

⇒ 論 說 ⇐

Experiences of Japan and South Korea in the Process of Catching-up

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Abstract

To begin with, the industrialization in Japan starting from the Meiji era is discussed. Then postwar economic recovery and development is discussed. An important point in Japan's postwar economic recovery and development is that postwar reforms such as democratization, dissolution of Zaibatsu, land reform etc. were implemented.

From 1956 until 1973 the Japanese economy experienced high economic growth. The first oil shock in 1973 put an end to the high economic growth. Japan was no longer able to pursue industrialization with an emphasis on heavy and chemical industries. Japan has endeavored in economic development with an emphasis on microelectronics and has succeeded in it. Japan has become a highly industrialized country ranked second in the world. After the Plaza Accord in 1985, however, Japanese economy experienced the bubble. In 1991 the bubble has burst. Since then Japan has experienced ten years of stagnation.

Korea was colonized by Japan (1910-1945). Although Korea regained its independence after World War II, the country was separated by the Korean War (1950-54). The country was completely devastated. As of 1960 South Korea was less developed than North Korea. Later, however, South Korea experienced a high economic growth with about ten years lag behind Japan. South Korea has had a close economic connection and was able to introduce capital and technology from Japan. South Korea's high economic growth can be to a considerable extent explained by 'Flying Geese Pattern' (Akamatsu) as well as 'Advantage of Backwardness' (Gerschenkron).

Finally the implication of South Korea's experience for Central and East European countries, especially for Poland is mentioned.

Keywords: Development Dictatorship, Catching-up, Compressed Industrial Development, Advantage of Backwardness, Flying Geese Pattern

Introduction

A sudden visit of Black Ships led by US Commodore Matthew Perry in 1853 roused Japanese people from their long peaceful sleep. Next year the Tokugawa Shogunate decided to open the country under pressure of artillery. As it was revealed that the Tokugawa Shogunate became fragile, a movement for overthrowing the Shogunate began from the periphery of Japan. In 1868 Meiji Restoration, a kind of revolution, occurred. A new regime with Emperor as the top was established. In this regime young politicians from Satsuma (present Kagoshima Prefecture) and Choshu (present Yamaguchi Prefecture) seized real power. As was shown by China's defeat in the Opium war (1840-1842), Japan had a danger of being colonized at that time. The Meiji government began modernization of Japan by promoting capitalist development from above. The next challenge for the government was to revise unequal treaties imposed by the great powers of the West. From the late 19th century to the early 20th century Japan succeeded in solving the problems of unequal treaties with the great powers. Thus Japan became able to avoid a danger of being colonized, but Japan in turn annexed neighboring countries (Taiwan in 1895 and Korea in 1910). Japanese people have endeavored to catch up advanced countries in the West, and Japan has approached this goal to a certain extent in the 1930s. Japan was severely defeated in World War II. Japanese people suffered from enormous damage. However, Japan has successfully revived like a phoenix from the ruins and became the second industrial country in the world in the 1980s.

South Korea was placed in a miserable and disadvantageous situation after World War II. However, the country began its high economic growth with 10 years lag behind Japan. In 1995 the country recorded US \$ 10,000 per capita GDP and was admitted to the OECD next year, joining a club of advanced industrial countries.

This paper¹ deals with experiences of two countries in East Asia in the process of catching-up and discusses factors which contributed to their success as well as problems connected with economic development and finally mentions the implication for European countries.

¹ This paper was originally written for my presentation at an international conference at CES Annual China Conference 2007 "Economic Transition, Regional Growth, Sustainable Development", held in Changsha, Province of Hunan, China on July 28-30, 2007. I am not a specialist of East Asian economy, but a specialist of comparative economic system and area studies of Eastern Europe. The reason why I made a presentation on the topic "Experiences of Japan and South Korea in the Process of Catching-up" is that Professor Ryszard Rapacki (Warsaw School of Economics, Poland) invited me to attend this conference. At that time Professor Rapacki was organizing a panel "Economic Convergence of EU New Member States on the Level of EU Core Members" and seeking a person who could talk the cases of East Asia. In response to his request I accepted this role and made the presentation. A year later, I improved the paper on the basis of several books and papers although I am aware that it is still rough and needs to be improved in my further study.

1. Industrialization in Japan

Start of Industrialization

To begin with, I would like to quote an excellent study by a Hungarian economist: Ehrlich, Eva (1984), *Japan: A Case of Catching-Up*. Although her study was done a quarter century before, from the outside of Japan her study still teaches us many points that we Japanese have not noticed.

She divides a hundred years of Japanese industrialization into two stages: The first stage lasts from the 1880s to the outbreak of World War II, and the first stage has to be divided into two phase, the first lasting from the 1880s to the end of World War I, the second from then until the outbreak of World War II. The second stage begins in the years following the end of the war, i.e. somewhere in 1946-1950. She gives characterization to the two stages of industrialization:

The first stage of industrialization: it relied to a small extent only on capital borrowed from the economically advanced countries; but domestic resources were mainly used; in the field of technological progress, it was a period of initiation and introduction of the average technologies of the economically advanced countries.

The second stage of industrialization: this stage was spent under peaceful conditions, without war and without colonies; the rate of growth was almost uniquely fast; it relied on considerable amounts of foreign capital, a great part of which stemmed from aid; as regards technological progress, this period was held to apply, spread and further develop the best possible techniques prevailing in the economically advanced countries (Ehrlich, 1984, p.54).

