

# The Impact of the Korean War on the Korean Economy

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## Introduction

The three-year long Korean War (June 25, 1950 - July 27, 1953) devastated both South and North Korean economies. It broke out when the two Koreas barely managed to maintain socio-economic stability and restore pre-WWII industry production capability to some extent. The distorted and exploited economy by Imperial Japan was demolished by the brutal war. It started out as the appearance of a civil war, but in effect was carried out as an international war. Thus, it was a severe and hard-fought one between UN forces (including South Korea and 16 other nations) and North Korea and its allies (China and USSR). Although it took place in a small country in Far-Eastern Asia, it developed into a crash between world powers, East and West, and left treacherous and incurable wounds to both Koreas. Nearly four million people were presumed dead, and much worse were the property and industrial facility damages.<sup>1</sup> Its impact on the Korean economy was so immense that consequential economic systems and policies re-framed the course of economic development in the following years. In spite of such enormous impacts of the Korean war on the economy, few studies exist. Of those that do, most are centered around describing or estimating war-related damages, while some focus on the long-term effects of US aid on the Korean economy.

The objective of this paper is to analyze the short-term direct impacts of the Korean War on both Korean economies and its long-term effects on their economic structure. To do this, section II will summarize the estimates of human casualties, non-human damages, production losses and rampant inflation rates, and so on. In addition, it will analyze how the war effected two major national economic reform policies, i.e., the farmland reform and privatization policies on

confiscated enemy properties. In the following section, the paper will deal with consequences of US aid brought about upon the Korean economic structure, and reevaluation of the Korean economic policy mishaps at the same time.

### *Short-term Direct Economic Impacts*

The immediate effects of the Korean war can be examined in three different aspects; destruction of industrial facilities and resulting disruption of productive activities, extreme over-issue of money and consequent hyper inflation, and discontinuance or distortion of two prime national economic reform policies.

#### **1. Damage Estimates**

Destruction ratios of major industries during the first four months of the war were estimated as high as 70% of textile industry, 70% of chemical industry, 40% of agricultural machinery industry, and 10% of rubber industry (ECA Report, October, 1950). In addition, the Korea Transportation Ministry statistics revealed that about 600 thousand housing units, 46.9% of railroad, 1,656 roads of a total of 500km, and 1,453 bridges totaling 49km were destroyed during the war. Furthermore, by August of 1951, 44% of factory buildings and 42% of production facilities lay in ruins. Among all, damages in the mining industry were the worst; about 51 % of the industry was destroyed and the estimated amount of damage was as high as US\$549 million, accounting for 23.3% of all industrial damages. Damage of power plants was even more devastating with nearly 80% destroyed. Within two months since the start of the war, power production plummeted down to a miserable level of 11 thousand kwh, about one-eighth of the 1948 production level of 80 thousand kwh, which was equivalent to one tenth of the power consumption level in 1945.<sup>2</sup> Such massive destruction of electric facilities brought about a drastic cutback of productive activities. The total war damage was estimated as high as 41.23 billion *won*, equivalent to US\$6.9 billion when the official exchange rate was applied (US\$2.3 billion with the market rate). It was also equivalent to 86% of the 1953 GNP, although the 1953 net commodity production remained at 27% lower than 1940 level (the 1953 per-capita net commodity production was 44% lower than the 1940 level). Consequently, foreign trade deteriorated from US\$208 million in 1948 (including US\$188.3 million government imports) to US\$2.9 million in 1950.<sup>3</sup> Even rice crops fell down to a 65% level of the average annual product of the 1945 - 1950 period. All these factors led to serious inflation.

## 2. Hyper Inflation

What aggravated the galloping inflation was the over-issue of currency. During the first three months of the war, the total money in circulation was increased by 72%.<sup>4</sup> Temporary increase in taxes could not meet the huge demand in war expenses, which accounted for about 50% of the national budget. The government filled the gap by borrowing from the BOK, i.e., issuing new money. About 90% of the money increase during the first six months of the war was used to finance government expenses. To exacerbate the situation, Korea had to provide UN force with loans in Korean currency according to the Taegue Agreement - an agreement of UN forces expenditure. This factor alone contributed to 79% of the money increase during the three year period of war (June 1950 - July 1953). Money in circulation increased by 24 folds between June 24, 1950 and July 31, 1953. As of December 31, 1953, it again increased by 42 times. The magnitude of the loan was so huge (17,748 million *hwari*) that even enormous sales revenue of aid materials only redeemed 40.6% of the loan until the end of the war (see Table 1, page 100).

