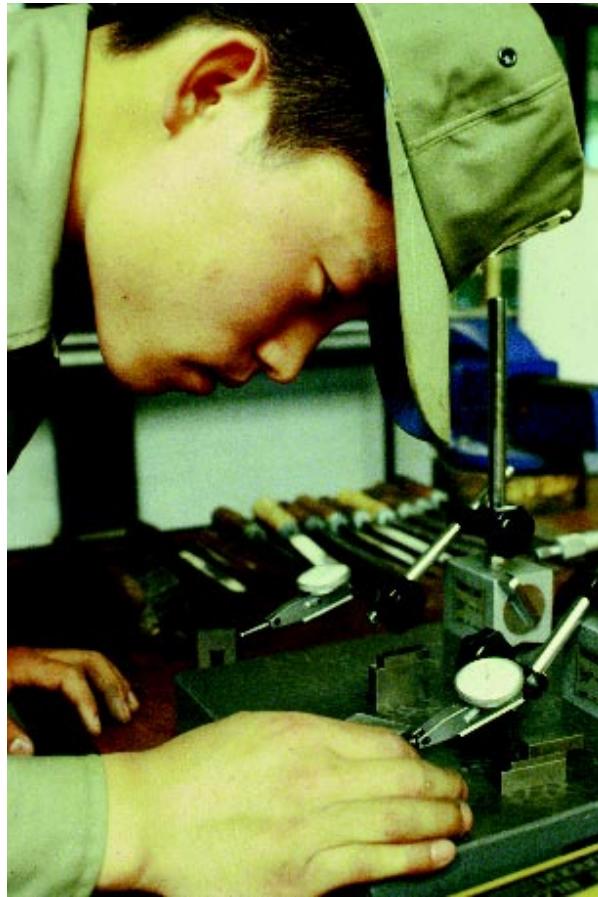


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# A PRODUCTIVE PARTNERSHIP

The World Bank and The Republic of Korea, 1962 – 1994



Korea Country Management Unit  
East Asia and Pacific Region  
The World Bank

February 1999



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**NOTE:**

*This booklet was originally published in printed format in February 1999. In order to work better in the worldwide web environment, this electronic edition has had blank pages removed and the main cover altered. Page numbers have been adjusted to match the new layout. Informational and narrative content have not been altered.*

*April 20, 1999*

## FOREWORD

The following report was created to provide members of the World Bank and their colleagues with an institutional record of the World Bank's relationship with the Republic of Korea. The report is intended to document and summarize the relationship that developed between the two partners over the period from 1962, when the first International Development Association (IDA) credit was issued to Korea, to 1994, when Korea graduated from the World Bank. It does not address the more recent assistance that the World Bank has provided to Korea since December 1997.

The report provides a chronological history of the World Bank's involvement in the rapid and extremely successful development of Korea. It identifies the different Project Loans, Sector Reports, and Economic Reports that the Bank approved or completed on the country's behalf. It also summarizes the effectiveness of the Bank's actions in achieving its objectives and highlights important lessons which the Bank can use in future projects or apply to its relationships with other developing countries.

The insights and conclusions presented in this report were derived primarily from project completion/implementation reports and project performance audit review reports prepared by the Bank's Operations Evaluation Department (OED). Economic and sector insights were gathered primarily from the relevant reports, while specific quotes and personal insights were obtained from individuals who worked closely with the Koreans during different periods of the Bank's involvement.

Annexes presented at the end of the report provide a more detailed summary of the different project loans and sector and economic reports completed by the World Bank.

Acknowledgments are extended to the team who worked on this project: Petr L. Spurney, Jr., the main author, and Richard De Silva, Daud Ahmad, Susan Swannack-Nunn, Minna Hahn, Joyce Rompas, and Malcolm Ross.

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Director  
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## GLOSSARY

ADC	Agriculture Development Corporation
AFDC	Agriculture and Fishery Development Corporation
AFMC	Agriculture and Fishery Marketing Corporation (replaced AFDC)
BPR	Bureau of Public Roads
BE	Board of Education
BOK	Bank of Korea
CBD	Central Business District
CIMC	Changwon Industrial Masters' College
CNB	Citizens National Bank
CTC	Central Train Control
cu m/s	Cubic meter per second
DBST	Double Bituminous Surface Treatment
DFC	Development Finance Companies
EMP	Environmental Monitoring Program
EPB	Economic Planning Board
ERR	Economic Rate of Return
ETRI	Electronics and Telecommunications Research Institute
FP	Family Planning
GERI	Genetic Engineering Research Institute
GOK	Government of Korea
ha	Hectare
HCI	Heavy and Chemical Industry
HII	Hyundai International, Incorporated
IBRD	International Bank for Reconstruction and Development
ICB	International Competitive Bidding
IEC	Information, Education, and Communications
ISWACO	Industrial Sites and Water Resources Development Corporation
ITC	Industrial Technology Center
ITD	Industrial Technology Development
KAIST	Korea Advanced Institute of Science and Technology
KBI	Korea Banking Institute
KBSC	Korea Basic Science Center
KDB	Korea Development Bank
KDFC	Korea Development Finance Corporation
KEPCO	Korea Electric Power Corporation
KERI	Korea Electrotechnology Research Institute
KHB	Korea Housing Bank
KHC	Korean Highway Corporation
KHIC	Korea Heavy Industries and Construction Company
KIER	Korea Institute of Energy Research
KIET	Korea Institute of Electronics Technology
km	Kilometer

KIGAM	Korea Institute of Geology, Mining, & Minerals
KIST	Korea Institute of Science and Technology
KIT	Korea Institute of Technology
KGC	Korea Gas Corporation
KLB	Korea Long-Term Credit Bank
KLDC	Korea Land Development Corporation
KMA	Kwangju Metropolitan Area
KMPA	Korea Maritime and Port Administration
KNHC	Korea National Housing Corporation
KNR	Korean National Railroad
KNUTE	Korea National University of Teacher Education
KOWACO	Korea Water Resources Corporation
KRISS	Korea Research Institute of Standards and Science
KTBC	Korea Technology Banking Corporation
KTDC	Korea Technology Development Corporation
KVTMA	Korean Vocational Training Management Agency
KWA	Kwangju Water Agency
LNG	Liquefied Natural Gas
MAF	Ministry of Agriculture and Fisheries
MCH	Maternal and Child Health
MW	1 Megawatt = 1,000 kilowatts (kw)
MOC	Ministry of Construction
MOCT	Ministry of Construction and Transportation
MOEd	Ministry of Education
MOEnv	Ministry of Environment
MOF	Ministry of Finance
MOHA	Ministry of Home Affairs
MOHSA	Ministry of Health and Social Affairs
MOTC	Ministry of Transport and Communications
NACF	National Agricultural Cooperative Federation
NHF	National Housing Fund
NIF	National Investment Fund
NITI	National Industrial Technology Institute
NRS	Namgang Regional Water System
O&M	Operations and Maintenance
OE	Office of Education
OED	Operations Evaluation Department, World Bank
OSROK	Office of Supply, Republic of Korea
p.a.	Per annum
PCG	Pusan City Government
PCR	Project Completion Report, World Bank
PCTOC	Pusan Container Terminal Operating Company
PHC	Primary Health Center
PPAR	Project Performance Audit Report, World Bank
py	Pyung (one pyung = 3.307 sq. m. or 35.586 sq. ft.)

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*Glossary, continued*

R&D	Research and Development
RD&E	Research, Development, and Engineering
RMMS	Road Maintenance Management System
ROK	Republic of Korea
SAR	Staff Appraisal Report
SIFC	Short-Term Investment Finance Companies
SMI	Small and Medium Industry
SMIB	Small and Medium Industry Bank
SMIPC	Small and Medium Industry Promotion Corporation
SMP	Sewerage Master Plan
SSE	Small-Scale Enterprise
SSI	Small-Scale Industry
TCG	Taegu City Government
TPD	Traffic Police Department
TSM	Transportation System Management
TU	Technical Unit
TWS	Taegu Water System
UNDP	United Nations Development Program
VHS	Vocational High School
VTI	Vocational Training Institute
WB	Water Bureau
WTP	Wastewater Treatment Plant

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## I. EXECUTIVE SUMMARY

### A. INTRODUCTION

The Republic of Korea became a member of the World Bank (the Bank) in 1955 and the International Development Association (IDA) in 1961. The Bank began its operational relationship with Korea in 1962 when it completed the first Country Economic Report and approved an IDA credit of \$17 million to expand and improve the Korean National Railroad. The development credit was the first step in a long-term partnership which spanned thirty years of rapid economic growth in Korea. By 1973, Korea's economy progressed sufficiently to require no further IDA credits, and Korea became a contributor to IDA in 1977. Over the period under review, the Bank completed over 31 Sector Reports, 24 Economic Reports, and 120 Project Loans/Credits in Korea. It disbursed funds totaling over \$7.8 billion to the Government of Korea (GOK) through operations in 11 sectors.

The partnership prospered due to a strong commitment by both the Bank and the GOK to fulfill the objectives set by the Government. It has been argued that the Government's singular commitment to development and the Bank's support were the most significant factors contributing to the success of the partnership. The high level of pride the Koreans had in their country's development effort and the important advisory and financial role of the Bank enabled the GOK to achieve rapid industrial growth for the country.

The Bank's relationship with Korea is a true success story. Very few countries have been able to graduate from both the IDA *and* the Bank in such a short period of time. Credit for the success must largely go to the Koreans themselves. Their commitment to economic growth and success propelled the country forward at an unparalleled pace. The objectives of the Government, the bureaucracy, and the workforce were largely aligned, enabling their combined efforts to achieve superior results. The Bank's assistance can be divided into two categories: (i) the advice and guidance that provided "course corrections" in macroeconomic policy formulation and in a range of sectors, and (ii) funds that supported the country's efforts at economic growth. Bank assistance through these two channels succeeded because the GOK addressed many of the issues that could have impeded economic growth. The success of the partnership is a tribute to the determined efforts of the Koreans and the Bank's awareness of, and respect for, their ability to produce results.

Bank assistance to Korea was significant in the Financial, Transportation, Energy, Education, and other Social Sectors. However, changing market conditions and shifting development priorities over three decades demanded a high degree of innovation, planning, and flexibility. Investment in agricul-

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ture increased substantially in the 1970s, then declined in the 1980s as the economy shifted to a greater emphasis on industrial development. Priorities in educational investment changed as the economy demanded support for research and development (R&D) and as more skilled labor was needed for science and technology development. Finally, the development of social infrastructure (e.g. urban, water supply, sanitation, sewerage, environment) became a higher priority as the country's Industrial Sector and Energy and Transportation Infrastructures became more developed. Emphasis was placed on achieving greater social equity through better distribution of income and wealth. Such flexibility enabled the GOK to meet the demands of the changing and often times volatile economic environment.

The pace of Financial Sector liberalization was one of the few points on which the Bank and the GOK disagreed. The Korean financial system mobilized resources and allocated funds to those sectors and activities in which growth was being promoted by the Government. This strategy was pursued through the Government's control of interest rates, allocation of credit, and ownership of commercial banks. However, the development of the Financial Sector did not keep pace with the growth in size and complexity of Korea's real economy. By the early 1980s, the imbalance between the financial and real sectors of the economy was obvious to policymakers. The GOK initiated several programs of financial liberalization to correct the imbalance, but the reforms were implemented partially or stalled due to external factors that caused macroeconomic shocks to the economy. In 1993, the Government introduced a financial liberalization plan in line with the recommendations of a Bank sector report (Sector Report 11373-KO), which was regarded as credible by both domestic market participants and the international community. While the GOK and the Bank both viewed Financial Sector liberalization as the ultimate objective, they were committed to different approaches and timeframes for reform. The fact that the Bank and the GOK were able to reach some consensus on a basic reform program in 1993 is a testament to the strength of the partnership.

A critical success factor in the partnership was the GOK's responsiveness to the Bank's macroeconomic and sector policy analysis and advice. They were also open to borrowing ideas from other countries' experiences, which the Bank was able to provide given its comparative advantage in this area.

Provided below are selected highlights of Korea's development chronology and the Bank's assistance from 1960 to 1994. Each section gives an overview of the country's economic situation, the GOK's investment priorities, and Bank assistance to the Government in each period.

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## B. THE SIXTIES

The 1960s, which marked the beginning of Korea's extremely rapid economic development, were characterized by a shift from agriculture to industry. Agricultural performance declined, and the income differential between urban and rural workers widened as urban migration accelerated. To support industrial development, the Korean government sought to increase the capacity and efficiency of the country's road and rail transportation networks, the quality of its education system, and the productivity of its existing agricultural base.

The Bank assisted Korea in its efforts with a combination of financial and technical assistance in four sectors: Agriculture, Transportation, Finance, and Education. Particularly in the areas of institution building and knowledge transfer, the Bank's assistance was well-received by the GOK. In this initial stage of assistance, the Bank was able to lay the groundwork for its long-term lending relationship with Korea. At the same time, the World Bank developed a high level of respect for the GOK's commitment to development.

## C. THE SEVENTIES

During the 1970s, Korea maintained its aggressive growth rate. The Government's economic growth strategy was to target specific productive activities and support them with interventionist financial policies. In 1973, the focus shifted to the heavy and chemical industries, and the GOK supported growth in these industries through direct promotion, subsidized credits, and tax concessions. The Government also sought to develop new urban centers throughout the country to spread industrial activity away from the Seoul-Pusan axis, and it promoted agricultural development to reduce rural-urban migration. Finally, the Government began to invest heavily in educating its skilled workforce to encourage R&D and industrial innovation and improve Korea's competitiveness in world markets.

After the promising start of the Bank-Korea relationship in the 1960s, the World Bank was committed to expanding its assistance to Korea. In the 1970s, the Bank produced ten sector reports and eight economic reports and made approximately \$2.6 billion in loans for 46 projects in nine sectors. The sector reports provided the analytical underpinning for later investment projects. The projects had a heavy emphasis on developing the country's infrastructure, with approximately 30 percent of the funds allocated to the Transportation Sector. The Bank also made loans in the Finance, Agriculture, Energy, Industry, and Education Sectors.

