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13 Lessons From Korea's Experience: A Synthesis

The purpose of this chapter is to synthesize our analysis of Korea's experience. There are four central questions:

1. What caused Korea's debt crisis?
2. How was Korea able to achieve rapid, successful recoveries?
3. What role has external borrowing played in the experience?
4. Are there lessons for other debtor countries?

To answer these questions involves integrating a number of interrelated factors. In section 13.1 we summarize our conclusions about each of these pieces individually. We put the pieces together and examine the implications, answering questions 1–3, in section 13.2. The final sections discuss the lessons to be learned and the prospects for the Korean economy.

13.1 The Pieces

13.1.1 External Debt

Foreign capital inflows have played a critical role throughout Korea's recent development. The preceding discussion has already emphasized the importance of foreign aid in the decade following the Korean War and documented the rapid accumulation of external debt, concentrated during 1966–69, 1974–75, and 1979–82.

Rapid growth of output and exports has meant that Korea's actual debt burden grew much more slowly than the nominal debt stock. Although the debt (denominated in U.S. dollars) grew at an average rate of 34.6 percent in the eighteen years from 1964 to 1982, the debt to GNP ratio reached 53.5 percent, while the ratio of debt service to exports reached only 20.6 percent. Korea ranked only eleventh in terms of its debt/GDP ratio and fifteenth in terms of its debt service ratio.¹ Korea's growth performance is a key piece of the puzzle surrounding the quick adjustment to the debt crisis in 1979–82.

External borrowing in Korea was used primarily to finance current account deficits. In particular, there has been little capital flight. This points to an analysis of domestic savings and investment as the key to explaining debt accumulation, because the current account deficit, or foreign savings, finances the portion of investment not financed domestically.

It is also notable that Korean debt has been carefully monitored by the Ministry of Finance since the borrowing began in the early 1960s. Applications for loans must be approved, and the government has actively used the allocation of foreign (and domestic) credit as part of the industrial policy, providing growth incentives for particular industries and firms.

Borrowing is a central component of economic planning in Korea. In many periods, the amount of borrowing required to finance desired investment was forecast quite accurately, however, unexpected external and internal developments during 1974–75 and 1979–81 meant that the forecast turned out to be a sizable underestimate. In any case, the Korean government has maintained excellent debt statistics throughout the period. It was not faced with the additional difficulty of faulty or incomplete information in responding to the 1979–80 crisis.

13.1.2 Economic Growth

Korea's phenomenal growth rates since 1965 have been well documented. Of particular significance is that Korea was able to avoid the dramatic slowdown which most of the other fast growers experienced after the first oil price shock. A detailed analysis of the economic sources of Korea's growth identifies fixed capital accumulation as the central factor.

Korean growth during the 1960s was attributable to a combination of increased factor accumulation, improved resource allocation, economies of scale, and technological improvement. Fixed capital accumulation accounts for the 1.1 percent average annual growth during 1963–72. In contrast, capital accumulation accounts for a growth rate of 2.6 percent during 1973–82. Korea offset reductions in factor productivity after the first oil shock with a substantial increase in investment.

Increased labor has also played a key role. The average work week increased throughout the period to 54.8 hours, placing Korea at the top of the International Labor Organization's (ILO) list. Furthermore, the work force is well-educated and disciplined.

It is interesting to point out that the sources of Korean growth are quite different from the sources of Japanese growth during its 1953–71 period of rapid acceleration. Factor accumulation explains only 45 percent of the Japanese growth rates as compared to 60 percent of Korean growth rates.

A decomposition from the demand side shows that government consumption played at best a minor role. Investment was consistently strong. However, since import requirements for investment ranged from 0.38 to 0.48, investment has been only a moderate source of demand for domestic output. Not surprisingly, exports emerged as the "engine of growth" in Korea during the 1975–85 period, as well as previously.