Based on Ehrlich (1984), below I would like to describe the first stage of industrialization. She stresses that towards the end of the Tokugawa Shogunate a market economy has already developed to a considerable extent. She says:

By the middle of the 19th century the Japanese economy, based on a relatively extensive division of labour and, already producing commodities to a considerable extent (about 25-30% of production might have become commodities) came into sharp conflict with the political and social system. It was one of the peculiarities of the division of labour constituting the basis of Japanese commodity production that within its framework not only were village and agriculture linked with town (castle-towns built around the seat of daimyo's) and industry (handicrafts), but also within villages the system of second and third occupations became relatively wide-spread resulting from the conditions of agricultural production. Accordingly, some industrial activities could

already be found in the villages at that time. This industrial activity displayed by people engaged mainly in agriculture was meant partly to meet the demands of the village, but also partly those of the town, and to a certain extent it took an “outworker” form organized by merchants (Ibid., p.219).

She points out that towards the end of the Tokugawa Shogunate wealthy merchants had possibility to promote capitalist development. She says:

The commercial house, who had taken in the economic situation and its possibilities for the country, were already in existence and to them, were attached various secondary and tertiary activities as, e.g., foreign trade, the exchange and lending of money, industrial outwork and the foundation of manufacturing. Thus there existed in the Japanese economy (society) a social stratum with a *macroeconomic approach* in several respects, who wished to utilize the potential economic possibilities of the country (of course in a capitalist way) and were more or less prepared to do so (Ibid., p.220).

However, we should take into account that the latest research shows us a little bit different picture. The second half of the 19th century is characterized by the rise and fall of enterprises. Out of 231 wealthy persons' families in mid 19th century only 20 have survived 50 years later, i.e. in the early 20th century (Ohno, 2004, p.48).

Anyway, at the start of industrialization, Japan was very eager to absorb latest techniques and technology as well as institutions from the West. The banking system was developed in framework organized by the government on the models of American and European banks, postal services were introduced according to the English system while in education the German system was adapted (Ehrlich, 1984, p.221). At that time there was a famous phrase, saying ‘Wakon Yosai’ (Japanese spirit with western technology).

In Ehrlich's study “modern” sector denotes large-scale industry, its field of action and its participants. On the other hand, and “traditional” sector denotes not only agriculture, but also the cottage industries found so often in Japan within the agricultural framework, the urban handicraft industry and, finally the mass small-scale mini-plants often arising within the family and developing from it. A unique point in her study is her viewpoint that in Japan “modern” sector and “traditional” did not exist separately but the coexistence and symbiosis of these two sectors was prevailing. She stresses “two-pole industrialization”, in other words, “industrialization on two legs” (Ibid., pp.223-230).

When Japan joined the international division of labour, its industrialization was strongly import-oriented and the progress of Japanese industrialization was accompanied at first by the

export of barely processed agricultural products and goods from the extractive industry (green tea, coal, copper ore and copper block). However, this export profile did not continue so long. It became characteristically transformed, that is, agricultural and industrial products adjusted to specific Japanese conditions and requiring relatively sophisticated working method, obtained a fundamental role in exports. It is well known that Japan lacks natural resources to be exported. Instead, “traditional” sector has played a great role. “Traditional” sector performed for the world market more than was required by the export and sales on the world market of simple, unprocessed products of agricultural sector (Ibid., p.230).

Other than the above mentioned, she mentions several interesting findings: for example, Even in the process of capitalization the relationship between those in authority and those not remained unchanged. The former Chinese Confucian ideology and the human ideal, proclaimed by Shintoism based on this ideology (modesty and diligence, a sense of responsibility and duty, satisfaction with the personal and social situation, recognition of the superiority of “national” interest) remained practically untouched (Ibid., p.221) ; and the very low level of consumption was accompanied by high standards of education and already in the mid-1870s the educational level of ordinary people (reading, writing and arithmetics) was relatively high (Ibid., p.48).

Japan’s defeat in World War II and its postwar economic development

Japanese people have endeavored to catch up advanced countries in the West, and Japan has approached this goal to a certain extent in the 1930s. However, the leadership of Japan became full of confidence so much that they took the wrong way². Although there was 13 times difference in GDP and 721 times difference in production of petroleum between Japan and the USA (Morimoto, 2005, p.401), recklessly enough Japan fought against this giant country in World War II. Japan was severely defeated in the war and its territory was reduced mainly to four big islands. A quarter of the national wealth was reduced to ashes.

Below I would like to describe a history of the Japanese economic recovery and development, mainly based on Hayashi (1982). An important point in Japan’s postwar economic recovery and development was that postwar reforms such as democratization, dissolution of Zaibatsu, land reform etc. were implemented. The significance of the postwar reforms consists in

² What was wrong? Japan proceeded on a way to militarism. In my opinion, one of the biggest problems consisted in the Meiji Constitution. According to the Constitution, Japan was a highly centralized country with Emperor’s absolute power. The Parliament could not control armed forces which were under the control of Emperor. Under the pretext of “Emperor’s controlling power” leaders of the armed forces often refused opinions of the Parliament and sometimes even Prime Minister’s opinion. Thus armed forces have run away without control. This led to Sino-Japan 15-year war, which began in 1931. Then Japan came into opposition to the USA, Great Britain and Netherlands, etc. Japan drifted into the war on the USA.

the following points: They brought the absolute Emperor system to an end and established the principle of that the sovereignty resides in the people; They clearly described the principle of renunciation of arms in the settlement of international conflicts; They established basic human rights such as freedom of speech, freedom of meeting, freedom of association, equal rights for both sexes; Workers are assured of the right to organize, the right of collective bargaining and the right to strike; They abolished parasitic landowners system in agriculture and swept away the remnants of semi-feudal social relationship.

