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SOUTH KOREA'S EXPERIENCE WITH EXTERNAL DEBT

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Abstract

This paper examines South Korea's macroeconomic performance and experience with external debt during 1960-1986. Most of Korea's debt was accumulated during three periods: 1966-69, 1974-75 and 1979-81. Each involved an initial phase of economic difficulty and an slow-down in growth, followed by an impressive recovery. The paper reviews the economic and political developments during each cycle in some detail. Of particular interest are the shifts in economic policy as domestic authorities responded to external and internal developments. The paper is part of a larger study of the Korean experience.

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I. Introduction

This paper examines South Korea's macroeconomic performance and experience with external debt from the early 1960s to 1986. Most of Korea's debt was accumulated during one of three periods: 1966-69, 1974-75 or 1979-81 (Table 1). Each period can be characterized as a cycle in which an initial phase of economic difficulty and growth slow-down 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 policy makers. 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.

The primary purpose of this paper is to review the economic and political developments during each cycle of debt accumulation, difficulty and recovery. The paper is part of a larger analysis of Korea's experience, and throughout the discussion, readers are referred to other parts of the larger study.

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 is a war devastated economy, heavily dependent on foreign aid. By 1986, she had 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), Korean

policy focus had 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 Korea policy debates much closer to those of Japan than to those of other debtor countries.

II. 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 U.S., 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 the relatively slow growth during the period from 1953-1966. On the one hand, the growth rates of exports and GNP responded very favorably, jumping from annual averages of 8% and 3% respectively during 1953-1966 to 37% and 10% during 1966-1970. At the same time, inflation rates remained stable but quite high (15-16%). 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 savings, despite the rise in savings 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% in 1965 to 27.2% in 1969.

Severe problems had emerged by 1970. The contributing factors included

a sharp drop in private savings 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 1960-1965. Section B gives an analysis of the debt accumulation period from 1966-1969 leading up to the crisis. Section C provides an examination of the components of subsequent recovery. It assesses the extent to which any underlying structural weaknesses been addressed and the relative roles of policy, luck and economic structure in the 1973 performance. The discussion refers to economic indicators given in Table 2.

A. Background (1960-65)

1960-65 was a period of major transitions. At the outset, two critical features of the economy were its trade policy of "import substitution of nondurable consumer and intermediate goods behind the protective wall of tariffs and quotas"[1], 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 April 1960 student uprising 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

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[1] W.T. Hong (1979) Trade Distortions and Employment Growth in Korea, Seoul: Korea Development Institute, p.245.

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

The first 5-Year Plan (1962-66) targeted fixed capital formation to grow at an average rate of 14.6%. However, domestic sources of financing were limited. Domestic bank savings were small. Domestic commercial banks were not "accumstomed or equipped" for long term loans, unless ordered to undertake them by the government. Hong (1979, p. 142, 257) estimates that short term credit for exports and long term credit for export promotion amounted to only 3% and 1-2% 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 signalled 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.[2] In 1962, the government instituted the system of guarantees to foreign lenders and investors. 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.[3]

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 1960-61 military government - 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. US 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.[4] A joint

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[2] Hong (1979) p. 141.

[3] The allocation of loans is described more fully in Collins and Park, Chapter 3.

[4] C. Frank, K.S. Kim and L. Westphal, (1975), Foreign Trade Regimes and Economic Development: South Korea, New York: Columbia University Press and N.B.E.R.

US-Korea stabilization agreement during 1963-4 reduced the fiscal deficit, introduced credit ceilings, and controlled lending to the private sector.

It is also notable that Korea began her industrialization with a period of wage restraint. Real wages fell by over 10% between 1962 and 1964. Available evidence suggests that labor productivity increased strongly during the same period. (There are two measures of labor productivity. One gives value added per employee. The other, produced by the Korea Productivity Center (KPC), measures output per production worker. The two series do not always tell the same story so that both have been reported.)