## 3. Distortion of Two Major Economic Reform Policies

Two major economic reform policies, that were about to be executed after long hardheaded disputes, were suspended due to the breakout of the war. Although the reform projects were resumed, they were subject to distortion during the war period. The farmland reform bill was enacted in June 1949, and its enforcement laws were promulgated in April 1950.<sup>5</sup> The enemy property privatization bill was passed by Congress in December 1949, and implemented in June 1950, starting with public auctions in Seoul. In spite of the sudden disruption by the war, the two reforms were resumed soon because of their significant implications for the establishment of market economy system in Korea and because of the huge funds needed to carry out the war. In consequence, the reforms were destined to be executed for reasons other than the original ones. No originally planned objectives could be achieved in such a situation. The farmland reform, for example, was executed for the wrong reason of providing war supplies. Thus the farmers who wanted to buy distributed farmland, had to pay 150% of the average annual product, 30% each in five years with farm products (not with money).<sup>6</sup> This obviously created a tremendous burden to new farmland owners in times of war and galloping inflation, especially when the wartime temporary farm family income tax was levied based on the revised land tax law in September 1951. The tax rate was applied progressively from a 15% to a 28% level,<sup>7</sup> and again it had to be paid with farm products.<sup>8</sup>

**Table 1: Money Issue by Factors during the Korean War**  
(Unit: Million *Rwan*)

	Fiscal Fund	UN Force Expenses	BOK Credit	Sales of Aid Materials	Foreign Exchange Sale	Others	Total Change
1950.6.25	1203	548	37	93	-	A/46	1335
1951	A4	3623	724	A1440	-	384	3287
1952	A694	5553	2754	A2954	A217	123	4565
1953	15893	8027	6882	A2904	A15719	811	12987
<b>Total Composition</b>	<b>16398</b>	<b>17748</b>	<b>10397</b>	<b>A7205</b>	<b>A15936</b>	<b>1172</b>	<b>22574</b>
<b>Ratio in %</b>	<b>(73)</b>	<b>(79)</b>	<b>(46)</b>	<b>(A33)</b>	<b>(A71)</b>	<b>(6)</b>	<b>(100)</b>

Source: Recited from Dae Keun Lee (1989), p. 149, table 2

Note: 100 old currency (*won*) was converted into 1 new currency (*hwari*) in the Feb. 17, 1953 Currency Reform.

In addition, farmers had to sell one third of their products to the government at an official price set by the government, according to the newly established law of grains management in 1950. The overall burden to new farmers was so enormous (approximately 50% of the value of annual product) that as of the end of 1954 about 10% of them sold their land again and became leased-land workers or left for cities.

It is necessary to note that between June 25, 1950 and February 15, 1953 (currency reform), the WPI index rose 18 times, and rice prices rose 22 times. In short, distortion of the farmland reform together with heavy land tax burden and compulsory sales to the government could by no means encourage farming or improve production, although the reform could end semi-feudalistic land ownership.

Old landlords, on the other hand, were forced by law to sell all the farmland that was in excess of three *chongbo* in size. They received a kind of voucher called Farmland Price Securities in return for the sold farmland. The value of 150% of the average annual product was redeemed, based on the government-assessed farm product price, but 30% each in five years in the form of a voucher in times of treacherous inflation. The only benefit accorded voucher holders was that they could use it to purchase enemy properties at public auction, although instead most of the vouchers were traded for 20-30% level of its face value.<sup>9</sup>

One of the original objectives of the reform was to create industrial capitalists by offering benefits for landlords to be able to purchase confiscated enemy factories and businesses with the land-price voucher. This, however, could not be accomplished not only because real value of vouchers plummeted with soaring inflation rate, but also because government redemption was carried out by 28% up until May 1955. Thus even landlords who received their vouchers as a redemption simply sold them even at the 20-30% level of their face values.<sup>10</sup> Only 5% of the largest 1.4% of landlords, who owned farmland of size over 20 *chongbo* (1 *chongbo* = 0.993 hectares), participated in enemy property privatization and up until 1958 only 40% of the vouchers issued were used to buy enemy properties. Of course there was little incentive to buy factories, many of which were destroyed during the war.

The government acquired needed rice for war supplies through farmland reform and took advantage of the difference between its sales revenue and redemption payment. Although such government policies contributed to the fight against inflation," both landlords and new independent farmers were severely impoverished accordingly. Most of all, original objectives of the reform were lost in the war's consequences.

The Korean government also went ahead and resumed sales of the confiscated enemy properties (production facilities or business firms) through auction, but only in a limited area, Kyungsang province, south-eastern part of Korea which was the only non-occupied area at that time. What the government hoped for from these sales was to create new industrialists, and to encourage production by new owners, and thereby to contribute to alleviate ferocious inflation. Although special privilege was given to former landlords or voucher holders to use their vouchers at public auction on enemy properties, most of them gave up their benefits due to the plummeted real value of vouchers and the difficulty of operating business in times of war. As a result, by the end of March 1953, less than 7% (20,955 cases) of the enemy properties (29,906 cases) were sold for a total of 263 million *hwan*. Thus, another objective of the reform, to make up fiscal deficits with sales revenue of enemy properties, also could not be realized. Only 1.5% of the sales revenue during the 1949-1955 period was transferred to government revenue,<sup>13</sup> although privatization was expedited as the war entered into a stable phase. The average sales value remained low until 1955, although the number of auctions increased. Major and big business privatization occurred beginning in 1955.