Initially one of the US policies toward Japan immediately after the war was the emasculation of industrial power from Japan to prevent it from revival as a militaristic power. However, the international situations have drastically changed. The Cold War intensified. In the Chinese Continent the Communist Party was becoming predominant and finally seized power in 1949. Such changes in the international situations urged the USA to change its policies toward Japan. The US government came to consider Japan as bulwarks against communism, and it encouraged Japan's industrial development.

The Korean War has broken out in June 1950. It was a very unfortunate event, but the war invigorated the Japanese economy. The world markets suddenly expanded because the US government purchased strategic materials for production of weapons in bulk and the US citizens, who anticipated a shortage of necessities of life, enthusiastically bought and stocked up them. Japanese export had quickly increased, and piles of dead stock had disappeared. The US army utilized not only military bases but also railways, roads, ports, communication facilities, etc. up to the maximum. The US army placed orders directly with Japanese companies for supply of weapons and repairs of military equipments. This was called 'tokuju' (tokubetsu juyo: special order from the US army). In this way, the USA made use of Japanese industrial production power like subcontractors.

The year 1955 was the most important turning point in Japanese economic history after World War II. By that year the economic recovery has almost completed, and the production in industry and mining has exceeded the maximum level during the war. The government's economic white paper for 1956 used a catch phrase as its subtitle, saying 'it is no longer the postwar'. From 1955 through 1973 the period of 'high economic growth' continued for 19 years.

Through the high economic growth Japanese economy has drastically changed. On the basis of this economic change, social aspects, people's life-style, way of thinking, and scenery of the Japanese Archipelago itself have entirely changed. If one compares Japan before and after the high economic growth, he/she might feel as if he/she came to a quite different country.

The driving force behind the high economic growth was active equipment investment by enterprises, namely, renewal and new installment of machines and equipment and construction of

factories, facilities and buildings. It was 'equipment investment-led economic growth'. The average growth rate of equipment investment during the period 1961-1970 was 15.2%, which was two or three times higher than in the West countries.

Why did Japanese enterprises make a desperate effort in equipment investment as if they were possessed by something? Japan imported raw materials from overseas and exported industrial goods to foreign countries. In this regards, there was no change between the prewar period and the postwar period. A big difference is that in prewar days for its machines and equipment as well as steel Japan mostly relied on imports from advanced countries. Japan had a deformed industrial structure with light industries such as textile industry as center, and metal industry being extremely weak.

During World War II Japan developed metal industry to a certain extent in order to provide a large quantity of munitions for itself. There remained a gap between Japan and the Western countries. At the end of the war industrial output in Japan was about 30% lower than the prewar level. However, the production facilities of key industries have survived at unexpectedly high level. The production capacity at the end of the war was 1.4 times higher than the prewar level. The economic recovery after the war was performed by the full use of this remained production facilities (for example, steel industry).

At the time of 10 years after the war, fixed production facilities in Japan have become surprisingly old and obsolete. During the Korean War (1950-1953) Japanese companies managed to produce goods with such inefficient old facilities. Japan earned a huge amount of US Dollar owing to the 'tokuju', and it was able to cover the deficit of foreign trade with this foreign currency revenue. However, now that the Korean War was over in 1953, and the Indochina War was also over in 1954, Japan lost the opportunity to get benefit from 'tokuju'. Now the time of ordinary foreign trade has come where everything is decided by economic competition for survival of the fittest.

While Japanese people were very happy with the boom from the Korean War, capitalist countries of the West suffered from the depression. The West countries promoted rationalization of the production process of their industries during this period, and then with reinforced economic capacity they were returning to the world market. In contrast, Japanese industry had too old and too obsolete production facilities. Japanese business circles became swayed by the feeling of danger. This is why Japanese enterprises made a desperate effort in equipment investment.

From 1955 until 1973 the Japanese economy experienced high economic growth. Factors which contributed to the high economic growth are as follows: (1) Rapid technological innovation. After World War II many engineers were sent to the USA from their companies.

They had absorbed the latest results of sciences and technology and on its basis they have developed unique technology of Japan; (2) Energy revolution (transformation of energy resources from coal to petroleum); (3) Migration of labor power from rural areas on a massive scale; (4) Smaller burden of military expenditure at about 1% of GDP; (5) Japanese style of management, which consists of three pillars: a) seniority-oriented wage system; b) life-long employment system; and c) company-wide trade union. These three pillars have contributed to creation of workers' loyalty to companies³; and (6) Diligence of Japanese workers and higher educational level of average workers.

The first oil shock in 1973 put an end to the high economic growth. How has Japan overcome the crisis in the 1970s? The following factors helped Japan to overcome the crisis: (1) 'Management with reduced weight' (adjustment in employment); (2) Pursuit for energy consumption saving technology; (3) ME Technology Revolution; and (4) Support by the government (especially MITI). Japan was no longer able to pursue industrialization with an emphasis on heavy and chemical industries. As is shown by a symbolic expression: a shift from 'heavy, thick, long and big things' to 'light, thin, short and small things', Japan has endeavored to attain economic development with an emphasis on microelectronics and has succeeded in it. Japan has become a highly industrialized country ranked second in the world.

Although at milder pace than before the first oil shock, the Japanese economy continued developing. The structure with surplus in current balance has taken hold in Japanese economy. Especially a surplus in trade with the USA stood out. In the 'Plaza Accord' in September 1985 G5 agreed on cooperative intervention to induce foreign exchange markets to the direction of stronger Yen and weaker Dollar. As a result US Dollar has lost almost half of its value in a year (1 Dollar = 235 Yen → 120 Yen). In this adverse situation Japanese manufacturing companies have made desperate efforts toward the rationalization of their production processes to decrease production costs, and in fact they have succeeded in it. Therefore, in spite of the original aim to decrease Japanese export to the USA, it has not decreased, and the structure of a huge surplus in trade with the USA remained unchanged. In order to evade the US criticism toward Japan for exporting unemployment, Japanese companies including automobile manufacturers actively embarked on local production in the USA in the second half of the 1980s. Similarly, local production by Japanese companies in East Asia began to increase.