A series of reforms were instituted following the 1964 election. Under US 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, 1964 saw an improved current account, a sharp decline in imports, and reduced industrial growth. It 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[5] have cited this as the reason for the dramatic increase in domestic (private) savings in the late 1960s. However, our analysis of savings in the more recent period finds interest rates to be of little importance.[6] This

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[5] This period is discussed in detail in D. Cole and Y.C. Park (1983) Financial Development in Korea: 1945-78, Cambridge: Harvard University Press, chapter 3. See also J. Gurley, H. Patrik and E. Shaw (1965), "The Financial Structure in Korea", United States Operations Mission to Korea and R. McKinnon (1973) Money and Capital in Economic Development, Washington: The Brookings Intitution.

[6] Savings is examined in Collins and Park, Chapter 8.

finding is consistent with Giovannini's conclusion that interest rate elasticities of savings are are small in developing countries, and with work by S. Van Wijnbergen.[7]

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. For the first time, commercial banks were allowed to issue foreign loan guarantees from 1966, and a series of strong incentives were put in place for exporters to invest and to borrow abroad.

To summarize, three critical developments had occured 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 5-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 US played the major role in allocation of foreign capital inflows. During 1964-5, growth of output and exports had resumed, the current account deficit had fallen to a manageable 0.3% of GNP and the 1964 devaluation together with real wage declines had resulted in a competitive labor force.

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[7] A. Giovannini (1983) "The Interest Elasticity of Savings in Developing Countries: The Existing Evidence," World Development, July. See also S. van Wijnbergen (1983) "Macroeconomic Effects of Changes in Bank Interest Rates: Simulation Results for South Korea," Journal of Development Economics.

B. Rapid Growth: 1966-1969

1966-69 was 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 shown in Table 1, external debt jumped from $392 million in 1962 (10.7% of GNP) to $1800 million at the end of 1969 (27.2% 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 shown in Table 3, the interest cost of domestic bank loans exceeded the average cost of borrowing abroad by 12.1% during 1966-70, and loans from the curb market were considerably more expensive. The real private cost to borrowing abroad was -2.3%. At a time when domestic bank loans were strictly rationed, the 1966 Foreign Capital Inducement Law introduced a more flexible process for foreign loan approval.

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

Gross fixed investment jumped from less than 15% of GNP in 1965 to 20% in 1966 and 26% in 1969. Table 4 shows that 83.8% of the increase in external debt can be accounted for by the current account deficit. Reserve

accumulation amounted to 20.2% 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 1968 Law for Fostering Capital Markets was the first in a series of measures to encourage public borrowing.

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

C. 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% in 1969 to 18.2% in 1970.

A second difficulty was that domestic savings dropped by 3% 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.[8] However, an alternative explanation begins by pointing out that the real question may be, not why savings rates fell in 1970, but why they were so high in 1969. In

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[8] Y.C. Park (1985) "Korea's Experience with External Debt Management," in G. Smith and J. Cuddington, (eds.) International Debt and the Developing Countires, Washington: The World Bank.

1970, savings 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 1968-9.[9] Domestic residents may well have perceived these rates as temporary so that one would expect little adjustment of consumption. In fact, this story also helps to explain the 1974 "drop" in savings to 19.9% of GNP. Savings had jumped from 16.5% of GNP in 1972, with a 5.3% growth rate, to 22.8% in 1973, with 14.0% growth rates.

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 accumulation of agricultural products arising from high grain imports, and a large rice harvest. The increases in 1971-72 were primarily 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%, implying a 65% increase in domestic real wages. However the nominal exchange rate (won/$) depreciated by less than 15%. The result was a deterioration in international competitiveness. Measures of the extent of the loss depend on which measure of labor productivity is used. Using the KPC measure, productivity rose by 101.1% during the period, implying a 14.4% rise in unit labor costs, measured

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[9] Unfortunately, growth rates statistics for 1970 are not strictly comparable with earlier and later years, because pre-1969 data are computed with different base prices and the old SNA method. See the Data Appendix for further discussion.

in dollars. However, using the value added index, productivity grew much more slowly, implying a 50.8% increase in dollar unit labor costs.

