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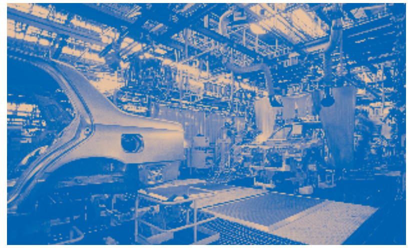

South Korea is known for its rapid and continuous economic growth in the latter half of the 20th century. After liberation from Japanese colonial rule in 1945 and the Korean War (1950-53), Korea has seen its per capita GDP shooting up from just US$290 in 1960 to an amazing US$28,384 in 2010.

This book looks at the country's modern economic development starting from the end of the Korean War, the economic problems Korea faced after the conflict, efforts to solve these problems, and the results produced. It will also describe changes in economic policy objectives from liberation from Japanese colonial rule in 1945 through today in detail.

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MODERN KOREAN ECONOMY

Understanding Korea No. 8

MODERN KOREAN ECONOMY
1948–2008

Yongjin Park

한국학중앙연구원
THE ACADEMY OF KOREAN STUDIES

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The Understanding Korea Series aims to share a variety of original and fascinating aspects of Korea with those overseas who are engaged in education or are deeply interested in Korean culture.

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Modern Korean Economy

Understanding Korea Series No. 8

Modern Korean Economy: 1948-2008

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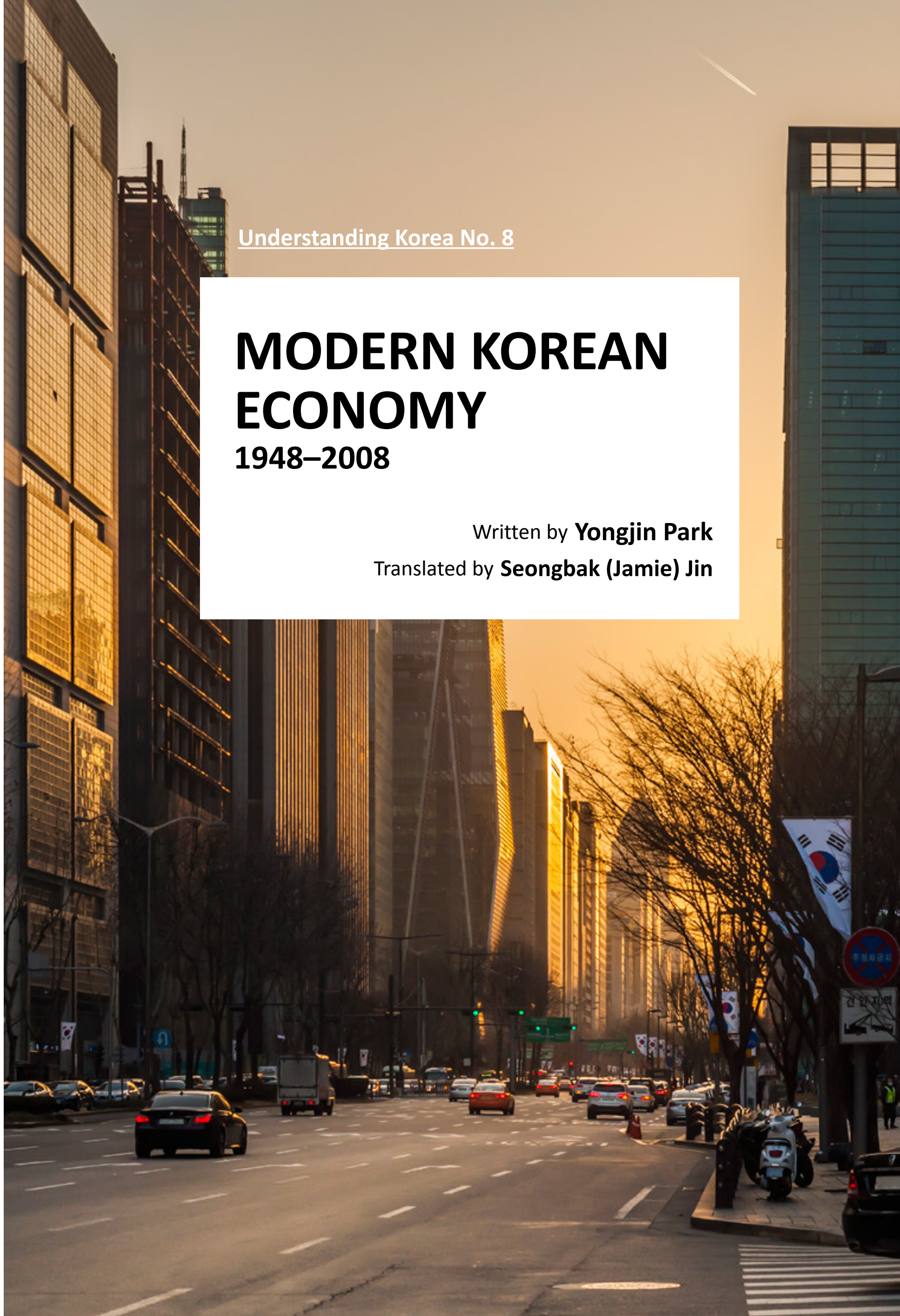


Understanding Korea No. 8

MODERN KOREAN ECONOMY
1948–2008

Written by **Yongjin Park**
Translated by **Seongbak (Jamie) Jin**

Contents

FOREWORD

The Academy of Korean Studies has helped scholars and students research the history and culture of Korea internationally for the past four decades. This in turn has contributed to Korea gaining increasing attention overseas. However, as there are not many Korean Studies resources suitable for foreigners, we have recognized the necessity of publishing books that contain extensive and accurate knowledge about Korea. We hope to provide various institutions abroad with suitable materials in order to nurture future generations of Korean Studies scholars.

The Center for International Affairs at the Academy of Korean Studies is charged with the task of promoting a better understanding of Korea. The center publishes the Understanding Korea Series, which are books customized for foreigners. They provide unique information about Korean culture and society for those who are deeply interested in diverse aspects of the country.

The eighth book in the series is *Modern Korean Economy: 1948–2008*. It introduces a variety of views on the Korean economy at an introductory level to ensure that foreigners are able to approach the subject of Korea's economic growth, from the end of Japanese colonial rule to the most recent economic developments, in a more interesting way. We hope that this book will be used by foreigners overseas as a resource for better understanding of Korea.

We would like to extend our appreciation to Professor Yongjin Park for writing the manuscript and to Ms. Seongbak (Jamie) Jin for translating it. We are also grateful to our staff members for their efforts in publishing this book.

Center for International Affairs
Academy of Korean Studies

INTRODUCTION

South Korea (this book uses the terms "South Korea" and "Korea" interchangeably) is known for its rapid and continuous economic growth in the latter half of the 20th century. The country's economy was impoverished after liberation from Japanese colonial rule in 1945 and the Korean War, which ran from 1950 to 1953. Since the mid-1950s, however, Korea has seen continuous and rapid economic growth with per capita GDP shooting up from just US$290 in 1960 to an amazing US$28,384 in 2010. Remarkable by any standard, this achievement was only attainable through consistent annual growth of 9.5 percent for 50 years.

Compared to countries with similar level of economic development in the 1960s, Korea's development over the period is unrivaled.

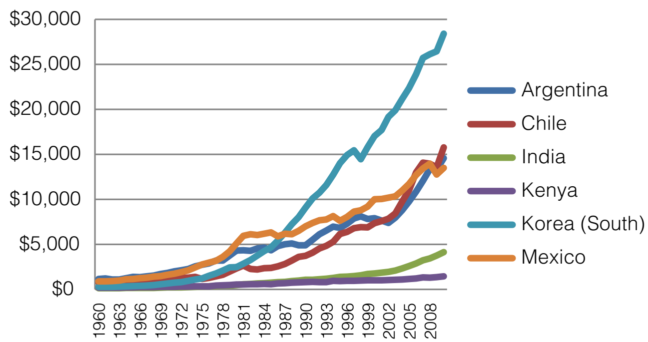


Figure 0-1 PPP-adjusted GDP per capita
Source: Penn World Table.

In 1960, the per capita GDPs of Kenya (US$210.36) and Thailand (US$200.45) were slightly lower than Korea's (US$290); India, whose recent high growth has received global attention along with Brazil's, had a per capita GDP (US$137.71) that was half of Korea's. The per capita GDP of South American nations including Argentina (US$1,159.48), Chile (US$779.21), and Mexico (US$908.61) were far higher than that of Korea. The income levels of developed economies at the time like the US (US$2,896.34), Britain (US$2,058.62), and France (US$1,943.60) were two to three times greater than that of South American countries, which were then considered middle income. Yet the economic conditions of these countries have greatly changed over the past 50 years. Kenya has seen little development, and India too has long suffered from underdevelopment. After the debt crisis of the mid-1980s, Argentina, Chile, and Mexico experienced slowing growth, and only recently did India and these South American countries start to grow rapidly. Korea, on the other hand, started out with a paltry per capita income but grew rapidly over the past 50 years. In 2013, the GDP per capita (based on purchasing power parity or PPP) was US$33,140, according to data from the World Bank. This was similar to the rates of Spain (US$32,103), and Italy (US$34,303).

Korea, however, is not the only country to achieve this level of economic growth; Japan and Taiwan also saw similar success. The industrialization experiences of these three Northeast Asian countries led to the formation of the East Asian economic model, which stresses direct economic intervention by an authoritarian government. China and select countries in Southeast Asia (e.g., Indonesia,

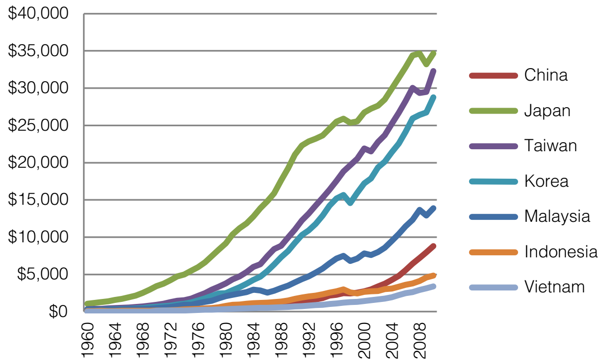


Figure 0-2 Korea and other Asian countries: GDP per capita
Source: Penn World Table.

Vietnam, and Malaysia) are underdeveloped economies showing rapid growth and achieving steady outcomes thanks to their active application of the East Asian economic model.

The economic development processes of Korea, Japan, and Taiwan are often compared, but the economic conditions of each were markedly different in the 1950s. Japan, though struggling after losing World War II, had successfully become a modern nation long before the war. By the 1930s, it became an imperialist country that was technologically advanced enough to produce airplanes and aircraft carriers on its own. The human and physical capital Japan accumulated before its defeat in World War II and the national wealth it amassed as a colonial power were not completely lost during the war. Japan belonged to a different class of countries and cannot be directly compared to Korea or Taiwan, which it had ruled as colonies.

Compared to Japan, Taiwan is more similar to Korea in many aspects, including modern history and economic conditions. Both countries are often referred to as two of the four "Asian tigers," the others being Hong Kong and Singapore. Yet a significant difference separates Korea and Taiwan. Modern Taiwan jump-started its path to development with a great influx of human resources, as nearly two million Kuomintang soldiers, landowners, entrepreneurs, and political elites came to the island nation after their loss to the Chinese Communist Party in 1949. The two million comprised about a fourth of the Taiwanese population at the time, and their wealth and knowledge helped establish Taiwan as a modern nation.

In case of Korea, it was divided into the North and South at the 38th parallel after liberation from Japanese colonial rule. The division was a crippling shock to the South Korean economy as it had never been an independent economy before, and the mostly agricultural South depended on the North for its electrical power generation and industrial production. As a result, South Korea started out with no foundation for building a modern nation and little power to achieve economic growth. To make matters worse, the Korean War (1950–53) greatly damaged the nation's economy and reduced the capacity of its human and physical capital. Thus, it would be fair to say that South Korea began its path under much poorer conditions than Taiwan or Japan. (Refer to Amsden and Chu [2003] and Chu [2009] for further discussion on the similarities and differences between both countries in economic policy and structure.)

The incredibly difficult and challenging initial economic conditions of South Korea also make its rapid economic development a source of inspiration for struggling developing countries. It shows that with the right economic policies and a little luck, emerging economies can achieve continuous development. Through the Knowledge Sharing Program (KSP), Korea is spreading and sharing the knowledge it gained in its economic development process with other developing economies.

Market-Based vs. Government-Led Economy

Economists agree that proper resource allocation is key for any economy to grow and develop, with many considering the market economy as the most effective way to efficiently allocate resources. Many social scientists, however, criticize the flaws of the market economy and emphasize the roles of government and civil society in correcting these flaws. To overcome poverty, economists say, active government intervention is required especially in low-income countries struggling with the poverty trap. An impoverished country until the early 1960s, Korea underwent impressive economic growth in the decades that followed. However, the country is far more than an economic success story. South Korea can be a case study in examining the proper combination of the market and government intervention to generate rapid economic growth. Throughout the process of Korea's development, economic policies evolved as a result of the endless debate over opposing viewpoints: namely the push towards a market-oriented economy and revisionist ideas that emphasized the government's role.

Readers who are not familiar with economics may wonder what exactly a market economy is and why many economists argue that a

market-based economy usually better in allocating resources. While it is not easy to provide simple explanations to these questions, most economists would agree that the two most important advantages of a market-based system are information and incentive. When a market for a given service or good opens, information on the market value placed on the service or good by consumers can be delivered to producers relatively easily through price. Producers that supply goods or services desired by consumers can earn high profits because consumers are willing to pay relatively high prices for the services or goods they want. In the long run, industries that earn high profits will attract more companies, meaning more resources will be allocated to produce the services or goods that consumers want. This type of resource distribution is ideal because once the market is established, resources are distributed in a way desired by members of society through their voluntary participation in the market without prior planning or intervention by external mediators.[1]

The concept of "resource allocation" might sound abstract, but many economic activities are related to it. For example, many university students live in dormitories. Though dormitories are within the same university, they can differ depending on the characteristics of the dormitory complex and building. Some students will prefer a specific dormitory complex, while others may prefer another. Dorm rooms and buildings are important "goods" provided through "allocation." How are dorm rooms "allocated" to students? At many universities, seniority is an important factor. Seniors are given priority in housing, and students in the same class are often selected randomly for housing assignment. Freshmen usually receive what remains after all upperclassmen are assigned rooms. Thus first-year students usually get the least preferable rooms with minor variations caused by luck. What happens if dormitory rooms are allocated through a market-based system instead of random selection? First, such rooms must be listed on the market, and all students willing to rent them must participate in the market as consumers. The students will then vie for the rooms by bidding the price they are willing to pay. In this scenario, rooms are "allocated" to the students offering the highest prices. If the students are equally wealthy (this is a key assumption), one who prefers a room on the second floor of Complex A will bid a relatively higher price and thus stand a higher chance of receiving that room than a student who wants a room in Complex B. The consumer's preference is reflected in the price. The price will also provide important information to the university about which rooms students like or dislike, and what room characteristics students think are important. A university can use this information and better "allocate" its "resources" to improve unpopular dormitories to fit students' preferences and demands. However, the university might lack the incentive to use this information to provide dormitories that students prefer. Companies participating in the market have the incentive to modify supply based on consumer preferences because this helps raise profits, even if they do not directly care for the consumers' wellbeing. Creating incentive is especially difficult at public universities, which are managed by the government and education authorities.

Through this simple example, the limits of resource allocation through the market are easily observed. Inequality occurs as students who are restricted financially will find it difficult to fully express their preferences, while students from rich families can monopolize the good dormitory rooms. Nonetheless, this example clearly shows that "relative prices" set by the voluntary demand of consumers inform producers about consumer preferences. This information is crucial and relatively accurate. The reason becomes clear when we consider the alternative methods available to obtain the same data. One commonly used method is survey research. Returning to the dormitory example, surveys can be used to ask students which rooms they prefer and to what degree. Creating a survey and organizing and analyzing the results are both time consuming and costly. Because the participation and response rate for these surveys is typically low, whether the opinions of a small group of respondents can reflect all opinions is also questionable. The way a person behaves in a hypothetical situation (when answering survey questions) and in a real situation (when selecting a dormitory room) can also differ. For example, someone could answer on a survey that the environment is important, but hesitate to pay extra for an electric or hybrid car that is more fuel-efficient.

Therefore, many economists are skeptical of resource allocation led by the government as they believe gathering information through market prices is far more efficient than doing it through a political process such as voting. Furthermore, when government institutions control resource allocation, inefficiency can result due to lack of market discipline in the public sector. When companies fail to properly read consumer demands, they are forced to make changes or even go bankrupt and exit the market. Yet the inability of incompetent public officials and politicians to properly collect and analyze public opinions is not properly penalized, resulting in the lack of incentive for government officials.

Then what can the government do in a country that has struggled with poverty for a long time? Many South American nations introduced the market system under US influence, and many in Eastern Europe attempted to make the transition into a market-based economy after the Cold War ended. Based on the experiences of these countries, the mere introduction of the market system is apparently insufficient to create economic growth.

Economists also disagree on the government's active role in institutionally underdeveloped countries with few human resources. Two schools of thoughts exist on this front. First, certain economists blame underdevelopment on improperly functioning markets due to corruption, exclusive human networks that hinder competition, and legal and institutional environments that restrict companies. The government's role is thus to improve these legal and institutional environments so that the market can function properly. These economists believe in the so-called market-conforming paradigm, in which the government's role is "freeing" the market from these institutional and social constraints.

Second, other economists contend that when the social and institutional foundations required for a market to function properly are inadequate, the government must aggressively change the way resources are allocated in the market. They may even deliberately distort market prices such as interest rates or foreign exchange rates to accelerate industrialization and growth. Economists who support

this view cite Korea as a leading example. Economist Alice Amsden (1989) discussed Korea's economic growth in her book *Asia's Next Giant*. In the chapter "Getting Relative Prices 'Wrong,'" she argued that government intervention is necessary for late-starting economies such as Korea and Taiwan. These nations fell behind developed countries in the productivity and skills required to rapidly transition from an agricultural to industrial economy and achieve growth. She said such intervention should not merely supplement relative price decisions in the market, but that the government must actively intervene and intentionally distort relative prices.

For example, it is well known that financial markets in underdeveloped economies are dysfunctional and often require interventions by the government. This topic will be explained in greater detail later, but such markets usually contain dual financial systems where formal financial institutions (banks) and informal financial markets (circular or private loans) coexist. High interest and default rates are often present, and the inefficiency of these markets hinders corporate growth. Frequent economic shocks and low profits caused by high financial cost further raise default rates, creating a vicious cycle that hampers the development of the financial market and the overall economy. Before the government actively intervened in 1961, Korea's financial market also had the characteristics of that in an underdeveloped economy. The government implemented drastic regulations and postponed corporate debt repayment in the private loan market for several years. Legalization policies also allowed private moneylenders to form banks to alleviate the negative effects of the dual financial system. Commercial banks were nationalized and specific industries and export companies were given preferential treatment. Exporters received interest rates lower than market levels, and in some cases, lower than the deposit interest rate. Many economists including Amsden argued that such intervention in the financial market marked the beginning of Korea's economic growth.

The Korean government's economic policy over the past 60 years has gone in a number of directions. The first five-year economic plans were enacted in the 1960s. This was followed by policies promoting the heavy and chemical industries in the '70s, and economic opening and privatization of the financial system in the '80s. Policy objectives evolved over time as economic conditions and views on the roles of the government and markets changed.

The Korean government implemented industrial policies that allowed the government to distort markets and make independent investment decisions. It also reestablished the roles of the government and markets in the process of democratic development; today, the country struggles to establish proper boundaries of government intervention and make the transition into a market-led economy.

The world economy has seen rapid transformation since the 1997–98 Asian currency crisis, China's economic rise, the 2008 global financial crisis, and the expansion of protectionism as seen in the 2016 election of the Trump administration in the US and Britain's decision to leave the European Union (Brexit) the same year. Despite continuous development and changes, Korea remains a trade-dependent economy in which exports play a significant role. Because the country had to open its domestic market in the 1990s, changes in international economic trends directly influence

the economy, and the domestic market is greatly swayed by the exchange rate and foreign currency flows.

Korean conglomerates (called chaebols in Korean) that survived the Asian currency crisis have gone on to enjoy success on the global market, developing distinct designs and securing production bases the world over. Yet these multinational companies are unlikely to take on the responsibility of providing employment for youths, and a trickle-down effect is not expected, despite their growth.

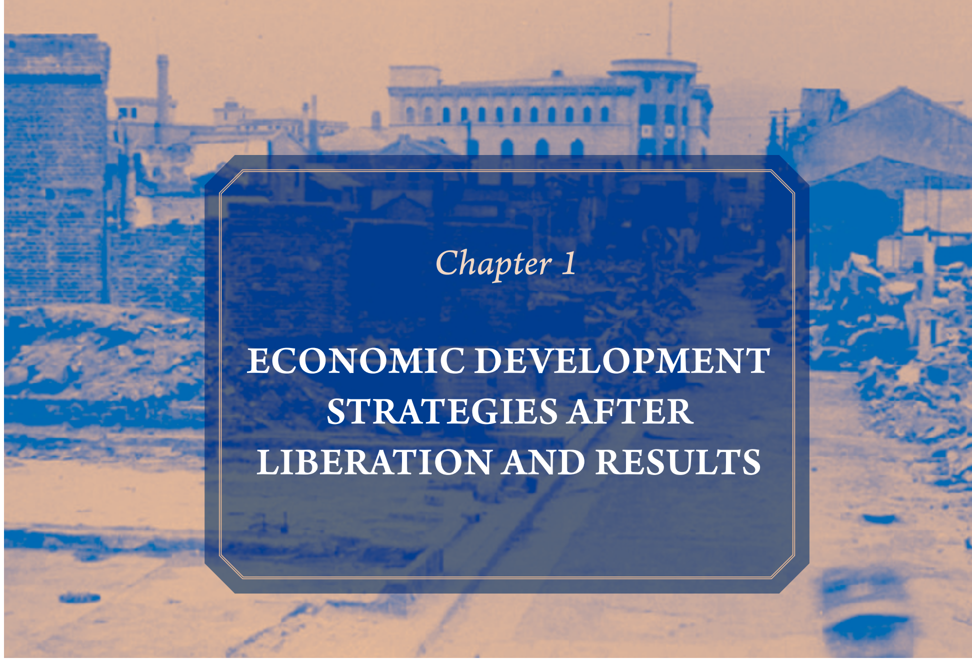
Korea's aging industrial structure is another growing problem. Among the country's top 100 corporations based on sales in 2015, hardly any were new and young companies founded after the 1980s that were not affiliated with the top five chaebols. The production gap between large and small and medium enterprises (SMEs) remains large, thus making it difficult to expect SMEs to resolve growth and unemployment issues. Leaving the discovery and promotion of new companies to the government, financial institutions are instead more focused on consumer banking and real estate lending. In addition, Korea also faces problems that are commonly experienced by developed countries such as income and job polarization, the rise of temporary workers, and a rapidly aging population due to a low birth rate.

About This Book

With the support of the Academy of Korean Studies, this book is an introduction to Korea's economic policy and development process to university students abroad, and those majoring in Korean studies wishing to learn more about the "Miracle on the Hangang River."

This book looks at the country's modern economic development starting from the end of the Korean War, the economic problems Korea faced after the conflict, efforts to solve these problems, and the results produced. It will also describe changes in economic policy objectives from liberation from Japanese colonial rule in 1945 through today in detail. Definitions of economic terms such as "exchange rate" and "informational asymmetry" are provided throughout the book to facilitate higher understanding by readers who lack an economics background.

This book will hopefully allow readers to better understand Korea as well as carefully reexamine the roles of the government and markets.



Chapter 1

ECONOMIC DEVELOPMENT STRATEGIES AFTER LIBERATION AND RESULTS

Korea's Post-liberation Economy

The modern Korean economy began in 1945 after 36 years of Japanese colonial occupation came to an end.[2] Liberation meant that Korea could reclaim sovereignty as an independent nation. Despite what the Korean people hoped for, however, the Korean Peninsula was immediately divided into North Korea, occupied by the Soviet Union, and South Korea, occupied by the US. In February 1946, the North formed the Provisional People's Committee for North Korea under Soviet command and began establishing a single regime to rule the peninsula. In August of the same year, all businesses and assets previously owned by Japanese individuals or corporations were expropriated without compensation and nationalized under an ordinance on the nationalization of major industries. Through this decree, the North removed the capitalist system introduced under Japanese occupation and set up a socialist system. In contrast, South Korea remained under the control of the US military government until August 15, 1948, when it was officially established as the Republic of Korea. The US aimed to maintain the capitalist system and managed the assets Japan had left behind through middlemen. Eventually, these assets were gradually sold to individuals through methods conforming to the rules of a market economy. In August 1948, after South Korea's first presidential election, the US transferred power to the South Korean government.

The South Korean economy under the US military government was in worse shape than it was under Japanese occupation due to shortages of raw materials and political and social instability following the division of the peninsula.

During Japanese occupation, Korea served as a supply base for Japan while it attempted to invade China and South Asian countries, and thus Korea was fairly industrialized compared to other countries previously colonized by Japan. Heavy industry facilities such as electric power plants were built in northern Korea thanks to its proximity to the Asian continent and an abundance of natural resources. Light industry facilities like those for food and textiles were built in South Korea (Lee Heon-chang, 1999, chapter 10). Korean workers under Japanese rule had not been trained in skilled labor or business management, and the Japanese had managed asset operations and technology. After the Japanese withdrew following liberation, industrial facilities in Korea did not operate smoothly and many were idle (USAMGIK, 1948, p. 59).

In addition to liberation, the division of the peninsula shocked the South Korean economy as well. The size of the economy was halved and the Manchurian import and export markets in China were lost. Also, the peninsula lost the complementary economic system dubbed the "industrial North, agricultural South" that Japan had created. Normal economic functions were difficult due to the imbalance between the two newly divided Koreas. South Korea lacked basic industries such as power plants, while there was a surplus in light industry factories such as those for textiles. As inter-Korean economic exchange decreased after the creation of the formal South Korean government, North Korea stopped transmitting electricity in the spring of 1948, and South Korea's industries, reliant on this power source, shrunk greatly.

Table 1-1 shows the negative effects of liberation and division on the peninsula's industrial production. Output in mining and manufacturing in 1946 were only about 15 percent of their levels in 1936.

Table 1-1 Mining and manufacturing production before and after liberation

(1936 constant prices, unit: hwan)

	1936	1946	1947	1949	1950	1951
Mining	31,310	6,074	12,147	15,902	7,730	3,534
Manufacturing	387,191	58,465	81,850	153,469	89,889	60,657
Manufacturing index	100.0	15.1	21.1	39.6	23.2	15.7
Mining & manufacturing index	100.0	15.4	22.5	40.5	23.3	15.3

Source: Research Department, Bank of Korea (1953), quoted in Park Ki-joo and Ryu Sang-yoon (2010).

Figure 1-1 Buildings in Seoul destroyed by bombing
Source: National Archives of Korea.

In 1950, production in mining and manufacturing returned to the levels of the late 1930s in the South, but economic conditions worsened soon afterwards due to the start of the Korean War. As shown in table 1-1, the output levels of mining and manufacturing in 1951 fell again to 15 percent of those in 1936. The Korean War broke out on June 25, 1950, and escalated into a global conflict with the intervention of Chinese and United Nations forces. The three-year war resulted in millions of deaths and the destruction of many production facilities until the ceasefire agreement in 1953. Table 1-2 shows how serious the damage was for each sector during the war.

The Korean War caused an imbalance in government spending and finance as well. The spike in government expenditures to pro-

Table 1-2 Damage to each sector during the Korean War (June 25, 1950–July 27, 1953)

(Unit: million hwan)

	Total damage	Residential homes	Social overhead capital	Gov't facilities
Number of structures	410,590	161,311	132,636	42,363
Percentage		39.3	32.3	10.3

	Regular businesses		Livestock
	Overall	Industrial sector	
Number of structures	67,497	40,045	6,783
Percentage	16.4	9.8	1.7

Notes: 1) Government facilities include central and local government buildings and facilities, police stations, and tax offices.
2) Social overhead capital includes roads, railroads, ports, communication networks, electric power and water supply facilities, schools, and financial institutions.
Source: Ministry of Home Affairs (1953), quoted in Committee on the Sixty-year History of the Korean Economy (2010).

cure war funds led to a significant government deficit. The government aimed to procure financial resources by issuing currency, an action that accelerated inflation. If the wholesale price index of Seoul was 100 in December 1949, it increased to 120 in June 1950, 287 in December 1950, 896 in December 1951, and 1,813 in December 1952. This rapid inflation continued until late 1956, when the government implemented a drastic retrenchment policy.

Both the US military government that controlled Korea immediately after liberation and the first South Korean administration of President Rhee Syngman had many critical issues that had to be addressed but all had to pushed back as the war became the most urgent priority. Devising and implementing consistent economic policy was difficult until after the end of the Korean War.

The war was a violent attempt to settle the political divide that arose after liberation and the stark division between radicals and conservatives. It had a profound impact on the trajectory of the South Korean government. Public organizations in South Korea were reshuffled around right-wing and anti-communist ideologies, which ironically strengthened the power and the reach of the government. Not only did the war provide an opportunity for South Korea to boost its military power and police force, it also strengthened the administrative system. Mandatory conscription was introduced, and the tax collection system and the tax burden grew through wartime requisition systems.[3]

Distribution of Vested Properties, Aid, and Agricultural Land Reform

From liberation to 1960, three key components of the Korean economy included vested properties, food-for-peace aid from the US, and agricultural land reform. The US military government and later the Rhee administration oversaw the distribution of all vested properties and aid until 1957.

Distribution of Vested Properties

Vested properties refer to the public and private assets of Japanese

colonialists handed over to the South Korean government after its establishment by the US military through a bilateral agreement on finance and assets. According to Kim Ki-won (1990), vested properties included a wide variety of assets including banks, land, forests and fields, residential homes, and ships. The value of vested properties in 1948 was nine times greater than the South Korean government's spending. Vested factories comprised a fourth of the country's plants, and their production constituted a third of gross industrial production.

Managing this large amount of assets was an urgent concern. The Act on Vested Asset Management was enacted to deal with this issue. It reflected policies aimed to distribute the assets to private entities, something that the US military government had agreed with, and catered to the socialist sentiment existing at the time as well. Leading businesses were nationalized and collectivized, and remaining ventures and assets were distributed to private entities. Distribution of vested assets was interrupted in 1950 by the outbreak of the Korean War and resumed after the ceasefire in 1953. The 1954 Constitution of South Korea was revised to weaken the nationalized rule and expressed more support for protecting private assets and constructing a market economy. Almost all industries were gradually distributed to private entities until 1962.

In the process of selling these businesses and assets, bids were held and private contracts were drawn. At times, the sale price of an asset was 30–90 percent lower than the real value. Entrepreneurs who purchased these assets via loans could gradually repay them over 10–15 years without interest. The government also allowed them to receive loans from banks to restore businesses and ensure that they operated properly. Businesses also received other advantages including foreign exchange transactions at low currency rates for importing equipment and raw materials. According to Chang Si-won (2006), many people who purchased vested properties had been administrators of these properties under the US military government or people experienced in operating businesses under Japanese colonial occupation. When these businessmen began production using vested properties, imports of foreign products were restricted to protect domestic production. These businessmen also received tax exemptions, thus purchasing vested properties meant gaining a foothold in the market to

Figure 1-2 A welcoming reception for the arrival of US aid in Busan is held by President Rhee Syngman.
Source: National Archives of Korea.

develop a successful business (Park Byeong-yoon, 1982, p. 91). The fact that seven of the top 10 chaebols purchased vested properties in 1961 shows the important role such properties played in creating Korean entrepreneurs after liberation.

Collusive ties between politicians and government officials, however, plagued the process of distributing vested properties; in many cases, bidding and signing private contracts involved unfair methods and corruption. Under this process, ill feelings grew toward those who accumulated wealth. After the 1960 student revolution, breaking down these corrupt structures and dealing with illicit fortune makers came forth as key social issues (Kim Il-young, 2004).

Economic Aid

Korea received economic aid from the US from 1945 until after the Korean War in 1953. America proved to be the most important source of foreign currency income for the Korean economy at the time. According to Jang Sang-hwan (1999), the US provided US$3.1 billion in economic aid and US$1.8 billion in military aid to Korea between liberation and 1961 including an annual average of US$270 million in civilian aid (excluding military assistance) from 1953 to 1958. Converted to a per capita amount, this would be about US$12 per person per year, constituting 15 percent of the gross national product (GNP) at the time and 80 percent of the overall volume of overseas trade (Cole and Lyman, 1971). Korea received the smallest amount of aid in 1954, equal to 11 percent of GNP that year, and the most in 1957, equal to 23 percent (Choi Sang-oh, 2005, p. 362).

Figure 1-3 A UNKRA official delivering relief supplies, 1959
Source: National Archives of Korea.

The US allocated the aid amount, and the Korean government directly imported goods based on that figure. Most of the aid was used to supply consumer goods and basic industrial products including food, fertilizer, clothing, and fuel. This allowed Koreans to consume up to a subsistence level from a humanitarian perspective. Only 10 percent of the aid went toward fixed capital assets and other similar resources. (Cole, 1980, p. 3)

The two countries, however, had opposing opinions on the form and manner of use of aid. Korea wanted to use the funds to purchase more capital goods to plan for future growth rather than

stabilize consumption. The US wanted the aid used to achieve political and economic stability. This difference in opinion caused friction between the two governments, but in the end, the US, as the provider of aid, prevailed (Choi Sang-oh, 2005). Washington used its aid to request that Seoul begin implementing financial policies aimed at achieving financial retrenchment and price stabilization. The US also forced Korea to purchase Japanese products with the aid money to accelerate the reconstruction of the Japanese economy. Korean President Rhee Syngman resisted because of the obvious anti-Japanese sentiment in Korea at the time, but Korea had no choice but to agree to the US demand.

The Rhee administration and the Korea Democratic Party (KDP) oversaw aid distribution as they had for the distribution of vested properties. Exchange of political donations and aid (or the authority to distribute aid) was prevalent in the distribution process.

Agricultural Land Reform

In addition to distributing vested properties, the Rhee administration enacted the Act on Agricultural Land Reform and implemented reform of agricultural land. After liberation, half of all farmers were peasants with no farmland. Those who did own land had a minute amount, and 30 percent of these landowning farmers were also tenant farmers. The Japanese had protected landowners during colonial rule, but maintaining the landlord system proved difficult after liberation (Yang Woo-jin, 2016, p. 35). The agricultural land reform aimed to reestablish the small peasant class that collapsed under Japanese occupation and reduce unequal land ownership. Another goal was meeting the high expectations farmers in South Korea had of the land reform, as North Korea had implemented aggressive agricultural land reform[4] immediately following national division.

The three methods of farmland reform were "uncompensated expropriation and free redistribution," "compensated expropriation and free redistribution," and "compensated expropriation and sale to tenants." Unlike North Korea, which implemented the first method, South Korea selected a more conservative method under the 1950 revision of the Act on Agricultural Land Reform: compensated expropriation and sale to tenants. Implementation of this reform began in April that year. Under the reform, a landowner could not own more than three *jeongbo* (about 30,000 square meters) of agricultural land. Land exceeding that area was purchased by the government and sold. The reform stipulated 150 percent of average annual produce as compensation to landowners, and farmers who purchased the excess land could pay installments of 30 percent every year for five years (Lee Heon-chang, 1999, pp. 379–380).

The implementation of the law progressed smoothly. Seventy to 80 percent of agricultural land was redistributed before the Korean War; 65 percent of agricultural land was cultivated by tenant farmers after liberalization, but this rate plummeted to 8 percent by 1951. Thirty-five percent of agricultural land was self-cultivated at the end of 1945, but this shot up to 92 percent by late 1951. As these numbers indicate, land reform brought groundbreaking changes (Kim Sung-ho et al., 1989). The reform set limits on the ownership of agricultural land and prohibited tenant farming and management outsourcing. It partially reflected the more progressive ideas that supported uncompensated expropriation or free redistribution. It also caused income redistribution of considerable size and largely helped reduce income inequality.

Certain scholars argue that although the agricultural land reform occurred with compensation, many landowners suffered losses because the government forced them to sell their land, violating private ownership of property rights, which is a basic principle of capitalism. The limit on the ownership of farmland and the clause on rent control shrank the agricultural business structure, which hindered the development of agricultural production over the long term. Yet many scholars recognize that the land reform led to many positive changes. Many tenant farmers became independent and cultivated their own land for the first time. The passing on of wealth by landowners decreased to an extent. The ruling class centered on landowners and nobles could no longer dominate economic and social opportunities. Instead, opportunities were relatively fairer to many people.[5]

Yang Woo-jin (2016) argues that the agricultural land reform broke down the landlord system. The decline of the economic and political power of landowners, a group that had exercised strong influence during Japanese colonial rule, limited the landowners' influence over the government and policies. Amsden (1989) also argued that the agricultural land reform raised the average income of farmers, which spurred companies to offer relatively high wages so that farmers would move to cities during South Korea's industrialization.

Economic Policy Basis after the Korean War

After the ceasefire agreement in July 1953, the economic policy of the Rhee administration focused on transitioning from the wartime emergency economic system to one of peacetime. Another goal was economic recovery, which included boosting production and consumption at least to levels before the Korean War.

A host of strategies were implemented to overcome chronic inflation and the economic chaos that had erupted during the war. The US and the United Nations Korean Reconstruction Agency wanted to set up a privately led system of market economy in Korea, and thus aimed to restore the economy back to pre-war levels and achieve economic stability. A final report on the reconstruction plan for the Korean economy submitted in February 1954 by Nathan Associates, a US economic consulting agency, ideologically supported Washington's position. This report suggested policy strategies for managing the Korean economy after the war and provided specific policy methods. The highlights of the report are summarized in table 1-3.

The Nathan report, Korea's first mid-term economic plan, strongly emphasized building a market economy controlled by a price mechanism and ultimately aimed to gradually raise the role of private businesses. The short term intent was to implement strong stabilizing policies and promote import-substituting industries that could lower domestic industries' dependence on imports. In accordance with these plans, the US government also demanded that Korean banks, which had been nationalized after liberation, be privatized. In 1958, a few banks were sold to large companies.

Table 1-3 Key points of Nathan Associates' economic program for Korean reconstruction

Duration of plan (based on US fiscal years)	1953/54–1958/59 (5 years)
Planning method (strategy)	Balanced growth
Urgent issues	1. Lack of basic resources 2. Inactivity of export trade 3. Rapidly rising demand due to fast increase in population 4. Lack of administrative & economic management skills 5. Prevalent hyperinflation
Key points	1. Build free competitive system under stable economy 2. Achieve import & export balance
Preconditions for setting objectives	1. Recover from damage of Korean War within shortest period 2. Persuade donor countries that aid needs realistic restoration plan
Production goals (set independence level to economic conditions of 1949–1950, before Korean War)	1. Raise production 40% 2. Increase agricultural production 35% 3. Multiply mining production more than 5 times 4. Boost manufacturing and construction 85% (14% of output) 5. Increase electric power three-fold
Main policy basis & methods	1. Devise & firmly implement comprehensive safety plan, boost tax revenue & reduce government expenditures, & achieve economic stabilization through credit controls 2. Avoid artificial price controls, implement financial credit policy, unify exchange rate to stabilize import-export prices, adjust wages to reflect market prices, & restore pricing mechanism by sharply reducing payment-in-kind system 3. Rational division of government-controlled and private businesses, develop private ventures, & achieve business rationalization & normal operation of private sector by correcting inflation & normalizing pricing system 4. Lower import dependence in domestic industries, foster industry for effective import substitution
Required funds	Overall amount (A): US$11.58 billion GNP (B): US$10.34 billion Amount of required aid (A-B): US$1.24 billion

Source: Korea Development Institute (1995).

The US pursued liberal market reform and aimed to set a stable currency value under its East Asian development strategy to set up Japan as the region's economic core, with Korea and Taiwan to serve as periphery markets. The Rhee administration, however, wanted to expand social overhead capital and build key industries under its main Five-Year Reindustrialization Plan (1949), as well as the Comprehensive Recovery Plan (1954) and the Five-Year Economic Recovery Plan (1956) devised so that Korea could eventually become an independent economy. Washington and Seoul often disagreed on this issue.

As previously mentioned, they also disagreed on the kind of aid goods that should be provided and their manner of use in Korea. Korea wanted to receive relief goods that supported its recovery plan, but the US supported an aid program that focused on consumer goods to achieve financial stability and solve public welfare issues. According to Park Tae Gyun (2004), among Third World countries at the time including India, nationalist anti-alliance movements and Third-Worldism under the Cold War system were prevalent. The US kept a close eye on Korea for fear that the latter would participate in these movements and emphasized the use of aid focused on consumer goods to prevent it.

Industrialization via Import Substitution

An important economic objective of the Rhee administration after the Korean War was establishing industrialization through import substitution, which was also mentioned in the Nathan report.

Under the policy of industrialization through import substitution, domestic currency (called *hwan* under the Rhee administration) was revaluated so that the parts required for industrialization could be purchased and imported at cheap prices. When companies that imported these parts built their products, the policy aimed to protect domestic industries from foreign competition by imposing high import duties and restriction measures on these products. (For more detailed information on government policies towards the exchange rate, refer to the following section on exchange rates.) The US and Korean governments both agreed on policy toward industrialization via import substitution, as the former wanted to control rapid inflation after the Korean War and the latter sought to protect and promote domestic infant industries.

Import regulations on cotton textiles, a key import-substituting industry at the time, were implemented in December 1954. By 1956, all imports of cotton goods were prohibited. Import regulations were also placed on milling; by 1955, all flour imports were prohibited except those in the form of aid. Tariffs were not imposed on non-competitive equipment that could not be produced domestically, and other raw materials. However, a 10-percent tariff was imposed on essential goods that could not be sufficiently produced domestically and intermediate goods not produced within Korea. Twenty percent was imposed on intermediate goods produced domestically, 30 percent on finished goods not produced domestically, 40 percent on finished goods produced domestically, 50-90 percent on quasi-luxury goods, and 100 percent on luxury items (Lee Sang-cheol, 2014).

In addition to these tariffs and foreign exchange policies, efforts went toward promoting the heavy and chemical industries through aid and direct funding support from the government. The Chungju Fertilizer Plant, Incheon Sheet Glass Manufacturing Plant, and Moonkyung Cement Manufacturing Plant (the three key industries), as well as Samhwa Steel and the Korea Shipbuilding Corp., were directly supported by the government-run Korea Development Bank.

