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CONTENTS

KEI Board of Directors	II
KEI Advisory Council	III
Preface	V

Overview and Macroeconomic Issues

Lessons from the Economic Development Experience of South Korea	1
<i>Danny Leipziger</i>	
The Role of Aid in Korea's Development.....	7
<i>Lee Kye Woo</i>	
Future Prospects for the Korean Economy.....	27
<i>Jung Kyu-Chul</i>	

Building a Creative Economy

The Creative Economy of the Park Geun-hye Administration	35
<i>Cha Doo-won</i>	
The Real Korean Innovation Challenge: Services and Small Businesses	47
<i>Robert D. Atkinson</i>	
Spurring the Development of Venture Capital in Korea.....	55
<i>Randall Jones</i>	

Economic Relations with Europe

Korea's Economic Relations with the EU and the Korea-EU FTA	65
<i>Kang Yoo-duk</i>	
130 years between Korea and Italy: Evaluation and Prospect.....	73
<i>Oh Tae Hyun</i>	
2014: 130 Years of Diplomatic Relations between Korea and Italy	81
<i>Angelo Gioe</i>	
130 th Anniversary of Korea's Economic Relations with Russia	87
<i>Jeong Yeo-cheon</i>	

North Korea

The Costs of Korean Unification: Realistic Lessons from the German Case	93
<i>Rudiger Frank</i>	
President Park Geun-hye's Unification Vision and Policy	101
<i>Jo Dongho</i>	



THE ROLE OF AID IN KOREA'S DEVELOPMENT

By Lee Kye Woo

Abstract

Korea's economic development is often cited as a model for other developing nations. One of about 60 countries whose per capita income was less than \$300 in the 1960s, only Korea was able to attain a per capita income of more than \$10,000 by 1995. Some scholars have pointed to education as the key. However, while education clearly played a significant role, Korea's spending on education was not greater than that of other developing countries at the same level of per capita income from 1962-1994. However, one underappreciated factor in Korea's development is the role of foreign aid. Official aid played an instrumental role in promoting Korea's economic and social development.

Introduction

Korea was a success case of development. A country with no significant natural resources devastated by the Korean War for three years, it rose from the ashes of the war as a “basket case” with a per capita income under \$100 in 1962 to over \$10,000 in 1995 at an average annual GDP growth of 10 percent. The Nobel laureate Professor Robert Lucas, Jr. called it a miracle.¹ Currently, Korea is the 13th largest producer of goods and services, and the 8th largest trader in the world with a per capita income of more than \$25,000, and is actively engaged in global development cooperation as a member of OECD and its Development Assistance Committee (DAC). In the 1960s, there were about 60 developing countries, including Korea, whose per capita income was less than \$300. Among these countries, Korea was the only one that attained a per capita income of more than \$10,000 by 1995. Only three countries, including Brazil, attained between \$3,000 and \$10,000 in per capita income. Aside from the Asian financial crisis period, Korea was also the first country to graduate from the multilateral development banks’ lending program and did so in the shortest time period after Singapore.

Various attempts have been made to explore the sources of Korea’s remarkable growth. For example, some scholars pointed to the human capital accumulation as the source of growth. However, its contribution to the growth path was less than 10 percent.² Undoubtedly, education, training and knowledge dissemination must have played an important role in the development process of Korea. However, during 1962-1994, the government of Korea did not spend more of its GDP on education than other developing countries at the same level of per capita income.³

Since the Korean economy’s spectacular growth rates were fueled by annual investment rates exceeding 30 percent of GDP, with a substantial part financed by official foreign assistance, this paper will examine the history of official aid to Korea and draw lessons relevant to donors and recipients of official aid. This paper argues that Korea’s economic miracle was supported not so much by the type or amount of aid received, but rather by the efficient sectoral targeting and application of that aid by donors and the Korean government.

Overview of Official Foreign Assistance to Korea

Scale and Type of Official Foreign Assistance

In the course of Korea’s social and economic development (1945-1999), total official foreign assistance amounts to about \$44 billion in current prices. This amount includes public development grants of about \$7 billion and public development loans of about \$37 billion. The total loan amount can be divided

into ODA (official development assistance) type loans of about \$6 billion (with a grant element higher than 25 percent) and OOA (other official assistance) type loans of about \$31 billion (with a grant element lower than 25 percent). Therefore, total ODA (grants plus ODA-type loans) was about \$13 billion.

Table 1-1

Official Foreign Assistance: 1945-1999
(\$ billion in current prices)

Fund	Total	Grant	Loan
ODA (grant element 25 percent +)	12.8	7.0	5.8
OOA (grant element 25 percent -)	31.2	0	31.2
Total	44.0	7.0	37.0

Donor	Total	Bilateral	Multilateral
ODA (grant element 25 percent +)	12.8	11.8	1.0
OOA (grant element 25 percent -)	31.2	11.0	20.2
Total	44.0	22.8	21.2

Source: Author on the basis of data from KOICA (2004) and Lee, J.S. (2013).

When the ODA received by Korea during 1965-1995 was compared with that of the other 59 developing countries that had per capita incomes of less than \$300 during the 1960s, Korea belongs to the 10-country group that received ODA of less than 2 percent of GDP on an average annual basis. The other 50 countries received more aid than Korea did, and as many as 15 countries received more than 10 percent of GDP a year on average. Therefore, we cannot attribute the Korean economy’s faster growth to the amount of aid Korea received.

Official development grants (\$7 billion) accounted for only 16 percent of total official capital inflows (\$44 billion) from 1945 to 1999. The rest (84 percent) were public development loans (\$37 billion), especially OOA-type loans (\$31 billion). During 1959-1999, when the official development loans were actively disbursed, OOA-type loans made up 84 percent of total official development loans. Official grants were scarcely available since 1975. This contrasts sharply with recent OECD/DAC development assistance, which is composed of mainly grants. Therefore, to the extent that official foreign assistance contributed to Korea’s successful industrialization and fast economic growth during 1962-1995, public development loans,

especially OOA-type loans, rather than official development grants, deserve credit.

Donors of Official Foreign Assistance

The major bilateral ODA donors were the United States and Japan, followed by Germany. The major multilateral donors were United Nations - Civil Relief in Korea and United Nations - UN Korea Reconstruction Agency, followed by the World Bank Group's International Development Association.

Among the public development loans of \$37 billion, about \$5.8 billion or 16 percent were loans with a grant element higher than 25 percent, which therefore belong to the ODA category. The other \$31.2 billion or 84 percent were loans with a grant element lower than 25 percent (OOA-type loans). Total public development loans of \$37 billion can also be divided into multilateral loans of \$20.5 billion (55 percent) and bilateral loans of \$16.5 billion (45 percent). ODA-type multilateral loans were only \$0.3 billion (0.8 percent) of total public development loans, and ODA-type bilateral loans were \$5.5 billion (15

percent). OOA-type multilateral loans were about \$20.2 billion (54 percent) of total public development loans, and OOA-type bilateral loans were 11 billion (30 percent).

Sectoral Allocation of Aid

Since the grants were mostly allocated to foodstuffs and emergency consumption goods, and the public development loans accounted for 84 percent of total official foreign assistance, the actual sectoral application of the public development loans reflects the Korean government's strategy for allocating aid. If the emergency structural adjustment loans received in the wake of the 1997 Asian financial crisis are excluded, the government prioritized the economic infrastructure sector (51 percent), followed by the production sectors (24 percent). The social infrastructure sector was allocated about 12 percent.