A series of adjustments were undertaken beginning in 1970. In accordance with an IMF Stand-by 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 persue 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% 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-a-vis other major currencies during 1972-3.[10] In real terms, the won depreciated by 11.9% during 1970-72, and an additional 15.6% 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% from 1970 to 1973 using the KPC index, or by 5% using the value added index.

In fact, both monetary and fiscal policies were loosened during 1971-2. Two developments contributed to this policy shift. Agricultural production (in particular, food grains) was low throughout 1970-73, with 1971 crops

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[10] The parities of the major currencies relative to the dollar were adjusted during 1972 and subsequently allowed to float.

especially unfavorable. 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.[11] Devaluation and export difficulties forced many firms with foreign debts close to bankrupcy. To avoid jeapordizing Korea's standing in international credit markets, the government elected to bail these firms out of 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. The Presidiential Decree, announced on August 3, 1972, is especially notable because it reversed almost all of the financial liberalizations 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 curb 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,

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[11] See Cole and Park (1983), especially pp. 158-68, for further discussion of this period.

despite improved export performance and the more expansionary macroceonomic 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 October 12, 1972 explicit priority sectors were introduced for inducement of foreign investments.[12]

1973 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 savings 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 structural investments which enabled it to resume the high growth rates of the 1960s as soon as favorable external conditions returned.

D. Assessment: Strengths vs. Weaknesses of the Korean Economy in 1973

We end this section by asking whether the 1973 boom signified a complete

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[12] See Hong (1979), p.144 for additional discussion.

recovery from the problems which emerged during the early 1970s, or whether underlying weaknesses remained. Considerable evidence (high and growing investment with high rates of return, rising labor productivity, a competitive real exchange rate) argues that it would be difficult to dispute the very favorable prospects for rapid continued growth (though perhaps not at 14.%). 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 savings and inventory behavior. The larger current account deficit required additional external borrowing, increasing the burden of the debt. The problem could be exascerbated by external factors - namely higher interest rates or a world recession which slowed the growth of exports. It could also be exascerbated 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. The foreign borrowing contributed significantly to the the growth of output. A ball-park 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.[13] 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.

III. The Second Period of Rapid Debt Accumulation (1973-78)

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 policy makers 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 signalled a shift in her comparative advantage towards higher skill-intensive and technology-intensive products. The U.S. decision to reduce the number of troops stationed in Korea reinforced the desire of policy makers to invest more heavily in defense. As

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[13] See Collins and Park, Chapter 7.

a consequence, a massive investment program was initiated in 1973 to develop heavy and chemical industries (HC). 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 slow down in world activity.

The major facts to be explained are as follows. During 1974-5, 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 her high growth rates and to improve her debt position. In addition, there was some reduction in inflation at first (1976-77), but a resurgence in 1978.

Section A examines the period of poor performance, assessing the relative importance of internal and external factors. Sections B and C turn 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 5.

A. The Problem Years (1974-75)

Table 5 shows that, in 1974, economic performance deteriorated. By Latin American standards, the outturn, with its real growth rate in excess of 3%, can hardly be called a crisis. But Korean policy makers were quite concerned about the developments. The growth rate dropped by nearly 40% Inflation surged to 24.3%.

Even more striking was the unprecedented increase in the current account deficit, which jumped from 2.3% to 10.8% of GNP within one year. External

debt grew by 37% from $4.3 to $5.9 billion, However the debt-GNP ratio rose only marginally from 31.5% to 32%. The debt service ratio fell slightly to 14.4%, substantially below its 1971 level of 21%. A more worrisome development was the rise in the share of short-term debt to nearly 21%. 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.

Poor performance in construction and manufacturing accounts for a 4% 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.[14]

The jump in inflation is not surprising. Domestic credit expansion averaged 35% during 1972-73 compared to only 24% during 1970-71. There was also a large shock from external price increases (oil as well as commodity prices). Unit import prices rose by 55% between 1973 and 1974. In addition, nominal wages rose by 35% (a real wage gain of 8.8%), while labor productivity increases amounted to less than 12% (less than 3% 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).