Agricultural ventures in the Korean economy gradually decreased after 1953 due to the distribution of vested properties, aid, and industrialization via import substitution with a dual exchange rate system. Manufacturing saw production increase mainly in the light industry. Industries that saw significant development over this time included textiles, which created 20 percent of manufacturing's value-added production; the so-called three white industries including milling and sugar manufacturing; fertilizer; and construction, which saw higher demand during the restoration period after the Korean War. Manufacturing, including both light and heavy, enjoyed stellar growth of almost 20 percent per year from 1953 to 1958.

The growth, however, was not sustainable as the distribution of vested properties and foreign aid were the main driving forces behind it. The government had also supported the consumer goods industry to implement industrialization via import substitution. However, the sector was far from achieving the minimum production volume to achieve optimal scale of operation and international competitiveness due to the small size of the domestic market. Companies desired protected domestic markets and did not prioritize the introduction of foreign technology.[6] Korea also raised the

prices of export goods as other countries had done while implementing an industrial policy of import substitution. Exporting grew more difficult. As a result, exports accounted for only 3.3 percent of the GNP, and most export goods were from the primary industries including agricultural and marine products and minerals.

Companies that grew during this period thanks to the protection they received included Samsung CheilJedang, Samyang Sugar, Daehan Flour Mill, Samsung Cheil Woolen Fabrics, Kyungnam Wool and Korea Wool, Daehan Cement and Dongyang Cement, Hankuk Glass, and the plastics sector of Lucky. They eventually expanded to become chaebols later. In the latter half of the 1950s, however, aid decreased and the reconstruction boom started to die down. This caused a recession. The retrenchment policy that had been implemented in the mid-1950s at the request of aid donor countries including the US, who wanted to control soaring inflation and build a market economy, contributed to the rapid downturn of the Korean economy in the late 1950s.

Exchange Rate Policy

The nominal exchange rate is the rate at which a country's currency is exchanged with that of another nation. The value of a foreign currency expressed in domestic currency is the exchange rate. If the latter increases, it means that the value of the foreign currency has gone up in relative terms and the value of domestic currency has gone down. This is called devaluation. If the exchange rate decreases, increasing the value of domestic currency compared to the foreign currency, it is called revaluation or upvaluation.

If the exchange rate rises, more domestic currency is required to purchase a foreign good. For example, suppose the initial exchange rate of US$1 = 1,800 hwan increases to US$1 = 2,000 hwan. This means that to import US$1 worth of goods to Korea, it will cost 2,000 hwan instead of 1,800. Therefore, the domestic price of import goods increases. On the other hand, domestic export goods will be sold in the US at lower prices even if domestic production costs (or prices) do not change, which will boost exports.[7]

Under a system of a fixed exchange rate, the government strongly intervenes in the market, manipulating the exchange rate to achieve policy goals. The Rhee administration and many South American countries adopted the policy of industrialization through import substitution, and decreased the exchange rate and revaluated their national currencies. Using this policy, countries could import raw materials and basic necessities at lower prices. This meant that companies that used these materials to supply the domestic market greatly benefited. This policy is also known to stabilize domestic prices, but raises the international prices of export goods and makes exporting difficult.

In contrast, countries aiming to achieve export-oriented industrialization including Korea after President Park Chung-hee came to power, Taiwan, and more recently China, set exchange rates high and devalued their national currencies. This policy combination raises the domestic prices of imported goods and lowers the overseas prices of export goods, boosting exports. For economies that import a large volume of basic essential goods, however, this exchange rate policy can fan inflation because it raises the prices of imported goods. The strategy can also increase prices of raw materials required to produce export goods, and thus might prove unhelpful in boosting the price competitiveness of export goods. If a country has many foreign loans, the cost of repayment can also rise.

The Rhee administration implemented a complicated multiple exchange rate system that applied different exchange rates to counterpart funds, "advance hwan payments to the UN military,"[8] and US$ transactions in the market. Aid funds and advance hwan payments to the UN military were the most important sources of foreign currency for the Korean government. To understand the relationship between these funds and the exchange rate, a detailed understanding of how aid was provided is required.

For example, if the US set the amount of aid to US$100 million, the money was not provided to the Korean government directly. Instead, the latter received the right to purchase goods (produced in the US or other countries) worth up to the same amount. The Korean government then distributed this right to importers. Depending on the counterpart fund exchange rate, an importer deposited the corresponding hwan amount to the Bank of Korea, received an import license, submitted the certificate to the country providing aid, and purchased the required goods. Thus, the lower the exchange rate for this fund or the more revaluated the hwan, the lower the hwan counterpart fund and burden of the private importer. Similarly, if the exchange rate for advance payments to the UN military was maintained at a low rate, the amount the Korean government was repaid in dollars from the UN military increased. The Korean government tried to maintain low exchange rates due to these benefits. This policy, however, allowed importers who received import licenses to purchase aid goods at cheaper prices and sell them at high market prices. Not only did these importers enjoy high economic rent,[9] but foreign prices of domestic goods were overvalued, making export difficult. In the face of declining exports, the government implemented a foreign exchange deposit system which allowed exporters to use the foreign currency they earned from exporting to import other goods or transfer them to other importers at a market exchange rate higher than the official exchange rate. The policy aimed to alleviate the negative effects exchange rates had on exports. While this policy improved exporter profitability, it failed to enhance the foreign price competitiveness of domestic goods, and its effects were limited.

Financial Policy

Interest rates in Korea's financial market in the 1950s were considerably high due to inadequate financial systems, low overall transparency in society, and high risk. Like many under-developed financial markets in poor countries, formal (banks) and informal financial markets (private lenders) coexisted. Interest rates in the private loan market were much higher than those at banks. Though numbers vary among researchers, the annual interest rate in the private loan market at the time was estimated to range from 48 to 240 percent, while the public interest rates of banks had to remain under 20 percent by law (Lee Sang-cheol, 2014).

Furthermore, the inflation rate was extremely high between 1945 and 1957, as table 1-4 shows, due to expansionary monetary poli-

Table 1-4 Inflation rate

(Unit: %)

	1946	1947	1948	1949	1950	1951
Producer price	385.4	73.9	62.9	36.7	-	-
Consumer price	280.4	78.9	58.4	24.9	167.5	390.5
	1952	**1953**	**1954**	**1955**	**1956**	**1957**
Producer price	-	25.3	28.2	81.1	31.6	16.2
Consumer price	86.6	52.5	37.1	68.3	23.0	23.1

Source: Bank of Korea.

cies to procure government funds needed during the Korean War. The lowest inflation rate in these years was 23 percent.

Thus, real interest rates (the nominal interest rate minus the inflation rate) in the formal market, despite its relatively high nominal interest rate, were often negative. In other words, if someone deposited funds in a bank to save, the real purchasing power of the funds he or she would withdraw later would be lower because the deposit interest rate was lower than that of inflation. As a result, Koreans mainly used informal financial markets such as those of circular or private loans rather than formal financial institutions like banks to stash their savings. Commercial banks struggled to attract depositors and failed to meet loan demands with deposits. They depended on the government and faced chronic excess demand for funds. Businesses found it difficult to get loans from banks that provided relatively low interest rates, and had to depend on the private loan markets with much higher interest rates. As companies constantly struggled with the burden of high interest rates, the chronic shortage of investment funds with low interest rates and the inefficient financial markets that caused it became key concerns for the Korean government.

The Rhee administration understood that printing too much money to finance the war was the main cause of inflation, which contributed to the lack of public savings and fund shortages of commercial banks. Controlling inflation by establishing an independent central bank like the US Federal Reserve System was an urgent priority. In May 1950, the Korea Bank Act and the Banking Act were enacted to set up the Bank of Korea. The central bank was tasked with the comprehensive goal of achieving currency stability and a sound banking system. It received the authority to control banks and other financial companies by restricting access to funds and adjusting interest rates. Furthermore, the Monetary Policy Committee modeled after the US Federal Reserve Board was also set up as Korea's highest decision-making organization for implementing monetary and financial policies. The Bank of Korea, however, was not given complete autonomy in monetary policy and saw a further reduction of power after Park Chung-hee assumed the presidency in 1961.

The Banking Act did not take effect during the Korean War and was implemented in 1954, a year after the conflict ended. Not only did the law excessively control commercial bank loans, making it difficult for banks to function, it also failed to attract government bank capital. Bank capital did not even add up to 0.1 percent of total assets. From 1954, Korea began to privatize its banks to solve these problems and introduced the market system more extensively with US support. By 1957, some commercial banks became private. A small group of companies purchased most of the bank capital sold by the government to become the dominant shareholders of the banks, allowing these companies to use banks as their personal piggy banks.

Why Borrowing Money is Difficult for Poor Countries and Individuals

Borrowing money from banks or other financial institutions is difficult for poor individuals, especially in poor countries. The poor either have to depend on the private loan market and pay high interest rates, or not borrow at all and lose good business opportunities. Getting out of the poverty trap thus remains elusive.

Why do banks rarely loan money to the poor? To understand the answer to this question, it must be understood that the objective of a bank or money lender is earning profit by lending money. How do banks earn profit from making loans? They add interest on the money loaned with an expectation that the amount repaid is greater than the principal. If the bank uses a client's deposit to provide loans, the interest rate on the loan must be higher than that on the initial deposit. This difference is called the loan-to-deposit rate of interest, or spread. This difference is the underlying source of profit for commercial banks. One may think that banks can simply raise their loan interest rates to boost profit, but it is not that simple. The biggest problem banks face is the possibility of the borrower defaulting on the interest and principal payments. So, when calculating the expected profit from loans, the bank must consider the probability of loan default.

For example, a bank has Clients A and B. The probability of Client A repaying a loan is 99 percent while that of Client B is 90 percent. Though Client A has a 99-percent chance of repaying the loan, the probability that he or she will not is also 1 percent. The expected value to be received from Client A is US$0.99 (= US$0.99 × US$1 + 0.01 × US$0). Similarly, if the bank loans US$1 to Client B, the expected value to be received is only US$0.90 (= US$0.90 × US$1 + 0.1 × US$0). To avoid loss, the bank must charge an interest rate of at least 1.01 percent to Client A and at least 11.11 percent to Client B. This example shows that to gain profit, banks must charge higher interest rates to clients with a greater risk of default. This principle applies to insurance as well. Teen drivers pay more for car insurance than drivers in their 50s, soldiers and elderly have higher premiums for life insurance.

Then why are the poor considered high risk clients? There are two reasons. First, the poor have little or no experience in making financial transactions, making it difficult for banks to verify whether they are trustworthy. Another possibility, however, is that banks could be prejudiced against less wealthy clients. Second, many banks require collateral when the risk of a client is difficult to analyze or if the client is considered high risk. Banks tend to avoid loaning to individuals who have no assets given the lack of collateral.

To foreign banks, Korea after the Korean War was a poor client devoid of resources or assets to put up as collateral. Aside from aid, it was thus difficult for the country to obtain commercial loans at low interest rates.

Rhee Administration's Education Policy

Enacted in 1948, Korea's first constitution reflected Western egalitarian ideas such as gender equality, which was considered progressive at the time. These modern concepts were most prevalent in education policy. In 1949, President Rhee made what was called "common education" (now elementary education) compulsory. After the Korean War and agricultural land reform, outmoded ideas of social class that were prevalent during Japanese occupation broke down. By the latter half of the 1950s, the attendance rate at common schools was almost 100 percent (Kim Ki-seok and Kang Il-gook, 2004).

With the advent of common education, rising demand for higher levels of education led to the opening of middle and high schools. The government's lack of funds to support these educational institutions meant schools were mostly set up and funded by private entities and managed by private school systems. Vocational colleges and universities were established as well. The number of universities and colleges rose from 42 in 1952 to 63 in 1960, and enrollment jumped from around 30,000 to 100,000 (Lew Young-Ick, 2006).

The average attendance rate of other comparable developing countries in 1960 was 26 percent at elementary schools and five percent at middle and high schools and other secondary educational institutions. The high attendance rates in Korea show that its investment in education was a unique phenomenon. The rise in interest and demand for education[10] and educational opportunities were significant factors that contributed to Korea's rapid economic growth after the 1960s.

As the number of young people receiving a high school education rapidly increased, however, the generation gap between the high school and university-educated younger generation who grew up after liberation and the older generation before them grew wider. This also intensified social conflict, as the ideas of democracy and equality these young people had been taught could not be achieved due to the country's political and economic situation at the time. The number of university students shot up in the latter half of the 1950s, but the growth of companies that would need them fell behind. This caused a glut of university graduates to remain unemployed (McGinn et al., 1980).

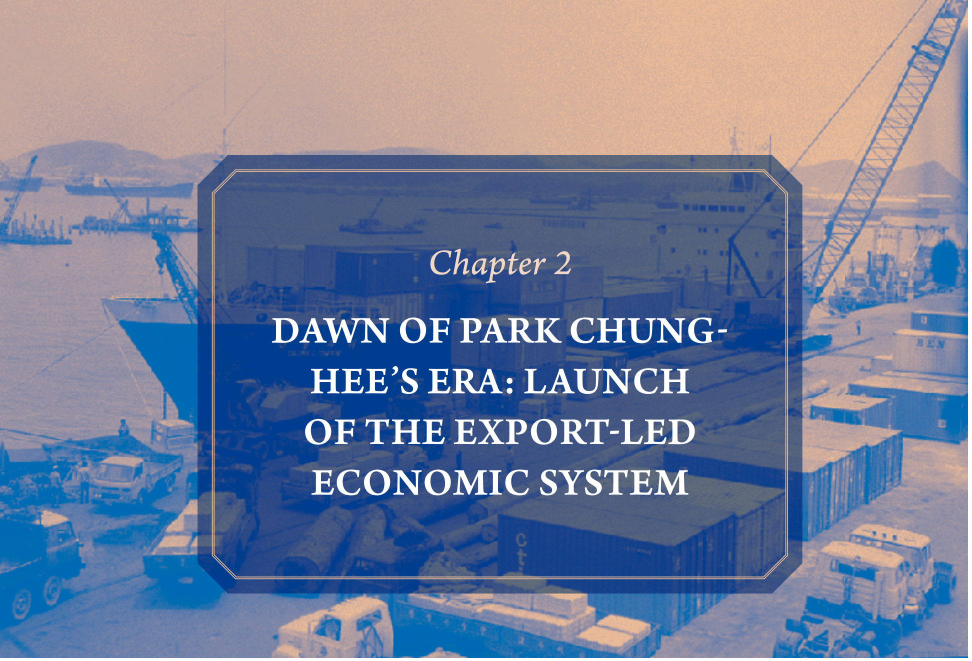
Results of the Rhee Administration's Economic Policy

Post-Korean War GDP growth from 1954 to 1961 averaged 4.1 percent, not enough to significantly improve the lives of Koreans. The per capita GNP saw paltry growth from US$67 in 1953 to US$82 in 1961. In 1960, one out of five people in the working population was unemployed and many remained mired in poverty. The vicious cycle of low income → low savings and low investment → continuation of low income continued. The total savings rate decreased from 13.1 percent to 11.7 percent between 1953 and 1961. The total investment rate also declined from 14.7 percent to 12 percent over the same period. Thus, by the early 1960s, US officials had become extremely gloomy about the prospects of Korean development (Mason et al., 1980, p. 195).

Several reasons explain why the government policy saw little

success. First, funding was restricted and professional knowledge was lacking in the technical sector. Those in charge of policy reform lacked the strategies and professional knowhow needed to operate a latecomer economy. Also, distribution of vested properties and aid was concentrated on companies with close political ties to the government. While these companies received preferential treatment in tariffs and low interest loans from banks, there was no effort or system to objectively evaluate the performances of these companies or to discipline those failing to perform adequately. So rather than creating national wealth through productive activities, many companies were instead engrossed in rent-seeking ventures and relied on foreign aid, bank loans, and government funds that they had exclusive access to. Some economists criticize that the owners of these companies were "speculative, lowbrow, corrupt, and dependent" types, who rather than expanding the economy through production, focused on taking away other people's opportunities and had "zero-sum business mentalities" (Jones and Sakong, 1980, p. 278).[11]

The Rhee administration, mired in the conflict raging between the right and left in Korea after liberation and the Korean War (1950–53) and its aftermath, also suffered. Many companies and individuals resorted to corruption and political infighting to squeeze more rent from the government. On March 15, 1960, the government held fraudulent elections in a desperate effort to maintain its regime. The violent resistance of citizens, however, ultimately led to the end of the Rhee administration.



Chapter 2

DAWN OF PARK CHUNG-HEE'S ERA: LAUNCH OF THE EXPORT-LED ECONOMIC SYSTEM

After the Rhee administration collapsed in 1960, the Korean economy faced an uncertain future. A major shift in US aid policy in late 1950s—once granted free of charge, such assistance had to be taken out in the form of loans—further complicated the already gloomy economic situation. Because of this change, Korea expected difficulty in financing its economic development. At the same time, the so-called April 19 Revolution of 1960 that ousted the Rhee administration sparked popular demand for democratization, economic development, and justice.

Yun Posun was elected president after the revolution, though real power was in the hands of Prime Minister Chang Myon. Before they could implement their own plans, however, Park Chung-hee seized power after the 1961 military coup, marking a turning point

Figure 2-1 President Park Chung-hee attends a building dedication ceremony for Saenara Motors (1962).
Source: National Archives of Korea.

for the Korean economy.

The Park administration made economic development its primary task and created five-year economic development plans through which a main strategy for development and the role of each economic sector was presented. The government also re-nationalized commercial banks that had been privatized under the Rhee administration. Using these government-owned commercial banks, the Park administration secured the means to allocate domestic capital and attract foreign investment through payment guarantees for commercial loans. This became a key piece in the government-led industrialization of the 1960s and '70s.

Establishment of Economic Development Plans

The first Five-year economic plan was announced in early 1962. It was based on the Five-Year Comprehensive Economic Reconstruction Plan presented by the Comprehensive Economic Reconstruction Committee of the Supreme Council for National Reconstruction in 1961. The ambitious key objectives of the plan included achieving average economic growth of 7.2 percent from 1962 to 1966, promoting exports, and building the foundation for an independent economy by promoting industrialization via import substitution. This plan can be summarized by the following three points. First, it criticized the flaws of free markets and claimed to support "guided capitalism." Second, it focused on building key industries such as cement, fertilizer, steel, and oil refining within manufacturing to create a foundation for an independent economy. Third, it attempted to improve the country's international balance of payments by raising exports, which were mainly primary products at the time (Lee Byeong-cheon, 1999, p. 147).

This plan was different from those of the previous governments in that it actively promoted the government's role in the economy and aimed to improve the international balance of payments through manufacturing and exports. It also contradicted what the US intended for Korea, which was to build a market-based economy. The plan mostly resembled Japan's developmental strategy. On the other hand, the stated goal of establishing an independent economy by fostering key industries and its focus on import substitution was little different from the policy objectives of previous governments.[12]

In obtaining the funds required for economic development, domestic capital was emphasized over foreign capital and the government's role took precedence over that of private companies. The plan included an ambitious attempt to obtain more than 70 percent of the estimated funds from domestic sources.

Washington, however, was concerned that by limiting the market economy and building an independent economy, Seoul subscribed to Third Worldism, which was popular among developing countries at the time. The US was also worried that it would require an enormous and unrealistic amount of money to implement the ambitious economic development plan. It requested that the Park administration reconsider its goal to build key industries and lower its targeted growth rate (Lee Wan Bom, 1999).

The US's concern was justified as the economic development plan failed to progress as intended, and many of its ambitious proposals proved unrealistic. The 1962 currency reform, designed to shrink informal sectors of the economy and punish those who made a fortune in exploitative informal financial markets, turned out to be a disaster. The plans to attract domestic funds by raising deposit interest rates hit a brick wall after the failure of the currency reform. As a result, the government had to depend on foreign short-term commercial loans to finance its policy operations. Foreign exchange reserves began to rapidly decrease due to the loan interest payment. In 1961 Korea had US$205 million in foreign exchange reserves, but this figure started to fall starting in March of 1962. By September, the amount had been nearly halved to US$107 million. Furthermore, inflation was worsening due to a grain shortage crisis from a year of bad harvests. Recognizing the failure to reach its economic growth objectives in 1962 and 1963 and sensing a crisis, the government implemented the export-import link system[13] on January 1, 1963. It presented a supplementary plan for the first five-year plan in 1964. The plan did not deviate much from the original plan, but lowered the target growth rate and revised the objectives to promote key industries to a more realistic level. In procuring funds, foreign capital was emphasized over domestic capital. The plan's focus also shifted to export-oriented industrialization as the government recognized exports as key means of earning foreign currency.[14] Once Korea enjoyed high economic growth after implementing a pro-export policy, export promotion became the number one objective of economic policy in the 1960s and 70s (Kim Sung-nam and Park Ki-joo, 2014, p. 104).

Financial Control Policy

As mentioned previously, Korea had high inflation and relatively low interest rates of bank deposits until the 1960s. This caused low saving rates and a chronic lack of investment funds. The change in US policy at the end of the 1950s also changed American aid into loans. Securing foreign currency to repay the principal and interest became a difficult task for Korea.

To effectively control the capital supply through banks, the Park administration enacted "temporary measures for financial companies" in 1961, nationalized banks, and transferred the authority to manage monetary policies from the Bank of Korea to the Ministry of Finance. The authority of the Monetary Policy Committee was also curtailed to overseeing items related to operating and managing monetary policies.

On October 18, 1961, the government and private companies held a meeting right before the Park administration was formed. There, the companies argued that government payment guarantees were necessary to procure foreign capital and that the government should provide loans to make up for the shortage in domestic loan markets (Kim Jeong-ryum, 1990, p. 434). To meet these demands, the Act on Payment Guarantees for Loans was enacted in 1962. Through this law, a payment guarantee system based on collateral to be obtained later was introduced exclusively for businesses that brought in foreign capital. The government used factories slated for construction using loans as collateral to provide payment guarantees.

Through this system, the government could exercise strong influence over the introduction and allocation of domestic and foreign funds.

At the same time, various policies to legalize black money being circulated through circular or private loans were implemented to channel these funds to the formal banking system as sources of investment. One of these policies was the currency reform of June 1962 that changed the currency unit from hwan to won and denominated the currency's nominal value by setting 10 hwan per won. This radical attempt sought to convert hoarded black money into circulation and bank bills for economic development. However, the amount of funds hoarded turned out to be much smaller than expected and owned by corporations, not privately owned. The

Figure 2-2 After currency denomination was announced, a long line formed outside a commercial bank as people tried to exchange their old currency to the new one.
Source: National Archives of Korea.

so-called deposit freeze policy froze funds in hwan and prevented them from circulating, causing a credit crunch. As concerns about the possible recession grew, the government announced mitigation measures to end the deposit freeze policy just a month after the reform was implemented. In the end, the lone accomplishment of the failed currency reform was changing the currency unit from hwan to won.

Another attempt to convert black money in the informal financial market into investment funds was to allow mutual loans companies

(a type of credit union similar to today's mutual savings and finance companies) operating in both the formal and informal financial markets to be legalized and merged to establish Kookmin Bank. From 1961 to 1971, provincial banks were also established to boost provincial finance.

After nationalizing the commercial banks, the Park administration directly and indirectly controlled the deposit and loan interest rates of banks. Until 1965, the government maintained a policy of low interest rates to lessen the burden of financial costs of corporations. One problem with the low interest rate policy was that the low interest rates not only suppressed savings, but also caused the savings to flow into the informal loan market in which interest rates were relatively high. To channel these funds into banks, the government carried out an interest rate policy that sharply raised the maximum deposit interest rate of commercial banks from 15 percent to 30 percent per year in 1965. At the same time, loan interest rates were maintained at relatively low levels. Thus, the interest payments of companies did not increase and savings and investment levels improved greatly. Banks' savings deposits jumped about 50 percent within three months until the end of 1965, and doubled every year through 1969. The ratio of savings deposits to GDP skyrocketed from 2 percent in 1964 to 21 percent in 1969. Savings deposits shot up from six percent of all deposits to 29 percent. The policy of interest rate realization coincided with the floating exchange rate system, and contributed to expanding the influx of foreign capital.[15]

The implementation of these government financial measures shows that the Park administration used finance as a powerful and easy-to-use policy tool to effectively control the economy and businesses. Proper growth and development of the financial sector was overlooked to cultivate industries and boost exports. After the 1965 measure was implemented, interest rates on loans were maintained at low levels. Thus, the deposit-loan spread (the gap between the rates of deposit and loan interest) were almost nonexistent. Sometimes the loan interest rate was even lower than that of deposits. This caused a “negative spread”: banks borrowed money at high deposit interest rates and lent them out at cheaper rates, and suffered losses every time they loaned money. The negative spread between the deposit-loan interest rate showed that the government considered banks as nothing more than their own loan window.[16]

Finally, the measure of August 3, 1972 was the most drastic form of government intervention in the private loan market. The crux of this measure was readjustment of the lender-borrower relationship so that all private loans of companies were repayable over five years at a monthly interest of 1.35 percent after a three-year grace period. In other words, after the measure was implemented, companies that had been paying a monthly interest rate that usually exceeded 3.5 percent per month suddenly had a three-year grace period and could pay a far lower rate of 1.35 percent for five years starting in the fourth year.[17] While detrimental to the private and informal market lenders, this obviously was great news for companies paying high interest rates on private loans. Thanks to this radical policy, Korea’s rate of economic growth grew by a large margin despite the first oil shock that occurred the following year in 1973. To absorb the remaining private loans that had largely decreased with the 1972

Figure 2-3 A slogan outside the National Tax Service after the implementation of the 1972 measure to freeze private loans
Source: *Kyunghyang Shinmun.*

measure into the financial system, the government allowed the establishment of seven investment and finance companies from 1973 and allowed them to serve as short-term funding sources.

The measure, however, invalidated contracts voluntarily and legally signed by private individuals and forced changes in terms of the contracts so that one party could clearly benefit at the cost of the other party. This policy would have been unconstitutional in most market-based, democratic societies and was a kind of policy that was possible only in a military government that had seized power through a coup. Furthermore, the measure set a bad precedent. Companies did not take full responsibility for their bad investment decisions or ill-managed funds. Under the measure, companies with more private loans received preferential treatment. Companies believed that if they grew bigger even through loans, the government would step in and help whenever they struggled. This created a corporate attitude of being "too big to fail." The government and tax-payers had to share the cost incurred by these bad investments and excessive borrowings.

During Korea's decades of economic development, banks were deprived of opportunities to acquire and accumulate the skills required to properly perform its economic function. This included attracting deposits through relatively low interest rates and evaluating the credit worthiness of companies and investment projects to provide loans at appropriate interest so that depositors' funds could be efficiently allocated to the most productive activities. Government-controlled financing allowed the government to act as a bank, resulting in economic technocrats dictating the allocation of credits even during the process of gradual financial liberation. This caused the financial sector to fall behind the industrial sector, represented by chaebols becoming a drag of the entire economy.

Curb Market vs. Formal Banks

In the implementation of the first and second economic plans, the underground economy, especially the informal loan market featuring high interest rates, was one of the biggest obstacles faced by the Korean government. The interest rate for private loans at the time (also called the curb rate) ranged between 4 and 10 percent per month and 48 and 120 percent annually (Lee Sang-cheol, 2014).

Interest rates for private loans were almost double that of banks (18 percent). This was extremely high, even when the high annual inflation over this time (15.6 percent) is considered. Because of these extremely high interest rates, many companies that did not have access to formal credit markets had their growth staggered.

While understanding the government's policy to solve the issue of the informal loan market is important, it would be useful to question how an 18 percent bank loan rate can coexist with a 48 percent interest rate in the informal loan market. If banks could undercut the private lenders in the informal loan market by offering loans with 20 percent interest to companies, both banks and companies would benefit and eventually private money lenders would be pushed out of the market. So why did this not occur?

George Akerlof, who shared the 2001 Nobel Prize in Economics, asked why this type of dual interest rate system is commonly found in developing countries.

There are two main reasons for this. First is the difference in information. Often, private moneylenders have more detailed information on the financial situation of their client companies than banks. If banks, which have insufficient information on clients' credit worthiness, try to compete against the private moneylenders, companies with varying degrees of credit worthiness (including companies that are in financial trouble and therefore were unable to borrow even in the private loan market, and companies with no intent to repay the money from the beginning) would all try to exploit the bank's lack of information. Thus, banks may be reluctant to enter the market until they can obtain enough information on clients' credit worthiness. The second reason is related to the institutional safeguards of credit markets and the speed and efficiency of their applications. A lender's biggest concern is the possibility of default, therefore the lender has to be assured about the measures—such as bankruptcy procedures, claims, and assets of default borrowers—to protect their interest in the case of default. This is difficult in developing countries where legal systems that protect property rights and credit evaluation systems are inadequate and inefficient. As Rajan and Zingales (2004) put it, in developing countries, "ownership rights are neither well demarcated nor well enforced; there are no agencies collecting, storing, and disseminating information on the creditworthiness of potential borrowers; there is little competition between the money lenders; the laws governing credit are outdated; contracts are not enforced because the judiciary is all too often either asleep or corrupt" (p. 8). Facing these problems, banks would avoid lending to companies and individuals lacking secure collaterals or political ties. Private money lenders, however, can mobilize human networks or use extralegal methods to prosper in the markets of developing countries.

Pro-export Policy

In 1960, when the government was focused on industrialization via import substitution, Korea's annual exports reached US$33 million, just a little under a tenth of its overall imports of US$344 million. The size of the country's overall trade at the time was quite small considering that the export of countries like Ethiopia, Tunisia,

and Cameroon were around US$100 million each, that of the Philippines was US$700 million, and Taiwan's was US$400 million (Park Kyung-ro, 2015).

After announcing the supplementary plan to the first five-year plan in 1964, the government introduced an export target system that aggregated estimated exports for each industry and selected export targets for each year. In monthly meetings on export expansion chaired by the president, former ministers and export executives assessed whether export targets were reached and sought solutions if the results were not satisfactory. The government implemented a three-pronged policy of aggressive export promotion through foreign exchange rates, administrative and tax systems, and finance.

The administrative and tax support sought to provide exporters with support funds and tax breaks such as complete exemption from tariffs on raw material imports used for exports, and an 80 percent reduction on export-generated incomes. Also implemented were incentives that reduced taxes by accelerating the accounting depreciation of fixed assets used in export industries and policies that allowed raw materials for export to be imported without tariffs simply by submitting the required documents.

Aside from these direct forms of tax support, administrative support systems were strengthened. The Korea Trade Promotion Corp. (KOTRA) was formed to set up overseas networks, gather market information, and provide export marketing. The launch of the Korea International Trade Association (KITA) also facilitated information sharing and cooperation at the industry level.

In the foreign exchange market, the fixed, dual exchange rate system was replaced with that of a single managed, floating exchange rate. The Korean won was devalued against the dollar almost by half from KRW 130 in May of 1964 to KRW 256.5 in March of 1965, greatly raising price competitiveness of exports. After the single floating exchange rate system took full effect in March 1965, the real exchange rate was maintained at stable levels. This drastic currency devaluation, however, caused inflation in the domestic prices of imported goods, and inflation remained high after 1964.

Financial support policy, financing export production at sub-market interest rates—was implemented through nationalized banks. An export support system that provides bank loans to companies with a letter of credits for all of its operating costs required for exporting. From 1961 to 1965, interest rates for export financing averaged 9.3 percent, far lower than the market interest rate of 18.2 percent. This gap widened as interest rates rose after 1966. Interest rates for trade financing were maintained at levels more than 17 percent lower than the regular interest rate for loans.

The government's aggressive pro-export policy directly boosted exports and international trade as private companies understood the clear message from the government. This greatly alleviated uncertainty in corporate planning for economic activities (Kim Nak-nyeon, 1999).

Dispatched Mine Workers and Nurses

Until the latter half of the 1950s, the country had mostly relied on American aid to rebuild the nation and develop its economy after the Korean War. The problem was, however, that such assistance was no longer free of charge as the US balance of international payments had worsened and the dollar's outflow abroad had rapidly increased. Thus, Korea had to seek other sources of investment funds including aid donors. On March 18, 1961, the government signed a technical assistance agreement with West Germany to lay the groundwork for bilateral cooperation. On December 13, 1961, the two countries concluded an economic and technical assistance pact that included economic aid.

Based on this deal, West Germany began accepting Korean technical (or job) trainees. Mine workers were also sent under this agreement as a part of technical assistance. Nurses were dispatched from the mid-1950s through private West German and Korean businesses. The lingering shortage of nurses in West Germany fueled higher demand. From 1966, the government-run Korean Overseas Development Corp. received the exclusive authority to send nurses abroad.

From 1963 to 1977, a combined 7,936 Korean miners were sent to Germany, and from 1960 to 1976, 11,057 Korean nurses were dispatched there as well.

The dispatched miners and nurses are fondly remembered by Koreans because their wages were believed to have been used as collateral by the Korean government, which was short on funds at the time, to secure commercial loans from Germany. For a long time, many Koreans thought that the hard labor of these workers had helped make their nation's economic development possible.

German commercial loans to Korea in 1961, however, were a type of aid provided per protocol under the bilateral agreement on economic and technical matters concluded on December 13, 1961. According to this protocol, Germany had to provide DEM 150 million in financial development aid to Korea. Of this amount, half came in the form of long-term development loans and the other half as guarantees for claims arising from long-term export transactions. These commercial loans were long-term export transaction credits provided to German companies that exported a large volume of high-level equipment to Korean companies on a deferred payment basis. The German export insurer Hermes provided the guarantee and the German reconstruction credit institute Kreditanstalt

Figure 2-4 The first group of miners report their departure to West Germany in 1964. (left)
Source: National Archives of Korea.

Figure 2-5 Dispatched Korean nurses say farewell at an airport in Seoul. (right)
Source: National Archives of Korea.

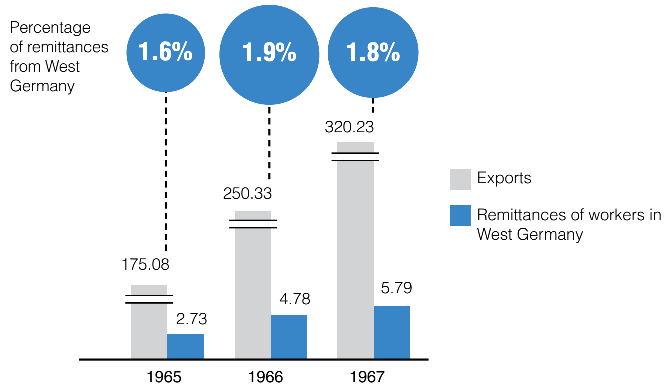


Figure 2-6 Comparison of exports and remittances of workers in West Germany (Unit: US$ million)
Source: Truth and Reconciliation Commission.

für Wiederaufbau (KfW) gave the funds. Thus, the notion that Korea obtained commercial loans using the wages of dispatched miners and nurses as collateral was an urban legend crafted and retold for political purposes. The intent was to instill patriotism within Koreans by emphasizing the country's urgent situation at the time and the rapid economic growth that followed.

While the role of these miners and nurses has been politically exaggerated, the remittances they sent back to their families and relatives were an important source of foreign currency. From 1965 to 1975, the remittance amount reached a hefty US$101.53 million. They accounted for 1.6 percent of exports in 1965, 1.9 percent in 1966, and 1.8 percent in 1967. For exports, a portion of the funds flowing in were used as expenses. Remittances from the mine workers and nurses, however, had a 100-percent rate of foreign exchange earnings whose entire amount was absorbed by the Korean economy. These earnings thus did contribute to Korea's economic development.

Economic Effects of Diplomatic Normalization between Korea and Japan and the Vietnam War

In the early 1960s, the Park administration strived to procure the resources needed to carry out its first economic development plan, but failed to produce satisfactory results and struggled to raise funds. Korea did not have good credit rating and few foreign governments or financial institutions were willing to provide commercial loans. Also, the Korean government lacked the human resources and the institutional, policy, and political capabilities needed to effectively carry out this task. The failure of the 1962 currency reform, soaring rice prices caused by poor harvests, inflation caused by expansionary monetary policy, and the rise in import demand also rattled the economy. Two incidents, however, enabled the Park administration to secure investment funds at the time: normalization of diplomatic relations with Japan and the dispatch of Korean troops in the Vietnam War.

Korea suffered from political turmoil after liberation and struggled to develop its economy following the Korean War. Japan, on the other hand, achieved quick economic recovery and continuous growth after the war. By 1960, it had developed enough to provide funds overseas. Furthermore, the US planned to build an anti-communist region in East Asia with Japan at the center. Since the Rhee administration, Washington had strongly demanded that Seoul restore diplomatic relations with Tokyo. For the Park administration, which desperately needed foreign funds, normalizing relations with Japan was an attractive strategy. Yet memories of exploitation under Japanese occupation remained strong in the minds of Koreans at the time, and restoring economic and diplomatic ties with their former colonial ruler would have proven to be a huge political burden. Due to the risk, previous governments had not even dared to try.

The failures of the 1962 currency reform and the 1963 plan for domestic fund procurement, however, gave urgency to foreign funds acquisition as a key to the survival of the administration. The Korean government thus began executing plans to normalize relations with Japan, an effort that had been developing out of the public eye. In June 1965, the government suppressed a massive protest against the normalization with force. A basic treaty on restoring ties with Japan was signed that month. In August, bilateral relations were normalized through parliamentary ratification in Seoul. In return for the normalization, Korea received US$300 million over 10 years as compensation for years of Japanese colonial rule, as well as US$200 million in public loans and US$300 million in commercial loans.[18] These funds were provided in phases, and Korean companies could use commercial loans to import Japanese capital goods. This partly alleviated the shortage of investment funds in Korea and provided a turning point in establishing a mutually beneficial economic trade structure between the two nations.

The second incident was Korea's decision to join the Vietnam War.

In a meeting between President Park Chung-hee and US President Lyndon B. Johnson in May 1965, a formal agreement was reached to dispatch Korean troops to Vietnam. In October the same year, the so-called Tiger Division and Blue Dragon Marine Brigade of Korea began operations in the coastal area of central Vietnam. Afterwards, Washington requested additional troops from Seoul, and in the process of negotiations, both sides signed the Brown Memorandum. The 14-point memorandum guaranteed the modernization of equipment of the Republic of Korea Army, coverage of all costs for the dispatch of Korean troops to Vietnam, improvement of labor conditions for troops, and participation of Korean companies in markets seeing increased demand from the war. Per this agreement, Korea additionally dispatched the White Horse Division in April 1966. Thus, for about eight years until March 1973, when all troops were withdrawn, about 45,000 Korean troops were stationed in Vietnam for independent operations.

Figure 2-7 A send-off in Busan for military workers during the first troop dispatch to Vietnam in 1964 Source: National History Museum e-Archive.

Aside from the US$150 million in development loans promised by the US government, the Vietnam War affected the Korean economy in three ways.

Figure 2-8 Korean engineers in 1969 built highways connecting Hanoi and Nha Trang. During the Vietnam War, more than 10,000 engineers worked in Vietnam every year. Source: National Archives of Korea.

First, Korean companies earned business opportunities by participating in the Southeast Asian nation's emerging market created by the large number of American soldiers dispatched there. The economic profit Korea raked in from trading with Vietnam from 1965 to 1973 reached US$283 million. Of this amount, more than US$94 million were from commercial exports, and two thirds of sales were from exports of war supplies.

Second, Korean companies obtained contracts from the US in the service sector and construction. They focused mostly on the transportation of goods, service industries (including laundry and entertainment), construction of military bases and buildings, and implementation of construction and civil engineering projects (e.g., building bridges and other public works). The amount of foreign currency income remitted by these companies until 1972 reached US$238 million.

Third, part of the wages paid to Korean soldiers in the Vietnam

Table 2-1 Composition of profit earned from increased demand in Vietnam

(Unit: US$ millions)

Categories	1965	1966	1967	1968	1969
Ordinary income	17.7	23.8	23.2	38.0	47.1
Exports	14.8	13.9	7.3	5.6	12.9
Military goods	2.8	9.9	15.9	32.4	34.2
Income from invisibles	1.8	37.3	128.1	130.6	153.3
Military services		8.3	35.5	46.1	55.3
Military construction		3.3	14.5	10.3	6.4
Soldiers' remittances	1.8	15.5	31.4	31.4	33.9
Engineers' remittances		9.1	33.6	33.6	43.1
Special compensation			4.6	4.6	10.8
Insurance		1.1	4.6	4.6	3.8
Total	19.5	61.1	151.3	168.6	200.4

Categories	1970	1971	1972	Sum	Pct. (%)
Ordinary income	70.1	35.7	27.5	283.1	27.7
Exports	12.8	14.5	12.5	94.3	9.2
Military goods	57.3	21.2	15.0	188.8	18.5
Income from invisibles	134.5	97.6	55.7	738.9	72.3
Military services	52.3	26.5	9.2	233.2	22.8
Military construction	7.4	8.3	3.1	53.3	5.2
Soldiers' remittances	30.6	32.3	26.8	201.5	19.7
Engineers' remittances	26.9	15.3	3.9	166.2	16.3
Special compensation	15.2	13.9	12.0	65.3	6.4
Insurance	2.1	1.3	0.7	19.4	1.9
Total	204.6	133.3	83.2	1,022.0	100.0

Source: Cho (2011).

War was remitted to their home country, and Korea received compensation for soldiers killed or injured in battle. At the time, the military headquarters participating in the war directly managed the monthly wages and remittances of soldiers, raising savings rates and foreign exchange reserves. Until 1972, more than US$200 million was remitted, 40 percent of which was saved in banks. The US provided US$65 million to Korea in compensation for soldiers killed or injured in action.

Table 2-1 shows how much profit was gained in several sectors from increased demand. From 1965 to 1972, total income after aggregating ordinary income and earnings from invisibles was US$1.022 billion. Of the profits, income from invisibles, including soldiers' and technicians' remittances, took up more than 72 percent. Given the fact that Korea's foreign exchange reserves amounted to just US$138 million in 1965, dollar revenue generated in Vietnam had a great impact on the Korean economy.

The construction and civil engineering skills learned by Korean companies in Vietnam allowed them to earn foreign currency through construction projects in the Middle East and other locations in the mid-1970s. The inflow of savings in banks and foreign

Table 2-2 Comparison of economic growth rates before and after 1965

Categories	1960–69	1960–64	1965–69	1970–75
GNP	8.6	5.5	11.8	8.8
Manufacturing production	16.0	9.4	22.5	18.3

Source: Bank of Korea, *Economic Statistics Yearbook*, 1971 and 1978.

exchange reserves from remittances sent by soldiers and workers in Vietnam helped propel Korea's second five-year economic development plan that began in 1966.

