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1997 Korean Financial Crisis: The Major Shift in the Industrial Policy

I. Introduction

In early 1990s, South Korea achieved remarkable productivity levels along with other East Asian countries including Taiwan, Singapore, and Hong Kong. Leading a high-tech industry, they went through a rapid growth. While Korea was going through "phases of globalization and then industry upgrading, away from the labor intensive exports," large conglomerates, called the chaebols, "amassed tremendous influence and dominate the economy ever since" (Wan, 2006). Some of the biggest conglomerates include Samsung, Hyundai and Daewoo, all of which were leaders in the technology and automobile industries. The success of the Korean economy was attributed to the government's adoption of strategic trade policy and industry policy for export-oriented development (Kwon, 1997) that favored the chaebols. In this process, the policy was "implemented largely through government control over credit allocation," which ultimately "generated the underlying causes of the crisis"(Jung and Lee, 2000). The government's intervention in the microeconomy created an inefficient financial sector where economic power was concentrated only on "a limited number of chaebols that adopted strategies of excessive expansion and diversification with debt capital"(Jung and Lee, 2000). After several signs of slowing, Korea's financial structures started crashing down. The inefficient financial sector and the highly leveraged corporate sector rendered a financial crisis in 1997.

The economy's weak fundamentals brought the country investment panics and currency devaluations. In November of 1997, the Korean government officially requested a bailout package to the International Monetary Fund (IMF). With a massive amount of short-term debt and a shortfall of foreign exchange reserves, Korea had to "[abandon] the traditional industrial policy of promoting targeted industries" (Jung and Lee, 2000) and carry out a restructuring throughout the entire economy. In this process, many corporations were forced out of the market and the economic crisis was aggravated. The bailout, however, ultimately improved the soundness of the financial institutions and the industries of Korea.

The structural reforms that the Korean government undertook contributed to the fast economic recovery after the crisis. Behind the success existed a major "shift in Korea's industrial policy – from promoting targeted industries to promoting innovation-related activities through market forces" (Jung and Lee, 2000). The paper examines the pre-crisis industrial policy of the government in part II and related macroeconomic indicators in part III. Then, the progress of the crisis will be explored in part IV. Most importantly, the economic restructuring that the nation went through will be discussed in the last part.

II. Pre-Crisis Industrial Policy

In order to develop an export-oriented development after achieving one of the fastest growths, the Korean government intervened in the market through credit control. It was first started under the micro-management of President Park Jung Hee who was in power during 1961-1979. With the credit control, which included "fixing credit ceilings for each banking institution and prior approval of bank credit," (Jung and Lee, 2000) the government had large control over the market. It was able to easily "[achieve] the nation's monetary target and [supply] the necessary funds to the government-targeted industries" (Jung and Lee, 2000). Since large corporates had a high demand for capital, the government aimed to gain control over them through credit allocation. By making the interest rate artificially low and thus creating an excess demand for capital, the government decided to subsidize targeted industries. Business groups who were heavily dependent on the low-rate and short-term loans offered by the government could "face certain ruin overnight, should the State banks call in their loans" (Wan, 2006). Therefore, it was easy for the government to exercise control over the chaebols.

The government also interfered commercial banks in deciding who could obtain loans and who could not (Kim, 2003). Therefore, corporate financing and corporate governance in Korea was heavily affected by this credit rationing of the government. The exporters who were subsidized by the government, borrowed heavily from banks to finance their investments and capital expenditures. Because Korea lacked "sophisticated institutional and regulatory framework"(Jung and Lee, 2000) necessary for corporates to develop equities, companies, especially those in the high-tech industry had to borrow only from banks to finance their investments and capital expenditures. Chaebols, especially those in the manufacturing industry, depended largely on financial intermediaries for financing than on bonds or stocks, because of a poor functioning of the securities market. The government put an effort to diversify the means of financing; however, the infrastructure of the securities market was too weak for such diversification.

