower real income, and of a high rate of inflation, domestic savings as a fraction of GNP plunged by four percentage points to 19% in 1975 from about 23% in 1973.” Other authors also argue that the large unexpected drop in savings was a major cause of the crisis. However, as discussed above, the high saving rate in 1973 was more out of line than the lower one in 1974. The 1974 rate exceeded the average rate of 16 percent during the less inflationary period, 1968–72, and remained approximately constant through 1975. The main reason for the jump in 1973 seems to have been the unexpectedly rapid real growth.

From a planner’s perspective, the more surprising outturn must have been the unprecedented jump in inventory investment. Eighty percent of the 1974 increase came from accumulation of manufactures (including capital goods) and raw materials. The large increases can be partially explained by the combination of an imminent expected depreciation and an unanticipated reduction in export growth. (Y.C. Park 1985c, 304).

It is also useful to identify the components of the current account deterioration. A little over 20 percent of the increased deficit came from a worsening in the invisibles balance, primarily due to increased payments for transport and investment income. Eighty percent came from the trade balance. There was the expected surge in imports. However, only 26 percent of the jump is accounted for by oil payments. Another 26 percent was from imports of capital goods, and the remainder was due to raw materials

imports. Payments for imports rose not only because of the price hike, but also because of a rise in the volume of imports. At the same time, the growth of export receipts slowed relative to 1972–73, returning to the average 1966–72 performance. While the world recession caused a reduction in the total volume of exports, the unit value of exports jumped by 27 percent between 1973 and 1974, dampening the deterioration in Korea's terms of trade.

To summarize the 1974 experience, Korean export growth was slowed by a combination of the oil and commodity price rise and the ensuing world recession. Slower export growth, in conjunction with the Big Push toward HC industries resulted in a jump in investment (fixed capital formation and especially inventories of imported capital goods and intermediates). At the same time, saving rates fell from their high level in the boom year of 1973. The result was an enormous current account deficit. The jump in inflation rates came both from higher oil prices and from rapid nominal wage growth. We return to a discussion of the relative importance of internal and external developments in chapter 5.

The year 1974 was the beginning of the Big Push toward promotion of heavy industries. The decision was made to continue this effort, borrowing to finance the required imports instead of contracting the economy to adjust to external shocks. BOK secured loans for the banking sector. Taxes were raised to conserve oil consumption. Unlike the response in many other developing countries, domestic oil prices were increased. The predeposit requirement on imports was also raised. At the same time, incentives for exporters came from lowered interest rates and expanded access to export credits.

In December the won was devalued from 400 to 484 won/\$, a rate which prevailed until January 1980. The devaluation resulted in a 7.2 percent real depreciation of the won relative to its average 1972–73 level. However, unit labor costs in dollars rose by about 4 percent during 1972–74 because of large nominal wage gains.

Finally, the National Investment Fund (NIF) was created in 1974. Its purpose was to generate additional domestic savings and to channel them to targeted sectors and projects consistent with the development plan. More specifically, it was to mobilize employee pension funds. In encouraging banks to make preferential loans, the policy marked the beginning of additional government intervention in the financial sector through credit allocation. As a share of bank credit, preferential loans were to grow from 40 percent in 1971 to 55 percent in 1976–77, and then to 70 percent in 1978. It is interesting that the interest rate incentives to borrow abroad actually declined during 1971–75 relative to 1966–70 because of higher foreign rates, the depreciation, and a decline in domestic bank loan rates (see table 3.6). However, access to loans from domestic banks remained severely

limited. The real cost of borrowing abroad remained negative,  $-1.6$  percent.

Overall, the situation deteriorated during 1975. The outcome was slightly better in terms of inflation and the current account deficit, but both remained extremely high. There was some further slowdown in real growth. The situation was much worse in terms of external debt. Korea borrowed an additional \$2.5 billion, escalating the debt-GNP ratio to 40 percent. Although the debt service ratio remained at 14.4 percent, the share of short-term debt to the total jumped from 20.9 percent to 28.5 percent. In marked contrast to 1974, 64 percent of the rise in short-term debt went to the private sector, with only 46 percent going to "accommodating" bank loans. Similarly, most of the rise in long-term debt went to the public or the private sectors.