A preemptive-rights-based privatization method became dominant in this process. Instead of public auctions, priorities were given to those who had managed or leased factories and farms. Most of them were clerical workers of firms previously under Japanese rule, or administrative staffs during the US Military rule. Approximately 73% of privatization was carried out based on this method, although almost all big business sales were made this way. Although the government was hungry for money, sales were only a bargain in times of severe inflation. The repayment date was extended up to 15 years in such a way that the bigger the business, the longer the repayment period. In addition, purchasers became practical owners once they made the first year payment. The entire process produced a windfall gain to new owners. About 40% of big manufacturers in the 1950s (36 out of 89) and 68% of the top 22 big businesses (15 out of 22) were created in this privatization process. The original objective of creating industrialists in a democratic way by offering an equal and fair chance to everybody (especially previous landlords) was lost due to more urgent needs of the government during the war period. On the other hand, pro-Japanese businessmen could become economic leaders once again even in the new independent republic.

The US Military government, which emphasized democratic redistribution of farmland, did not oppose to preemptive-right-oriented privatization. Expeditious establishment of businesses was considered

more important, no matter who became new owners. It was thought that previous managerial staffs or workers would be helpful in swiftly restoring production if ownership was given to them with priority.

We need to point out at this point that the MacArthur-led US Military government in Japan forced Japan to carry out democratization of business ownership. MacArthur dissolved *zaibatsu* headquarters and dispersed stock ownership to the general public. In addition, management by *zaibatsu* leaders, their family members, and top executives was forbidden. Furthermore, monopolistic firms were divided to prevent economic concentration. The US government initiated and carried out all this reform thoroughly in Japan, but not in Korea. The prime concern of the US was probably to dissolve the core of economic power that led and supported the war against the US. There was no such motive for the US Military in Korea.

#### **4. Impacts on the North Korean Economy**

Destruction in North Korea was more severe. In addition to the terrible human casualties, 25 million death toll of North Koreans and Chinese combined, the total damage was estimated as high as 420 billion *won*, which was a lot higher than the damage in South Korea and equivalent to roughly four times of the North Korea's 1953 GNP.<sup>13</sup> To be specific, 8,700 factories and state enterprises, 600,000 housing units, and over 5,000 schools, disappeared in smoke. Additionally, 370,000 hectares of rice paddies and fields were put into a state of devastation.<sup>14</sup>

Two major economic reforms, however, successfully were carried out long before the Korean War and thus were not affected at all by the war. In North Korea, the land reform was enacted on March 5, 1946 and its execution was completed in 20 days.<sup>15</sup> North Korean government confiscated all the enemy-owned farmlands, tenant-based farmlands and the excess of five *chongbo* of all farmlands, and distributed them for free to tenants or farmers with small land, according to the "Confiscation without Redemption and Redistribution without Payments" principle (The North Korean Land Reform Law, Article 5). The land reform law, however, stated that distributed land could not be sold or used for mortgage or for tenant farming (same law, Article 10) and that distribution of land should be carried out by decisions made by the People's Council (same law, Article 6). Although it was declared as free redistribution, it turned out to be a disguised nationalization of land that discouraged farming and caused a decrease in productivity in later years.

In the case of firms and production facilities that were owned by the Japanese or the pro-Japanese businessmen, they were all confiscated without redemption. They were put temporarily under the control of

USSR military government, and then officially nationalized by the North Korean government on August 10, 1946. Following this reform, the socialistic production system accounted for nearly 90% of all production facilities.

### *The Long-term Consequences of the US Aid and Korean Economic Policy Mishaps*

#### **1. Critiques on the Economic Developmental Role of the US Aid in the Korean Economy and Assessment on Them**

In relation to the effects of US aid on the Korean economy, there has been a die-hard argument that has criticized US aid for destroying the economic basis of Korean agriculture, establishing a consumer goods oriented industrial structure and thus making the Korean economy dependent on the US.

Criticism of the economic effects of US aid in Korea was raised based on the following logic. First of all, critics argued that most of the initial aid items were food, medicine and other necessary consumer goods. Although these aid materials were indispensable, industrial facilities were also badly needed. In contrast, most aid for North Korea from the USSR and China was industrial machinery and facilities.<sup>16</sup>

Negative aspects have been emphasized especially in relation to the Public Law (PL) 480 Aid. Aid funds were formed through sales of US surplus agricultural commodities and a considerable portion of the funds was used to purchase military supplies from the US. Some economists argue that the inflow of massive US farm product aid caused the fall of domestic farm product prices, discouraged the will of farmers to produce and thereby decreased the income of farmers.

In addition, some critics argued that the US Military Government authorities allowed pre-emptive rights to pro-Japanese farmers and manufacturers in the process of transferring confiscated enemy properties to private ownership. Other extremists even claimed that the US destroyed the agricultural industry through aid, made the Korean economy dependent on the US economy, and perpetuated its dependency by controlling the Korean economy through aid, loans and direct foreign investments.

