A Revaluation of Heavy and Chemical Industry Promotion of South Korea

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Abstract. The Formulation of the HCI (Heavy and Chemical Industry) promotion policy was a turning point of the South Korean economy development. It is the most important industrial policy during the Yushin regime, which led by dictator Park Chung-Hee. However, due to the dictatorial nature of the Yushin Regime and its complicated repercussion, the valuation of the HCI promotion policy is a mixture of praise and criticism. This essay aims to explore the gain and loss of the HCI promotion policy and its impact on South Korea future development.

Keywords: South Korea; Development; Heavy and Chemical Industry; Industrial Policy.

1. Introduction

From 1973 to 1979, South Korea implemented an industrial policy, the Heavy and Chemical Industry Promotion Policy, which was deemed necessary for improving defense and economic situation and the legitimacy of the autocratic Yushin Regime. First, this essay aims to introduce the historical context of HCI promotion policy and explain why the administration of President Park Chung-Hee adopted this policy in the 1970s. Second, this essay will evaluate the gain and loss of the HCI program and argue that HCI policy can be regarded as a success for South Korea despite not achieving all the pre-set goals in the end and is wildly criticized by some scholars and influential institutions such as the IMF and World Bank.

2. Rationale and Motivation

In the early 1970s, South Korea was at a turning point of its development. On the one hand, under a dictatorial regime led by President Park, the South Korean economy experienced rapid growth through facilitating export-oriented light industry in the 1960s. The success of the South Korean export sector was a mixture of government policy inclination, capital concentration, entrepreneurship, a proper international environment, and cheap labor [1, 2]. However, for South Korea, the situation deteriorated as the 1970s began. When Richard Nixon won the election and began his administration, he adopted new protectionism and dollar devaluation to address the recent economic crisis in the US. These measures and their repeal would later be called Nixon Shock. As the most important market for Korean goods, over 40% of Korean exports went to the US in 1970. Nixon Shock severely impacted the South Korean economy and forced the political elites to consider a way out. Besides, the negative consequence of export-oriented industrialization policy gradually emerged. Many reputed Korean companies, most of them engaged in export trade, were troubled by increasing debts and the risk of capital chain rupture [3]. Furthermore, stronger international competition with other developing countries and a great imbalance of trade (from 1965 to 1972, the total trade deficit of South Korea reached 561.4 million dollars) collectively blocked the way of keeping investing in the labor-intense light industry. All these hindrances to development reflected on the slowing economic growth rate in 1970 and 1971, which decreased to 8.9% and 10.2%, though still considerable, were much less compared to 15.9% in 1969 [4].

Economic growth is a matter of life and death for President Park's Yushin Regime. The election of 1971 has exposed the swindling support of Park's Democratic Republican Party. With all the convenience and monopoly of political resources, President Park merely won a Pyrrhic victory over his political opponent Kim Dae-jung. Unexpected resistance from the populace and high enthusiasm for democratization blocked Park's way of legally revising the constitution, which only allows three terms for the presidency. For remaining in power, President Park declared martial law and launched a self-coup to topple down the old constitution. He introduced the 'Yushin constitution' that grants the executive branch great power and stipulates an unlimited term of re-election. These unpopular decisive actions were tacitly accepted by the Koreans, who still credit Park for economic development. Yet, these political tumults have revealed how weak Park's position would be if economic growth were to stop [2]. In addition to domestic issues, the international situation deteriorated for South Korea in the early 1970s as well. Since the foundation, South Korean security has heavily leaned on the US [5]. However, in 1969, President Nixon declared that the US would not 'undertake all the defense of the free nations of the world' in Guam unless these free nations were to face the direct aggression of another great power, namely the Soviet Union. The Guam Doctrine was nothing but a thunder to South Korea since it implies that in case of a Northern invasion, South Korea might have to face the enemies alone, without direct military help from the US. This prospect was wildly regarded as bleak and hopeless by the political elites of South Korea because of the weak production ability of arms and terrible preparedness of the army. As a veteran, President Park was sensitive about defense. A series of terror attacks, orchestrated by North Korea, clearly warned him of the danger of invasion. As time went on, there were more disturbing signs. The US withdrawal of the 7th Division from South Korea in 1971 and Nixon's visit to China in 1972 caused great alert in South Korea, pushing the policymakers to effort to build a self-reliant defense industry to sustain its army [5].