The counterpart to the current account improvement was a decline in inventory accumulation. This portion of investment remained high, although the accumulation was concentrated primarily in agricultural, not manufacturing, products. Fixed capital formation rose somewhat, and there was a slight further decline in the saving ratio.

The trade balance improved somewhat, primarily because of the small increase in the value of imports. In particular there was a substantial decline in the imports of manufactures, offsetting further increases in the prices of capital goods and oil.

It is not surprising that inflation remained relatively high as the impact of the December 1974 devaluation filtered into domestic prices. However, nominal wage growth slowed somewhat to 27 percent, with the increase in labor productivity growth remaining constant. With no additional external shocks and with a sustained moderation in wage growth relative to productivity, inflation rates would have been expected to drop further during 1976-77. One sign pointing in this direction was the declining growth of wholesale prices—26.5 percent in 1975 compared to 42.1 percent in 1974. The high inflation in 1974-75 was in large part a one-shot reaction to the oil price shock and devaluation. This perspective, combined with labor market developments, makes the rapid decline in inflation during 1976-78 less surprising. Fiscal policy continued to be expansionary, financed primarily by external borrowing. Thus, during 1975 there was no significant change in domestic saving. Furthermore, the 1974 depreciation did not succeed in reviving exports, primarily because of stagnant world demand, rising unit labor costs, and the resulting decline in competitiveness.

In summary, three major problems characterized 1974-75. The first was a slowdown in growth of exports and GNP. The second was an unsustainable current account deficit and the implied rapid accumulation of external debt. Current account deficits during these two years accounted for 93 percent of the increased external debt. This problem was exacerbated by a worrisome

shift to short-term borrowing. Finally, policymakers were concerned about the high rates of inflation.

#### 4.2.2 Recovery, 1976–78

Table 4.2 shows the rapid recovery which began in 1976. Growth rates of GNP and exports surged to 14 percent and 51 percent, respectively, while inflation continued to decline. Most striking is the drop in the current account deficit from 9.1 percent in 1975 to 1.1 percent within one year, and to 0.0 percent in 1977. This section examines how these dramatic improvements came about. It concludes with a discussion of the state of the Korean economy in 1978, the year before the severe 1979–80 crisis.

The current account improvement during 1976–77 is attributable to a rise in domestic savings as a share of income and to a decline in inventory investment. On the other side, very rapid export growth, fueled by the 1974 devaluation and the recovery in world demand, contributed to an export boom during 1976. Korea was also beginning to enjoy growing receipts from construction activity in the Middle East.

Thus, we can identify four factors which explain how Korea's current account deficits recovered so quickly. One factor is the strong recovery in world demand which stimulated demand for Korean exports. A second is the increased fixed capital formation which expanded potential export production. Exports of chemicals plus machinery and transport equipment grew from 14 percent to 24 percent of total exports between 1973 and 1978.<sup>7</sup> Third, the large increases in savings, attributable primarily to rapid income growth, enabled Korea to finance the bulk of its investment domestically by 1976.

Finally, by 1978 the negative impact of higher oil prices had been dampened considerably by the inflows from construction in the Middle East. Oil payments had averaged \$0.3 billion per year during 1972–73, while construction revenues had averaged \$0.014 billion. During 1974–78, oil payments and construction revenues totaled \$5.8 billion and \$3.9 billion, respectively, so that 90 percent of the additional oil payments were offset by additional foreign exchange inflows from construction.

It is important to stress that substantial capital inflows continued during this recovery period. External debt increased by approximately \$2 billion in each of the three years. The real cost of foreign borrowing remained negative during 1975–78. There was relatively easy access to foreign credit, including import financing and prepayment of exports. Domestic bank credits, however, were subject to increasing restrictions.

Inflation fell from 29.5 percent in 1975 to 15.7 percent in 1977. As argued above, much of the 1974–75 jump in inflation should be interpreted as a one-time adjustment to the terms of trade shock and to devaluation. Given an economy without backward-looking wage indexation, and given that import



prices remained stable during 1976–78, reduced inflation is not surprising. The two issues which do warrant explanation are, first, that inflation did not decline by more and, second, that it was reignited during 1978.