The government's control over the banks resulted in bank incompetency. Although the banks were the primary source of funds for corporates, they could not independently assess the credit risk of borrowers to the government's intervention. Therefore, banks had to rely on collateral loans. With insufficient information about the firms' financial status, the number of non-performing loans increased. Without any "efficient mechanism to control the provision of credit to corporation or to enforce stricter supervision of [the] financial institutions,"(Jung and

Lee, 2000) firms voluntarily switched their financing method from indirect financing to direct financing. As a result, the change brought moral hazard and adverse selections, further deteriorating their financial soundness. The firms accumulated excessive amount of debt, which served as a catalyst for the financial crisis. As can be seen in Figure 1, the debt to equity ratio of Korean firms was far higher than that of their peers in other countries in the similar period; the ratio of Korean firms is more than two times greater than that of Japanese firms.

(in %)

	Korea (1997)	US (1996)	Japan(1996)	Taiwan (1995)
D/E	396.3	153.5	193.2	85.7

[Figure 1] Comparison of Debt to Equity Ratio in Manufacturing Industry

The corporate governance in Korea got distorted under the underdeveloped securities market. Because the banks were not exposed to competition under the government's interference, the market could not achieve an institutional development. This allowed the chaebols to have complex corporate governance structures. They were managed by individual families and their subsidiaries owned a large amount of shares of each other. [Figure 2] indicates that the founders of the chaebol groups and their relatives, in fact, had a relatively small percentage of ownership. Yet, they exercised significant influence on the corporate governance.

Business Group	Founder	Relatives	Member Companies	Total
Hyundai	3.7	12.1	44.6	60.4
Samsung	1.5	1.3	46.5	49.3
LG	1.1	5.6	33.0	39.7
Daewoo	3.9	2.9	34.6	41.4
Sunkyong	10.9	6.5	33.8	51.2
Sangyong	2.9	1.3	28.9	33.1
Hanjin	9.5	12.6	18.2	40.3
Kia	17.1	0.4	4.2	21.7

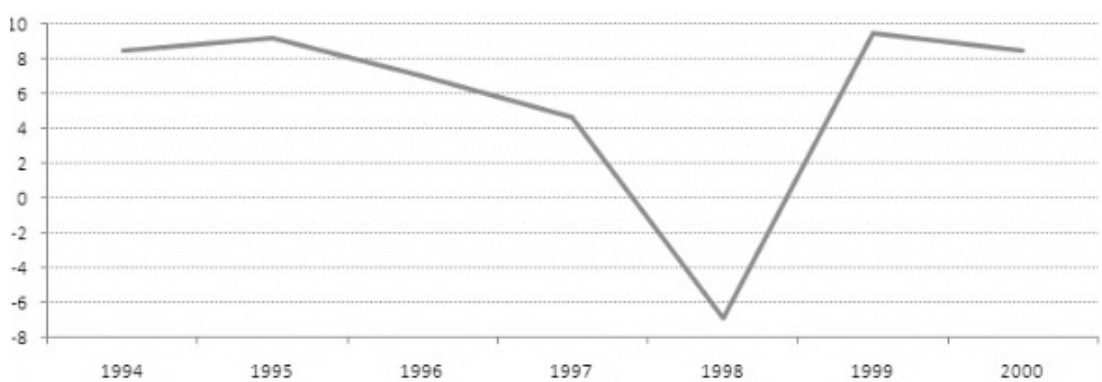
Source: World Bank (1998).

(% of common shares held)

[Figure 2] Ownership of Korean Business Groups By Insiders

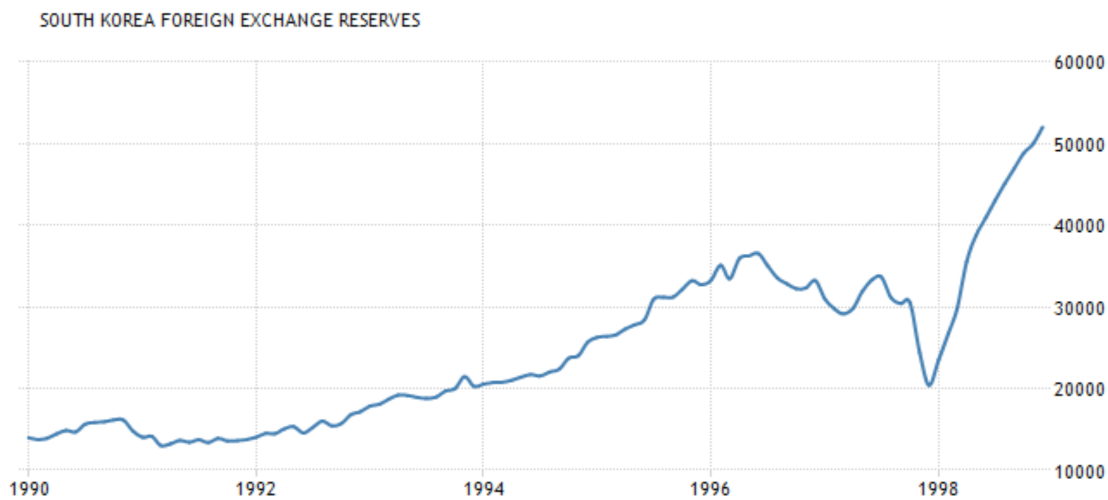
III. Macroeconomic Overview Before the Crisis