The data also document that labor productivity has consistently grown faster in the manufacturing than in the nonmanufacturing sector. The domestic price of manufactured goods—a proxy for the tradable goods sector—rose relative to the price of other—nontraded—goods throughout the 1960–85 period. However, this real appreciation has represented technical progress and not a deterioration in external competitiveness or a reallocation of resources away from the production of tradables.

One of the most enviable aspects of Korea's recent recovery has been trade balance improvement combined with growth. In contrast, most debtor

countries have achieved trade surpluses through recession-induced reductions in imports. In fact, the very low income elasticities of Korean imports during 1981–83 are unusual by Korean standards. They are explained in large part by disastrous harvests during 1978–80, necessitating a surge in food imports, followed by a very favorable harvest during 1981–82 which both raised domestic output and reduced imports. Exports did not begin to recover until 1983, and this turnaround is explained by a combination of increased world demand, a terms of trade improvement, and the lagged impact of a real depreciation and numerous targeted investments gradually coming on stream.

13.1.3 Investment and the Five-Year Plans

As we have discussed, Korea instituted a series of five-year economic plans, beginning in 1962. The first step in the formulation of these plans was to determine the investment required to achieve a desired rate of growth. Thus, investment for growth has been the number one priority, while external borrowing emerges at the other end as the residual—the gap between investment and available domestic financing. In the mid-1960s it was an important supplement to declining foreign aid. More recently it has been used to substitute for shortfalls in domestic (especially household) savings.

The plans also identify particular sectors of the economy for growth, and the government has actively controlled the allocation of credit, thereby playing a key role in determining the industrial concentration of capital accumulation.

Even the best plan will have little impact if it cannot be implemented. Korean policymakers have used exchange rate, tax, and credit allocation policies to establish the appropriate incentives to domestic firms. However, a large part of the success of the five-year plans is attributable to Korea's centralized decision making combined with a very close link between government and business. Authorities maintain current data, including information about individual firms' performance. Decisions are made quickly, and policies are pragmatic, often intervening directly at the firm level. One implication of this approach has been that, by selecting previously successful firms to undertake new projects, the government has helped to create a number of large conglomerates (*chaebol*) and a highly concentrated industrial structure.

13.1.4 Saving Behavior

Korea's saving rate has risen from 14 percent in 1965 to 28 percent in 1986, however, the remarkable secular increase has been interrupted periodically. These plunges have accelerated foreign borrowing so as to finance desired rates of investment, leading to a crisis.

Two aspects are especially notable. First, savings declines are primarily attributable to drops in household savings and not to deteriorating

government budgets. Second, current account improvement during the adjustment has not been brought about by cuts in investment to close the gap. Instead, the key has been the recovery of household savings, supplemented by increased government savings.

Disaggregation shows that both the secular rise and plunges occurred in the household sector. The performance is explained quite well by a model in which the marginal propensity to consume out of permanent income is higher than out of transitory income. Although interest rates are estimated to affect savings positively, we do not find the estimates to be significantly different from zero. Thus, Korea's strong growth, leading to upward revisions in permanent income, accounts for the secular rise, while growth slowdowns account for the 1970–71, 1975, and 1980–81 plunges, as households reduced savings to smooth consumption.

13.1.5 Exchange Rate Policy

Overall, Korea has followed a consistent, credible exchange rate policy, maintaining a competitive, sometimes undervalued, real exchange rate with low variance. In adjusting to external imbalance during both 1974 and 1980, the policy packages included a substantial (20 percent) one-shot devaluation in addition to a change in the exchange rate regime.

The nominal exchange rate was fixed to the U.S. dollar during 1975–79, during which time authorities permitted a 14 percent real appreciation. Since 1980 the exchange rate has been continually adjusted vis-à-vis a basket of currencies. The real exchange rate depreciated by 6 percent during 1980–82 and by a further 14 percent during 1982–86. It appreciated gradually during 1987.

13.1.6 Wages and Competitiveness

Even more striking than Korea's success in maintaining external competitiveness throughout most of the 1965–86 period is the fact that real depreciations were often (e.g., in 1973 and 1983–86) accompanied by real wage increases. Again, rapidly increasing labor productivity is the key to the puzzle, providing a buffer which can be divided between increased competitiveness and increased real income.