Two factors help to explain why inflation rates did not fall below 15 percent: rapid wage inflation and rapid monetary expansion. Nominal wages increased by 142 percent between 1975 and 1978, while consumer prices and labor productivity rose by only 45 percent and 33 percent, respectively. As will be argued in chapter 10, the wage growth was fueled by an increasingly tight domestic labor market. In particular, the combination of the accelerating demand for labor from the Big Push and the reduced supply of skilled labor for foreign construction projects pushed up wages in some sectors, filtering across to wages elsewhere in the economy. The wage growth together with a fixed nominal exchange rate implied a deteriorating competitiveness of Korean workers relative to the country's major competitors—Singapore, Hong Kong, and Taiwan. It is noteworthy, however, that existing data points to a deteriorating distribution of income during the late 1970s, following two decades of continued improvement.

The monetary expansion arose both from domestic credit expansion and from the foreign sector. The continued capital inflows and growing net foreign asset position has been mentioned above. In addition, large deficits in the Grain Management Fund were financed through money creation. In an effort to promote self-sufficiency, the price at which the government purchased rice grew 30 percent more rapidly than the price at which the rice was sold during 1975–78.

The government became increasingly concerned about domestic inflation. During the late 1970s, a variety of price controls, ceilings, and guidelines proliferated. Prices in monopolistic and oligopolistic industries were controlled by the government, which authorized all increases. As the industrial concentration grew, these controls accounted for an increasingly large share of the CPI. In addition, the prices of many essential products were monitored by the government.

Nam claims that government pricing policies led to many problems during the late 1970s (1984). The “stop-go” approach to allowing price increases created supply shortages, declining product quality, reduced investments, and distorted resource allocation during a time of substantial structural readjustment. Black markets for some essential consumer goods emerged.

There is a general consensus that 1975–78 was a period of increasing misallocation of resources and increasing industrial concentration. Seventy-seven percent of all investment in equipment in the manufacturing sector went to HC industries, although these industries accounted for only 55 percent of total production.

The *chaebol*—large-scale industrial conglomerates—became a significant share of the business sector in the mid-1970s. Although they participate in all sectors of the economy, they have been the most prominent in heavy and

chemical manufacturing. Statistics are difficult to obtain, however Jones and Sakong (1980, 304) provide estimates for 1975 which suggest that the forty-six largest *chaebol* produced 37 percent of value added in manufacturing and 13 percent in GNP, and that business concentration was increasing rapidly. Westphal (1984) states that by

1980–81, the list of officially recognized *chaebol* had 26 large groups, which together controlled 465 firms. Eight of these, along with two public conglomerates, appear on Fortune's 1980 list of the 500 largest industrial corporations outside of the United States. One, the Hyundai Group, was the largest nonpetroleum corporation resident in the less developed countries.

Financial and trade policies also became more restrictive during this period (see ch. 9 and 11). Financial market restrictions increased and credit rationing was tightened, with preference given to HC industries and to large firms. Extremely high corporate debt-equity ratios contributed to the fragility of the banking sector—in the manufacturing sector, the debt-equity ratio rose from an already high 3.16 in 1974 to 3.77 in 1979, and then to 4.88 in 1980. (It would fall to 3.86 by 1982, following a massive bailout and the growth of Korean stock markets.)

By 1978 the economic situation looked somewhat less promising. Growth rates declined further. The current account deficit reemerged. This time, the increase was attributable to increased fixed capital formation. Domestic savings continued to rise as a share of income. There was also a jump in inflation. On the positive side, the debt of GNP ratio declined, with a reduction in the share of short-term debt.

Thus, a number of structural weaknesses faced the Korean economy at the beginning of 1979. The major ones were the recurrent imbalance between investment and domestic savings, growing fragility of financial markets, and increased government intervention in trade, the financial sector, and pricing. Furthermore, the Big Push to HC industries contributed to a misallocation of domestic resources and to excess capacity in these sectors.