As can be seen in [Figure 3], there had been hardly any sign of potential recession in the real GDP growth rate prior to 1997, although the GDP growth had been constantly slowing since 1995. The rate reached its peaked at 9% in 1995 and went down to only 4.7% in 1997, a relatively moderate decrease considering the big plunge in economic growth after the government's bailout request to the IMF. Then, the economy went through a significant downturn starting late 1997, with the growth rate falling to -6.8% in 1998.



[Figure 3] The Real GDP Growth Rate of Korea (Statistics Korea)

The principal reason the government requested for the bailout package to the IMF is the lack of foreign exchange reserves to payoff its foreign debts. As seen in [Figure 4], the reserves had been constantly increasing since 1991. However, in just a few months, they dropped sharply right before the crisis. A large decrease happened in such a short term, because (1) the government intervened to protect the exchange rate too much and (2) the foreign reserves were used for the government guarantees on bank deposits (Sung et al., 2010).



(in million $)

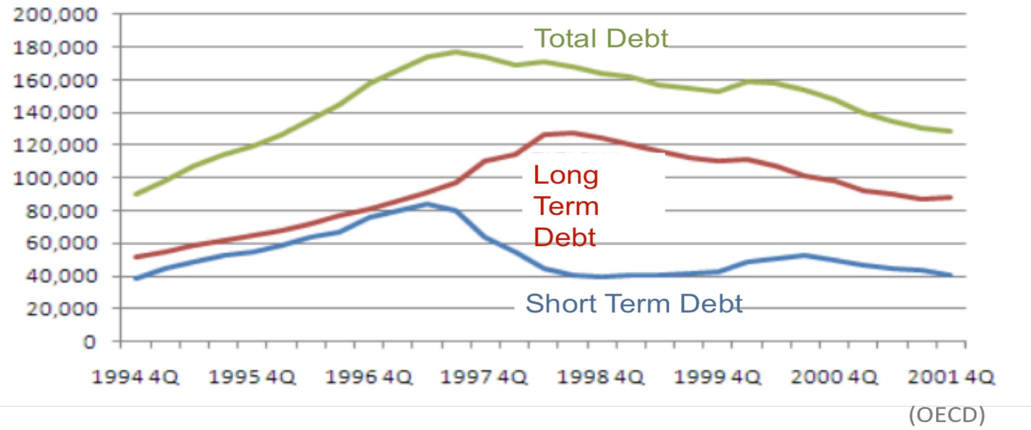
[Figure 4] South Korea Foreign Exchange Reserves (tradingeconomics.com)

The current account of Korea had also been dropping since 1994, as can be seen in [Figure 5]. The current account deficit worsened as Korea experienced a downturn in semiconductor industry and a decrease in export due to the weakening of the Japanese yen against the US dollar in 1996. At that time, the government had been using the limited flexible exchange rate system, in which the range of fluctuation in the rate was limited. Since the US dollar weighed heavily in determining the Korean won, the currency did not depreciate as much as it should have despite the yen depreciation (Kim, 2006). While the government's intervention allowed Korean won to maintain a certain range of values, it actually increased the pressure of the currency depreciation that followed the growth of current account deficit. Then, the repeated cycle of the government's attempt to prevent the devaluation led to an exhaustion of the foreign exchange reserves. Korean won sharply depreciated in the beginning of 1998 and slowly stabilized in 1999. Since the government freely intervened in the country's foreign exchange rate, the won was able to hold up a pressure of depreciation, even with the accumulation of the current account deficit.