Thanks to the normalization of diplomatic relations with Japan and Korean participation in the Vietnam War, the mid-1960s became a turning point in the Korean economy. As shown in table 2-2, annual growth in the latter half of the decade (1965–69) was 11.8 percent, more than double the real growth rate (5.5 percent) in the first half (1960–64).

Korea grew rapidly in the latter half of the 1960s also in part due to export support policies that the previous chapter discussed in detail. The significance of Seoul's normalization of diplomatic relations with Tokyo as well as higher demand in Vietnam cannot be ignored.

But the normalization of relations with Japan created a sharp divide among the Korean public. Despite the economic effects of the deployment to Vietnam, debate has raged on over whether the financial results fully compensated for the ethical and moral burden of the physical damage and human loss caused by the Vietnam War. In the conflict, 5,000 Korean soldiers were killed, 16,000 were injured, and many faced long-term health problems from exposure to defoliants, not to mention the millions of Vietnamese soldiers and civilians who lost their lives.

Results of Pro-export Policy

The Korean economy achieved rapid growth due to strong and comprehensive support from the government's export policy and

the global economic boom in the 1960s. The country exceeded its target growth rate from 1964 to 1971. Over this time, GDP growth was robust at an annual average clip of 8.7 percent. Per capita GNP also rose rapidly from just US$82 in 1961 to over US$240 in 1970.

The rapid increase in exports, as seen when observing each sector separately, drove Korea's economic growth. After 1960, outbound shipments surged at a yearly average exceeding 40 percent. Furthermore, the rapid boost of exports of industrial products, especially those of the light industry, saw the items take up a greater percentage of overall exports. In 1961, textiles comprised only 10.8 percent of exports but occupied 40 percent by 1969, emerging as the key export item at the time. The percentage of agricultural and non-industrial goods exports has steadily decreased. By the end of the decade, 70 percent of exports were light industrial products (Lee Sang-cheol, 2014). As both exports and the light industry grew, investment in fixed capital to produce light industrial products also gained momentum. Aside from 1964 and 1971, when contractionary policy was implemented due to the overheating economy, investment in fixed capital rose every year in greatly assisting the country's economic growth.

As shown in Table 2-3, the degree of dependence on trade built up yearly due to the surge in imports and exports, from 20–23 percent during 1962–64 to 43 percent in 1971.

Though exports boomed, so did the imports of raw materials and capital goods to prevent improvement of the trade balance. Exports as a percentage of GDP increased from six percent in 1962 to 16.6 percent, and imports rose from 16.6 percent to 26.7 percent. At the same time, the national savings rate went up from 11 percent to 18 percent, but overall investment increased even faster from 20–23 percent during 1962–64 to 43 percent in 1971. As a result, foreign capital had to fill the gap for the amount that could not be supplied by domestic savings. As a result, current balance saw deficit every year after 1965, and this deficit was equal to 8.4 percent of GDP.

The Korean industrial structure also underwent a structural change. The percentage of mining and manufacturing to GDP went up from 16 percent to 26 percent, while agriculture fell from 37 per-

Table 2-3 GDP growth rate and degree of dependence on imports and exports (1962–71)

	GDP growth rate	GDP growth rate by demand sector				Degree of trade dependence		
		Final consumption	Fixed investment	Exports	Imports	Sum	Exports	Imports
1962	2.1	5.8	28.7	13.0	34.0	22.6	6.0	16.6
1963	9.1	3.1	27.3	9.0	26.8	21.2	5.4	15.8
1964	9.7	6.5	-9.3	23.5	-24.2	20.2	6.7	13.5
1965	5.7	6.3	27.1	35.9	12.6	25.4	9.5	15.9
1966	12.2	6.8	59.5	42.4	56.2	32.2	11.9	20.3
1967	5.9	8.3	22.6	32.7	30.8	36.0	13.6	22.4
1968	11.3	9.6	37.4	39.5	43.6	40.6	14.7	25.9
1969	13.8	9.4	24.8	36.1	26.6	41.4	15.4	26.0
1970	8.8	9.5	1.0	19.6	8.0	41.3	16.0	25.3
1971	10.4	9.2	6.4	24.7	19.6	42.5	16.1	26.4

Source: Bank of Korea, Economic Statistics System (ecos.bok.or.kr), quoted in Committee on the Sixty-year History of the Korean Economy (2010).

cent to 25 percent. Amid rapid growth, many jobs were created and unemployment decreased from 8.1 percent in 1963 to 4.4 percent in 1970–71.

Several factors explain how the Park administration achieved such groundbreaking success, but economists commonly refer to the following three. First, companies receiving preferential treatment from the government through the pro-export policy had to quickly imitate advanced techniques and improve effectiveness to survive in overseas markets and reach government-set export targets. Second, the government sacrificed the banking sector's autonomy and profitability and managed policy loans itself, acting as one large bank in charge of procuring resources through foreign loans so that domestic companies could secure funds more easily. Third, while ignoring strong demands for democracy in the 1960s and neglecting to protect basic workers' rights, the government pursued a trickle-down policy under which workers could indirectly benefit from corporate growth. This enabled the government to maintain a pro-business policy and achieve political stability at the same time.

Sakong and Jones (1981) argued that after the reform of the exchange rate system, companies that had conducted zero-sum activities, enjoying huge economic rent by monopolizing import rights and receiving foreign exchange through preferential treatment from the government, could no longer enjoyed these advantages. As the government prioritized exports, companies had to pioneer export goods and programs in overseas markets and performed positive sum activities by manufacturing products with international competitiveness.

The Korean economy faced many challenges as well. The government's expansionary monetary policy to support the economy led to continuous inflationary pressure. The annual inflation rate averaged a relatively high 12.3 percent. Despite the rapid rise in savings due to the aforementioned high interest rate policy, investment soared at an even faster rate. Investment resources that savings could not supply had to be financed using current balance deficits, which caused the foreign debt to accumulate. By 1973, the country's foreign debt was almost 32 percent of GDP (Collins and Park, 1989, p. 171).

Table 2-4 Employment, inflation, and international balance of payments (1962–71)

	Employment (%)			Inflation (%)		International balance of payments (US$ millions)		
	Employment growth	Unemployment	Rate of participation in economic activities	Exports	Imports	Current balance	Trade balance	Capital balance
1962	-	-	-	6.6	9.3	-55.5	-335.3	19.2
1963	-	8.1	56.6	20.7	20.6	-143.3	-410.2	106.5
1964	1.8	7.7	55.7	29.5	29.5	-26.1	-244.9	26.6
1965	5.4	7.3	57.0	13.5	13.5	9.1	-240.3	7.4
1966	2.6	7.1	56.9	11.3	11.3	-103.4	-429.5	196.5
1967	3.6	6.1	56.9	10.9	10.9	-191.9	-574.2	280.3
1968	5.1	5.0	58.0	10.8	10.8	-440.3	-835.7	501.0
1969	2.5	4.7	57.8	12.4	12.4	-548.6	-991.7	718.1
1970	3.6	4.4	57.6	16.0	16.0	-622.5	-922.0	661.6
1971	3.4	4.4	57.4	13.5	13.5	-847.5	-1,045.9	815.4

Source: Bank of Korea, Economic Statistics System (ecos.bok.or.kr), quoted in Committee on the Sixty-year History of the Korean Economy (2010).

Competition among companies in the domestic market was also restricted, but the pro-export drive tried to discipline companies and foster competitiveness in export markets. This worsened the competitiveness of companies that mainly focused on domestic demand and caused the long-term issue of productivity gaps between large companies successful in the export market and others that relied on the domestic market, as well as those subcontracted by corporations.

Growth of the Chaebol System

The chaebol is a conglomerate unique to Korea that controls multiple large companies often not concentrated in a specific sector or related industry. This conglomerate type is commonly compared to the Japanese *keiretsu*, a group of large companies clustered around a core bank. A chaebol, however, does not own banks (at least not formally), and while a *keiretsu* is managed by professional managers, a chaebol is run by the founder and his or her family. And a chaebol commonly procures components for export products through affiliates, while a *keiretsu* generally obtains components by outsourcing.[19]

Chaebols first began to emerge in the 1950s, when many companies that eventually developed into such conglomerates purchased vested properties, received American aid, and entered the manufacturing sector. In 1955, the top companies based on market capitalization were (1) Samyang Corp., (2) Korea Coal Corp., (3) Korea Development Bank, (4) Lucky Industries, and (5) Goldstar Textiles. By the end of the 1950s, other companies including Taechang, Samsung, Samho, Gaepoong, Daehan Industries, and

Dongyang Group emerged. Taechang grew under the protection of the Park administration and controlled affiliates including Taechang Textiles, Taechang Industries, Maeil Textiles, the Korean Cultural Advertising Agency, and Shipbuilding Machines. Taechang was the country's largest group of companies at the time. Gaepoong Group was established by the proprietor Lee Jeong-rim from Gyesung. After the Korean War ended, Lee founded Hoyang Industries and accumulated wealth by delivering ice to US forces in Korea. Samsung, Korea's top chaebol well known for its smartphones and semiconductors, also began in this era after purchasing two vested properties.

Chaebols began to form into the conglomerates of today in the

Figure 2-9 Samyang Corp. became Korea's largest company in the 1950s by starting off with salt and sugar production as a farming business in 1924. Pictured is Samyang's Fengtian, Manchuria (now Shenyang) office in 1930.
Source: Samyang Corp.

1960s after the Park administration came to power. The government implemented an export-oriented policy and provided support for large companies to achieve economies of scale. Over this period, certain chaebols succeeded while others failed. In 1964, the top 10 business groups were Samsung, Samho, Samyang, Gaepoong, Donga, Lucky, Daehan, Tongyang, Hwashin, and Hankook Glass. Some had amassed wealth under Japanese colonial rule and others were new companies. Samsung grew bigger by founding or taking over Tongyang Broadcasting Co., *JoongAng Ilbo* (a major daily newspaper), Tongbang Life Insurance, Jeongju Paper, Samsung Electronics, and Samsung Sanyo Electric. Lucky, which had jumped to fifth place, further expanded by founding Goldstar, which domi-

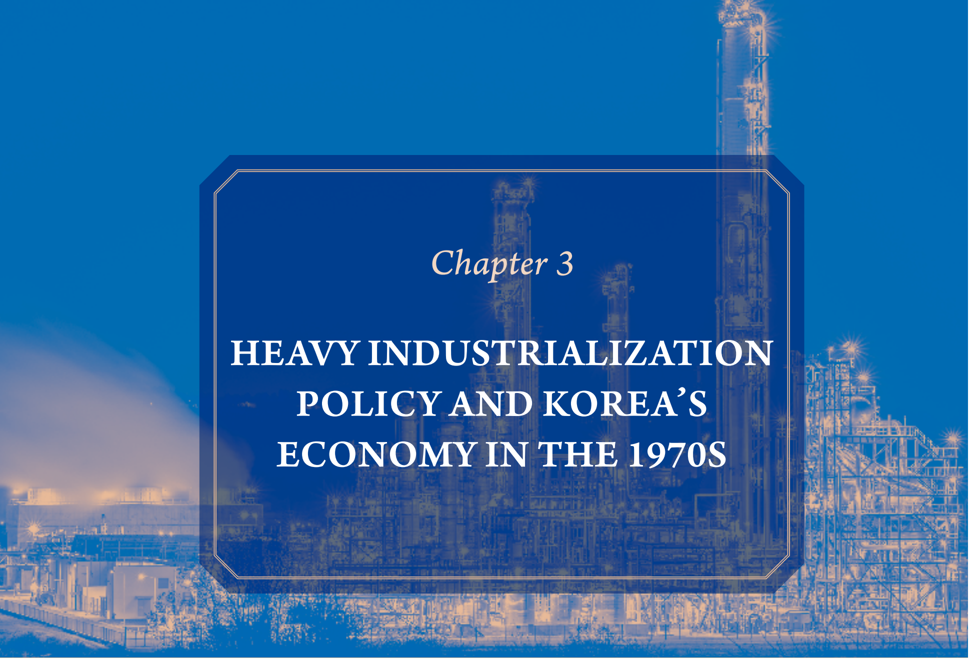
Figure 2-10 TV Manufacturing factory of Goldstar Corporation, which dominated the Korean appliance market in the 1970s.
Source: National Archives of Korea.

nated the domestic appliance market in the 1970s and '80s and later became LG Corporation. Key companies that had accumulated their wealth during Japanese occupation, including Gaepoong (Lee Jung-lim), Samho (Chung Jae-ho), and Hwashin (Park Heung-shik), fell behind in the competition. Chung's Samho misused company funds on camouflage private loans and was caught during the implementation of the emergency economic measure of August 3 in 1972. Samho was branded as an "anti-social company" and collapsed.

In the 1970s, Korean chaebols took advantage of the government push toward the heavy and chemical industries as a means to further growth. The chaebol system was solidified during this era in which the average number of affiliates that each top 10 chaebol owned grew from 7.5 in 1972 to 17.6 in 1979. Lucky surpassed Samsung in this period to become the top chaebol. Hyundai, led by founder Chung Ju-yung, was a latecomer but saw spectacular growth thanks to the construction boom in the Middle East and the rise of the automobile industry. Hyundai came in third after Samsung. Top chaebols in the 1960s, such as Samyang, Gaepoong, Donga, Tongyang, Hwashin, and Hankook Glass lost their positions after Hyundai, Korea Explosives Co., Dongkuk, Hyosung, Shindonga, Sunkyong, and Hanil Synthetic Fiber Co. shot up the list. The heavy and chemical industries received active government support from the mid-1970s, and Korea's rapid progress in these sectors shook the business world. Samsung took over Korea Engineering, Daesung Heavy Industries, Woojin Shipbuilding, Tongil Construction, and Hankook Semiconductor and shifted its focus from light industries

to the heavy and chemical sector. Daewoo enjoyed swift growth after taking over Hankook Machinery, Okpo Shipbuilding, and Sehan Motors and shifting its focus to the heavy and chemical industries.

Afterwards, chaebol companies underwent a rapid transformation through exports into multinational corporations possessing international competitiveness and greatly contributed to the growth and transformation of the Korean economy. By 1997, however, the top 30 chaebols had gotten so large that their sales accounted for almost 84 percent of GDP. Their reckless diversification and overinvestment led to poor loan management and the rise of convoy systems. These issues, along with other problems, caused the 1997–98 Asian financial crisis. After the crisis hit, 16 of the 30 top chaebols went bankrupt and had to readjust their structures. They shrunk to an extent but soon recovered. By 2011, sales of the top 30 chaebols exceeded GDP for the first time, and those of the top five occupied 62.7 percent of GDP. Thus the conglomerates enjoyed a greater concentration of economic power than they did before the crisis. Despite the spectacular growth, the conglomerates were still tightly controlled by the founders' families. Potential abuse of power and erroneous decisions by the owner families were not kept in check by shareholders or banks. Economic power was concentrated in a few chaebols, and the market simply could not prevent abuse of power and thus got distorted. This hindered the emergence of new companies and impeded industrial growth, and these problems remain uncorrected. Issues with the chaebol system will be discussed further in chapter 5.



Chapter 3

HEAVY INDUSTRIALIZATION POLICY AND KOREA'S ECONOMY IN THE 1970S

Implementation of the third five-year economic plan began in 1972 alongside the adoption of the Yushin Reform Constitution in October that year. The new constitution gave the Park administration powers above the law and Park the right to rule for life. Economic growth continued through the early 1970s, and the government gained confidence in the success of its export promotion policy. At the same time, the government was concerned that Korea's exports—mostly labor-intensive, low wage-based products in the light industry—would lose their competitiveness in the long run as the workers' wages rose. As an alternative, it chose to promote exports and foster import substitution of intermediary and capital goods in the heavy and chemical industries. The third (1972–76) and fourth (1977–81) five-year plans for economic de-

velopment had the government invest large amounts in promoting shipbuilding, automobile, and petrochemical industries. In January 1973, immediately after the Yushin Reform, plans for promoting the heavy and chemical industries were announced. The government also set a goal of US$10 billion in exports and US$1,000 dollars in per capita income by 1980. In 1977, this goal became the slogan for the decade. The government quickly implemented industrialization of the heavy and chemical sectors, as if the policies were enacted under a wartime mobilization system. Under this aggressive policy, the government not only performed the role of a bank by providing loans, but also acted like a private company in selecting which industries and technologies to invest in. A consensus on the outcome of this controversial policy has yet to be reached.

Over this period, the Korean economy quickly evolved into a more advanced system that focused on exports from the heavy and chemical industries. The rail, electrical, automotive, and petrochemical sectors grew rapidly during this time. Companies including Hyundai Motors, Kia Motors, Daewoo Shipbuilding, and POSCO developed quickly as well. These industries and companies became long-term growth engines for the Korean economy.

Chronic inflation ensued, however, as huge amounts of money were injected into the market as massive investment projects were initiated and foreign currency flowed into the country thanks to the Middle East construction boom following the first oil shock. Furthermore, the continuous rise of foreign loans to procure funds needed for the investments in heavy and chemical industries led to persistent current balance deficits. In 1980, Korea had US$25 billion in foreign loans, which was almost 40 percent of GDP at the time (Collins and Park, 1989). Domestic economic instability continued with the frenzied growth of housing price and real estate speculation, which began with the development of Seoul's southern Gangnam district. In the final stage of the industrialization of the heavy and chemical sectors, the second oil shock occurred in 1979 and caused a worldwide recession. The industry suffered as equipment produced with the support of aggressive investment in the mid-1970s became idle and degenerated, rapidly worsening the profitability of participating companies. Financial institutions that had invested in these industries under the government's direction were suddenly stuck with a large amount of non-performing loans. Korea was hit with poor harvests at this time as well. Furthermore, President Park Chung-hee's assassination in 1979 caused political chaos. In 1980, GDP saw its first decrease (2.7 percent) since 1957.

Announcement of the Heavy and Chemical Industrialization Policy

In January 1973 in his New Year's press conference, President Park Chung-hee announced the implementation of a policy promoting the heavy and chemical industries. The Korean government had led industrial policy since the mid-1960s, as the powerful Economic Planning Board (EPB) led development policy by creating and implementing the country's first five-year economic plan in the 1960s. While forming and executing the initial plan, the EPB concentrated on light industry policy. After the success of the first plan, the second

(1967–71) focused on promoting the heavy and chemical sectors by constructing integrated plants for steel and iron manufacturing and petrochemical facilities that produced basic industrial materials. The objective for the steel industry was to build large integrated steel and iron mills. Laws were enacted to promote petrochemicals and other industries as well.[20]

The policy announcement made in January 1973, however, marked the start of a far more ambitious implementation of industrial policy focusing on the heavy and chemical industries. The goal was to raise the percentage of the heavy and chemical sectors from 35 percent of overall industry in 1972 to 51 percent by 1981, and advance the country's industrial structure. It also aimed to increase the percentage of exports of heavy and chemical industry products, which was 27 percent of exports in 1972, to 65 percent by 1981, which would result in the advancement of export goods. The plan also targeted US$10 billion in exports and US$1,000 in per capita income by 1981.

Initially, the EPB considered the heavy and chemical industries as import substitution sectors that would produce key intermediate goods domestically. But under the new policy, both sectors would be promoted as export industries. Considering the country's level of technology and capital equipment at the time, this was a radical attempt.

This ambitious plan was announced in early 1973 for several reasons. The Park administration sought to build advanced industries differently from what other Asian developing countries were doing by following Japan's example. Japan initially used an export strategy

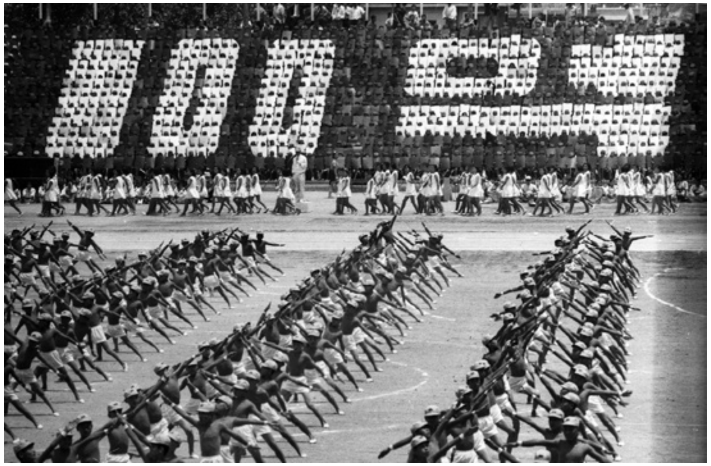


Figure 3-1 In the second youth athletic meet at Daegu Sports Complex in 1973, students perform group gymnastics to mark the government target of US$10 billion in exports.
Source: *Maeil Shinmun*.

focused on labor-intensive light industries, then shifted to a policy promoting the heavy and chemical sectors, which turned out to be extremely successful. Also at the time, Korea needed to promote its defense industry. In January of 1968, North Korean commandos attacked the Blue House in Seoul, and two other attacks by the North ensued in Uljin and Samcheok in November of that year. In July of the following year, the Nixon Doctrine of the US stressed that "Asians will use their strength to defend themselves," which raised the likelihood of American forces withdrawing from South Korea. This fueled fears of further North Korean military provocations. Finally, the heavy and chemical industries in developed countries

(including latecomers like Japan) were in decline, especially the pollution-generating and labor-intensive sectors of steel and shipbuilding. Based on the structure of the global division of labor, this provided opportunities for developing countries to enter the heavy and chemical sectors.

Government policy promoting the heavy and chemical industries for export was officially documented in a plan on the "reorganization of the industrial structure in accordance with a policy toward the heavy and chemical industries" devised by the Heavy and Chemical Industry Promotion Committee.[21] The heavy and chemical industries required enormous investments in capital resources to develop and had economies of scale, in which production costs and prices decrease as production volume rises up to a certain point. The Korean domestic market, however, was small and per capita income was low, thus it could not generate enough domestic demand that could accommodate the production volume that could reduce production costs to an optimal level. The plan raised this point to argue that it was inappropriate to promote the heavy and chemical industries as import substituting sectors.[22]

This plan selected six industries to promote—steel, nonferrous metals, machinery, shipbuilding, electronics, and chemicals—and contained detailed goals and plans for each sector. While the government claimed to support export industrialization of the heavy and chemical industries as its policy objective, different development strategies were implemented for each sector. Shipbuilding and electronics, which were relatively labor intensive, were selected as preferential export-oriented industries. Steel and nonferrous metal, which supplied basic materials, were selected to satisfy domestic demand first. For machinery, which was farther behind other advanced economies in technology and productivity, import substitution was promoted over the short term because the sector was not projected to be internationally competitiveness. Components used in shipbuilding, electronics, and other industries were chosen as strategic products and promoted.

The policy promoting the heavy and chemical industries was ambitious, requiring the government to choose private companies to participate and compete in the construction of factories and industries. The selected companies were allowed to manage business

Figure 3-2 A panorama of Kumho Petrochemical at the Ulsan Chemical Complex built as part of the industrialization process of the heavy and chemical sectors
Source: Kumho Petro Corp.

operations and received tax and financial incentives. This method differed from what other developing countries did, in which the government directly participated in the business through state-

Figure 3-3 Okpo before construction of Geojedo Island Okpo shipyard
Source: National Archives of Korea.
Figure 3-4 Okpo shipyard under construction on Geojedo Island
Source: National Archives of Korea.

owned companies, or, alternatively, the government made private companies responsible for planning as well as procuring the necessary capital. The method Korea chose had several advantages but also caused overlapping investment, as large companies scrambled to participate in the heavy and chemical industries after recognizing the government's intent to promote the sectors.

Support Policy for Heavy and Chemical Industries

Financing Policy

The key conundrum in developing the heavy and chemical industries was to finance the enormous resources required. The Park administration played a key role in financing as it did in the 1960s. To avoid heavy reliance on foreign capital as in the past, the government developed a national savings movement to finance 40–50 percent of the estimated required resources with domestic capital, and set up in 1974 a multilateral system for domestic capital mobilization called the National Investment Fund (NIF). The fund played a key role in providing financial support through domestic capital, receiving funding from banks, insurance companies, and public funds. Banks provided a fixed rate of the amount of deposit increase, insurers a fixed rate of all insurance imports, and public funds a fixed rate of their surplus funds to the NIF. Seventy-four percent of the resources came from banks, 14 percent from investment funds, and the remaining 12 percent from public funds.[23] The NIF paid 12-percent interest to contributing financial institutions and public funds, lower than what banks were charging for long-term loans at the time. These

funds were entrusted to financial institutions that in turn loaned them to companies in the heavy and chemical industries. The annual interest rate was nine percent, lower than the market interest rate and the 12 percent paid to finance the funds in the first place. The deposit-loan margin reversal phenomenon that occurred in the 1960s during Korea's economic development reappeared at this time. This

Table 3-1 Loan interest rates of National Investment Fund and banks

Categories	January 1974	February 1977	June 1978	January 1980	June 1982
National Investment Fund	9.0	14.0	16.0	22.0	10.0
Interest rates of bank loans	15.5	18.5	21.0	26.0	10.0
Difference in interest rates	6.5	4.5	5.0	4.0	0.0

Source: Bank of Korea, quoted in Koh Youngsun (2010).

Table 3-2 Composition of National Investment Fund loans for heavy and chemical industries 1974–81

(Unit: KRW hundred million, %)

Categories	1974	1975	1976	1977	1978	1979	1980	1981
National Investment Fund (A)	331	828	1,797	3,019	5,299	7,820	9,583	11,582
Former financial institutions (B)	1,473	2,132	3,362	5,084	7,880	11,695	14,640	17,818
A/B	22.5	33.8	53.5	59.4	67.2	66.9	65.5	65.0

Source: Bank of Korea, quoted in Koh Youngsun (2010).

phenomenon occurred when interest rates for loans were set lower than those of deposits to increase savings and reduce the burden on companies. The government consequently used its budget to offset the resulting annual deficit. Ultimately, the government forced banks to provide a fixed percentage of private savings into the fund (this amount received less profit than it did in the market), and companies received these funds under a policy of offering interest rates that were exceptionally lower than those of the market. The costs incurred as a result were paid for with government finances, or in other words, "tax payers' money." Table 3-1 shows how large the gap between the interest rates of loans from banks and those of the NIF was.

When resources proved insufficient even with the NIF, especially in the early stages when resource financing was inadequate, the government directly provided large amounts of loans through banks. Table 3-2 shows the percentage of NIF loans and those from financial institutions issued for the heavy and chemical industries.

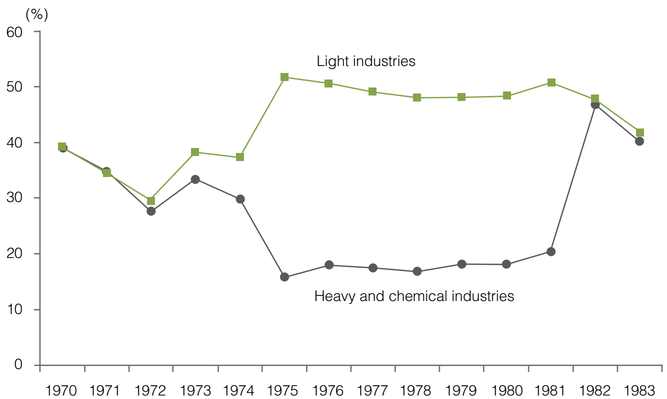


Figure 3-5 Effective marginal tax rate of corporations
Source: Kwack Tae-won (1985), quoted in Yoo Jungho (1991).

In addition to such financial support, the Regulation of Tax Reduction and Exemption Act was enacted in 1975 to provide tax support for the heavy and chemical industries. Compared to light industry companies, those in the heavy and chemical sectors received tax rates 30–35 percent lower. Furthermore, customs law was revised so that imported components and raw materials needed in operations of the heavy and chemical industries could be exempt from customs duty. Figure 3-5 shows how tax rates differed for the light industry and the heavy and chemical sectors after the law was enacted.

Heavy and Chemical Industries and Education Policy

In addition to capital mobilization and preferential tax systems, other crucial forms of assistance included research support to cultivate technical skills and train skilled personnel required in the heavy and chemical industries, introduction of advanced skills to ensure smooth operations, and the ability to develop techniques independently.

To boost the country's technical skills, the government reorganized select educational institutions at the middle and high school levels to graduate levels and opened think tanks for researchers with advanced degrees.

First, a policy toward equalization of high school admissions was introduced in 1974. Entrance exams used by private high schools were replaced with standardized government examinations in each region. Standardization was also implemented to narrow the significant differences in quality among teachers, facilities, and faculty at schools. With the implementation of these standardization policies for high schools, the number of high school students saw brisk growth.

When it announced its policy toward the heavy and chemical industries, the government predicted a shortage of 1.34 million technical engineers through 1981. Thus technical high schools were set up, training facilities for technical engineers received reinforced support, and policy actions that benefited graduates of technical high schools and those with technical skills were implemented (Jeong Jin-seong, 2014). This policy raised the number of students applying to and graduating from technical high schools over the short term, and produced trained workers, technical engineers, and certified technicians who could effectively operate complex machines in the field. The National Technical Qualifications Act governed the qualifications of such workers, and a system that evaluated theoretical knowledge and practical abilities and issued certificates was introduced.[24]

The government had limited the number of students at higher institutions of education for fear of unemployment and anti-government student activities. In the mid-1970s, however, the student admission quota was selectively raised, mainly for two-year professional colleges and the natural science and engineering departments of four-year universities.

Furthermore, the government wanted to develop a workforce

Figure 3-6 Hyundai Motors' Pony cars waiting to be shipped for export in 1978 Source: National Archives of Korea.

and accumulate knowledge that would allow the nation to introduce and use advanced techniques, and eventually develop its own technical skills and avoid reliance on technology from other countries. One of the first steps toward this goal was the building of a research complex in Daedeok, Chungcheongnam-do (now Daejeon Metropolitan City), and over time, think tanks for electronics, maritime, and standard research, and a machinery and metal testing laboratory were set up.

These government projects raised the government's R&D spending, which in the 1970s did not even reach 0.5 percent of GDP. The government, however, managed 50–70 percent of the amount and led investment in R&D. Government spending on education also steadily increased. From the early 1960s to the mid-1970s, about 15 percent of the government budget was used for education, but this steadily increased from 1975. By the early 1980s, education spending accounted for more than 20 percent of the government budget (Kim Soo-gon and Lee Joo-ho, 1995).

Finally, the government built industrial complexes to house large-scale industrial facilities needed for the heavy and chemical sectors and executed major urban planning projects that even included residential areas for workers to be employed at industrial facilities. The production and technical links between raw materials and intermediary and finished goods are close in the heavy and chemical industries, something taken into consideration during the construction of industrial complexes. The need to install joint prevention facilities was also recognized because pollution was concentrated around polluting industries. In March 1974, Changwon, Onsan, Yeocheon, and other areas were selected as industrial bases and Okpo and Geoje as areas for shipyards.

Outcome and Legacy of Heavy and Chemical Industries

Investment in the heavy and chemical industries saw a major advance in the first half of the 1970s due to government support. By 1979, the amount invested in the sectors reached KRW 4.1 trillion. The same year, the initial production target was reached. Table 3-3 shows the composition of investment resources, showing that 30.9 percent of investment was obtained from the capital of private companies participating in the business; 61 percent of external invest-

Table 3-3 Investment in the heavy and chemical industries (1973–79)

Categories	Domestic capital (KRW 1 million)	Foreign capital (US$1,000)	Sum (KRW 1 million)	Self-funding (KRW 1 million)	Self-funding ratio (%)
Investment in equipment	2,006,648	3,158,672	3,552,804	1,207,043	34.0
(Steel)	(601,319)	(1,374,939)	(1,268,164)	(593,910)	(46.8)
(Nonferrous metals)	(113,634)	(177,866)	(199,447)	(48,149)	(24.1)
(Machinery)	(150,067)	(120,698)	(208,605)	(75,979)	(36.4)
(Shipbuilding)	(492,750)	(1,211,995)	(1,095,357)	(200,829)	(18.3)
(Electronics)	(452,394)	(258,120)	(577,521)	(165,175)	(28.6)
(Chemical)	(196,484)	(15,054)	(203,710)	(123,001)	(60.4)
Support facilities	200,737		200,737		
Base construction	154,882		154,882	72,546	46.8
Human resource development	71,214	56,395	98,565		
Research development	89,785	79,823	128,807		
Sum	2,523,266	3,294,890	4,135,795	1,279,589	30.9

Source: Kim Kwang-mo (1988, p. 312).

ment funds was obtained from domestic capital. The proportion of foreign capital was maintained at levels lower than initially planned.

Higher investment in the heavy and chemical industries also affected employment. From 1972 to 1979, the number of employees grew an annual four percent, and the number of jobs increased much faster than it did in the 1960s. Unemployment fell from 4.5

Table 3-4 Economic growth and employment in 1970s Korea

	GDP growth rate	GDP growth by demand sector				Employment		
		Final consumption	Fixed investment	Exports	Imports	Employment growth rate	Unemployment rate	Rate of participation in economy
1972	6.5	5.5	2.4	41.1	0.9	4.4	4.5	57.7
1973	14.8	7.7	26.3	55.4	36.7	5.4	3.9	58.4
1974	9.4	7.8	13.8	5.5	17.6	4.4	4.0	58.9
1975	7.3	5.8	9.5	20.0	2.9	2.4	4.1	58.3
1976	13.5	7.6	25.5	37.9	24.9	6.2	3.9	59.7
1977	11.8	5.7	32.6	20.2	20.7	3.2	3.8	59.4
1978	10.3	8.1	35.1	13.6	27.7	4.7	3.2	59.9
1979	8.4	8.1	9.6	1.2	12.1	1.4	3.8	59.5
1980	-1.9	1.2	-12.0	8.6	4.0	0.6	5.2	59.0

Source: Bank of Korea, Economic Statistics System, quoted in Committee on the Sixty-year History of the Korean Economy (2010).

percent in 1972 to 3.2 percent in 1978; the rate averaged 3.9 percent over the period. With the construction boom in the Middle East, the goal of US$10 billion in exports was achieved in 1977, and the government reported the country's first surplus in its international balance of payments. Table 3-4 shows the economic growth and employment conditions in 1970s Korea.

Most importantly, the most influential outcome of the push toward the heavy and chemical industries was the reorganization of

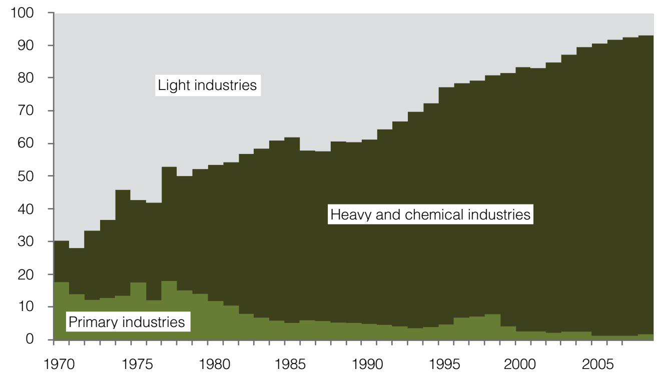


Figure 3-7 Percentage of exports for each sector
Source: Korea International Trade Organization (www.kita.net), quoted in Sakong and Koh (2010).

the Korean economy into a more advanced industrial structure. The focus on labor-intensive industries lessened and that on the heavy and chemical sectors grew. In this process, various regions of the country were specialized and developed. Furthermore, qualitative changes to the workforce and management methods ensued. As shown in figure 3-7, the heavy and chemical industries accounted for 10 percent of exports in 1970, but by 1980, that figure had jumped to 40 percent and continued to grow. By 2008, more than 90 percent of exports were from both sectors.

In 1970, 50.4 percent of all workers in Korea were in agriculture. By 1980, that figure had declined to 34 percent. In 1990, with the heavy and chemical industries continuing to rise, only 17.9 percent of all workers were in agriculture. Over this period, the percentage of all workers in secondary industries increased rapidly from 17.2

percent to 28.7 percent and further to 35 percent, respectively. The rapid transition of Korea's industrial structure can be seen by comparing it with the industrial structures of other advanced economies that underwent heavy industrialization. Figure 3-8 shows the Hoffman ratio, or the ratio between the added value of an economy created by the light industry and that of an economy created by the heavy and chemical industries. As the industrial structure advances, the Hoffman ratio naturally falls. Compared to advanced economies such as the UK, US, and Germany, industrialization in East Asian countries such as Korea, Taiwan, and Japan progressed quite rapidly. In the early stages of Britain's industrial development, the country's Hoffman ratio was similar to Korea's at the start of the latter's indus-

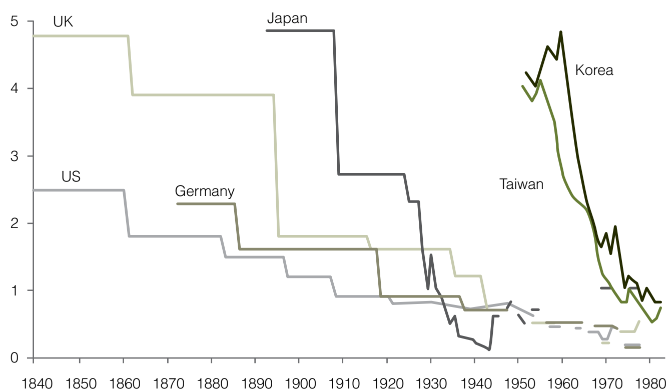


Figure 3-8 Estimated Hoffman ratios for each country
Note: Hoffman ratio is the ratio of value-added light industries to that of heavy and chemical industries.
Source: Kim Jong-il (2002).

trialization, but it took more than 100 years for the UK's ratio to fall below 1, whereas Japan needed about 25 years and Korea only 15 from the mid-1960s.

Industries selected by the government to promote exports (e.g., shipbuilding, steel, and chemicals) continued to rise after the structural adjustment of 1980 to become key industries for Korea. And in the process of bringing in capital goods needed for industrialization and constructing factories, an enormous amount of knowledge was absorbed.

Yet despite these notable long-term results, evaluation of the outcome of the government's policy toward the heavy and chemical sectors remains difficult. The policy is a source of controversy because of its socialist nature (as it adhered to the principles of a centrally planned economy) implemented by the Park administration, which had an anti-communist stance. Critics of this policy thus question if natural distribution was manipulated by the government that led to price distortions through policy loans and tax support, and whether long-term aftereffects were caused by government intervention in certain functions of banks and companies. The main criticisms are as follows.

First, overlapping and overinvestment by large companies occurred because of too many government incentives and excessive tax and financial support. Yoo Jeong-ho (1991) said that until the end of the 1970s, the capital efficiency of heavy industry was much lower than that of light industry. The direction of the government's financial and tax policies directed resources toward heavy industry and fewer toward light industry. This lowered overall investment efficiency in manufacturing. From 1975 to 1980, the operating rate of machinery, electronic equipment, athletic equipment, and other similar industries was about 50 percent, far lower than the overall manufacturing average of more than 70 percent at the time. This shows that equipment and production capacity at the time exceeded what was required to satisfy domestic and export demand.[25] Due to the low operating rate and poor profitability, output in the heavy and chemical industries remained stagnant. Eventually, the adjustment of investment and rationalization occurred in the heavy and chemical industries in the 1980s. The sharp rise in domestic inflation in the latter half of the 1970s meant exporters struggled due to higher costs. Despite the need to devalue the Korean currency, the government fixed the exchange rate to lessen the burden of principal repayment on foreign loans taken out during the promotion of the heavy and chemical industries. The government also feared that the prices of raw materials required for the heavy and chemical industries would increase. Thus export competitiveness fell in 1979, and export volume declined for the first time since 1960.

Second, Cho Yoon-je (1997) argued that "government-controlled" financing took root during this time. The government attracted domestic savings and foreign capital and used these funds to support related companies through banks. By providing preferential interest rates lower than those of the market to participating companies, the reversal of the deposit-loan interest rate that occurred temporarily in the 1960s became a chronic issue in the financing of the heavy and chemical industries. Cho called this a form of financial repression. Normal financial development was neglected for the sake of the

Table 3-5 Percentage of policy loans out of deposit bank loans

(Unit: KRW billion)

	1966	1971	1976	1981
Loan amount	307	2,007	8,378	39,295
Policy loans	41	568	3,532	12,437
Regular loans	266	1,239	4,846	26,858
% of policy loans	13.4	28.3	42.2	31.7

Source: Bank of Korea, *Economic Statistics Yearbook*, each year.

heavy and chemical industries; both sectors took 13.4 percent of all bank loans as policy loans in 1966. This continued to increase steadily, and by 1976, 42.2 percent of all bank loans were for policy loans. The percentage remained high in 1981 at 31.7 percent.

Government-controlled financing, begun in the 1960s, was a powerful method that allowed the government to effectively control and regulate corporate activity. It also, however, prevented banks from acquiring the fundamental ability to evaluate the credit ratings and risks of a company. This caused the financial industry to remain underdeveloped, something that hindered Korea's economic development later.

Finally, the rise of the heavy and chemical industries created the chaebol (conglomerate) system that would dominate the Korean economy and cause negative effects. As previously mentioned, economies of scale were a trait of the heavy and chemical industries that was advantageous to large companies. According to Park Ki-joo (2014), 75–80 percent of investment in manufacturing during the

Table 3-6 Expansion of chaebols during heavy and chemical industries drive

Chaebols	No. of affiliates		Acquisitions in heavy & chemical industries
	1974	1978	
Hyundai	9	31	Automobiles, machinery, iron & steel, shipbuilding, aluminum, oil refining, heavy electrical, heavy machinery
Samsung	24	33	Shipbuilding, general machinery, electric switching systems, petrochemicals
Daewoo	10	35	Machinery, automobiles, shipbuilding
Lucky	17	43	Petrochemicals, oil refining, electronics
Hyosung	8	24	Heavy electrical, machinery, auto parts, petrochemicals
Kukje	7	22	Iron & steel, machinery
Sunkyung	8	23	Chemical, machinery
Samhwa	10	30	Electrical, machinery
Ssangyong	17	20	Cement, heavy machinery, shipbuilding, heavy electrical
Kumho	15	22	Iron & steel, petrochemicals
Kolon	6	22	Heavy electrical, petrochemicals

Source: Kim Eun Mee (1987).

1970s went into the heavy and chemical industries, and 90 percent of facility investment in the same sectors was for large companies. This allowed chaebol affiliates to grow rapidly. From 1971 to 1979, the top 30 chaebol companies set up 202 new companies, took over 135 existing ones, and raised the number of affiliates by 303. Table 3-6 shows how many affiliates (in the heavy industry) that chaebols took over or established between 1974 and 1978.