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Overall, the projects were successful in fulfilling their intended objectives. During this decade, the Bank learned some key lessons regarding factors that affect a project's chances for successful implementation. It also continued to advise the GOK on Financial Sector liberalization, but recognized the policy constraints which demanded a gradualist approach. Given the highly-leveraged capital structure of Korean companies, the easing of interest rate controls had to be managed carefully. Throughout the 1970s, the Bank strengthened its relationship with the Koreans and built on the goodwill and constructive dialogue which had begun to develop in the 1960s.

#### D. THE EIGHTIES

The 1980s were a difficult period for Korea, starting with the assassination of President Park Chung Hee and a brief period of political uncertainty and social unrest. Despite these developments, the Bank-Korea partnership continued to grow. Inflationary pressures and a second oil crisis dealt a severe blow to the economy, but in 1980, the *won* was devalued substantially and a flexible exchange rate policy was adopted, reestablishing the country's export competitiveness and ushering in an economic boom. After 1986, the economy grew at a remarkable rate. Real exports, growing at over 20 percent per annum from 1986 to 1988, drove the economic boom. The country benefited in the late 1980s from low and stable oil prices, the appreciation of the Japanese *yen*, and the continued strong growth of the OECD countries, which were Korea's main export markets.

During this decade, the GOK realized that its extensive role in directing the course of industrial development through credit allocation, fiscal incentives, and protection policies was no longer appropriate for Korea's increasingly complex and sophisticated economy. As a result, the GOK planned for further deregulation of its Financial Sector with the Bank's assistance. However, macroeconomic shocks prompted the Government to reduce the extent of reforms, thus limiting the level of liberalization envisioned originally.

In addition to attempting Financial Sector modifications, the GOK continued to push infrastructure development. The main objective was to modernize and increase the capacity of the national transport system while encouraging the development of new industrial areas and housing complexes outside of Seoul and Pusan, the two main urban centers. The GOK also strove to improve the quality of education and research at several of its universities and key technology institutions.

The Bank assisted the GOK through the difficult years of the early 1980s with two structural adjustment loans that aimed to revitalize the economy by restoring the competitiveness of Korean industry. This effort involved a combination of measures such as currency devaluation, trade policy reform,

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and energy diversification. In addition, the Bank continued its broad multi-sector focus, providing \$3.6 billion in funds and technical assistance to 42 projects in nine sectors as well as sector analysis and advice on policies and project design. While strong emphasis continued in the Transportation and Finance Sectors, the Bank also provided assistance to six Urban Development Projects that sought to reduce inter-regional disparities and provide more affordable housing to lower-income families. The lending programs also included project investments in Industry, Energy, Agriculture, Education, and Water Supply and Sanitation.

By the mid- to late-1980s, the Bank's assistance strategy was geared to Korea's advancement from a newly-industrialized country (NIC) to the lower rungs of the developed-country income ladder. The Bank's contribution lay in addressing long-term development issues, such as: (i) liberalization of the Financial Sector, (ii) a re-focusing of industrial policy away from government-led intervention to a more market-oriented strategy, (iii) reformulation of social policies to de-emphasize basic needs which were already met, and (iv) the introduction of more sound managerial and financial systems across sectors. The Bank's lending was oriented toward policy change through sector adjustment and investment operations, moving beyond simple financing to making contributions to institutional development. The GOK also wanted to maintain relations with the Bank to enhance the effectiveness of its domestic policy initiatives and gain the confidence of external financing sources.

#### E. THE EARLY NINETIES

Due to rapid growth over the previous three decades, the Korean economy became the tenth largest economy in the world in the early 1990s. The economy continued to prosper from domestic rather than export-generated demand, although the economy suffered from some "overheating" in the early 1990s which resulted in labor shortages and accelerated inflation. These factors, coupled with the country's slow rate of technological investment, hurt Korea's export competitiveness. The Government realized that increased liberalization of its Financial Sector was needed to facilitate economic recovery, and it announced a comprehensive restructuring plan which began in 1992.

Because the prospects for further expansion of labor-intensive products were more limited, the Government placed heavy emphasis on moving industry toward more technology-intensive production. It provided incentives for increased R&D and improved the quality of basic science education in secondary schools, colleges, and universities. The GOK also tried to develop a sustainable energy strategy which could insulate Korea from energy crises. Lastly, due to the negative impact of rapid industrialization on the environment, the Government sought to develop more efficient methods of production for natural resource conservation and to adopt systematic measures for improving environmental policies and programs.

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By 1990, based on the standard criteria of per capita income and access to capital markets, Korea was ready to graduate from the World Bank. During the lending phasedown (1991-94), the priority areas for Bank operations, in accordance with GOK preferences, were the Social Sectors, small and medium industry, and environmental improvement. It was agreed that the 1994 graduation could be reversed if economic conditions deteriorated seriously or political reunification of the peninsula took place.

The 1990s marked the final chapter of a very productive partnership for Korea and the Bank. From 1990 to 1994, the Bank completed five sector reports and one economic report, and it committed \$1.2 billion in funds for 21 projects in eight different sectors. The GOK decided to follow through on the Financial Sector reforms it had started during the 1970s and 1980s. The interventionist policies of the Government had imposed significant efficiency costs on the rapidly-growing economy, so the Bank assisted the Koreans by completing the comprehensive Financial Sector Study in late 1992. This study became a key input to the reform program announced in the summer of 1993 as well as a Bank sector loan in 1993. The reforms were well-received by the international financial community.

During the early 1990s, the Bank was active in helping Korea meet its requirements for skilled scientific and technical manpower, environmental research and development, and education research. The Bank also supported investments in science and vocational education, science and technology research at the university level, and library computerization on a national scale. These improvements were designed to help Korea develop high-technology products that would be competitive in world markets.

Six of the 21 projects which were approved during this period are still under implementation (as of February 1999). The completed education projects were extremely effective in improving the technology base by increasing the number and quality of Korea's scientists, engineers, and technicians. These improvements had a direct impact on domestic technology innovation and resulted in higher-quality industrial products. Major housing and land reforms also took place, and most of the objectives of the water supply projects were achieved.

In the Urban and Water Supply and Sanitation Sub-Sectors, the Bank contributed by supporting the rationalization of sector policies and strengthening institutional capacities for investment planning and financial management. The Bank also provided assistance to the Housing Sector Project, as the escalation of housing costs raised Government concerns in this sector. In the Social Sectors, the Bank's health projects contributed to improving and modernizing private hospital facilities and addressing health finance issues. The

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Bank also completed economic work to address income and wealth distribution issues, which enhanced understanding of many Social Sector concerns.

#### F. CONCLUSIONS

The recent East Asian financial crisis aside, Korea was a success story of development. A country that was devastated by civil war, had its capital city occupied twice by outside forces, received a flood of refugees from the North, suffered wrenching dislocations of population and economic activity, and which was not endowed with any significant natural resources had, in the space of little more than a single generation, gone from “basket case” to graduation from Bank lending by the end of 1994. How did Korea accomplish this, and what was the Bank’s role in this development?

*First*, Korea’s spectacular real GDP growth was driven principally by surging exports. *Second*, this export drive was based mainly on price competitiveness. *Third*, this price competitiveness resulted because labor productivity gains regularly outstripped wage increases by substantial margins and because the Government generally supported export promotion policies. Central to this pro-export policy regime was an effective exchange rate which, for the most part, was kept low relative to those of Korea’s competitors. The flow of subsidized credit to exporters from the nationalized banking system also supported exports. *Fourth*, two major factors in controlling wage increases were the effort by authorities to restrain the power of labor unions and the large number of lower-paid women who entered the workforce. At the same time, the quality of the workforce was upgraded continually by an aggressive education policy. *Fifth*, consumption (especially of imports) was restricted, while saving and investment were encouraged vigorously to maximize capital formation. *Sixth*, since Korea itself possessed no natural resources, its export drive was based on the efficient processing of imported raw materials. Its capital equipment and technology were likewise imported. Thus, imports continued to rise with export and GDP growth, and the current account remained in deficit for the most part. This deficit was financed by external borrowing which, in turn, created a large amount of foreign debt for Korea.

Government policies resulted in real GDP growth averaging 10 percent annually between 1962 and 1994, with a corresponding rise in per capita income from under \$100 to over \$10,000. This spectacular performance was fueled by annual export growth of 20 percent in real terms, while savings and investment rose sharply and exceeded 30 percent of GDP.

The Bank played a major role in Korea’s development effort, not only through its economic and sector analysis and policy advice but also through a diversified lending program which responded to the changing needs of the fast-growing economy. In the early years, the Bank focused on lending for

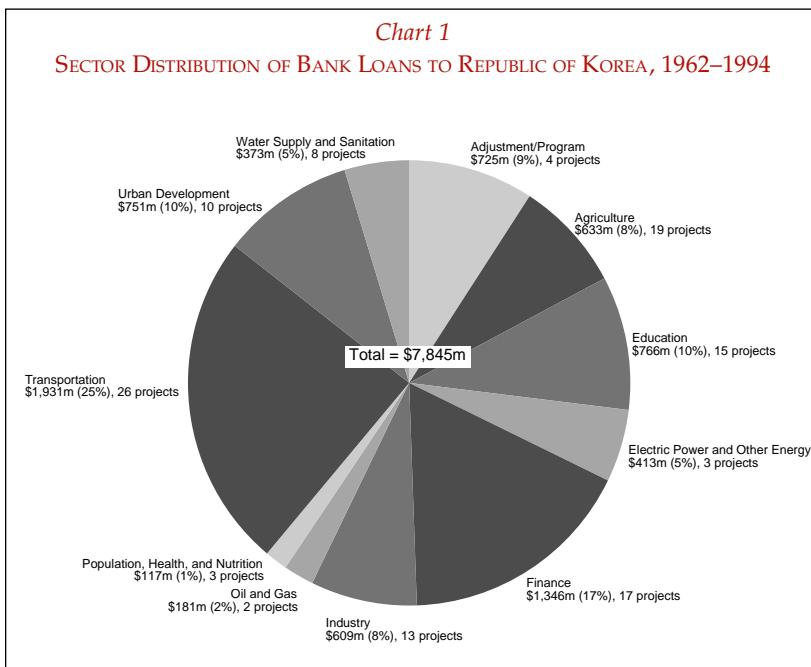
Agriculture, Irrigation, Rural Development, Small and Medium Industry, Transportation (roads, ports, and railways), Regional and Urban Development, and Education. In later years, priority was given to Social (Education, Health) and Social Infrastructure needs (Housing, Water Supply and Sanitation, and Sewerage), as well as to improving technology, R&D, and environmental protection. The Bank paid particular attention to institutional strengthening and the coordination of sector strategies, areas in which the GOK requested the Bank's advice and valuable cross-country experience.

At the same time, the Bank had the unique opportunity to learn from the Korean development experience. The Bank gained lessons from Korea in areas such as: (i) planning and investment for scientific and technological excellence in the Education Sector; (ii) Industrial Sector restructuring; (iii) technology acquisition, financial development, and commercialization using an institutional framework aimed primarily at building an indigenous technological capacity; and (iv) small- and medium-size industry sub-contracting and development. The Bank also had the opportunity to help adapt and transfer the developed country experience to an industrializing economy in the areas of health insurance, minimum wages, and social security. In doing so, the Bank gained experience and expertise that could be applied to other developing countries.

The Bank also gained from intensifying its collaboration with Korea's concessional loan program to obtain benefits for other borrowing countries through co-financing and technical assistance in sectors of Korean expertise (e.g. Construction, R&D, Small and Medium Industries, Science, and Technology Manpower). As Korea positioned itself for an enhanced international role, the Government increased its contributions to IDA, entered into a co-financing framework agreement with the Bank, and created a consultant trust fund to attract more Korean experts for Bank work. Therefore, contributions on both sides helped prolong a long and constructive relationship and brought major benefits to all concerned.

## II. INTRODUCTION

The Republic of Korea became a member of the World Bank (the Bank) in 1955 and the International Development Association (IDA) in 1961. The Bank began its operational relationship with Korea in 1962 when it completed the first Country Economic Report and approved an IDA credit of \$17 million to expand and improve the Korean National Railroad. The development credit was the first step in a long-term partnership which spanned thirty years of rapid economic growth in Korea. By 1973, Korea's economy progressed sufficiently to require no further IDA credits, and Korea became a contributor to IDA in 1977. Over the period under review, the Bank completed over 31 Sector Reports, 24 Economic Reports, and 120 Project Loans/Credits in Korea. It disbursed funds totaling over \$7.8 billion to the Government of Korea (GOK) through operations in 11 sectors.



The partnership prospered due to a strong commitment by both the Bank and the GOK to fulfill the objectives established by the Government. It has been argued that the GOK's singular commitment to development and the Bank's support were the most significant factors contributing to the success of the partnership. The high level of pride the Koreans had in their country's

development effort and the important advisory and financial role of the Bank enabled the GOK to achieve rapid industrial growth for the country.

A chronological listing of the Bank's involvement with Korea is presented in Annex 1 at the end of this report. The timeline identifies the specific Sector Reports, Economic Reports, and Project or Adjustment Loans that the Bank completed or approved in each decade of the partnership. A list of all loans and credits, along with key data, is presented in Annex 2.

This report discusses the progress of the Korea-Bank relationship by decade, summarizing the prevailing economic situation in Korea, the development focus of the Korean government, and Bank assistance to the country in each time period.

### III. THE SIXTIES

During the 1960s, the Korean economy began to expand rapidly as the Government followed an export-led industrialization strategy. This period was characterized by very high growth rates in the country's gross national product (GNP), literacy, and trade. The World Bank facilitated Korea's development efforts by supporting investments in transportation infrastructure, agriculture, and education.

#### A. ECONOMIC SITUATION

The Korean economy expanded rapidly throughout the 1960s, largely due to high growth in the Industrial Sector and the commitment to economic development from a strong political leadership. Merchandise exports increased dramatically from approximately \$92 million in the 1962–1964 period to almost \$490 million in 1968. Per capita GNP increased from \$99 in 1965 to \$170 by 1968. However, despite this rapid growth, Korea's GNP ranked below three-fifths of the nearly 100 other developing countries.