During 1965–72 real wages grew at an average annual rate of 9.0 percent, while productivity grew by 14.4 percent. However, during 1973–79 real wages grew by 12.5 percent, outpacing the 11.1 percent productivity growth. Shortages in skilled labor associated with the Big Push toward heavy industrialization led to rapid nominal wage gains. Unit labor costs, measured in dollars, grew 2.3 times more quickly for Korea than for Taiwan, a major competitor in third markets.

It is important to point out that real wages declined both at the outset of Korea's export-led growth and as Korea reestablished its competitive position after the real appreciation in 1975–79. During 1960–64 the average

annual real wage decline was 1.96 percent, despite 7.46 percent productivity growth. Real wages fell at the beginning of the adjustment (1981–82), with all of the productivity gains going to reduce unit labor costs. This, plus exchange rate depreciations, has dramatically improved Korea's competitive position since 1982.

We note a few other characteristics of Korea's labor market. Worker organizations are extremely weak. There is evidence that they have increased job security, but not that they have influenced wages. Bonuses average 15 percent of employee compensation, which enhances flexibility. Finally, the fact that wages are not indexed to past inflation rates has meant that inflation shows little inertia.

13.1.7 Trade Policy

Korea's well-documented switch from a policy of import substitution to one of export promotion during 1960–64 involved a significant import liberalization. However, trade policies continued to play an important role, with tax preferences and interest rate subsidies becoming the primary mechanisms after 1965. Through the mid-1970s, export incentives were maintained with little variability. Subsidies were used to compensate exporters during periods of real appreciation.

Imports were substantially liberalized during the 1960s. Restrictions increased during the Big Push and have been gradually relaxed since 1980. Quantitative restrictions, domestic content, and other regulations have remained critical, so that tariff rates substantially underestimate the degree of protection. For example, the share of manufactured items subject to import restriction jumped from 34 percent in 1968 to 61 percent in 1978. These restrictions have been important in developing infant industries such as automobiles and steel, allowing Korea to become competitive enough to begin exporting these products. The restrictions help to explain why almost all Korean imports are raw materials, intermediate products, or capital goods, with consumer products amounting to less than 5 percent of Korean imports.

Korea also stands out in not maintaining a structure of protection which penalizes agriculture. The political economy of that outcome seems to be linked to the relatively equitable income distribution due primarily to a major land reform undertaken during the 1950s.

13.1.8 Industrial Policy

Korea has been extremely successful in selecting growth industries and in managing their industrial transition. A large part of the success lies in having developed credible, comprehensive strategies in which investment projects formed the cornerstones of five-year macroeconomic plans.

Korean businesses targeted for expansion have not been concerned about policy inconsistencies or government policy reversals. They have been given

preferential access to domestic credit, to external funds, and to imported materials. The government has maintained its commitment, bailing out firms threatened with bankruptcy during downturns or financial panics. It has also created a few conglomerates which are enormous, even by world standards.

In retrospect, some of the policies were mistakes, particularly during the Big Push in 1974–79. For example, government intervention led to substantial overcapacity in petrochemicals. However, the entire policy should by no means be written off as a mistake. Many of the investments in heavy industries are beginning to pay off, and exports of these products are growing rapidly.

13.1.9 Fiscal Policy

Fiscal policy in Korea is perhaps most notable for the role it did not play in the accumulation of external debt. Government savings have been positive in every year since 1962.

The budget deficit (which includes public investment as an outlay) has been kept under control, ranging from 1 to 4 percent of output. A tax reform and switch to VAT in the 1970s succeeded in raising revenues from 15 to 18 percent of GNP. Large deficits in 1975 and 1980–81 are attributable primarily to increased expenditures in the Grain Management Fund. Social expenditures, such as education and housing, have been low historically, but have risen over time. Since 1980 they have amounted to 30 percent. Indicators of fiscal stance show that fiscal policy has been countercyclical, used by the government in attempts to “fine tune” economic performance.