Table 3-7 Manufacturing industry shares of conglomerates

(Unit: %)

	1977	1978	1979	1980	1981	1982
Top 5 chaebols	15.7	15.9	16.3	16.9	21.5	22.6
Top 10 chaebols	21.2	22.0	22.7	23.8	28.4	30.2
Top 15 chaebols	25.6	26.2	27.1	28.1	32.6	33.9
Top 20 chaebols	29.3	29.4	30.3	31.4	35.3	36.6
Top 25 chaebols	31.9	31.9	33.0	33.9	37.7	38.8
Top 30 chaebols	34.1	34.1	35.2	36.0	39.7	40.7

Source: Lee Gyu-eok and Lee Seong-soon (1985, p. 97), quoted in Park Ki-joo (2014).

Table 3-7 shows that economic concentration consequently rose. In 1981, the five and 30 largest chaebols took up 23 and 41 percent of manufacturing sales, respectively. The government also provided preferential treatment (public funding and financing) to conglomerates that entered the heavy and chemical industries. Companies and consumers excluded from the two sectors had to bear the costs. Large corporations grew at the expense of other companies, mainly small and medium enterprises (SMEs), and consumers mostly in the light industry.

Heavy and Chemical Industries Success Case I: POSCO

The development of Pohang Iron and Steel Co. (POSCO)—from planning and procuring resources to construction and growth—summarizes the struggles the Korean economy faced in the 1970s and the government's efforts to overcome them.

Since the Rhee administration, the country had wanted to build an integrated steel sector. Called the "rice of industry," steel was considered the most basic material for industrialization, yet Korea lacked the technology and know-how required to build and operate steel mills. The government also had no proper method of procuring the enormous resources needed for construction. After the Park administration came to power, its first five-year economic development plan included the construction of an integrated steel mill with a production capacity of 310,000 tons per year. However, the United States Agency for International Development (USAID), which oversaw loan distribution, opposed the project, thus plans for construction floundered. The organization provided the following reasons for opposing the construction of an integrated steel mill.

1) Korea had limited natural resources such as iron ore and coking coal and needed to import them. The US$35 million in foreign currency required for this would be difficult to manage since the country's exports amounted to US$42 million.
2) Even if the integrated steel mill was finished with a capacity of 500,000 tons, demand at the time was only 300,000 tons.
3) Korea could not compete with Japan in the world steel market.
4) Korea would have found it more advantageous to import steel materials than produce them, and to use the US$150 million in the steel mill's projected construction cost for other projects needing funding.

Figure 3-9 Construction of POSCO at Yeongilman Bay Wasteland
Source: *The Asia Business Daily*, October 22, 2012.

The plan to construct the integrated steel mill was ultimately dropped from the first five-year economic development plan. In 1967, the government made another attempt in forming the so-called integrated steel business promotion committee. Plans for the construction of a steel mill that could produce 600,000 tons per year were made. A World Bank research team, however, opposed the project for the same reasons US AID had, making it difficult for Seoul to obtain loans. Once again, the project was canceled. A breakthrough finally came after Korea normalized diplomatic relations with Japan.[26] The two countries agreed that the funds Japan

Figure 3-10 Park Tae-joon, the first president of POSCO, writes on the company's first hot rolled coil on October 3, 1972.
Source: *The Asia Business Daily*, October 22, 2012.

promised to pay as compensation for its colonial rule would go toward building an integrated steel mill. In December 1969, both sides agreed that Tokyo would pay US$73.7 million in damages (US$42.9 million on a repayment basis and US$30.8 million with no strings

attached) over three years, along with US$50 million in commercial loans. Furthermore, plans were made to build an integrated steel mill costing US$123.8 million in foreign capital and US$76.9 million in domestic capital. The construction of Korea's first steel plant with an annual capacity of 1.03 million tons began in 1970 and was completed in July 1973. This marked the beginning of POSCO.

The size of the steel mill was larger than what was planned in 1967. The intent was to fully utilize economies of scale, a trait of the steel industry in which unit production costs decrease as production volume increases to a certain point. The government wanted to lower the unit cost of production to a level in which competitiveness could be gained. For the same reasons, the government regulated the steel industry so that POSCO could dominate the domestic market. Yet the private sector did not get the responsibility of building and operating the factory; the government operated the factory with the aim to provide low-cost steel to other industries.[27]

POSCO sent 597 workers for training to Japan and Austria, two countries in charge of the factory's master plan and construction, to accumulate the engineering knowledge required in steel manufacturing and skills related to running the factory. After production began, POSCO also focused on on-the-job training at the plant. Skilled workers and technicians who obtained technical skills later served as key personnel operating POSCO.[28]

POSCO began production in 1973. It set up the facilities required for factory construction, received generous and active government support including tax breaks, faced a rapid increase in domestic steel demand due to the implementation of the government's policy toward promoting the heavy and chemical industries, focused on securing technology, and built a system under which technicians and skilled workers could actively participate in the improvement of the production process. The company exceeded the government's expectations and grew rapidly. PaineWebber, an American financial consulting company, produced a report after taking notice of POSCO's rapid growth. An excerpt is below.

> Quite remarkable is the fact that POSCO has been profitable every year since it began production in 1973. In fact, in recent years, the company has had to resort to the use of accelerated depreciation and other accounting conventions to hold down reported profits . . . This profit record is all the more remarkable when considering,
> - Major start-up and training costs have been incurred during this period.
> - POSCO has provided steel at bargain price levels to both its domestic and foreign customers (Amsden, 1989, p. 296).

In 1977, POSCO set up an R&D center and began its own R&D activities to improve quality. In 1986, the company collaborated with US Steel on the modernization of the latter's factory in Pittsburg, California. UPI of the US was established as POSCO's first overseas corporation. In 2013, POSCO ranked sixth in world steel production and 177th on the Fortune Global 500 list.

POSCO has enabled the growth of key Korean industries through the supply of high quality steel. Such sectors including shipbuilding,

electronic appliances, and automobiles provided the foundation for Korea's economic development. By supplying basic materials required in the heavy and chemical industries, POSCO played a key role in changing the focus of the national economic structure from primary industry to secondary industry, and from the light industry to the heavy and chemical industries. Over its development process, POSCO received active government support in the form of resources, finance, and tax breaks, accumulated techniques in the process of importing capital goods and establishing the factory, allowed its technicians and skilled workers to actively intervene on site, and developed technology through R&D investment. This was the typical process of many Korean companies during the fostering of the heavy and chemical industries.

Heavy and Chemical Industries Success Case II: Automobiles[29]

In 2013, Korea was the world's fifth-largest automobile producer, and the Hyundai-Kia Motor Group ranked fifth globally after Toyota, GM, Volkswagen, and Nissan based on production size. The automotive industry is a key sector in Korea. In 2012, five Korean companies including Hyundai Mobis (eighth), Hyundai Wia (38th), and Mando (48th) were ranked among the world's top 100 automotive parts suppliers.

Korea's modern automotive industry began in May 1962 with the enactment of the Act on Automobile Industry Protection, which prohibited the import of foreign cars and related parts. Later that year, Saenara Motors, a modern automotive factory, was established in the Bupyeong district of Incheon in line with a government support policy. The company was named after the Saenara, a small sedan with a 1,200cc engine. When the model was first produced, a properly engineered and manufactured sedan came on the market. In 1963, however, the country's foreign exchange reserves had been exhausted and the lack of sufficient foreign currency prevented the import of automotive components. Saenara Motors was taken over by Shinjin Industries (formerly GM Korea). In 1966, the carmaker changed its name to Shinjin Motors. In 1970, Shinjin Motors formed a technical partnership with Japan's Toyota Motors and produced the Corona, Crown, Ace, Publica, and Land Cruiser pickup models with a 20-percent localization ratio.

Hyundai Motor was a latecomer established by the founder of Hyundai Group, Chung Ju-yung. The company signed a technical agreement with Ford Motor of the US. In 1968, the Korean carmaker began mass producing the Cortina. Kyungsung Precision Industry began as a bicycle manufacturer but changed its name in 1952 to Kia Industries. By 1962, it was producing the three-wheel truck K-360 with an engine displacement of 356cc through a technical collaboration with Mazda Motor of Japan. Asia Motors, established in 1965, formed a partnership with the Italian automaker Fiat and produced the Fiat 124 model in March 1970.

In 1970, a Korean government report assessing the machinery industry was made in preparation for the promotion of the heavy and chemical industries. The report gave the following evaluation of Korea's automotive industry.

"There are four Korean automobile manufacturing companies

including a three-wheeled car manufacturer. Most factories are for assembly in which key automotive components, mostly imported, are assembled. Economies of scale cannot be realized, as these companies lack the required production capabilities, but production volume exceeds demand. Also, most automotive suppliers are small and cannot be compared to those in advanced countries in production (quality and volume)."[30]

The report also said the domestic costs of automotive production were quite high compared to those in other countries because domestically produced parts were expensive. So if localization was to occur under these conditions, the price competitiveness of the auto industry would worsen. The report recommended strengthening automotive component factories before implementing localization policy. The factories of the West German automaker Volkswagen were used as benchmarks that could reach optimal mass production scales and achieve economies of scale. The production standard for machine processing factories was an annual 500,000 cars.

Based on this report, the government made an announcement on its policy toward the heavy and chemical industries in 1973. The ambitious plan was to expand output from 20,000–30,000 units to 500,000 by the early 1980s, completely localize automotive components by 1975, and achieve export industrialization of the components industry. The government's objective was to raise the localization rate in the finished car sector to 95 percent by 1975 and export 75,000 cars by 1981. Another goal was for each carmaker to develop small sedans priced within the range of US$2,000 and produce at least 50,000 of them. Under this plan, the government appointed companies as producers of "people's cars" and exempted them from half of the commodity taxes and a third of auto taxes on one model. The selected companies could also supply 80 percent of overall demand for sedans first before other companies. This caused automotive manufacturers to put everything on the line to build mass production facilities for passenger cars. Hyundai's attempt to form a joint venture with Ford failed, so the former independently produced a small car. Kia and Shinjin planned to produce cars using models from Toyo Industry (Mazda), a Japanese automaker, and Opel, a German automaker, respectively, as basic models. Hyundai and Kia announced a plan to invest US$60 million and Shinjin US$48.81 million to produce passenger cars.

In 1973, Kia completed its Soha-ri factory whose construction began in 1970, before it joined other companies in manufacturing passenger cars. At this factory, the first localized Mazda engine of 1,300cc was developed, and in 1975, the small car Brisa, which was based on the Mazda Familia, was produced. Instead of importing models, Hyundai planned to develop its own distinct model and sent a request to Italdesign, an Italian company, to do so. After concluding a service and technical alliance agreement with Mitsubishi Motors of Japan for the design of the car frame, gasoline engine, and gearbox, Hyundai produced the 1,200cc Pony in 1976 at its Ulsan factory.[31]

Hyundai took a big risk in producing its own model, as Korea lacked its own automotive technology and was far behind advanced economies in technical skills. In the process of developing its distinct model (Hyundai Pony), the company started to allow workers

Figure 3-11 Pony cars being produced at the Ulsan factory of Hyundai Motor
Source: National Archives of Korea.

to take part in design and planning. Workers could experience the design process and learn detailed design techniques for vehicles, as well as accumulate production skills. Design work was usually subcontracted to professional companies, but Hyundai technicians were dispatched in each design phase and the work was done jointly. Hyundai made a request to Mitsubishi to build its Ulsan factory. The plant was not just an assembly facility, but an integrated production factory that could process engines, build car frames, and self-produce main car components. It was also a welding, pressing, and stamping factory. In the construction process, 200 of Hyundai's technical personnel received technical training for the construction and operation of an integrated car factory through overseas technical cooperation. About 2,000 skilled workers received technical training for production in varying stages and for a variety of production jobs. POSCO had obtained technical skills in a similar manner by participating in the factory construction process, importing capital goods, and conducting technical training. This method of absorbing technical skills was unique to large companies in Korea, and eventually allowed Korean automakers to design and produce vehicles independently.

Though small, the Korean automotive industry not only assembled imported components produced abroad, but its companies were not merely affiliates of foreign automakers. Korea had integrated automotive factories that could produce distinct models through a coherent production process. Developing distinct models greatly improved the localization rate of components. When the Pony was first released on a trial basis, the localization rate was at a high 85 percent; when full-fledged production began in 1976, the rate reached 90 percent.

Table 3-8 Changes in automotive production volumes of companies in 1970s

(Unit: units, %)

	1973	1974	1975	1976	1977	1978	1979
Kia & Asia Motors	489 (3.83)	685 (7.40)	10,202 (55.45)	6,991 (26.18)	10,548 (23.98)	16,477 (18.98)	22,140 (19.50)
GM Korea	6,696 (52.51)	1,565 (16.91)	2,559 (13.91)	3,788 (14.19)	4,270 (9.71)	12,162 (14.01)	18,430 (16.23)
Hyundai	5,426 (42.55)	6,846 (73.95)	4,722 (25.67)	14,826 (55.53)	27,466 (62.45)	57,054 (65.71)	71,744 (63.17)
Geohwa	140 (1.10)	161 (1.74)	915 (4.97)	1,096 (4.10)	1,697 (3.86)	1,130 (1.30)	1,250 (1.10)
Sum	12,751 (100.00)	9,257 (100.00)	18,398 (100.00)	26,701 (100.00)	43,981 (100.00)	86,823 (100.00)	113,564 (100.00)

Source: O Won-chol (1996).

Afterwards, tax exemptions and boosted income thanks to economic development fueled a significant increase in car demand. The Kia Brisa and Hyundai Pony gained popularity, and the production volume of automobiles surged as shown in table 3-8. Korean automotive exports began in 1976, when 1,019 units of the Pony were exported to the Middle East, South America, and other countries. By 1978, 18,317 units were exported to 42 countries, including those in Europe. Back in Korea, Hyundai grew into a dominant company with a market share of more than 60 percent.[32]

The rapid increase in automotive production revived the industry, and the government and automakers raised the production target for 1981 to one million units; they also decided to additionally invest large amounts to expand production facilities. The second oil shock of 1979, however, sent oil prices soaring, and the government acted to suppress demand for cars and preserve the country's limited energy resources. Car demand plummeted, resulting in severe financial difficulties for automakers. Rationalization thus occurred in the automotive industry in 1980, leading to restructuring of the sector.

Promotion of Capital Markets

Direct and Indirect Financing

Financial institutions connect investors or depositors to companies or individuals who need funds. The two types of financing are indirect financing through banks or similar institutions and direct financing through stocks or bonds. The biggest difference between the two is who makes and takes responsibility for the final decision on investment and loans.

For example, when depositors put their money into banks, they know that the bank will use the money to provide loans but not to whom the money is loaned or how it will be used. Depositors do not make decisions on loans, banks do. Most countries thus have deposit insurance systems to protect depositors from incurring losses if banks make the wrong loan decisions and suffer losses or even go bankrupt.[33] With direct financing through stocks and bonds, however, an investor who bought financial securities in the stock or bond market must take full responsibility for his or her decisions. If the company that issued the stock or bond struggles financially or goes bankrupt, the investor alone is responsible for losses.

So from an investor's point of view, direct financing is riskier than indirect financing, and banks can accumulate many deposits from individuals even at low interest rates because bank deposits are relatively safe. For the same reasons, direct financial markets prevent the participation of small companies with little business experience to protect investors. Consequently, small and medium enterprises (SMEs) find it difficult to issue stock or bonds, and even if they do, they are not traded in the stock or bond market.

In most economies, direct and indirect financing coexist but the extent to which one predominates varies by country. Generally, the proportion of direct financing is greater in countries with developed financial industries. Historically, the proportion of direct financing has gradually increased.

In countries with less developed financial markets, indirect financing through banks is more common given the difficulty of acquiring or trusting information on accounting, the financial conditions of companies seeking investment, or their business prospects. Furthermore, if a company goes bankrupt, the process of liquidating its remaining assets is often slow and unclear. Under these circumstances, people will avoid high-risk direct investment as financial information on companies is difficult to obtain. Instead, they prefer indirect investment through banks, as banks can obtain financial information on companies with relative ease and have more authority in the liquidation process if companies go bankrupt.

So for direct financing to rise, accounting information provided by companies must be transparent and accurate, making it easier for people to understand their financial situations. Information on credit ratings and previous financial transactions of companies and entrepreneurs should be collected to make access easier. Also, financial institutions must use this knowledge to build a system that can protect investors and prevent losses. Once these conditions are met, people can use direct financing, which guarantees relatively higher returns, as a rational alternative to indirect financing.

If these conditions are met, companies will have other financing options besides bank loans and can procure large amounts of long-term funds from a wide range of investors simultaneously. This will make accumulating large amounts of capital possible. Furthermore, when companies need short-term operating funds instead of those for long-term investment, issuing short-term financial securities such as commercial papers (CPs), whose use has recently increased, will be easier than obtaining bank loans. The process of obtaining bank loans is more complicated and requires companies to submit various documents. Furthermore, if a company relies heavily on debt and has a low equity ratio, the potential loss for the company owner is low while the bank or creditor will take the brunt of the damage even if an investment business fails. This can lead to moral hazard, as company owners will prefer high-risk investment. This risk can be mitigated if the equity ratios of companies increase through the stock market. Higher direct financing can also mitigate problems that arise with individual or family company structures if ownership dispersion occurs through stock markets.

Reckless or excessive expansion of the stock or bond market, however, can expose to danger inexperienced investors unfamiliar with the risks of direct investment if the above conditions are not met. Wild fluctuations in the stock market occurred before the latter was revitalized in the 1980s.

Development of Korea's Capital Market[34]

Korea's capital market was officially established in March 1956, with trading beginning after the opening ceremony for the Korea Stock Exchange. Just a few items were listed on the day of the opening ceremony: 12 company stocks and three types of government and public bonds. In 1962, the Securities and Exchange Act, commercial law, and other related statutes were enacted. Trading volume had previously been low, and most securities traded were government bonds, which were relatively safe. Thus the Korean stock market was initially focused on government bonds. Between 1956 and 1961, trading volume reached KRW 10.6 billion, 76.8 percent of which was from government bond trading. Listed stocks were issued by companies with the government as the major stockholder, and investors had little interest in the stock market. At the time, private companies were mostly family run, did not issue shares, and relied on government funds, US aid, and preferential financing.

The situation saw marginal improvement even after the Park administration came to power in the 1960s. In 1965, the government sold publicly owned stocks and took actions to raise stock trading. As the number of government-managed companies grew, the number of listed companies reached 24 in 1968. But no private companies offered or listed stocks. At the time, companies that received policy loans from the government at low interest had no reason to issue stocks or bonds, and most companies excluded from receiving policy loans were too small to secure enough profit to issue stocks or bonds. Furthermore, companies were not transparent enough for the capital market to fully function, people could not invest much due to low incomes, and companies relied on indirect financing through loans and policy loans. The conditions required for the capital market to function were thus not met, and the market played no role in economic development until the late 1960s.

Table 3-9 shows how dependent companies were on external

Table 3-9 Company financing

(Unit: KRW billion, %)

	1966		1967		1968	
	Amount	Compo-sition rate	Amount	Compo-sition rate	Amount	Compo-sition rate
Internal funds	36.2	23.9	46.6	20.8	67.7	18.8
External funds	115.2	76.1	178.0	79.2	291.6	81.2
Sum	151.4	100.0	24.6	100.0	359.3	100.0
External funds	115.2	100.0	178.0	100.0	291.6	100.0
Indirect financing	43.5	37.8	73.6	41.3	137.5	47.2
Direct financing	22.9	19.9	39.8	22.4	45.4	15.6
External debt	48.8	42.4	64.6	36.3	108.7	37.3

Source: Kim Sun-ho (2013).

funds and loans. Their internal funds were just a fourth of their external funds. In 1967, 41.3 percent of external funds came from indirect financing and 12.4 percent from direct financing. In 1968, 47.2 percent was from indirect financing and 15.6 percent from direct financing.

In the late 1960s, demand for industrial funds saw a steady increase as economic development progressed and the country's industrial structure was modernized. Foreign long-term public loans with low interest rates were crucial for economic development but got more difficult to obtain. Furthermore, companies had to start making principal and interest payments on foreign capital taken out in the early 1960s, thus they requested a reduction of the interest burden and implementation of repayment measures. Developing

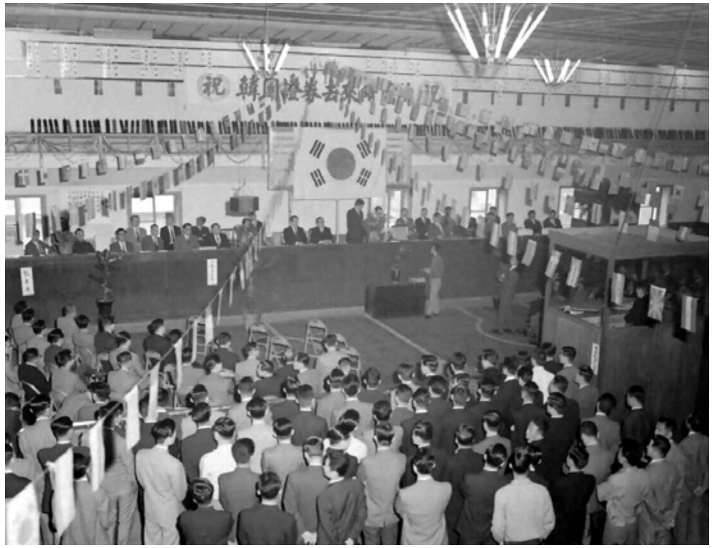


Figure 3-12 Opening ceremony of the first Korean Stock Exchange in 1963. Back when the Korea Stock Exchange was in the Myeong-dong area of downtown Seoul, trading status could be known only through information on bulletin boards. A stock agent points to a trading price and an employee posts the value on the bulletin board.
Source: National Archives of Korea.

the capital market was a major issue at this time. In response, the government enacted the Act on Capital Market Promotion in 1969 and the Act on Public Corporation Inducement in 1973. This forced companies to publicly release information on their financial status via financial statements, which helped foster the capital market.

The Act on Capital Market Promotion included clauses on corporate tax and depreciation costs, and provided tax benefits to companies that released their business information to the public. This encouraged companies to not just release their information but also issue stocks. This, however, merely confirmed the opacity of companies and achieved few significant results. Companies were afraid to disclose information for fear of competitors stealing their business ideas or exposing outdated management practices. Following the implementation of the August 3 measure in 1972, private loans had to be reported. In this process, many companies, including corporations, were found to have siphoned off company funds to provide private loans to their affiliates. As a result, the Act on Public Corporation Inducement of 1973 required the regular screening of such companies and made them disclose their corporate information. Failure to comply resulted in strong regulatory sanctions, as well as tax disadvantages and limits to financial support from the government.

Companies immediately responded to this mandatory disclosure practice. In 1973, companies procured funds by offering new stocks or through secondary distribution in 47 cases, worth KRW 21.5 billion, three times more than the number from 1968 to 1972. By 1975, companies procured a record KRW 100 billion through the capital market. In 1976, financing from the primary market reached KRW 262 billion, up 67.8 percent from the previous year. In 1968, a policy promoting the capital market was debuted, and in 1976, the Act on Public Corporation Inducement was finalized. The number of listed companies took off from just 34 in 1968 to 274 in 1976. The amount of listed capital jumped from KRW 9.6 billion to KRW 1.153 trillion, and the combined market price of listed stocks more than doubled from KRW 64.3 billion to KRW 1.4361 trillion from

Table 3-10 No. of listed stocks, 1968–76

(Unit: KRW million)

	No. of companies	No. of stock-holders	Listed capital	Listed stocks		
				Combined market price	Trading volume	Amount of funds procured
1968	34	39,986	96,585	64,323	76,342	9,247
1969	42	54,318	19,902	86,569	98,464	609
1970	48	76,276	134,292	97,923	79,174	7,151
1971	50	81,913	141,357	108,706	50,523	2,940
1972	6	10,326	17,439	245,981	84,689	24,741
1973	104	1,999	251,620	426,247	13,006	54,548
1974	128	19,613	38,134	532,825	157,419	74,287
1975	189	290,678	643,415	916,054	310,547	15,625
1976	274	568,105	1,153,325	1,436,074	59,176	26,225

Source: Kim Sun-ho (2013).

1968 to 1976. Also, the number of individual stock traders, a good indicator of market capital, skyrocketed more than tenfold from 40,000 in 1968 to 570,000 in 1976.

The introduction of the securities investment trust business that manages and operates the stock investments of investors began around this time as well.[35] The Korea Investment Development Corp. set up a stock investment trust in 1970 with KRW 100 million; by 1973, the amount had leaped to KRW 2.1 billion. After the first oil shock occurring in the same year, however, the Korean economy again stagnated and almost no new funds were established. To resolve this, five banks and 27 brokerages formed a joint investment venture and established Korea Investment Management Co., Ltd. Afterwards, additional funds of securities investment trusts were set up, going from one to 27 types between 1970 and 1976 and from KRW 100 million to KRW 48.9 billion over the same period. The number of people participating in investment trusts also saw exponential growth from 1,316 in 1974 to 74,810 in 1976. In 1974, an organization for employee stockholder associations was started led by the Ministry of Finance. The initial objective was to raise corporate productivity and stabilize society through effective cooperation between labor and management, but the organization also greatly contributed to the development of the capital market. Within a year after the ministry's announcement, the number of newly established associations reached 135 and that of members closed in on 48,000. By 1976, the number of members had ballooned to 100,235.

Korea's capital market slowly began to take shape in the 1970s. Direct financing had become a viable alternative for indirect financing, yet corporate dependence on banks marginally declined and the capital market did not sufficiently grow to put the indirect financial market at risk. The proportion of direct financing was 20.8 percent from 1970 to 1974 and that from 1975 to 1979 was 23 percent.

Oil Shocks and the Middle East Construction Boom

Oil shocks refer to sudden hikes in oil prices that rattle the world economy. Two oil shocks occurred in the '70s, one in 1973 and the other in 1979. The first occurred in response to US support for Israel during the October (or Yom Kippur) War in 1973. Twelve Mideast oil-producing member countries (including Saudi Arabia, Iran, and Iraq) of the Organization of Petroleum Exporting Countries (OPEC) reduced oil production five percent and announced further cuts of five percent until the US accepted their demands. At the same time, OPEC member countries raised the price of oil 70 percent from US$3 to US$5.11 a barrel. The US rejected this demand, and by early 1974, the price of oil skyrocketed to US$12 a barrel and remained around this level until the second oil shock.

The second oil shock occurred in 1979, when the Iranian Revolution nationalized Iran's oil companies and slashed daily oil production from six million barrels to 1.5 million. This jacked up the world price for oil from an average of US$15 to US$39.50 per barrel within a year.

The oil shock raised costs in industries where oil is a basic material, like the chemical and automotive sectors. This directly affected prices and the financial market fluctuated due to unexpected inflation, shocking the world economy. Developed economies that faced stagnation due to the oil shocks were hit by the double whammy of inflation and economic recession, which is referred to as stagflation, a term coined at the time.

Korea, as a country fully dependent on imports for oil, was no exception to the turmoil caused by the oil shocks. The second oil shock came at a time when the country was struggling with overinvestment due to its drive to promote the heavy and chemical industries. This also coincided with the political chaos that occurred after the assassination of President Park Chung-hee in 1979, and the

Figure 3-13 Oil refinery construction site of Hyundai Construction Corp. Source: National Archives of Korea.

economy fell into a slump for the first time since 1957.

Yet both oil shocks also provided opportunities for the country. Korean construction companies had accumulated experience through large-scale capital investment since the 1960s and conducted projects in countries that had accumulated wealth due to the spike in oil prices. The income such builders earned in the Middle East partly absorbed the economic shock Korea faced due to recession. Samhwan Corp. in 1973 landed a contract to build highways in Saudi Arabia before the region's construction boom began in 1975. At the time, the Korean government struggled to maintain foreign exchange reserves due to the first oil shock. Strengthened by government support, Korean construction companies saw their projects in the Middle East go through the roof in value from US$750 million in 1975 to US$8.2 billion in 1980.[36] At the time, the value of Korean construction projects in the Middle East grew an annual 76.1 percent, while GNP rose just 7.2 percent and exports 25 percent. The Korean government exceeded its export goal of US$10 billion in 1977 and posted a current balance surplus during this time, largely due to the dollar income earned from the Mideast construction bonanza.[37]

The domestic investment rate rose from 15 percent in 1976 to 27 percent a year later, and economic growth reached 14 and 13 percent in the two years, respectively. Despite the global recession caused by the first oil shock, the Korean economy maintained solid growth. The effect of the Mideast construction boom on the Korean economy can also be observed through labor statistics. In the mid-1970s, many construction workers from Korea were sent abroad due to government investment and the construction boom in the Middle East. In 1978, unemployment in Korea fell below three percent and employee wages greatly increased.

Wages for Korean construction employees consequently soared due to a labor shortage in the sector. The labor cost per unit (total labor costs of an industry divided by the output) increased 40 percent in 1975 and 75 percent in 1978. Table 3-11 shows the speed at which wages rose at the time.

The Mideast construction boom earned massive foreign currency and created many jobs for Korea within a short period. After 1980, however, demand in the region plummeted and prices suddenly shot up due to the inflow of foreign currency and higher wages, as

Table 3-11 Inflation and rate of wage increase (1972–79)

(Unit: %)

	Consumer price	Producer price	Nominal wages (manufacturing)	Unit cost of wages (manufacturing)
1972	11.7	14.0	13.9	6.1
1973	3.2	6.9	18.0	11.5
1974	24.3	42.1	35.3	31.7
1975	25.2	26.5	27.0	24.3
1976	15.3	12.1	34.7	32.5
1977	10.1	9.0	33.8	21.3
1978	14.5	11.7	34.3	18.8
1979	18.3	18.7	28.6	21.2

Note: Unit cost of wages = nominal wages/added value per employee
Source: Korean Statistical Information Service (www.kosis.kr). Nominal wage data from Ministry of Labor.

shown in table 3-11 above. This resulted in yet another shock to the Korean economy. High prices along with real estate speculation caused rapid inflation in real estate, and despite the high increase in wages, workers were increasingly unhappy.

Emergence of Gangnam and Boom in Real Estate Speculation[38]

Immediately after the Korean War ended, the population of Seoul was 1.24 million. As industrialization and urbanization progressed

Figure 3-14 Photographer Jun Min-Cho, while searching for a representative image of the Apgujeong-dong neighborhood in April 1978, came across this scene at what is currently the Galleria Department Store site and captured it in a photograph. In this picture, a farmer is plowing using the traditional method with tall apartment buildings in the background. Jun recalls thinking at that moment that this empty plain of a neighborhood would soon become the Seoul city center.
Source: Jun Min-Cho.

due to economic development, the capital experienced a population explosion, going from 2.44 million in 1960 to 3.47 million in 1965 and 5.43 million in 1970. In 1970, 80 percent of Seoul residents were migrants from rural areas, and more than 30 percent of city housing at the time was unauthorized. The downtown region of Gangbuk (north of the Hangang River) was expanding and became overpopulated to the point of creating a serious housing shortage.[39]

The development of regions surrounding the downtown area and the Hangang River could not resolve this problem. Eventually, a plan was implemented to develop the Yeongdong district across the river, and the district was developed into Gangnam.

The area known as Gangnam and Seocho-gu today was called Yeongdong or "South Seoul" before the 1970s. Meaning "east of Yeongdeungpo," Yeongdong thus was an area not significant enough to have its own moniker as it was named for its proximity to another region. With the explosion in Gangbuk's population in the 1960s, the opening of the third bridge over the Hangang River, Hannamdaegyo Bridge, in 1969, and construction of the Gyeongbu Expressway in 1970, Yeongdong, then a secluded farming area, was transformed into Gangnam, which would eventually turn into Korea's busiest downtown region. The development of Gangnam was an extremely large undertaking and its planning was historically unparalleled. The project's execution lacked both sufficiently detailed urban planning and measures to quell speculation, both of which are necessities in urban planning projects. Furthermore, the construction of housing and relocation of residents did not occur actively until the early 1970s due to the aftermath of a global recession.

From the mid-1970s, however, the Park administration actively promoted development via government policy. Areas were chosen for expansion, systems to select apartment districts were introduced, express bus terminals and subway lines were built, public institutions and schools were relocated to Gangnam, and policy to control development was enforced in the Gangbuk area. The government itself also led the construction of large-scale apartment complexes.

Table 3-12 Real estate prices (1970–78)

	Housing price	Housing site price	Urban household income	Consumer price
1970	100	100	100	100
1973	180	165	144	131
1975	292	297	226	204
1976	373	400	302	235
1977	464	514	369	259
1978	806	1,168	503	296

Source: Economic Planning Board, *Annual Report of Urban Household Survey*, various years.

Private builders followed the government's initiatives and this led to the appearance of private apartments on a large scale.

At this time, huge sums of money were released into the Korean market due to investment in the heavy and chemical industries and the construction boom in the Middle East. This caused rapid inflation and the value of the Korean currency to decrease. As a result, inflation hedges grew popular and higher demand for investment in non-monetary assets resulted including gold, land, and real estate. This caused massive inflation at housing sites and real estate around Gangnam and the country. Table 3-12 shows changes in Korea's real estate prices in the 1970s. If the benchmark index was 100 in 1970, consumer prices shot up nearly three-fold to 296 by 1978. Real estate prices increased to 806 (eight times), and housing site prices zoomed to 1,168 (11 times). The increase was steepest between 1977 and 1978 but greater in Seoul. Between April and July 1978, the average sale price of an apartment per *pyeong* (a traditional unit of Korean area measurement equal to 3.3 square meters) increased 40 percent. In response, the government announced the August 8 Comprehensive Measures for Control of Real Estate Speculation and Stabilization of Land Prices (so-called August 8 measures) on August 8, 1978, and began to regulate the real estate business.

When the development of Gangnam began in the latter half of the 1970s, real estate inflation caused land prices to rapidly rise within a short period of time. This brought about social changes such as a spike in real estate speculation and the emergence of the nouveau riche and *bokbuin*, or Korean women who dived into the real estate market to gain wealth. Jun Gang-Soo (2012) said the 1978 boom in real estate speculation marked the beginning of the transformation of Korean society. People in Korean society had been previously work-oriented with the desire to save. After 1978, however, the country transitioned into a rent-seeking society where people were periodically affected by the fervor for real estate speculation. Those who sought unearned income and moved ahead of others in the market grew wealthy. Korean society eventually became heavily dependent on land development and construction.

Labor Market and Labor Policy of the Park Administration

Pro-business, Anti-union Policy

The Korean government was established in a political environment dominated by conflict between the left and right. The Constitution stipulated the protection of the three labor rights and passed the progressive "Four Labor Acts" during the Korean War: the Labor Union Act, the Act on Labor Dispute Adjustment, the Labor Relations Commission Act, and the Labor Standards Act. The government rushed to pass these labor laws at the time because the Park administration was competing with North Korea for legitimacy and wanted to present itself as pro-labor. The South Korean government had previously rushed to implement land reform for the same reasons. Yet outdated, oppressive, and exploitative labor-management relations passed down from the Japanese colonial era dominated Korean society at the time. As the country was still an agricultural society, it had no conglomerates with modern workplaces. Thus these labor laws had little impact. Furthermore, judicial systems that could regulate labor practices or government organizations that could manage and inspect the enforcement of labor laws were inadequate. Labor-management relations remained underdeveloped, while laws and labor practices existed separately. Furthermore, South Korea was competing for legitimacy with North Korea, which had a socialist system, and the former enacted an explicit anti-communist policy after the Korean War. These circumstances made it difficult for labor movements to find their place. In 1960, the Federation of Korea Trade Unions was formed

Figure 3-15 A factory at Pyounghwa Market in the 1960s where labor activist Jeon Tae-il worked. Workstations were placed close together in small spaces and referred to as "attics."
Source: Imagine Publishing.

but could not function properly due to deeply rooted conflict between factions.

Amid these conditions, the Park administration developed a clear stance of being pro-business and anti-union. The government not only rendered labor laws ineffective through decrees, but restricted in 1962 the three labor rights: organization, collective bargaining, and collective action through a referendum. Afterwards, it restricted labor-management negotiations through unions in implementing the first five-year economic development plan. The government did try to protect basic worker rights by revising labor law in 1961 and 1963 and implementing systems for paid holiday allowance, pension, and labor-time management. Multiple unions were banned, however, and the clause prohibiting unions from engaging in political activities was bolstered. In addition, the government weakened the penalty clause for unfair labor practices and required prior judicial reviews of labor disputes, making legal labor disputes difficult to implement. Other rules repressed unions and labor movements. As a result, companies in the 1960s grew rapidly and Korea transitioned from an agricultural society to an industrialized one. This raised the number of workers, and allowed many to overcome poverty. But labor practices and labor-management relations remained outdated, and working conditions were poor. Female workers in light manufacturing (i.e., textiles, clothing, and wig making) had to endure long working hours under poor conditions, and many suffered violation of their personal rights by their employers and male middle managers. If workers complained or showed any signs of resistance, companies and organizations with authority would fire them or keep them under close observation.[40]

In November 1970, labor activist Jeon Tae-il, a member of the Cheonggye Clothing Trade Union, demanded that the workday be reduced from 14 hours to 10–12 hours, with every Sunday off, not every other Sunday. He also sought to raise the extra pay of apprentices, which was KRW 70–100 at the time, by 50 percent. Jeon set himself on fire while holding the Act on Labor Standards, and his suicide made him a martyr of the Korean labor movement. This showed how poor working conditions were for Korea in its development era. Jeon's death sparked social interest in the severity of the labor problem and caught the attention of intellectuals. It also boosted participation in the labor movement.

In response, the government declared a state of emergency in December 1971, and proclaimed the Act on Special Measures for National Security soon after. Collective action and bargaining had to be regulated by government authorities. In 1973, the Yushin Constitution restricted the three worker rights of organization, collective bargaining, and collective action via referendum. Intellectuals and students jointly resisted the Yushin Constitution, and union activity increased. After 1973, the number of union members rose every year and eventually reached one million by 1978. Furthermore, the number of labor disputes, deemed illegal under the Yushin system, also grew every year. An average of 109 labor disputes per year occurred from 1975 to 1979. From 1966 to 1971, when labor disputes were legal, there were only 66 labor disputes combined, which meant that there were seven times more labor disputes under the Yushin system. Intellectuals, university students, and religious groups that had participated in the anti-Yushin movement banded together. The labor movement emerged as a politicized issue after the YH labor incident of 1979.[41] These events brought the Yushin Constitution to an end.

The government's continuous oppression of labor activities since the 1960s prevented employers, workers, and the government from gaining experience in rationally dealing with social issues related to the relationship between wage-earning workers and capitalists. It also prevented the establishment and development of related institutions, hindered social unity, and rapidly advanced the labor movement.

Puzzle of Rising Wages and Characteristics of the Korean Labor Market

In addition to the government's pro-business, anti-labor stance, a notable characteristic of the labor market was the rapid rise in real wages. The economy grew at rapid speed, but the number of urban poor had also increased due to the dissolution of farming villages

Table 3-13 Comparison of rate of wage hikes in non-agricultural sectors of seven developing economies, 1970–84

	Korea[1)]	Brazil[2)]	Argentina	Mexico	Turkey	Taiwan
1970	100	100	100	100	100	-
1971	102	110	105	103	100	-
1972	104	114	99	104	99	100
1973	119	119	107	104	98	107
1974	130	119	126	107	96	98
1975	131	127	124	114	116	110
1976	154	129	80	123	122	126
1977	187	134	76	125	146	138
1978	219	142	77	122	147	151
1979	238	134	87	121	155	163
1980	227	130	100	116	124	166
1981	225	118	91	119	130	171
1982	241	115	79	117	129	180
1983	261	97	97	86	130	188
1984	276	84	112	83	11	191

Notes: 1) Real earnings in manufacturing
2) Average wages for skilled construction workers; data from central bank of each country
Source: Amsden (1989).

and workers flocking to industries. The government also suppressed organized activities by workers. So the rapid rise in wages was rather surprising. Amsden (1989) referred to this as the "paradox of increasing wages." Table 3-13 shows the degree to which wages in Korea rose from 1970 to 1984 by comparing the rates of wage hikes in Korea, Brazil, Argentina, Mexico, Turkey, and Taiwan—all countries with similar levels of development at the time.

Real wages in the seven countries rose in the 1970s, but Korea's case was remarkable. If the real wage was 100 in 1970, Korea's real wages soared to 238 in 1979, or an astounding jump of 238 percent in 10 years. This was far greater than real wages in Turkey (155), Brazil (134), or Taiwan (163–166) in 1979, which were growing at similar levels to Korea. Lindauer (1984) narrowed the scope of research and observed the rate of wage hikes for manufacturing workers. Between 1969 and 1979, he found, the real wages of Korean manufacturing workers soared more than 250 percent.

Wage hikes in Korea during the 1970s and 1980s were higher than Japan's during its high growth period. From 1950 to 1968, an 18-year period considered Japan's high growth era, real wages of Japanese manufacturing workers jumped 2.7 times. In comparison, those of Korea leaped 4.3 times in 25 years from 1955 to 1980 and 3.6 times in 12 years from 1966 and 1980. This not only caused the Korean economy to grow rapidly, but it allowed the effects of growth to be distributed relatively evenly.

Rapid economic growth was an important factor that led to steep wage increases in Korea, but several other factors came into play as well. Korea's labor market had characteristics different from those

of other developing countries. First, Korea had extremely low wages compared to all other countries yet achieved growth, no small feat. Yet even if Korea's wages had risen by the same amount as other countries, the rate of increase would appear much higher because it started at relatively low levels. The US Bureau of Labor Statistics compared the hourly wages of workers in manufacturing around the world between 1975 and 1980. The hourly compensation index was used to compare hourly compensation in Korea, Taiwan, and Mexico. Korea's in 1975 and 1980 was US$0.35 and US$0.95, respectively; Taiwan's US$0.38 and US$1.02; and Mexico's US$1.47 and US$2.21. Wages in Korea and Taiwan rose quickly, but when their absolute values are compared, both still had lower wages than Mexico until 1980, and Korea's remained even lower than Taiwan's.[42]

Second, the demand for low-skilled male workers surged due to

Table 3-14 Comparison of wage hikes of workers in manufacturing and skilled workers, 1965–84

Period	Rate of wage increase	
	Workers in manufacturing	Professionals, technicians, & managers
1965–70	12.8	6.6
1971–74	7.1	6.1
1975–79	16.8	15.3
1980–84	5.3	2.5

Source: 1965–79, Bai (1982); 1980–84, Ministry of Labor (1985), Amsden (1989).

external factors such as higher demand during the Vietnam War and the construction boom in the Middle East. This caused the wages of workers in manufacturing, including construction, to soar. Table 3-14 shows that between 1965 and 1970, during the Vietnam War, and between 1975 to 1979, during the Middle East construction boom, manufacturing workers saw a high rate of wage hikes, even higher than that of highly skilled workers including professionals, technicians, and managers.