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[14] See Collins and Park, Chapter 7.

The rise in fixed capital formation was to be expected given the shift in development strategy. As an indication of 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% during 1966-70 to 38.8% during 1971-75, the percentage of these going to heavy and chemical industry (HC) rose from 57% to 68%. Most of this increase is accounted for by changes in allocation during 1973-5. It is also likely that investment to HC 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 5-Year Plan (1972-76) than targetted: 13.2% vs. 7.6%. Part of the explanation for this may be the increase in residential construction between 1973 and 1974 which accounted for nearly half of the increased fixed capital formation, the remainder being attributed primarily to increased transport equipment.

A second factor was the decline in domestic savings. Park (1985, p. 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 argued above, the high savings rate in 1973 was more out-of-line than the lower one in 1974. The 1974 rate exceeded the average rate of 16% during the less inflationary period 1968-72, and remained aproximately constant through 1975. The main reason for the jump in 1973 seems to have been the unexpectedly rapid real growth.

From a planners perspective, the more surprising outturn must have been the unprecedented jump in inventory investment. 80% 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.[15]

It is also useful to identify the components of the current account deterioration. A little over 20% of the increased deficit came from a worsening in the invisibles balance, primarily due to increased payments for transport and investment income. 80% came from the trade balance. There was the expected surge in imports. However, only 26% of the jump is accounted for by oil payments. Another 26% was imports of capital goods, and the remainder was 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 1972-3, 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% 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 towards HC industries resulted in a jump in investment (fixed capital formation, and especially inventories of imported capital goods and intermediates). At the

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[15] Park, 1985, p. 304.

same time, savings rates fell from their temporary jump 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.[16]

It was the beginning of the Big Push towards 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 won/$ to 484 won/$, a rate which prevailed until January 1980. The devaluation resulted in a 7.2% real depreciation of the won relative to its average 1972-3 level. However, unit labor costs, in dollars rose by about 4% during 1972-74 because of large nominal wage gains.

Finally, the National Investment Fund was created in 1974. Its purpose was to generate additional domestic savings, and to channel them to targetted 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

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[16] The relative importance of internal and external developments is discussed in Collins and Park, Chapter 5.

allocation. As a share of bank credit, preferential loans were to grow from 40% in 1971 to 55% in 1976-7 and 70% 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 (Table 3). However, access to loans from the domestic banks remained severely limited. The real cost of borrowing abroad remained negative, -4.1%.

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%. Although the debt service ratio remained at 14.4%, the share of short term debt to the total jumped from 20.9% to 28.5%. In marked contrast to 1974, 64% of the rise in short term debt went to the private sector, with only 46% going to "accomodating" 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 and not manufacturing products. Fixed capital formation rose somewhat, and there was a slight further decline in the savings 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%, 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 be expected to drop further during 1976-7. One sign pointing in this direction was the declining growth of wholesale prices - 26.5% in 1975 compared to 42.1% in 1974. The 1974-5 high inflation 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 savings. 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 1974-5. 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% of the increased external debt. This problem was exascerbated by a worrisome shift to short-term borrowing. Finally, policy makers were concerned about the high rates of inflation.

B. Recovery (1976-78)

Table 5 shows the rapid recovery which began in 1976. Growth rates of GNP and exports surged to 14% and 51% respectively, while inflation continued to decline. Most striking is the drop in the current account deficit from

9.1% to 1.1% within one year, and to 0.0% in the next. 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 1976-7 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 Middleeast.

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. For example, exports of chemicals plus machinery and transport equipment grew from 14% to 24% of total exports between 1973 and 1978.[17] Third, the large increases in savings, attributable primarily to rapid income growth, enabled Korea to finance the bulk of her investment domestically by 1976.