Overall, fiscal deficits have not been financed through rapid money creation. The deficits themselves have been relatively small. Also, authorities have alternated between domestic and foreign credit. For example, after jumps in bank credit to the public sector during 1980–81, net credit was reduced during 1982–84.

13.1.10 Monetary Policy

The banking system, including the Bank of Korea, has been monitored by the MOF since 1962 so that macroeconomic policymaking is extremely centralized. We highlight four aspects. The first is the key role for credit allocation in the industrial strategy, as discussed above. A second objective of monetary policies (especially interest rate adjustments) has been to increase household savings. It is very difficult to quantify how effective this tactic has been.

Third, Korean financial markets have three levels. The official banking sector is highly controlled, although there has been some liberalization since 1982, including the privatization of five commercial banks. There is also a partially controlled nonbank financial sector and an unorganized curb market. The latter two have added flexibility to Korea’s financial system, providing credit (often at high interest rates) to those firms which were not given access to scarce bank credit. Since a financial scandal in 1982,

however, the curb market has shrunk considerably. NBFIs have been growing rapidly, accounting for half of all deposits of banks plus nonbanks in 1985, as compared to one-fifth in 1978.

Korea's financial system has been anything but a unified system in which credit is allocated by market forces. While it is certain that the outcomes under such a system would have been different, it is very difficult to assess whether they would have been "better" or "worse." To us, the most sensible conclusion is that the Korean government successfully used an active and pervasive policy of intervening in financial markets to promote its growth objectives.

There has been some movement toward financial liberalization of the banking sector. But unlike the trade liberalization, the changes seem to have been greater on paper than in practice. Credit allocation remains a cornerstone of Korean industrial policy.

13.1.11 Income Distribution

Korea began industrialization with a relatively equitable distribution of income. The main reasons for this initial situation were the major land reform and the devastation from the Korean War which helped to level wealth holdings. During the rapid growth of the 1960s, Korea seems to have been able to, if not improve the income distribution, at least maintain the existing one. Unlike many other developing countries, Korea avoided a deterioration in distribution during the early stages of industrialization. One of the main factors seems to have been the rapidly expanding employment opportunities generated by the export-led growth.

The distribution of income began to deteriorate during the 1970s. One factor was the explosive growth of big business during the Big Push and the resulting growth in inequality among employers. However, available evidence does suggest a renewed trend toward increasing equality since the late 1970s.

13.1.12 Two Themes

Two unifying themes emerge from these eleven pieces in the puzzle of Korea's successful performance. The first is the importance of rapid growth rates, rising labor productivity, and expanding human and physical capital resources. These factors gave Korea the leeway to borrow heavily, while keeping the burden of debt repayments manageable, and to avoid squeezing real incomes when increasing international competitiveness. The rapid productivity growth in tradable goods production has eased the problem of mobilizing and transferring domestic resources in order to pay external debts.

The second theme is the use of active, interventionist government policy which is credible, consistent, and coherent. These policies placed investment as the number one priority and led the economy through a fundamental industrial restructuring.

13.2 Implications: A Synthesis

In this section, we synthesize the pieces discussed above in order to answer the questions posed at the outset. The first question, important in distinguishing Korea's experience from that of many other debtor countries, is why did the debt crises occur.

Since 1965 Korea has been vulnerable to external and internal shocks because of its determined investment policy which left no buffers between desired investment and domestic savings. External borrowing was treated as the buffer or residual.

The country was hit by a number of external shocks, in particular oil price and interest rate changes, but the role of internal shocks must not be underestimated. During 1974–75, terms of trade deterioration accounts for only one-third of the current account deficit. And like 1970–72, this period seems better described as a slowdown than as an economic crisis. External factors were more important during 1979–80. However, the crisis would have been much less severe if these factors had not been exacerbated by the agricultural disaster, political turmoil, and previous policy mistakes.