(in million $)

[Figure 5] Current Account of Korea (MoM) (Statistics Korea)

The biggest macroeconomic factor that led to the start of the financial crisis is the increase in foreign debt, especially short-term loans (Krugman, 1998). Under the implicit guarantees of the government on the balance of payment, the banks tried to increase its sizes, making as many foreign loans as possible. This also contributed to firms' making excessive amount of debt. When the financial crisis that started in Thailand and Indonesia spread to Korea, foreigners started to withdraw loans near maturity and the financial institutions suffered from bankruptcy. The government requested a bailout to the IMF, as the foreign reserves of Korea could no longer stop the chain of bankruptcy (Sung, 2005). The excessively high debt to equity ratios of the corporations led to even more cases of bankruptcy. As can be seen in [Figure 6], the short-term foreign debts were increasing at a faster rate than the long-term debt until the third quarter of 1997. From the fourth quarter, the amount of long-term debts increased, as the government received loans from the IMF and extended the maturity of the debts. On the other hand, the amount of the short-term debts decreased as foreign creditors started to pull their money out from the country, and it remained low since then.



[Figure 6] Foreign Debt of Korea (QoQ) (OECD)

The crisis is also attributable to the weak financial soundness of domestic banks. Focusing too much on profitability, the banks neglected the capital adequacy ratio, the ratio of a bank's capital to its risk. The banks got in a deadlock and ended up in insolvency with a sudden exit of foreign reserves. The capital adequacy ratio started to diminish but never went down below 8% until 1996. However, this was mainly due to the banks' inaccurate valuation of their distressed assets and allowances for bad debts (Shin and Yang, 2000). In other word, the ratio was actually lower than that which the government had released. The amount of non-performing loans also increased during 1992-1996, and the stock prices in the banking industry fell in a greater degree than the stock indices did.

The shrinking profitability of the chaebols indicated that the depression was already in progress in 1996. Their profitability plunged in 1996, as seen in [Figure 7] where their returns on asset dropped to as low as 0.23% in 1996. A complex corporate governance structure of the chaebols also worsened the situation. They used "cross-equity shareholdings as a way to support weaker affiliates and reduce on paper their reported debt-equity ratios" (Coe and Kim, 2002). Therefore, when one subsidiary was bankrupt, there was a high probability that another subsidiary would also be bankrupt. The risk of bankruptcy of the chaebols was high, because the industries in general were in bubble with abnormally high debt ratios.

(in %)

Rank	1993	1994	1995	1996	1997
1st - 5th	1.86	3.54	4.86	1.41	0.43
6th - 10th	0.87	1.17	1.1	-0.49	-2.15
11th - 30th	-0.4	-0.06	-0.08	0.08	-3
Avg	1.11	2.19	3.15	0.23	-2.13

[Figure 7] Average ROA of Korean Chaebols (Statistics Korea)

IV. The Progress of the Crisis

The rapid depreciation of the Thai baht in July 1997 created a troubling atmosphere. Most foreign exchange rate-policies in East Asian countries at that time were operated with the possibility of government intervention as a viable option, rather than calling for a complete market system. Thailand was enacting a multicurrency basket policy, while Indonesia and the Philippines enforced a restriction on the range of daily exchange-rate fluctuations (Sung et al, 2010). Malaysia operated on a supervised fluctuating exchange-rate policy. Korea, like Indonesia and the Philippines, enacted a policy that restricted the exchange rate fluctuation range. The government's efforts to neutralize the threat of currency depreciation through exchange rate intervention finally fell apart, resulting in the big drop as evidenced in the history.