Finally, by 1978, the negative impact of higher oil prices had been dampened considerably by the inflows from Mid-East construction. Oil payments had averaged $0.3 billion per year during 1972-3, while construction revenues had averaged $0.014 billion. During 1974-78, oil payments and construction revenues totalled $5.8 billion and $3.9 billion, so that 90% of the additional oil payments were offset by additional foreign exchange

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[17] These figures are based on Customs Administration data.

inflows from construction.

It is important to stress that substantial capital inflows continued during this recovery period. External debt increased by aproximately $2 billion each of the three years. The real cost of foreign borrowing remained negative during 1975-8. 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% in 1975 to 15.7% in 1977. As argued above, much of the 1974-5 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 1976-8, reduced inflation is not surprising. The two issues which do warrant expalnation 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%: rapid wage inflation and rapid monetary expansion. Nominal wages increased by 142% between 1975 and 1978, while consumer prices and labor productivity rose by only 45% and 33%. The wage growth seems to have been 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 to 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 deteriorating competitiveness of Korean workers relative to her 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% more rapidly than the price at which the rice was sold during 1975-8.

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.[18] 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. 77% of all investment in equipment in the manufacturing sector went to heavy and chemical industries, although these industries accounted for only 55% of total production.

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[18] S.W. Nam (1984), "Korea's Stabilization Effort Since the 1970s," Korea Development Institute Working Paper N. 8405.

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, p. 304) provide estimates for 1975 which suggest that the 46 largest chaebol produced 37% of value added in manufacturing, and 13% of GNP, and that business concentration was increasing rapidly. Westphal et. al. state 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"[19]

Financial and trade policies also became more restrictive during this period. Financial market restrictions increased, credit rationing was tightened, with preference given to HC 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 4.88 in 1980. (It had fallen to 3.86 by 1982, following a massive bailout, and the growth of Korean skock 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

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[19] Westphal, L.E. et. al. (1984) "Exports of Capital Goods and Related Services from the Republic of Korea", World Bank Staff Working Paper, No. 629.

inflation. On the positive side, the debt to 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 persistent 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 heavy and chemical industries contributed to a misallocation domestic resources and to excess capacity in these sectors.

IV. 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 in which output declined by nearly 5%. 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.[20]

For Korea in this period, just as in the two earlier episodes and just as for many other countries internal developments combined with external ones

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[20] Analyses of the 1979-85 experience are also given in Park (1985a, 1985b), Dornbusch and Park (1986), Nam (1984) and Aghevli and Marquez (1986). Haggart (1986) and Amsden (1986) contain interesting discussions of the political economy of adjustment in Korea

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 1974-8 had convinced policy makers to step back from the Big Push, with its reliance on widespread government intervention, and to refocus from industrial policy as a tool to promote rapid economic growth to a growing concern about price stability as a necessary precondition to continued growth. The policy shift was confounded by increasing social unrest, the assasination of President Park, and agricultural disasters during 1978-80. On net, complicated interactions between internal and external factors makes it extremely difficult to identify the relative importance of particular elements in explaining outcomes.[21]

The discussion is divided into four remaining sections. Section A discusses the policy shift embodied in the 1979 Comprehensive Stabilization Plan (CSP). Section B examines the 1979-80 crisis period. Sections C and D analyse the early recovery period from 1981-2, and the strong performance period 1983-6. Throughout the discussion, we refer to macroeconomic indicators in Table 6.

A. Policy Refocus (1977-9)

As government concern over persistently high inflation grew, policy makers 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

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[21] See Collins and Park, Chapter 5.

system (in particular, for agricultural products), increases in a number of controlled prices and acceleration of import liberaalization.

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, the August 1978 Comprehensive Measure to Curb Speculative Real Estate Investment was hoped to shift savings from real assets to the banking sector.) Government spending was reduced, in part through deferrment of construction projects. On the trade side, the import liberalization ratio was raised, 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 Comprehensive Stabilization Program was announced in April 1979.. This plan has been described as a "landmark"[22] because it was the first comprehensive stabilization plan which put control of inflation as the number one priority. In the past, the government had been concerned first about investment for growth, and had consistently being willing to use external and/or internal credit to finance real expansion, despite any unfavorable implications for price stability. Furthermore, the Plan stated that pervasive government intervention to direct economic development was appropriate in the early stages, but argued that it was also appropriate to

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[22] See Nam, 1984.

rely increasingly on market forces at later stages. As such, it accepted part of the blame for existing economic difficulties. The new approach, which combined proposals from BOK, KDI and the Economic and Scienticic Council, was strongly supported by a newly appointed Deputy Prime Minister (Shin Hyon Whak).