### **4.3 The Third Period of Crisis and Recovery, 1979–86**

The final period of major debt accumulation, crisis, and recovery is perhaps the most interesting. It was certainly the most severe, including one year (1980) in which output declined by nearly 5 percent. By 1983, however, high growth had resumed, combined with substantial improvements in inflation and external balance.

Korea's impressive performance stands in marked contrast to the majority of heavily indebted countries, which continue to struggle in the aftermath of multiple painful external shocks since 1979. The rapid and sustained turnaround in Korea's economic performance has been widely cited as a model of successful adjustment and held up as an example of the favorable

outcomes from the correct application of macroeconomic stabilization policies.

For Korea in this period, as in the two earlier episodes and just as for many other countries, internal developments combined with external ones to create the economic crisis. By 1979 Korea was again in the midst of a shift in the government's fundamental economic strategy. Performance during 1974–78 had convinced policymakers to step back from the Big Push, with its reliance on widespread government intervention, and to refocus from viewing industrial policy as a tool to promote rapid economic growth to having a growing concern about price stability as a necessary precondition to continued growth. The policy shift was confounded by increasing social unrest, the assassination of President Park, and agricultural disasters during 1978–80. On net, complicated interactions between internal and external factors make it extremely difficult to identify the relative importance of particular elements in explaining outcomes. We return to these issues in chapter 5.

The discussion is divided into four remaining sections. Section 4.3.1 discusses the policy shift embodied in the 1979 Comprehensive Stabilization Plan (CSP). Section 4.3.2 examines the 1979–80 crisis period. Sections 4.3.3 and 4.3.4 analyze the early recovery period from 1981 to 1983 and the strong performance period, 1983–86. Throughout the discussion, we refer to the economic indicators in table 4.3.

**Table 4.3** Major Economic Indicators, 1978–86

	1978	1979	1980	1981	1982	1983	1984	1985	1986 <sup>P</sup>
GNP growth rate	11.0	7.0	-4.8	6.6	5.4	11.9	8.5	5.4	12.5
Export growth rate	26.5	18.4	16.3	21.4	2.8	11.9	19.6	3.6	14.6
Inflation (CPI)	14.4	18.3	28.7	21.3	7.2	3.4	2.3	2.5	2.3
Current account (% GNP)	-2.1	-6.8	-8.8	-7.0	-3.8	-2.1	-1.7	-1.1	4.9
Fixed investment (% GNP)	31.3	33.2	32.3	28.7	30.5	31.3	31.3	30.8	31.3
Domestic savings (% GNP)	28.5	28.1	23.5	23.5	24.0	27.9	30.3	30.7	34.8
M2 growth rate	35.0	24.6	26.9	25.0	27.0	15.2	7.7	15.6	18.6
Budget deficit (% GNP)	2.5	1.4	3.2	4.7	4.4	1.6	1.4	1.0	1.8
Growth rates									
Nominal wages	34.3	28.6	22.7	20.1	14.7	12.2	8.1	9.9	9.1
Real wages	17.4	8.7	-4.7	-2.6	6.9	10.4	5.7	7.3	6.7
Labor productivity									
Value added	12.6	16.0	-3.9	11.1	-1.8	4.2	12.0	-0.8	7.6
KPC index <sup>1</sup>	11.9	15.9	10.6	18.1	7.8	13.6	10.5	7.1	13.6
Terms of trade	117.8	115.3	100.0	97.9	102.2	103.1	105.3	105.9	114.7
Real effective exchange rate	109.0	97.2	100.0	103.6	103.2	110.6	114.4	121.2	139.2
Won/\$	484.0	484.0	607.4	681.0	831.1	775.8	806.0	870.0	881.5

Source: Economic Planning Board and Bank of Korea.

Note: Based on new SNA method.

<sup>1</sup>From Korea Productivity Center, output per production worker.

<sup>P</sup>Preliminary.

#### 4.3.1 Policy Refocus, 1977–79

As government concern over persistently high inflation grew, policymakers began to reassess the approach embodied in the Big Push. A series of measures were introduced. During 1977 these included restraints on monetary and fiscal expansion to contain aggregate demand. The government also attempted to eliminate shortages through improvements in the distribution system (in particular, for agricultural products), increases in a number of controlled prices, and acceleration of import liberalization.