Many sectors progressed rapidly and their performance exceeded the Government's development targets. However, agricultural performance was disappointing due to slower progress in land development and the lack of modern agricultural inputs. As a result, the gap between urban and rural incomes widened, which prompted the Government to emphasize increased agricultural productivity in the 1970s.

As Korea's exports grew rapidly, imports also increased significantly, causing some concern for Korea's balance of payments position. The merchandise trade deficit increased from \$233 million in 1964 to \$780 million in 1968, reflecting Korea's dependence on imports at the time.

The Bank, through its economic work, recommended that to achieve a long-term and sustainable economic outcome, the country needed to develop a well-designed export promotion and import substitution program. The country needed to improve productive and marketing efficiency by containing the rise in domestic prices. The Bank also recommended a more flexible exchange rate system. If Korea wanted to invest in those projects that made the most economic sense, it would have to work towards reducing the difference between the levels of subsidized and market prices.

During this period, the Bank raised the issue of Financial Sector liberalization for the first time. However, the GOK managed to follow a more centrally-directed and controlled approach successfully throughout the 1960s, 1970s, and 1980s. The Korean government used an economic model in which

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private enterprise dominated the Industrial Sectors and the Public Sector controlled the financial system. Thus, during the 1960s, Korea experienced a complete nationalization of the Financial Sector.

The Bank's economic analysis projected that the Korean economy, with the exception of the Agriculture Sector, would continue to grow rapidly and that the country could continue to use a large amount of foreign capital to finance its rapid industrial growth.

#### B. KOREA'S DEVELOPMENT FOCUS

In the 1960s, the GOK focused its development efforts on rapid industrial development. In the First and Second Five-Year Development Plans (1962–1966 and 1967–1971, respectively), the Government set out its development goals. In order to support an increase in industrial output and exports, the Government knew a substantial increase in transportation capacity would be required. To assist the Government in planning the necessary sector improvements, the World Bank provided a grant for a 1965 Transportation Survey. The survey recommended that increased emphasis be placed on road and rail transport, improved maintenance, and the strengthening of institutions responsible for developing and maintaining the different transportation networks.

The GOK also realized that to support the labor demands of industrialization, the education system would have to be improved significantly. As urbanization gathered momentum through the late 1960s and early 1970s, more demands were placed on existing educational facilities. One priority was to train former agricultural workers for the more demanding technical positions in industry. At the same time, the Government did not want to abandon its agricultural production base; rather, it hoped to improve the productivity of existing cropland and increase the incomes of its agricultural workers as the transition to a more industrialized economy moved forward.

#### C. WORLD BANK ASSISTANCE

Given the investment needs of the Korean economy and the GOK's development objectives, the Bank saw several windows of opportunity for assisting efforts to increase the country's pace of development and improving the quality of investment programs. The Bank began to play an advisory and financing role from the early 1960s through its economic and sector work, policy analysis, and an increasingly-diversified lending program. The Korean authorities soon realized the contribution Bank-financed projects could make in improving sector policies, strengthening institutions and coordination, and transferring expertise and technology. The GOK also valued the Bank's macroeconomic analysis and the Bank's role as an outside observer.

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## 1. Bank Program Highlights

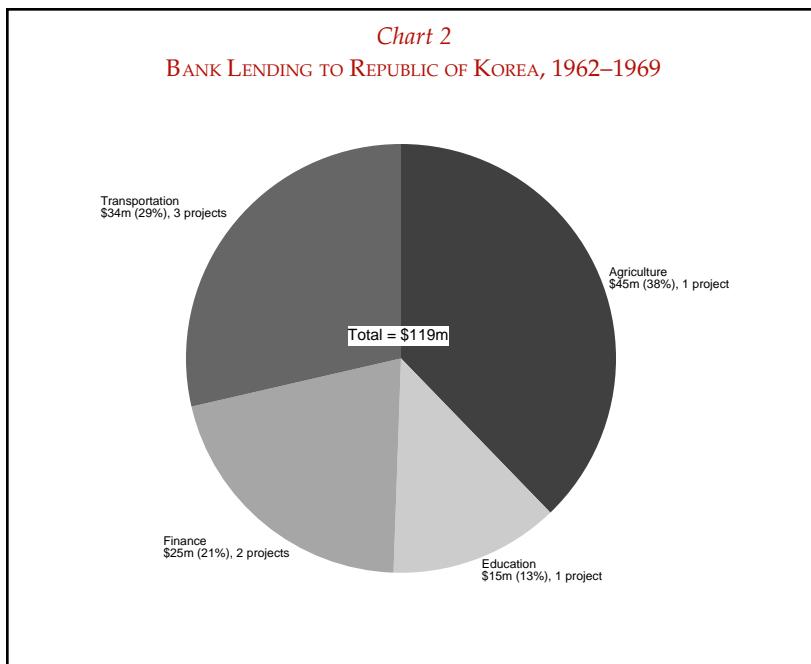
From 1960 to 1969, the World Bank focused its assistance to Korea in four sectors: Transportation, Finance, Education, and Agriculture. In these sectors, the Bank approved four IDA credits and three International Bank for Reconstruction and Development (IBRD) loans, mostly in the late 1960s, which totaled approximately \$119 million. These funds amounted to approximately 1.5 percent of the Bank's total assistance to Korea from 1962 to 1994, at a time when the investment program was in its initial stages. However, the funds represented a significant portion of projects costs in Korea, accounting for 35 percent of total project costs in the Agriculture Sector and up to 100 percent of total foreign costs in the Finance Sector.



*Photo: William Spidle, The World Bank Photo Library, 1983.*

In the 1960s, the World Bank completed eight economic reports (see Annex 1), funded a major Transportation Survey, and completed an analysis to determine whether Korea was eligible for IBRD borrowing. The Bank also initiated Sector Reports for the four sectors in which it was providing assistance, and the recommendations in these reports would be used in the design of subsequent project loans.

Given the urgent need to improve transportation, the Bank provided assistance to help Korea modernize and expand the national railroad system. The Bank's first assistance to Korea was in the form of an IDA credit for the Korean National Railroad (KNR) in 1962. It would become the first of several credits and loans the Bank would make to the Transportation Sector and the KNR. The Bank also provided financial support to the Korean Development Finance Corporation (KDFC) to on-lend funds to Korean industry and help promote KDFC's institution building efforts. Other loans provided technical assistance for road transport development, financial support for an irrigation project (the most extensive such investment planned at the time), and support to improve the secondary and tertiary education systems.



## *2. Effectiveness*

The information available from OED audit reports and project completion reports, which included inputs from the concerned GOK agencies, indicate that the Bank's assistance was highly regarded by the Korean government. Each of the projects successfully met their respective objectives with few implementation difficulties. Direct financial support aside, the Bank's contributions in the areas of institution building and knowledge transfer were substantial. In each sector, the Bank was able to improve the capacity of the implementing agency or institution significantly. The KNR, Agricultural Development Corporation (ADC), Bureau of Public Roads (BPR), and KDFC all benefited greatly from the technical expertise and management experience of Bank specialists. Overseas training of key personnel also played a key role. In addition, the Bank's in-depth economic analyses provided input to the development planning process.

However, difficulties did arise during the implementation of some projects. In particular, the irrigation project experienced some problems with respect to land reclamation. Both the Bank and implementing agencies were aware of the potential cost overruns and delays associated with land acquisitions, a frequent problem at the time in many countries and one the Bank continued to address in its implementation reviews.

### *3. Main Lessons*

The World Bank was able to begin a successful long-term relationship with Korea during the 1960s due to its strong support of the Government's early development objectives. It provided assistance to the GOK where it was most required, namely in the areas that would stimulate industrial development: Education, Transportation Infrastructure, and Financial Intermediation.

The Bank was also successful in laying the groundwork for its long-term country assistance strategy. This strategy included three important components: (i) providing funding for capital investment; (ii) seeking ways to increase the capacity and efficiency of implementing agencies; and (iii) where appropriate, presenting the Government with policy recommendations. Although these three components were not always fully achieved, the Bank was consistent in its approach from the beginning, which greatly strengthened its relationship with Korea.

It is important to note that much of the success achieved in project implementation during this period can be attributed to the highly industrious and disciplined Korean work ethic. The strong commitment to development enabled projects to be completed on time or with minimal delays and greatly eased the Bank's supervision burdens. Although each of the implementation agencies benefited from the insights and cross-country experience of Bank staff, they were relatively well-managed and efficient organizations. Projects during this decade enabled an already efficient system to increase its productivity further.

## II. THE SEVENTIES

### A. ECONOMIC SITUATION

During the 1970s, Korea maintained its aggressive growth rate without incurring the problems of mass poverty, rural-urban dualism, and chronic foreign exchange and savings-investment gaps. Real GNP growth accelerated to 11.5 percent per annum during 1977 and 1978, with per capita GNP exceeding the significant watershed of \$1,000 in 1978. Korea's exports continued to grow as trading opportunities arising from a healthy economy, a favorable exchange rate, an extensive system of subsidies, and an abundant supply of credit encouraged investment in export-oriented light industries. Consequently, the manufacturing sectors grew at 18 percent per annum. This growth, coupled with improvements in the terms of trade and growth in receipts from overseas construction contracts, improved the current account balance ahead of schedule and resulted in a surplus of \$12 million in 1977. These developments accelerated the shift of resources away from agriculture to more productive uses in industry.

Korea's rapid growth did not come without problems. In the late 1970s, Korea faced high inflation (10.1 percent in 1977 and 14.4 percent in 1978), worsening income distribution, and urban concentration. Moreover, rapid growth over the previous 15 years left the economy vulnerable to external shocks, as evidenced by the oil crisis of 1973. The institutional structure had also not kept pace with the economy.

Korean policymakers questioned whether achieving price stability, social equity, and improvements in the quality of life would be possible with continued high growth. The Bank believed that a 10 percent growth in GNP per annum was feasible, provided the GOK implemented a series of measures focused on the restructuring of resource allocation, institutional reforms, and the mobilization of additional foreign resources. Such measures included import liberalization, financial liberalization, and policy reforms in the Agricultural Price Support Program, Land, Housing, Education, and Urban Transportation.

The rapid development of the economy was based on highly interventionist financial policies. The Government committed the resources required for priority investments, often financing them on preferential terms. Strict control over resource allocation by the financial system was a major component of the Government's development strategy, which the GOK achieved through: (i) restrictions on the establishment of new financial institutions, (ii) ownership control over the entire Banking Sector, (iii) determination of interest rates, and (iv) selective credit controls in allocating resources. These instruments severely constrained the overall efficiency of the financial system in Korea.

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In aggregate, the Government controlled approximately 50–60 percent of total banking credit. While the total credit needs of the economy were met through both formal and informal credit channels, individual firms had uneven access to credit, with differences in borrowing costs reflecting the multiplicity of lending rates and the highly-segmented nature of the credit system rather than market-determined risk differentials. Therefore, the financial system during the 1970s was unable to provide adequate safeguards against faulty investment decisions and over-investment in certain activities through its normal credit evaluation function.

Even with inefficient capital allocation, the economy expanded rapidly, with investment growing at 36 percent in real terms. Korea was entering a new stage of development, and its economy was becoming more complex and sophisticated. Hence, the Bank recommended that the Government change its role in the economy. Although the GOK had implemented strict controls in many sectors, it was time for the Government to relax its controls in the economic sphere, particularly in the financial system. The Bank recommended that the GOK devote its efforts to tackling social development problems in areas such as education, housing, public transportation, and the environment.

## B. KOREA'S DEVELOPMENT FOCUS

The promotion of manufactured exports from 1961 to 1973 pushed Korea's industrial development to new levels. However, President Park Chung Hee announced in 1973 a major shift from general export promotion to a sectoral development strategy focusing on the heavy and chemical industries (HCI). The Government encouraged HCI growth through subsidized credit and tax concessions and direct pressure on the major conglomerates. This change in policy and the use of specific industrial targets showed the Government's willingness to steer resources to priority industry sub-sectors through trade and financial policies. The GOK believed that the industrial structure needed "upgrading," and the new strategy required large-scale investments which were too risky to be undertaken by private firms without decisive government leadership. The HCI Sub-Sectors were seen as the basis for a new wave of technology-intensive goods that would sustain exports and provide technological benefits to other industries through linkages and subcontracting.

In this decade, Korea continued to suffer from the widening gap between urban and rural incomes. The Korean government sought to reverse this trend by giving greater priority to agricultural development in its Third Five-Year Development Plan (1972–1976).

Another problem resulting from rapid urbanization was the heavy concentration of people in two major urban centers: Seoul and Pusan. In response, the GOK supported the development of other urban centers throughout the

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country and improved housing and transportation conditions in the two principal cities. Urbanization also brought serious environmental problems, and air and water pollution, sewerage, and solid waste disposal problems accompanied rapid industrialization in the two metropolitan areas.

The Government attempted to address many of the problems caused by rapid urbanization and industrialization in its Fourth Five-Year Development Plan (1977–1982). The main development goals included: (i) rapid agricultural growth and rice self-sufficiency, (ii) improved equity and income distribution throughout the country, and (iii) increased efficiency and productivity of industry.

The GOK also realized that export competitiveness and industrial growth were closely related to the effective and sustained development of human resources. Therefore, the Government placed a high priority on producing large numbers of skilled workers for employment in industries with rapidly changing technologies. Past concerns over surplus labor were being replaced by fears of labor shortages, particularly of skilled labor. At the same time, the agricultural labor force began to decline in absolute numbers (-3.8 percent from 1977–1978). This trend accelerated due to increasing urbanization and industrialization. While the problems of low-productivity employment and absolute poverty were receding, signs of increasing income disparity and problems associated with industrial concentration began to appear.

### C. WORLD BANK ASSISTANCE

Given the strong relationship that began in the 1960s, the World Bank seemed comfortable with expanding its assistance to Korea over the next several years. The Koreans had demonstrated a work ethic and level of commitment rarely seen by Bank staff in other developing countries. In fact, many individuals who worked directly with the Koreans at this time described the efforts of the Koreans as the “best they have seen.” Throughout the Bank, people seemed to agree that the proactive Korean approach to working with the Bank was a model for other countries.