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

B. 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% of GNP, while external debt rose by $5.5 billion, to 32.5% of GNP. 1979 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 Plan'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. Like the story during 1974-5, 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%, while unit labor costs rose by 11%. (Nominal wages, real wages and labor productivity grew by 29%, 9% and 16% respectively, marking an end to the 1976-8 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.[23] A simple accounting decomposition on the demand side shows that, although there was a massive (7%) reduction in the contribution of exports to growth between 1978 and 1979, this decline was offset by 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% 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

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[23] This discussion refers to Collins and Park, Chapter 7.

variables. Our counterfactual examples using the KDI Quarterly Macroeconomic model of the Korean economy imply that with no deterioration in external conditions (ie. with unchanged oil prices, foreign prices, foreign growth rates are interest rates) Korean growth would have been considerably stronger (9% in 1979) while the current account deficit would have been 17% ($0.7 billion) smaller.[24]

1980 was a crisis year for the Korean economy. Real output declined by 4.8%. Inflation reached over 25%. The current account deficit rose to 8.7% of GNP. External debt jumped from 32.9% of GNP at the end of 1979 to 44.7% 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% in 1980. In contrast, agriculture's annual contribution to growth had ranged from 0.8% to 2.3% during 1971-77.

External factors included the terms of trade deterioration following the second oil shock (there was a 17% 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

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[24] See Collins and Park, Chapter 5 for further details.

external conditions had not deteriorated, real growth would have been positive (5%), and the current account deficit would have been only half as large (an 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% points lower in the absence of the unfavorable external developments.

A stabilization package was initiated in January 1980, supported by a two-year IMF Stand-by Arrangement. The exchange rate was devalued by 17% in January, 1980. At the same time, a more flexible exchange rate regime was introduced in which the won/$ 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% in nominal terms and 9.7% in real terms. Domestic interest rates bank loans and deposits were increased 5-6%[25], and the higher oil prices were passed through to domestic consumers.

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 in 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

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[25] Bank deposits did increase in the first few months after the interest rate adjustment.

series of measures in June, September and November. In June, interest rates were raised 1-2% and domestic credit was expanded - particularly to small and medium business, 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, reduced the interest rates on loans, and expanded credit for residential construction.

C. Early Recovery (1981-1983)

Korea had weathered the two previous crises by borrowing extensively, and smoothing the adjustment instead of contracting the economy. However, policy makers 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, and 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.

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 firms. In June, the government tried to further stimulate construction. Interest rates were reduced by 3% (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%. A sectoral decomposition shows that agriculture grew very strongly (contributing over 3% to the GNP growth rate as compared to -3% in 1980), with some recovery in manufacturing.

Inflation fell from 28.7% to 21.3% within the year. However, the current account deficit remained at nearly 7% of GNP, external debt had risen to 48.4% of GNP, and a worrisome 26.1% of the debt was short-term. Inflation remained high by historical standards. Furthermore, gross fixed investment had fallen from 31.8% of GNP during 1978-80 to 28.9% 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 stimulate investment. A financial scandal in May 1982[26] resulted in further credit expansion in order to bail out firms in trouble. The growth rate of M1 jumped to over 45%. At the same time, there was little change in the fiscal position, and the real effective exchange rate appreciated by nearly 4%. Furthermore, world demand stagnated.

1982 economic performance was mixed. The growth of exports fell from

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[26] A scandal in the curb market forced two large corporations to go bankrupt. The incident triggered a contraction in the availability of curb market loans, and many firms threatened to default.