Additional measures were undertaken during 1978. On the monetary/fiscal side, short-term trade credits were discouraged in an effort to reduce the contribution of the foreign sector to monetary expansion. Ceilings were placed on credit to the private sector. Interest rates on bank loans and deposits were increased as part of a nationwide savings campaign. In addition, it was hoped that the August 1978 Comprehensive Measure to Curb Speculative Real Estate Investment would shift savings from real assets to the banking sector. Government spending was reduced, in part through deferment of construction projects. On the trade side, the import liberalization ratio was raised and tariff rates on some imported raw materials were adjusted so as to absorb increasing prices. Limitations were imposed on the exports of some items with domestic shortages.

The CSP was announced in April 1979. This plan has been described as a “landmark” (Nam 1984) because it was the first of its kind to put control of inflation as the number one priority. In the past, the government had been primarily concerned about investment for growth and had consistently been willing to use external and/or internal credit to finance real expansion, despite any unfavorable implications for price stability. Furthermore, the CSP stated that pervasive government intervention to direct economic development was appropriate in the early stages, but argued that it was also appropriate to rely increasingly on market forces at later stages. As such, the government accepted part of the blame for existing economic difficulties. The new approach, which combined proposals from BOK, the Korea Development Institute (KDI), and the Economic and Scientific Council, was strongly supported by a newly appointed deputy prime minister, Shin Hyon Whak.

The CSP had four major components. The first was a more restrictive monetary policy, including improvements in the preferential loan system, and increased interest rates. Second, fiscal policy was to be contracted through a 5-percentage-point cut in spending and additional deferments of large public investment projects. Third, the policy stepped back from the focus on HC industries by calling for a reallocation of investment toward other manufacturing and nonmanufacturing sectors. Finally, the government redoubled its efforts to prevent real estate speculation and to increase the supply and stabilize the prices of essential commodities.

#### 4.3.2 The Crisis, 1979–80

Macroeconomic performance deteriorated during 1979. Output and export growth rates continued their decline. Inflation rates remained high. The current account deficit jumped to 2.2 percent of GNP, while external debt rose by \$5.5 billion to 32.5 percent of GNP. It was a year of increasing domestic unrest. Partially in response to worsening income distribution, there were a number of demonstrations. The situation culminated in the widespread political uncertainties following the death of President Park in October.

Macroeconomic policies were relatively contractionary during 1979. Money growth was kept within the CSP's targets, and government expenditures fell relative to GNP, leading to a reduction in the fiscal deficit.

The counterpart to the larger current account deficit was a jump in fixed and inventory investment. Savings remained high. As was the story during 1974–75, unanticipated slowdown of export and output growth helps to explain the inventory jump and subsequent external imbalance.

A large trade deficit accounts for most of the current account deterioration. Higher import prices led to a substantial rise in the value of imports, while export receipts stagnated. Increasing real appreciation and labor costs help to explain the poor export performance. Between 1978 and 1979, the real exchange rate appreciated by 9 percent, while unit labor costs rose by 11 percent. Nominal wages, real wages, and labor productivity grew by 29 percent, 9 percent, and 16 percent, respectively, marking an end to the 1976–78 period of real wage gains in excess of productivity and the beginning of a period of restrained nominal wage gains. Cumulatively, unit labor costs more than doubled during 1975–79, while the exchange rate remained fixed.

We look next at the declining growth rates. A simple accounting decomposition on the demand side (see ch. 7) shows that, although there was a massive (7 percent) reduction in the contribution of exports to growth between 1978 and 1979, this decline was offset by the extremely slow growth of imports. The net contribution of trade to growth remained roughly constant between 1978 and 1979. On the other hand, the drop in the growth of fixed investment was only partially offset by inventory accumulation. Total investment contributed a full 3 percent to the reduction in growth between 1978 and 1979.