After the 'Plaza Accord' the Japanese government attempted to expand the public investment and the domestic demand to weaken export drive. For this purpose, in the second half of the 1980s an easy-money policy was adopted and continued, leading to the bubble in

³ For Japanese style of management, see Koyama (2007).

real estates and assets. In 1991 the bubble has burst. Since then Japan has experienced ten years of stagnation. Japan has so far made efforts to catch up the West and has succeeded. Japan lost her target which she should catch up. Rather Japan is being caught up by late-comer countries like South Korea. Japan is required to establish a new development model for herself.

2. Economic Development in South Korea: A Miracle of Hangan

Korea was under the rule of the Japanese Empire as its colony from 1910 to 1945. As expressed by words "Agriculture in South and Industry in North" (Lee, 1982, p.72), during the Japan's rule industry was not developed in the southern part of Korean peninsula compared with the northern part where mineral resources were rather abundant.

Although Korean nation regained independence after World War II, soon the Korean War (1950-1953) has broken out. As a result of the war Korea was divided into North and South at the 38th parallel. It is said that US Army and South Korean Army have mobilized 2.6 to 2.7 million soldiers while North Korean Army and Chinese volunteer Army have mobilized 3 million soldiers. In total nearly 6 million soldiers have fought in the Korean Peninsula. Both sides had heavy casualties. The magnitude of physical damages amounted to two years' GDP of South Korea at that time (Watanabe, 1996. p.38).

"Government led by Lee Sung Man spent all its time in ceaseless political strife and completely lacked ability to manage economic recovery. More than anything else the national land has been completely destroyed by the three-year war, and almost no resource was left for economic reconstruction" (Ibid., p.40). South Korea's last resort was aid from the USA. Its aid was mainly supply of good, the majority of which being raw materials such as wheat, raw sugar, raw wool, raw cotton, etc. The aid goods were sold off by the government for the domestic production. A part of the proceeds was included in the general budget, and other part was utilized for financing companies through the Korean Industrial Bank. It was only flour milling, sugar refining and textile industry that was brisk. These big companies succeeded in obtaining these articles of disposal by the government not because of their entrepreneurial efforts but because they behaved as businessmen with political contacts. Government had no economic policy for overcoming poverty while a handful of big companies were enjoying privileges and prospering. People's disillusion and irritation about the government and such companies were increasing day after day.

There occurred a military coup d'etat led by General Park Chung Hee on May 16, 1961. General Park run the Presidential election in 1963 and he defeated an old and experienced politician. "Korean people chose President who came from the Army" (Ibid., p.48). Although the

declaration of democratization was made in June 1987 and the Presidential election was held in December in the same year, the military regime practically continued until 1993 because General Noh Tae Woo was elected President. According to Watanabe, civil bureaucrats' way of thinking was conservative and abstract and their way of behavior was worship of the powerful and formalism, which was contrary to enterprising spirit. The military coup d'état was an epoch-making event that broke down the civil bureaucracy which has been warmly fostered in the Confucian climate as well as thoughts and ethics which have supported the former. I would like to add that I was very critical toward the military regime in South Korea 40 years ago. At present, however, I have to admit that the regime of development dictatorship has played a positive role in the modernization of South Korean society, although it of course had negative aspects too. Not only the military itself appeared as a driving force of the modernization. But also the military regime appointed young able bureaucrats to high-ranking positions of ministries. The mainstay of economic-related ministries was composed of fresh bureaucrats in thirties with young economists educated in the USA as a center.

According to Watanabe, the new government aimed at 'export-oriented industrialization'. In order to pursue it, protective policies were abolished. Main goods of South Korea's exports were labor-intensive assembled and processed products. South Korean companies assembled and processed materials and interim products which were imported from advanced countries, by using machines and equipments which were imported also from advanced countries, and they exported the final products. In spite of rapid heavy and chemical industrialization, the country had still fragile production basis of interim good such as parts as well as capital goods such as heavy machines. The country had to strive for expanding exports, relying on imports of interim goods and capital goods.

The government responded to enlarging deficit in trade balance not by new equilibrium through reduction of imports but active and bold introduction of foreign capital. Without expansionist economic management in that sense, South Korea's high economic growth would be impossible. Foreign capital came mainly in the form of loan. Until mid 1960s government-basis official loans have occupied a high share in the total foreign capital. Noteworthy was the problem of the Basic Treaty between Japan and South Korea. People's feelings toward the treaty were complicated in South Korea. Many people took it as 'humiliating'. The public opinion was split into two concerning the pros and cons of signing the treaty. Suppressing people's opposition even by proclamation of martial law, the government concluded the treaty in December 1965. Watanabe says, "Park Administration perceived it a better choice in diplomatic strategy toward Japan to dare to introduce capital from Japan and accomplish self-supporting economy through this rather than to stick to 'bonds of life' in the past, being forced to fall into

a slump" (Ibid., pp.74-75).