This pattern of sectoral aid allocation was almost the inverse of that pursued by average OECD/DAC donors in recent years. OECD/DAC donors prioritize social and administrative

Table 1-2 Donors of Official Development Assistance: 1945-1999 (\$ million in current prices)

Bilateral			Multilateral		
Donor		Amount	Donor		Amount
1.	US	5,542.35	1.	CRIK	457.40
2.	Japan	5,051.81	2.	UNKRA	122.10
3.	Germany	834.93	3.	IDA	102.59
4.	Saudi Arabia	123.54	4.	WFP	98.50
5.	France	101.46	5.	UNDP	69.12
6.	Austria	52.77	6.	IBRD	40.00
7.	Netherlands	17.76	7.	UNTA	32.40
8.	Australia	14.01	8.	UNICEF	14.30
9.	Denmark	10.46	9.	UNFPA	7.69
10.	Belgium	10.15	10.	ADB	6.80
11.	UK	9.68	11.	ADF	6.34
12.	Canada	8.07	12.	UNHCR	1.87
13.	Sweden	7.74	13.	Other UN Organizations	7.69
14.	Italy	6.31	14.	Other	1.86
15.	Norway	4.87	Total		968.31
16.	Switzerland	4.53			
17.	New Zealand	3.36			
18.	Other	4.18			
Total		11,808.00			

Table 1-3

Donors of Public Development Loans: 1959-1999 (\$ million in current prices; as a %)

	ODA-Type Loans (Grant Element 25 percent+)	OOA-Type Loans (Grant Element 25 percent-)	Total
Multilateral Loans	300.1 (1.6)	20,235.0 (98.4)	20,535.1 (100)
IDA	115.6 (100.0)	-	115.6 (100)
IBRD	147.0 (1.0)	14,671.9 (99.0)	14,818.9 (100)
ADB	37.5 (0.7)	5,555.7 (99.3)	5,593.2 (100)
EC	-	7.4 (100.0)	7.4 (100)
Bilateral Loans	5,528.4 (33.5)	10,959.6 (66.5)	16,488.0 (100)
Japan	2,861.3 (46.7)	3,262.8 (53.3)	6,124.1 (100)
US	1,958.8 (37.8)	3,221.2 (62.2)	5,180.0 (100)
France	-	3,488.8 (100.0)	3,488.8 (100)
Canada	0.7 (0.2)	460.4 (99.8)	461.1 (100)
Germany	305.5 (81.0)	71.5 (19.0)	377.0 (100)
Belgium	-	231.4 (100.0)	231.4 (100)
Sweden	-	160.8 (100.0)	160.8 (100)
Saudi Arabia	96.6 (100.0)	-	96.6 (100)
UK	-	62.7 (100.0)	62.7 (100)
Denmark	2.8 (100.0)	-	2.8 (100)
Netherlands	1.7 (100.0)	-	1.7 (100)
Hong Kong	1.0 (100.0)	-	1.0 (100)
Others*	300.0 (100.0)		300.0 (100)
Total	5,828.5 (15.7)	31,194.6 (84.3)	37,023.1 (100)

*Includes statistical errors

Source: Author based on KOICA (2004) and Lee, J.S. (2013).

infrastructure and services (49 percent), and give about 24 percent to the economic infrastructure and production sectors.⁴ However, OECD/DAC aid recipient countries have not duplicated Korea's economic performance. Therefore, to the extent that official foreign assistance contributed to Korea's faster growth and industrialization, we can attribute them to the Korean government's sectoral aid distribution policies and practices, which were quite different from those of current OECD/DAC assistance donors and recipients.

Evolution of Official Foreign Assistance for Korea

The history of official foreign assistance to Korea evolved over several stages in accordance with political, economic and social development processes: first, the 1945-1949 period under the U.S. military government and the Korean

government established in August 1948; second, the 1950-1959 period covering the Korean War (1950-53) and rehabilitation period; third, the 1960-1979 period featuring active industrialization and fast growth; and fourth, the 1980-1999 period characterized by economic and political stabilization and liberalization. Each of these periods will be studied in detail in the ensuing sections, with special emphasis placed on the role of different objectives and types of aid, as well as sectoral aid allocation policies and practices.

Official Foreign Assistance: 1945-49

Background

In the wake of World War II, Korea was liberated from Japanese colonial rule on August 15, 1945. After the peninsula

Table 1-4

Sectoral Distribution of Public Development Loans: 1959-1999 (\$ million in current prices; as a %)

Sector	Amount (withdrawn)	Percent	Percent excluding structural adjustment during the 1990s
Social Infrastructure and Services	3,001.5	8.1	12
1. Education	1,251.8	3.4	
2. Health/Population	428.0	1.2	
3. Housing/Water	1,321.7	3.5	
Economic Infrastructure	12,682.1	34.3	51
1. Transportation	5,321.8	14.4	
2. Communication	1,287.5	3.5	
3. Electric Energy	6,072.8	16.4	
Production	6,145.2	16.6	24
1. Agriculture/Fishery	828.2	2.2	
2. Manufacturing/Mining	5,278.5	14.3	
3. Construction/Trade/Tourism	38.5	0.1	
Multi-Sector	1,421.2	3.8	6
1. Environment/Women	613.5	1.7	
2. Area Development	807.7	2.1	
Goods Program	13,473.1	36.4	7
1. Grain Goods	1,736.3	4.7	
2. Structural Adjustment	11,736.8	31.7	
Statistical error	300.0	0.8	
Total	37,023.1	100.0	100

Source: KOICA (2004) and OECD (2012).

was divided between U.S. and Soviet spheres of influence, social, economic and political chaos in the South exacerbated humanitarian crises brought on by Japanese colonization and World War II. Such was the context in which foreign assistance arrived in Korea.

Objective, Donor, and Content of Assistance

Assistance provided to the Korean Peninsula during 1945-49 was not for economic rehabilitation and reconstruction, but primarily for emergency humanitarian relief from the traumas the country had suffered under the Japanese colonization and during World War II, and for macroeconomic stabilization.

During the period, official foreign assistance was provided

mainly by the U.S. Army Military Government in Korea, and the Economic Cooperative Administration (ECA), a U.S. government foreign assistance agency. The U.S. Army Military Government in Korea (USAMGIK) provided emergency relief and humanitarian assistance under the program called Government Appropriations for Relief in Occupied Areas (GARIOA) and rehabilitation assistance under the Economic Rehabilitation in Occupied Areas (EROA) program. However, the majority of assistance came from GARIOA.

The emergency assistance provided much-needed humanitarian relief, staving off widespread starvation, disease, and social unrest through the provision of basic necessities including foodstuffs and agricultural supplies,

Table 1-5

Evolution of Official Foreign Assistance for Korea (\$ billion in current prices)

Period	Objective of Aid	Scale and Type of Aid	Major Donors
1945-1949 U.S. Military & newly established Korean governments	<ul style="list-style-type: none"> Emergency relief from the effects of World War II and Japanese colonization 	<ul style="list-style-type: none"> All grants \$0.7 billion 	<ul style="list-style-type: none"> US/AMGIK/ECA
1950-1959 The Korean War and rehabilitation	<ul style="list-style-type: none"> Emergency relief from the effects of the Korean War Rehabilitation and reconstruction after the Korean War 	<ul style="list-style-type: none"> Mostly grants \$2.3 billion 	<ul style="list-style-type: none"> US/ECA/FOA/ ICA UN/CRIK/ UNKRA
1960-1979 Industrialization and growth	<ul style="list-style-type: none"> Economic growth based on industrialization 	<ul style="list-style-type: none"> Grants and loans mixed \$6 billion (1962-78) 	<ul style="list-style-type: none"> Japan and US Multilateral development banks
1980-1999 Stabilization and liberalization	<ul style="list-style-type: none"> Economic growth based on stabilization, efficiency, balance 	<ul style="list-style-type: none"> All loans, especially OOA-type loans, except for the period (1997), which saw grants and loans mixed \$33 billion (1979-99) 	<ul style="list-style-type: none"> Multilateral development banks Japan and U.S.

Table 2

Official Foreign Assistance to Korea: 1945-1952 (\$ million in current prices)

	U.S./ AMGIK (1945-49)	U.S. ECA/SEC (1948-52)	Total (1945-52)	
			\$	%
Reconstruction	69.8	6.0	75.8	11
Education	7.9		7.9	1
Housing/Health				
Food/Raw materials	416.8	196.0	612.8	87
Technical Assistance (TA)	7.7	NA	7.7	1
Total	502.2	202.0	704.2	100

Source: Author based on KOICA (2004).

which accounted for 35 percent and 24 percent, respectively, of total GARIOA assistance. Indeed, by 1947, foreign grain totaled 44 percent of Korea's total grain supply, while the large amount of fertilizer supplied to Korea led to huge increases in agricultural production. Assistance for reconstruction accounted for only 14 percent of the total aid provided by GARIOA (\$502,155) during the same period.