However, this simple approach underestimates the total effects from external developments because it ignores resulting changes in endogenous variables. Our counterfactual examples using the KDI Quarterly Macroeconomic model of the Korean economy (see ch. 5) imply that with no deterioration in external conditions (i.e., with unchanged oil prices, foreign prices, foreign growth rates, and interest rates), Korean growth would have been considerably stronger (9 percent in 1979) while the current account deficit would have been 17 percent (\$0.7 billion) smaller.

Nineteen eighty was a crisis year for the Korean economy. Real output declined by 4.8 percent. Inflation reached over 25 percent. The current account deficit rose to 8.7 percent of GNP. External debt jumped from 32.9 percent of GNP at the end of 1979 to 44.7 percent by the end of 1980.

Again, there were both internal and external reasons for the 1980 outturn. There were two major internal developments. First, the death of President Park created a climate of political uncertainty and social unrest which is difficult to quantify. The second arose from the agricultural sector. After poor grain harvests in both 1978 and 1979, the rice crop failed in 1980. Grain imports increased substantially during this period. The sector's contribution to total GNP growth was -3.4 percent in 1980. In contrast, agriculture's annual contribution to growth had ranged from 0.8 to 2.3 percent during 1971-77.

External factors included the terms of trade deterioration following the second oil shock (there was a 17 percent decline between 1978 and 1981), the slowdown in world economic activity, and the increased cost of servicing the external debt due to the rise in interest rates. Referring again to simulations from the KDI Quarterly model, our results suggest that if external conditions had not deteriorated, real growth would have been positive (5 percent) and the current account deficit would have been only half as large (as improvement of \$2.7 billion).

Three factors contributed to the inflation: devaluation, the oil price jump, and the gradual decontrol of prices. The model simulations suggest that inflation would have been about 9 percentage points lower in the absence of the unfavorable external developments.

A stabilization package was initiated in January 1980, supported by a two-year IMF standby arrangement. The exchange rate was devalued by 17 percent, and at the same time, a more flexible exchange rate regime was introduced in which the won-dollar exchange rate was to be determined based on external conditions and on the value of a basket of currencies. During 1980, the (trade weighted) nominal exchange rate depreciated by 18.9 percent in nominal terms and 9.7 percent in real terms. Domestic interest rates, bank loans, and deposits were increased 5-6 percent and the higher oil prices were passed through to domestic consumers.<sup>9</sup>

The plan also called for a tightening of monetary and fiscal policy, in the hopes of counteracting the inflationary impact of devaluation. However, conditions deteriorated during the year. Employment and output stagnated, student demonstrations and labor unrest increased in the spring, and firms were having severe difficulties meeting their debt obligations as a result of the devaluation and the economic recession. The high debt-equity ratios contributed to the precarious financial situation.

In response the government relaxed monetary and fiscal policy in a series of measures in June, September, and November. In June, interest rates were raised 1-2 percent and domestic credit was expanded, particularly to small and medium-sized businesses and to low income housing construction.

Government expenditures on social services were increased, and the target money growth rates were raised slightly. The September and November measures reduced selected taxes and the interest rates on loans, and expanded credit for residential construction.

#### 4.3.3 Early Recovery, 1981–83

Korea had weathered the two previous crises by borrowing extensively and smoothing the adjustment instead of contracting the economy. However, policymakers were skeptical about the feasibility of this option. Their debt stock was already very large and prospects for a quick recovery of world demand for Korean exports looked dim. Instead, macroeconomic stabilization especially a reduction in inflation rates, remained the top priority.

The fifth five-year plan, formulated in 1981, launched a major new stabilization effort. It gave first priority to reducing inflation. In response to dissatisfaction with the role of government intervention in the unfavorable economic performance, second priority was given to economic liberalization. As will be discussed further in chapters 9 and 11, the trade regime has since been liberalized substantially, while liberalization of domestic financial markets has proceeded more slowly.

The program included a wide variety of measures. Tax reforms reduced individual income taxes, extended the value-added tax, and restructured corporate taxes, eliminating many special advantages. Price controls were eliminated. The number of restricted imports was reduced as part of the trade liberalization.