By the way, Matsumoto (2001), stresses the continuity between the period of Japan's rule and the postwar South Korea, and points out that the Japanese model was built in the leadership of President Park Chung Hee. According to him, in establishing the nation's armed forces after the war the central role was played by about 70 officers from the Japanese armed forces and the Manchurian armed forces as well as about 300 graduates or undergraduates of the Japanese military academy. Since then they have occupied important posts in the armed forces. About 100 persons who passed the high civil service examination at the time of Japan's rule were generally appointed to high-ranking governmental positions. An argument that this country was founded on the denial of the Japan's rule is only a principle. Contrary to this principle, there are factors of the continuity between the Japan's rule and the postwar South Korea in terms of the human structure in the state apparatus, legal structure, the mode of the administration, etc. (Matsumoto, 2001, pp.29-34).

According to Watanabe (1996), by this treaty Japan decided to offer aid totaling US \$800 million including aid gratis and private loans. With this as priming water, accelerated expansion of the introduction of foreign capital proceeded since 1965. In the second half of the 1960s commercial loans surged. In the 1970s foreign direct investment increased. Not only foreign capital but also foreign technology has been introduced on a massive scale. Until mid 1960s foreign technology was introduced mainly to the spinning and weaving industries, however, as early as in the second half of 1960s the introduction of foreign technology to these industries has almost ceased. Since mid 1970s also the shipbuilding and the petrochemical industries have relatively decreased in the total introduction of foreign technology. In contrast, other heavy and chemical industries remained at high level for a while in the introduction of foreign technology. At the same time, the introduction of foreign capital to metal, electronic and machine industries increased. Watanabe points out similarity of the system of technology between Japan and South Korea. Due to Japan's colonial rule before the war, the number of engineers who were able to easily understand technological literature written in Japanese was overwhelmingly large in South Korea and Taiwan, compared with any other countries. Watanabe mentions a fact that out of 2293 cases of technological introduction between 1962 and 1983 1486 cases, i.e., 65% came from Japan (Ibid., pp.77-78).

In order to construct a real self-sustaining economy, the military regime aimed at heavy and chemical industrialization in the early 1970s. Government attempted to get 'advantage of accumulation' through the regional collectivization by establishing industrial parks according to priority industries. Having prepared infrastructure such as roads, ports, water supply, electricity, etc. the government invited companies to these industrial parks. Companies located in these

industrial parks enjoyed special measures of tax and finance and were given the privileges of exemption from custom duties and excise when they imported capital goods such as machines and equipments. It is a steel manufacturer POSCO that symbolizes the heavy and chemical industrialization in this period. This is the biggest and the most up-to-date integrated comprehensive steelworks. For construction of this giant steelworks the government invested a huge amount of the budget funds and foreign capital. Its technology had nothing to do with conventional technology, but it was formed by the introduction of the most up-to-date foreign technology. Watanabe says, "The construction of this steelworks was, at least at the beginning, a state 'venture business' attempted at any risk rather than a project planned on the basis of a rational cost-benefit analysis (Ibid., p.86). Why were they in such a hurry? We should take into account that this country has always been confronted with North Korea. In the 1970s, the size of the US Army in South Korea was gradually scaled down. This fostered consciousness of urgent necessity for establishing self-reliance both economically and militarily among people and the military. People's national passions together with feelings of danger have supported the rapid heavy and chemical industrialization.

Rural areas have drastically changed. Rural areas in South Korea were extremely poor until early 1960s. As early as mid 1970s, however, peasants' income reached almost the same level as workers' household in urban areas. The industrialization in South Korea has been so strongly pulling employment that migration from the rural areas began. Since the second half of the 1960s the tendency of a decrease in the rural population and the number of peasant families was remarkable. Labor markets in the rural areas became tight. Accordingly, the average labor hours of peasants became longer, the percentage of incomplete employment in agriculture was decreasing and the participation of women in labor was increasing, and at the same time, real wages of agricultural labor were rapidly increasing. 'Semaui movement', the plan for modernization of villages led by the government, also supported the improvement of living conditions of peasants. According to Watanabe, most of soldiers who participated in the military coup d'etat came from villages. One of the factors behind the military coup d'etat was poverty in rural areas. The military regime has kept a kind of 'Nohonshugi' (the belief that agriculture forms a basis of the nation's economic and social life) as its identity. The 'Semaui movement' had three major goals: The first goal was to remove peasants' conception to accept their fate with resignation and foster diligence, self-support and cooperation. For this purpose, peasants should cooperate on small projects for improvement of their environment such as repair of banks of small rivers in their villages, construction of public wells, etc. with the financial support from the government; The second goal was improvement of the environment. This included government-supported projects such as electrification of rural areas, improvement of village

structure and construction of water supply facility as well as the national land improvement plan such as improvement of big rivers, soil-erosion control, forestation, etc.; The third goal was an increase in peasants' income. In order to increase the production of rice and wheat, big projects such as improvement of irrigation facilities, utilization of ground water, improvement of agricultural machines and implements and breed improvement were carried out. In order to increase income, peasants were encouraged to do side business. Lucrative cash crops were cultivated, and peasants' group work as well as joint use of fertilizers and agricultural machines was actively encouraged. Thus enriched rural areas became markets for industries (Ibid., pp.89-93)

Big roles which entrepreneurs have played cannot be neglected. In South Korean society which has inherited strong Confucian culture the entrepreneurial tradition has been weak. In addition, under the colonial rule it was strictly hindered to nurture Korean entrepreneurs. In South Korea immediately after its liberation enterprise organizations and entrepreneurial talents were in short supply. Mr. Jeong Juyeong (1915-2001), the founder of the Hyundai concern, can be mentioned as a representative of newly-emerged entrepreneurs. He was born and grown at a poor peasant. Although he had no educational background other than elementary school, he began his career with railroad workman, and started a civil engineering and construction business with his savings. In 1950 he acquired a motor vehicle repairing factory and brought the two businesses into one, starting 'Hyundai' construction company. Making the best use of his entrepreneurial foresight, swift judgment and energetic acting power, in a single generation he has developed 'Hyundai' into one of the greatest concern in South Korea. I think that economic animal-like behavior of proprietors represented by Mr. Jeong Juyeong was very important in South Korea's postwar economic recovery and its high economic growth.