Table 3-15 Comparison of working hours in manufacturing industries, 1976–85

Country	Avg. working hours
Korea	53.3
Malaysia	48.4
Hong Kong	47.1
Hong Kong	38.0
Mexico	46.0
Japan	46.0
Argentina	45.6
Britain	41.5
Germany	41.2
US	40.1
France	40.1
Israel	38.7
Norway	38.1
Puerto Rico	38.0
Sweden	37.8
Belgium	34.3

Source: International Labor Organization (1986), quoted in Amsden (1989).

Third, working hours in Korea were far longer than in other developing economies at the time. Though wages kept going up, working hours did not decrease. Table 3-15 compares the average workweek in the number of hours for manufacturing workers between 1976 and 1985, and shows that the working hours of Koreans were far higher than those in other countries. Many countries that achieved consistent economic growth saw a decline in working hours as they developed. Korea, on the other hand, maintained a culture of labor practices and long working hours that became embedded during modernization under Japanese colonial rule even with economic development.

To shorten the number of working hours, legalization and institutionalization are required. The Korean government, however, banned labor activities organized at the national level, which are necessary for this process, thus the practice of long working hours remained. Because hourly wages rapidly increased, however, the desire of workers to cut working hours was relatively weak. Hourly wages soared while relatively long working hours persisted for a long time. This allowed Korea to raise its wages at rates faster than other countries that gradually cut back on working hours. Afterwards, working hours in Korea saw a gradual decline as the number of official holidays rose and the five-day workweek was introduced. Yet Korea remained notorious for a relatively high number of working hours compared to other countries.

Finally, Amsden (1989) and Seguino (1997) cited that women in Korea earned much less than men. As shown in table 3-16, female workers in manufacturing industries in 1980 received 44.5 percent

Table 3-16 Difference in wages between male and female workers in manufacturing, 1980

Country	Ratio (%)	Country	Ratio (%)
Sweden	89.3	Belgium	69.4
Burma	88.8	UK	68.8
Denmark	86.1	Syria	68.8
Norway	81.9	Ireland	68.7
Netherlands	80.1	Greece	67.8
El Salvador	78.9	Switzerland	67.7
Australia	78.6	Egypt	63.1
France	75.4	Luxembourg	61.2
Finland	75.4	Cyprus	50.2
West Germany	72.7	Japan	48.2
New Zealand	72.4	Korea	44.5

Note: Female/male average wage x 100
Source: International Labor Organization (1986), quoted in Amsden (1989).

of what male workers earned. Compared to other countries except Japan, this was a remarkably wide gap.

Cultural reasons could explain the large wage gap between male and female workers in Korea, but historical and political factors proved significant as well. First, external factors such as the Middle East construction boom greatly contributed to raising the wages of skilled male staff but provided no opportunities for female workers. The government drive toward promoting the heavy and chemical industries created many high-quality jobs requiring high skills at high wages. These industries, however, were characterized by large

male-oriented workplaces, which later formed the basis for strong labor activities. Women were unable to get these jobs, however.

Yet the low wages of female workers who were mainly hired by labor-intensive sectors, such as textiles and clothing and companies that assembled electronic goods, played a significant role in maintaining the export competitiveness of light industries excluded from policy loans and tax support in the process of promoting the heavy and chemical industries in the 1970s. But the gender wage gap and the difference in earnings between workers in manufacturing sectors that arose in this period persisted for a long time. Furthermore, the low wages of female workers lowered women's participation in the labor market.

Concluding Remarks

In the 1970s, Korea enjoyed brisk annual growth of nine percent on average and a rapid increase in real wages. Inflation also rose due to higher investment in equipment for the heavy and chemical industries, the Mideast construction boom, and the two oil shocks. Furthermore, political and economic instability was brought on by the Yushin Constitution and real estate speculation. Rapid implementation of the policy promoting the heavy and chemical sectors coincided with the second oil shock, causing a host of problems. Many questioned the country's government-led, growth-focused economic development model at this time. After 20 years of development, the Korean economy had grown in size and sophistication, making it difficult for the central government to control, regulate, and plan every aspect. Also, negative effects arose caused by regulation and control policy. The so-called comprehensive policies for economic stabilization announced in April 1979 focused on changing the economic structure by gradually reducing the government's role and providing more autonomy to the private sector. Policy suggestions considered innovative at the time included reducing export support, relaxing price regulations, and liberalizing interest rates. These actions were not properly implemented initially due to opposition from government departments that would be affected and sudden political changes that followed the assassination of President Park Chung-hee on October 26, 1979. They did, however, form the basis for the economic strategy of the new government that took power in 1980. The Park administration's growth-oriented policy had come to an end.

The Park administration had seized power in a coup and repressed democracy and workers' rights, not to mention being guilty of many other flaws. In economic policy, however, the administration did not focus on President Park's personal fortune or the interests of the ruling elite, but aimed to achieve economic growth by supporting companies and fostering their development. Many lessons can be drawn from the Park administration's economic policy. Few governments achieved such rapid economic growth through active and sometimes unconstitutional (such as the August 3 measure) intervention to distribute resources. Developing countries with underdeveloped legal and institutional structures that distort markets rarely achieve economic success. Furthermore, Korea's experience shows why countries with centrally planned economic models must

make the transition to more liberal, market-focused ones, and why the process of developing economic models and practices that enable the market and sectors to properly perform their functions is so difficult.

Chapter 4

THE 1980S: SEEKING GRADUAL OPENING AND TRANSITIONING INTO A MARKET ECONOMY

Chun Doo-hwan, then a major general in the Republic of Korea Army, seized power in 1980 after the second oil shock and while Korea was suffering from a sudden rise in prices, recession, and political instability. His administration deviated from the previous growth-oriented policy of its predecessor and prioritized stability. The government was no longer fixated on supporting the economy through fiscal policy or deficits, and tried to focus on recording surpluses. It also greatly reduced the rate of increase of money in circulation until the mid-1980s (the rate of increase of currency in circulation was 21.3 percent in 1982 but was lowered to 7.2 percent in 1984), and focused on price stability. To resolve worsening profitability and the decline in investment efficiency caused by overinvestment in the heavy and chemical industries in the late 1970s, the government turned to investment adjustment and industrial ratio-

nalization. Another objective was to transform the government-led economic system to one led by the private sector, as well as to strive to open and liberalize the economy and fan competition. Like the policy seeking to rationalize industry, these initiatives were initially unsuccessful. The centrally planned economy remained mostly the same, and liberalization stayed in the planning stage. Attempts were made to liberalize the financial system through market principles, and the financial market and banks were privatized. Preparation was also made to liberalize capital transactions abroad.

Along with these policy changes, the 1985 Plaza Accord caused the Japanese yen, German mark, French franc, and British pound to shoot up in value, which changed the international market. As a result, Korean products grew more price competitive in developed markets, and the prices of raw materials and international interest rates both decreased. This is referred to as the "three lows" that created unprecedented optimal conditions for Korean industry. Exports hit new heights, and in 1986, the country achieved its first current account surplus and continued to report surpluses for four straight years.

Structurally, the Korean economy underwent another transformation in the 1980s. Until the 1970s, the country saw quantitative growth from focused investment in capital goods. After the 1980s, the economy not only experienced an increase in production factors, but also a surge in human capital and investment in R&D, which boosted productivity.

This change in the growth pattern, however, did not occur equally throughout the economy. Large exporters that led the change while participating in the heavy and chemical industries and the sectors they controlled rapidly advanced and raised productivity. But many small and medium enterprises (SMEs) and industries that had to compete with other developing countries with cheap labor quickly fell behind. The difference in productivity between large companies (which had kept expanding after the push toward the heavy and chemical industries) and SMEs emerged as a major problem for the Korean economy.

Changes in Macroeconomic Policy Objectives and Structural Adjustment of the Heavy and Chemical Industries

In the latter half of the 1970s, wages and prices soared in Korea, but the government fixed the exchange rate for fear of hikes in interest expenses on foreign capital, quickly lowering the profitability of exporters. At the same time, housing prices and rental deposits surged due to overheating investment in real estate, causing public uneasiness. After taking power in the coup of December 12, 1979, the Chun administration set price stabilization as its objective for macroeconomic policy and implemented strong retrenchment measures (currency and fiscal) until 1986. These measures eliminated the practice of incrementally raising the previous year's budget and introduced "zero-base budgeting," in which a business's effectiveness and costs were assessed again for each new period starting from zero even if performance was similar to the previous year's. Overall fiscal expenditures and net loans, which had risen an average of 34.6 percent per year between 1975 and 1981, decreased seven percent between 1982 and 1986 after the financial retrenchment measures were implemented. The government deficit reached 4.3 percent of GDP in 1981, but this dropped to 0.1 percent in 1986 with the decrease in fiscal expenditures. With these retrenchment measures and the continuing decline in oil prices after 1981, inflation plummeted from 28.7 percent in 1980 and 21.4 percent in 1981 to 7.2 percent in 1982 and 3.4 percent in 1983. Afterwards, the rate of consumer inflation remained below 10 percent. Thanks to these safety measures, the economy saw a rapid recovery after 1981, and growth reached 12.2 percent in 1983 and 9.9 percent in 1984.

In addition to the implementation of the financial retrenchment measures, investment was adjusted to alleviate worsening profitability in the heavy and chemical sectors caused by overinvestment and the second oil shock. Aside from the three key sectors of automobiles, heavy construction equipment, and development equipment, shipping also faced a structural recession and was selected for rationalization as well. The government did not intervene by punishing companies for their actions and correcting them. Instead, the entry of new businesses was regulated during the rationalization of these industries, and the government or government-managed financial institutions granted relief loans for these companies, preserved their debts, and provided tax support. In organizing insolvent companies from 1986 to 1988, KRW 986.3 billion in principal was written off based on support measures that preserved all debts that exceeded assets; principal repayments worth KRW 1.6406 trillion were postponed and KRW 4.1947 trillion in interest payments were rolled over or exempt. Furthermore, new long-term loans with low interest rates worth KRW 460.8 billion were provided for unconditional use. A combined KRW 241.4 billion in taxes became exempt under tax support measures.

The government led the structural adjustment of companies this way partially because it wanted to take responsibility for promoting these industries under its policy. Seoul also wanted to prevent negative consequences to the economy overall if these companies remained insolvent for a long time. As companies that received substantial government support during the heyday of the heavy and chemical industries struggled, the government again limited competition within these industries and provided huge public funds to preserve their profitability. This intervention method not only gave excessive preferential treatment to these companies, but was also extremely unfair to other sectors and companies that did not receive such benefits. Furthermore, companies expected the government to protect and support them, and did not respond to changes in the corporate environment or try to diversify and change their businesses. Banks also took on much of the financial burden to provide financial support in the promotion of the heavy and chemical industries. In the process of industrial rationalization and rectification of insolvent companies, banks became saddled with a large amount of non-performing loans (NPLs). The estimated size of banks' NPLs was KRW 4 trillion in 1984 and KRW 5 trillion in 1985, which accounted for 14.5 and 14.9 percent of all bank loans, respectively. Eventually, the Bank of Korea provided these banks with KRW 299.9 billion in 1985, KRW 684.4 billion in 1986, and

KRW 773.8 billion in 1987. All told, KRW 1.7221 trillion in funds at an interest rate of three percent were given to six banks to prevent their balances from worsening.

Structural Adjustment of the Automotive Industry

Korea's economy struggled with sluggish exports following the second oil shock of 1979 and the global recession, as well as the political chaos that occurred after the assassination of President Park Chung-hee on October 26 of that year. The burden of principal and interest payments on foreign loans that had accumulated over the industrialization period of the heavy and chemical sectors increased due to rising interest rates abroad. Furthermore, the rising price of crude oil made it difficult to maintain foreign exchange reserves. The government thus attempted to lower energy consumption and took measures that prohibited people from refueling their cars on weekends, raised the price of oil and the special consumption tax on gasoline, introduced registration taxes for vehicles, hiked automotive taxes, and controlled car consumption. After 1976, automakers that had invested in facility expansion due to higher car demand faced inventory accumulation and lower operating rates due to plunging sales. Financial costs from investment in equipment also rose. Companies struggled, and auto component suppliers went bankrupt. In 1979, production of finished vehicles exceeded 200,000 units, but this figure plummeted to 120,000 in 1980 and 130,000 in 1981. Operating rates declined as well; by 1980, they fell to 35 percent in finished automobile companies and 40 percent in component makers. The number of workers in component companies was halved from about 806,000 in 1978 to 401,000 in 1980. Table 4-1 shows that the fall in operating rates of the Korean automotive industry from 1979 to 1981 was worse than the decline for domestic manufacturers of machinery equipment and foreign automakers.

In August 1980, the government announced measures to help prevent finished automobile companies and component makers

Table 4-1 Profitability index of finished automobile companies before and after 1980

Items	Profit rate of assets			Profit rate of sales		
	1979	1980	1981	1979	1980	1981
Kia Industries	3.3	-11.8	-13.1	3.3	-16.5	-16.9
Sehan Motors	3.5	-14.1	-13.9	2.9	-18.9	-19.6
Hyundai Motors	4.4	-6.4	-4.7	4.3	-8.6	-5.5
Asia Motors	1.3	-4.1	-4.9	1.3	-5.5	-5.0
Donga Motors	3.5	-8.2	-1.8	7.5	-15.8	-3.5
Geohwa	8.2	1.1	18.0	5.0	1.5	13.6
Average	4.28	-10.38	-8.82	3.51	-13.0	-10.44
Fabricated metal product machinery & equipment	1.86	-2.94	-0.30	1.72	-3.11	-0.31
Nissan	5.11	4.81	4.09	2.84	3.19	2.85
Toyota	7.08	8.33	7.30	3.64	4.34	3.79
GM	8.98	-2.20	0.85	4.36	-1.32	0.53
Ford	4.97	-6.34	-4.60	2.69	-4.16	-2.77
Average of Taiwanese transportation equipment companies	4.50	3.60		4.20	3.70	

Source: Korea Institute of Industrial Economics & Technology (1982, p. 175), quoted in Park Yi-taek (2014).

from going bankrupt as part of a policy to adjust overlapping and overinvestment in the heavy and chemical industries. This measure was based on the assessment that Korea's automotive industry had too many assembly companies despite a small domestic market, and could not reach the output of 300,000 units that would enable the industry to achieve economies of scale. The sector's weak international competitiveness and its capacity to overproduce despite low demand meant that the operating rate was low. The measure aimed to merge finished automobile companies and form a production system by car type. The key points of the measure were: 1) sedan production was unified via a merger between Hyundai and Sehan Motors, and other companies were prohibited from producing cars weighing one to five tons; 2) Kia Industries was banned from producing sedans but allowed to monopolize the production of commercial vehicles between one and five tons; and 3) trucks and buses that exceeded five tons could be produced by all companies based on free competition. In the attempt to merge Hyundai and Sehan, GM, which owned half of Sehan shares, demanded the same number of investment shares and management rights as Hyundai. Hyundai and GM had different views even after the merger, and their conflict continued even in the process of devising development strategies. In response, the government gave up on the Hyundai-Sehan merger in 1981, and instead implemented a rationalization measure as an alternative to allow Hyundai and Sehan to both produce sedans. A competitive system between these two companies was maintained. Under this measure, Kia would monopolize the production of trucks from one to five tons and small and medium-size cars, Kia and

Donga Motors would merge,[43] and Kia's motorcycle sector would be transferred to Daelim Industries. But the Kia and Donga merger was canceled in July 1982 in the negotiation process due to changes in the international environment. A measure to monopolize the production of special vehicles was revoked, and a competitive system was put in place instead. These rationalization measures of the early 1980s allowed Kia to produce buses and trucks weighing one to five tons, but prohibited it from making sedans.

These measures restricted competition between companies and greatly influenced the development of each company. Hyundai and Sehan were selected as sedan suppliers, and both companies expanded production, strengthened cooperation with foreign companies, and began to set mid- to long-term development plans. Kia and Donga were prohibited from producing sedans. Their equipment grew idle and both suffered enormous losses. Afterwards, Hyundai formed a joint venture with Mitsubishi, strengthened technical cooperation, and began building factory facilities with the capacity to produce 300,000 units per year. In 1984, the Mabuk-ri Advanced Engineering and Research Institute was established and Hyundai began to develop engines independently. Daewoo took over half of Sehan's Korean shares and seized management rights from GM in 1982 to become Daewoo Motors Co., Ltd. Kia, which had maintained its position as Korea's second-largest maker of sedans until the end of the 1970s, set up Kia Research Institute in 1981 after it was excluded from the sedan market. It released a van and improved its management performance. Afterwards, Kia participated in the development of an export-oriented sedan with Mazda in 1983.

Construction of the factory producing the subcompact Kia Pride began in 1984. Mazda provided eight percent of the capital required and Itochu Corp. two percent. Kia prepared to manufacture sedans once the rationalization measure was revoked.

Production restriction measures by vehicle type implemented in 1982 were abolished in 1989 with the removal of measures to rationalize the automotive industry. Companies could expand production to a variety of car types, new companies entered the industry, and a new round of active structural reorganization occurred.

The rationalization policy of the early 1980s aimed to achieve economies of scale by restricting the number of companies in the automotive industry and reducing competition. When the sector started to develop, many car assembly companies entered the industry and competed. Korea now has 12 automotive companies. At the time, Mexico and Brazil's automotive sectors were more advanced than those of Taiwan or Korea, but the level of development declined because of too many companies, including direct investment, joint, and independent companies competing. The rationalization policy Korea implemented was based on the case study of Mexico and aimed to prevent Korea from making the same errors. Had the automotive industry been unified and monopolized as the government intended, however, the negative effects of monopolization could have been greater than the positive effects of economies of scale. The Japanese automotive industry grew rapidly after World War II because of an effective production system set up through competition among many companies and active pursuit of technical development. In contrast, the rationalization measures implemented by Korea during the early 1980s were not implemented in the way the government intended. Competition between Hyundai Motor and Daewoo Motor in the sedan sector remained, and Kia Motor, though excluded from producing sedans, prepared to produce them as a potential manufacturer. In the end, the competitive system suffered little damage and the potential negative effects were reduced. Furthermore, many problems arose in the process of debating and changing the rationalization measures. The nation's three automakers incurred enormous losses for discarded facilities. Automotive production under contracts that introduced technology from foreign companies was terminated due to the rationalization measures. As a result, Korean companies lost credit due to breach of contract. The rationalization measures of the early 1980s excluded Kia, the country's no. 2 carmaker, from the sedan sector, and the government wanted the company to monopolize truck and bus production to obtain economies of scale. This proved to be excessive government intervention. Kia was not eliminated due to fair competition with other companies but because of government policy. The top and no. 3 companies in the sector were the winners as each enjoyed half of the market, though for a short time. The fates of companies were decided by political factors, not economic factors, discouraging entrepreneurs and workers from doing their jobs. The development of the Korean automotive industry did not accelerate during the implementation of these rationalization measures in the early 1980s until 1989, when they were discarded. Instead, such measures are said to have hindered the automotive sector's development.

The Plaza Accord and Economic Boom from the 'Three Lows'

The 1985 Plaza Accord was an agreement to depreciate the US dollar in relation to the Japanese yen and German mark to improve the international balance of payments of the US, Japan, and Germany. The US was consistently reporting trade deficits as it imported more than it exported, and Japan and Germany saw trade surpluses year after year. The agreement got its name from the Plaza Hotel in New York, where it was signed; afterwards, the yen's value against the dollar increased 51 percent from 1985 to 1987.[44] In response, the won's value against the dollar changed little but greatly fell against the yen. The international price competitiveness of Japanese goods thus worsened while that of Korean goods improved greatly. For example, if a Korean product was the same price as a Japanese one in 1985 after the change in the exchange rate, the domestic price of the Korean product remained the same but its international price dropped to half of that of the Japanese product. Furthermore, crude oil prices, which had skyrocketed after the second oil shock of 1979, continued to decrease over this time, and international interest rates remained low due to the recession in developed economies other than Japan and Germany. The low value of the won, low price of crude oil, and low interest rates formed the "three lows" that provided an extremely favorable macro-economic environment for the Korean economy.

The Korean economy immediately responded to the three lows. First, as the relative price competitiveness of Korean exports got a huge shot in the arm, exports rose 24.5 percent from the previous

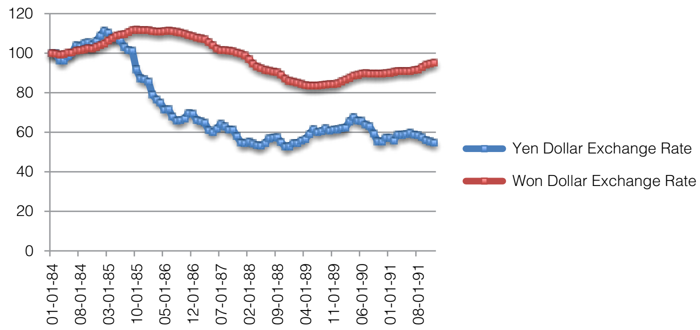


Figure 4-1 Changes in JPY/US$ and KRW/US$ rates (1984.1=100)
Source: Bank of Korea.

year in 1986, 21.9 percent in 1987, and 11.7 percent in 1988. Thus the country saw its first current account surplus in 1986 of US$4.7 billion. In 1987 the nation recorded its highest surplus of US$14.5 billion. Between 1987 and 1989, the surplus amounted to US$34.6 billion. The volume of foreign loans over that time had increased to 59.3 percent of GDP in 1985, but began to decrease in 1986. By 1990, the ratio of foreign loans to GDP had dropped to 18.1 percent, the lowest since 1961. The amount of foreign exchange reserves also nearly doubled from US$7.7 billion in 1985 to US$15.2 billion in 1989.

Korea saw rapid economic growth at this time as well. After undergoing structural adjustments following the recession of 1980–81, recovery came swiftly. GDP growth reached 8.3 percent in 1982, 12.2 percent in 1983, and 9.9 percent in 1984. After the arrival of the three lows, growth registered 12.2 percent in 1986, 12.3 percent in 1987, and 11.7 percent in 1988. Employment also consistently went

up while unemployment dropped. In 1988, the jobless rate dropped to two percent for the first time. Prices remained stable during this time as well, thanks to pro-stability measures of the early 1980s. In the decade's latter half, Korea could achieve growth, price stability, and a favorable international balance of payments, the three primary objectives of macroeconomic policy. A popular phrase at the time was that the country was seeing "the greatest economic boom since Dangun (the mythical founder of the Korean nation)."

Table 4-2 Macroeconomic trends in 1980s

	GDP growth	GDP growth by demand sector				Employment		
		Final consumption	Fixed investment	Exports	Imports	Employment growth rate	Unemployment rate	Rate of participation in economy
1980	-1.9	1.2	-12.0	8.6	4.0	0.6	5.2	59.0
1981	7.4	5.3	-2.9	15.2	5.4	2.5	4.5	58.5
1982	8.3	6.6	10.3	6.0	4.0	2.5	4.4	58.6
1983	12.2	8.3	16.4	14.9	10.1	0.9	4.1	57.7
1984	9.9	6.8	11.5	14.5	8.9	-0.5	3.8	55.8
1985	7.5	6.5	5.4	2.2	0.1	3.7	4.0	56.6
1986	12.2	8.5	13.4	24.5	18.7	3.6	3.8	57.1
1987	12.3	7.7	18.5	21.9	19.3	5.5	3.1	58.5
1988	11.7	9.0	13.6	11.7	13.5	4.1	2.5	58.5
1989	6.8	10.3	16.9	-3.6	16.0	3.0	2.4	60.0
1990	9.3	9.8	24.7	4.9	13.3	3.1	2.4	60.6

Source: Bank of Korea, Economic Statistics System (ecos.bok.or.kr). Employment data from Statistics Korea, Korean Statistical Information Service (www.kosis.kr).

Yet the economic boom fueled by the three lows did not last long. Because of the continuous surplus in the current account balance, US pressure to strengthen the Korean currency increased. Thus the won appreciated and the gap between the won and yen exchange rates decreased. And as foreign currency flowed into Korea, inflation reared its ugly head again from 1988. Eventually, the real effective exchange rate[45] rose rapidly in 1989 and reached an even more appreciated state than in 1985. Exports decreased 3.6 percent in 1989 and the current balance deficit returned to Korea.

Though short lived, the economic boom caused by the three lows greatly reduced foreign debt and positively affected the Korean economy. The won was quickly revalued after rapid depreciation of the exchange rate, however, and this caused confusion for companies when making production or investment decisions. Unfortunately, the economic boom that resulted from the three lows did not lead to the resolution of long-term issues but instead caused a stock market boom and real estate speculation.

Expansion of the Chaebol System and the Struggle between Government and Business[46]

Consolidation of the Chaebol System and Problems

The chaebol system was expanded and consolidated in the 1980s. In the 1970s, the percentage of the national economy controlled by chaebols rose more than half. After the 1980s, the percentage fluctuated with no significant change.

Also, table 4-4 shows that the number of affiliates of the top 30

Table 4-3 Percentage of GDP occupied by chaebols' value-added production

(Unit: %)

	1973	1978	1983	1989
Top 5 chaebols	3.5	8.1	10.0	8.4
Top 10 chaebols	5.1	10.9	13.0	10.4
Top 20 chaebols	7.1	14.0	16.0	13.5

Source: Kim Ki-won (2001).

Table 4-4 Change in number of affiliates of top 30 chaebols

Year	1970	1979	1982	1985	1987	1989
Number	126	429	402	404	474	513
Average	4.2	14.3	13.4	13.5	15.8	17.1

Source: Kang Cheol-gyu et al. (1991, p. 115).

chaebols rose from 126 in 1970 to 429 in 1979. The number of affiliate changed little afterwards until the mid-1990s, when it shot back up again but at a slower pace than in the 1970s. In 2000, the number of affiliates fell to 567.

In addition, chaebols dominated small and medium enterprises (SMEs) in the first half of the 1980s. The percentage of subcontractors for chaebols among SMEs soared from 18.2 percent in 1978 to 48.5 percent in 1987 (Lee Jae-hee, 1999, p. 56).

Yet this chaebol system had several serious problems.

First, many chaebols operated as sole proprietorships or family businesses, and key business decisions were made by the chaebol owner or his or her family members. Many companies in developed economies started out this way as well. But two problems can arise if companies continue to operate as sole proprietorships or family businesses even after rapidly growing in size and gaining strong influence over an economy.[47] First, the chaebol head, as the most influential individual in the organization, passes down the position to a family member from the next generation. This severely limits the pool of talented and competent candidates. One expert said, "Finding a talented person who can operate a large hierarchical business organization within a fluctuating economy among family members is very rare" (Morikawa, 1996, p. 57). Inevitably, a CEO who owns the company but is also a non-professional will likely emerge under the chaebol system. The fear is that such a leader can damage the company's potential to develop or even drive the business into bankruptcy, and thus harm the overall economy because of the chaebol's large size. Another issue is moral hazard. The rights of general stockholders under the chaebol system were ignored before the 1997–98 Asian financial crisis. Banks, as creditors, were negligent about pre-evaluating and post-supervising loans under the government-controlled financing system. This prevented oversight of incompetent company heads and no measures were in place to inspect corruption or keep it in check. As the chaebol system developed and expanded under these conditions, corruption committed by company executives worsened.

The second problem of the chaebol system is the octopus-like diversification of the conglomerates. The "convoy" style of management developed because of underdeveloped markets. Chaebols did not completely rely on markets as the capital and labor markets were underdeveloped; instead, they owned many affiliates and

moved capital and labor between them. This was more effective in substituting and complementing the market. Early in Korea's industrialization, it was also difficult to accurately evaluate a company's investment prospects from the outside due to asymmetrical information. Thus affiliates made investments and provided payment guarantees, allowing companies to accumulate new investment funds. In the earlier stage of industrialization from the 1960s to '80s, Korea imported technology from developed economies to enter preexisting markets. At that time, acquiring general and flexible resources and skills, such as the ability to acquire funding and management know-how and government aid, were more important than creating demand and developing technical skills (Park Cheol-soon, 2000). Chaebols rationally dealt with given business conditions and consequently developed the convoy style of management.

After the 1980s, however, Korea's economic structure gradually grew more advanced, and possession of industry-specific resources and skills, including marketing, technology, and branding, proved more important for companies (Park Cheol-soon, 2000). An increasingly difficult task was succeeding as a newcomer in an industry armed with only general abilities such as securing funding and government support. In many cases, however, chaebols maintained their old customs and invested by starting new businesses instead of selecting the new and more challenging route of achieving competitiveness similar to what developed economies had by creating higher added value in existing industries. When second- or third-generation chaebol heads came to power, they imitated the management methods of their predecessors but with inferior business skills. They resorted to excessive diversification and drove their companies to crisis. From the latter half of the 1980s, the government's ability to adjust overinvestment substantially weakened due to the liberalization of the financial market and democratization. Thus corporate expansion through octopus-like diversification proved even more dangerous than before.

Power Struggle between Government and Chaebols

As liberalization of the Korean financial market gradually progressed in the 1980s, chaebols financed capital through non-banking financial institutions (NBFIs) in the domestic and foreign capital markets. This allowed chaebols to gain autonomy from the government, which had controlled companies through banks, and a power struggle ensued. Since the enactment of the Act on Monopoly Regulation and Fair Trade in 1981, the government attempted to regulate chaebols through several amendments to the law. Thus, 1987 saw the debuts of the investment regulating system and the credit limit management system.

The Act on Monopoly Regulation and Fair Trade was introduced to induce fair competition by preventing companies with dominant market positions from abusing their status and preventing collusive acts and insider transactions. The law gradually developed into an institutional strategy to restrict the concentration of economic power in the hands of top chaebols and allowed government intervention in the market. Even in the 1980s, the country had no social consensus on whether introducing market competition to Korea, where government regulations on entry and the use of industrial policy continued, was required for economic development. Thus the law was not implemented in the way it was meant to be as a basic law of the market economy system. Restrictions on the concentration of economic power in chaebols began in 1987 with the introduction of systems for investment regulation and credit limit management.

To prevent excessive amounts of money from flowing into chaebols, the credit limit management system capped the amount of funds a chaebol could borrow. The investment regulating system restricted mutual investments that allowed chaebol affiliates to purchase each other's stocks for investment and mutual debt guarantees that allowed affiliates to guarantee each other's debts. The government also banned chaebol heads and their families from controlling many affiliates with a small amount of capital and prevented chaebols from illegally abusing affiliates to compete with other companies. To understand the investment regulating measure, comprehension of the unique investment structure of chaebols is required.

Generally, chaebols have many affiliates in unrelated industries that are strongly connected to form a stable structure. This structure guarantees safety for the chaebol, as the collapse of one affiliate does not result in liquidation of the group. The main methods of connecting these affiliates are mutual and circular shareholding, which allows one affiliate to purchase the shares of another to provide capital.

Before chaebols were regulated under the Act on Monopoly Regulation and Fair Trade, they created connecting links among affiliates through mutual shareholding by having two or more affiliates purchase each other's stocks. The amount of capital recorded on financial statements rises if two companies engage in mutual shareholding, though only money is exchanged between them. The increased capital is a kind of fictitious capital and not real. If the fictitious capital is used to expand the capital of affiliates, the debt ratio can be made to look smaller than it is. So unless a combined financial statement showing the financial conditions of all chaebol affiliates is created, understanding a chaebol's business status is difficult. Because mutual shareholding can create an indefinite amount of fictitious capital, it was banned in 1986 after the Act on Monopoly Regulation and Fair Trade was amended for the first time.[48]

Circular shareholding allows chaebol owner families to control many companies worth more than what they initially invested. To control a company, a little more than half of the company's shares must be owned. Then machinery equipment, buildings, land, and other physical assets as well as the authority to deal with management and profits can be taken. Circular shareholding uses this advantage. The chaebol head can use the funds of a company he or she owns to take over the stocks of another company within the chaebol and control it. Putting it more simply, assume that Companies A, B, C, D, and E are each worth KRW 1 billion (if no debt in any of these companies is assumed, capital = net assets). The chaebol head first invests KRW 500 million in Company A and acquires control. Next, if Company A invests in Company B, the latter invests in Company C, the latter invests in Company D, and the latter invests in Company E, a structure in which each affiliate is controlled by one that invested in it is formed. In the end, the chaebol head can control five companies worth KRW 5 billion by investing only KRW

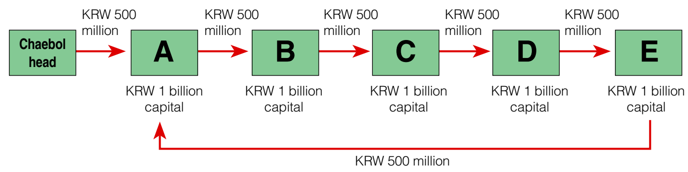


Figure 4-2 Chaebol circular shareholding
Source: Lee Jong-tae (2012).

500 million. Furthermore, if Company E purchases Company A's shares worth KRW 500 million that the chaebol head owns, (circular shareholding), the latter can control all five companies without having used any of his or her own money.

Samsung Group is a good example of circular shareholding. Its control structure is as follows: Samsung Everland at the top → Samsung Life Insurance → Samsung Electronics → Samsung Card → Samsung Everland. Group chairman Lee Kun-hee and his owner family possess few shares. In the case of Samsung Electronics, the shares owned by the Lee family were only three percent in 2007; the chairman had 1.91 percent, his wife 0.75 percent, and his oldest son 0.65 percent. Via circular shareholding, however, the family controls the group's three main businesses—Samsung Life Insurance, Samsung Electronics, and Samsung Card—which are major players in Korea in their respective fields.

Circular shareholding is risky. Because all affiliates are interconnected, if one main affiliate goes bankrupt, the group will face an economic crisis. Circular shareholding, however, allows the chaebol head and his or her family to transfer their accumulated wealth

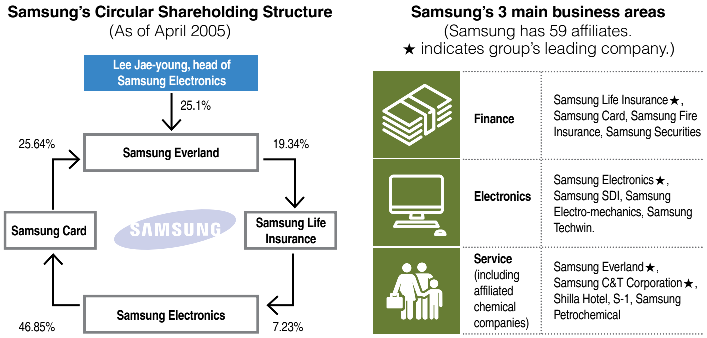


Figure 4-3 Samsung's circular shareholding structure
Source: Lee Gwang-hoe (2007).

and business rights to the next generation through the companies. Chaebols used "empire management" methods to operate their companies, which were arbitrarily managed by chaebol heads and their families without systems to keep them in check. This caused problems mentioned in the previous chapter.

Unlike mutual shareholding, circular shareholding is not clearly prohibited but regulated indirectly through the total investment limit system, which was introduced on December 31, 1986. The system prohibited companies affiliated with conglomerates from acquiring more than 40 percent of their net assets in stocks of other companies to weaken the links of circular shareholding.[49]

Despite these regulations, the concentration of industries changed little, and chaebol influence gradually increased along with financial liberalization.

According to Koh (2010), the government can approach the

chaebol problem in two ways. One is regulating chaebols through the market. The government must clearly state that it will not help chaebols even when they face difficulties to prevent moral hazard, and expose them to the pressures of competition and the risks of being thrown out of the market, as well as mergers and acquisitions. The other option is directly regulating financing, debt guarantees, and ownership structure to regulate chaebols. Of these two methods, the government chose to implement the latter in the second half of the 1980s, with little success. This method failed to meet the government's expectation because companies strongly believed that the government would not stand idly by if chaebols went bankrupt because of the high economic cost incurred. This belief limited the policy's effectiveness. Before the 1997–98 Asian currency crisis, chaebols rarely went bankrupt for economic reasons and thus their behavior did not change.

Financial Liberalization

Among the policy changes that occurred in the 1980s, deregulation of the financial sector took the longest time. After the failure of the drive to promote the heavy and chemical industries in the late 1970s, the government was criticized for its management of fund distribution and the ineffectiveness of its policy loans. By gradually privatizing commercial banks and relaxing restrictions to entry in the financial industry, market principles were introduced and policies redirected toward liberalizing the financial sector. The financial liberalization the government implemented over this time included relaxing entry requirements for financial institutions, privatizing banks, and liberalizing interest rates and the capital market.

Liberalization of Interest Rates and Privatization of Banks

Liberalizing interest rates means allowing rates to be set by market principles, demand, and supply and preventing rates from being distorted by government regulations, policy loans, or preferential financing that can occur when banks are nationalized. Before the 1980s, the Korean government worried over the growing financial strain on companies, so it prevented interest rates from rising and implemented a repressive financial policy that burdened financial institutions. This action brought on negative effects. Funding supply was limited, and industries and large companies that were prioritized received support through policy loans at low interest rates. Companies and people who did not receive preferential treatment had to procure funds from the private loan market at high interest. And because the interest rates of deposits and loans were all regulated, banks could not perform basic functions such as raising deposit interest rates by developing new financial products or applying differentiated interest rates to borrowing companies after assessing their level of risk. This meant the overall competitiveness of banks remained quite weak.[50]

Prices stabilized due to retrenchment measures implemented since 1981, and conditions required for interest rate liberalization were met. In response, the government began taking action to liberalize interest rates. Such rates had been kept low while the government managed losses incurred by financial institutions. Corporate

debt ratios remained high, however. If interest rates were to rise, the financial burdens of companies would go up as well. Thus full-scale liberalization of interest rates faced rough execution. Even after a cursory liberalization was done, the central government still managed interest rates under the guise of administrative guidance. In December 1988, extensive and sweeping plans for interest rate liberalization were announced, but prices started to become unstable in 1989 and interest rates quickly surged. In response, interest rates were controlled once again and these liberalization plans announced in 1988 also failed to take effect.

The privatization of banks progressed relatively quickly compared to the liberalization of interest rates. In 1973, the remaining four commercial banks were privatized. Hanil Bank sold its government-owned stocks in 1981, Cheil Bank and Seoul Trust Bank were privatized in 1982, and Cho Hung Bank followed in 1983. Regulations and orders were reduced or revoked to heighten bank autonomy. Policies that secured the roles of banks were implemented amid privatization. To prevent banks from collapsing due to companies using them as personal vaults, the 1982 Banking Act was revised to limit the amount of bank stocks a single shareholder could own to eight percent; this ceiling was further lowered to four percent in 1994.

To promote competition among financial institutions, their barriers to entry were lowered and the establishment of new commercial banks was permitted. Shinhan Bank was opened in 1982 with investment from Korean-Japanese businessmen, and KorAm (Hanmi) Bank was founded through collaboration between Bank of

America and large companies in Korea. Then came Dongnam Bank, Daedong Bank, and Donghwa Bank in 1989, and in the same year, Korea Exchange Bank became a "regular bank" ("special banks" were subject to special laws). In 1990, Hana Bank, Boram Bank, and Pyeonghwa Bank were established, and Kookmin Bank became a regular bank. By the mid-1990s, Korea had 15 commercial banks. Banks also expanded their business lines to credit cards. In addition, the trust business, which had been monopolized by Seoul Trust Bank, was opened to provincial banks from 1983 and commercial banks in 1984. Banks were allowed to deal in trust products in addition to performing their basic functions, and the number of bank branches shot up from 556 in 1980 to 1,397 in 1990.

Despite bank privatization, the government continued to intervene in the activities of bank executives and asset and organizational management. Banks were privatized to prevent chaebols from owning banks, and their ownership became divided. As a result, shareholders and boards of directors failed to oversee their businesses amid pervasive government influence; banks thus did not operate as private entities.

Lee Kyu-sung, who oversaw the structural adjustment of financial institutions as finance and economy minister after the 1997–98 Asian financial crisis, gave the following four explanations for why bank privatization failed to obtain the results envisioned by the government.

> First, the idea that financial institutions are businesses that seek profit was not widespread. Commercial banks were privatized and provided fewer policy loans, but they were still seen as public businesses that supported companies rather than businesses that sought profit. The myth of high growth was widespread in society, making it difficult for these concepts to change.
>
> Second, the government was negligent toward creating conditions that would allow financial liberalization. Though the government privatized banks, it was unable to thoroughly manage bad loans that had accumulated, and responsible management systems for banks were not established after privatization. Banks were unable to establish their own management bodies due to the dispersed ownership structure, and the government still appointed bank presidents. Furthermore, management of policy loans was not completely transferred to the government, and thus the government continued to intervene in and provide support to banks.
>
> Third, companies continued to manage their businesses on loans and remained opaque. Thus it was difficult to provide loans based on credit evaluation. Credit was still granted based on collateral and the "too big to fail" criteria.
>
> Lastly, prudent financial supervision needed to be strengthened following financial liberalization, but the supervision system was still inadequate, as were institutions for credit evaluation and deposit insurance. Thus financial institutions were unable to grow into profitable organizations. Instead, they looked to the government for protection, pursued external growth and expanded branches or savings, and settled for pro-

viding credit to mainly large companies (Lee Kyu-sung, 2006, pp. 81–82).

Growth of Capital Markets and Non-banking Financial Institutions

After the Act on Public Corporation Inducement of 1973 was enacted, Korea's capital market had achieved solid growth and continued on its upward trajectory in the 1980s. An economic boom occurred in the mid-1980s thanks to the three lows. In 1986, Korea recorded its first trade surplus and its economy grew at a rapid rate. The stock price index also continued to increase, and the volume of stocks traded and issued rose as well. The composite price index of stocks increased 68 percent in 1986, 98 percent in 1987, and 70.5 percent in 1988. Korea's stock price index saw the world's highest growth at the time. In 1989, the composite price index of stocks reached 1,000 for the first time. Negative attitudes toward initial public offerings (IPOs) held by business owners also subsided, corporate demand for capital increased, and IPOs and capital increase from issuing new company stocks surged. Corporate financial gains from issuing stocks rose from KRW 840.8 billion won in 1985 to KRW 1.8987 trillion in 1987, KRW 7.7 trillion in 1988, and KRW 14.1755 trillion in 1989. The capital of listed companies also saw a massive increase from KRW 4.6 trillion in late 1985 to KRW 23.9 trillion won by late 1990, a jump of more than 500 percent.