Efforts were made to implement a longer-term sustainable economic development strategy under the ECA. Although

the ECA essentially operated like GARIOA, focusing on the provision of essential supplies and commodities, its aid was conditional on the implementation of macro stabilization and fiscal austerity policies.

In 1948, when the government of the Republic of Korea (ROK) led by Syngman Rhee was established, the policy objectives of the U.S. aid program were formalized under the ROK-U.S. Agreement on Aid. The U.S. imposed a strict set of controls to ensure that aid funds were allocated and used efficiently to achieve the policy objectives. The Korean government agreed to stabilize prices, privatize properties formerly owned by the Japanese, and liberalize markets, i.e., implement fair foreign exchange rate.

The exchange rate provision was a cause of often acrimonious donor-recipient conflicts over stabilization policy. The Rhee government was intent on maximizing foreign aid receipts when in use by keeping an officially overvalued currency against the dollar.⁵ A Counterpart Fund account had to be established at the central bank where the proceeds of U.S. goods provided under the assistance program and sold in the marketplace were to be deposited. The allocation and uses of the Counterpart Fund had to be mutually agreed on by both governments.

The stabilization program suffered from policy inconsistencies and lack of support from the Korean government at the outset. Ultimately, however, the macro stabilization and fiscal austerity measures had real positive effects in checking hyperinflation and shoring up Korea's fiscal budget, as well as laying the groundwork for development. Consumer prices which had increased by as much as 86 percent in 1947 rose by only 4 percent in 1949.⁶

Early in Korea's development, a considerable amount of aid went into the education sector, resulting in a sharp reduction in illiteracy rates. During Japanese colonial rule, education was largely restricted to a few Koreans who received a Japanese education. Schools under the U.S. Military Government (1945-48) had clearly defined political and economic purposes: to convert Korean youths and adults to American-style democracy and provide basic skills training. The U.S. Military Government established civic schools for literacy and basic education of older students who were no longer qualified for compulsory primary education. Indeed, civic schools for adults that taught basic reading, writing and math were critical in sharply reducing the adult illiteracy rate within a very short time. By 1948, nearly 15,400 civic schools were established and more than one million adults were enrolled. About 15 million textbooks were printed and distributed for about three million children enrolled in primary education. The Korean language of *Hangeul* was formally reintroduced in the curriculum, and any elements of Japanese educational tradition were discarded.⁷

In step with the U.S. policy initiative on civic schools, the Education Act was passed by the newly established Korean government in December 1949, which gave civic schools a statutory status. Essentially, the Korean government implemented the same policy on adult education through such schools as the U.S. Military Government did. From the summer of 1946, adult education started eradicating illiteracy as well as fostering people to become democratic citizens. The Adult Education Bureau took charge of training leaders who would in turn visit cities and rural counties to train local leaders, who would then teach illiterate adults in neighborhoods and villages. The illiteracy rate fell from 78 percent in 1945 to 22 percent in 1949, and ultimately to below 10 percent in 1968.⁸

Official Foreign Assistance: 1950-59

Background

Soon after the Korean government's proposal to use a massive amount of aid for economic reconstruction through a five-year economic development plan was rejected by the U.S. Congress, the Korean War broke out on June 25, 1950. The cease-fire in 1953 left the Korean Peninsula war-torn, divided, and devastated again. South Korea suffered massive social and economic damage: civilian casualties totaled nearly 1.5 million while the destruction of properties was estimated at about \$3.1 billion, leaving nearly 43 percent of residential homes and industrial facilities damaged.

Scale and Donor of Assistance

Korea received about \$2.3 billion in official foreign assistance for emergency relief and reconstruction efforts during the 1950s. The economy and public finance system depended

heavily on foreign aid. For example, aid accounted for about 74 percent of total government revenues and 85 percent of total imports during the period 1953-61. As in the 1940s, the major donor was the U.S. government. Multilateral efforts failed to result in a large assistance package under the UN flag, with the only exceptions being the UN-sponsored Civil Relief in Korea (CRIK) and United Nations Korea Reconstruction Agency (UNKRA), which together accounted for about 21 percent (\$479 million) of total official assistance granted during the 1950s.

Objective and Sectoral Application of Assistance

The nature of aid was again emergency humanitarian relief, although some reconstruction assistance was provided by UNKRA and the U.S. Foreign Operations Administration (FOA)/International Cooperative Agency (ICA) during the latter half of the 1950s. During the 1950s as a whole, reconstruction assistance accounted for less than 30 percent of the total aid granted, with emphasis placed on physical infrastructure, industries, and education/health. As the majority of assistance came in the form of food, raw materials, and other consumable commodities (77 percent), the economy was sustained by consumption goods supplied as aid. Also, the government policy to keep the local currency overvalued to maximize proceeds of assistance and imports discouraged export-oriented industrialization and contributed to creating a chronic balance-of-payments deficit.

Although foodstuffs, raw materials and other consumption goods accounted for about 77 percent of total official aid, the Counterpart Fund, created from the proceeds of consumption goods donated as part of aid and sold in the domestic market, contributed about 30 percent - 53 percent of total government revenues during 1954-60. During the same period, about 32 percent of the Counterpart Fund (about 103.4 billion *won*) was used for the defense budget, and 45 percent went for public investment in fixed assets and financial operations. The Counterpart Fund constituted about 70 percent of total public investment and financial operations, contributing to the inception of capital formation in Korea. Therefore, the sectoral distribution of official aid, taking into account the disbursement from the Counterpart Fund, shows 54 percent for infrastructure and production sectors and 46 percent for social and government general services. This pattern of sectoral aid distribution contrasts sharply with the pattern of OECD/DAC assistance, which allocates only 24 percent for infrastructure and production sectors and 49 percent for social and government services.

UN/CRIK Aid

The U.N.'s Civil Relief in Korea (CRIK) provided multilateral assistance of \$457 million, of which all but a fraction came from the U.S., as part of wartime relief efforts during 1951-

Table 3-1

Official Foreign Assistance to Korea (1945-61) (\$ million in current prices; as a %)

	US/ AMGIK (1945-49)	US ECA/SEC (1948-52)	UN/CRIK (1951-56)	UN/ UNKRA (1951-59)	US/FOA (1953-55)	US/ICA (1955-59)	US/ PL480 (1955-61)	Total (1945-61)	
								\$	%
Agriculture/ Fishery				8.1	1.3	40.4		49.8	1.7
Mining				12.8	0.9	59.6		100.3	3.4
Manufacturing				27.0					
Physical Infrastructure				8.9	48.5	219.5		276.9	9.3
Other reconstruction	69.8	6.0	47.9	NA	1.2	19.6		144.5	4.9
Education				9.6	17.4	14.0		106.6	3.6
Housing/Health	7.9*		16.2	11.5		30.0			
Food/Raw materials	416.8	196.0	393.3	36.2	136.0	891.0	202.6	2,271.9	76.6
TA	7.7	NA	NA	7.8	NA	NA	NA	15.5	0.5
Total	502.2	202.0	457.4	121.9	205.3	1,274.1	202.6	2,965.5	100.0

Source: Author based on KOICA (2004) and Kim (2012).

56. Much of the assistance came in the form of foodstuffs, and textiles and clothing, representing 40 percent and 24 percent, respectively, of total assistance granted. The UN relief efforts were crucial in relieving widespread starvation and disease in Korea during this time.

UN/UNKRA Aid

The United Nations Korea Reconstruction Agency (UNKRA) provided significant assistance (\$122 million) in support of the reconstruction of Korea's economy: repairing devastated properties, providing rehabilitation supplies, transport, and services for Korean industry. One salient feature of UNKRA aid was that the proportion of aid that went toward building up the productive capacity of the economy was 70 percent, leaving 30 percent for consumption. This ratio was exactly the reverse of aid efforts under AMGIK and ECA during the 1940s and under CRIK and the FOA/ICA during the 1950s.