The economic stagnation and the dire need for defense both required change in industrial policy that guides investment and resource allocation. To President Park and his close aides, the HCI Promotion Program is an elixir solving two problems with one stroke. They believed the heavy and chemical industries would create new exports and concurrently improve the national defense capacity. Personally, President Park's expectation was even higher. A new pre-set export goal of 10 billion dollars was announced when the HIC Promotion was decided as the national industrial policy, even though economic experts in the Economic Planning Board that successfully designed and facilitated the development of labor-intensive industry before strongly advised against this ambitious program [2].

3. The Implementation of the HCI Promotion

In the New Year Conference of 1973, President Park announced the Declaration of Heavy and Chemical Industry. This declaration is regarded as the beginning of the HCI promotion program that first includes six major heavy industry projects. These projects all possess some common attributes: first, all the government-supported plants should be upsizing to international scale to enhance efficiency; second, all the projects should target the export market since the local market is narrow; and third, insisting on industrial concentration when adopting the HCI promotion. Yet long before it was announced, it was tested through launching relatively limited projects. In June 1970, Deputy Prime Minister Kim Hak-Yol announced the 'Four Core Projects', planning to build a special 'steel plant, iron casting, integrated machinery, and a large-scale shipyard. For gaining favor and necessary funds from Japan, the Four Core Projects avoid mentioning any military use of these projects. These projects were later proven to be successful and known as POSCO, one of the most successful firms that was built in the HCI promotion period. Another effort was purely based on military consideration. In 1972, the newly founded Defense Industry Promotion Committee deemed that an all-out effort was needed to supply arms to reserve troops by expanding currently insignificant arms production. This project was achieved by a division of production of light weapons components to different manufacturing sectors instead of building a new plant, which could be unbearable for South Korea. This measure not only accomplished the task but also saved huge amounts of money. In addition, these projects gave President Park confidence to order his officials to produce a comprehensive heavy industrialization plan. As a result, the declaration of the HCI program eventually emerged.

The government continued to use its usual strategy for promoting heavy industry. Since President Park took power in 1963, the South Korean government, though claimed to adopt a free market policy, in fact adhered to an interventionism policy and made a 'Five Years Plan' that contains strong elements of statism [6]. In this interventionism model, large-scale industry projects are mainly designed and guided by bureaucrats of the central administrative agencies, and subsidized private enterprises provide funding and actual implementation. This model first succeeded in facilitating the export-oriented industry and establishing the first labor-intense light industry park, Guro Industry Park, in the 1960s. Before 1973, the agency responsible for economic policy was the Economic Planning Board (EPB). After that, since the officials in the EPB were skeptical about the HCI program, President Park ordered the establishment of the HCI Promotion Committee, which, instead of an advisory body, had the power to formulate law-binding regulations and policies [7]. Notably, only the Yushin Constitution grants President Park the power to create that kind of committee by presidential order, without approval of the Congress. It had shown how President Park's personal reference affected the HCI program. Due to the capital-intense nature of the heavy and chemical industry and the centralization of investment, the rapid development of chaebols who benefited from governmental nurture has profoundly influenced the fate of South Korea in the near future.

4. Interest Rate Regime and Suppression of Pay Rise

The HCI promotion program demands a vast amount of investment. Yet, in 1972, all the companies that might take the responsibility of funding heavy industry projects were heavily debt-ridden. For addressing this issue, on August 3, 1972, the government ordered a domestic debt freeze and forced the creditors to re-negotiate interest rates to save big enterprises from the potential risk of capital chain rupture. This expedient is a double-edged sword, on the one hand solving the debt issue of big business, on the other hand socializing debt risk and engulfing social imbalance. Besides, through capital subsidies and import tariff exemption, 75% of total credit was provided to the manufacturing sector during 1973 to 1979. The South Korean government's active intervention ensured that most financial capacity was utilized to facilitate the HCI program. Yet, excessive preferential treatment to chaebols destroyed prudence that exists in common business and investment and would cause a great deal of damage to South Korea when the Second Oil Crisis broke out.

In addition, except for creating a low-interest rate regime through executive power, the government also helped to limit labor costs by suppressing political movements that pursue democratization and labor rights. A series of so-called 'public security incidents' were used by the authorities as the pretext for armed suppression. Some dissenters were alleged as being supported or instigated by the North. Though widely criticized as inhuman and autocratic, the firmness of government ensured that in manufacturing sectors, labor income share decreased during the HCI promotion period. Objectively, it at least enhanced the relative competitiveness of export products and contributed to obtaining export orders from the Middle East. For example, in the second year after putting into use, the POSCO plant produced steel with a price cheaper than its Japanese and Taiwan counterparts.