The number of listed companies leaped 95.6 percent from 342 in 1985 to 669 in 1990. In 1987, the Korea Electric Power Corp. (KEPCO), with more than KRW 3 trillion in capital, was newly

Table 4-5 Growth of Korea's capital market

(Unit: KRW billion)

	1980	1985	1987	1989	1990	1991	1992
Stock market							
Listed companies	352	342	389	626	669	686	688
Book value of stock	2,421	4,665	7,591	21,212	23,982	25,510	27,065
Market value	2,526	6,570	26,172	95,447	79,020	73,118	84,712
Market value/ GNP (%)	6.9	8.4	24.7	67.7	46.1	34.1	35.5
Trading volume	1,134	3,620	20,494	81,200	53,455	62,565	90,624
Stock price index	106.9	163.4	525.1	909.7	696.1	610.9	678.4
Corporate bonds							
No. of issuers	434	1,213	1,457	1,504	1,603	1,862	2,070
Book value	1,649	7,623	9,973	15,396	22,068	29,241	32,696
Trading volume	246	660	5,327	4,378	2,455	1,394	453

Source: Korea Exchange (2011).

listed. The market capitalization of listed stocks subsequently saw astounding growth from KRW 6.5 trillion in 1985 to KRW 95.4 trillion by 1989.

Due to the sharp growth in the stock market, the proportion of direct financing by companies nearly doubled from 22.9 percent in 1980 to 45.2 percent in 1990. The percentage of stocks in direct financing rose from 10.9 percent to 14.2 percent, and direct financing became an important method of procuring funds for companies.

An important reason for the bullish stock market in the latter half of the 1980s was the "citizens stock system." In developed economies, many public companies in the 1980s underwent privatization. In Korea, the spinoff of public companies was implemented in ac-

Table 4-6 External financing by corporate sector in Korea

(Unit: %)

	1970	1975	1980	1985	1988	1990	1992
Indirect financing	39.7	27.7	36.0	56.2	27.4	40.9	36.3
Borrowing from banks **(A)**	30.2	19.1	20.8	35.4	19.4	16.8	15.1
Borrowing from NBFIs **(B)**	9.5	8.6	15.2	20.8	8.0	24.1	21.1
Direct financing (C)	15.1	26.1	22.9	30.3	59.5	45.2	41.4
Commercial papers	0	1.6	5.0	0.4	6.1	4.0	7.6
Corporate bonds	1.1	1.1	6.1	16.1	7.5	23.0	12.5
Stocks	13.9	22.6	10.9	13.0	40.6	14.2	15.9
Foreign borrowings (D)	29.6	29.8	16.6	0.8	6.4	6.8	5.0
Others	15.6	16.4	24.5	12.7	6.7	7.1	17.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
(A) + (D)	59.8	48.9	37.4	36.2	25.8	23.6	20.1
(B) + (C)	24.6	34.7	38.1	51.1	67.5	69.3	62.5

Note: Others include government loans and corporate credit.
Source: Bank of Korea (2007).

cordance with income redistribution policy, and stocks were sold to citizens. This greatly affected the stock market.

In April 1988, 31.28 million POSCO shares worth KRW 413.3 billion held by the government-run Korea Development Bank were supplied to the public. Three million shareholders were secured, and market capitalization increased by KRW 800 billion. The following year, shares of KEPCO were sold to the public. Initially, the number of applicants exceeded six million, and the day the shares were listed, market capitalization saw a rise of about KRW 14 tril-

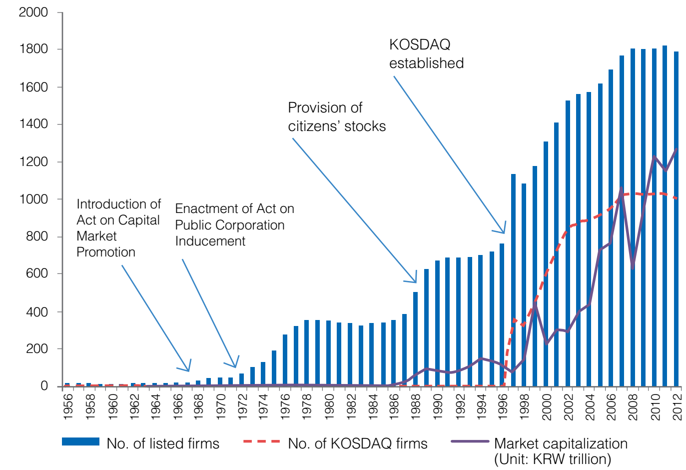


Figure 4-4 No. of listed stocks and market capitalization of Korea Exchange
Source: Kim Sun-ho (2013).

lion. The market capitalization of KEPCO accounted for more than 15 percent of that of the stock market.

In the 1980s, Korea faced mounting external pressure to open its capital market. Over this time, the government announced a long-term plan for the internationalization of the capital market, and prepared to open the stock market to foreign participants. To satisfy global demands for access to the Korean capital market, the Korea Fund, an international trust company that aimed to draw investment in Korean securities, was established in 1984 and got listed on the New York Stock Exchange, allowing foreigners to indirectly invest in Korean companies.[51] In November 1985, the Korean government allowed companies that satisfied set criteria to issue overseas securities. Subsequently, Samsung Electronics in December 1985 issued overseas convertible bonds worth US$20 million in the euro-dollar market in a first for a Korean company and also got listed on the Luxembourg Stock Exchange. After the company issued overseas convertible bonds, Daewoo Heavy Industries and Machinery issued US$40 million in May 1986, Yukong Ltd. US$20 million in July the same year, and Goldstar (now LG Electronics and LG Cable) US$30 million dollars in August 1987.

In December 1988, the government prepared a step-by-step expansion method for opening the Korean capital market. Until 1990, it attempted to accelerate the issue of foreign convertible bonds and diversify overseas securities. In November 1989, Sammi Steel issued US$50 million of international bonds with warrant in a first for a Korean company. In 1990, STC Corp. and five other companies issued international bonds with warrants worth US$180 million, Hyundai Motors US$70 million in international bonds with warrants, and Samsung C&T Corp. US$40 million in depository receipts in the euro-dollar market, also a first for a Korean company. Major Korean corporations, including those of the top five chaebols like Samsung and Hyundai, could directly procure funds through foreign capital markets. According to Cho Yoon-je (1997), as opportunities to procure funds abroad at lower financial cost became available for the largest chaebols, the market for foreign capital loans took off among the top five chaebols in the 1990s. Because the five no longer had to rely on bank loans, the top six through 30 chaebols received more opportunities to receive bank loans after being relatively excluded from bank loans and lacking funds. As a result, their

debts increased.

Other sectors that saw the number of companies rise at this time included investment and finance, merchant banking,[52] and mutual savings and finance. These companies were set up after the August 3 measure of 1972 to institutionalize the private loan market. Furthermore, insurers, investment trust companies, 53 brokerages, and other non-banking companies were established and developed in various sectors as well.

Mutual savings and finance companies were mainly responsible for providing financial services to the general public and small business owners. After the first oil shock of 1973, such companies saw a wave of bankruptcies, and depositors suffered enormous losses. In response, the government opted to expand outstanding companies in mutual savings and finance only, and certain finance companies managing installment payments were taken over by large companies, though the latter were prohibited from entering the banking sector through the Banking Act. After the takeovers, mutual savings and finance companies expanded and stabilized but were taken over by other companies for use as their own piggy banks, as this would ease the mobilization of capital when parent companies were in trouble. This would cause a lot of problems later.

The proliferation of investment finance companies, commonly referred to as short-term investment finance companies, rose rapidly in tandem with the growth of the commercial paper (CP) market. Corporate bonds are issued when companies borrow investment funds from the public or financial institutions. A CP is similar to corporate bonds as a type of due bill used when borrowing money.

But a CP is a short-term obligation with a maturity of one year in general. It can be issued by a company representative without the permission of the board of directors, with no need to submit a securities report. So issuing CPs is a relatively simple process. This direct financing instrument is preferred by companies to finance short-term operating funds. Short-term investment finance companies grew by purchasing CPs from issuing companies at discounted prices and selling them to other financial institutions to earn profit. In 1976, merchant banking corporations also began participating in the CP market.

Also during this time, the number and size of brokerages went up due to the growth of the Korean stock market. Insurers in the indemnity and life insurance markets also saw fast growth. In 1975, the combined assets of insurance companies were just KRW 216 billion, but soared to KRW 5.4 trillion in 1985, KRW 26.2 trillion in 1989, and KRW 44.6 trillion in 1991, growing more than 25 percent a year.

Non-banking financial institutions (NBFIs) were less regulated than banks. With the continuous growth of these institutions, the proportion of loans from NBFIs kept rising. Figure 4-5 shows that in 1976, loans from such institutions took up 25 percent of all loans, but this increased to 36.2 percent in 1980, 43.7 percent in 1986, and more than 50 percent in 1990. Such loans eventually exceeded bank loans in market share. The amount of deposits received by NBFIs also reached 59.9 percent of all deposits received, which exceeded the amount banks received.

With the growth of NBFIs, the banking sector gradually waned in the market and bank profitability declined. In response, the government allowed banks to enter the trust business in the capital and short-term financial markets so that they could compete with NBFIs. The trust accounts of banks surged rapidly afterwards. Banks occupied five percent of the domestic trust market in 1984, but that figure exceeded 40 percent by 1993. But as banks invested in risky assets such as CPs or stocks through trust accounts, the riskiness of bank-owned assets increased, and banks were soon affected by movements in the short- and long-term capital markets.

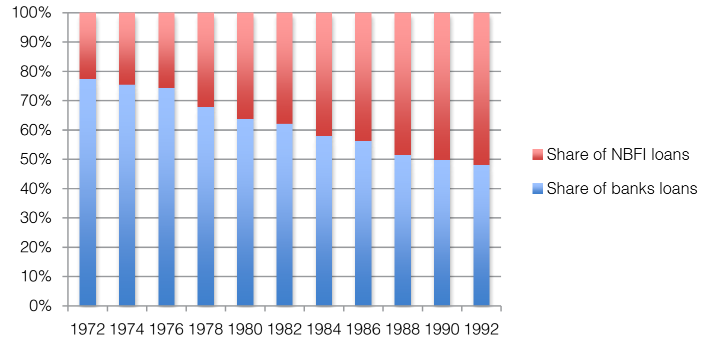


Figure 4-5 Growth of NBFIs and commercial banks
Source: Bank of Korea, *Monthly Bulletin*, various issues.

Implications

Financial liberalization and growth of both the capital market and NBFIs occurred as Korea's financial industry grew more competitive. These changes in the 1980s, however, resulted in several negative consequences.

First, despite the introduction of new financial institutions and the advancement of the financial structure, corporate accounting practices remained opaque and disclosure requirements were still underdeveloped. Also, credit evaluating institutions were unreliable and incompetent. Furthermore, banks that had been privatized under these conditions could not escape the influence of government officials and political circles and focused on providing loans mainly for large companies. Also, no sound government system existed to supervise financial institutions participating in the direct financial market, and investors participating in the capital market were insufficiently protected. The transparency of the capital market improved little until the 1990s, after the market was opened to foreign investors. Foreign investors thus focused on indirect investment through banks and short-term investments rather than direct and long-term investments, which made Korea's capital market more volatile.

Second, the privatization of banks and growth of NBFIs provided chaebols with the opportunity to enter the financial market, which furthered the conglomerates' economic concentration. According to Kim Soo-gon and Lee Joo-ho (1995), the top 30 chaebols in 1988 owned 12 of the country's 25 securities companies, 18 of 35 insurers, and 18 of 38 investment trust companies. Furthermore, the Banking Act prohibited individual companies from owning more than eight percent of bank stocks, but the top 30 chaebols collectively owned about 30 percent of all banking shares directly or indirectly through the NBFIs they owned. As mentioned in the previous chapter, Korea's direct financial market expanded and the top five chaebols could issue stocks and shares abroad, raising their sources

of investment funds. Chaebols could accumulate funds through a number of ways and even secure funding sources that could be directly controlled through NBFIs. The government's method of regulating chaebols through policy loans via banks was no longer effective. The authoritarian Park and Chun administrations fully controlled chaebols, but from the mid-1980s, conglomerates gradually broke away from the government's grasp and began to boldly criticize public policy.

Third, as large companies and chaebols expanded their control over NBFIs, they continuously demanded financial liberalization. From the 1990s, liberalization progressed, including that of real interest rates, but the concept of "too big to fail," which became embedded after the August 3 measure of 1972 and industrial rationalization of the 1980s, lingered. Believers of this idea thought that once a company expanded to chaebol size, the government would protect it if and when a management crisis occurred. The debt ratio (calculated by dividing a company's total debt by its total assets) of large companies and chaebols at the time shows how strong this belief was. As the chaebol system solidified around the end of the 1960s, the debt ratio surged and remained at high levels.

Revival of the Labor Movement and the Widening Gap between Corporations and SMEs

Revival of Union Activities

Major General Chun Doo-hwan seized power in a military coup on December 12, 1980. His government implemented gradual

Figure 4-6 Workers of Ulsan Hyundai Heavy Industries on strike in 1987
Source: Korean Confederation of Trade Unions.

liberalization of the economy, but politically, it maintained the authoritarian rule of the previous Park administration. The new government brutally suppressed civil unrest that occurred in Gwangju immediately after the coup and maintained the oppressive labor policy of the 1970s. This failed to prevent a rise in union activities led by skilled factory workers of large companies over the development period of the heavy and chemical sectors of the 1970s. The labor disputes that occurred in 1980 during the "Spring of Seoul" after President Park Chung-hee's assassination at Sabuk Dongwon Coal Industry, Dongkuk Steel, and Incheon Steel saw workers occupy areas, get into direct confrontations with riot police, and commit destruction and arson at factories. These incidents were different from those in the 1970s.

This marked the beginning of a transition in the Korean labor

movement. In the 1970s, the movement revolved around female workers in the light industries. In the 1980s, labor was led by male workers of large companies in the heavy and chemical industries. The Chun administration continued to emphasize a policy of stability and public security, and the labor movement remained relatively inactive for a short while. The situation shifted, however, with the decline in unemployment due to rapid economic growth in the 1980s and labor shortages in several sectors. Furthermore, when student activist Park Jong-chul was tortured to death in January 1987,[54] the people's anger led to the June 10 resistance movement. In July the same year, unions began to form, starting with the one at Hyundai Motors' Ulsan factory, and labor disputes expanded throughout the nation. At this time, laborers demanded higher wages and the recognition of unions. The demand for democratiza-

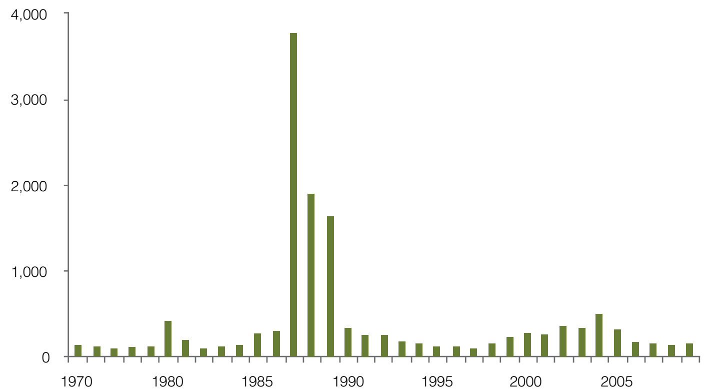


Figure 4-7 No. of labor disputes
Source: Korea Labor Institute (www.kli.re.kr).

tion grew strong and the government refrained from calling in riot police or arresting union leaders. Thus organized labor activities occurred at almost all large-scale workplaces around the country, leading to a spike in labor disputes as employers responded negatively to the upsurge in labor activism. Figure 4-7 shows the number of labor disputes per year. Between 1975 to 1986, the number of disputes did not even reach 500, but in 1987 alone, more than 3,800 broke out. The number of unions also exploded from 2,700 in June 1987 to 7,800 in 1989. The union participation rate also increased from 12 percent in 1986 to 19 percent in 1987.[55]

Wages also saw major spikes of 11.6 percent in 1987, 19.6 percent in 1988, and 25.1 percent in 1989. Double-digit raises continued

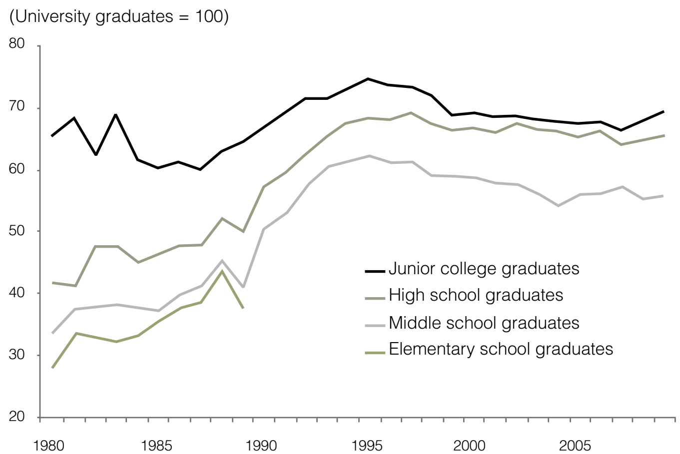


Figure 4-8 Wages by workers' educational backgrounds
Source: Korean Statistical Information Service (www.kosis.kr).

through 1996.[56] A closer look at the rise in wages shows that pay in manufacturing grew the fastest over this period. With the introduction of the graduation quota in 1981, the maximum number of students admissible to universities doubled. So in the mid-1980s and afterwards, the supply of university graduates to the workforce soared, and the supply of workers in manufacturing declined, meaning the education premium kept falling until the mid-1990s.

The Widening Gap between Corporations and SMEs

As the number of unions increased in 1987, conditions for workers also improved. Organized labor activities usually occurred at large companies and workplaces, however, thus the wage gap between workers at large companies and those at small and medium enter-

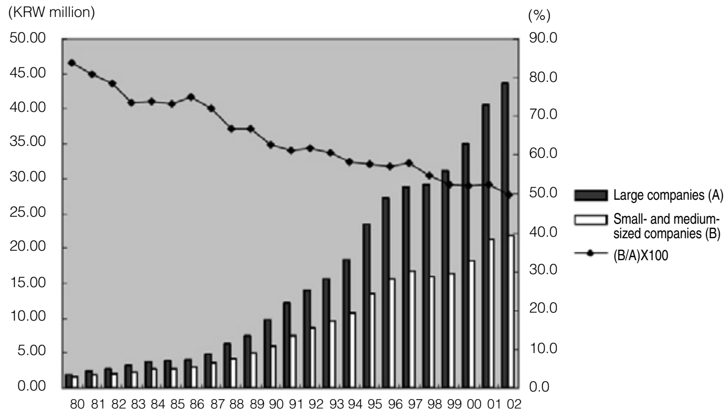


Figure 4-9 Per capita income of workers in large companies and those in SMEs
Note: Large companies are classified as having more than 300 employees.
Source: Jeong Yeon-seung, Seong Baek-nam, and Lee Won-young (2005).

prises (SMEs) rapidly widened. Figure 4-9 shows that in 1987, per capita income of workers in large companies and those in SMEs exceeded 75 percent, but this fell to 67 percent in 1989 and continued to decline. By 2002, the figure fell under 50 percent for the first time.

As wages for workers in manufacturing and production made great strides, companies responded by raising the labor equipment ratio[57] and curbing additional hiring. Figure 4-10 shows how dramatic this trend was. Though the sales of large companies consistently rose after 1988, the number of employees started to decline from 1988 and continued to do so until 2002. On the other hand, the number of employees at SMEs fluctuated based on business fluctuations under no specific pattern. The percentage of employees at manufacturing SMEs steadily increased. The ratio of

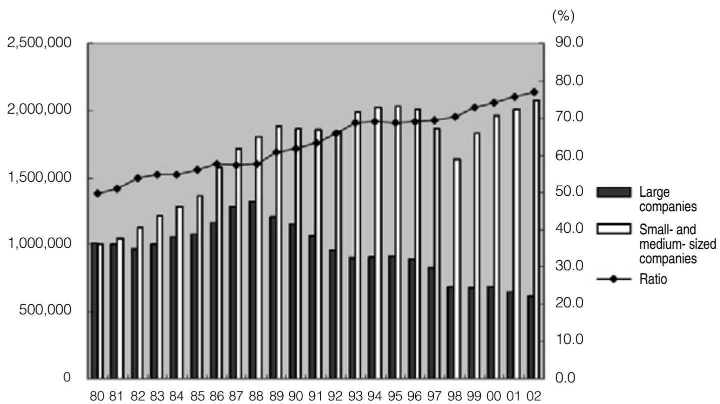


Figure 4-10 No. of employees at corporations and SMEs (manufacturing)
Note: Large companies are classified as those with more than 300 employees.
Source: Jeong Yeon-seung, Seong Baek-nam, and Lee Won-young (2005).

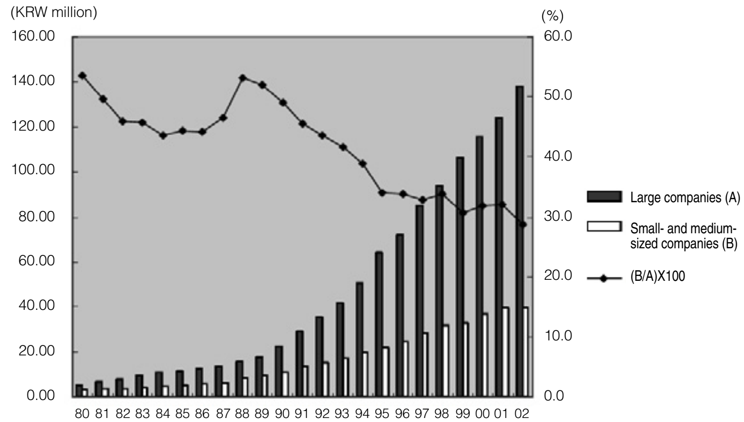


Figure 4-11 Productivity of large companies and SMEs (manufacturing)
Note: Large companies are classified as those with more than 300 employees.
Source: Jeong Yeon-seung, Seong Baek-nam, and Lee Won-young (2005).

employees at SMEs was under 60 percent in 1987 but exceeded 70 percent in 1993.

As a result, the equipment ratio and productivity gap between SMEs and large companies expanded. Figure 4-11 shows the development of labor productivity at SMEs and large companies. In the mid-1980s, the labor productivity of SMEs was 45–50 percent of that at large companies. In 1987, however, labor productivity rapidly picked up steam at large companies and resulted in the swift expansion of the productivity gap as well. By 1995, the labor productivity of SMEs dropped to 35 percent of that at large companies and continued to decrease. This widening productivity gap did not occur solely due to rising wages at large manufacturing companies in the late 1980s. Competition in export markets was fierce, and

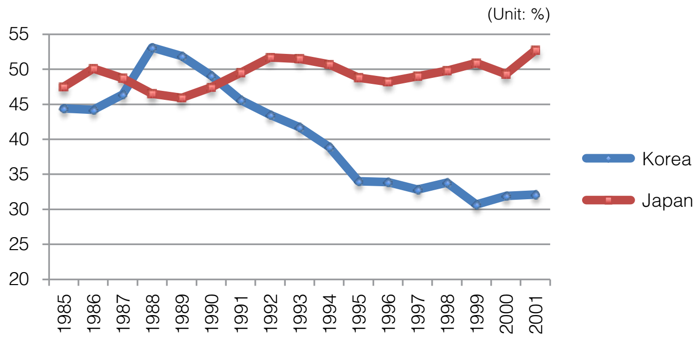


Figure 4-12 Productivity gap between Korean and Japanese companies
Notes: Korea's SMEs are classified as companies with five to 300 employees. Japan's SMEs are classified as having four to 300 employees.
Source: Jeong Yeon-seung, Seong Baek-nam, and Lee Won-young (2005).

large companies began to actively pursue investment in R&D from the 1980s. In the 1990s, before the era of venture companies, most SMEs lacked innovation and were dependent on low wages. Many were subcontractors supplying parts to corporations. These factors contributed to the widening productivity gap in the 1980s.

A comparison of other countries shows the large productivity gap between corporations and SMEs in Korea. From 1996 to 2001, the productivity of SMEs in the UK was 66.8 percent of that at large companies. The same figure in France was 64.5 percent, 61.5 percent in Italy, 50 percent in Japan, and 32 percent in Korea. Since the 1980s, Japan's productivity ratio (productivity of SMEs divided by that of large companies) has fluctuated at 45–55 percent over the past 40 years. Korea's productivity ratio was similar to Japan's in the

1980s, but continued to decrease from 1987. Today, Korea's productivity gap is noticeably larger than Japan's.

The productivity gap widened the wage difference between SMEs and large companies. Furthermore, the low productivity of SMEs negatively affected overall productivity in manufacturing.

The Real Estate Bubble and the 'Plan to Build Two Million Housing Units'

Korea achieved a great deal in the latter half of the 1980s, from an economic boom thanks to the "three lows," hosting the 1986 Asian Games and the 1988 Summer Olympics in Seoul, and amending the Constitution to allow a presidential election. Over the same period, a large amount of foreign currency flowed into the country

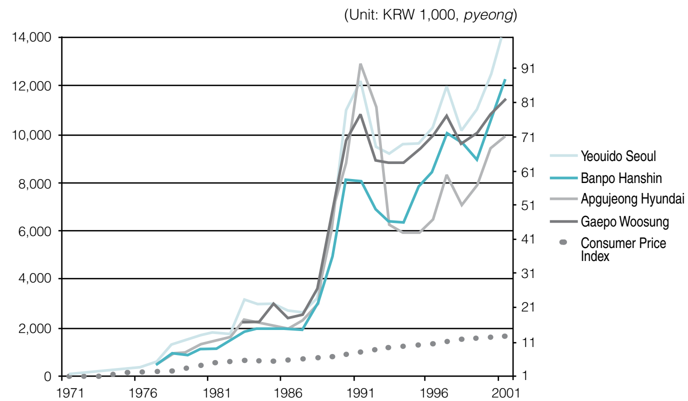


Figure 4-13 Changes in Seoul apartment prices, 1971–2001
Source: Lim Seo-hwan (2002).

due to the current balance surplus, wages saw a steep increase after 1987, and two elections were held in 1987. As a result, several pledges for regional development were proposed and real estate inflation accelerated.

Real estate prices in the country grew 13.22 percent in 1988, 14.59 percent in 1989, and 21.04 percent in 1990. Apartment prices in Seoul rose 18.47 percent in 1988 and 18.22 percent in 1989. 1990 saw such prices shoot up a record 37.62 percent. Figure 4-13 shows that the prices of apartments around downtown Seoul grew far faster than the average at the time, with prices leaping three- or four-fold in just four years.

Due to the surge in real estate prices, the value of all land in Korea was nine times higher than GDP at the time. At the same time, Japan's real estate bubble was at its peak and the country's land value was 5.3 times its GDP. This shows that Korea's land prices were at extremely high levels. As the real estate sector overheated, the government announced measures to cool the market. Two actions that greatly influenced the real estate market were announced at this time: the Public Concept of Land Ownership and the Plan to Build Two Million Housing Units.

The Public Concept of Land Ownership was announced in March 1990 to regulate land as a public good and imposed high taxes on profit gained through land transactions. It had three forms of legislation. The first placed a ceiling on land ownership, the second taxed profit from excess land, and the third taxed income from regional land development.

The first legislation imposed an annual tax ranging from 7 to 11

Figure 4-14 The new town of Sanbon in Gunpo, Gyeonggi-do, is developed during the implementation of the Plan to Build Two Million Housing Units.
Source: National History Museum e-Archive.

percent of the price of land that exceeded the ownership ceiling (in the country's six large cities: 200 *pyeong* per household—one *pyeong* is equal to 3.3 square meters; in other cities: 300 *pyeong*). The government's aim was to induce landowners to supply land to the market instead of keeping it long term. The second piece of legislation taxed excess profit earned from idle land. A tax of 30 percent was imposed if the excess income was under KRW 10 million and 50 percent if the income was above KRW 10 million. The final piece of legislation imposed a capital earnings tax of 25–50 percent on unearned income gained by the landowner in regional development.[58]

On February 4, 1989, the so-called Plan to Build Two Million Housing Units was announced under Emergency Measures to Control Real Estate Speculation. The government concluded that real estate prices had skyrocketed because of a housing supply rate of just 69.3 percent at the time. As a result, authorities ambitiously sought to stabilize real estate inflation and raise the housing supply rate to 72.9 percent by building 400,000 housing units per year over five years until 1992. Plans to build five new towns in Gyeonggi-do—Bundang in Seongnam, Ilsan in Goyang, Pyeongchon in Anyang, Sanbon in Gunpo, and Jungdong in Bucheon—were set to expand the housing supply. The private sector accounted for 45 percent of the housing supply, and to attract the sector's participation, the regulation on apartment prices was repealed and a system was introduced that linked sale price to production cost in which sales price would be determined by the costs of housing sites and construction.

When the housing plan was first announced in 1989, it had little effect on real estate prices. By late 1991, however, the goal of building two million housing units had been achieved one year ahead of schedule. The completion of 2.717 million housing units in 1992 greatly contributed to alleviating the housing shortage.

From March 1990, when the Public Concept of Land Ownership system began, until 1991, housing prices rose a relatively low three to four percent every quarter. From 1991, when the housing supply began to grow, a long-term trend of downward price stabilization began. Afterwards, real estate prices saw no major hikes but fluctuated within a narrow range. By 2006, 1992 price levels were restored.

Table 4-7 Global comparison of cost structure in 1995

	US	Japan	Taiwan	Korea
Real interest rates	3%	1.2%	5.4%	8.1%
Land prices (per square meter)	US$5	US$195	US$48	US$226
Cost of transportation/ sales	7.4%	8.8%	7.5%	16.7%

Source: Ministry of Finance (2005).

Ultimately, the real estate bubble in Korea that formed in the latter half of the 1980s did not collapse as it did in Japan. Because of the surge in real estate prices, however, the rise in workers' wages in the latter half of the 1980s did not necessarily raise the standard of living. Table 4-7 shows that companies faced a high cost structure during that time due to the real estate bubble, lowering the competitiveness of the Korean economy.

Chapter 5

GLOBALIZATION, MARKET OPENING, AND THE ASIAN FINANCIAL CRISIS

The transition to an economic system led by the private sector that began in the 1980s accelerated in the 1990s. Kim Young-sam, elected the country's first civilian president since the 1961 coup, took office in 1993. He announced a five-year plan for a "new economy" and attempted economic reform, including in the financial sector. Due to continuous changes in the economic structure and environment of the 1980s, government intervention in the economy had grown more indirect and markets were introduced more quickly. Not only did the size of the economy expand due to continuous growth, but growth patterns and industrial structures grew more complicated. Thus growth that was only quantitative could no longer be sustained. After the country's democratization in 1986, previously neglected issues at every level of society surfaced,

causing social conflict. Growth was no longer the primary focus and made way for actions to meet social and economic demands. Interest rate liberalization progressed, and the exchange rate, which the government had directly regulated, was put under a market-average system.

Also around this time, a group of nations in Europe formed the European Union and the US signed the North American Free Trade Agreement (NAFTA) with Mexico and Canada. The Uruguay Round, which aimed to create a global trade system, was concluded in 1994. In 1995, the opening of the World Trade Organization (WTO) raised pressure on Korea to open its agricultural and financial markets. To satisfy these demands, Seoul accelerated the opening of the country's markets, including for finance, under the globalization slogan. In 1996, the nation also joined the Organization for Economic Cooperation and Development (OECD).

Despite financial liberalization and a policy of opening up Korea's markets in the 1990s, the country's transition to a private sector-led economy was anything but smooth. With Korea reeling from the Asian financial crisis in 1998, many sectors underwent liberalization and the government's role grew. The public sector, however, was unable to predict potential problems associated with market opening and provide proper supervision. Furthermore, banks were accustomed to outdated policy loan practices and collusion between the government and large companies. Instead of trying to evaluate companies' credit, banks focused on financing large companies in the belief that they were too big to fail and that the government would not let them collapse. Companies also continued to grow bigger by borrowing excessively. The risks of these internal problems mounted because foreign investors preferred short-term rather than direct investment. Accounting practices were not transparent, and clear legal procedures for dealing with bankruptcies did not exist. In 1997, these issues coincided with economic instability and the Asian financial crisis that began in Thailand. This crisis proved to be Korea's toughest economic ordeal since the 1960s.

Implementation of the Real-Name Financial Transaction System

In the first half of the 1980s, the fraud scandal involving Jang Young-ja and Lee Cheol-hee and the bankruptcy of Myeongsung Group froze Korea's financial market. These two incidents occurred because companies formed in the process of rapid economic growth borrowed excessively. Another reason was the dual structure of Korea's financial market, in which private and institutional loans coexisted. To devise solutions to these problems, the government eliminated secret funds in 1982 and required financial transactions to be conducted under real names. The so-called real-name financial transaction system was implemented the following year.

Before the advent of the new system, the Act on Guaranteeing Confidentiality in Deposits and Savings of 1961 allowed anonymous transactions that could be conducted under borrowed or false names. The size of assets managed under a borrowed or false name could be hidden, and finding the source was difficult. The government permitted anonymous transactions because investment

funded economic development, but individuals with large assets did not actively invest to avoid exposing their net worth. The government wanted to guarantee protection for investors in this regard, and in return, their funds would flow into financial institutions for use in investment.

The government's decision to allow anonymous transactions boosted the latter's value. These anonymous funds were used for illicit purposes including amassing funds through illegal means and trading funds for use in politics and real estate speculation. Tracing these transactions was impossible as they were nothing short of money laundering. Furthermore, aggregate taxation was impossible on anonymous assets, and tax practices were unfair as many resorted to tax evasion through the manipulation of inheri-

Figure 5-1 The real-name financial transaction system was implemented quickly, causing a lot of confusion and chaos in the financial market on the first day. A notice posted at a brokerage firm announces the changes in business hours due to the implementation of the real-name financial transaction system.
Source: *Segye Times.*

tance and gift taxes. To remedy these issues, a real-name financial transaction system was introduced on July 1, 1983, that forced all financial transactions including deposits, stocks, and bonds to be done under real names. At the same time, the financial aggregate tax was slashed from 76.5 percent to 50 percent, an aggregate tax on income from financial assets was imposed, and the tax on hidden dividends was reduced. In the process of identifying transactions, incentives were provided so that owners would identify funds with unclear sources. For example, the real owner of funds did not need to take on tax responsibilities under certain conditions. The government announced a policy on real-name transactions in 1983 and the Act on the Real-Name Financial Transaction System was enacted by the National Assembly, but implementation of the system took 10 years. This is because massive preparation was required to computerize an enormous volume of materials on financial transactions and build a new system. The real-name system was also feared to cause an outflow of bank deposits, gold, and national wealth abroad and shrink investment. The system's implementation was postponed twice. Finally in 1993, it was quickly implemented under an emergency presidential decree.

Though preparation was required to implement the real-name financial transaction system, the 10-year delay in its implementation shows how opaque accounting and financial practices were in Korea at the time and how strongly those in the establishment opposed the system. Companies created slush funds to bribe politicians and government officials given the few ways for politicians to legally procure political funds. The real-name system was eventually implemented, though much later in 1993, because transparent financial transactions were necessary to develop Korea's financial sector and capital market to advance the economy further. Identifying anonymous and secret assets under the real-name financial system greatly assisted in suppressing and legalizing the underground economy; it also allowed imposing aggregate tax on financial income gained through financial investment by individuals or corporations and boosted tax income. The system also made it possible to trace assets in corruption cases, including collusive relations between the government and business.[59]

Joining the OECD and Opening Korea's Markets

Joining the OECD

In October 1991, Seoul indicated its intention to join the Organization for Economic Cooperation and Development (OECD) after the OECD secretary general in January 1989 had called Korea the "most influential among the newly industrialized countries in Asia." In July 1993, the Kim Young-sam administration finalized plans to join the OECD in 1996 under its five-year "new economy" plan and began the plan's implementation. On November 26, 1996, Korea became the 29th member country of the so-called rich countries' club after undergoing the National Assembly's ratification procedure.

Joining the OECD meant that other member countries officially recognized Korea as an established democracy. Korea served as an exemplary case of transition, moving from the developing country group to a developed country within a short period of time.

Korea's bid to join the OECD proved controversial in the early 1990s. After the Uruguay Round and the establishment of the World Trade Organization (WTO), developed economies pressured Korea to open its markets. The US Federal Reserve Bank (FRB) and the OECD demanded that Korea accelerate plans for interest rate liberalization. The US persuaded Korea to join the OECD in a 1992 congressional report that said efforts would go toward removing tariff and non-tariff barriers on American goods and services.

Developed economies also recommended that Korea join the OECD because the nation would have to accept the organization's economic institutions and regulations once it became a member. This would lead to many institutional changes in Korea that included the abolition and relaxation of government regulations. For example, the government would have to open up its capital market and revise regulations on the service market.

In Korea, however, opposition to OECD entry was strong. The difference in views of the Korean economy by foreigners and Koreans was considerable. Foreigners grouped Korea and Japan together and believed Korea was no longer a developing country. But Koreans thought that their economy was insufficiently prepared to manage market opening and globalization overall. Domestically, uncertainty rose over whether opening Korea's markets would result in positive outcomes, and others warned that joining the OECD could lead to collapse like it did for the South American economy. A consensus was formed that the Korean capital and financial markets needed to open to advance the economy through raising competition among

financial institutions (including banks) after outdated financial practices such as government-controlled financing were eliminated. Yet no consensus was reached on when and how to achieve this. Stage theory was popular at the time, and many believed that Korea should join the OECD only after radically reforming companies and modifying their financial practices, opening the capital market, and improving corporate structure. Two years after Korea officially joined the OECD, the Asian financial crisis forced Seoul in 1998 to apply for rescue loans from the International Monetary Fund (IMF). As a result, Korea had to dismantle the economic framework of its development era and lost the initiative to set up a democratic economic system.

Liberalizing Imports and Opening the Capital Market

Opening Korea to foreign investment and competition involved liberalizing imports and opening the capital market.

Import liberalization measures were first attempted in 1978 but were interrupted due to the second oil shock a year later. Import liberalization gradually resumed in 1984. Korea reported a current balance surplus in 1986, and as the surplus rose over the next few years, the country was subject to Article 11 of the General Agreement on Tariffs and Trade (GATT) in 1990. This meant no more limiting of imports because of its international balance of payments. Korea's trade surplus with the US also worsened the trade conflict between the two countries. The Korean government slashed tariff rates from 34.4 percent to 9.8 percent in 1995 and gradually relaxed regulations on import volume. By 1995, the liberalization rate was a healthy 92 percent (Koh, 2010), so import regulations on products were relaxed to OECD levels.

In the latter half of the 1980s, Korea began preparing to open its domestic stock market. As the government pushed to join the OECD, the target and scope for opening the capital market gradually expanded. The Securities Supervisory Board of Korea in January 1992 revised regulations on foreign stock transactions and permitted 10 percent of stocks issued by listed general corporations and eight percent of stocks issued by public corporations to be acquired directly by foreigners. Also during this time, foreign brokerages were permitted to set up branch offices in Korea.

Because of the government's fear that capital inflows and outflows would cause economic instability, it took a cautious stance by opening the capital market at a slower pace than that of product markets.

The government was wary because many developing countries had faced financial crises after opening their capital markets. Generally, opening the capital market leads to crisis because as capital transactions are liberalized, a large amount of foreign capital with relatively low financial costs flows into the country, fanning competition for loans among domestic financial institutions. As a result, the rise in corporate loans creates a bubble in the stock or real estate market. Eventually, the bubble bursts and real estate and corporate loans become insolvent.

Because of these risks, Seoul chose a more cautious strategy. Kim and Shin (2003) referred to the government strategies used to open the capital market at this time as "bank-centered liberalization."

According to Kim and Shin, the government liberalized domestic banks' capital and foreign currency transactions but postponed the liberalization of other capital inflows or imposed significant restrictions. So compared to individuals or companies, banks were freer to issue foreign securities and borrow foreign currency. After foreigners were permitted to invest in the Korean stock and bond markets in 1992, foreign investment quickly flowed in but the inflow of other investment through banks was also high (see table 5-1).

By focusing on liberalizing banks formerly under its control, the government aimed to minimize the risks that could arise due to capital liberalization. Banks were used in the promotion of the heavy and chemical industries in the 1970s and the structural adjustment process in the '80s. The government believed that it could reduce the risks by implementing the same bank-centered liberalization for opening the capital market in the 1990s.

At the same time, however, substantial deregulation was conducted in the foreign activities of banks and non-banking financial institutions (NBFIs). The government intended to raise the international competitiveness of domestic financial institutions via deregulation, and did not think of the possible consequences on economic stability. Yet as regulation of foreign activities was relaxed, 24 investment finance companies became merchant banking corporations that could engage in foreign financial activities. Domestic banks also established 28 branch offices abroad, and the foreign debt they accumulated quickly shot up. These financial institutions focused on short-term foreign currency loans, and the volume of short-term foreign loans increased rapidly. Foreign investors preferred short-term investment because little information was available on the Korean economy, so short-term loans were deemed safer under these conditions. Korean financial institutions and companies preferred short-term debt, which had relatively lower interest rates, because they wanted to reduce financial costs.[60] At the time, foreign loans were about 25 percent of GDP, which was not high compared to previous levels, but the percentage of short-term foreign loans continued to rise. By 1996, right before the Asian foreign currency crisis, the share of short-term foreign loans in foreign loans overall grew to 58 percent. Table 5-1 shows how fast direct foreign currency loans of banks, merchant banking corporations, and companies grew between 1992 and 1997 and how high the percentage of short-term loans were.

If the proportion of short-term foreign loans rises, foreign lenders can reject debt rollovers and demand debt repayment even at the slightest external shock, making the economy vulnerable. As shown in the table 5-1, short-term foreign currency loans from banks grew by US$11.7 billion in 1995 and US$12.6 billion in 1996, but fell by US$14.84 billion in 1997. The volume of short-term foreign currency loans declined in 1997 because foreign financial institutions that had loaned money to Korean banks denied debt renewals. Foreign financial institutions grew anxious over Korea's economic situation and the Asian financial crisis, forcing Korean banks to unexpectedly repay an enormous amount of debt within a short period of time. Foreign exchange reserves at the Bank of Korea nearly ran out and many banks went bankrupt.