Since UNKRA sought to facilitate reconstruction, its aid was used to import equipment and construct new factories (glass, cement, paper, etc.). UNKRA aid was also used to rehabilitate damaged industries (smelting factories, large-

Table 3-2

Official Foreign Assistance to Korea and OECD/DAC Assistance (as a %)

Sector	Aid to Korea	OECD/DAC Recipients
	1945-61	2011
Infrastructure	49	17
Manufacturing + Agriculture	5	7
Social + Technical Assistance	4	49
General Government	42	

scale textile factories, and coal mines). Some UNKRA aid was used to fund policy loans for SMEs in manufacturing and mining industries through the Bank of Korea (BOK), which made loans based on recommendations by the Ministry of Commerce and Industry.⁹ However, UNKRA aid was only 4 percent of total official aid during 1945-61 and could not influence the sectoral distribution pattern of total aid.

U.S. /FOA and ICA Aid

Consumption

The U.S. FOA (Foreign Operations Administration) (1953-55) and ICA (International Cooperation Agency) (1955-59) insisted on pursuing stabilization before development, placing priority on reining in hyperinflation caused by the expansion of debt to finance the war, and on securing a minimum subsistence level of living. Thus, foreign aid was focused on increasing the supply of consumer and intermediate goods to curb inflation. FOA provided a total of \$205 million, and its sequel agency, ICA, \$1.3 billion. About 70 percent of their aid was for consumption goods, supplies and raw materials, such as fertilizer, wheat and energy (non-project assistance).¹⁰ In particular, since 1954, a large quantity of wheat flour was given to Korea under the Title I of Public Law 480 (Food for Peace Program), which was used as compensation for workers mobilized under public works programs, such as soil reclamation projects for reforestation. During 1955-74, food assistance given under PL 480 was equivalent to 37 percent of total U.S. aid (\$4.4 billion). The large quantity of food aid distorted food prices and incentives for farmers.¹¹

Reconstruction

While maintaining their emphasis on consumption goods (70 percent of total aid), FOA (1953-55) and later ICA (1955-59) in particular provided significant aid for economic reconstruction toward the end of the 1950s. Project assistance to increase the economy's productive capacity accounted for 30 percent of total aid, of which nearly 37 percent was used to construct railways. Some of the project assistance was used to invest in manufacturing (including fertilizer, electric wire, pesticide, rubber recycling, and tire factories). In addition, about \$78 million in ICA project assistance was used to build 44 new small-sized plants. Project assistance was also used to reconstruct power plants. By the end of the 1950s, much of Korea's infrastructure, including railways, roads, and harbors damaged during the war, were rehabilitated back to nearly pre-war levels, thanks to foreign aid. However, reconstruction efforts faced a major challenge in supplying adequate electric power to meet social and economic demand, since much of the electricity had been supplied from power plants in the North before the Korean War.¹²

Education

Besides physical infrastructure and productive industries (mining and manufacturing), education was an aid allocation priority. In absolute terms, the amount of aid that went toward education during the 1950s was only about \$30 million or 1.5 percent of total official assistance received. However, the priority given to this sector by both the donor and recipient governments was clear. Assistance efforts after the Korean

War centered on: classroom construction for basic education, secondary vocational education, teacher training, and higher education. During the Korean War, the nation lost the use of almost 70 percent of its classrooms. As such, UNESCO and UNKRA developed a five-year program for the development of Korea's education system and provided \$11 million, or nearly eight percent of total aid by UNKRA, for education assistance, one half of which was used to repair schools destroyed during the Korean War. Once infrastructure reconstruction efforts were fully under way, the focus of education assistance shifted toward providing material aid, including a textbook printing factory for primary and secondary education, as well as increasing investments in higher education.¹³

Contrary to common belief, U.S. assistance in support of the Korean education system was not as sizeable as that given for infrastructure and productive industries. During 1954-61, FOA/ICA devoted only about one percent of their total assistance (\$20 million) to the education sector. However, the assistance addressed the most keenly felt shortages of technical and professional human resources, which were essential for economic development. About half of the education assistance was invested in higher education, in particular Seoul National University (SNU), with another 20 percent in teacher training, and the rest in secondary vocational education.

Prior to Korea's liberation from Japan, access to higher education remained largely limited. Moreover, Korea suffered a huge shortage of skilled workers and technicians after the departure of the Japanese, who held most of the skilled jobs during their occupation. As such, a top aid priority was bolstering Korean higher education and research, and secondary vocational education to support Korea's economic development. To build up Korea's technical capacity, a considerable amount of financial and technical assistance went into upgrading Korean secondary vocational education, as well as institutions of higher learning.

To staff primary schools left vacant by the repatriation of Japanese teachers, who accounted for 40 percent of all teachers, eight new teacher training institutes were established with the help of U.S. assistance by 1951. As a result, enrollment in primary schools nearly doubled from 1.4 million in 1945 to 2.5 million in 1947. Thanks to the expansion of teacher education programs, Korea eventually achieved universal primary education in the late 1950s, while making all primary schools coeducational.¹⁴

Another unique feature of the U.S. education assistance was that investment in facilities, equipment, and materials did not dominate, and technical assistance accounted for about 40 percent of the total. For example, a teacher education program was carried out in cooperation with the George Peabody College of Teachers in the United States. The aim of this cooperative program was to significantly modernize the education system

and its curriculum. This program benefited several universities, including SNU, Korean teacher-training institutes, junior colleges, and lower-level schooling programs. Under the Peabody Technical Assistance Program carried out between 1956 and 1962, about 40 Peabody faculty members were sent to Korea to train Korean educators in Western-style education methods. The Korean educators were trained in educational theory, curriculum development, and teaching practices through on-site technical assistance at various educational institutions in Korea. In addition, nearly 80 Korean teachers were sent to the U.S. to receive training in higher education.¹⁵

Another example of technical assistance is the Minnesota Program. The ICA offered a significant amount of technical assistance for about 40 developing countries under “university contracts,” which enlisted U.S. universities and technical institutions to facilitate the sharing of professional knowledge and skills. The basic objectives of the technical cooperation program were: expansion of education in the fields of engineering, medicine, agriculture, and public or business administration; support of specific services or industries; expansion of research; and training of technical manpower. In Korea, the Minnesota Program provided technical and material assistance to SNU from 1954 to 1961, for the Colleges of Agriculture, Engineering, and Medicine. Later on, the program was expanded to include the fields of nursing, veterinary medicine, and public administration. Through spillover effects, the program successfully contributed to nationwide training of professionals and academics in the covered fields and modernization of related industries and services in Korea.¹⁶

Official Foreign Assistance: 1960-1979

Background

The 1960s witnessed sharp changes in both domestic and international arenas. Domestically, a new government was established through a bloodless military coup in 1961. The new government embarked on industrialization of the Korean economy through successive five-year economic development plans, starting in 1962. The plans aimed to enable the Korean economy to take off through industrialization: initially in export-oriented labor-intensive light industries in the 1960s, followed by export-oriented heavy and chemical industries in the 1970s.

To mobilize capital needed to implement the Five-Year Economic Development Plans, the new government initiated a series of reforms. First, it strengthened the Foreign Capital Promotion Law in 1962 to encourage foreign direct investment and promote private sector borrowing overseas supported by government guarantees. It also launched negotiations with the Japanese government in 1962 for rapprochement and reparation. The government anticipated that domestic savings

would be insufficient to finance the Plans’ ambitious investment programs, and made all-out efforts to mobilize foreign savings (grants, loans, and foreign direct investment, etc.). Second, the government made a drastic tax reform in 1965 to increase revenues and eradicate corruption. Third, in that same year, the government also pursued interest rate reform, raising the one-year savings account interest rate from 15 percent to 30 percent, to encourage domestic savings.