5. Liquidation: Loss and Cost

It has long been argued that the HCI promotion program is not a prudent economic plan but a political initiative that emerged as a whim, used by the dictator to preserve his regime. Yet, Hurricane's research denies this claim and insists that President Park's policy is consistent, not a 'temporary deviation from the course of development', and the need to facilitate heavy and chemical industry was also well recognized by South Korean political elites at that time. However, it is undeniable that the HCI promotion has a dark side, which would seriously impact the future of South Korea.

The first counter product was overinvestment and idle capacity. As mentioned before, since big business groups (chaebols) were generously supported by the government in many ways, their investment choices were becoming less cautious. Considerable funds were misplaced to overlapping and idled production sectors. According to Joseph Chul-Kyoo Jung, over 30% of all investment in machinery was idled during the HCI promotion, and the government did not even notice it. This phenomenon exposed the defects of government interventionism [3]. Cronies close to the top can not only escape from strict supervision but also not take the risk of a healthy free market when they are backed up by an interest rate regime, infrastructure construction, and policy support. When the Second Oil Crisis hit South Korea and increased the cost of raw materials, unsustainable overinvestment dragged down the economy. In 1979, South Korea first experienced negative economic growth since President Park took power in 1963 [8].

The second issue was inflation and debt. The government's generosity to chaebol groups and the HCI program means expansionary fiscal could hardly be controlled. Statistics show that during the HCI promotion period (1973 to 1979), the average yearly inflation rate was over 20%. Associating with the declining labor income share, the inequality of South Korean society seriously deteriorated. Mounting debts and financial deficits are the reasons why the succeeding government, led by another military dictator, Chun Doo-Hwan, terminated the HCI promotion program. By comparison, after adopting stable finance policy in the President Chun administration, for the first time South Korea achieved a fiscal surplus [9]. It at least implied that Park's strategy of the HCI promotion might not be an optimal choice for South Korea.

6. Positive Effects: Economic Development, National Defense Autonomy and Industrial Restructuring

Despite its many defects, the HCI promotion still accomplished a great achievement. The first contribution is that it expanded exports that once reached bottlenecks in the early 1970s. In 1977, South Korea total exports were over 10 billion dollars, two times more than 1975, when the HCI promotion was at the early stage. Thanks to soaring exports, the South Korean economy kept high-speed growth from 1973 to 1979 (about 10% average annual growth rate) [10]. Without the HCI promotion and the production capacity, skilled labor, and technology it nurtured, South Korea could never open the Middle East market, thereby greatly increasing exports. Its contribution was not contained in these development figures. The industry surplus was used to support the 'New Countryside Movement,' which was deemed a great success to improve the living standard and agricultural production of the countryside [11].

On military perspective, the HCI promotion could be regarded as a success as well. In the early stage of the HCI promotion, it satisfied the light weapon demands of 2.5 million reserve troops. Though avoiding any public admission, the South Korean government devoted considerable energy and resources to developing the defense industry. Park Ching Hee even implemented a nuclear weapon development plan that irritated the Americans. In 1978, South Korea accomplished the development of middle-range missiles. This success shows the capacity of the rapidly developing military industry. It shall not be forgotten that South Korea could hardly fulfill the light weapon demands in the late 1960s.

The other dimension is the HCI promotion program achieved industrial restructuring. To build prosperous heavy industry is every developing country's dream, and South Korea did by the HCI promotion. From steel and petrochemicals to shipbuilding, South Korea possessed an integrated industrial system that has outlived the program itself and made South Korea the 10th largest industrialized country. When all is said and done, the HCI promotion laid the foundation of an advanced industrial power for the future generations of South Korea. Therefore, it is hard to devalue the achievements of the program and the acumen and foresight of President Park and his officials.

7. Summary

In conclusion, despite of committing many errors in implementation and causing impactful defects, this essay still deems the benefits of HCI promotion policy outweigh its costs, because it developed economy and accomplished industrial transformation that troubled many developing countries. It could be argued that President Park administration might better perform yet what has been past could not be assumed. Nevertheless, President Park and his subordinates can be credited for pushing the plan into reality.

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