Again, the actual restrictiveness of macroeconomic policies varied as a number of additional measures were undertaken during the year. In April, policy was loosened as additional credit was given to exporters and to small and medium-sized firms. In June the government tried to further stimulate construction. Interest rates were reduced by 3 percent, lagging behind the declines in inflation. The government also began to rely more heavily on incomes policy in an attempt to keep wages down.

There were some improvements in the state of the economy during 1981. In particular, there was a one-year turnaround in the growth rate—the economy grew strongly at 6.6 percent. A sectoral decomposition shows that agriculture grew very strongly (contributing over 3 percent to the GNP growth rate as compared to -3 percent in 1980), with some recovery in manufacturing. Inflation fell from 28.7 to 21.3 percent within the year. However, the current account deficit remained at nearly 7 percent of GNP and external debt had risen to 48.4 percent of GNP, with a worrisome 26.1 percent of the debt being short term. Inflation remained high by historical standards. Furthermore, gross fixed investment had fallen from 31.8 percent of GNP during 1978–80 to 28.9 percent of GNP during 1981.

A new policy package to revive the economy was introduced in January 1982. The interest differential on preferential loans was eliminated. The money supply was increased to stimulate investment. A financial scandal in

May 1982 resulted in further credit expansion in order to bail out firms in trouble.<sup>10</sup> The growth rate of M1 jumped to over 45 percent. At the same time, there was little change in the fiscal position and the real effective exchange rate appreciated by nearly 4 percent. Furthermore, world demand stagnated.

Economic performance in 1982 was mixed. The growth of exports fell from 20.1 percent in 1981 to only 1 percent in 1982. As a consequence, there was a moderation of output growth. This time, neither agriculture nor manufacturing grew strongly. Instead, construction and other services were the sources of growth. External debt rose an additional 4 percent of GNP to 52.7 percent. However, there were substantial improvements in the current account and in inflation. The current account deficit declined from 6.9 to 3.7 percent of GNP. We return to the discussion of current account improvement with growth in chapter 7.

Even more striking is that inflation fell from 21.3 to 7.2 percent. Three factors contributed to the large drop. The first was the sustained slowdown in nominal wage growth. Real wages had declined in both 1980 and 1982. The second was a small terms of trade improvement. The third was a real currency appreciation. Although the won depreciated against the dollar, the nominal effective exchange rate remained constant and the real effective exchange rate appreciated.

By 1983 the Korean economy was performing strongly. Real growth was nearly 12 percent, while inflation had fallen below 4 percent and the current account deficit had been reduced to just 2 percent of GNP.

Where did the 1983 boom come from? The simple accounting decomposition (ch. 7) shows that Korean exports, investment, and private consumption all grew strongly. The expansion was not attributable to increased government spending. The sectoral decomposition shows that expansion of manufacturing contributed nearly 4 percentage points, as compared to just 1.3 percentage points in 1982. There had been some improvement in external conditions. World growth had resumed—industrial countries grew by 2.6 percent in 1983 as compared to -0.2 percent in 1982 and an average of 1.4 percent per year during 1980–81.

Increased international competitiveness enabled Korea to take advantage of the stronger world demand. Further nominal exchange rate adjustment had led to over 10 percent additional real depreciation since 1980. Domestic wage growth had also slowed. Despite a slowdown in labor productivity during the early 1980s, unit labor costs measured in dollars declined by 16.6 percent over 1979–83. During the same period, (dollar) unit labor costs remained constant for Hong Kong and rose by 28 percent for Taiwan.<sup>11</sup>

Other internal factors had also improved. Many of the controls and restrictions introduced during the 1970s had been relaxed. Agricultural output had revived. In addition, the social and political climate had eased considerably.



By 1983 Korea had dealt with the major economic difficulties from 1979–80. Furthermore, macroeconomic stabilization had been achieved without compromising high rates of capital formation. Investment had remained strong throughout 1980–82 even though domestic savings did not begin to recover until 1983. A critical point here is that Korea was able to continue to borrow from abroad during its crisis period and these funds were used to maintain investment. It is very unlikely that Korea would have had this option if the crisis years had been 1982–83. Korea was lucky to run into difficulty before most of the other debtor countries.