In July, Thailand suffered from currency depreciation, while Indonesia was victimized in August; people naturally feared that Korea, which had been enacting similar policies as the other two, was up next. Eventually, in September, parts of Korea's foreign exchange market became paralyzed. Under the depreciation pressure caused by accumulating current account deficits, the Korean foreign exchange reserves, which were already exhausted to safeguard against defaulting on the payment of short-term foreign debts, could not stop the large-scale withdrawal of foreign currency. Companies that imported raw materials were particularly affected in their production capabilities. The abnormally high debt ratio recorded in all industries and the complicated corporate governance of the chaebols groups carried the risk that one bankruptcy of a company will lead to another in the same industry. The excessive amount of foreign debts brought about the exit of foreign investors along with the financial crisis in other Asian countries. Facing the chain of bankruptcies, Korean government officially asked for a bailout to the IMF in November.

V. Economic Restructuring After the Crisis

(1) Financial Restructuring

The crisis in Korea was a liquidity crisis that came from mismatches in maturity and inadequate capital structures in the balance sheets of the financial and non-financial corporates. Therefore, the injection of currency reserves was necessary. In December 3, 1997, the Kim Young Sam administration (1993-1998) started the financial restructuring after a long discussion with the IMF. The government came up with macroeconomic policies and restructuring plans according to the recommendation of the IMF. The government independently sought funds from international financial institutions. It was offered $58.4 billion by the IMF and other international financial institutions (Ki, 2006), but the 40% of the bailout money was reserved as a buffer against inadequate funds. The rest was to be offered as installment payments until 2000, with each payment conditioned upon the progress of the structural reforms and monetary and fiscal policies (Ki, 2006). Until December 18th, the Korean government was able to withdraw only $9.1 billion out of the huge amount of the funds that were offered.

This amount was, however, insufficient for covering the country's short-term obligations. The foreign reserves dropped rapidly as foreign creditors refused the rollovers for the short-term debts. On the 18th, The Bank of Korea released that the month-end foreign reserve balance would be anywhere from -$600 million to +$900 million. The uncertainty further drove the exit of the foreign creditors from the country, "pushing the country to the verge of a sovereign default in less than two weeks after the initial agreement was signed" (Kim, 2006). With the help of the U.S. government, however, Korea was able to negotiate with the IMF to demand greater proportion of the bailout money and with the foreign financial institutions to extend the maturity of short-term debts. Though charged extraordinarily high interest rates ranging from 7.91% to 8.41%, Korea was able to restructure nearly 95% of its short-term debt by March, 1998 (Kim 2006).

In addition to the debt restructuring with the bailout money, the Korean government had to follow the IMF's bailout program that consisted of two parts. The first focused on stabilizing exchange rates and expanding foreign reserves. The government eliminated the regulation on the volatility in exchange rates. It also kept the interest rate high to increase the current account, by encouraging the foreign capital and reducing the domestic capital outflow. With the success of the debt restructuring and the government's financial reform, the GDP growth rate finally started to show an upward trend after 1999. After the government minimized its influence on the foreign exchange rate, the market value of won dropped. The won-dollar exchange rate, which peaked at 1,965 KRW/USD in December, 1997, sharply dropped to a range of 1,600-1,800 in January, 1998 and then stayed at 1,200 range at the year end (Kim, 2006). The depreciation was then followed by the current account surplus. At the same time, however, the high interest rate accelerated the bankruptcy of numerous corporates. Therefore, in April 1998, the program went through a revision after the IMF saw some stability in the economy. The second part of the program focused on the economic recovery and price stabilization. The government stopped maintaining a high interest rate, allowing the nation to achieve one of the fastest economic recoveries in the world.

Approved by the National Assembly, the Korean government was able to collect approximately 54 billion dollars by issuing bonds and used it all until the end of 1999. The amount of total public funds ran to 13.03% of the GDP in 1997. Considering that the government adopted a tightening fiscal policy, this was a significant size of funds. A large number of nonperforming loans that followed the bankruptcy of the chaebols played an important role in the collection of such funds. The government, which did not actively implement the expansionary policy right after the crisis, had enough funds to support the financial institutions in distress.

The government also forced five banks out of the market. The remaining banks were bailed out by the government, acquired or merged by foreign capital. Since the government enacted the Foreign Capital Inducement Act in May 1998, "hostile takeovers by foreigners have been permitted, though in reality they have been impeded by an extensive web of cross-shareholding" (Marcus, 2000). Even after the end of the financial crisis, the merger and acquisition in the banking industry continued, leading to the formation of big banks and financial holding companies.