20.1% in 1981 to only 1% 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% of GNP to 52.7%. However, there were substantial improvements in the current account and in inflation. The current account deficit declined from 6.9% to 3.7% 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%. 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%, while inflation had fallen below 4% and the current account deficit had been reduced to just 2% of GNP.

Where did the 1983 boom come from? The simple accounting decomposition (Collins and Park, Chapter 7) shows that Korean exports, investment and private consumption all grew strongly. The expansion was not attributable to increased government spending. The sectoral decompostion shows that expansion of manufacturing contributed nearly 4% points - as compared to just 1.3% in 1982.

There had been some improvement in external conditions. World growth had resumed - industrial countries grew by 2.6% in 1983 as compared to -0.2% in 1982 and and average of 1.4% 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% real 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% over 1979-83. During the same period, (dollar) unit labor costs remained roughly constant for Hong Kong, and rose by 28% for Taiwan.[27]

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 acheived 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 her crisis period and that 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 in running into difficulty before most of the other debtor countries.

D. 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

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[27] These figures all use value added measures of productivity.

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 1984-1986. The Revised Plan explained that the economy had already acheived the major goals (price stability and renewed export and output growth) 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."[28]

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." (p. 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 4.5% of GNP in 1982 to 1.6% in 1983. M1 growth was slowed to 17.0% during 1983 and 0.5% during 1984. The nominal exchange rate was managed so as to depreciate the won by 5.7% in real terms from 1982 to 1984.

Economic performance remained strong in 1984. Growth exceeded 8%. The

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[28] Government of Korea (1983) The Revised Fifth Five Year Economic and Social Development Plan 1984-1986, pp. iii, 3.

current account improved further as domestic savings rose. Inflation fell below 3%.

In 1985, the real growth rate slowed to 5%. The development is partially attributable to a slowdown in world economic activity. The dollar value of Korean exports grew by just 4% and exports contributed just 1% to GNP growth, compared to 4% in 1984 and 6% 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% in 1981 to 19% in 1985 and the ratio of debt service to exports dropped from 57% in 1982 to 49% 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% during 1985, and by an additional 15% in 1986.

1986 was a banner year for the Korean economy. Real growth reached 12.5%, inflation remained at just 2.3% and the current account registered a $4.6 billion surplus (nearly 5% of GNP)[29]. In stark contrast to most of the other debtor countries which experienced further deterioration in their debt indicators,[30] Korea's debt to GNP ratio fell from 56.3% to 46.8% as she reduced the debt stock 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.

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[29] See R. Dornbusch and Y.C. Park (1987) "Korea's Growth Policy," Brookings Papers on Economic Activity for discussion of the "problems" associated with Korea's current account surpluses.

[30] See Morgan Guarantee, (1987) "LDC Debt Realities," World Financial Markets, June/July for a review of the performance of the major debtor countries.

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Table 1
Korea's External Debt, 1960-85
(million of U.S. dollars)

Debt	1961	1962	1963	1964	1965	1966	1967	1968	1969
Total Foreign Debt	83	89	157	177	206	392	645	1,199	1,800
Foreign Direct Investment	-	1	3	6	16	21	34	49	56
Foreign Debt/GNP	3.9	3.8	5.8	6.2	6.9	10.7	15.1	22.9	27.2
Foreign Debt Plus Direct Investment/GNP	3.9	3.9	5.9	6.4	7.4	11.3	15.9	23.9	28.0
Debt Service Ratio[1]	8.6	0.8	1.0	2.6	5.0	3.2	5.4	5.4	8.6

(continued)

Debt	1970	1971	1972	1973	1974	1975	1976	1977	1978
Total Foreign Debt	2,245	2,922	3,589	4,257	5,933	[illegible]	[illegible]	[illegible]	[illegible]
Foreign Direct Investment	81	117	175	329	486	549	650	741	830
Foreign Debt/GNP	28.7	31.2	34.0	31.5	32.0	40.5	36.7	33.8	28.5
Foreign Debt Plus Direct Investment/GNP	29.7	32.4	35.6	34.0	34.6	43.1	38.9	35.8	30.1
Debt Service Ratio	18.5	21.0	18.7	14.8	14.4	14.4	12.1	11.1	13.9

[1] Includes interest on short-term debt.