How was Korea able to recover so quickly from slowdowns and crises? We believe the central factor has been successfully distinguishing between permanent and temporary shocks and responding appropriately. The devastation of the Korean War was clearly a permanent shock. In designing and carrying through the impressive structural readjustment of the 1960s, policymakers learned how to put together an adjustment package that worked.

They chose to embark on another structural readjustment during 1973–79 because of pessimistic forecasts for medium-term growth using the industrialization path of the 1960s. In contrast, Korea borrowed to smooth adjustment to the 1973 jump in oil prices because the shock was judged unlikely to alter the medium- to long-run prospects for heavy industry. However, policymakers have not been rigid. A third shift in focus came as doubts emerged about the efficacy of further heavy industrialization, and the economy found itself saddled with massive debts accumulated during 1979–80.

This point is closely linked to the role of external debt in Korea's adjustment. The debt has been used to supplement domestic savings in financing investment, enabling faster rates of growth. The debt has also been used to smooth over temporary shocks, without jeopardizing the ongoing structural adjustment plan. However, Korea has been admirable in not using external borrowing to avoid undertaking a structural readjustment.

What is the adjustment package that has worked for Korea? The centerpiece has been a comprehensive investment plan, operationalized through competitive exchange rates, credit rationing, tax and other incentives for targeted industries, trade policies, and allocation of external credit. Initial declines in real wages have helped to boost competitiveness,

but once the investment-growth cycle got going, productivity gains were split between raising wages and enhancing competitiveness.

Traditional macroeconomic “stabilization” tools—monetary expansion and fiscal deficits—have been important in the passive sense that they have been kept in line. Fiscal deficits have remained small and authorities have been careful to limit domestic credit expansion to the public sector. However, these policies played at best a supporting role in pulling Korea out of slowdowns and crises. Both were quite variable with many reversals during 1980–81. By the time a definite monetary-fiscal expansion emerged in 1982, Korea was already well on the way to recovery.

Good fortune has also helped Korea to recover. In particular, the first oil shock gave Korea an unexpected boost during 1976–78 through revenues from construction in the Middle East, and the recent recovery was fueled by terms of trade improvements beginning in 1981.

13.3 Lessons

We begin by pointing out two lessons which, most certainly, cannot be learned from the Korean experience. The first is how to design short-run macroeconomic stabilization packages. There are no “quick fixes” in Korea’s recent history.

The second is the benefits of liberalized trade regimes and domestic and international capital markets. Active intervention has been a mainstay of Korean policy. However, there are numerous examples of extensive intervention in other countries which has coincided with poor economic performance. Korea surely contains lessons about which types of intervention are likely to be effective.

We can draw four lessons from Korea’s experience. First, the value of credibility, consistency, and coherence in economic policy. As in Korea, this may well necessitate coordinated trade, industrial, and credit policies in order to promote infant industries. It certainly includes maintaining a competitive real exchange rate, together with a sustainable fiscal policy, and moderate monetary growth.

A second lesson is the value of long-term structural adjustment policy with investment as the top priority. When things have gone well in Korea, high rates of investment have stimulated growth, raising domestic savings and enabling Korea to finance external debts. When difficulties emerged, Korea consistently avoided cutting investment so that the economy was poised to resume growth when external and/or internal conditions improved.

Of course, the difficulty with such an investment program is that it must be financed, and extensive borrowing can lead to repayment difficulties. The Korean experience highlights a third lesson—the value of external borrowing in enabling an investment policy to be carried through, as distinguished from external borrowing used to avoid structural adjustment.

Finally, Korea's ability to recover from downturns emphasizes the value of monitoring economic performance and maintaining accurate statistics for key variables.

13.4 Prospects

The prospects for rapid growth to continue over the short- to medium-term are excellent. Our view is based both on Korea's recent good fortune (especially the decline in oil prices and interest rates and the appreciation of the Japanese yen) and on Korea's very competitive position as a result of real depreciations in 1985–86 and heavy investments over the past decade which are beginning to pay off.