3. Compressed Industrial Development

South Korea has experienced its high economic growth with 10 years lag behind Japan. We are impressed by its wonderful speed of its growth. South Korea's postwar economic development has been often called a Miracle of Hangan. Let us pay attention to capital stock which supports production activity in a country. In South Korea the rate of capital formation was only 7% in 1953, but it increased to 33% in 1980. With the increase in capital stock, there emerged high economic growth and industrial development. Average annual rate of growth of the manufacturing was 12% during the period 1953-61 and 15% during period 1962-1966 (the first planned period), and it further accelerated to 22% during the period 1967-1971 (the second planned period). Although there was the oil shock in 1973, the manufacturing kept developing with 18% of average annual rate of growth. In the course of the industrialization the dependence

on import has gradually decreased in manufacturing industries such as textile, electric, electronic, shipbuilding, petrochemical, steel industries, etc. and at the same time the dependence on export has gradually increased in these industries. The speed of the decrease in the dependence on import as well as the speed of the increase in the dependence on export in these industries were higher than in the case of Japan (Watanabe, 2002, pp.136-138).

According to Watanabe, such 'compressed industrial development' was enabled by 'advantages of backwardness' which South Korea has enjoyed in terms of foreign capital, transfer of technology, invitation of private companies from developed countries, etc⁴. Being situated in the least developed part of the capitalist developed world, NICs (Newly Industrializing Countries) including South Korea have benefited 'advantages of backwardness' deriving from the developed world and succeeded in 'internalize' them effectively (Ibid., pp.142-143)

'Advantages of backwardness' is a concept coined by Alexander Gerschenkron (1966). Watanabe explains as follows: A late-comer countries has advantages that it can make use of industrial technology, which advanced countries have elaborated in the long history of their technological development, as 'existing technology' at the starting time of its economic development. In addition, it is blessed with an advantage that it can shorten the period of capital accumulation through the import of capital. Moreover, a present late-comer country can introduce not only technology and capital individually but also talents and ability of the enterprise management that effectively organize this technology and capital. The introduction of direct investment by private companies from advanced countries is the case (Watanabe, 1996, p.207).

In connection with this, another important factor is industrialism⁵. Industrialism that was created in advanced countries was transmitted to less developed countries, which in turn internalized the transmitted industrialism and became able to begin the process of rapid development. The process of internalization of the industrialism which originated in developed countries is the process of the so-called 'modern economic growth' of Kuznetz (Watanabe, 2002, pp.22-23)

By the way, not all developing countries could enjoy 'advantages of backwardness'. Watanabe mentions Bangladesh as an example of regression. According to him, in order to internalize industrialism countries must possess suitable 'social ability'. Namely, especially the three points: i) technical ability of workers, ii) managerial ability of managers and iii) bureaucrats' administrative ability, i.e., ability to draft and implement policies are important (Ibid.,

⁴ Amsden (1989), stresses an aspect of 'industrialization based on learning' in the economic development of late industrializers including South Korea.

⁵ The whole of the civilization of modern industrial technology, i.e., capital stock in which new technology that modern industrial civilization has developed is embodied, and a group of managers and skilled workers both of whom operate the capital stock, is named 'industrialism' by Watanabe (2002).

p.25).

By the way, in Japan there are very critical views toward the 'compressed industrial development' of South Korea. Matsumoto (2001) says, "in no small extent the compression of time was enabled by leap over". "Leap over" refers to, for example, a way not giving high priority to the production for domestic demands but abruptly focusing on exports (p.55). The government has always encouraged enterprises to export and given them loans through governmental banks at more favorable interest rate than loans for the production to domestic demands. According to him, South Korea's real strategy has been 'making copies of Japan'. South Korea, the government and people in a body, has been copying the methodology of Japan's economic development itself. They have actually made only Japan as the object of their learning. Maintaining their attitude of refusing Japanese culture for a long time⁶, the area of learning has been narrowed to the economy with the whole process being controlled by the government. Taking into consideration from the beginning a scenario that they should follow Japan and then oust her from the markets by the price competitiveness, South Korean business circles have copied the development process deliberately. Matsumoto expresses this strategy with the metaphor of 'kobanzame' (remora or shark sucker) saying, "it can swim if it wants but it relies mainly on the driving force of a bigger fish which it has been sucking, and after arriving the destination it neatly eats foods there and expels the bigger fish from the feeding area" (p.43)

At the beginning the price competitiveness was secured by low wages. In the second half of the 1970s, however, the level of real wage in the production area in South Korea rapidly increased, showing aspects of a turning point. Thus South Korea's export strategy was pressed for a fundamental change (Taniura, 1989, p.42). Instead of low wages, the price competitiveness has been secured by 'the economy of scale', as symbolized by a giant steel factory, a giant shipyard, etc. Taniura (1989) says that 'the economy of scale' has been respected just like a religious belief by many people including economists in the government and managers (p.82). As the domestic markets were rather small, the products from these giant facilities had to be exported.