Externally, the Organization of European Economic Cooperation (OEEC) and its Development Assistance Group (DAG) were reorganized in 1962 as the Organization of Economic Cooperation and Development (OECD) and the Development Assistance Committee (DAC) with the participation of other major economies like the U.S., Japan, and Australia. This reorganization reflected the full recovery of the European economies from World War II and aimed to further economic growth through expansion of economic relations (trade, investment, aid, etc.) with developing countries. The UN designated the 1960s as the First Development Decade for economic growth of developing countries to promote economic cooperation and liberalization. Besides the traditional loan window (with interest at concessional rates) of the International Bank for Reconstruction and Development (IBRD), the World Bank Group created a credit window (soft loan without interest) for low-income countries (IDA) in 1960. The U.S., which served as the major donor for the rehabilitation and recovery of the Korean economy in the 1950s, also made a strong commitment to the economic growth of developing countries through the Foreign Assistance Act of 1961. The Kennedy Administration, however, shifted the focus of its assistance policy from grants to loans, emphasizing the responsibilities of recipient countries, and combined its two major aid agencies, the International Cooperation Agency (ICA) and Development Loan Fund (DLF), into one agency called the Agency for International Development (AID). Several European countries also established their own bilateral aid agencies.

In the academic arena, the traditional Harrod-Domar growth theory, which emphasized physical capital accumulation as the main source of growth, was challenged by the neoclassical growth modeling of Robert Solow and the human capital theories of Theodore Schultz and Gary Becker, which emphasized population growth, technological progress, and human capital accumulation as major sources of growth.

Objectives of Aid

The 1960s marked the turning point in the history of official foreign assistance in Korea. The scale of aid increased compared with the 1950s. The objective of aid shifted from rehabilitation and reconstruction in the wake of the Korean War to economic growth through industrialization and exports. The aid was not for emergency relief or subsistence consumption,

but for investment and economic growth to attain higher living standards. Compared with the 1950s, when donors took initiatives for identifying where the aid funds were needed and applying them to different sectors, the government of Korea took the initiative in this period, basing its assistance requests on its successive five-year economic development plans, starting in 1962.

Scale and Type of Aid

During the development decades (1962-1992), total capital inflows to Korea amounted to about \$82 billion, of which public capital inflows, i.e., public development grants and loans, amounted to only \$21 billion, or about 26 percent of the total capital inflows. The rest consisted of private capital inflows, such as commercial loans, financial institutions' borrowing, private sector bonds, and foreign direct investment. However, public capital inflows played an important initial role in leading Korean economic development. As development progressed, the importance of public capital inflows declined, and private capital inflows took over the leading role. The share of official foreign assistance declined from 38 percent of total capital inflows during the first half of the development decades (1962-78) to 22 percent during the second half (1979-1992), due to the rising share of private capital inflows. Increases in public capital inflows and investment at the initial stage of the development decades played the role of crowding in private capital inflows and investment at the later stage. This is one of the unique features of Korean economic development.

Throughout the whole development decades (1962-1992), public grants (\$1.5 billion) accounted for only 1.8 percent

of total capital inflows. This is another unique feature of the Korean economic development. Korea's high growth and successful industrialization took place with public development loans rather than public grants. This is also the reason why some studies of Korean economic development demonstrate that public development loans made greater contributions to high economic growth rate than grants.¹⁷ However, loans were not particularly more effective in promoting economic growth; rather, loans were the main source of development finances, and few grants were available during the development decades.

Another feature of the capital inflows in Korean economic development is that loans (public and private) dominated capital inflows (\$67 billion or 82 percent of total), compared with foreign direct investment (FDI). FDI amounted to only \$7.8 billion (10 percent of total) during the development decades (1962-1992). Many development studies show that FDI made greater contributions to economic growth than loans did.¹⁸ However, in the case of Korea, fast economic growth and industrialization was attained mainly with loans. Therefore, for fast economic growth and industrialization, the key seems to be efficiency in the application of foreign capital, rather than the type of capital, i.e., whether the capital is grants, FDI, or loans.

Public capital inflows (official foreign assistance) can be divided into public grants and public loans. The latter can be further disaggregated into ODA-type loans (official development assistance loans with a grant element greater than 25 percent of the total loan amount) and OOA-type loans (other official assistance development loans with a grant element smaller than 25 percent).

Table 4-1 Capital Inflows to Korea: 1945-1992 (\$ million in current prices; as a %)

	1945-61	1962-65	1966-72	1973-78	1962-78	1979-85	1986-92	1979-92
Public Grants	3,117	739	763	-	1,502 (9.2)	-	-	-
Public Loans	5	62	1,130	3,431	4,623 (28.3)	10,105	4,688	14,79 (22.6)
Commercial Loans		71	1,950	5,858	7,866 (48.1)	7,937	5,206	13,143 (20.1)
Financial Institutions' Borrowings		-	205	1,226	1,431 (8.7)	14,881	10,296	25,177 (38.6)
Private Sector Bonds		-	-	-	-	834	4,515	5,349 (8.2)
Foreign Direct Investment		13	227	704	937 (5.7)	1,157	5,684	6,841 (10.5)
Total	3,122	886	4,275	11,219	16,359 (100)	34,914	30,389	65,303 (100)

Source: Lee, J.S. (2013).

During 1960-1990, while public grants decreased from 99 percent during the previous period (1945-60) to only 13 percent (\$2.7 billion) of the total public capital inflows (\$21.3 billion), ODA-type loans increased sharply to \$4.7 billion, accounting for 22 percent of the total public capital inflows. Consequently, total ODA (grants plus ODA-type loans) of \$7.4 billion accounted for only 35 percent of the total public capital inflows. This means that the OOA-type loans of \$13.9 billion (65 percent) dominated the total public capital inflows (official foreign assistance) during the same period. This is because in 1975, Korea had to graduate from the World Bank Group's IDA loans, which were Korea's main source for soft loans (i.e., ODA-type loans). Therefore, among the official foreign assistance flows, Korea's economic development took place mainly with the OOA-type loans (with a grant element less than 25 percent). This is another unique feature of the capital inflows in Korea's economic development processes.

During 1962-1982, the Korean economy grew an average 8.2 percent per year. Studies show that about 3.3 percentage points or about 40 percent of the high growth rate can be attributed to the higher level of foreign capital inflows including official foreign assistance, especially OOA-type loans with a grant element smaller than 25 percent.¹⁹ In fact, the GDP growth rate during 1945-1959, when foreign capital inflows were much lower, averaged only 4.4 percent per year. Moreover, the grant element of the OOA-type loans provided during 1962-1982 contrasts sharply with the current practice of DAC members, which provide official development assistance (ODA) mainly with a grant element higher than 86 percent.²⁰

Table 4-2 Public Capital Inflows: 1960-1990
(\$ billion in current prices)

Type	1945-1960	1960-1990	1991-1999	Total
ODA Grants	3.0	2.7	1.3	7.0
ODA Loans	0.0	4.7	1.0	5.8
OOA Loans	-	13.9	17.3	31.2
Total	3.0	21.3	19.6	44.0

During the 1960s, general government revenues still depended heavily on official foreign aid, and almost half of total investment was financed by foreign savings, i.e., net transfers from public development grants and loans. Even during the 1970s, when fiscal dependence on foreign assistance declined, total investment still depended on public development loans, especially on OOA-type loans, since domestic saving rates

were much lower than total investment rates.²¹ The gap was filled by public development loans and other types of foreign capital inflows. For example, during 1974, while total investment was about 32 percent of GDP, the domestic savings rate was only 21 percent of GDP, leaving a gap of about 11 percent of GDP. This investment gap had to be financed by foreign savings, especially OOA-type loans.²² Domestic savings rates were not yet high enough, and grants or soft loans were no longer available in large amounts at that time. Only after 1986 were domestic savings rates high enough to cover total investment rates.