#### *1. Bank Program Highlights*

During the 1970s, the Bank continued to finance investments in the four sectors it had begun assisting in the 1960s and provided assistance in the Energy, Urban, Industry, and Population Sectors (see Annex 1). Sector reports produced by the Bank concentrated on the Education, Finance, Industry, and Agricultural Sectors. To assist the formulation of the Country Assistance Strategy, in-depth economic analyses were performed annually throughout the decade. Of the funds disbursed by the Bank to Korea from 1962 to 1994, \$2.6 billion or 34 percent of the total funds were disbursed in the 1970s. Over half

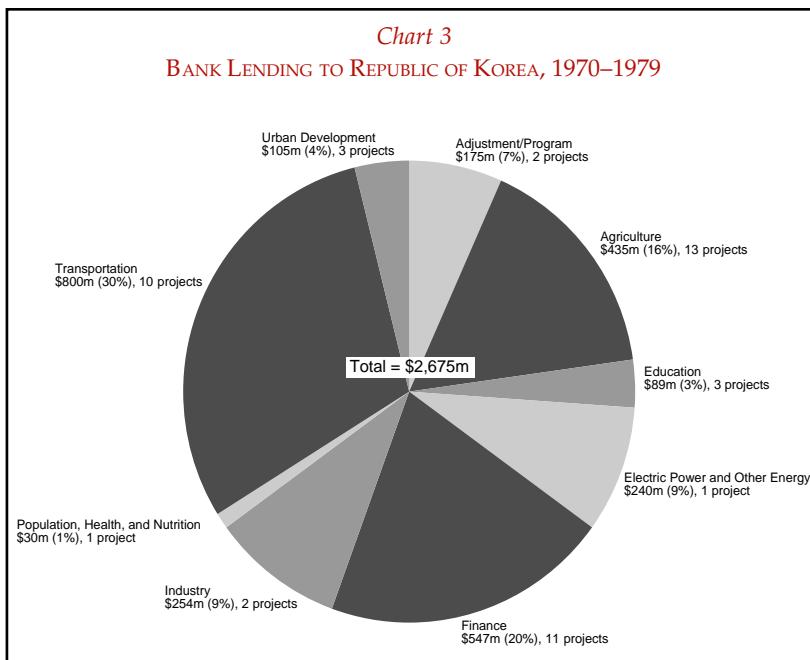
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of the funds were concentrated in three sectors: Transportation (\$797 million), Finance (\$546 million), and Agriculture (\$435 million). The Bank approved 46 investment loans and funded critical components of projects in each of these sectors. In the Transportation Sector alone, the Bank contributed up to 68 percent of total project costs. In the Finance and Industry Sectors, the Bank's nine loans financed intermediaries which supported several thousand sub-projects in a wide variety of industries. Finally, the Bank continued its strong commitment to the Agriculture Sector by contributing funds totaling approximately one-third of its investments.



*Photo: Keum Yong Choi, The World Bank Photo Library, 1980.*

During this period, the World Bank also assisted in three Regional Urban Development Projects; four Education Projects; two Power Projects; two Program Loans; and one Population, Health, and Nutrition Sector Project. The Regional Development Projects were particularly innovative in their approaches. They focused on the poor southwestern Cholla region, with development targets for the urbanized areas of Kwangju and Jeonju. Although the Bank did not normally support multi-sector projects at the time, Korea needed an integrated approach to address regional problems. In addition to the development of necessary infrastructure, these projects supported improvements in agricultural processing, industrial development, and tourism. The OED evaluated these projects after completion and concluded that they were extremely effective in assisting the selected regions.



The Bank's Sector Reports in the 1970s generated recommendations that formed the foundation for many of the Bank's sectoral development and financing objectives. A summary of the primary recommendations in key sectors is presented on the next page. (*Note:* No additional sector work was undertaken in the Transportation Sector in the 1970s; lending assistance continued to support the earlier analytical work of the 1960s.)

**SUMMARY OF PRIMARY RECOMMENDATIONS IN KEY SECTORS, 1970 – 1979**

*Education*

- ❖ Address the weaknesses of the education system in three phases: (i) improve the primary and secondary education systems and teacher training; (ii) improve the upper secondary education system; and (iii) review and reform the higher education system.

*Industry*

- ❖ Shift emphasis from the HCI to light industries in order to take advantage of the comparative advantages of skilled labor;
- ❖ Establish and maintain an incentive system for the promotion of industry (e.g. tax reductions, duty drawbacks, and preferential credit terms);
- ❖ Change the financing of industrial projects in three ways: (i) extend the short-term maturities of bank loans, (ii) convert debt held by shareholders of the company to equity, and (iii) require mandatory conversions of high interest and curb market borrowings to commercial bank loans; and
- ❖ Increase scope and quality of R&D.

*Agriculture*

- ❖ Place increased priority on agriculture and rural development;
- ❖ Increase output by improving the drainage and irrigation systems of existing cropland;
- ❖ Set realistic targets for productivity increases in agriculture;
- ❖ Institute self-help projects to develop the capabilities of rural villagers; and
- ❖ Increase intermediate and long-term credit for productivity improvement and diversification projects.

*Finance*

- ❖ Address the weaknesses of the Korea Development Bank (e.g. revise the interest rate structure; sell off subsidiaries, audit loan and equity portfolios), which is the single most important source of capital for Korean industrial development;
- ❖ Implement an automatic guarantee scheme against defaults of external repayment guarantees and loans to benefit public or priority industry enterprises; and
- ❖ Liberalize the Financial Sector by easing controls on interest rates for both lending and deposits.

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## 2. Effectiveness

To meet the rising demands on the transport infrastructure during the 1970s, Bank assistance focused on four Highway Projects, four Railway Projects, and two Port Development Projects. The project objectives supported the Bank's three-pronged approach, in which projects included civil works, institution building, and, when necessary, policy change. In each of the Transportation Sub-Sectors, funds dedicated to the civil works components were managed effectively, and the objectives were achieved. Through the physical expansion of capacity and improved maintenance of facilities, the railways, highways, and ports were able to increase their respective throughputs of passengers and cargo. Each sub-sector also benefited from the knowledge transfer and technical expertise provided by the Bank and its consultants. The KNR continued to improve its operations, as did the Bureau of Public Roads (BPR) and the Korea Maritime and Ports Administration (KMPA).

Recurring problems in these projects arose from difficulty in accurately forecasting traffic increases in the context of unprecedented urban and industrial growth and from the agencies' lack of independence, which constrained them from setting realistic tariffs.

In the Finance Sector, the Bank assisted Korea in funding three key financial institutions: the Small and Medium Industry Bank (SMIB), the Korea Development Bank (KDB), and the KDFC. Multiple projects were approved for each institution, and all were implemented satisfactorily. Moreover, each institution displayed a high level of managerial skill and technical competence, demonstrating a proficiency level rarely seen in developing countries.

In the Education Sector, Bank loans addressed five main weaknesses: (i) inadequate primary and secondary school systems, (ii) inadequate training for workers given the rapid changes in the economy, (iii) shortage of high-level manpower, (iv) poor quality of instruction, and (v) poor integration of modern teaching techniques. The four projects improved the quality of education and training by upgrading teaching staff and providing new equipment and facilities.

The Rural Infrastructure Project (Loan 1216-KO) represented the Bank's first involvement in multi-sector rural development in Korea. This project, along with the others in the Agricultural Sector, was highly successful in improving the living standards and incomes of rural farmers. However, several of the Irrigation Projects suffered from implementation delays, scope reductions, and cost overruns which limited the level of benefits achieved upon completion.

The sudden and large increase in the world price of petroleum in 1973 raised Korea's import bill significantly. This event was followed by a worldwide

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recession in 1974 which greatly affected Korea's export markets. As a result, the GOK needed to finance a much larger percentage of its imports through external capital inflows to prevent an acute balance of payments deficit. The GOK successfully avoided a disruptive reduction in investment by using funds from two Bank program loans.

Unfortunately, not all of the Bank's project loans were implemented successfully. Several projects were delayed due to implementation difficulties and unexpected cost overruns (e.g. Education and Irrigation). Other projects (e.g. KNR) were unable to achieve the desired level of return due to policy constraints. Nonetheless, these projects did contribute greatly to the country's development.

Three projects during this period were judged as unsuccessful. The Kyongju Tourism Project (Loan 953-KO), the Heavy Machinery Project (Loan 1466-KO), and the Electronics Technology Project (Loan 1676-KO) did not meet their objectives due to poor utilization of facilities and capacity. Overly-optimistic forecasts, changes in the marketplace, and unexpected competitive reactions caused each project to develop facilities for a market that did not evolve. Consequently, the estimated rates of return were not achieved.

### *3. Main Lessons*

The World Bank quickly broadened its scope of assistance in many sectors. It became clear that a project's success, while dependent on design and scope, was also a measure of the skill of the implementing agency and the level of commitment from both the project agency and the Government. In a few projects, the required level of commitment was sometimes lacking due to differing opinions on the relative priority of a component or phase of a project, which limited the overall effectiveness of some multi-phased or multi-component projects (e.g. Fifth and Sixth Railway and Highway Projects).

Throughout the decade, an outstanding policy issue was the pace and scope of Financial Sector liberalization and the restructuring of trade and investment markets. The Korean economy continued to be regulated heavily during the 1970s. The state played an integral role in the development of the economy, which faced two threats: (i) the world oil crisis, and (ii) increasing tension among North and South Korea and China. The policymakers could not implement fundamental changes in the government-led Financial Sector under such volatile conditions. Financial liberalization had to wait until the political and economic situation stabilized.

A key lesson learned from the financial intermediation loans was that hasty financial liberalization posed potential hazards due to a lack of prudent regulation, trained supervision personnel, and audit regulations in Korea. The

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GOK's efforts to address these issues and prepare the infrastructure before liberalization were critical to the success of the projects. The Government recognized that Financial Sector liberalization had to be implemented gradually, particularly since the banking system had grown accustomed to government direction. Given the highly-leveraged capital structure of Korean companies, a relaxation of interest rate controls, the centerpiece of any liberalization program, had to be managed carefully. Therefore, the Government adopted a compromise approach.

Several project evaluations identified adequate project preparation, careful assessment of implementation capacity, and realistic time scheduling as essential components of successful project implementation. The strong initial support and participation of stakeholders and beneficiaries in implementation was also crucial to project success.

The World Bank continued to strengthen its relationship with Korea during the 1970s. The different points of view and policy options the Bank presented to the Koreans sparked healthy debates which many believe led to improved projects, policies, and benefits. The Bank's willingness to support the GOK's actions and strategies, even when different from the conventional wisdom of development theory, was also important during this period.

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## V. THE EIGHTIES

### A. ECONOMIC SITUATION

The period of 1980–1984 was extremely difficult for the Korean economy due to the assassination of President Park Chung Hee, and a brief period of severe political uncertainty and social unrest. Inflationary pressures and the second oil crisis led the GOK to decentralize decision making in the real sector and reduce government intervention in the financial system, which allowed a greater role for market prices in resource mobilization and allocation. Although the economy suffered from severe external shocks, it rebounded strongly by 1986 and grew at a remarkable rate thereafter. GNP grew above 12 percent per annum from 1986 through 1988. Real exports grew at over 20 percent per annum and were the main engine of the economic boom. During this time, the country benefited from the low and stable price of oil, the appreciation of the Japanese *yen*, and the continued strong growth of OECD countries, which were Korea's main export markets.

In the early 1980s, the main concerns of Korea's policy-makers were: (i) inflation, which rose to 39 percent in 1980; (ii) a large external debt (\$47.2 billion in 1985); (iii) trade and current account deficits; and (iv) a growing unemployment problem. In 1980, the *won* was devalued substantially and a flexible exchange rate policy was adopted, which established export competitiveness and ushered in an economic boom. GNP growth, driven by a strong recovery of exports, averaged 8.5 percent in 1983–1984, reducing the current account deficit to 1.7 percent of GNP in 1984. However, new concerns arose, such as incipient inflation, a strongly-appreciated *won*, labor strife, and large wage increases. Such issues adversely affected Korea's competitiveness.

The current account surplus reached 9 percent of GNP in 1988, creating economic and political problems. The GOK responded by appreciating the *won/dollar* rate by 8 percent in 1987 and 13.7 percent in 1988. At the same time, it tried to reduce market pressure for greater *won* appreciation by limiting capital inflows. Inflation had fallen to a low level.

In December 1988, the GOK announced plans to liberalize the domestic financial markets. Lending rates were decontrolled, but key deposit rates remained fixed, so the reform had little effect on interest rates. The GOK also planned a shift in its monetary operations away from direct credit control to the use of indirect instruments, such as the discount rate and reserve requirements. This program was sidetracked in 1989 by the effort to limit the appreciation of the *won*, as the Government found the money supply was increasing too rapidly and therefore restored direct controls. The GOK also planned to liberalize the capital account by 1992, but progress was slow as strict limits were maintained on capital inflows.

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In addition to Financial Sector liberalization, the Korean government was forced to address problems in the labor market. After a period of wage austerity in the early- and mid-1980s, when wages lagged behind productivity growth in manufacturing, labor strife and large wage settlements in 1987 became a new factor in the equation.

After an export-led boom, the economy went through a necessary adjustment which involved the real appreciation of the currency and a relative shift of output away from tradable to non-tradable sectors of the economy.

The Bank thought that the Korean economy would need to look to domestic absorption as the source of new demand. The growth of exports could not continue at the rate achieved from 1986 to 1988, so the increase in exports could not remain the sole source of economic growth.

#### B. KOREA'S DEVELOPMENT FOCUS

Despite Korea's impressive economic performance in the 1970s, a combination of external shocks and a global recession which affected the heavy and chemical product markets caused strains and structural imbalances in the economy. Weak domestic policies, exacerbated by the surge in energy prices and slowing export growth, made these imbalances apparent. Government initiatives in early 1980, which included a reduction in subsidies and wage controls, were designed to stabilize the economy. While these measures were effective, they had strong contractionary effects and prompted the Government to launch a comprehensive adjustment program to address the underlying structural weaknesses of the economy.