In order to evaluate this argument, we need to start by clarifying the objective facts. The US aid to Korea started in 1945 with GARIOA (1945-1949) of a total of US\$502 million, which was followed by EC A & SEC aid between 1949 and 1953 of a total of US\$109 million (see Table 2, pages 106-107). These were economic relief funds and goods in nature. During the Korean War, however, the US aid began to be



used for military purposes. In May 1952, the Agreement on Economic Coordination between the ROK and the United Command was made. The CEB (Combined Economic Board) was established to carry out economic aid coordination. Following the war (December 1953), the CEB Agreement for a Program of Economic Reconstruction and Financial Stabilization between ROK and USA was signed. As FAO took the place of EC A after the war, the OEC (Office of the Economic Coordinator for Korea) was also replaced by the USOM (US Operating Mission to the ROK) in 1959 to deal with US aid in Korea. During this period, US aid combined with CRIK (Civil relief in Korea) and UNKRA began to soar from US\$59 million level in 1950 to a maximum level of US\$383 million in 1957.<sup>17</sup> Such a large amount of aid consisted of 31.6% of Korean government revenue in 1954, 57.6% in 1955, and 49.2% in 1957.<sup>18</sup> This ratio was even bigger than the total domestic tax revenue, which was slightly over the 30% level during the mid-1950s. Besides, 35% of the defense budget (51% in 1955, and 42% in 1957) was supported with aid funds.

To recapitulate, foreign aid during the 1953-1961 period accounted for about 64% of the annual gross investment. In other words, while the average annual investment for the period was 12.4%, the domestic savings ratio remained as low as 4.1%. Foreign savings, mostly foreign aid, had to fill up the remaining gap. Due to the US aid the Korean economy achieved a 3.5% annual economic growth rate during the 1954-61 period, which is obviously higher than that of 2.8% for the 1946-53 period.<sup>19</sup> More importantly, US aid was very effective in stabilizing the Korean economy. The postwar average annual inflation rate was reduced to 20% from 120% of the preceding period.

On the other hand, although some extreme criticisms on the role of the US aid cannot be condoned, there is some room to reconsider some adverse effects that resulted from US aid. The so-called "counterpart fund" financed 90% of the economic reconstruction project expenses. The counterpart fund was designed to be spent for financing defense expenses in part and financing or offering loans to economic reconstruction projects, either public or private.<sup>20</sup> The fund, however, was one that was raised by selling US aid commodities, mostly US surplus agricultural products. In addition, even among ICA aid, 23.2% was agricultural product. Article 402 of the MSA required that any US aid receiving country should have aid of about 25% of it in the form of agricultural products. The problem was that all these agricultural commodities brought in Korea either through ICA or PL480 were so big that they did contribute to lowering prices of Korean farm products and decreasing the income of farmers. Some Korean agricultural

**Table 2: Foreign Aid**  
(Unit: Thousand US Dollars)

Year	USA					CRIK	UNKRA	Total
	GARIOA	ECA & SEC	PL480	AID	Sub-total			
1945	4934				4,934			4,934
1946	49,496				49,496			49,496
1947	175,371				175,371			175,371
1948	179,593				179,593			179,593
1949	92,703	23,806			116,509			116,509
1950		49,330			49,330	9,376		58,706
1951		31,972			31,792	74,448	122	106,542
1952		3,824			3,824	155,534	1,969	161,327
1953		232		5,571	5,803	158,787	29,580	194,170
1954				82,437	82,437	50,191	21,287	153,929
1955				205,815	205,815	8,711	21,181	236,707
1956			32,955	271,049	304,004	331	22,370	326,705
1957			45,522	323,268	368,790		14,103	382,893

1958			47,896	265,629	313,525		7,747	321,272
1959			11,436	208,297	219,733		2,471	222,204
1960			19,913	225,236	245,149		244	245,393
1945-50	502,097	73,136			575,233	9,376		584,609
1951-55		36,028		293,823	329,851	447,671	75,149	852,671
1956-60			15,722	1293,479	145,201	331	46,935	1498,467
1961-65			329,543	599,230	928,773			928,773
1966-70			274,789	22,246	496,035			496,035
1971-75			33,651	26,938	60,589			60,589
1976-80				3,442	3,442			3,442
<b>TOTALS</b>								
1945-80	502,097	109,164	795,705	2438,158	38245124	457,378	122,084	4424,586

Source: The Bank of Korea

products such as wheat and cotton eventually disappeared completely due to the sharp decline of their prices.

On the other hand, major items of ICA were fertilizer, cotton, petroleum, sugar, wheat, cowhide, etc. This contributed to bolstering consumer industries in Korea, especially the "three white" industries, flour, cotton and sugar. As a result, secondary industry (mining and manufacturers) increased its share in the national economic structure from 9.8% in 1953 to 15.1% in 1961. The proportion of consumer goods industry, however, maintained its supremacy over production goods industry, by 74.4% vs. 18.3% in 1953 and 77.3% vs. 19.3% in 1961. Such a trend contributed to the retardation of the producer goods industry in the years to come.

Regardless, it is not logical to blame US aid in terms of surplus agricultural commodities for all the adverse effects on the Korean agricultural sector. Militaristic use of aid funds can be criticized, but this was inevitable in some respects, as was the Marshall Plan in Europe. It is extremely irrational to accuse the US of trying to destroy the basis of Korean agriculture through aid, and then to force or strengthen its supremacy over the Korean economy, when we consider the insignificance of the Korean economy to the US.