The government played an active role in mobilizing assistance funds in a sustainable manner and coordinating donors' offers systematically. One mechanism that proved effective was the annual or bi-annual meetings of the International Economic Consultative Group for Korea (IECOK), which was established at the Korean government's initiative in 1966. These meetings, chaired by the World Bank, briefed bilateral and multilateral donors on the Korean government's development strategy and investment programs. The meetings identified needs for future assistance and described the implementation progress of existing investment projects financed by foreign assistance. This mechanism was used until the beginning of the 1980s and was replicated by the World Bank for many other developing countries.²³ Korea's experience contrasts sharply with the OECD/DAC-organized Paris Declaration for Aid Effectiveness, which emphasizes aid coordination not by recipient, but by donors.

Major Donors of Aid

Although the U.S. continued to be a major aid provider, as it was during the 1940s and 1950s, other developed countries, especially Japan, began to play an equally important role as major donors during the development decades (1962-1992). Moreover, multilateral banks, such as the IDA (International Development Association) and IBRD (International Bank for Reconstruction and Development) of the World Bank Group and the ADB (Asian Development Bank), also became a major assistance source. During 1961-1999, the IDA and IBRD financed more than 120 investment projects and structural adjustment programs with a total of \$14.9 billion loans and credits. The ADB supplemented with \$5.6 billion loans during the period. Consequently, aid funds during the period were concentrated on credits (no-interest loans) or loans (with interest), rather than grants. The U.S. government also shifted its aid from grants to loans under the initiative of President Kennedy's Foreign Assistance Act of 1961.

By 1960, U.S. aid, mostly in the form of grants, was declining from its 1957 peak. The U.S. and Japan each had provided more or less the same amount of ODA (grants and ODA-type loans) of \$3.0 billion during 1961-1990. While the U.S. played a dominant role (64 percent) during the first half of

Table 4-3 Aid Dependency: 1962-1992 (as a % of GDP)

	1962-66	1966-72	1973-78	1979-85	1986-92
Gross Investment Rate	15.4	24.8	28.8	31.1	35.7
Domestic Savings Rate	6.4	14.8	23.4	24.8	34.6
Foreign Savings Rate	8.2	9.2	4.8	6.3	1.3
Statistical Errors	0.8	0.8	0.6	0	-0.2

Source: Lee, J.S. (2013).

the development decades (1961-1975), Japan played a more active role (58 percent) during the second half (1976-1990). Moreover, during the 1959 to 1999 period, when all public development loans were actively disbursed, Japan provided a somewhat larger amount of public development loans (a total of \$6.1 billion ODA and OOA loans) than the U.S. lent (\$5.2 billion). Besides the U.S. and Japan, France was a major bilateral donor, providing solely public development loans (\$3.5 billion) and no grants.

Aid from Japan during the first half of the development decades (1961-1975) was given through the Reparation Fund, which was agreed to by both governments in 1965. This fund was composed of \$300 million in grants and \$200 million in public concessional loans at a 3.5 percent annual interest rate with a 20-year repayment period including seven years' grace. In addition, \$300 million in commercial loans were also promised. These loans were to be disbursed equally over a ten-year period starting from 1965. Therefore, Japanese development loans accounted for about half the total development loans during this period (1965-1975). Also, total grants and loans, including commercial loans from Japan, during the period were more than a third of total capital inflows, including commercial loans, and were equivalent to about 23 percent of Korea's total exports.

Sectoral Distribution of Assistance

During 1945-1961, most aid was provided in the form of food, materials and other consumable goods. Since most of the aid was sold in the domestic market and converted into cash and deposited into the Counterpart Fund, which was used mainly for general fiscal expenditures and partly for the special investment and finance account, it is difficult to see the specific sectoral allocation of the aid fund. The aid fund allocated to specific investment projects was a rather minor part of the total aid fund. However, since 1962, the general fiscal account's aid dependency gradually declined, and most assistance was provided in the form of loans. Therefore, official foreign assistance tended to be earmarked for specific investment projects of a certain sector.

The overall trend of the government's emphasis on economic infrastructure and production sectors in allocating aid funds

accentuated as the implementation of the development plans progressed. During the first half of the development decades (1962-1978), economic infrastructure (and service) and manufacturing sectors accounted for 73 percent of total public development loans, and the agricultural sector for 26 percent. The Japanese Reparation Fund was originally intended for the agricultural/rural sector. However, as the pressure for financing manufacturing and economic infrastructure investment mounted, a major part of the fund was devoted to economic infrastructure investment, including construction of roads, power plants, the POSCO steel factory and the Seoul-Busan Expressway. Moreover, during the second half of the development decades (1979-1992), economic infrastructure (and service) and manufacturing sectors accounted for 94 percent of total public development loans, and the agricultural sector for only 6 percent. Compared with the 1945-1959 period, the higher growth rates and more successful industrialization of Korea during the development decades (1962-1992) could be attributed to this sectoral allocation pattern of public development loan funds.

Such sectoral allocation of public development loans during the development decades in Korea differs sharply from the average OECD/DAC members'. In 2010, DAC members' ODA funds were allocated on a priority basis to the social and administrative infrastructure and service sectors by about 49 percent, while economic infrastructure and productive sectors received about 24 percent²⁴ (Table 3-2). This pattern of aid allocation, by neglecting the economic infrastructure and productive sectors, may have contributed to the sharply lower speed of economic growth and industrialization in other developing countries and to the running debate on DAC aid effectiveness in academic circles.²⁵ It was shown that aid applied to infrastructure and production sectors promotes economic growth much more than aid applied to social and administrative sectors in the short and medium terms.²⁶ Moreover, recent studies show that even the reduction in poverty under the Millennium Development Goals (1990-2015) owes more to economic growth than to redressing inequity by a two to one ratio.²⁷

The government's emphasis on the economic infrastructure and service sectors should not mask the importance accorded

Table 4-4

Donors of ODA during 1961-1990
(\$ million in current prices; as a %)

	First Half (1961-1975)	Second Half (1976-1990)
Scale	3,941.4 (100.0)	3,510.8 (100.0)
Donor		
U.S	2,506.2 (63.6)	512.0 (14.6)
Japan	1,080.0 (27.4)	2,014.3 (57.4)
Others	355.2 (9.0)	984.5 (28.0)
Type		
Grants	1,999.0 (50.7)	
Loans	1,942.4 (49.3)	3,510.8 (100.0)

to the education, training, and science/technology sectors. In particular, during the first half of the development decades (1962-1978), when industrialization programs were launched, the government allocated a substantial amount of official foreign assistance, especially grant funds, to these sectors in the form of free-standing technical assistance projects. For example, the Korea Institute of Science and Technology (KIST 1966-70: US/AID \$9.1 million), the Central Vocational Training Center (1968-81: UNDP/ILO \$2.6 million), the Korea-Germany Vocational Training Center (1970-75: Germany 16 million DEM), the Keum-Oh Industrial High School (1970-76: Japan 1.1 billion yen), the Dae-Jun Vocational Training

Center (1976-83: Japan \$2 million), and the Korea-Belgium Vocational Training Center (1976-80: Belgium \$6 million). These technical assistance projects laid the foundation for Korea's science and technology development and technical workforce development at the inception of the industrialization programs. Favoring the infrastructure and production sectors helped promote industrialization and economic growth, shifting a much greater share of total employment toward high value-added sectors, i.e., the manufacturing and service sectors, and resulting in the improvement of living standards.