The adjustment program focused on revitalizing the economy by: (i) restoring the competitiveness of Korean industry through devaluation, (ii) controlling inflation, (iii) adopting a longer-term program to reform trade policies and emphasize energy investments, (iv) improving savings performance, (v) reforming the financial system, and (vi) controlling the growth of external debt. In an effort to assist the Government's efforts, the Bank provided the GOK with two Structural Adjustment Loans to help restore a viable balance of payments and to foster sustained GNP growth. Two Industrial Finance Sector Loans complemented the adjustment efforts.

The GOK recognized that its extensive role in directing industrial development through selective credit allocation, discriminatory fiscal incentives, and protection policies was no longer appropriate in the increasingly complex and sophisticated Industrial Sector. As a result, the GOK decided to undertake a number of Financial Sector reforms. However, macroeconomic shocks prompted the Government to reduce the extent of reform significantly.

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The GOK established the Korea Technology Development Corporation (KTDC) to support small and medium industry (SMI) by investing in new research, providing venture capital, and improving industrial technology. Projects financed by the KTDC were intended to become an integral part of Korea's industrialization effort. The GOK also introduced a series of credit lines to development finance companies serving small and medium industry. The Government hoped to continue the strong pace of industrial development with a new focus on small-scale enterprises and industries. The GOK also sought to improve the quality of education and research at several of its key universities and technology institutes.

Korea's rapid economic growth, coupled with increased levels of disposable income that spawned an increase in the number of automobiles and trips, strained the transportation system both regionally and in urban areas. As in the GOK's Third, Fourth, and Fifth Five-Year Development Plans, the Sixth Plan (1987–1991) included massive Public Sector investments to relieve the strained transportation system. These investments continued to focus on the Seoul–Pusan axis, where most of the industrial development was taking place. The basic objective of the Government was to modernize and increase the capacity of the national transportation system and to encourage the development of new industrial areas and housing complexes outside of Seoul.

During the 1970s, the GOK had become increasingly concerned about the concentration of economic activity and population in the capital city of Seoul, and hence initiated a series of regional development projects to encourage a more even distribution of economic growth and population throughout the country. The Government planned to construct highways, major water systems, industrial complexes, and other infrastructure to promote economic development in strategic areas. Regional plans and supporting projects were developed for the three poorest regions surrounding Kwangju and Jeonju in the southwest and Taebak in the northeast.

The high oil prices of the late 1970s dealt a heavy blow to Korea's energy-intensive and oil-import-dependent economy. The Government responded by diversifying energy sources, fostering energy conservation, and adopting policies to reduce the growth in energy demand. In the late 1980s, the Government went further by trying to improve the economic and institutional efficiency of the Energy Sector.

### C. WORLD BANK ASSISTANCE

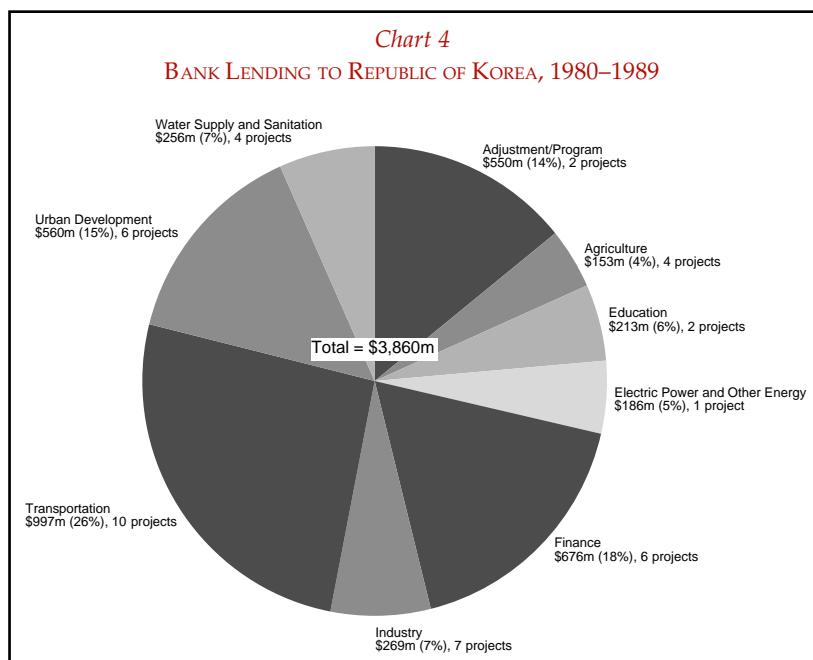
The Bank and the Government of Korea continued to build on the close partnership they had developed in the 1960s and 1970s. The Bank's Country Assistance Strategy aimed to assist Korea's transition to middle-income developed country status by addressing long-term development issues, such

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as: (i) the development of an internationally-competitive Financial Sector, (ii) the refocusing of industrial policies toward a more market-oriented approach, (iii) the shifting of social policies to de-emphasize basic needs that were already met, and (iv) the development of more sound managerial and financial systems.

### *1. Bank Program Highlights*

During the 1980s, the World Bank program in Korea expanded further in size and scope. Disbursements from Bank loans during this period totaled about \$3.9 billion, or nearly 50 percent of the funds made available to Korea during the 1962-1994 period. While the Transportation and Finance Sectors continued to dominate the program, lending to the Urban and Water Supply Sectors increased significantly at the expense of the Agriculture Sector. Two Structural Adjustment Loans were also added to help Korea overcome the difficulties of the early 1980s. In addition, the Bank continued its broad multi-sector focus, providing funds and technical assistance in Transportation, Finance, Urban Development, Industry, Water Supply, Education, and Energy. In addition, Bank staff completed 16 Sector Reports in a broad range of policy areas, including: (i) labor and export-led industrialization, (ii) spatial strategy, (iii) container port site selection, and (iv) regional development. The Bank produced seven Economic Reports, approximately one every two years, dur-



ing the decade. The Bank's commitment to Korea during the 1980s was significant in that its project interventions became critical components in almost every sector in which the Bank was involved. With the exception of one Power Project, one Education Project, and a few Urban Development and Transportation Sector Projects, the Bank's loans often accounted for over 30 percent of each project's total budget. Through its policy and program advice and lending commitments, the World Bank became a partner in the development and strengthening of the Korean economy during the 1980s.

The Bank's role in Urban Transportation in Korea began in 1980 with a review of the urban transportation situation in major cities. The Bank identified the need for: (i) improving traffic and transportation management, (ii) formulating urban transportation policies, (iii) strengthening key institutions, and (iv) improving coordination among various national and local govern-



*Photo: Keum Yong Choi, The World Bank Photo Library, 1980.*

ment institutions. With Bank financing, the Government subsequently undertook Transportation Improvement Studies in the major cities, which formed the basis for subsequent Urban Transportation Projects in Korea. Based on these studies, the Bank financed three Urban Transportation Projects in Seoul, Inchon, and Taegu. The projects included physical upgrading of infrastructure, transportation investment planning, and training in transport system management techniques (TSM). The Bank's emphasis on TSM rationalized the Korean practice of increasing infrastructure capacity. The Bank contributed its experience from other countries, and the Koreans focused on maintaining a successful project implementation track record. Both parties under-

stood each other's differing viewpoints and worked together to resolve conflicts when necessary. An open dialogue and the strong relationship between the two partners enabled project design changes to be made during implementation to compensate for differences identified in project formulation.

The Bank continued to support the country's initiatives in the Transportation Sector with financial and technical assistance for a Highway Sector Project and two Road Improvement Projects. The Bank had been involved in the development of the Highway Sector since the Government's Second Five-Year Development Plan. The project loans focused on increasing and improving the national, provincial, and county networks of roads and on strengthening the implementing agency, the Bureau of Public Roads. These projects were a high priority for the GOK because they opened remote regions to capital investment.

The Bank carried out a Transportation Sector Survey in 1983 which concluded that although most of the planned transport investments pursued appropriate development priorities, the utilization of existing equipment and facilities could be increased considerably. The increasingly complex traffic patterns, higher traffic densities, the growing maintenance requirements of an expanded transportation system, and the need to conserve energy demanded maximum efficiency and the judicious use of scarce investment capital. The Bank agreed with the Government's focus on selectively increasing transportation capacity, enhancing transportation efficiency, and strengthening maintenance activities.

The Bank provided financing assistance to six Urban Development Projects. These projects were intended to: (i) reduce inter-regional disparities, (ii) improve Pusan's urban management and finances, (iii) increase the role of credit in the Housing Sector, (iv) provide affordable housing to lower income families, and (v) develop the capabilities of the Korea Land Development Corporation (KLDC). The six loans accounted for \$560 million of the total loan funds, ranking the sector third behind Transportation and Finance in the 1980s.

The movement toward higher-end technological output demanded more engineers, managers, and technicians who could cope with increasingly sophisticated technical tasks. To support the transition from a labor-intensive industrial system to a more skill-intensive and high-technology focused one, the three projects in the Education Sector were meant to increase the supply of higher-quality technological manpower and improve science and technology education at the college and graduate school levels.

Investment by the Bank in the Industry Sector focused on providing resources to the key financial institutions serving the small and medium machinery industry (e.g. SMIB, CNB, KLB, and KTDC). In addition, ten Bank

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loans were made to improve procedures for investment appraisal, technical assistance, training, staff development, and resource mobilization and allocation. The loan funds allocated to this sector remained relatively constant from the 1960s to the 1970s, increasing from \$249 million to \$269 million.

The Bank also provided assistance in the Water Supply and Sanitation Sector by providing funds for four Community Water Supply Projects. The projects were designed to: (i) relieve water shortages, (ii) expand the water supply to satisfy the residential and industrial needs of multiple municipalities, and (iii) preserve water quality while reducing the levels of leakages.

The Bank carried out an Energy Sector Survey in 1985. The report identified the need to: (i) make better use of imported gas, (ii) deregulate the pricing of petroleum products, (iii) loosen the controls on the petroleum and coal industries, (iv) encourage competition within and between fuels when technically feasible; (v) lower the cost of the Power Sub-Sector Investment Program; (vi) achieve a more balanced energy conservation strategy, and (vii) improve environmental monitoring. The Bank financed two Electric Power Projects in the 1980s. The later project focused on improving the economic efficiency of electricity utilization through improved demand forecasting, load management, investment planning, a more innovative tariff structure; and institution building.

The Bank's loans in the Agriculture Sector declined in the 1980s, with total funds approved dropping to \$153 million from \$435 million in the 1970s. The Bank focused on four projects, split into two groups: (i) those attempting to provide additional credit to farmers, and (ii) those designed to increase the marketing efficiency and production of fruits and vegetables.

## *2. Effectiveness*

The Structural Adjustment Loans were successful in helping to stabilize the country's macroeconomic performance in the 1980s. Progress in developing a technology-intensive industrial structure, promoting the growth of SMI, and furthering the adjustment of distressed industries was significant.

The six Financial Sector Projects helped the GOK finance a wide range of enterprises, including small-scale enterprises (SSE) through the Citizen National Bank. Moreover, the history of lending to various financial institutions through the 1960s and 1970s enabled the Bank to develop an effective dialogue with the GOK on Financial Sector policies and reform issues during the 1980s. Finally, the Financial Sector Loans enabled further strengthening of many of Korea's key financial institutions (e.g. KDB, KLB, and CNB).

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The Road Improvement and Highway Sector Projects were effective in supporting the Government's efforts to promote economic development in the provinces and rural areas by reducing transportation costs and stimulating greater productive investment. Much of the tertiary network of roads was improved to all-weather quality, maintenance organizations were established, and preparations began to facilitate future investments in the sector.

The Seventh Railway Project Loan continued to address the same sub-sector and institutional objectives the Bank had emphasized earlier; namely, the loan helped expand capacity to meet increasing passenger and freight volumes and strengthened KNR's capacity. Although the project did not address KNR corporate autonomy, the commercial accounting, costing, marketing, and management information systems developed under the project increased KNR's institutional capacity and operational efficiency significantly.

The National Urban Land Development and Housing Projects successfully addressed the deficiencies in housing availability and housing policies and strengthened the Housing Sector and land development institutions, especially the KLDC. The Bank stressed the need for a satisfactory mechanism to promote consultation and coordination between the KLDC and the Korea National Housing Corporation (KNHC) in order to promote housing construction.

### *3. Main Lessons*

The Bank's approach and Korea's strategy for liberalizing the Financial Sector to aid economic development in the 1980s were characterized by varying policy emphases. The GOK wanted to introduce more competition by developing a non-bank financial sub-system, while the Bank wanted to make the commercial banks more market-oriented. The GOK's decision to pursue its approach brought some important lessons, such as:

- ❖ Macroeconomic stability, particularly price stability, is an essential precondition for the successful liberalization of interest rates. Financial liberalization should not be rushed without examining the impact on the real sector of the economy. The GOK, despite its announced intention, maintained control over bank interest rates and intervened in credit allocation decisions to stave off the massive bankruptcies of highly-leveraged corporate borrowers. A different approach could have generated financial instability and led to pressures to terminate the liberalization program.
- ❖ Liberalization of interest rates must be undertaken gradually. To maintain realistic levels in real lending rates, nominal lending rates must be adjusted in line with inflationary expectations. A sudden interest

rate liberalization in a period of high and fluctuating inflation could have led to unrealistically-high real interest rates, causing financial distress for firms and banks.

The successful implementation of the Second Structural Adjustment Loan (Loan 2354-KO) and other complex project loans heavily influenced by the strong work ethic, discipline, and tenacity of the Korean management team and staff. The commitment to development, coupled with the presence of a dynamic entrepreneurial mindset, enabled the country to meet and overcome numerous macroeconomic policy challenges during the decade. A strong political commitment on the part of policymakers, with the full support of technocrats in the core economic Ministries, were responsible for the success of the structural adjustments.

During the 1980s, Korean policymakers considered Bank analyses and recommendations seriously when formulating development priorities and macroeconomic strategies. The Bank worked closely with the Koreans during this period to ensure that the Government understood the rationale behind the Bank's views, and the Bank accepted practical solutions where necessary in finalizing project designs. Such an approach was appreciated by the Koreans and further strengthened the partnership.

The GOK preferred to use domestic resources for funding technical assistance and training when appropriate and domestic funds were available. In these situations, the Bank's comparative advantage lay in introducing new and innovative ideas and feasible technical solutions.