Hattori (2001a) defines the development pattern of South Korea as 'assembly-type of industrialization' and analyzes the process. According to him, South Korea has not given high priority to the improvement of its technological capability. As shown by the rise of the share of products of heavy and chemical industries in its export, the heavy and chemical industrialization in South Korea rapidly proceeded. On the other hand, the import of capital goods rapidly

⁶ Until 1998 when President Kim Dae-Joon at that time decided the gradual removal of the ban, the import of Japanese movies, music records and CDs was prohibited.

increased too. Japan has played the role of the base for supplying machines and materials necessary for South Korea's industrialization. The fact that high quality parts could be obtained in this way has enabled South Korea to produce high quality products and increase the export of the products rapidly. At the same time, however, the very fact has discouraged the growth of small and medium-sized enterprises as 'skirts' which should have produced high quality parts in this country (Hattori, 2001a, pp.6-9). This is why Hattori calls 'technology and skill-saving' industrialization (Hattori, 2001b). South Korea started its industrialization from the standard technology and proceeded to the advanced technology, but its technology has basically remained within a category of the assembly-type and the development of the processing-type of industries has remained insufficient. Therefore, South Korea has continuously been obliged to import expensive machines and parts on a massive scale (mainly from Japan), causing a permanent deficit in the current account, and at last the country fell into a serious economic crisis in 1997 (Hattori, 2001b, pp.115-125).

Hattori (2001b) explains differences in the initial conditions between Japan and South Korea as follows: In order for Japan to catch up the advanced countries in the West, there was no way other than to accumulate the skill by herself. As the speed of the technological progress at that time was slow Japan was able to have time for catching-up. Compared with late industrializers including South Korea, Japan's development can be called 'technology and skill-accumulating' development. At the time of 'mechatronics', however, the late industrializers cannot sufficiently accomplish the catch-up through the accumulation of skill like Japan has experienced before. It would be necessary for them to secure 'invisible' technology too. However, since it was considered possible to catch up for the time being if high quality parts could be imported, the 'assembly-type of industrialization' was continued. Having described like this, Hattori (2001b) argues that in order to escape from the trap of the 'assembly-type of industrialization', it would be necessary for South Korea to change its course to the 'technology and skill-accumulating development' (pp.133-135).

4. Flying Geese Pattern and a 'Mechanism of Intra-regional Circulation' of Goods and Investment Funds in East Asia

In the 1970s labor-intensive industries such as textile industry and assembly of radio, television and other home appliances were relocated from Japan to South Korea. Along with the economic development in NICs such as South Korea, Taiwan, etc. labor costs in these countries have increased to a considerable level. Labor-intensive industries in these countries relocated their production bases to ASEAN countries such as Thailand, Malaysia, etc. in pursuit for cheaper

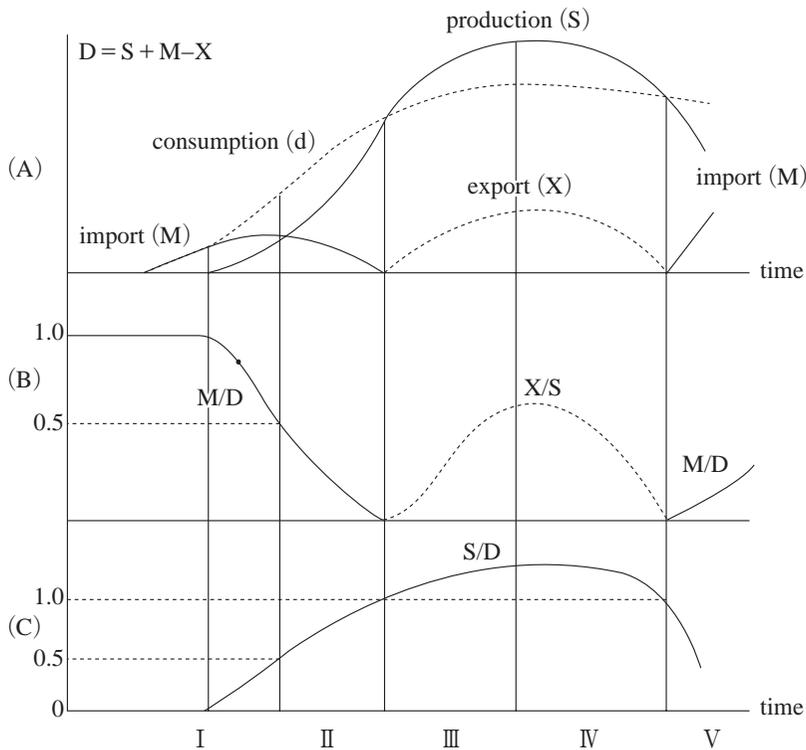
labor costs. These phenomena can be explained by Flying Geese pattern, which was originally presented by Kaname Akamatsu⁷ before World War II and was later developed and modified by the younger generations (Inada, et al., 2000, pp.67-68).

Akamatsu (1962) analyzes the development of cotton yarn, cotton cloth, spinning & weaving machinery, machines & tools in the Meiji era and finds the common development pattern. According to Yamazawa (1993), it originally referred to the typical development pattern of modern industries in Japan, which, as a late-starting industrializing country in the late 19th century, introduced modern industries at first through import, then started domestic production to substitute import, and finally exported its product abroad as it became competitive internationally. It focuses on an efficient interaction between international trade and industrial growth and the sequence of inverse V-shaped growth curves of import, domestic production, and export resembles the flying formation of wild-geese returning to the south in late Autumn.

The flying geese pattern is called also the Catching-up Product Cycle (CPC) by the younger generations. Yamazawa (1993) further explains Figure 1 as follows: In Figure 1 Panel A illustrates CPC by means of the schematic forms of four growth curves of import (M), domestic production (S), domestic consumption (D), and export (X) of a modern industry products. Statistically domestic production is derived as apparent consumption, i.e. production plus import minus export ($D=S+M-X$) but theoretically its growth curve sets the pace of the CPC development of a particular industry, through its impact on domestic entrepreneurs. Panel B illustrates the change of the two key ratios in the process of the CPC development, import/consumption ratio (M/D) and export/production ratio (X/S) which are often used to measure the progress of import substitution and export expansion respectively. Although export starts only after import finishes in this schematic diagram, in reality products are differentiated within the same products group and the export of lower quality product starts while the import of sophisticated one still continues. Panel C illustrates the CPC by a single growth curve of production/consumption ratio (S/D). Five development phases, introductory, import substitution, export, mature, and reverse import, are distinguished by the specific values of S/D , namely 0.5, 1.0, maximum, 1.0 again (Yamazawa, 1993, p.17).