Koh (2010) said the Korean government implemented inconsistent and contradictory policies because it misunderstood the concept of regulatory reform, a key part of liberalization. Regulatory reform requires both deregulation and "better regulation," but the government merely focused on deregulation that reduced its role. Furthermore, though banks and NBFIs managed different businesses after the capital market was opened, supervisory authorities failed to properly comprehend the situation or predict potential problems.

Table 5-1 Foreign capital inflow in Korea

(Unit: US$100 million)

	1992	1993	1994	1995	1996	1997
Capital	69.9	32.2	107.3	172.2	239.2	60.3
Net FDI	-4.3	-7.5	-16.5	-17.8	-23.4	-19.5
Net portfolio investment	58.0	100.1	61.2	115.9	151.8	147.6
Other	16.2	-60.5	62.6	74.6	110.8	-67.9
Assets	-33.0	-45.9	-73.7	-139.9	-134.9	-107.4
Liabilities	49.2	-14.6	136.3	214.5	245.7	39.5
Net borrowing by banks	24.3	12.0	89.8	134.0	141.5	-141.2
Long term	12.0	0.8	19.5	16.1	15.3	7.2
Commercial	9.0	1.5	21.8	20.3	24.9	6.6
Development	0.8	-0.8	0.1	-3.5	-8.5	-0.1
Merchant	2.2	0.1	-2.4	-0.7	-1.1	0.7
Short term	12.3	11.2	70.3	117.9	126.2	-148.4
Commercial	7.0	3.9	53.8	85.2	71.9	-103.1
Development	5.9	5.6	7.8	15.6	22.4	-24.3
Merchant	-0.6	1.7	8.7	17.1	31.9	-21.0
Non-banks (firms)	24.9	-26.6	46.5	80.5	104.2	180.7

Source: Bank of Korea, *The Balance of Payment*, various issues, quoted in Shin Inseok and Hahm Joon-Ho (1998).

Financial Liberalization and the Rise in Chaebols' Financial Control

Interest rate liberalization was first attempted in 1988, but with no success. Another try was made in 1991 with the announcement of a four-stage plan for interest rate liberalization. In the first stage, interest rates for short-term loans and deposits with ineffective regulations that required liberalization and long-term deposits longer than three years were liberalized from November 1991. In November 1993, interest rates on all loans and long-term deposits longer than two years (three years or more if including savings) underwent liberalization. In late 1995, most deposit and loan interest rates were liberalized, and regulations on issuing financial products and maturity rates were either relaxed or abolished. Short-term interest rates were liberalized first while long-term interest rates remained under the indirect control of the government for a relatively long time even after interest rates were liberalized. For commercial papers (CPs), which were short-term financial securities, regulations on maturity dates and the minimum amount were relaxed, administrative guidance for interest rates were abolished, and restrictions on the volume issued were also revoked. This interest rate was the first to be fully liberalized.

Because short-term interest rates were liberalized first, companies preferred CPs for procuring capital. As a result, banks accumulated a large volume of CPs for trust accounts, which weakened the financial structure of companies and banks.

Along with liberalization of interest rates, regulations on setting up financial institutions, management, and procuring funds were relaxed as part of financial liberalization, and more financial institutions were permitted to engage in additional businesses. Also, a regulation banning the top 15 chaebols from owning up to 50 percent of shares in life insurers was revoked. By 1996, all chaebols except for the top five owned and ran life insurance companies.

After interest rates were liberalized and financial companies could enter other businesses, commercial banks began to participate in the CP market, which had been dominated by investment financial companies. Such companies thus went under quickly. As a result, laws on mergers and transfers of financial companies were enacted in 1991, and investment financial companies were reorganized into other establishments. In 1994, nine investment financial companies became merchant banking corporations and 15 followed in 1996; investment financial companies thus disappeared. By late 1996, 30 merchant banking corporations were competing in Korea.

Banks were guided by the Bank of Korea and merchant banking corporations by the Ministry of Finance. The ministry, however, lacked the personnel and know-how required to supervise the rising number of such corporations. Regulations on loans and capital accumulation of merchant banking corporations were quite loose. Banks were permitted to loan only up to 45 percent of their funds to one borrower or company, but merchant banks could loan up to 150 percent of their funds to one borrower. From the mid-1990s, after interest rates were liberalized and the foreign loan market was opened, banks and merchant banking corporations competed for foreign currency loans, and the economy grew more vulnerable. It was only in 1997 that the Banking Supervision Authority under the

Bank of Korea introduced guidelines for foreign exchange holdings of banks in preparation for the withdrawal of foreign currency deposits and refusal of debt renewals by foreign financial institutions. The ministry imposed no guidelines on the foreign exchange holdings of merchant banking corporations and other NBFIs.

Kim Joon-kyung and Chung H. Lee (2008) said interest rate liberalization occurred quickly because chaebol attitudes toward such liberalization changed. Financial institutions rapidly expanded to other types of businesses during this time for the same reason. Until the mid-1980s, chaebols had opposed interest rate liberalization fearing that higher interest rates would raise financial costs. When they began owning shares in NBFIs and privatized banks in the latter half of the 1980s, however, their attitudes toward interest rate liberalization changed. In the early 1990s, chaebols boosted the maximum number of bank shares they could own, and increased their demands for financial liberalization to borrow funds more

Table 5-2 Chaebol-owned non-banking financial institutions

	Brokerages	Insurers	Investment & finance companies & merchant banks	Other	Total
Top 5 chaebols	5	5	4	2	16
Top 10 chaebols	9	7	7	2	25
Top 30 chaebols	13	9	19	2	43

Note: Others include factoring and credit card companies and credit unions.
Source: Financial Supervisory Service, quoted in Kim Soo-gon and Lee Joo-ho (1995).

freely. In this era, public demand for democratization and liberalization was strong, and the government could not regulate chaebols easily. In 1995, the top 10 chaebols owned 25 NBFIs and the top 30 chaebols owned 43 (see table 5-2).

Aggressive Chaebol Investment and Worsening Profitability

As described in the previous chapter, the top five chaebols reduced their dependence on domestic banks after they could procure capital abroad at lower financial cost. This made it easier for chaebols ranked sixth through 30th, which had been struggling to obtain bank loans, to procure loans. Furthermore, chaebols could procure additional capital through non-banking financial institutions (NBFIs) that they had continuously raised their ownership stakes in since the 1980s. Chaebols continued to invest aggressively. But as mentioned in Chapter 4 ("The Consolidation of the Chaebol System and Problems," pp. 165-169) their companies invested not to improve or innovate products being produced for sale on high-end foreign markets but to enter new industries. Unlike in the 1970s, industry had grown more sophisticated. Companies needed advanced personnel, technical resources, and know-how to enter new sectors. Furthermore, their cost structures weakened due to the rapid increase in wages and land prices after the mid-1980s, and the profitability of chaebols greatly eroded. The profitability of the top five chaebols remained relatively favorable, but that of conglomerates ranked sixth to tenth stayed around 1 percent, and that of those

Table 5-3 Weakening profitability of top 30 chaebols

	1993	1994	1995	1996	1997
Top 5	1.86	3.54	4.86	1.41	0.43
6–10	0.87	1.17	1.10	-0.49	-2.15
11–30	-0.40	-0.06	-0.08	0.08	-3.00
Overall average	1.11	2.19	3.15	0.23	-2.13

Source: Korea Fair Trade Commission, quoted in Koh Youngsun et al. (2007).

ranked 11–30 were zero or negative from 1993 to 1996.

Another problem was the way in which chaebols were procuring investment funds. Such conglomerates had mostly financed their investments with debt instead of raising capital by issuing stocks, thus leading to high debt ratios. In 1997, the debt ratio of the top 30 chaebols was 518 percent, meaning their debt was five times more than equity. The ratio was high because of the strong belief that large companies could not fail. Collusion between the government and corporations had protected them. Furthermore, ownership by chaebol families became diluted when stocks were issued, and circular shareholding allowed group chairmen to control companies at relatively low cost. So rather than issuing stocks to procure funds, chaebols obtained most of their investment funds through debt.

A high debt ratio is a longstanding trait of the chaebol as confirmed by an international comparison. Figure 5-2 compares the debt ratios of manufacturers in Korea, the US, Japan, and Taiwan. The ratios of Korean and Japanese companies are relatively high, and those of US and Taiwanese companies are much lower. Japan has maintained lower ratios than Korea, and unlike Korea, Japan has continuously decreased its ratios over time.

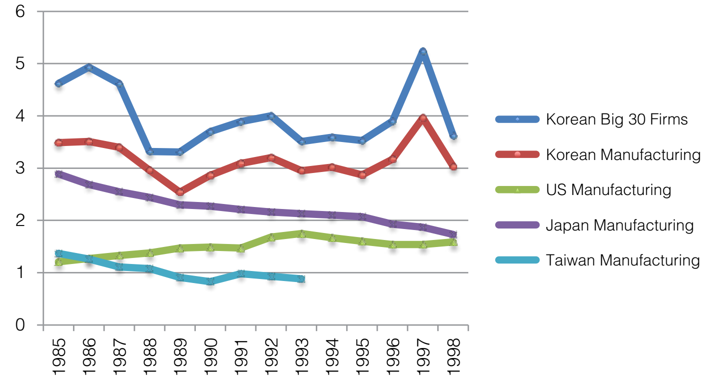


Figure 5-2 International comparison of debt ratios
Note: The estimates for 1987 are not directly comparable with those for other years.
Source: Korean big 30 firms data are estimated based on data from National Information and Credit Evaluation. The rest are from the Bank of Korea's "Financial Statement Analysis," various issues, quoted in Krueger and Yoo (2002).

When the debt ratio of manufacturing is compared to that of the top 30 chaebols, the debt ratio of the latter is even higher. This is because financial policy stressing relatively low interest rates primarily targeted large companies.

The debt ratio began to rise in 1995, and by 1997, its level was deemed high even by Korean standards.

In 1971 and 1981, the Korean economy struggled and the debt ratios for both of those years grew as much as it did in 1997. Companies in 1971 were overly dependent on private loans but received help from the government under the August 3 measure of 1972. When the debt ratio rose due to overinvestment in 1981 during the heyday of the heavy and chemical industries, the government assisted companies as well. In 1997, however, the problem of high debt ratios could not be resolved like in the past and the foreign currency crisis followed. Over that time, a large portion of the debt comprised capital loans were borrowed from abroad and most were short-term loans. Hahm and Lim (2006) explains why this was an issue in the following paragraph:

> The 1997 crisis was different in that it involved a significant number of short-term loans provided by foreign creditors in the private sector. With the liberalization of capital markets in the 1990s, the amount of capital inflow into Korea had greatly increased in the years leading up to the crisis . . . Particularly problematic was the relative size of short-term foreign debt. In 1997, the amount of foreign debt maturing in a year was more than twice Korea's foreign currency reserves. The ratio between short-term foreign debt and foreign currency reserves rapidly deteriorated in the second half of the year . . . (p. 89).

The 1997 Foreign Exchange Crisis

Development of the Crisis

The foreign exchange crisis that broke out in November 1997 began when international creditors refused to renew debts of Korean financial institutions, demanded loan repayment, and indiscriminately withdrew funds. Like most crises, this one erupted when domestic and external factors collided and macroeconomic indexes of the Korean economy (growth, interest rates, prices, and

exchange rate) had shown no prior symptoms. In the third quarter of 1995, however, the value of the Japanese yen declined, and in 1996, the price of semiconductors, a major export of Korea, started to plummet. As a result, the country's terms of trade weakened and the current balance deficit rose to four percent of GDP. After financial liberalization, short-term loans of chaebols and financial institutions surged, and the cost of interest payments (and the burden of repayment in foreign currency) also shot up. The burden of foreign payments grew at an annual average of 27 percent from US$62.9 billion in 1992 to US$164.3 billion in 1996. In the corporate sector, chaebol profitability was worsening as a result of their aggressive investments.

Figure 5-3 Korean Minister of Finance and Economy Lim Chang-yuel (center) and IMF Managing Director Michel Camdessus sign an agreement on giving Korea a financial bailout package on December 3, 1997.
Source: Yonhap News Agency.

Amid the deteriorating business climate, Hanbo Group, which was ranked Korea's no. 14 chaebol, went bankrupt in January 1997. In March and April the same year, Sammi Group (25th) and Jinro Group (19th) went under, and the financial market began to freeze. Monetary stringency accelerated a wave of bankruptcies. In July the same year, Kia Motor Group (eighth) collapsed, followed in November by Haitai Group (24th) and New Core Group (28th).

The crisis began in Thailand and spread to Indonesia and Malaysia, and this created international anxiety toward markets in Asian developing economies. In October 1997, Asian stock markets including those of Japan and Hong Kong plummeted, and international credit rating agencies, Moody's and Standard and Poor's lowered Korea's sovereign rating. From November the same year, foreign creditors began massive withdrawals of capital from Korea; the amounts they took out exceeded the value of foreign exchanges reserves of the Bank of Korea. Eventually, Seoul applied for a bailout from the International Monetary Fund (IMF). In December 1997, US$5.5 billion, the first tranche of the US$25 billion bailout, which was the largest in the IMF's history, was provided. The won-dollar exchange rate also went from about 950 in 1997 to an all-time high of 1,995 by December 1998.

Along with the bailout, the IMF demanded that Korea implement macroeconomic measures to raise interest rates, apply financial retrenchment, and increase exchange rates, as well as implement structural adjustment of the overall economy. This required adjusting the financial structure, improving corporate governance, and raising the labor market's flexibility, measures that would later greatly influence

Korea's economic structure.[61]

An ensuing wave of chaebol bankruptcies and extreme volatility in the foreign exchange rate greatly affected daily life in Korea. In 1998, the number of unemployed exceeded 1.3 million as a period of high unemployment occurred. Many companies struggled to survive and were unable to invest. In this crippled business environment, consumption and investment in equipment plunged. Wages had grown at an annual average of more than 10 percent since 1986, but their rise dropped to the single-digit level in 1997 for

Figure 5-4 From left to right clockwise—a homeless man spends the night at an underground passage around Seoul Station, people deposit foreign currency into collection boxes in a meeting to save the economy in December 1997, and members of a civic group denounce the government's incompetence and violation of sovereignty during a rally in Gwanghawmun, Seoul, around the same time.
Source: *Chosun Ilbo*. "10 Years of Division and Deprivation: The Lack of Healthy Leadership." January 18, 2008.

the first time. In 1998, real wages decreased 9.3 percent. As layoffs following restructuring by corporations and financial institutions loomed, many workers went on strike opposing these layoffs and held demonstrations against the government's economic policy. In a show of solidarity to help the nation, a national drive sought to collect gold from Koreans to earn much-needed foreign currency.

The jury is still out on if external shocks like the financial crisis in Southeast Asia or internal factors were to blame for precipitating the 1997 foreign currency crisis in Korea, but both clearly played a role. The Korean government went on to build an economic system capable of safely absorbing external shocks by determining and revising the flaws causing the economy to become vulnerable.

Hanbo Group, the Poster Child for a Poorly Managed Chaebol

Chung Tae-soo, founder of Hanbo Group, was born in Jinju, Gyeongsangnam-do, as the son of a poor farmer. Elementary school was the only formal education he received.

Working as a low-level tax official from 1951 to 1974, Chung was transferred to Seoul in early 1960. In early 1970, he struck it rich after finding molybdenum ore veins at an abandoned mine in Gangwon-do that he had purchased at a low price. Setting up Hanbo Group in 1974, Chung purchased Sam-ah Construction in 1976, renamed it Hanbo Housing, and dove into the apartment business. In 1978, when the development of Seoul's Gangnam district was progressing, Hanbo Housing purchased a site with no buildings or structures in the city's Daechi-dong neighborhood for KRW 2 billion, a huge sum at the time. The company had Eunma Apartments built on the site to great success. Afterwards, Chung took a major step up in the housing business, going from an apartment salesman dealing with billions of won to a quasi-conglomerate dealing with hundreds of billions of won. Using this money, he took over Hanin Golf Course (now Taekwang Country Club) owned by Hyosung Group and Kumho Steel in 1984. He renamed the steel company Hanbo Steel, which would later become the core company of Hanbo Group. Chung indiscriminately (or recklessly) expanded his business lines to retail and education. In 1986, he took over the department stores Shin Shin and Hwashin in downtown Seoul, as well as Gangneung Superior Technical School of Nursing (now Gangneung Yeongdong University).

The would-be business mogul faced his first crisis in 1991. After purchasing land in Seoul's Suseo district, where building apartments was prohibited per land compartmentalization, Chung lobbied government officials and politicians to obtain permission from the city to change the rules. The media, however, eventually got wind of this act, which became known as the "Suseo corruption incident." Along with nine National Assembly officials, Chung went to prison.

Immediately after his release, Chung took over the mid-size builder Yoowon Construction in 1996 to show that his company was still viable. Hanbo Steel, the flagship unit of Hanbo Group, began constructing a cast iron (produced by melting iron ore) and hot-rolled steel mill in Dangjin, Chungcheongnam-do. The company rose to become the second in its field in Korea.

Yet Hanbo Steel's debt ratio exceeded 300 percent due to losses in the construction sector that began in 1989, and its loan dependency exceeded 50 percent. Despite this, Chung kept aggressively investing to expand the company. He planned to build a coastal steel industrial complex in 1989 and a cast iron, hot-rolled steel mill in 1994. Because Hanbo relied mostly on external loans as sources of revenue for continuous expansion, in November 1996, its external loan amount reached about KRW 5 trillion and its debt ratio shot up to 1,000 percent. This was after the reclamation work for the construction of the coastal complex was completed in 1993 and after the first-stage construction of the steel mill was finished in 1995. Korea First (Cheil) Bank, Hanbo's primary creditor bank, judged that deficit operations were unavoidable even after the steel mill was completed due to Hanbo Steel's excessive levels of external loans and interest payments. After withdrawing its existing loans, the bank declared January 1997 as the last month of loan nonpayment.

In 1997, Hanbo Group was Korea's 14th-largest conglomerate but was also KRW 4.2 trillion in debt. The group's collapse was the largest insolvency in the country's history.

Banks were later found to have violated regulations to provide Hanbo with enormous loans. Bank loans could not exceed 15 percent of a bank's assets, and when guaranteeing payment, a bank could not loan more than 30 percent of its loan limit to more than one entity. Korea First Bank, one of the main creditor banks of Hanbo, provided loans to Hanbo Steel equal to 94 percent of the bank's assets.

In the criminal investigation that followed, prosecutors found that Hanbo Group had funneled huge funds to political circles in the 1992 presidential election and the 1996 general elections. From 1993 to 1996, preferential loans from the financial sector went to Hanbo Group. Because of this incident, Kim Hyun-chul, the son of then President Kim Young-sam, and Kim Ki-sup, a deputy department director of the Agency for National Security Planning (now the National Intelligence Service) were both convicted for their roles in the scandal, causing a significant impact on political circles. Hanbo Group was dissolved and Chung and his son both remain on the list of habitual tax delinquents, owing KRW 240 billion to the government.

Shindonga magazine made the following comment:

> Foreign financial institutions and personnel working in the Korean market agree that "Hanbo Group is a problem, but the financial institutions that engaged in transactions with Hanbo are even more problematic."
>
> Michael Brown, the Seoul branch manager of the First National Bank of Chicago said, "Too often, Korean banks forget that they themselves are 'companies.' We cannot know if there was political corruption, but it is clear that banks do not operate on the basis of 'commercial judgment.' The fact that loans, which exceeded the paid capital of a bank, were provided to a single company shows that the ABCs of asset composition were ignored. This case is probably also strongly related to the process of appointing bank presidents. Businesses cannot operate normally in an environment where bank presidents are appointed based on the 'the seniority system,'

> the current bank president's 'position' (bank presidents were likely to be reappointed), or because 'the candidate has friends in high places.'"

This directly criticized the practices of Korean banks tied to government-controlled financing, and essentially, to political financing. The Hanbo case is another reminder of how difficult financial reform is in Korea.[62]

Response to the IMF Crisis

While providing bailout funds, the IMF demanded that Korea adhere to the fund's long-term prescriptions for macroeconomic policy, including the implementation of retrenchment measures and high interest rates and long-term structural adjustments in each economic sector. Structural adjustments comprised three main parts: financial markets, company management structures, and liberalization of capital markets. Structural adjustment of the financial market included weeding out and reorganizing insolvent financial institutions and securing the BIS capital adequacy ratio so that such institutions could safely operate. Structural adjustment of the corporate sector required a transparent economic structure via raising the transparency of accounting practices and lowering high debt ratios. At the same time, Korea was also pressured to transform its economic structure into one more in line with Anglo-American systems.

From the fourth quarter of 1997 to the second quarter of 1998, the IMF demanded that Korea achieve a current balance surplus and expand its foreign exchange reserves through intense retrenchment and a high interest rate policy. This, however, induced long-term losses. Companies went bankrupt and the unemployment rate increased. After exchange rates stabilized and the first liquidity crisis improved, the government began to relax its retrenchment stance in May 1998 and started opting for gradually reducing interest rates. Pump priming measures included raising public spending and taking on fiscal deficits, and this helped the economy recover quickly. GDP fell 5.7 percent in 1988, but rose 10.7 percent in 1999. In macroeconomics terms, Korea was no longer in recession. In August 2001, Korea repaid the US$19.5 billion it borrowed from the IMF and officially graduated from the fund's management program.

Throughout this process, the Korean economy underwent intense structural adjustment in the business, financial, and labor-management sectors.

In the business sector, the government judged that large companies had gone bankrupt because of 1) the absence of information surveillance and accountability, 2) complex financial structure due to excessive financial transactions between chaebol affiliates, 3) excessive loans and high financial costs, 4) overlapping overinvestment and business diversification, and 5) abuse of power by chaebol heads and their reckless investment decisions. To solve these issues, five principles for business structural adjustment were established. To improve corporate transparency, companies had to create combined financial statements showing the financial situations of all affiliates from June 2000. Furthermore, cross-payment guarantees of the top 30 chaebols were to be eliminated by the end of 1998. By March 2000, all such guarantees were gone. Companies

Table 5-4 Change in debt ratios of top 30 chaebols

(Unit: KRW trillion)

Items	Assets (A)	Capital (B)	Debt (C)	Debt ratio (C/B)
End of 1998	366.5	79.2	289.3	363.2
End of 1999	374.8	141.9	232.9	164.1
Comparison	8.3%	62.7%	-54.4%	-199.1%

Note: Twenty-three affiliates of conglomerates included in the top 30 chaebols in 1999 and 2000 were selected and combined (excluding financial and insurance companies).
Source: Korea Fair Trade Commission, quoted in Koh Youngsun et al. (2007).

were vulnerable to external shocks because of their dependence on loans, thus 64 corporations with more than KRW 250 billion in loans signed agreements "to improve financial structure" with their creditor banks, and agreed to lower their debt ratios to below 200 percent by the end of 1999. As a result, the debt ratios of large companies plummeted, and they kept their ratios below 200 percent[63] (see table 5-4).

Finally, to reorganize affiliates acquired by large companies in various industries through octopus-like diversification, business exchanges called "big deals" between large companies occurred. Non-core affiliates were separated and made into independent companies. Though these deals appeared to be led by the private sector on the outside, they were effectively led by the government. Scholars questioned the validity of these exchanges at the time. For example, the semiconductor big deal between LG and Hyundai groups was one of the most controversial cases that caused conflict between the government and business.[64]

The financial industry underwent the most change, and most

public funds were used for structural adjustment of the sector. The government knew that if financial institutions were to remain insolvent over the long term, other industrial sectors would incur losses as well. A large amount of public funds was thus used to adjust the structure of the financial industry and the government aimed to normalize the financial system as quickly as possible. Various methods were used including the liquidation and M&As of insolvent financial companies. Public funds were injected into capital-starved financial institutions. Though the country had 33 banks in 1997, many small and medium-size ones and those in the provinces were liquidated. The number of banks thus fell to 23 in 2000 and 19 in 2005. Furthermore, among the 30 merchant banking corporations in the mid-1990s, their ratio of short-term loans to capital was high, and most of their loans went to chaebols ranked 11th to 30th that had collapsed during the foreign currency crisis, which caused them to fall into a state of capital impairment[65] immediately after the crisis. Afterwards, all such corporations were liquidated or converted into other financial institutions in the process of adjusting the nation's

Table 5-5 Structural adjustment of financial institutions 1997–2000

	No. of financial institutions (End of 1997: A)	Shutdown	Merger	Sum (B)	B/A
Banks	33	5	5	10	30.3
Non-banks	2,069	336	126	462	22.3
Sum	2,102	341	131	472	22.4

Source: Financial Supervisory Service, quoted in Koh Youngsun et al. (2007).

financial sector (see table 5-5).

To boost the stability of the financial industry, the Financial Supervisory Service and the Financial Supervisory Commission were established as integrated watchdogs monitoring the banking, securities, and insurance sectors. The standard for determining the weakness of a financial institution's assets was drastically strengthened. Also, Korea Asset Management Corp. (KAMCO) was established to promptly organize bad loans without the direct injection of public funds if insolvency recurred.

Per IMF demands, the government in late 1997 changed the exchange rate system into one utilizing a freely floating exchange rate and relaxed regulations on foreign currency transactions, which opened the Korean market to foreign currency. In 1998, limits on stock investment by foreigners was abolished, thus the Korean capital market was completely opened.

Reform of labor-management relations introduced several employment methods and a flexible system for the labor market to make layoffs easier. At the time, many chaebols ranked 10th to 30th and financial institutions had gone insolvent due to the foreign currency crisis or collapsed. Despite the need for layoffs in large companies and financial institutions, unions were concentrated in these sectors. Workers were laid off because of the incompetency of management and government negligence toward supervisory agencies. Severe backlash from labor followed, as workers suffered unfairly because of ineptitude by management or the government. The introduction of the layoff system was thus a sensitive issue. In response, the government formed the Korea Tripartite Commission

in January 1998, and in an agreement, labor groups accepted the layoff system, flexible work schedules, and systems to strengthen the flexibility of the labor market (such as the worker dispatch system) required to recover from the economic crisis. In return, the government agreed to certain demands from such groups. Teachers' unions were permitted, unions were allowed to engage in political activities, and the unemployed were allowed to join unions. The social security system was also modified. Afterwards, the Labor Standards Act approved short-term employment of workers, and the worker dispatch system was revised so that service and dispatch workers could be legitimately employed in 26 occupations (professional jobs that require specialized knowledge including computers and regular jobs including janitorial work). The proportion of dispatched workers thus increased, greatly influencing the manner of employment in the Korean economy.

Government actions that opened the economy and raised flexibility quickly led to the recovery of economic indexes excluding the unemployment rate. The vitality of the financial market including stocks was restored. New problems appeared, however. The number of temporary workers shot up, the Korean currency appreciated due to the inflow of massive investment funds, and speculative capital was regulated. These problems greatly changed the nature of the Korean economy.

Rise of Social Policy[66]

In the process of adjusting the structures of financial institutions and large companies following the foreign currency crisis, the ranks of the unemployed soared, the number of jobs in the low-income bracket decreased, and the level of poverty quickly expanded. Korea had a basic social security system that included livelihood protection, which was a public assistance program, and four social insurances covering industrial accidents (introduced in 1964), medical (1977), national pension (1988), and unemployment (1995). Social security and welfare issues had previously been resolved through economic growth in the country's industrialization heyday, and as a result, these systems failed to provide sufficient benefits to those who needed it.

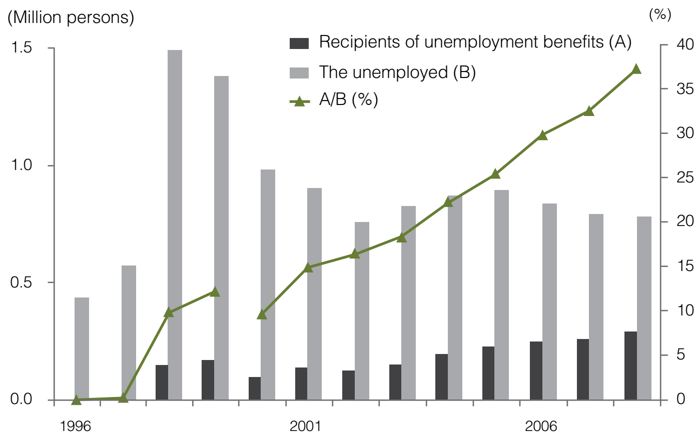


Figure 5-5 Recipients of unemployment benefits
Note: There was a change in the definition of unemployment in 2000 that created discontinuity in the data.
Source: Korea Employment Information Service (www.keis.or.kr).

Thus the government turned to public works projects to expand the social security system and provide short-term jobs to the unemployed. Giving jobs to the unemployed or those lacking regular income, the project aimed to achieve a minimum level of social stability via direct job creation. This was also an emergency relief effort that provided living expenses to people and played a key role in supporting the unemployed during the economic crisis. The government also allowed more people to apply for employment benefits. Previously, only workers at workplaces with more than 30 employees were eligible to apply, but in January 1998, that number was lowered to 10 and further to one in October the same year. As shown in figure 5-5, the percentage of the unemployed receiving unemployment benefits also saw a steady increase.

In 2000, the introduction of the National Basic Livelihood Security System marked a groundbreaking attempt to guarantee the basic livelihood of the people in a more stable way by institutionalizing temporary projects for the social safety net such as public works projects.

Chapter 6

POST-CRISIS ECONOMY

Exports after Korea accepted the IMF bailout rose due to intense structural adjustment and high exchange rates. On August 23, 2001, three years and eight months after Seoul received the relief package, the government repaid the loan in its entirety—US$19.5 billion—and was no longer under IMF supervision.

The effects of the bailout, however, proved to be longer lasting. Many reforms and programs implemented during the structural adjustment process were set through laws and institutions, and greatly influenced the structure and development of Korea's capitalism. In addition, the nation weathered with much fuss the 2008 financial crisis, and chaebols that survived became successful in international markets. Samsung Electronics secured its place as a world leader in semiconductors and sold more smartphones than Apple. After taking over Kia Motor, Hyundai Motor saw unprecedented growth

in international markets including the US and China, and became the world's fifth-largest automaker. Korea's shipbuilding industry had the world's best technical skills and topped the global list in orders received. Yet few in Korea speak about another economic boom or an optimistic future. The aforementioned companies are now multinational corporations with distinct designs and production bases all over the world. What is unlikely, however, is that these chaebols will take on the responsibility of employing young workers or that a trickle-down effect following their growth will occur.

The Kim Dae-jung administration, elected in 1997, aimed to foster the "new growth powers" set to replace large companies by making huge investments in venture companies. The results, however, merely proved how difficult the implementation of industrial policy was in the changed Korean economy and how unstable and ineffective the tech-heavy stock market KOSDAQ was; the latter was set up with government support. These efforts ended with little success. In the end, Korea's industrial structure remained unchanged. Few new and young companies founded after the 1980s were among the top 100 companies not affiliated with the top five chaebols (Naver and NCSOFT were ranked 51st and 98th, respectively, based on stock market capitalization but their sales prevented them from making the top 100). The production gap between large companies and small and medium enterprises (SMEs) remained wide, thus the latter are unlikely to grow and solve the problems of growth and unemployment. Furthermore, banks should be discovering and promoting new companies in place of the government but are focusing on consumer banking and real estate loans. A savings bank scandal from 2011 to 2012 showed that the Korean economy was still not transparent enough in key areas like corporate accounting practices, and the management and supervisory structures of financial institutions were underdeveloped, making it difficult for the financial system to function properly.

In addition, Korea faces issues commonly experienced by developed economies such as wide gaps in income and jobs and a rapidly aging population due to a low birth rate.

Macroeconomic Recovery and Structural Changes

Through structural adjustment after the financial crisis, insolvencies in the business sector saw considerable improvement. Debt ratios fell and stability indexes, including dependency on loans, and current account ratios achieved levels better than before the foreign currency crisis. Furthermore, after many chaebols collapsed in the process of structural adjustment following the foreign currency crisis, implicit guarantees under the notion of "too big to fail" that existed between chaebols and the government were no longer assured, and companies gradually stopped growing bigger through excessive loans and investments.

In the financial sector, most insolvent institutions were liquidated or merged with other financial institutions. Non-banking financial institutions (NBFIs), including merchant banking corporations, were reorganized (liquidated or merged) in the process of major structural adjustment, and the solvency of financial institutions improved rapidly.

Structural adjustment of the public sector and government-run companies that failed in the beginning of the Kim Young-sam administration saw expedited progress at this time. Eight public companies selected to be spun off were privatized, the number of public companies and their workforce were greatly reduced, and resources required for the structural adjustment of the private sector were secured through sales income.

After such structural adjustment and system maintenance were performed, the economic system seemed more advanced. Especially, the financial market, including capital and foreign currency, experienced extensive liberalization. In accordance with plans to globalize the capital market, the government originally aimed to abolish the retention limit for foreigners in 2000, but due to the foreign currency crisis in late 1997, the opening and liberalization of the financial market progressed early. The opening of Korea's stock market accelerated. In December 1997, right before the foreign currency crisis, investment limits were greatly expanded—55 percent for general corporations and 25 percent for public corporations. In May 1998, the investment limit for foreigners was abolished for general corporations and those registered with the Korea KOSDAQ Association (KOSDAQ-listed companies) among the listed corporations; by July, the limit for foreigners had been abolished for almost all stocks. For corporations that represented leading industries in the Korean economy, however, the limit on acquiring stocks by foreign investors were selected separately with related laws and articles of association. Inflow of funds from foreign investors thus increased, and of the market value of listed shares, the retention rate of foreign investors jumped from 14.6 percent in 1997 to 42 percent by late 2004. The number of foreign investors listed with the Financial Supervisory Service also saw a continuous rise from 2000; by late 2004, 16,899 foreign investors were listed.

Attempts to make companies more transparent achieved success to an extent. Financial institutions and investors could access information on companies more easily and the corporate management structure was streamlined. Corporate accounting standards were revised and toughened, and chaebols had to provide consolidated financial statements. In the process of reorganizing Daewoo Group, major disciplinary actions were taken and indictments for accounting fraud and poor auditing were made. Misdemeanors by management and accounting companies were no longer accepted. External board of director systems were introduced and strengthened, which changed the corporate management structure. Because many chaebols were broken up and divided, stockholder rights improved as circular shareholding declined and more companies obtained control through holding companies. The control of large companies by the presidents' families continued, however, and many chaebol owner families still used expedient and law-evading tactics to pass down management rights to the next generation while ignoring the interests of shareholders and investors.

Table 6-1 Stock investment by foreigners

(Unit: 10,000 shares, KRW billion)

Year	Foreign-owned stocks	Ratio to listed stocks	Market capitalization of foreign stocks	Ratio to listed stocks
1995	76,231	10.0	167,229	11.9
1996	98,929	11.5	152,220	13.0
1997	81,979	9.1	103,580	14.6
1998	120,405	10.5	256,334	19.6
1999	213,688	12.3	765,905	21.9
2000	273,107	13.9	565,585	30.1
2001	286,922	14.7	936,982	36.6
2002	305,458	11.5	931,607	36.0
2003	425,913	18.0	142,534	40.1
2004	515,419	22.0	173,157	42.0
2005	533,493	23.0	260,262	39.7
2006	556,305	22.3	262,534	37.3
2007	536,588	19.0	308,047	32.4
2008	476,567	16.4	166,933	28.9

Source: Heo Chan-guk (2006).

Expansion of Credit Card Supply and Venture Promotion Policy

In addition to the structural adjustment policy toward managing the foreign currency crisis, two other actions by the Kim Dae-jung administration had long-term effects on the Korean economy. One was the policy promoting venture businesses that encouraged startups to develop new industries including in information and communications technology (ICT). The other focused on the credit card supply that attempted to boost consumption and make the economy more transparent.

President Kim Dae-jung took office in 1998 right after the foreign currency crisis erupted. His government promoted credit card use as a measure to expand domestic consumption, which had declined during the foreign currency crisis. Furthermore, the salaries of regular employees could be easily verified, but many independent business owners with high income underreported their sales to pay less tax. So the idea was that higher use of plastic would mean sales information could be sent to the National Tax Service through the credit card company. The income of independent business owners would then be detected more clearly to better prevent tax evasion.

To promote credit card use, the limit on cash advances was abolished in May 1999, allowing card companies to freely select the withdrawal limit for cash advances. In June that year, a system offering income tax breaks through credit card use was introduced. For example, credit card users could enjoy a proportional discount for certain taxes for higher card use. And the credit card receipt lottery made its debut in 2000.

As a result, the number of credit cards issued skyrocketed from 10 million in 1990 to more than 100 million in 2002, and spending on credit also jumped almost tenfold in four years from KRW 63.6 trillion in 1998 to KRW 622.9 trillion in 2002. So consumption took a huge leap as intended by the government.

But because the government promoted the use of credit cards, card companies competed fiercely to gain a bigger share of the market. Companies advertised credit cards at subway stations and on the streets, and also indiscriminately issued cards to those with no income or poor credit ratings. Furthermore, many cardholders did not fully understand the high interest rates of their cards and bought more than they could afford. People used cash advances on

their credit cards more than regular payment methods for products or services purchased. Though a cash advance commanded high annual interest of about 30 percent, it was attractive for people who needed living expenses or emergency funds because money could be easily withdrawn despite no collateral or poor credit rating. Cash advances in 1997 accounted for under 50 percent of credit card use, but this figure exceeded 60 percent in 2000 and 2001.

Eventually, the number of those who failed to manage their credit card debt ballooned. The rate of credit card default began to rise in 2002 and exceeded 14 percent of overall spending by late 2003. The number of delinquent borrowers who had defaulted on payments for more than a month also shot up from 1.43 million in late 1997 to 1.93 million in 1998, a leap of 500,000 in just one year, and continued to increase. In 2003, the number of delinquent borrowers soared by 1,084,000 in one year, and the nation's credit card crisis erupted as people lowered consumption to repay their debts.

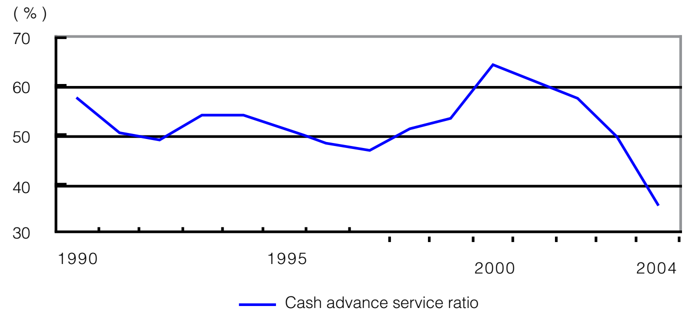


Figure 6-1 Cash advance as percentage of credit card use
Source: Heo Chan-guk (2006).

Overall consumption dipped 1.3 percent in 2003 and 0.4 percent in 2004.

Credit card delinquency caused massive losses for credit card companies as well as credit card delinquents. The card companies of banks including Korea Exchange, Kookmin, and Woori survived the crisis by merging with their parent banks. The parent companies of Kookmin and Woori could absorb the losses, but Korea Exchange needed a capital injection after the loss of Korea Exchange Bank Credit Service. No buyers came forward among domestic and foreign banks, and the affiliate was eventually sold to Lone Star, a short-term speculative fund, causing negative effects.[67] The credit card crisis of 2003 occurred because economic policy failed to sufficiently consider potential issues when increasing the credit card supply. Also, credit card companies, driven solely by competition for market share, did not consider customers' credit ratings and ability to make payments. Furthermore, cardholders consumed without properly considering the risks of a relatively new financial product in Korea,

Table 6-2 Rise in number of credit delinquents

(Unit: 10,000 people, %)

	Dec. 2000	Dec. 2001	Dec. 2002	Dec. 2003	Dec. 2004
No. of credit delinquents	208.4	245.0	263.6	372.0	361.5
No. of credit delinquents due to plastic	44.4	104.2	149.4	239.7	243.5
Proportion (%)	21.3	42.5	56.7	64.4	67.3

Source: Ministry of Finance (2005), quoted in Heo Chan-guk (2006).

the credit card. Not only did the policy toward boosting credit card supply produce numerous credit delinquents, it also caused a main commercial bank to go insolvent (though it was eventually sold to a foreign private equity fund). Yet the long-term settlement of the credit card brought about positive effects as well. Use of the cash advance declined and flow of funds grew more transparent.

Promotion of Venture Companies

The Kim Dae-jung administration considered information and communications technology (ICT), which had seen rapid development, as a new growth engine and sought to create an environment in which new companies could be established and developed. ICT industries had a high failure rate, but the sector promised high growth and high risk to allow companies secure in the market to grow rapidly. Thus it was difficult to gain support through financing methods focused on bank loans. In response, the government introduced direct financing using stocks, a method more appropriate for new entrants to the industry. This included venture capital, which had proven successful in the US.[68] The government also promoted the tech-heavy KOSDAQ, which had begun to grow from the 1990s. After the Act on Special Measures for Venture Company Promotion was enacted in October 1997, a number of financing methods were provided for registered venture companies certified by the Small and Medium Business Administration (SMBA). Such companies were allowed to apply for funds in a variety of ways (e.g., capital procurement, technical skill transfer and human resources). Chaebols had emerged amid the process of promoting the heavy and chemical sectors as national industries. Similarly, venture companies in cutting-edge ICT grew at a rapid pace. In 2001, the number of registered venture companies with the SMBA exceeded 10,000, and an estimated one million jobs were created. The exports of venture companies also reached US$4.5 billion, exceeding the overall industry average of 19 percent.

Government support for promoting venture companies and financing allowed venture companies, defined as technologically innovative startups, to expand in an economic environment with almost no venture companies. Critics, however, blasted the government for overemphasizing quantitative expansion of venture companies and providing numerous policy benefits to a business once it was selected as a venture company. This led to direct criticism of the venture verification system that allowed the government to regulate venture companies. The system was revised several times from 1998. In 2006, venture company types were selected by private institutions subject to market agents (Small and Medium Business Corp. or the Korean Venture Capital Association).

The pro-venture policy quickly raised the number of venture companies but also produced a huge number of insolvencies among them, enough to cause a venture business bubble. Over the "venture adjustment period" of 2002–04, many companies failed and M&As between companies occurred, greatly reducing the number of companies. After 2004, however, the number of venture companies exceeded 10,000 again thanks to a "venture re-expansion" policy.