Although Korea was important for the US as a front base against the communist block, the Korean economy could not be prime interest to the US. It was just a trivial interest, not worthy of playing with or exploiting. At best it could be only a burden.

It may be useful at this point to look at how Taiwan utilized US agricultural commodity aid. The Taiwanese government sold it to people for a low price so that they could alleviate hunger or famine. On the other hand, the government sold its domestically grown farm products overseas for a high price. That was how Taiwan could achieve such an early success in developing rural areas and agriculture. Development in rural areas brought not only an increase in demand for manufactured goods, but also for some primitive capital formation. Together with the successful farmland reform, appropriate policies on foreign aid farm products contributed a great deal to the formation of agricultural capital and later to the formation of industrial capital as well. Of course, the Taiwanese success cannot be replicated in Korea, because Korea experienced a three year long devastating war. Besides, Korea could not produce any internationally competitive farm products due to its inherent unfavorable natural conditions.

## **2. Conflicts between the US and Korean Governments**

There was conflict between the Korean government and the US on how to utilize the remaining counterpart fund (65%) except for the

portion for defense expenditure (35%). Korea wanted to spend it in order to expand and reconstruct SOC's and key industries including some heavy and chemical industries, while the US wanted to spend stabilizing the Korean economy and maintaining regional securities through acquiring enough supplies of urgent and indispensable needs. Instead of immediate industrialization of Korea, the US even recommended that Korea resume (free) trade with Japan for needed goods and to form a kind of anti-Communist block through cooperation. Japan was in need of raw materials from Asian countries including Korea, and wanted to sell their manufactured goods to Asian markets. Such an ambitious hope by the US could not be realized, however, since antagonism against Japan could not disappear within only a few years. President Seungman Rhee, especially, strongly opposed to this idea of forming an anti-Communist block with Japan as a leader. Instead, President Rhee himself wanted to play a leading role to that end. As a result he forbade special-foreign-exchange-loan funded imports from Japan.

Finally a compromise was made in December 1953 between the two governments. Both governments agreed that reconstruction investments should be agreeable to fiscal stabilization in principle. On other disputable issues they agreed to make further discussions and negotiations. The first remaining issue was which government should decide where to buy aid materials. The US hoped to purchase aid commodities from Japan so that the Japanese economy could be revitalized. The US intention was to build up a strong Japanese economy to lead the overall Asian economy and to replace the US role in the near future in providing proper economic assistance to Asian nations. A final decision was made to indirectly allow Japan to participate in the open international auction, but to allow Korea to be in charge of its operation.

The second issue was which exchange rate to apply, official or market rate. Korea wanted official rate applied so that it could import capital goods and intermediate goods for lower costs, while the US wanted market rates applied so that it could lessen the burden of repayment for UN forces loans from Korea. The US position on this point was so strong that the official exchange was finally raised to a realistic market rate level in 1951 from 1 \$ = 60 *hwan* to 1 \$ = 180 *hwan*. In 1955 the rate was again adjusted to 1\$ = 500 *hwan*, reflecting price changes in Korea.

The third and the most controversial issue was what kind of goods were to be delivered as aid. Again the US maintained a firm position. Priority was thus given to consumer goods for the sake of economic stability. About 70% of aid fell under this category. In consequence,

textile (cotton), milling (flour) and sugar refining industries had grown up fast and became leading industries in Korea. As noted earlier, consumer- goods producing light-industry oriented structure was formed in Korea as a result.

The fourth and final issue was about how to allocate aid. The US tried to maximize sales earnings of the aid materials through public auction with general merchants participating and by applying market foreign exchange rate in determining prices of the aid materials in terms of Korean currency. The Korean Defense Ministry, on the other hand, insisted on maintaining "real-demand principle," that allowed sales only to those who had operational production facilities. It also expressed its priority for the application of the official exchange rate in determining prices. The final decision was to allow real-demand principle to Korea in only a few major items such as cotton, wheat and sugar.

### **3. Mishaps of the Korean Government Economic Policies**

The serious consequence of the Korean government's "real-demand principle" was that it gave a windfall gain to those who could acquire aid materials, since the WPI rose four times during the 1953-61 period. On the other hand, even when the official exchange rate approached market rate in 1955, the immediate discrepancy between sales price of aid materials and their market price ranged from 7 to 73% on the spot. Thus, the Korean government was actually more responsible than the US for fostering consumer goods industry and later on paving the way for the rise of big-business oriented *Chaebol* structure.

In addition to the advantage given to those who had operational production facilities, especially in relation to "three-white" industry, the Korean government provided them with special benefits such as the application of much lower interest rates for their loans, mostly 10% or lower, which was lower than general bank loan rate, 18.25%, and much lower than the curb rate of 48% (4% per-month). Even the inflation rate was higher than the nominal bank loan rate at that time. Further, various tax credits and benefits were added. Also, loans were allocated in favor of big firms. This in turn made the owned capital ratio of big firms lower than that of small and medium firms. The former was 28%, and the latter, 46% in 1960. Such a practice finally contributed to the establishment of special government-business nexus and corruption. The usual kickback rate of bank loans was reported to be about 20% (Shin, 2000, p.277).