#### 4.3.4 Successful Adjustment, 1983–86

As a result of the very favorable 1983 economic performance, Korean policy shifted away from a focus on short-run macroeconomic stabilization (prices and the balance of payments), turning again to issues of long-run structural development. The point is important in contrasting Korea's experience with that of other developing country debtors. For most of them, 1983 was the beginning of the crisis. For Korea, the major adjustments had already been accomplished.

The government launched a revision of the fifth five-year plan, to be in effect from 1984 to 1986. In the revised plan it was explained that the economy had already achieved the major goals of price stability and renewed export and output growth, as set forth in the original plan. The revision, "rather than being oriented to quantitative targets, emphasizes institutional reforms and structural improvements...to make a major shift in the style of economic management toward relying more on competition and market mechanism and to solve the problems of imbalance" (Government of Korea 1983, iii, 3). The revised plan very clearly shows the policy shift to structural adjustment and long-term growth. For example, it states that Korea's "remarkable [1980–83] performance has laid the foundation for another economic takeoff" and that Korea was "forging ahead towards joining the ranks of advanced industrial countries" (3).

Against this backdrop, both monetary and fiscal policy were tightened significantly in conjunction with a new IMF program, in effect from July 1983 through March 1985. The fiscal deficit was reduced from 4.3 percent of GP in 1982 to 1.6 percent in 1983. M1 growth was slowed to 17.0 percent during 1983 and 0.5 percent during 1984. The nominal exchange rate was managed so as to depreciate the won by 5.7 percent in real terms from 1982 to 1984. Economic performance remained strong in 1984. Growth exceeded 8 percent. The current account improved further as domestic savings rose. Inflation fell below 3 percent.

In 1985 the real growth rate slowed to 5 percent. This development is partially attributable to a slowdown in world economic activity. The dollar value of Korean exports grew by just 4 percent and exports contributed only 1 percent to GNP growth, compared to 4 percent in 1984 and 6 percent in

1983. However, inflation rates remained low and the current account continued to improve. Korea's debt position also improved. Short-term debt, as a share of total debt, declined from 26 percent in 1981 to 19 percent in 1985, and the ratio of debt service to exports dropped from 57 percent in 1982 to 49 percent in 1985.

The government initiated further depreciation of the won in order to bolster Korea's competitiveness. In real terms, the won depreciated by 6 percent during 1985 and by an additional 15 percent in 1986.

Nineteen eighty-six was a banner year for the Korean economy. Real growth reached 12.5 percent, inflation remained at just 2.3 percent and the current account registered a \$4.6 billion surplus (nearly 5 percent of GNP).<sup>12</sup> In stark contrast to most of the other debtor countries which experienced further deterioration in their debt indicators,<sup>13</sup> Korea's debt to GNP ratio fell from 56.3 to 46.8 percent as its debt stock was reduced by \$2.25 billion. Strong growth in the industrial countries, lower interest rates, a dramatic terms of trade improvement (primarily from the drop in oil prices), and the substantial real depreciation all contributed to the impressive performance.

Korea's adjustment has been extremely successful on the macroeconomic stabilization front. The balance of payments, inflation, growth, and the debt burden have all improved dramatically since 1979–81. In the following chapters, we turn from a chronological analysis to an examination of individual pieces of the performance. These pieces are synthesized and our main conclusions are summarized in the final chapter.

## 5 Internal versus External Shocks

As described in chapter 4, Korea experienced large current account deficits, slowdowns in growth, and rapid accumulation of external debt during 1974–77 and again during 1979–83. In both periods, the poor performance coincided with internal as well as external developments. This chapter evaluates the relative importance of internal versus external factors in explaining the current account imbalances during each of these periods.

Our analysis draws from two approaches. The first begins with the current account identity and decomposes the change in the current account from a base year into price, income, interest rate, and other effects. This approach does not take into account shifts in behavior of domestic residents (importers, monetary authorities, etc.). Our second decomposition, based on the KDI Quarterly Macroeconomic model, incorporates a more fully specified set of behavioral relationships. The basic characteristics of the