Nonetheless, there are challenges and uncertainties. For example, the favorable external developments from which Korea has benefited greatly in recent years may not continue. Tensions in the Middle East heighten uncertainties about oil price movements. Exchange rate movements, particularly the yen-dollar-won rates, pose new issues for Korean competitiveness. While some gradual real appreciation is unlikely to disrupt growth prospects, it may well be important to mitigate protectionism in the United States. Continued access, especially to U.S. markets, is critical to the continuation of Korea's export-led growth. Current efforts to identify new markets for Korean products and to reduce dependence on the United States are especially timely given the uncertainties about U.S. trade policy.

Many have expressed surprise that Korea decided to reduce external debt. There remain many high-return investments. There are also arguments for borrowing to take advantage of current favorable external conditions through investment and stockpiles. On the other hand, Korea has a substantial external debt, and reducing it will reduce the potential for future debt crises. Furthermore, careful and forward-looking decision making has been an asset in the past. Caution today may well pay off handsomely as external conditions become less favorable down the road.

In addition to the uncertainties about external developments, there were changes in the internal political and economic situation following the ruling party's announcement in June 1987 that it would initiate steps to promote a more democratic society. The new atmosphere generated a number of volatile domestic issues. Labor disputes stand out as the most important, with wage compensation and labor rights emerging as major issues in negotiations between workers and employers. It is impossible to predict how the balance between these groups will shift, how much wages will increase, or how severe work stoppages will be.

The most recent forecasts for Korean macroeconomic performance remain very favorable. We conclude our discussion with a look at the outcome projected in the sixth five-year plan, initiated in 1987. The major targets are given in table 13.1. As shown, real GNP is projected to grow at an average annual rate of 7.3 percent during 1987–91, with WPI inflation just 2 percent. The target current account deficit is \$5 billion.

Table 13.1 Selected Macroeconomic Targets

	Units ^a	Sixth Plan Targets ^b							1987-91 (annual average)
		1985	1986	1987	1988	1989	1990	1991	
GNP (current)	\$ billion	83.7	94.0	108.9	124.1	139.1	156.0	175.0	13.2
GNP (1980 prices)	\$ billion	86.6	97.0	104.8	112.6	120.5	128.9	137.9	7.3
Growth rate	%	5.4	12.0	8.0	7.5	7.0	7.0	7.0	7.3
Total investment to GNP	%	31.1	30.2	29.7	30.5	30.8	31.0	31.3	30.7
Domestic savings to GNP	%	28.6	32.8	32.8	33.0	33.2	33.3	33.5	33.2
Foreign savings to GNP	%	3.1	-2.7	-3.1	-2.5	-2.4	-2.3	-2.2	-2.5
GNP deflator	Increase rate (%)	4.1	1.5	3.5	3.5	3.5	3.5	3.5	3.5
Wholesale price	Increase rate (%)	0.9	-2.2	2.0	2.0	2.0	2.0	2.0	2.0
Current account	\$ billion	-0.9	4.5	5.0	5.0	5.0	5.0	5.0	5.0
Trade balance	\$ billion	-0.0	4.3	5.0	5.3	5.5	5.5	5.5	
Export of commodities	\$ billion	26.4	33.6	38.0	41.9	45.8	49.9	54.4	9.4
Import of commodities	\$ billion	26.4	29.3	33.0	36.6	40.3	44.4	48.9	10.3
Invisible trade balance	\$ billion	-1.5	-0.8	-1.0	-1.0	-1.2	-1.2	-1.2	
Total external debt	\$ billion	46.8	44.5	41.8	39.0	36.5	34.5	32.9	
Total external assets	\$ billion	11.2	11.8	13.0	14.3	15.8	17.5	19.4	
Net external debt	\$ billion	35.6	32.7	28.8	24.7	20.7	17.0	13.5	

Source: Government of Korea (1986).

^aBased on new SNA. For a comparison of the old and the new SNA methods, see the Data Appendix. By and large, the new SNA, by including previously unrecorded or underrecorded economic activities, yields higher GNP growth estimates.

^bThese are preliminary estimates based on data available.