Implementation of Aid-Financed Investment

The government of Korea paid special attention to the implementation of aid-financed investment projects and programs. In 1961, the government appointed a Planning and Coordination Officer in the Prime Minister's Office with responsibility for monitoring and evaluating all important government policies and projects. In 1965, the Professors Group for Evaluation was commissioned to reinforce the system. This Group was responsible for monitoring and evaluating the implementation of the five-year economic development plans, a substantial portion of which were financed with official foreign assistance. Since then, the external and semi-independent group assisted with monitoring and evaluating all important government policies and investment projects; the results were reported at meetings attended by the president, cabinet members, heads of decentralized public agencies, public enterprises, and key members of the National Assembly four times a year. Initially, the Professors Group for Evaluation had only 15 members; however, when the group was transferred from the Prime Minister's office to the Economic Planning Board in 1981, its membership reached 107 professors.²⁸

Table 4-5

Public Development Loans by Donor: 1966-1992 (\$ million in current prices; as a %)

	1966-72	1973-78	1966-78	1979-85	1986-92	1979-92
US	685	867	1,552 (36)	2,660	75	2,735 (19)
Japan	256	516	772 (17)	896	1,252	2,148 (15)
International Organization	152	1,605	1,757 (38)	4,114	2,582	6,696 (45)
Germany	25	122	147 (3)	71	46	117 (2)
UK	1	105	106 (2)	376	1	377 (3)
France	6	22	28 (1)	643	668	1,311 (9)
Canada	5	145	150 (3)	436	-	436 (3)
Hong Kong		42	42 (1)	404	-	404 (3)
Others		7	7 (0)	505	64	569 (4)
Total	1,130	3,431	4,561 (100)	10,105	4,688	14,793 (100)

Table 4-6 Public Development Loans by Sector: 1962-1992 (\$ million in current prices; as a %)

	1962-66	1966-72	1973-78	1962-78	1979-85	1986-92	1979-92
Agriculture, For, Fish		512	696	1,208 (26)	889	59	948 (6)
Mining		10	-	10 (0)	37	-	37 (0)
Manufacturing		115	150	265 (6)	588	518	1,106 (8)
Economic Infrastructure+- Services		493	2,585	3,078 (67)	8,591	4,109	12,700 (86)
Others	65*			65 (1)			
Total	65*	1,130	3,431	4,626 (100)	10,105	4,686	14,791 (100)

Source: Lee, J.S. (2013).

* Data on sectoral allocation is unavailable.

Official Development Assistance: 1980-1995

Background

During the late 1970s and early 1980s, Korea's economic condition deteriorated substantially. The economy registered a negative growth rate in 1980 for the first time since the Korean War, and the inflation rate approached 30 percent per annum. Amid concerns that high inflation and overinvestment in the heavy and chemical industries might weaken the international competitiveness of Korean industries, the second oil crisis in the late 1970s precipitated the Korean economy into crisis.

The Korean government concluded that the crisis was not a temporary one, but rooted deeply in the structural problems that grew out of the government-led economic growth strategy adopted in the 1960s and 1970s. Thus, the Korean government attempted to revise its growth strategy, switching from a government-led approach to a market-led one and adopting comprehensive policy measures for economic stabilization. These policy measures were reflected in the fifth Five-year Economic and Social Development Plan, which began in 1982. The Development Plan aimed to achieve optimal economic growth in harmony with stability, efficiency, and balance. The stability and balance goals were to be attained by government actions to address imbalances in income, region, sector, and enterprise size. Government expenditures were curtailed sharply, small and medium enterprises were granted more assistance, and social security systems were expanded. Growth and efficiency goals were to be attained not by government-led strategy, but by market forces and liberalization policies, which permeated all sectors of the economy, including trade, finance and even education, especially at the higher education level.

Thanks to the weak dollar, low oil prices and low international

interest rates, Korea's exports increased dramatically, and the economic growth rate returned to a high level. Consequently, the current account turned to surplus for the first time in history, domestic savings rates surpassed investment rates, and foreign debts began to decrease in 1986. The opening of Korean capital markets to foreign investors began in earnest in 1992, and when Korea joined the OECD in 1996, the liberalization policy advanced more. Consequently, with a massive volume of foreign capital flowing into Korea, the amount of foreign debts, especially short-term debts, substantially increased, leaving the economy vulnerable to a sudden foreign capital outflow. The bankruptcy of some major conglomerates in 1997 led to panic among foreign investors, and a massive foreign capital outflow followed, resulting in currency and financial crises during the latter part of 1997.

Objectives of Aid

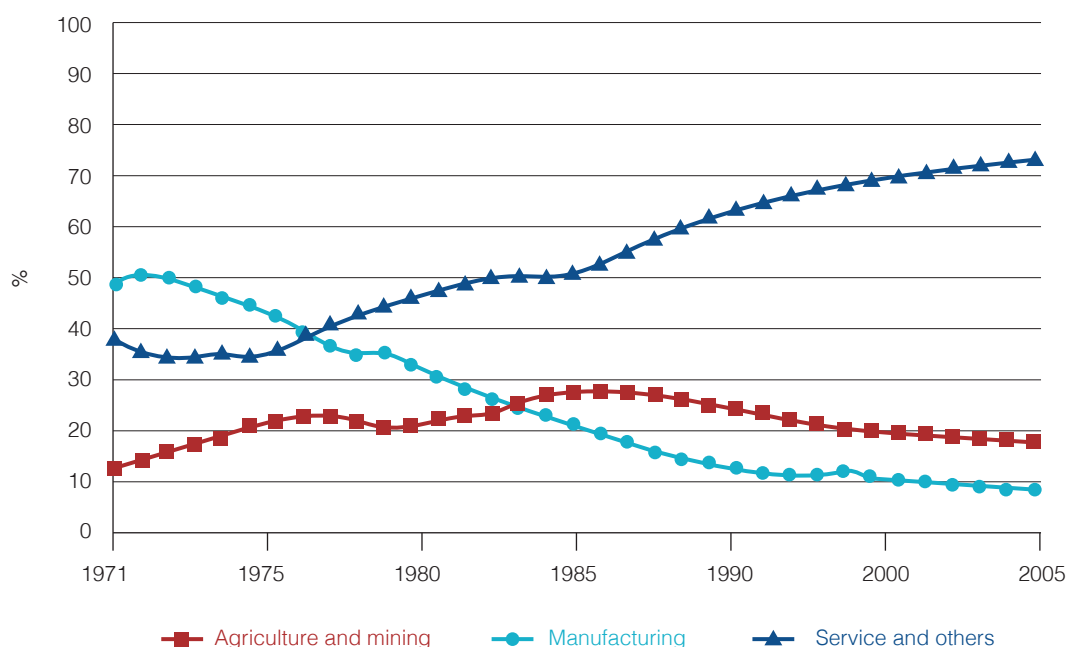
The objective of assistance at this time was to finance investment for economic growth, in contrast to the rehabilitation and reconstruction that was observed during the 1950s in the aftermath of the Korean War, and as such was more similar to that of the 1960s and the 1970s. During the 1980s and the 1990s, however, official foreign assistance had additional objectives. It also aimed to finance the goals of the new economic and social development plans, that is, promoting efficiency and equity by supporting liberalization, innovation, and welfare/balancing programs. After 1995, it also aimed to facilitate emergency economic restructuring in the wake of the Asian Financial Crisis of 1997.

Scale of Aid

During the second half of the development decades (1979-1992), total capital inflows to Korea increased sharply to \$65.3 billion, compared with only \$16.4 billion during the first

Figure 1

Shares of Employment by Industry (as a %)



Source: Eichengreen, B., D. Perkins, and K. Shin (2012) From *Miracle to Maturity: The Growth of the Korean Economy*, Harvard University Asia Center, Cambridge and London.

half (1962-1978). The increase was mainly in private capital inflows, especially in commercial loans and borrowings by financial institutions. The public capital inflows rose as well from \$4.6 billion during the first half of the development decades to \$14.8 billion during the second half. However, the increase in public capital inflows was entirely in the form of public development loans, without public grants. Moreover, the majority of the public development loans were also not ODA-type (with a grant element higher than 25 percent), but OOA-type (with a grant element lower than 25 percent). As mentioned already, this is a unique feature of the official foreign assistance flows into Korea, if compared with the current DAC-provided ODA with a grant element higher than 86 percent for all developing countries.