Such procedure helped those big businesses to form cartels such as the Korea Textile Association, through which they could monopolize raw material aid such as cotton (100%), molasses (100%), wheat (81%),

and sugar (27%). These associations also practiced sales cartelization. For example, 19% of textile industries took 89% of the market, while 2% of sugar industries took 92% of the market. The Che-il Woolen Textile Co. controlled 60% of the market, and three leading flour milling companies took up 50% of the market in the 1950s.

Since such monopoly was not built up based on economic productivity, but on special benefits from government, they could establish neither optimum level of production scale, nor competitiveness in international markets. In addition, the labor productivity was estimated as low as the one third or one half level of the Japanese counterpart in the textile industry (cotton).

What made those industries either flourish or survive was special favor in aid material allocation, special benefits in tax and financing, monopolistic business operation, and most of all, utilization of labor of long working hours for very low wages. People worked 11-12 hours a day for a monthly salary of 13-26 thousand *hwan*, when the minimum living expenses of laborers of 8 hours working was set at 23 thousand *hwan*. This was possible because there was infinite number of an unemployed labor force. The unemployment rate was estimated to be 45%, if 20% level of disguised employment was included.

All these facts helped big businesses grow with high profits. The gains only from the difference between different exchange rates were estimated to be as big as US\$1.3 billion during the 1953-1960 period. Nine of the biggest ten Korean *Chaebols* established their core sectors during this period. Unfortunately, their products were centered around aid raw material related products such as cotton, wool, sugar and food. Consumer goods industries such as fertilizer, cement, flat glasses, which could generate bigger forward and backward linkage effects, were not yet being produced any for markets.

Another major mishap of the Korean government occurred in relation to its policy on the agricultural sector. The Korean government transferred inflationary pressure onto the agricultural sector through low grain price policy based on aid grains and heavy tax. Aid by grains between 1945-1960 consisted of 33% of all aid offered in Korea. The size of inflow of aid grains was 400-500 thousand tons per year, which was equivalent to 15% of domestic production, and which was obviously a lot higher than grain import in the pre-war year 1949 (2% of the domestic production).

The grain price index fell by 35% during the 1956-59 period, while prices of consumer goods rose by 72% during the 1953-54 period, and it rose by only 20% while those of other consumer goods rose by 64% during the 1955-59 period (see table 3).

**Table 3: WPI in the 1950s (1955 =100)**

	WPI	WPI For Grains	WPI For Non- Grains
1956, 10 - 1957, 1	142.1	174.4	131.4
1957, 10 - 1958, 1	143.3	142.9	143.4
1958, 10 - 1959, 1	140.3	133.1	142.7
1959, 10 - 1960, 1	152.8	120.4	163.6

Source: Sung Yoo Hong. *Capital Accumulation Process in The Korean Economy*. 1965.

It is true that the low price of grains was related to heavy inflow of aid grains. But the Korean government policy was responsible for this low grain price. During the war, the government tried to acquire grains for war supplies through government purchasing policies within one third of the annual product. The government tried to maintain a government purchasing price that was as low as possible. It was estimated as low as 74% of the average production costs and much lower than market prices. This policy was carried out until 1961. The government also tried to keep grain prices low so that it could lessen the burden of redemption for the landlords who sold their land to the government. The government was supposed to pay for them based on the monetary value of the specified quantity of grain on the voucher (farmland securities).

There was another reason for the low grain price policy. The government needed to keep grain prices low, because they were a leading factor of the WPI. If the WPI rose more than 25% per year, Korea had to devalue Korean currency against US dollars, which was not what the Korean government wanted. One last additional reason for the low grain price was that it could help poor urban dwellers.

The temporary land tax was created and levied on deprived farmers in order to finance war expenses. Farmers had to pay this tax with real farm products. This started in 1951 and continued even after the war until April, 19 1960 when the tax was allowed to be paid in money. This temporary land tax was 5.5 times higher in its money value in terms of official grain price (10 times in market price). Tax revenue from this alone accounted for 30% of the total tax revenue in terms of official grain prices (70-90% in market prices) during the war, and 12-24%, even after the war. Faced with such heavy burden, farmers could depend only upon borrowing in order to continue farming. According to Dae Keun Lee's study (1987), farm family debt rose by 4.4 times during the 1953-56 period, and 1.7 times. Nearly 80-90% of all farm families had some debts. Unfortunately 70-80% of them were high-interest curb loans. This situation drove many small new independent farmers to sell their farmland. About 58% of those who bought



farmland of 0.3 *chongbo* or smaller, and 32% of those who bought farmland of 0.3-0.5 *chongbo* sold their farmland (Jindo Park, 1994). Consequently 26% of all farmland returned to tenant farming again in reality. In the meantime, those who sold their land had to stay in rural areas, working as farmers on leased land, because at that time the urban sector could not absorb any bankrupted farmers.