Korean agencies such as KMPA were quite capable of implementing project investments that were within their immediate control. However, progress was more difficult when coordination and cooperation with other agencies was involved. The need for coordination across agencies became an issue in the implementation of complex projects. The Bank performed a significant advisory role in this respect, which promoted inter-agency coordination.

Lessons learned in the Transportation Sector Projects included:

- ❖ The cost and scheduling of land acquisitions should be estimated carefully when land acquisition is in the implementation stage to avoid project delays.
- ❖ It is difficult to forecast traffic growth in rapidly-expanding economies. In many of the projects, demand far exceeded the estimates or available investment resources (e.g. container ports).

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## VI. THE EARLY NINETIES

In the late 1980s, as Korea's per capita income approached the Bank's graduation benchmark, the Bank prepared to reduce its operations in the country. In the phase-out period, the GOK saw the need for Bank advice and assistance in addressing social concerns, social infrastructure deficiencies, and environmental problems, areas which had been neglected relative to other sectors in the 1970s and 1980s. Furthermore, the Bank's assistance should provide institutional strengthening and coordination, sub-sector analysis, and investment programming. Korean authorities believed the Bank could make these contributions through selective project operations and analytical work at a relatively modest cost.

Based on the continued success of the economy, Korea graduated from the Bank in the Bank's fiscal year 1995. However, the Bank and the Korean authorities agreed that if economic conditions deteriorated or if political reunification of the peninsula took place, graduation would be reviewed and either prolonged or suspended.

### A. ECONOMIC SITUATION

Due to rapid growth over the 1960-1990 period, the Korean economy became the tenth largest economy in the world by the early 1990s. Financial Sector liberalization became increasingly important, but this was complex given past policies in Korea and the vested interests in the business sector.

Economic growth in Korea slowed after 1988, with GNP growth of 6.8 percent in 1989. However, the Korean economy continued to prosper due to domestic rather than export-generated demand. In particular, a rapid increase in private consumption and a government-driven construction boom drove growth during this period. In 1992, after a period of five years in which GNP growth averaged over 10 percent, per capita GNP reached \$6,500. This consistently strong growth caused the economy to "overheat" in the early 1990s. Korea experienced serious labor problems and faced daunting challenges in the areas of trade, finance, technology, and social welfare.

From 1989 to 1991, the economy experienced labor shortages, and inflation accelerated. These two problems, coupled with annual increases in private consumption (10 percent) and construction (20 percent) which far exceeded GNP growth (8 percent), caused a significant increase in domestic demand and the subsequent overheating of the economy. Rising labor costs compounded the problem. Although the frequency of labor disputes declined sharply after 1990, nominal wages in manufacturing continued to increase

rapidly at an average rate of 20 percent from 1989 to 1991. The rapid wage increase resulted from a tight labor market, as evidenced by the unemployment rate of 2.3 percent. With the introduction of a more democratic political system, it became more difficult to resist pressure from labor for rapid and large wage increases. Labor shortages were caused by improved family planning, the reduced migration of rural workers that had supplied the manufacturing industries during the 1960s and 1970s, and the expansion of secondary education to workers in the urban areas. The GOK looked to additional sources (e.g. females, senior citizens, and the disabled) to meet incremental labor needs. However, it resisted adding foreign guest workers for fear of possible adverse social impacts.

While domestic demand increased rapidly, exports grew at an average rate of only 3 percent during 1989–1991, a sharp contrast to the average of 20 percent during 1986–1988. Meanwhile, average imports grew over 15 percent. These trends reversed in 1992, with exports growing at 12 percent and imports rising by only 7.5 percent. The lackluster performance in exports was caused by a sluggish world economy and an erosion in Korea's export competitiveness. Currency appreciation, which was intended to contain the external surplus and rising inflationary pressures, blunted Korea's competitive edge relative to regional competitors who were producing labor-intensive exports. The labor shortage and rising wages, the resulting decline in productivity, and the slow rate of technology upgrading also hurt Korea's competitiveness in world markets. Because domestic demand continued to rise, the current account balance worsened steadily after 1989, eventually turning into a deficit in 1990 (\$2 billion) and 1991 (\$9 billion). Interest rates and post-Gulf War oil prices were no longer offered an advantage to Korea. Accordingly, the country's external debt increased, reaching \$39 billion by the end of 1991.

The Government knew that further Financial Sector liberalization was needed for economic recovery. The GOK's attempts to liberalize the domestic Financial Sector in the 1980s had achieved only limited success. In August 1991, the Government announced a new four-phase interest rate deregulation program. With the assistance of the Bank, financial liberalization continued and helped strengthen the Industrial Sector while fostering an industrial transformation.

Changes in Korea's Industrial Sector were characterized by a decline in light industry. High wages, poor productivity increases, and frequent labor disputes began to push industries away from the labor-intensive Light Industry Sub-Sector. The Government realized that it needed to enhance productivity to continue its industrial transformation and decided to promote technology development, which was identified as one of the top priorities in the Seventh Five-Year Development Plan (1992-96).

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In the 1980s, significant progress was made in improving social welfare, particularly in the areas of health insurance and housing. Poverty decreased substantially in the wake of rapid economic growth; however, the lower- and middle-income classes felt a sense of “relative deprivation.” The distribution of wealth, if not income, was perceived to be skewed considerably.

Even with the economic difficulties in the early 1990s, it was generally believed that the Korean economy would not face serious constraints in achieving its medium- and long-term macroeconomic targets, barring major external shocks. Rather, the country’s real challenge was to join the ranks of the industrialized countries by the end of the century. Such an achievement depended on the GOK’s ability to: (i) improve the labor/management relationship and alleviate the labor shortage problem; (ii) continue liberalization efforts, especially in the Agriculture and Financial Sectors; (iii) accommodate industrial restructuring with a greater emphasis on automation and high value-added outputs; (iv) enhance equity without undermining growth potential; and (v) balance continued growth with environmental preservation.

#### B. KOREA’S DEVELOPMENT FOCUS

As Korea’s competitive edge in labor-intensive industries became more limited, the Government emphasized the need for moving industry toward more technology-intensive production. To achieve this objective, it created an elaborate legal and institutional framework that established the Public Sector’s role in coordinating and implementing R&D programs and provided incentives for Private Sector investment in R&D. The GOK also focused on developing technological expertise in its key national institutes (e.g. KIST, KBSC, and NITI) and worked to improve the quality of basic science education in secondary schools and raise the scientific awareness of the general public.

Korea’s per capita energy consumption in 1991 was 2.4 tons of oil equivalents (toe), making Korea the second highest energy consumer in Asia after Japan. The energy import bill represented over 15 percent of Korea’s total imports and about 18 percent of its export earnings. The country’s high dependence on imported energy made the Korean economy extremely vulnerable to external factors. To reduce this vulnerability and maintain a sustainable energy strategy, the GOK initiated measures in areas such as energy diversification, deregulation, conservation, and environmental protection.

The rapid industrialization of the economy had damaged the country’s environment, and air, water, and noise pollution had become major problems. Waste disposal, especially in densely-populated areas, was also a growing concern. Soil pollution and water from livestock waste and agriculture chemicals affected the conservation of soil, forests, and fisheries. More efficient methods of production were needed to conserve natural resources and reduce the pressures on the environment.

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Given the GOK's objectives, Bank lending during the early 1990s focused primarily on the Social Sectors, environmental improvement, institutional development, and the transfer of technology. Up until the 1990s, the Social Sectors had received less attention and were areas in which Korea's knowledge and experience lagged behind the country's level of economic development. The new focus on the environment, coupled with continued emphasis on institutional development, was welcomed by the Korean authorities.

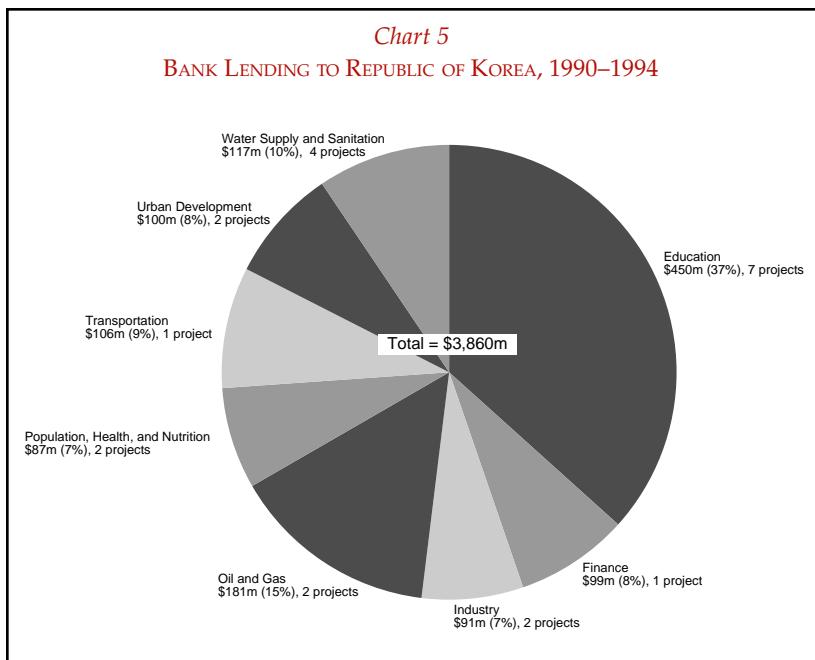
### C. WORLD BANK ASSISTANCE

The continued strong growth of the Korean economy had convinced many of the World Bank's partners that Korea was ready to graduate from lending and join the world's economy as a developed nation, and they put pressure on the Bank to end its assistance to Korea. However, the GOK believed it was still too soon for Korea to graduate. The Government valued its relationship with the Bank, but it complied with Bank policy and agreed to graduate from the Bank in 1994.

#### *1. Bank Program Highlights*

The 1990s marked the final chapter of a very productive partnership for Korea and the World Bank. The Bank continued to pursue its assistance strategy in this phase-out period, although the lending focus shifted from Transportation and Finance to the Social and Environment Sectors. The Bank completed five additional Sector Reports and one additional Economic Report before 1994, and it supported 21 project loans in many different sectors (e.g. Education, Water Supply and Sanitation, Oil and Gas, Transportation, Finance, Industry, and Social Sectors). The Bank disbursed approximately \$1.2 billion during the early 1990s, or 15 percent of the total funds it disbursed to Korea from 1962–1994.

To increase access to international capital markets with the phase-out in development financing, the GOK realized that it needed to reform its Financial Sector. Historically, Korea's Financial Sector had been used as an instrument of industrial policy, but the use of policy loans and controlled interest rates imposed significant efficiency costs in the rapidly growing and complex Korean economy. Recognizing the need for reforms, the GOK in April 1992 requested the Bank's assistance in preparing a blueprint for the liberalization of the Financial Sector and market opening. In response, the Bank carried out a comprehensive Financial Sector Study, completed in December 1992, which became a key input in the Financial Sector reform program announced by the Government in mid-1993.



Specific reforms under the GOK's program were:

- ❖ interest rate liberalization
- ❖ increase autonomy in the management of banks
- ❖ reform of policy loans
- ❖ management of monetary policy
- ❖ bank supervision
- ❖ capital account liberalization.

The first phase of implementation started in July 1993, and the second phase of reform began in November 1993. The reform program adopted by the GOK was consistent with the recommendations made in the Bank's study. Over 80 percent of lending rates and approximately 60 percent of deposit rates in Korea became market-determined. This Financial Sector reform program was well-received by the international financial community. The Financial Intermediation Project (Loan 3689-KO) supported the Government's efforts and assisted it in deregulating the financial system.

In addition to the Financial Sector Report, the World Bank completed two other sector reports that focused on Gas Utilization and Transportation. Specifically, the Gas Utilization Study documented Korea's dependence on imported energy and helped the GOK assessed the value of liquefied natural gas (LNG) in meeting the country's long-term energy needs. The Bank's purpose was to: (i) establish the scope for economic use of gas in Korea; (ii) as-

sess the viability of alternate investment scenarios in LNG infrastructure; (iii) outline the possible contribution of LNG to a pollution abatement strategy; and (iv) review the existing institutional and policy frameworks regulating LNG use.

The Transportation Sector Study focused on Korea's challenges in managing the supply of, and demand for, its multi-modal transportation network. Demand had been outpacing supply, yet pricing policies were not effective in alleviating this problem because they were not based on market mechanisms. The Bank assisted the Government by: (i) reviewing the state of transportation in the country and its future direction, (ii) assessing near-term financial resource requirements, (iii) examining options for pricing and regulatory reforms, and (iv) identifying innovative public and private financing options.

Project loans approved during the 1990s supported many sectors including: Education; Oil and Gas; Transportation; Urban Development; Industry; Population, Health, and Nutrition; and Water Supply and Sanitation. The Oil and Gas Loan assisted in the investment phase of an expansion program for a nationwide gas utilization system, which will have significant environmental benefits and improve the efficiency of energy use in Korea. This loan was complemented by the Petroleum Distribution and Sector Management Improvement Projects. The Education Sector received \$450 million, the highest



*Photo: Keum Yong Choi, The World Bank Photo Library, 1980.*

amount of loan funds, as the GOK sought to improve the quantity and quality of its research, facilities, and equipment and to raise the quality of its science and vocational training programs. One particularly innovative project (Loan 3468-KO) established a computerized interlibrary network linking 37 institutions to enhance information access for students, faculty, and researchers. Other project loans sought to improve the efficiency of Korea's Energy Sector by enhancing the reliability of petroleum supply and increasing the country's LNG capacity. Public hospitals were built to increase medical access for the rural and urban poor, subways and ports were expanded, regulatory reforms were introduced in the Housing Sector, and health hazards in water and wastewater facilities were reduced.

## *2. Effectiveness*

Six of the twenty-one projects that were approved and implemented between 1990 and 1994 have yet to be completed (as of February 1999). The funds for these projects have not been disbursed completely, so evaluation of the effectiveness of these loans is pending.