Traditionally, public capital inflows, especially in the form of public grants and ODA-type loans, were for filling the gap between the total investment rate and the domestic savings rate. During the second half of the development decades (1979-92), however, the domestic savings rate rose steadily, and after 1986 savings rates were high enough to cover the total investment rate, reducing the need for public development loans. Therefore, Korea was asked to graduate from the ADB (Asian Development Bank) list of borrowers in 1988 and from the World Bank list of borrowers in 1995. The resumption of

public capital inflows during the 1997-1999 period was mostly for emergency economic adjustment purposes in the wake of the 1997 Asian Financial Crisis. Korea is one of the few countries that graduated from the international organizations' credit/loan programs early and in a short period (after Singapore).²⁹

Major Donors of Aid

During the latter half of the development decades (1976-1990), Japan played a more active role in providing ODA to Korea. While during the first half of the development decades (1961-1975), the U.S. provided 64 percent of total ODA (grants and ODA-type loans), during the second half of the development decades (1976-1990) Japan came to assume 58 percent of the total ODA. In addition, during the second half, Japan increased public development loans three times from \$772 million to \$2,148 million. During the 1990s, Japan provided a much larger amount of public development loans than the U.S. did. During the entire period of 1960-1999 when Korea received public development loans, Japan provided a larger amount of loans (\$6.1 billion) than the U.S. offered (\$5.6 billion). However, international organizations, especially the World Bank (IBRD), played the most dominant role during the latter half of the development decades. In particular during 1991-1999, when international organizations provided 65 percent of total public development loans, including the emergency restructuring

loans in the wake of the Asian Financial Crisis, Japan provided only 21 percent of the total (Tables 1-2 and 1-3).

Sectoral Allocation of Aid

As mentioned already, as Korea's development plans progressed, the government's emphasis on economic infrastructure and production sectors grew when allocating aid funds. This trend was particularly clear during the 1980s and 1990s, and it contrasts sharply with DAC members' current practice of sectoral ODA allocation.

Conclusions and Lessons Learned

This paper has reviewed the role that official foreign assistance played at different stages of Korea's economic and social development (1945-1995), which has been praised as a miracle. From this review, we can draw some conclusions and lessons for the benefit of current and future donors and recipients of official foreign assistance.

1. Provision of consumption goods (foods, clothes, raw materials and supplies) after WWII and liberation from Japanese colonial rule was effective in staving off starvation and disease, and controlling inflation in Korea. However, it did not stimulate growth. Foreign assistance would have been more effective if the emergency relief had ended earlier, and aid funds had been provided for investment, supplementing Korea's low domestic savings. This point is relevant to many developing countries in conflicts and vulnerable situations today.
2. As part of emergency relief and humanitarian assistance, Korea received a fair amount of assistance funds on a priority basis for education, especially basic education and technical/professional education (teachers' education, secondary vocational education, and professional higher education in agriculture, engineering, medicine and nursing, public/business administration). Funding for materials and facilities did not crowd out funding for technical assistance. Such assistance programs helped achieve universal primary education in the late 1950s, relieved technical and professional human resources constraints on an emergency basis, and laid a foundation for industrialization during the 1960s and 1970s.
3. The active industrialization and fast growth of the Korean economy during the development decades (1962-1995) was made possible by a large amount of foreign capital inflows, especially official and private loans, to fill the significant gap between the total investment and domestic savings rates. Foreign capital inflows, especially official development assistance, also made up a significant portion of fiscal deficits prior to the development decades.
4. Among the capital inflows, public capital inflows, i.e., official foreign assistance flows, played a pivotal role during the earlier stages of Korea's development. However, as industrialization and economic growth proceeded, private capital flows played a much more dominant role in promoting development of the Korean economy during the second half of the development decades. Earlier official foreign assistance had crowd-in effects on private capital inflows, which sustained industrialization and economic growth during the later stages.
5. However, the amount of official foreign assistance flows was not as important as the sectors in which the capital was applied. Among 60 countries, which were at a similar level of per capita income as Korea during the 1960s, Korea received the least amount of ODA as a ratio of GDP during 1965-1995 (1.4 percent), but achieved the fastest industrialization and economic growth. The sectoral application of aid seems to have been more important than the absolute level of aid for industrialization and economic growth.
6. Grants were only a very small portion of total and official capital inflows in Korea. During the development decades (1960s-1990s) when industrialization and economic growth took place in Korea, grants were scarce. Therefore, Korea's fast industrialization and growth was attributable to loans. This experience presents a case contrary to development literature, which shows that foreign direct investment (FDI) made greater contributions to growth than loans in many developing countries. This Korean experience also contrasts sharply with the current OECD/DAC-provided assistance, in which grants dominate more than 90 percent of official development assistance (ODA). Moreover, the Korean economy industrialized and grew quickly not with ODA-type loans (with a grant element higher than 25 percent), but more with OOA-type loans (with a grant element lower than 25 percent), especially during the second half of the development decades. Therefore, the type of foreign capital inflows or official foreign assistance may not be so important as the effective allocation and application of foreign capital inflows.
7. Public capital inflows or official foreign assistance flows during the development decades were applied to the economic infrastructure sectors on a priority basis, followed by the production sectors. This sectoral allocation of official aid stimulated investment and growth in the private sectors. Such sectoral allocation of foreign assistance flows is sharply different from that of the average DAC members' official development assistance flows, which place much greater emphasis on the social and administrative infrastructure and service sectors and neglect the economic infrastructure and production sectors.

The slower growth of DAC aid recipients indicates that the successful industrialization and fast growth of the Korean economy can be attributed to its unique sectoral allocation and application of official foreign assistance flows, irrespective of their type. The impact of the sectoral aid allocation pattern on economic growth is well documented on the basis of cross-country and time series panel data,³⁰ which found that the foreign assistance flows applied to infrastructure and production sectors promoted economic growth at a much higher rate than other sectors in the short and medium terms. This finding also has implications for poverty reduction as well. Recent studies show that the poverty reduction effect of economic growth during the Millennium Development Era (1990-2010) was twice as great as that of the reduction in inequity.³¹ This sectoral aid allocation pattern should not, however, mask the priority given to the social sectors, especially education and health, and the science and technology sectors at the inception of the industrialization programs.

8. The government of Korea played an active role in mobilizing aid flows in a sustainable manner and coordinating donors' offers in a systematic way. One effective mechanism was the International Economic Consultative Group for Korea (IECOK) meetings, which began in 1966. These annual or bi-annual meetings, chaired by the World Bank, briefed bilateral and multilateral donors on the Korean government's development strategy and investment programs; they identified assistance needs and Korea's progress in implementing investment projects financed by aid. This mechanism had been used until the beginning of the 1980s and was replicated by the World Bank for many other developing countries. Aid coordination was done by the aid recipient, not by donors or donors' group.
9. The Korean government established a special arrangement for managing public development loans. For careful review and approval of the proposals for public and private development loans, it established a special inter-ministerial committee, rather than leaving the process in the hands of a sole minister. This system contributed to a careful and non-political selection of efficient investment projects and programs.
10. The government paid special attention to results-oriented monitoring and evaluation of key government policies and projects, including aid-financed investment projects and programs. For this purpose, it established the Planning and Coordination Officer in the Prime Minister's Office and commissioned the Evaluation Professors Group, an external and semi-independent group, to monitor and evaluate the implementation of the five-year economic development plans, a substantial part of which was

financed by official foreign assistance. The results of their work were reported at meetings attended by the president, cabinet members, heads of decentralized public agencies and public enterprises, and key members of the National Assembly four times a year, contributing to the effectiveness of the investment and aid programs.

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Overview and Macroeconomic Issues

Lessons from the Economic Development Experience of South Korea

Danny Leipziger

The Role of Aid in Korea's Development

Lee Kye Woo

Future Prospects for the Korean Economy

Jung Kyu-Chul

Building a Creative Economy

The Creative Economy of the Park Geun-hye Administration

Cha Doo-won

The Real Korean Innovation Challenge: Services and Small Businesses

Robert D. Atkinson

Spurring the Development of Venture Capital in Korea

Randall Jones

Economic Relations with Europe

Korea's Economic Relations with the EU and the Korea-EU FTA

Kang Yoo-duk

130 years between Korea and Italy: Evaluation and Prospect

Oh Tae Hyun

2014: 130 Years of Diplomatic Relations between Korea and Italy

Angelo Gioe

130th Anniversary of Korea's Economic Relations with Russia

Jeong Yeo-cheon

North Korea

The Costs of Korean Unification: Realistic Lessons from the German Case

Rudiger Frank

President Park Geun-hye's Unification Vision and Policy

Jo Dongho



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