Table 1 (continued)
Korea's External Debt, 1960-85
(million of U.S. dollars)

(continued)

Debt	1979	1980	1981	1982	1983	1984	1985	1986
Total Foreign Debt	20,287	27,170	32,433	37,083	40,378	43,053	46,762	44,510
Foreign Direct Investment	866	873	975	1,044	1,112	1,222	1,456	1,891
Foreign Debt/GNP	32.5	45.0	49.0	53.5	53.1	52.3	56.3	46.8
Foreign Debt Plus Direct Investment/GNP	33.9	46.5	50.4	55.0	54.6	53.7	58.0	48.8
Debt Service Ratio	16.3	18.5	20.1	20.6	18.8	20.1	21.4	--

Table 2
Major Economic Indicators

	1964-65	1966-67	1968-69	1970	1971	1972	1973
GNP Growth Rate	7.7	9.7	12.3	--	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	
Current Account (%GNP)	0.3	-3.7	-8.4	-7.7	-8.9	-3.5	-2.3
Fixed Investment (%GNP)	15.	21.	26.5	24.7	22.5	20.4	23.2
Domestic Savings (%GNP)	14.	17.	20.	18.	16.	18.	24.
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[1]	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

[1]From Korea productivity center, output per production worker.

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

Source: Economic Planning Board and Bank of Korea.

TABLE 3

Cost of Foreign Capital

(annual average; percent)

Item	1966-70	1971-75	1976-80	1981-83	1984-85	1986
Domestic bank lending rate[a]	24.4	17.0	18.0	12.5	10.0	10.0
Curb Market interest rate	54.2	40.1	41.3	30.6	24.4	23.1
Foreign interest rate[b]	7.2	7.9	9.3	13.3	9.7	6.9
Exchange rate depreciation[c]	5.1	7.8	5.5	10.9	14.8	-3.0
Domestic inflation rate (GDP deflator)	14.6	19.9	20.7	9.8	3.8	2.4
Interest rate differential between home and foreign markets [(1) - (2) - (3)]	12.1	1.3	3.2	-10.9	-14.5	6.1
Real private cost of borrowing abroad [(2) + (3) - (4)]	-2.3	-4.1	-5.9	13.6	20.7	1.5

Note: [a] Discounts on bills of Deposit Money Banks

[b] Ninety-day LIBOR (london interbank offered rate)

[c] Bank of Korea standard concentration rate

Source: Bank of Korea, Monthly Bulletin, various issues.

TABLE 4

Usage of External Debt

	1960-69	1970-73	1974-75	1976-78	1979-82	1983-85	1986
Debt	1594	2459	4186	6380	22260	9679	-2291
Current Account Deficit	1285	2150	3910	1387	16768	3866	-4617
Foreign Exchange Accumulation	411	484	507	3396	2047	796	2[illegible]7
Errors and Omissions (-)	1	-57	94	585	2406	2716	544
Direct Foreign Investment (-)	-40	-281	-232	-308	-430	-522	-477
Discrepency	-63	161	-93	1320	1469	2893	-2091

Billions of U.S. dollars

Table 5
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)	3.10	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	15.8	21.5	17.4
Labor Productivity[1]						
Value added	5.0	2.4	2.2	2.4	10.3	12.6
KPC index	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

[1]From Korea Productivity Center. Output per production worker.

Note: Based on new SNA method.

Source: Economic Planning Board, Bank of Korea.

Table 6
Macroeconomic and Policy Indicators for Korea: 1978-86

Year	1978	1979	1980	1981	1982	1983	1984	1985	1986
GNP Growth Rate[1]	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	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

[1]From Korea Productivity Center. Output per production worker.

Note: Based on new SNA method.

Source: Economic Planning Board, Bank of Korea.