### **Conclusion**

The Korean War brought about devastating damages to both Koreas, although damages to North Korea are estimated to be a lot larger than those to South Korea. Financial aid to the North by the communist block (excluding construction assistance) was, however, a little bit smaller than to the South - US\$3 billion for the North and US\$4.4 billion for the South. The assistance for reconstruction of damaged industrial facilities and new construction of SOE and key industries in the North surely made it surpass the Southern counterpart in terms of GNP up until 1974. While for various reasons the South Korean agricultural sector was impoverished through the farmland reform in times of war, North Korea built up a collective farming system through virtual nationalization of farmland, which lowered productivity for different reasons. In the meantime, South Korea came to foster consumer-goods oriented and big-business oriented industrial structures while neglecting a producer-goods oriented industry. North Korea built up a heavy-industry oriented industrial structure and neglected the production of daily necessities.

Construction-oriented assistance helped North Korea to surpass South Korea in economic development in earlier stages, but made it very much dependent on foreign technology and facilities. North Korea simply used aided facilities and machinery without knowing how to produce them. It thus soon became helpless when assistance from its allies was cut off and its facilities were rusty since the 1970's, although the root cause for economic failure of North Korea stemmed from other sources such as extreme collectivism, economic autarky principle, etc. They prohibited the inflow of foreign technology and capital, which in turn lowered productivity and economic growth through its inherent inefficient economic system, and most of all proscribed basic human rights.

The Korean War damaged two major economic reforms and thereby made the Korean economic structure distorted and foreign-dependent. Although some criticisms were raised on the role of the US in South Korea, we find that the mishaps of the Korean economic policy were more responsible for the adverse effects of foreign aid. The most serious consequence of the war is the consolidation of division,

antagonistic confrontation, and acceleration of heterogeneous societies in a nation, making probable unification costs astronomically high. Division of land cut off markets from each other, blocked interrelated linkage effects between different industrial structures, and brought about the heavy burden of high defense expenditure. More importantly, democratization has been retarded for security reasons in both areas for a long time.



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## Notes

1 The Korea Defense Ministry statistics shows that 301,866 Korean soldiers, 33,629 UN forces soldiers, and 1,060,968 civilians were dead or missing, while about 2.5million North Korean and Chinese were dead.

2 North Korea cut electric power supply to South Korea starting from May 14, 1948, making energy shortage problem more serious than before.

3 Foreign trade increased to US\$26.1 million in 1951, US\$54.3 million in 1952, and US\$161.4 million in 1953, though.

4 Chun and Park(1995) revealed that WPI rose by 531% in 1951 and 30% in 1956. They also reported that money(MI) was increased tremendously from 120 million won in 1949 to 1.4 billion won in 1952. Kim (1986, p.51) even claimed that the price level in 1951,1952, and 1953 were 22,48, and 65 times higher than that in 1947. Estimates and even some publicized data vary depending on the sources. The only obvious fact is that the inflation rate was fierce, and the money was tremendously over-issued.

5 Actually about 60% of tenant farmland had been privately sold before the farmland reform was enacted in 1950. Thus, the farmland reform was carried out for the remaining tenant farmland and owner farmland of three *chongbo* or bigger in size. The ratio of owner farmers rose from 14% in 1945 to 88% in 1957 according to the government publication.

6 In the case of confiscated enemy farmland privatization, executed by the US Military government on March 22, 1948, buying farmers were to pay 300% of the annual average product, 20% each in 15 years, for the farmland of size two or less *chongbo*. 199 thousand *chongbo* (61.4% of the total confiscated farmland, 324 thousand *chongbo*) were sold to 505 thousand farm families. The remaining 38.6% were transferred to the Korean government for later privatization (June, 1949).

7 This tax alone accounted for about one third of government revenue during the war (38.1% in 1950, 22.5% in 1951, 30.4% in 1952 and 20.6% in 1953). The burden from this tax was big enough to discourage farming and deteriorate agricultural productivity.

8 As of March 1955, only 56.8% of the total sales were paid in, due to the heavy burden of the new farmland owners. It took 13 more years to get all the sales get paid (98% complete in 1968). In this process many new independent farmers returned to a tenant status in reality. They began to work on leased land.

9 We need to compare farmland reform policy of Korea with those of other countries in the similar situation in order to make a proper evaluation. In fact the US Military Government Authorities simultaneously enforced a farmland reform in three occupied countries, Korea, Japan and Taiwan. For example, in Japan, General MacArthur ordered Japanese government to liberate farmers. Japan thus made a bill for the farmland reform on Nov. 22, 1945. MacArthur was not satisfied with the bill and refused to accept it. Thus Japan came to make a revised version of the reform bill in May 1946, which was passed in congress in Nov. 1946. It was a swift and thorough reform. Even though Japan had to listen to MacArthur and thus had to revise their original bill, Japan carried out all the reform process all by themselves. Fortunately Japan did not face opposition from big landowners whose economic power and influence had been weakened very much during the war. The most important feature of the Japanese reform was that former tenant farmers could pay for their new ownership with government bonds for the period of 30 years. That obviously alleviated the burden of farmers.