Of the 15 loans that were completed, seven focused on the Education Sector. These project loans met their respective objectives successfully. Equipment and facilities were improved, the quality of vocational high schools (VHS), as well as the quality and capacity for skill training in selected VHS, was also greatly improved. The quality of teaching throughout the country also improved. The effectiveness of these loans is significant because in these projects, the Bank dealt with several new implementing agencies for the first time. Their strong performance reinforced the Koreans' long-standing reputation as excellent project implementers.

In the Housing Sector, major housing and land reforms were completed. The amount of land available for development increased from 16 percent to 41 percent of total supply, zoning and permit processes were decentralized, and the phase-out of inefficient "permanent rental" housing units began.

Institutional objectives were also achieved in the Water Supply and Sanitation Projects. However, financial objectives were not met because the pricing policies instituted by the GOK failed to support cost structures. While non-revenue water controls were successful, tariffs did not keep pace with legal covenants. Thus, the true benefit of these projects came from sector policy improvement.

### *3. Main Lessons*

The projects in this phase-out period followed a pattern similar to those in previous decades. Project effectiveness depended on the level of GOK commitment, so a project's potential impact rose substantially if it fit into the GOK's development policy for the sector at that time. Along similar lines, if a project's policy reforms were conditionally linked to the GOK's broad directions, as in the case of the Housing Project (Loan 3329-KO), the Bank had little leverage to insure that the project would proceed according to design.

In the Education Sector, the Bank was active in assisting Korea to: (i) meet the requirements for skilled scientific and technical manpower, (ii) improve environmental research, development and education, (iii) improve the quality of science and vocational education and university-level science and technology research, and (iv) establish library computerization on a national scale. These Bank initiatives supported the Government's efforts in technology-intensive industrial development and technological innovation to help Korea develop sophisticated products and remain competitive in export markets.

An important lesson learned in the numerous education projects was that Bank supervision requirements could be reduced significantly by combining Bank missions. Rather than using the "single mission-single project" approach, the Bank conducted its supervision for all of the education projects in a single mission. This innovative approach increased the Bank's efficiency and reduced staff weeks considerably for several of the education-related projects.

The Water Supply Projects gave the Bank two important lessons to apply to other countries. In the Urban and Water Supply and Sanitation Sectors, a major Bank contribution was support for the rationalization of sector policies through the strengthening of institutional capacities for investment planning and financial management (e.g. through the Kwangju and Seoul Sewerage, Pusan and Taejon Sewerage and the Juam Regional Water Supply Projects). The Juam project improved and expanded water supply in one of the poorest regions in Korea, while the sewerage projects in the four major cities helped address environmental issues, modern technology, and institutional needs. The Bank drew together its diverse experiences in various Urban Sub-Sectors and applied them to the more general issues of urban management and transportation in the Pusan Urban Transport Project. The Housing Project enabled the GOK to address policy issues in the sector, which had emerged as an area of concern to the GOK following the severe escalation in housing prices. The project focused on formulating a framework for housing policy development and an agenda for sector policy reform.

In the Social Sector, the Bank assisted with a Health Technology Project to improve and modernize private non-profit hospital facilities. The Public Hospital Modernization Project included sector policy studies and an action plan on health finance. Economic work on income and wealth distribution, another area of high priority to the Government, enhanced the understanding of many Social Sector concerns.

## VII. CONCLUSIONS

The recent East Asian financial crisis aside, Korea was a success story of development. A country that was devastated by civil war, had its capital city occupied twice by outside forces, received a flood of refugees from the North, suffered wrenching dislocations of population and economic activity, and which was not endowed with any significant natural resources had, in the space of little more than a single generation, gone from “basket case” to graduation from Bank lending by the end of 1994. How did Korea accomplish this, and what was the Bank’s role in this development?

*First*, Korea’s spectacular real GDP growth was driven principally by surging exports. *Second*, this export drive was based mainly on price competitiveness. *Third*, this price competitiveness resulted because labor productivity gains regularly outstripped wage increases by substantial margins and because the Government generally supported export promotion policies. Central to this pro-export policy regime was an effective exchange rate which, for the most part, was kept low relative to those of Korea’s competitors. The flow of subsidized credit to exporters from the nationalized banking system also supported exports. *Fourth*, two major factors in controlling wage increases were the effort by authorities to restrain the power of labor unions and the large number of lower-paid women who entered the workforce. At the same time, the quality of the workforce was upgraded continually by an aggressive education policy. *Fifth*, consumption (especially of imports) was restricted, while saving and investment were encouraged vigorously to maximize capital formation. *Sixth*, since Korea itself possessed no natural resources, its export drive was based essentially on the efficient processing of imported raw materials. Its capital equipment and technology were likewise imported. Thus, imports continued to rise with export and GDP growth, and the current account remained in deficit for the most part. This deficit was financed by external borrowing, which created a large amount of foreign debt for Korea.

Government policies resulted in real GDP growth averaging 10 percent annually between 1962 and 1994, with a corresponding rise in per capita income from under \$100 to over \$10,000. This spectacular performance was fueled by annual export growth of 20 percent in real terms, while savings and investment rose sharply and exceeded 30 percent of GDP.

The Bank played a major role in Korea’s development effort, not only through its economic and sector analysis and policy advice but also through a diversified lending program which responded to the changing needs of the fast-growing economy. In the early years, the Bank focused on lending for Agriculture, Irrigation, Rural Development, Small and Medium Industry, Transportation (roads, ports, and railways), Regional and Urban Develop-

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ment, and Education. In later years, priority was given to Social (Education, Health) and Social Infrastructure (Housing, Water Supply and Sanitation, and Sewerage), as well as to improving technology, R&D, and environmental protection. The Bank paid particular attention to institutional strengthening and the coordination of sector strategies, areas in which the Korean authorities requested the Bank's advice and valuable cross-country experience.

At the same time, the Bank had the unique opportunity to learn from the Korean development experience. The Bank gained lessons from Korea in areas such as: (i) planning and investment for scientific and technological excellence in the Education Sector; (ii) Industrial Sector restructuring; (iii) technology acquisition, financial development, and commercialization using an institutional framework aimed primarily at building an indigenous technological capacity; and (iv) small- and medium-size industry sub-contracting and development. The Bank also had the opportunity to help adapt and transfer the developed country experience to an industrializing economy in the areas of health insurance, minimum wages, and social security. In doing so, the Bank gained experience and expertise that could be applied to other developing countries.

The Bank also gained from intensifying its collaboration with Korea's concessional loan program to obtain benefits for other borrowing countries through co-financing and technical assistance in sectors of Korean expertise (e.g. construction, R&D, small and medium industries, science, and technology manpower). As Korea positioned itself for an enhanced international role, the Government increased its contributions to IDA, entered into a co-financing framework agreement with the Bank, and created a consultant trust fund to attract more Korean experts for Bank work. Therefore, contributions on both sides helped prolong a long and constructive relationship and brought major benefits to all concerned.

## ANNEX 1

### CHRONOLOGICAL LISTING OF WORLD BANK INVOLVEMENT WITH THE REPUBLIC OF KOREA

#### 1960 - 1969

##### *Economic Reports Completed by the World Bank – Date Published (Report #)*

1. Korea: The Economy – February 1962 (FE 22)
2. Korea: Current Economic Position and Prospects – April 1963 (FE 29)
3. Korea: Current Economic Position and Prospects – August 1964 (FE 38)
4. Korea: Memorandum on Economic Developments – March 1965 (FE 42)
5. Korea: The Economy – June 1966 (FE 55)
6. Korea: Second Five-Year Plan – October 1966 (AS 116)
7. Korea: Current Economic Position and Prospects – January 1968 (AS 133)
8. Korea: Current Economic Position and Prospects – March 1969 (EAP 4)

##### *Project Loans Completed by the World Bank*

1. First Railroad Project
2. Second Railroad Project
3. First Korea Development Finance Corporation (KDFC) Project
4. Technical Assistance Project – Transportation
5. Pyongtaek – Kumgang Irrigation
6. First Education
7. Second KDFC Project Loan

#### 1970 - 1979

##### *Sector Reports Completed by the World Bank – Date Published (Report #)*

1. Industrial Development Problems and Programs – November 1971 (PI 9)
2. Education Sector Review – March 1972 (PE 45)
3. Korea: KDFC Special Study – March 1973 (1093 – KO)
4. Korea: Report on the Development Bank – June 1973 (186 – KO)
5. Agricultural Sector Survey – November 1973 (213a – KO)
6. Korea Growth and Change in Industry – May 1975 (984 – KO)
7. Education Sector Memorandum – February 1977 (1471 – KO)
8. Education Sub-Sector Memorandum on Higher Technical Training – June 1978 (1927 – KO)
9. Korea: Development of the Machinery Industries – March 1979 (2130 – KO)
10. Structure of Agricultural Credit – August 1979 (2665 – KO)

##### *Economic Reports Completed by the World Bank – Date Published (Report #)*

1. Korea: Economic Situation and Prospects – March 1970 (EAP 12)
2. Korea: Economic Situation and Prospects – September 1971 (EAP 25)
3. Korea: Economic Situation and Prospects – November 1972 (EAP 33)
4. Korea: Current Economic Position and Prospects – February 1974 (332 – KO)
5. Korea: Current Economic Position and Prospects – May 1975 (768 – KO)

6. Korea: Growth and Prospects of the Economy – February 1977 (1489 – KO)
7. Korea: Country Economic Memorandum – August 1978 (2162 – KO)
8. Korea: Rapid Growth and Search for New Perspectives – May 1979 (2477 – KO)

*Project Loans Completed by the World Bank*

1. Third Railway Project – April 1970
2. First Integrated Dairy Beef Project
3. Third KDFC Loan
4. First Highway Project
5. Yong San Gang Irrigation - Stage I
6. First Agricultural Credit Project
7. Fourth Railway Project
8. Second Education Project
9. Fourth KDFC
10. First Port Development Project (Pusan)
11. Korea Seeds Project
12. Kyongju Tourism Project
13. Second Highway Project
14. Integrated Agricultural Products Processing Project
15. Secondary Cities Regional Project
16. First Korea Development Bank
17. Third Education Project
18. First Program Loan
19. Fifth Railway Project
20. Fifth KDFC Loan
21. Second Integrated Dairy Development
22. Small and Medium Industry Bank (SMIB)
23. Third Highway Project
24. Second Program Loan
25. Rural Infrastructure Project
26. Mi-ho Watershed Area Development
27. Second Agricultural Credit Project
28. Second Development Bank Project
29. Yong San Gang Irrigation - Stage II
30. Second Port Project
31. Sixth Long-Term Credit Bank Project
32. Heavy Machinery Project
33. Fourth Education Project
34. Ogseo Area Development - Stage 1
35. Second SMIB Project
36. Second Rural Infrastructure Project
37. Sixth Railway Project
38. Third Development Bank Project
39. Seventh Long-Term Credit Bank Project
40. Fourth Highway Project

41. Chungju Multipurpose Project
42. Electronics Technology Project
43. Third SMIB Project
44. Second Gwangju Regional Project
45. First Population Project
46. Gojeong Power Project

### **1980 - 1989**

#### *Sector Reports Completed by the World Bank – Date Published (Report #)*

1. Financial Sector Report – November 1980 (3288 – KO)
2. Sector Survey of Science Education – January 1982 (3775 – KO)
3. Korea: Labor and Export-Led Industrialization – September 1983 (4485 – KO)
4. Korea: Transport Sector Issues – December 1983 (4423 – KO)
5. Korea: Agricultural Sector Survey – April 1984 (4709 – KO)
6. Korea: Energy Sector Issues – January 1985 (5307 – KO)
7. Korea: Container Port Site Selection and Regional Development – May 1986 (6005 – KO)
8. Korea: Housing Finance System – June 1986 (5807 – KO)
9. Korea: Planning for Fishing Ports Development – June 1986 (5966 – KO)
10. Korea: Spatial Strategy Review – September 1986 (5868 – KO)
11. Korea: External Liability Management – November 1986 (6437 – KO)
12. Korea: The Korean Labor Market: Emerging Policy Issues – February 1987 (6478 – KO)
13. Korean National Railroad: Review of Operational Efficiency – June 1987 (6692 – KO)
14. Korea: Sewerage and Wastewater Management Issues, Options and Recommendations – April 1988 (7061 – KO)
15. Lessons of Financial Liberalization in Asia: A Comparative Study – November 1988 (7512 – AEP)
16. Korea: Health Insurance and the Health Sector – June 1989 (7412 – KO)

#### *Economic Reports Completed by the World Bank – Date Published (Report #)*

1. Korea: Current Developments and Policy Issues – May 1980 (3005 – KO)
2. Korea: Adjusting to a New World Environment – June 1982 (3885 – KO)
3. Korea: Development in a Global Context – June 1984 (5102 – KO)
4. Korea: Managing the Industrial Transition – July 1986 (6138 – KO)
5. Korea: Country Economic Memorandum – July 1986 (6211 – KO)
6. Korea: Managing an External Surplus: Monetary and Trade Issues – June 1988 (7024 – KO)
7. Korea: Country Economic Memorandum – October 1989 (7920 – KO)

#### *Project Loans Completed by the World Bank*

1. Sector Program on Higher Technical Education
  2. The Citizens National Bank
  3. Seventh Railway Project
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- 4. Second Agricultural Products Processing
  - 5. Fourth Development Bank Project
  - 6. Eighth Long Term Credit Bank Project
  - 7. Third Agricultural Credit Project
  - 8. First National Urban Land
  - 9. Fourth Small and Medium Industry Bank Project
  - 10. First Water Supply Project
  - 11. First Industrial Finance Project
  - 12. Technology Development Project
  - 13. Agricultural Wholesale Marketing
  - 14. Second Citizens National Bank
  - 15. Second National Urban Land
  - 16. Small and Medium Machinery Industry (4 Loans)
  - 17. Provincial and County Roads
  - 18. Coal and Cement Distribution
  - 19. Industrial Finance Project (3 Loans)
  - 20. Second Water Supply Project (Nagdong)
  - 21. Second Structural Adjustment Loan (SAL)
  - 22. Jeonju Regional Development Project
  - 23. Highway Sector Project
  - 24. Program for Science and Technology Education
  - 25. Second Technology Development Project
  - 26. Metropolitan Region Water Supply Project
  - 27. Small and Medium Industry Project (3 Loans)
  - 28. Seoul Urban Transportation Project
  - 29. Fourth Agricultural Credit Report
  - 30. Second Industrial Finance (3 Loans)
  - 31. Seoul - Pusan Corridor Project
  - 32. Namgang and Taegu Water Supply Project
  - 33. Second Power Project
  - 34. Urban Land Development Project
  - 35. Pusan Port Project
  - 36. Pusan Urban Management Project
  - 37. Housing Finance Sector Project
  - 38. Kyonggi Regional Transport Project
  - 39. Taegu Urban Transport Project
  - 40. Third Technology Development Project
  - 41. Technology Advancement Project
  - 42. Road Improvement Project