Venture support policy comprised ambitious attempts to promote startups based on new ICT in the Korean economy, which is structured around chaebols, and develop them into new growth engines. Of the companies founded around this time, internet web portals such as Naver and Daum, game companies such as Nexon and NCSOFT, and communication equipment companies represented by Humax formed the new non-chaebol group. But it is tough to say if Korea has achieved the same success that certain developed economies have, such as the US, where ICT-based companies have revamped corporate systems with rapid growth in the industry. More time is required to fully evaluate industrial policy, including venture promotion. Furthermore, conditions required for venture companies to grow, aside from policy intervention such as transparency of accounting and development of the KOSDAQ market, must be met for industrial growth. Thus evaluation of the success or failure of the policy remains hard. Yet Korea's ICT companies, aside from Naver in the financial market, have failed to crack the list of top 100 companies based on sales or asset value. The top 30 corporations still comprise chaebol affiliates founded in the 1960s and '70s, and they continue to dominate the economy. Though Korea was a latecomer to industrialization, no company founded after the 1990s is on its list of the top 30 corporations, and its corporate structure remains outdated compared to other developed economies. This shows that the objectives of venture support policy have not been realized.

Continuing Low Growth and Low Employment

After the foreign currency crisis, the won remained weak, exports rose, and consumption expanded due to the government's intent to boost domestic consumption by supplying more credit cards. After 2001, however, the won gradually recovered in value and the rise in fixed investment decelerated, slowing down exports and economic growth. In 2003, the level of household debt and number of credit delinquents both increased because of the government's expansion of the credit card supply, which was intended to boost domestic consumption. As a result, consumption overall declined and the rate of increase in overall consumption did not recover to levels before the foreign currency crisis.

A notable macroeconomic trend in the 2000s was that the current account balance and prices remained relatively stable, but economic growth stayed relatively low and the increase rate of gross national income (GNI),[69] which represents real purchasing power, was remarkably lower than that of GDP. From 2003 to 2007, the annual increase of GDP was 4.4 percent but that of GNI was 2.6 percent.

The situation in the job market was similar. From 1997 to 2008, the annual growth of employees was just one percent, fueling fears of jobless growth. Unemployment continued to decline after the foreign currency crisis and fell to 3.2 percent in 2007. This, however, was not the result of higher employment but that of a decrease in the rate of economic participation. Because certain people had given up looking for work, the rate of participation from 2000 to 2007 did not recover to pre-crisis levels (62.5 percent in 1997). The rate of participation peaked in 2004 at 62.1 percent and gradually decreased afterwards.

As low growth and low employment continued, fears grew over the growth potential of the Korean economy. Low growth con-

Table 6-3 Macroeconomic trends after Asian currency crisis

	GDP growth rate	GDP growth rate by demand sector				Employment		
		Final consumption	Fixed investment	Exports	Imports	Employment growth rate	Unemployment rate	Rate of economic participation
1997	4.7	3.3	-2.3	18.4	10.0	1.7	2.6	62.5
1998	-6.9	-13.6	-22.9	30.4	-3.6	-6.0	7.0	60.6
1999	9.5	11.7	8.3	-7.9	3.6	1.8	6.3	60.6
2000	8.5	8.6	12.2	10.6	20.9	4.3	4.4	61.2
2001	3.8	4.9	9.2	-3.9	-3.6	2.0	4.0	61.4
2002	7.0	7.9	6.6	-0.6	0.5	2.8	3.3	62.0
2003	3.1	-1.3	4.0	9.1	6.6	-0.1	3.6	61.5
2004	4.7	-0.4	2.1	19.6	14.7	1.9	3.7	62.1
2005	4.2	3.6	2.4	-1.6	2.8	1.3	3.7	62.0
2006	5.1	4.5	3.6	5.4	8.6	1.3	3.5	61.9
2007	5.0	4.5	4.0	11.4	11.1	1.2	3.2	61.8

Source: Bank of Korea, Economic Statistics System. Data on employment from Statistics Korea, Korean Statistical Information Service.

tinued for the following reasons. First, as the structural adjustment of chaebols and financial institutions occurred after the foreign currency crisis, reckless investments dependent on loans declined while rational investment based on profitability and a company's financial soundness increased. Thus maintaining investment levels of the past was difficult. Second, as previously mentioned, household debt soared after the foreign currency crisis and the number of credit delinquents took off. This limited the purchasing power of households and exacerbated the domestic slump. Finally, as the number of temporary workers grew, job instability rose as well. The widening gap between the rich and poor was also considered a factor that shrunk private consumption.

Consolidation of the Chaebol System

During the foreign currency crisis, companies in chaebols ranked 11-30 collapsed and Daewoo Group was dissolved, delivering a major blow to the chaebol system. The top 10 chaebols, however, saw brisk expansion in the structural adjustment process afterwards. The top five chaebols—Samsung, Hyundai Motor, SK, LG, and Lotte—collectively boosted sales 115 percent from KRW 302 trillion to KRW 650 trillion from 2000 to 2010, and their net profit jumped a whopping 292 percent from KRW 13 trillion to KRW 51 trillion (Kim Seung-shik, 2013, p. 101). Afterwards, these conglomerates were divided among relatives, and they continued to divide and grow like cells afterwards. They became the dominant system of the Korean economy. As of 2012, 12 groups belonging to the top 30 chaebols were formed as a result of splits among relatives of the Samsung, Hyundai, and LG owner families. CJ (12th) and Shinsegae Group split from the Samsung family, Hyundai Group split into Hyundai Motor (second) and Hyundai Development Co. (20th), and GS (seventh) and LS (13th) split from LG. Outside of the top 30 chaebols, Hansol split from Samsung, Heesung from LG, and Halla and Hyundai Marine & Fire (insurance group) from the Hyundai family. As owner families separated and chaebols were split up, the split companies themselves began to expand by raising

the number of affiliates, growing into groups like their parent chaebols. This process was repeated. Most likely, the top 30 chaebols will also split due to family and continue to grow. Due to this cell-like expansion of chaebols, the number of affiliates in the top 30 chaebols leaped from 126 in 1970 to 513 in 1989 and further to 819 in 1997. The number grew further after the foreign currency crisis. By 2012, the number of affiliates reached 1,179.

The economic concentration of chaebols, or the percentage of the economy the top 30 chaebols control in Korea, recorded 84 percent in 1997. During the foreign currency crisis, the figure temporarily decreased but rose again afterwards. In 2010, it was 96.7 percent, higher than even before the foreign currency crisis.

The economic concentration of the top 30 chaebols is not necessarily a problem, but if the growth of such groups fails to lead to overall economic growth and development, the country's economic vitality could decline. A direct example of this is the GDP ratio of added value created by chaebols and the ratio of employment.

Table 6-4 Economic concentration and employment ratio trends of top 30 chaebols

	1987	1997	2001	2010
GDP % of sales	66.0	83.9	67.5	96.7
GDP % of assets	55.1	88.8	58.0	124.5
GDP % of value added	10.8	15.0	12.8	40.0
% of total employment	–	4.2	3.0	4.5

Source: The Federation of Korean Industries, Korea Fair Trade Commission, and Korea Development Institute, quoted in Kim Seung-shik (2013).

Before the foreign currency crisis, the added value created by the top 30 chaebols was around 10 percent of GDP. But chaebols were mainly original equipment manufacturers (OEM) that did not secure independent technical skills or brands, meaning the profitability and added value of their exports were relatively low.

After the foreign currency crisis, however, major chaebols sharpened their technical skills and more entered international markets with distinct brands. The added value created by these groups reached 40 percent of GDP. Despite their growth, however, they accounted for just 4.5 percent of employment, just a slight improvement from 4.2 percent in 1997.

If chaebol companies dominate sales and added value but do little to boost employment, the burden of job creation must be shouldered by small and medium enterprises (SMEs).[70] Of the 95.5 percent of employment not provided by large companies (4.5 percent), 5.5 percent comes from the public sector (i.e., civil servants and staff at public companies), 61.2 percent from SMEs, and the remaining 28.8 percent from self-employment. If the sectors that produce 60 percent of all added value are responsible for more than 95 percent of employment, the wages of the self-employed and staff at SMEs will inevitably be far lower than employees of large companies.

The final section of Chapter 5 ("The 1997 Foreign Exchange Crisis," pp. 219–234) looked at the revival of the Korean labor movement and the widening gap between large companies and SMEs. After 1987, wages at large companies surged relatively quickly. In response, corporations reduced employment and raised their labor equipment ratios, and the wage gap between large companies and SMEs continuously widened even after the end of the foreign currency crisis. If the wages of SME workers were set at 100 in 1987, those of staff at large companies were 110, and this figure increased to 146 in 2009.

The average monthly wage of the self-employed was KRW 1.49 million in 2010, only 68 percent of that of all wage earners. Fifty-eight percent of those employed by independent businesses with fewer than five people were paid under KRW 1 million per month on average, and 28.6 percent of these businesses were in the red (Hyundai Research Institute, 2012).

Deepening Income Inequality

While added value is concentrated around chaebols, employment in Korea is shouldered by other sectors. Income inequality continued to worsen after the foreign currency crisis. According to Kim Nak-nyeon (2012), the average income of the top one percent in Korea in 2010 was KRW 195,555 million, or 11.5 times the overall average. Before the foreign currency crisis, the top one percent took up about seven percent of overall income, but after the crisis, their share soared to 11.7 percent in 2008. The top 10 percent of earners (instead of the top one percent) before the foreign currency crisis accounted for about 35 percent of overall income, but this figure surged to a peak of 44.1 percent in 2008. As of 2010, it was 42.4 percent.

The concentration of income in Korea is higher than the average of 19 OECD member countries. Korea has the fourth-highest concentration of income of the top one percent of wage earners after the US (17.4 percent), the UK (14.3 percent), and Canada (13.3 percent). For concentration of income of the top 10 percent of wage earners, Korea was third after the US (46.3 percent) and the UK (40.4 percent).

As the percentage of income of the top 10 percent of high wage earners increases, the percentage of income among the remaining 90 percent declines.

According to Hong Sok-chul and Jun Han-kyung (2013), the most important factor contributing to the rise in income inequality in Korea is the increase in wage inequality, which makes up the largest portion of income. A look at the distribution of income of regular employees in 2011 showed that the top 10 percent earned 4.8 times more than the bottom 10 percent. The difference was four times in 2000, 4.5 in 2005, and 4.7 in 2010, showing the worsening of the gap over time.

Furthermore, according to OECD statistics, low income workers earning less than two-thirds of the median income make up 25.2 percent of all workers. This is the highest ratio among OECD member countries and the US, and no improvement whatsoever has been seen since 2000.

Worsening income inequality is also worrisome because of the manner in which it occurred. The problem arose not because of the concentration of income in one side, but because of the decline in the middle class and the rapid polarization of income earners into the high- and low-income brackets. According to Kim Nak-nyeon (2012), the size of the middle class (made up of income earners pulling in between 1.5 to 0.5 times the median income) declined

11 percent from 2000 to 2010. Sixty-two percent of those who dropped out of the middle class fell into the low-income class, while 38 percent moved up to the high-income class.

Rising income inequality has caused numerous negative side effects in Korea, including a continuous decline in the birth rate. As fears over low growth mount, skepticism is growing over the prospects of long-term growth in the Korean economy.

CONCLUSION

The Korean government over the past 60 years has gone in a number of directions vis-à-vis economic policy. Its first five-year economic plans came in the 1960s, the push to promote the heavy and chemical industries started in the '70s, and the country opened its economy and reformed its financial system in the '80s. Policy objectives evolved as opinions on the roles of the government and markets changed.

Select government actions in 1960s and '70s Korea would have been difficult to implement in democratic nations as they violated individual legal contracts, legal, property and bargaining rights, and the right to collective labor action. Companies that received preferential treatment from the government grew rapidly while others that did not stagnated. The government, not the market, had excessive influence over the rise and decline of companies, and debate over inequality and its consequences inevitably followed. After the 1970s, public demand for civil rights grew and more argued for changes in the degree and method of government intervention in economic activities. As demands for democracy spread throughout society at the end of Korea's authoritarian era in the 1980s, the government's role in the Korean economy was reevaluated. In the 1990s, Korea emerged as a major player in global trade, and the influence of chaebols that had achieved success abroad grew stronger. Korea was pressured to open its markets by trading partners such as the US, and sweeping privatization and deregulation followed starting with the financial market. During the 1997–98 Asian financial crisis and the recovery process that followed, competing opinions surfaced on the scope and method of appropriate government intervention. The country struggled following the privatization of sectors that had been under direct and indirect control of the government. Recently, economic growth has slowed down while the birth rate has plummeted, and demand is rising for better social welfare amid worsening unemployment and a rapidly aging population. These problems did not occur over the country's period of high growth decades earlier. The role of the government and its proper responses to these issues are being debated.

Korea in the past implemented aggressive industrial policy that allowed its government to distort the market and make independent investment decisions. Against the backdrop of the country's democratization, however, the roles of the government and markets have been reevaluated, and the nation's process of transitioning into an economy led by the private sector without government intervention has incurred high cost.

Even after privatization, banks that had long been quasi-public agencies under government control have inadequately performed their roles. Many banks were dissolved under structural adjustment conducted during the foreign currency crisis, and continued to operate under government control and intervention. The banking industry has not developed into a competitive sector. In the past, the government financially restricted chaebols as a means to both support and control them. After chaebols went global and the Korean financial market was opened, however, the government could no longer support or control chaebols as before. Yet even after democratization, Korea still lacks the institutional tools to regulate and prevent large companies from dominating the economy like developed Western economies have. Civil movements have grown, but the gap left by the government's reduced role has not been filled. The growth of chaebols has failed to bring equal opportunities or enhanced welfare, and social inequality has worsened. In addition, Korea faces issues commonly experienced by developed economies such as income and job polarization and a rapidly aging population due to a low birth rate.

As can be seen throughout this book, the Korean economy has proven its resilience by recovering from economic crises faster than others. The country has achieved stable and continuous growth, improved standards of living even in the most unfavorable conditions, and solved many problems faced by developing economies. How Korea tackles its latest challenges remains to be seen.

ENDNOTES

INTRODUCTION

1. Friedrich Hayek's article "The Use of Knowledge in Society" explains the advantages of pricing systems.

CHAPTER ONE

2. Japanese and Korean scholars strongly disagree on whether Japanese colonial rule had a positive or negative effect on the growth of Korean capitalism. Korea's feudal system dissolved after Japanese occupation, and Japan installed in its place more modern systems. Textile factories, rice mills, hydroelectric power plants, shipyards, railroads, and ports constructed for the Japanese colonialists in Korea served as substructures for "reconstruction in the 1950s and rapid transition into export-led growth in the 1960s" (Borthwick, 1992, p. 292). Mason and others said: "And yet, for all the hardships imposed on the Korean people, Japanese colonial rule laid some of the key foundations for Korea's later entrance into modern economic growth." (Mason et al., 1980, p. 7) Yet per capita consumption of key grains such as rice, beans, and barley fell during colonial rule, and the basic right to life for tenants was less guaranteed than it had been for peasants under the feudal system. Substantial evidence shows that the standard of living in Korea saw a fall in both relative and absolute terms as well. Amsden (1989) evaluated Japan's modern system the following way: "The end result of Japanese colonialism in Korea was a society that was unable to support itself and totally at odds. Peasant opposed landlord and those who resisted Japanese colonialism opposed those who collaborated. Under these conditions, the machinery of modern government that Japan had bequested was a useless inheritance. With a distended police force accustomed to domestic repression, and a minuscule army incapable of national defense, Korea once again fell victim to the Great Powers." (Amsden, 1989, p. 35)

3. The Korean War provided an opportunity for the South Korean military to expand qualitatively and quantitatively. Over this time, large groups of commissioned officers formed, and many officers in these groups gained exposure to Western society while undergoing US military training. These officers became key figures in leading policy under the Park Chung-hee administration after the 1961 military coup.

4. In North Korea, land reform was implemented in March 1946 through the method of uncompensated expropriation, free redistribution. Each household was allocated a maximum amount of five *jeongbo* (about 50,000 square meters) of land. Park Myeong-rim (1996), vol. 2, chapter 4, was referenced on North Korea's land reform.

5. Kim Il-young (2004) is referenced for a detailed discussion on the results of the agricultural land reform.

6. According to Kim Yang-hwa (1991), no efforts were made in the cotton and worsted industries to standardize and simplify the production process to raise output, though this was a basic method of business rationalization. The average equipment capacity of the eight businesses in the worsted industry was 4,500 spindles, but the international optimal capacity at the time was 20,000 to 40,000. The production capacity of Korean milling companies was only a third of the average of companies in West Germany and Japan.

7. Governments often intervene in exchange rates because the latter directly affects imports and exports. The exchange rate is largely decided based on two methods.
   - Fixed, pegged exchange rate: The government fixes the exchange rate of a specific currency at a certain level. This promotes international trade as the certainty of exchange rates increases, and instability caused by movements of speculative short-term capital can be removed. However, a demand-and-supply imbalance can occur and distort the trade balance, prices, employment, and resource distribution. Thus, governments that implement this strategy often implement flexible fixed, pegged exchange rates.
   - Floating exchange rate: The exchange rate is decided based on the demand and supply of foreign exchange. Under this system, the imbalance in the international balance of payments is automatically adjusted and effective resource distribution among countries is possible. On the other hand, economic activities shrink due to the uncertainty of exchange rates, which can also grow unstable due to movements of international short-term speculative capital. Many governments implement managed systems of floating exchange rate in which a central bank can easily intervene.

8. Counterpart funds refer to the aid in dollar amounts provided by the US government converted into hwan using the exchange rate agreed on by the Korean and US governments. The advance hwan payments to the UN military refers to UN military costs provided to the UN military in hwan by the Korean government, which was then repaid to the Korean government in dollars later.

9. Kim Nak-nyeon (1999) estimated that economic rent created by market intervention to modify exchange rates between 1955 and 1960 reached 16–19 percent of GNP, and rent created by exchange rate regulations 11–15 percent.

10. There are various debates on the cause of Korea's extremely high demand for education. Education's role in economic growth was a major factor, as education supplied the human resources that contributed to economic growth in the modernization process. Furthermore, individuals with higher levels of education received favorable treatment in the hiring process and had higher income levels. Koreans also believed (and still do) that education was an investment in the future. Korean Educational Development Institute (2003) was referenced for detailed analytical research on the country's zeal for education.

11. How much capitalism developed under the Rhee administration is a source of heavy controversy. Many criticize the lack of development and the backwardness of capitalists based on empirical evidence. Others, however, argue that the Rhee administration was disparaged to highlight the performance of the military governments that followed, including that of Park Chung-hee.

CHAPTER TWO

12. For more details on the continuity of the economic development plans of the Rhee and Yun-Chang administrations and the economic policy of the Park administration, refer to Lee Wan Bom (1999) and Lee Wan Bom (2004).

13. The export-import link system gave exporters the right to use all export proceeds for imports. Because this import right could be transferred, however, a premium market for import rights was formed. Currency was overvalued at the time, and it was more profitable to bring in imported raw materials and manufacture them to sell on the domestic market than to export them. But this system was difficult to maintain as it violated the General Agreement on Tariffs and Trade (GATT), which prohibited export subsidies in any form except for primary goods. The government also realized the need for more comprehensive measures such as exchange rate reform for export support instead of relying on the policy of export-import links.

14. Yang Woo-jin (2016) said that "in the process of implementing plans to achieve economic development to build an independent economy, it was impossible not to urgently seek all kinds of emergency measures. During the process of economic development from the 1960s to the '70s, a series of these emergency measures were implemented."

15. Many companies that brought in foreign capital at this time, however, considered foreign capital as special concession and brought them in hastily. These funds were not used effectively, and many of these companies became insolvent. Manufacturing's debt ratio (a company's total debts divided by its total assets) was around 100 percent until the mid-1960s, but after the 1965 interest rate policy, it grew exponentially to nearly 400 percent in 1970. As a result, insolvent companies were reorganized from March 1969. By 1971, more than 200 companies went bankrupt. After this, the Park administration aimed to decrease dependency on foreign capital in the process of heavy industrialization. The habit of heavily relying on loans developed over this time among Korean companies, however, and would become a significant problem in the Korean economy later.

16. Banks' balances worsened with the occurrence of the reversal phenomenon of the deposit-loan interest rate. From 1968 to 1972, the government lowered the rate gradually over four phases to resolve the issue.

17. Interestingly, in the process of registering private loans under the 1972 measure, a third of all registered private loans were loaned by company owners to their own affiliates. The existence of these "camouflaged private loans" showed the prevalence of corrupt companies that used corporate funds for private loans and companies that embezzled funds to enter the private loan business. They were deemed "anti-social companies" in 1973 and eventually collapsed along with all affiliates. This led to the enactment of the Act on Public Corporation Inducement in 1973 to force companies to make their businesses more transparent to those on the outside.

18. In the debate over normalizing diplomatic relations with Japan, Koreans wanted a formal apology from Japan for its colonial rule, and wanted the agreement to clearly state that financial support from Tokyo was compensation for colonial rule. Neither point, however, was discussed in the process of forming diplomatic ties. The agreement was thus maligned for a long time and criticized as humiliating to Koreans and hastily drawn.

19. Jwa Seung-hee (1998) argued that in an underdeveloped economic systems where property rights are not properly guaranteed because the government is unstable and the rule of law is not yet established, operating official and public businesses could require providing political funds and paying excessive taxes. He argues that chaebols elected to run unofficial family-run businesses because they wanted to avoid such burdens. At a time when businesses could be affected by non-economic factors, diversification was a rational choice. Jwa said government policy toward industry led to diversification as well, setting up barriers to entry for certain industries but providing generous support to companies selected to raise national competitiveness. So when a new business opportunity arose, all chaebols attempted to grab the opportunity, thereby diversifying.

CHAPTER THREE

20. The government focused on integrated steel and iron mills and petrochemical complexes, but because of Korea's inadequate technology and the enormous capital required to build factories in these industries, Korea had no choice but to fully rely on foreign technology and capital. Even after the plan was established, the government struggled to procure capital, and construction did not begin until 1969 and 1970.

21. O Won-chol played a key role in creating and implementing government policy toward promoting the heavy and chemical industries. With a degree in chemical engineering and known as an archetypal technical bureaucrat, he argued early on that the heavy and chemical industries had to be promoted as export sectors to achieve economies of scale. Technical bureaucrats played key roles in devising economic policy. In his autobiography, O wrote that he gave the following reply to President Park Chung-hee, who asked him in May 1972 how to boost exports over the long term. O responded by saying, "Mr. President! I think the time has come to launch the heavy and chemical industries. World War II left Japan in ruins. The first step Japan took to recover its economy was focusing on export sectors oriented toward the light industry, similar to what we are doing now. Afterwards, when Japan's exports reached US$2 billion, the country shifted its policy focus to the heavy and chemical industries. This was in 1957. Ten years later, by 1967, Japan's exports reached US$10 billion" (O Won-chol [1999, pp. 457–458], quoted in Kim Sung-nam and Park Ki-joo [2014]).

22. The government's fixation on economies of scale limited the number of companies in the domestic market, thereby stifling competition. It formed a monopoly system dominated by large companies in the domestic market.

23. Kim Joon-kyung (1993, pp. 162–163), quoted in Koh Young-sun (2010).

24. The acquisition of scientific skills was emphasized in the announcement of the policy promoting the heavy and chemical industries.

"The government will announce the 'heavy and chemical industry policies' that focus on the 'promotion of heavy and chemical industries.' Another point I'd like to make is that from now on, we must all take part in the 'scientification movement of all citizens.' Everyone must learn, familiarize themselves with, and develop 'scientific techniques.' Only then can our national power increase rapidly. Without scientific development, we cannot become an advanced nation. To achieve our goal of US$10 billion in exports and promote the heavy and chemical industries in the 1980s, we must focus on developing scientific techniques nationwide. All students from elementary school to university, adults, men and women of all ages, must learn technical skills. Only then will our national power grow rapidly" (From the New Year's news conference of January 12, 1973).

25. Debate rages over how severe overlapping investment and overinvestment were at the time and whether low operating rates and poor profitability were the result of the failure of the policy toward the heavy and chemical industries. Park Young-gu (2005) said low investment efficiency and operating rates generally occur early in the development of the heavy and chemical sectors, and because equipment at the time was designed for exports, the operating rate was inevitably low in the initial stages before exports began to increase.

26. The basic agreement for the normalization of Korean-Japanese diplomatic relations was drawn up in 1962. The US, Korea, and Japan all wanted Seoul and Tokyo to form official ties. The US urgently needed an alliance between Korea and Japan to resist the rise of socialism in South Asia. After taking power following the 1961 coup, the Park administration needed US approval and capital for economic development. Japan was expected to play a role in defending against South Asia. Afterwards, talks continued behind the scenes for two years, and were finally announced in 1964. In response, Korea's main opposition party immediately formed the National Committee Against Degrading Diplomacy with Japan and began campaigning all over the country. University students also

fiercely opposed the agreement. On March 24, 1964, students from Seoul National University held a rally demanding an "immediate halt to Korea-Japan talks," and on May 20, the university student alliance in Seoul held a "funeral for national democracy." On June 3, 10,000 demonstrators entered Gwanghwamun Gate and a police station was set on fire. The slogans of the protesters expressed opposition toward "degrading diplomacy," and even demanded the administration's resignation. This issue escalated into a huge political burden in the early years of the Park administration.

27. President Park Chung-hee appointed as head of POSCO Park Tae-joon, a retired general who had served with the president in the military. Park Tae-joon had demonstrated his business acumen while in charge of the public corporation Korean Tungsten Co. He headed the steelmaker for 27 years and oversaw record growth for the company, becoming a famous businessman in the process.

28. The Japanese technical team called the Japan Group was extremely helpful in the construction and operation of POSCO. The group was not only in charge of the master engineering plan for POSCO, but provided engineering structures and basic operation manuals for each factory. At the time, Japan's steel technology was more effective than those of other countries. POSCO was thus fortunate to bring in Japanese capital and technology and eventually introduce advanced processes in steel manufacturing during construction.

29. This section relies heavily on Park Yi-taek (2014) and Oh Gyu-chang and Cho Cheul (1997).

30. Choi Young-hwa (1970, pp. 214–215).

31. Toyota left the Korean market in 1972, and Shinjin Motors partnered up with GM to become GM Korea. The latter's sales stagnated in 1973, however, due to the oil shock, and became insolvent. Afterwards, the government-run Korea Development Bank took over GM Korea's shares of Shinjin and the company renamed itself Sehan Motors.

32. At the time, the domestic market prices of Korean cars were almost double that suggested by the government in its guidelines, which was US$2,000. Despite localization, the productivity of domestic suppliers of automotive components and finished automobile companies remained low compared to international standards, and the technical skills gap between domestic and advanced foreign companies was still large. Thus the export price of the Hyundai Pony was set to half of that domestically, and exports failed to help Hyundai's profitability.

33. The deposit insurance system was introduced in the US immediately following the Great Depression in 1934. In Korea, the Depositor Protection Act was enacted in 1995 and officially implemented after the establishment of the Korea Deposit Insurance Corp. in 1996.

34. This section refers heavily to the Kim Sun-ho (2013) report "Growth and Development of Korea's Exchange and the Stock Market."

35. The term "investment trust" comes from the phrase "have faith in the investment and entrust." Thus the investor does not invest directly but entrusts his or her funds to an expert in asset management who invests on the investor's behalf. Investment trusts vary depending on investment, such as securities, real estate, or commodities investment trusts. The most well-known securities investment trust has funds created using capital entrusted by the investor for investment in marketable securities (e.g., stocks, bonds, and derivative products) via professional investment institutions (e.g., investment trust or asset management company), and the profits earned from the investment is returned to the investor. Investment trust is an indirect investment method in which financial specialists use their knowledge and scientific analysis to make investments; this method is effective for regular investors who lack sufficient knowledge, information, and time.

36. Hyundai is a Korean company that grew into a multinational corporation thanks to the unique circumstances in the Middle East. Hyundai's participation in the Middle East began with its contract with the Arab Shipbuilding and Repair Yard Co. in Bahrain in October 1975. In December, the Korean company landed a project to build a naval base

in Saudi Arabia. In 1976, it secured the right to build Jubail Industrial Harbor for US$930 million, the largest construction project for a Korean company at the time. From 1975, when Hyundai first entered the Middle East, until 1979, the company earned US$64 million in foreign currency earnings, which was equal to 60 percent of the company's sales profit. Bolstered by such rapid growth, Hyundai was listed as one of *Fortune* magazine's top 500 global companies in 1976 and reached 78th on this list in 1979. (*Dong-A Ilbo* article dated July 30, 2013, and written by Heo Moonmyeong from his series on Kim Jihwa and his era).

37. Korea posted a current balance surplus in 1977 but also a trade deficit of US$470 million. As foreign currency earned from the Middle East flowed in, the capital balance surplus of US$1.3 billion was transferred to the current balance surplus.

38. This section references Jeon Kangsoo, 2012. "Gangnam Development under the Park Chung-hee Government in the 1970s." Institute for Korean Historical Studies no. 28, pp. 9–38.

39. The incident that occurred in large housing complexes in Gwangju (now Seongnam, Gyeonggi-do, shows how serious the housing problem was. The government reorganized Seoul's slums and promised to parcel out land and provide jobs to about 20,000 households or 124,000 people who had lost their homes. These people were moved to Seongnam, a suburb under development. Seongnam, however, remained incomplete and even lacked basic amenities such as drinking water facilities and bathrooms. The area was also desolate and lacked proper connections to buses and other forms of public transportation. The government failed to provide jobs as promised. On August 10, 1971, tens of thousands of angry citizens occupied government and public offices and held armed demonstrations. Source: Kim Dongchoon (2011).

40. Petitions against low wages, long working hours, and the poor work environment of young female factory laborers working as garment cutters and apprentices at Cheonggyecheon Stream in the late 1960s were submitted to administrative offices, including the Ministry of Labor and

Dongdaemun Office, but were ignored. A letter written by Jeon Tae-il provides a good account of the situation.

> "(Workers) rest only for two days a month on the first and third week.With such little rest, they will deteriorate no matter how physically strong they are. Regular public officials work an average of 45 hours per week, but young women working at factories aged just 15 perform 98 hours of tough labor per week. Skilled female workers of an average age of 20 have about six years of experience and have been severely underexposed to the sun to the effect that they suffer from eye disorders, neuralgia, and neurogenic gastroenteritis. Many skilled female factory workers also suffer from respiratory tract disorders or pulmonary tuberculosis . . ." (Kwon Tae-eok, 1995, pp. 398–400).

41. In August 1979, YH Trade, the country's largest wig manufacturer in the 1960s and '70s, announced that it was closing after the owner had misused government funds. A combined 172 female workers who opposed this demanded that the company return to normal operations and conducted a sit-in protest at the headquarters of the Shinmin (New People's) Party, the main opposition party at the time. In response, about 1,200 police officers were dispatched to the headquarters to maintain public order. They broke through the crowd of National Assembly and Shinmin members at the sit-in and arrested workers. Also taken into custody at his home was future president Kim Youngsam, who was the party leader at the time. An employee named Kim Kyungsook, 21, was killed, and reporters and leading Shinmin members were injured. Due to this incident, the party joined the labor movement and strongly resisted the Yushin Constitution.

42. Cited from the Bureau of Labor Statistics (2004), "International Comparison of Hourly Compensation for Production Workers in Manufacturing, 1975–2003."

CHAPTER FOUR

43. Bus production in Korea began in 1954 at a factory of Hadonghwan Motors, a company that specialized in bus production but later became an automaker. It was mainly active in the markets for buses, trucks, jeeps, and other non-sedan vehicles. In 1967, Hadonghwan formed a partnership with Shinjin Motors to manufacture buses and jeeps. In 1981, the company changed its name to Geohwa and then Donga, and was eventually taken over by Ssangyong Group before becoming Ssangyong Motors.

44. Japan feared that the international competitiveness of its products would worsen as the yen's value increased following the Plaza Accord; in response, Tokyo implemented expansive financial and fiscal policies to support its domestic economy. Japan's capital market was opened after the Plaza Accord as well, and foreign capital quickly flowed into the country, creating a bubble in which the Japanese markets for capital and real estate saw explosive growth. After the bubble burst in the Japanese capital and real estate markets, a long-term recession ensued. The Plaza Accord is thus seen as a factor that contributed to Japan's long-term recession.

45. Export price competitiveness is affected not only by the nominal exchange rate but also by the rate of change in prices in each country. So even if the won/dollar exchange rate did not change, if the rate of increase in prices in the US and Japan, two of Korea's trade partners, is relatively higher than Korea's, the competitiveness of Korean export prices against the dollar will increase. To accurately evaluate the export price competitiveness of a country, the real effective exchange rate, which reflects the rate of increase in the prices of trading partners, is used. The rate is calculated by dividing each trading partner's exchange rate with its price index to find the real exchange rate, and then the weighted average of the change in the exchange rate between the home currency and the currency of the main trading partners is calculated using the trade scale.

46. Kim Ki-won (2001) is referenced heavily in this section.

47. In Japan, many large companies also started out as family businesses and eventually grew into corporations. Problems associated with this structure surfaced in the 1930s. After World War II, such problems were solved after the US military government acted to break up conglomerates (Shibagaki, 1974).

48. Even after mutual investment was prohibited, mutual debt guarantees by chaebols continued. Such a guarantee occurs when Affiliate A borrows money from a bank and leading Affiliate B, belonging to the same chaebol, guarantees debt repayment. From the financial institution's viewpoint, the loan is safer because it seems as if the loan was provided to the main affiliate guaranteeing the loan. So through mutual debt guarantees, chaebol affiliates could procure funds relatively easily. This type of guarantee can distort the market if the financial market is underdeveloped, as Korea's was. If an independent company was competing with Affiliate A, the former would be in an unfair position because of Affiliate B. Another key issue is that a chaebol affiliate is rarely liquidated independently under the Korean chaebol system. So if Affiliate A goes bankrupt, so does the entire chaebol including Affiliate B. Unable to properly guarantee debt, mutual debt guarantees were banned in 1992.

49. On April 1, 1995, the limit on investment was lowered from 40 percent to 25 percent, but this was revoked on February 24, 1998, as a measure to defend the management rights of domestic companies after hostile M&As by foreigners were permitted. After the limit's revocation, however, investment grew among affiliates of conglomerates and the rate of internal ownership surged. This caused other harmful effects as well. As a result, the limit was reintroduced less than two years later in December 1999. On April 1, 2001, the government banned the acquisition of more than 25 percent of one's net assets in stocks of other companies. Yet even after the rule's reinstatement, it was repeatedly reduced, relaxed, and reintroduced until it was finally abolished in 2009 (Seo Ae-kyung, 2012; Korea Corporate Governance Service).

50. Two cases that vividly illustrated Korea's financial backwardness in 1982 and 1983 were the billing fraud committed by Cha Young-ja and Lee Cheol-hee and the bankruptcy of Myeongsung Group. In the first case,

Cha, who was related to the president by marriage, and her husband Lee, a graduate of the Korean Military Academy who served as deputy head of the Korea Central Intelligence Agency and a member of the National Assembly, used their positions and backgrounds to receive enormous expedited loans from banks and loaned them to companies with poor capital turnover. The couple received promissory notes from the borrowing companies worth two to nine times the loan amount as collateral, claiming this was necessary if the companies defaulted on their loans. The promissory notes, in turn, were sold at discounted prices to wealthy individuals who trusted the couple based on their position and background. The couple earned about KRW 140 billion in profit in what was called the largest case of financial fraud since the country's foundation. The couple gained an astronomical amount, and as a result of their fraud, two listed companies, Gongyeong Construction and Iljin Steel, went bankrupt, and other leading companies including Life Housing, Samick Housing, and Haitai suffered extensive damage. Furthermore, the presidents of Cho Hung Bank and Commercial Bank of Korea, the main creditor banks of these companies, were convicted and sent to prison. This incident shocked the nation's financial sector. Myeongsung Group was founded by the young businessman Kim Cheol-ho. His chaebol expanded quickly and owned 21 affiliates in just five years. The group mobilized private money lenders through bank employees and illegally received more than KRW 100 billion in support. Myeongsung collapsed after being charged with fraud and was ordered to pay KRW 11.2 billion in restitution. Sixteen public officials who accepted bribes from Kim and other related personnel were arrested and the group's four main creditor banks were subject to regulations. This resulted in the freezing of the financial market again.

51. Direct foreign investment in the capital market was prohibited until 1992.

52. Merchant banking corporations are corporate financing institutions. Instead of loaning money to companies, they function both as investment banks that invest by obtaining shares and as mid- to long-term equipment financing companies. After the Korea Merchant Banking Corp. was established in 1976, five more companies were set up until 1979, and the six-company structure was maintained until 1990.

53. For more detailed information on investment trust companies, refer to endnote 25.

54. Park Jong-chul, a junior linguistics major at Seoul National University, died in January 1987 after six detectives tortured him with water and electricity in an investigation room. Police initially lied about the cause of death, but the doctor who conducted the autopsy exposed the truth, and the government officially admitted to the torture five days after his death. The attempt to cover up the incident was denounced. In a mass demonstration demanding a democratic presidential election, Lee Han-yeol, a sophomore at Yonsei University, was killed after being hit with a tear gas shot by police. On June 10, the demonstration became uncontrollable. Eventually, the government announced on June 29 a constitutional amendment to allow an open presidential election. The large-scale rally that occurred on June 10, 1987, marked a turning point in Korean democracy in that the political system made the transition from an authoritarian dictatorship to a formal democracy (Jung Hae Gu, Hae-Jin Kim, and Sang-Ho Jeong [2004]).

55. The number of unions before 1987 might have been overestimated because many companies had "company-controlled unions" randomly organized for their own convenience. An important achievement of the labor movement in 1987 was that many of these company-controlled unions disappeared and unions that truly represented workers were established.

56. Wage hikes in the 1980s might have secured worker rights that had been repressed up until that point, but the double-digit rise in pay that continued through the 1990s greatly raised costs for companies and worsened their profitability.

57. The labor equipment ratio is calculated by dividing a company's physical assets by the number of employees. This is the amount of capital invested per employee. Generally, the heavy and chemical industries and similar capital-intensive sectors have high ratios, while labor-intensive industries such as textiles and clothing have low ratios.

58. The Public Concept of Land Ownership system received prominent public support, but aspects of the policy were irrational and unequal and implemented arbitrarily. The ensuing negative effects that occurred fueled a backlash against the system from many in the establishment. Eventually, the tax system for excess profit from land and the ceiling on land ownership were ruled unconstitutional in July 1994 and 1999, respectively, and the legislation became null.

CHAPTER FIVE

59. The real-name financial transaction system made anonymous and secret accounts illegal, but it was still possible to create borrowed-name accounts. Individuals could receive the consent of another person to use their name to open an account, though the financial assets belonged to the individual borrowing the name. These borrowed-name accounts became illegal in November 2014, 20 years after the law requiring real-name financial transactions took effect.

60. Shin and Hahm (1998) gave another reason financial institutions preferred short-term over long-term loans. In 1993, when the government relaxed regulations on the use of foreign currency loans, regulation of short-term foreign currency loans was relaxed while regulation of the volume of long-term foreign currency loans was maintained to control capital flow. As numerous merchant banking corporations were established and competition for loans between financial institutions intensified, the government further deregulated banks so that they could compete with merchant banking corporations. In this process, the minimum rate of long-term debt was from lowered from 60 percent to 40 percent, contributing to the rise in short-term foreign currency loans. (Shin and Hahm, 1998, pp. 27–28).

61. Maintaining high interest rates caused serious negative side effects and aroused high controversy. The IMF wanted to maintain high interest rates to attract foreign capital into Korea. This increased financial cost, and many companies went bankrupt because of monetary stringency due to retrenchment requirements. Some argued that because Malaysia had rejected a bailout from the IMF (the country decided that the IMF's policy of high interest rates was unjust), its recovery from the crisis was less demanding than Thailand's, which had followed the IMF's prescriptions. Because Malaysia did not apply high interest rates, fewer companies there went bankrupt, and the government could reduce the size of public funds injected into financial institutions. Furthermore, when the US subprime crisis occurred in 2008, Washington chose to implement a policy of ultra-low interest rates. Critics of the high interest policy claimed that the IMF's intent was to benefit foreign investors in Korea to secure their profits rather than help the Korean economy.

62. *Shindonga*. 1997. "Appearing to pursue financial liberalization while political powers dominate finance." March.

63. Removing the payment guarantee and lowering the debt ratio were necessary to reduce chaebol losses, but these measures were forcefully implemented in a short period of time and caused negative side effects. For example, to get rid of the payment guarantee and lower the debt ratio, many companies issued a large volume of stocks to expand their capital. The stock market, however, was considerably undervalued in the aftermath of the foreign currency crisis. During this time, foreign financial companies earned enormous profits by purchasing many Korean stocks and secured shares of Korean companies relatively easily.

64. Big deals are similar in appearance to the industry rationalization measures of the 1980s but based on economic principles. Companies were classified (either to be restored or liquidated) in these business exchanges. Big deals attempted to manage insolvent companies through open and transparent processes. Buyers were not selected in secret when insolvent companies were sold; the sale was open to buyers in Korea and abroad. Thus, the big deal is considered an improved method (Sakong and Koh, 2010).

65. Capital impairment occurs when the capital of financial institutions falls because their debts exceed their assets. If the debt amount is greater than

the amount of assets and capital combined, the financial institution becomes insolvent and bankruptcy is inevitable.

66. This chapter relies heavily on the Committee on the Sixty-year History of the Korean Economy (2010).

CHAPTER SIX

67. LG Card and Samsung Card each spent KRW 1 trillion to deal with insolvency. Samsung Card received fund injections from major shareholders Samsung Electronics and Samsung Life Insurance and affiliates to raise capital. LG Group, the major shareholder of LG Card, avoided taking on losses and funds were injected from creditor banks. LG Group, however, had to hand LG Investment & Securities over to creditors. Eventually, LG Card became normalized and merged with Shinhan Card in 2007, and LG Investment & Securities was sold to Woori Finance Holdings.

68. Venture capital firms or funds invest in companies by taking over their stocks rather than loaning to the investing company. If the companies receiving investment grow and get listed on the stock market, their shares are resold at a high price to make a profit. This investment method involves investing in relatively risky companies, but the promise of high profit from successful investment compensates for the risk, which makes it an appropriate financing method for high risk, high profit investments.

69. Gross national income (GNI) is calculated by adding trade loss and profit in GDP following the change in terms of trade and the net factor income from the rest of the world, which is the difference between income earned by nationals abroad and that earned by foreigners at home. The widening gap between GDP and GNI meant than imports were greater than exports and that income earned by foreigners at home was greater than that earned by nationals abroad.

70. Because chaebol companies avoid boosting employment, the ratio of wage laborers in the Korean market is 71.2 percent, far lower than the OECD average of 83 percent, and Korea ranks 18th out of 21 comparable countries.

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3, 84, 200, 234, 254

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21, 50

Yonhap News
150