Taiwanese government legislated Rent Decrease Law in 1949, Law of State Property Privatization in 1951, and Law of General Ownership Transfer. 'Farmers Only Principle' was also indoctrinated there. Again all the reform process was planned and executed by the Taiwanese government. And they achieved quite a successful farmland reform. Compared with farmland reforms in Japan and Taiwan, that in Korea was neither successful nor desirable. We can, however, bestow the following meanings upon the farmland reform in Korea. First, it put to an end to the old feudal-ownership-based governing system. Second, it abolished a highly exploitive tenant farming system and created many small independent farmers. Third, 'Farmers Only Principle' paved the way for modern civil society and capitalism, and provided a momentum for productivity improvement through privatization of farmlands.

10 If landlords wanted to exchange their land securities (or vouchers) for money, they could receive the money value of the number of sok of rice specified on the voucher. Evaluation was made only at an official price of rice, which was nearly 30-40% of the market price. What was worse was that the amount of money they could get by selling their vouchers was limited to 300 thousand *won* (three thousand *hwan*) in a month. Besides vouchers were not allowed to be put up as security (mortgage) for bank loans except when loans were used for operating privatized enemy factories.

11 In order to cope with inflation, Korean government carried out currency exchange measure three times during the war (Sep. 15, 1950 - Sep. 22, 1950; Oct. 25, 1950 - Nov. 3, 1950; Nov. 11, 1950 - Nov. 18, 1950). The first exchange was made only in the unoccupied area, Pusan and vicinities, and was intended to get rid of the illegally issued currency which was seized and circulated by North Korea. The second and the third exchanges were carried out after Seoul was recovered and they were intended purely to unify the official currency, and to initiate anti-inflationary measure at the same time. Each family was allowed to exchange currency only 20 thousand *won* or less, and to withdraw 50 thousand *won* each month thereafter. Further the government carried out currency reform in the form of denomination (100 *won* = 1 *hwan*) and froze 3 billion *hwan* as compulsory savings in order to fight against inflation in Feb. 1953.

On the other hand, Korean government requested UN forces to pay back its loans, which was the major factor of inflation and balance-of-payment deficits. UN forces borrowed 30-35 billion *won* from Korea every month, which accounted for about 79% of money issued. Korea and UN forces reached an agreement in May 1953 (called Mayer Agreement) regarding the repayment schedule. Twelve million US dollars were repaid until the end May 1952. And an agreement was made on how to repay the remaining 80 million US dollars.

In spite of all these efforts made by the government, neither economic stability, nor acquisition of industrial fund, nor correction of ill-distributed wealth could be accomplished.

12 Shin (2000), p.261.

13 Since the estimate was made based on the different sources, direct comparison with that of South Korea may not be meaningful, though. In any case, industrial production in 1953 was estimated 64% smaller than its 1949 level, and agricultural production was down to 24% lower than its 1949 level.

14 Ko, 1993, pp. 104-106.

15 According to the North Korean publication, 53% of the farmland was confiscated (equivalent to 90% of all tenant-based farmland), and was distributed for free to 70% of farmers.

16 The Russian economic aid to North Korea in the pre-Korean War period (Jan. 1946 - Dec. 1949) was estimated as big as US\$547 million. This helped North Korea to restore major industrial facilities such as coal mines, iron and steel mills, fertilizer industries, power plants and railroads, with special assistance from Russian technical advisors. What differentiated the Russian aid to the South was that the Russian aid was concentrated on restoration of industrial facilities with aided industrial equipment and technical assistance, while the US aid was centered around consumer goods. It should be remembered that the Russian aid was offered in an effort to build up strong-tie among communist block and was used to prepare for the war, although the Russian style aid helped the North Korean economy surpassed the South Korean economy.

Aid the North Korea by Russia continued during and after the war. Communist aid consisted of two different types of assistance in general, financial aid and construction assistance. The total amount of financial aid alone to North Korea approached US\$3 billion, which was almost comparable to the total aid to South Korea by the US and UN, US\$4.4 billion. About 67% of financial aid was free. Approximately 52% of the aid to North Korea came from Russia, 31% from China, and 27% from the East European Communist countries combined. The construction assistance oriented aid surely helped North Korea restore its industrial facilities much sooner than South Korea and thus could keep its per-capita GNP higher than that of the South until 1974.

17 Per capita GNP of South Korea in 1953 was only US\$67, and her net commodity product level was 27% lower than that in 1940. People could save only 9% of their incomes.

Aid by CPIK and ECA(&SEC) was mostly relief goods, i.e., either consumer goods

or raw materials. On the other hand, about 70% of UNKRA aid was project assistance aid, through which industrial facilities for reconstruction were brought in. The size of UNKRA aid was very small compared with US ICA aid (about one fifteenth during the 1954-61 period). And in the case of ICA aid, only 28% was industrial reconstruction and raw materials. 31.5% of them was for railroads and trains, 10.7% for electric facilities, 8% for housing and welfare facilities, and 15% for manufacturing sector.

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