**1990 – 1994\******Sector Reports Completed by the World Bank – Date Published (Report #)***

- 1. Korea: Gas Utilization Study – January 1990 (8142 – KO)
  - 2. Korea: Issues in the Distribution of Income and Wealth – January 1991 (9281 – KO)
  - 3. Korea: Financial Sector Study – July 1993 (11373 – KO)
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4. Korea: Transport Sector: Resource Mobilization Challenges and Opportunities – April 1995 (13847 – KO)
5. Tax Reform in Developing Countries – December 1997 (17284)

*Economic Reports Completed by the World Bank – Date Published (Report #)*

1. Korea: Country Economic Memorandum – September 1992 (10733 – KO)

*Project Loans Completed by the World Bank*

1. Juam Regional Water Supply Project
2. Universities Science and Technology Research Project
3. Second Technology Advancement Project
4. Vocational Education Project
5. Third Technology Advancement Project
6. Health Technology Project - I
7. Housing Project
8. Gas System Expansion
9. Pusan & Taejon Sewerage Project
10. Vocational Schools Development Project
11. Science Education and Libraries Computerization
12. Public Hospital Modernization Project
13. Kwangju and Seoul Sewerage Project
14. Petroleum Distribution and Sector Management Improvement
15. Environmental Research and Education
16. Financial Intermediation
17. Environmental Technology Development
18. Science and Technology Education
19. Ports Development and Environment Improvement
20. Waste Disposal Project
21. Pusan Urban Transport Management

\* Note: Includes all project loans approved by December 31, 1994.

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## ANNEX 2A

**DISTRIBUTION OF BANK FUNDS TO THE REPUBLIC OF KOREA BY SECTOR, 1962 – 1994<sup>†</sup>**

<b>Loan/ Credit#</b>	<b>Org.</b>	<b>Description</b>	<b>Approval Year</b>	<b>Amount Disbursed</b>
<b>Water Supply and Sanitation Projects</b>				
20720	IBRD	First Water Supply	1981	\$81,479,314
23500	IBRD	Second Water Supply	1983	\$51,288,552
24910	IBRD	Metropolitan Region Water Supply	1985	\$89,282,424
26150	IBRD	Namgang and Taegu Water Supply	1985	\$34,009,874
34500	IBRD	Pusan & Taejon Sewerage	1992	\$33,516,232
31780	IBRD	Juam Regional Water Supply	1990	\$28,012,390
35900	IBRD	Kwangju and Seoul Sewerage	1993	\$35,770,198
38300	IBRD	Waste Disposal	1994	<u>\$19,539,005</u>
<b>Subtotal</b>				\$372,897,989
<b>Urban Development Projects</b>				
9530	IBRD	Kyongju Tourism	1973	\$24,884,191
10700	IBRD	Secondary Cities Regional	1975	\$15,000,000
17580	IBRD	Second Gwangju Regional	1979	\$51,199,661
19800	IBRD	First National Urban Land	1981	\$71,340,000
22160	IBRD	Second National Urban Land	1982	\$100,000,000
23880	IBRD	Jeonju Regional Development	1984	\$38,599,514
27040	IBRD	Urban Land Development	1986	\$150,000,000
28530	IBRD	Housing Finance Sector	1987	\$150,000,000
28010	IBRD	Pusan Urban Management	1987	\$50,000,000
33290	IBRD	Housing	1991	<u>\$100,000,000</u>
<b>Subtotal</b>				\$751,023,366
<b>Transportation Projects</b>				
250	IDA	Railroad	1962	\$16,872,694
S0040	IDA	Technical Assistance - Transport	1968	\$0
1100	IDA	Second Railway	1967	\$12,841,782
6690	IBRD	Third Railway	1970	\$39,648,571
1830	IDA	Third Railway	1970	\$18,085,884
7690	IBRD	First Highway	1971	\$53,423,018
9170	IBRD	First Port Development (Pusan)	1973	\$80,000,000
8630	IBRD	Fourth Railway	1972	\$40,000,000
9560	IBRD	Second Highway	1974	\$47,000,000
11010	IBRD	Fifth Railway	1975	\$100,000,000
12030	IBRD	Third Highway	1976	\$90,000,000
14010	IBRD	Second Port	1977	\$66,217,024
15420	IBRD	Sixth Railway	1978	\$120,000,000

<sup>†</sup>Note: Includes all project/loans approved by December 31, 1994.

<b>Loan/ Credit#</b>	<b>Org.</b>	<b>Description</b>	<b>Approval Year</b>	<b>Amount Disbursed</b>
16400	IBRD	Fourth Highway	1978	\$143,000,000
18360	IBRD	Seventh Railway	1980	\$92,962,248
22670	IBRD	Coal and Cement Distribution	1983	\$54,028,546
22280	IBRD	Provinical and County Roads	1982	\$124,325,583
26000	IBRD	Seoul - Pusan Corridor	1985	\$32,944,401
23920	IBRD	Highway Sector	1984	\$215,003,033
25140	IBRD	Seoul Urban Transportation	1985	\$24,601,085
27260	IBRD	Pusan Port	1986	\$134,500,000
29080	IBRD	Taegu Urban Transport	1988	\$30,000,000
29050	IBRD	Kyonggi Regional Transport	1988	\$111,859,868
30610	IBRD	Road Improvement	1989	\$177,210,000
38280	IBRD	Pusan Urban Transport Management	1994	\$65,147,972
37930	IBRD	Ports Development & Environment Improvement	1994	\$40,989,369
		<b>Subtotal</b>		\$1,930,661,078

### Population, Health, and Nutrition Projects

17745	IBRD	First Population	1979	\$30,000,000
33300	IBRD	Health Technology - I	1991	\$57,053,626
35160	IBRD	Public Hospital Modernization	1992	\$29,802,778
		<b>Subtotal</b>		\$116,856,404

### Oil and Gas Projects

34130	IBRD	Gas System Expansion	1991	\$80,717,300
36130	IBRD	Petroleum Distribution & Sector Management Improvement	1993	\$100,234,376
		<b>Subtotal</b>		\$180,951,676

### Industry Projects

11750	IBRD	Small and Medium Industry Bank	1975	\$29,856,707
14660	IBRD	Heavy Machinery	1977	\$80,000,000
15070	IBRD	Second Small and Medium Industry Bank	1977	\$54,988,602
17490	IBRD	Third Small and Medium Industry Bank	1979	\$59,974,227
16760	IBRD	Electronics Technology	1979	\$23,940,672
20040	IBRD	Fourth Small and Medium Industry Bank	1981	\$59,988,645
21120	IBRD	Technology Development	1982	\$47,943,766
22150	IBRD	Small and Medium Machinery Industry	1982	\$8,923,438
22151	IBRD	Small and Medium Machinery Industry	1982	\$20,169,425
22152	IBRD	Small and Medium Machinery Industry	1982	\$7,069,753
22153	IBRD	Small and Medium Machinery Industry	1982	\$9,921,875
24730	IBRD	Second Technology Development	1984	\$45,160,550
25150	IBRD	Small and Medium Industry	1985	\$530,683

Loan/ Credit#	Org.	Description	Approval Year	Amount Disbursed
25152	IBRD	Small and Medium Industry	1985	\$19,800,941
29130	IBRD	Third Technology Development	1988	\$49,082,605
32020	IBRD	Second Technology Advancement	1990	\$31,572,875
33150	IBRD	Third Technology Advancement	1991	<u>\$59,786,552</u>
		<b>Subtotal</b>		\$608,711,316

### Finance Projects

5290	IBRD	First Development Finance Corporation	1968	\$4,949,714
6220	IBRD	Second Development Finance Corporation	1969	\$19,725,686
7350	IBRD	Third Development Finance Corporation	1971	\$29,125,294
9050	IBRD	Fourth Development Finance Corporation	1973	\$39,608,661
11450	IBRD	Fifth Development Finance Corporation	1975	\$54,879,664
10950	IBRD	First Development Bank	1975	\$60,000,000
14610	IBRD	Sixth Long Term Credit Bank	1977	\$70,000,000
13380	IBRD	Second Development Bank	1976	\$75,000,000
13381	IBRD	Second Development Bank	1976	\$7,458,123
15740	IBRD	Third Development Bank	1978	\$110,000,000
16350	IBRD	Seventh Long Term Credit Bank	1978	\$100,000,000
18290	IBRD	The Citizens National Bank	1980	\$12,036,156
19320	IBRD	Eighth Long Term Credit Bank	1980	\$88,507,004
19330	IBRD	Fourth Development Bank	1980	\$99,838,595
18295	IBRD	The Citizens National Bank	1980	\$17,769,926
21440	IBRD	Second Citizens National Bank	1982	\$28,202,244
23090	IBRD	Industrial Finance	1983	\$4,930,455
23091	IBRD	Industrial Finance	1983	\$128,442,776
23092	IBRD	Industrial Finance	1983	\$119,320,960
25710	IBRD	Second Industrial Finance	1985	\$61,115,289
25711	IBRD	Second Industrial Finance	1985	\$111,941,915
25712	IBRD	Second Industrial Finance	1985	\$3,968,339
36890	IBRD	Financial Intermediation	1993	<u>\$98,717,024</u>
		<b>Subtotal</b>		\$1,345,537,825

### Electric Power and Other Energy Projects

16660	IBRD	Chungju Multipurpose	1979	\$123,989,958
17880	IBRD	Gajeong Power	1979	\$102,743,253
26710	IBRD	Second Power	1986	<u>\$185,926,776</u>
		<b>Subtotal</b>		\$412,659,987

### Education Projects

15110	IDA	First Education	1969	\$15,004,863
9060	IBRD	Second Education	1973	\$23,000,000
3940	IDA	Second Education	1973	\$20,000,000

<b>Loan/ Credit#</b>	<b>Org.</b>	<b>Description</b>	<b>Approval Year</b>	<b>Amount Disbursed</b>
10960	IBRD	Third Education	1975	\$22,500,000
14740	IBRD	Fourth Education	1977	\$22,785,735
18000	IBRD	Sector Program on Higher Technical Education	1980	\$99,855,455
24270	IBRD	Program for Science and Technology Education	1984	\$96,528,367
30370	IBRD	Technology Advancement	1987	\$16,303,755
34680	IBRD	Science Education and Libraries Computerization	1992	\$49,212,810
34690	IBRD	Vocational Schools Development	1992	\$29,036,627
33140	IBRD	Vocational Education	1991	\$29,570,546
32030	IBRD	Universities Science and Technology Research	1990	\$44,429,872
36120	IBRD	Environmental Research and Education	1993	\$52,510,897
36930	IBRD	Science and Technology Education	1994	\$156,881,417
36940	IBRD	Environmental Technology Development	1994	<u>\$88,154,362</u>
		<b>Subtotal</b>		\$765,774,706

### Agriculture Projects

6000	IBRD	Pyongtaek-Kumgang Irrigation	1069	\$44,994,533
2340	IDA	First Integrated Dairy Beef	1971	\$7,236,936
7950	IBRD	Yong San Gang Irrigation - Stage I	1972	\$33,000,000
2830	IDA	Yong San Gang Irrigation - Stage I	1972	\$15,037,103
3350	IDA	First Agricultural Credit	1972	\$10,500,000
9420	IBRD	Korea Seeds	1973	\$7,000,000
9940	IBRD	Integrated Agriculture Products Processing	1974	\$12,963,448
13190	IBRD	Miho Watershed Area Development	1976	\$28,996,259
12160	IBRD	Rural Infrastructure	1976	\$20,000,000
12180	IBRD	Rural Infrastructure	1976	\$40,000,000
11930	IBRD	Second Integrated Dairy Development	1975	\$15,000,000
13640	IBRD	Yong San Gang Irrigation - Stage II	1977	\$94,994,798
13280	IBRD	Second Agricultural Credit	1976	\$20,000,000
15300	IBRD	Second Rural Infrastructure	1978	\$94,658,623
15030	IBRD	Ogseo Area Development - Stage 1	1977	\$36,000,000
18510	IBRD	Second Agricultural Products Processing	1980	\$47,304,298
19740	IBRD	Third Agricultural Credit	1981	\$50,000,000
21110	IBRD	Agricultural Wholesale Marketing	1982	\$30,614,010
25490	IBRD	Fourth Agricultural Credit Report	1985	<u>\$25,000,000</u>
		<b>Subtotal</b>		\$633,300,008

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Loan/ Credit#	Org.	Description	Approval Year	Amount Disbursed
<b>Adjustment/Program Loans/Projects</b>				
10940	IBRD	First Program Loan	1975	\$100,000,000
12190	IBRD	Second Program Loan	1976	\$75,000,000
20710	IBRD	First Industrial Finance Project	1981	\$250,000,000
23540	IBRD	Second Structural Adjustment Loan (SAL)	1983	<u>\$300,000,000</u>
		<b>Subtotal</b>		\$725,000,000

## ANNEX 2B

### SECTOR BREAKDOWN

Sector	Amount Disbursed
Water Supply and Sanitation	\$372,897,989
Urban Development	\$751,023,366
Transportation	\$1,930,661,078
Population, Health, and Nutrition	\$116,856,404
Oil and Gas	\$180,951,676
Industry	\$608,711,316
Finance	\$1,345,537,825
Electric Power and Other Energy	\$412,659,987
Education	\$765,774,706
Agriculture	\$633,300,008
Adjustment/Program Loans/Projects	\$725,000,000
<b>TOTAL</b>	<b>\$7,843,374,355</b>

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