(2) Corporate Restructuring

The government needed ways to restructure corporates that were on the verge of collapse. They were in a distressed financial condition when their “high leverage, short-term loans, and un-hedged foreign borrowing proved ruinous with a sudden currency depreciation and interest rate surge” (Jung and Lee, 2000). In addition, the corporate governance of the chaebols who “used cross-investments as a way of recapitalizing weaker affiliates without actually investing funds and for lowering debt-equity ratios for the entire group” became very unstable. The government previously “placed limits on affiliate’s cross-shareholdings” in 1998, but failed to do so “in response to complains that [chaebols] left affiliates vulnerable to hostile takeovers by foreigners” (Coe and Kim, 2002). To resolve these issues, the government decided to adopt a policy to strengthen the financial soundness of the corporates. Based on the principles of corporate restructuring that the Kim Dae Jung administration (1998-2003) decided to work on, the Financial Supervisory Commission proposed five guidelines to increase the effectiveness of corporate governance.

1. Chaebols will be required to submit combined financial statements to enhance their transparency.
2. Existing cross-debt guarantees between affiliates should be eased by the end of 1999.
3. Chaebols were required to reduce their debt to equity ratios to 200 percent by the end of 1999.

4. Chaebols will be encouraged to concentrate on their core business lines through 'Big Deals', or asset swaps among the five largest chaebols.
5. Chaebols will be required to appoint outside directors and maintain a formal system of checks to strengthen monitoring. (Jung and Lee, 2000)

The policy implemented by the Kim Dae Jung administration helped the economy to restore its growth, although it was not the same growth as the previous one. Yet, the policy was much more successful than that adopted by Kim Young Sam. The Big Deals, which involved "business swaps among the chaebols as a mechanism to focus the groups on a limited number of core competencies" is what President Kim Dae Jung pushed for. As the government had planned, the top five Chaebols except Daewoo Group succeeded in lowering their debt to equity ratio and the number of subsidiaries. However, the reduction in the ratio was partially due to the elimination of "cross-equity holdings across affiliates which artificially lower debt ratios without any real debt reduction or capital expansion" (Coe and Kim, 2002). Until 1999, many chaebols were not able to cover their short-term debts and were exposed to the risk of the economic downturn and the slide of the interest rate. Still, some improvements in the capital structures allowed the government to get rid of "all cross-debt guarantees among chaebols units and affiliates, except for deferred payments allowed under the Fair Trade Act" (Jung and Lee, 2000).

Even with the workout program pushed by the government, the corporates remained in distress and faced "uncertain prospects when grace periods on debt service [expired]" (Coe and Kim, 2002). In addition, the chaebols under court-supervised insolvencies were extremely slow in recovery. It was because they lacked "expertise in bankruptcy procedures within the court system" and had "gaps within the insolvency procedures that favored the interests of debtors over those of the creditor" with the "small pool of qualified court-appointed trustees" (Coe and Kim, 2002). The uncertain prospects also contributed to the delay of the recovery. There was still a lot of work to be done for the government to restore their financial soundness until 1999.

Corporates were eventually able to survive with less assistance after going through the restructuring. Korea experienced a strong economic recovery with the stock market boom in 1998-1999. The high growth period that Korea enjoyed before the crisis, however, did not return. Following the high level of growth in 1999–2000, the economy started slowing down again. The domestic demand was insufficient to support the nation to "maintain a growth rate far above the advanced economies" (Wan, 2006). According to Wan, the two factors that limited Korea's export expansion are the end of Japanese recession and inadequate compensation for "the loss of American markets to Chinese competitors" (Wan, 2006). The fast recovery and the current growth rate show that the firms have gotten stronger since the crisis, but they do not indicate that the large conglomerates that went through the distress are now able to survive without the government's assistance. In fact, the chaebols still maintain a privileged position in the economy with number of industrial policies that were designed to favor them. The assistance before the crisis that was initially started by President Park was necessary in that it gave corporates in Korea a chance to expand without restrain, but it was a reckless decision that made the corporates to expand their operations regardless of their capacity. Even after the restructuring effort of the government and with the stronger financial structures and corporate governance, large corporates still seem to need the cocoon of the government.

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