⁷ Originally Professor Akamatsu used an expression "wild-geese flying pattern" of the industrial development of less-advanced countries. See Akamatsu (1962), p.11.

**Figure 1 The Catching-up Product Cycle Development of an Industry:
A Schematic Diagram**

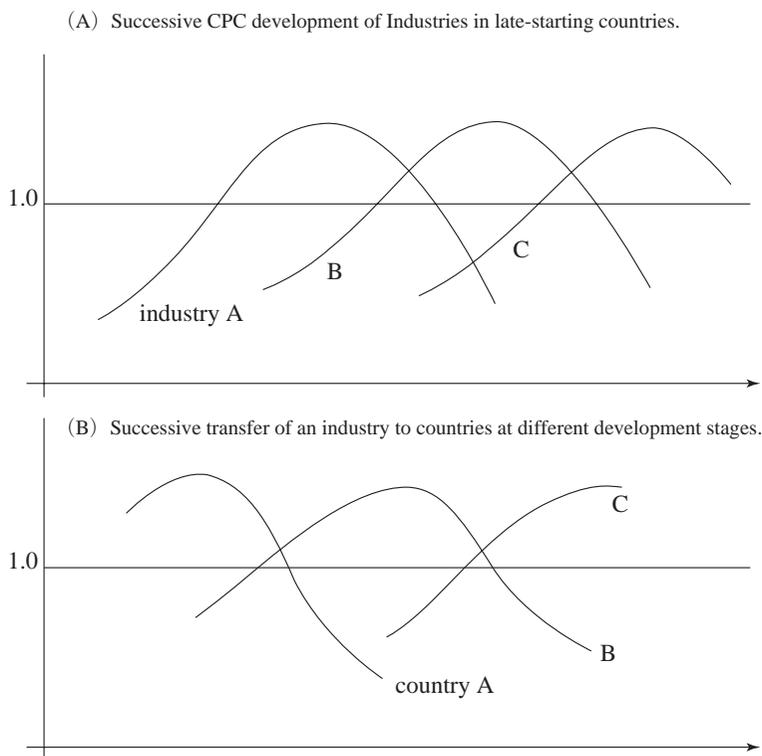


- Five development stages
 I introductory
 II import substitution
 III export
 IV mature
 V reverse import

Source: Yamazawa, Ippei, et al. (1993), p.16.

This illustration was later extended to describe another sequence of inverse V-shaped growth curves of domestic production of individual modern industries with the same country, i.e. a diversification of industrial structure in the process of industrialization (Variation 1; see Figure 2 (A) Successive CPC development of industries in late-starting countries). The illustration was further extended to describe the transmission of the CPC development among trading countries (Variation 2; see Figure 2 (B) Successive transfer of an industry to countries at a different development stages) (Yamazawa, 1993, p.14).

Figure 2 Variations of the CPC Development



Source: Ibid, p.21.

Since South Korea has accomplished the catching-up to a certain extent, the country is now placed in a position to be caught up by ASEAN countries. It is noteworthy that the interdependency among East Asian countries is being consolidated in recent years. At present, the biggest market for East Asia is East Asia itself in both exports and imports, and the presence of Japan and the USA have remarkably decreased. For example, the share of East Asia in the total exports of East Asia increased from 23.0% in 1980 to 36.0% in 1998. Also the share of East Asia in the total imports of East Asia increased from 22.2% to 42.2% in 1998. Since 1990s goods produced in East Asia have been circulating more and more within the region of East Asia. Namely, a ‘mechanism of intra-regional circulation’ of goods in East Asia is being formed. Similarly, the biggest supplier of investment funds for East Asia is also East Asia, and thus a ‘mechanism of intra-regional circulation’ of investment funds in East Asia is being formed (Watanabe, 2002, pp.235-242).

5. Europe in the light of Asian Experiences

Allow me to make an imprudent analogy. It seems to me that the relation between Japan and East Asia is similar to the relation between Germany (not only Germany but also some other core countries in the EU) and Central East European countries. In certain respects, Poland's relation with Germany is quite similar to South Korea's relation with Japan. As for population, both South Korea and Poland have about 40 millions and it is less than a half of the population of Japan and Germany. Japan and Germany are neighboring countries for South Korea and Poland respectively. Both South Korea and Poland have had experiences of being controlled or colonized, and therefore their people have complicated feelings toward these countries. At the same time, both countries have had strong cultural influences from these countries. Both countries have so far introduced capital and technology on a massive scale.

Although it may sound groundless, I would like to say the following anticipation: Having benefited from 'advantages of backwardness', South Korea accomplished 'compressed industrial development'. Finally the country was admitted to the OECD, joining a club of advanced industrial countries. At present Poland has relatively high unemployment and a relatively large number of agricultural populations, and consequently it has a potential of further industrialization. It cannot be denied that if there exists suitable 'social ability' as mentioned above, and if things go well, the country will be able to benefit from 'advantages of backwardness' and catch up the average of EU-15 within a relatively short time. Besides, there might be a scenario that Central and East European countries will develop further in the future, bringing about an 'intra-regional circulation mechanism'.

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