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17. Trade and Development: The Experience of Korea and Taiwan

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TRADE AND DEVELOPMENT: THE EXPERIENCE OF KOREA AND TAIWAN*

1. INTRODUCTION

Taiwan, in the late 1950s, and Korea, in the early 1960s, both commenced the export-oriented growth by promoting the export of labor-intensive manufactured products. As a result, both Korea and Taiwan went through drastic economic transformations from typical backward economies to the so-called export-oriented NICs. The objective of this paper is to analyze the similarities and differences between the experiences of these two countries in their export-oriented growth.

Section 2 briefly highlights the initial conditions in Korea and Taiwan prior to their commencement of export-oriented growth. Section 3 delineates the necessity of export promotion efforts and the actual beginning of export-oriented growth strategy in these countries. Section 4 describes how these countries institutionalized the export-oriented regime, Section 5 examines the financial systems that have been maintained in these countries, and Section 6 attempts a comparative evaluation of the growth performances of these two export-oriented economies.

2. THE INITIAL CONDITIONS

One may like to amplify the differences in the initial conditions of Taiwan from those of Korea by emphasizing the facts that Taiwan enjoys a multi-crop subtropical climate, that there was a sudden influx of one and half million highly educated middle class refugees of distinct characteristic traits into Taiwan from the mainland in the late 1940s, and that Taiwan could benefit from the extensive network of overseas Chinese and a well-experienced government establishment from the beginning (i.e., 1949). This section, however, focuses more on the similarities in the initial conditions of Korea

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and Taiwan.

By the end of the Japanese colonial rule, only two percent of the Korean population over 14 years of age could have completed the secondary school education (see Kim, 1990: 146). Literacy rate was 13.4 percent in 1945 (see Scitovsky, 1985). After the Second World War, however, one could observe an outburst of educational zeal among the Korean people, even during the chaotic period of 1945-53 and especially in the 1950s and 1960s. The number of enrollments in elementary schools increased by 8.2 percent per annum during 1945-52 (increasing from 1.37 million persons in 1945 to 2.37 million persons in 1952), and yet, due to colonial heritage of educational obscurantist policy, the elementery school enrollment as percentage of corresponding age groups (i.e., ages 6-11 years old) amounted to only 60 percent and the illiteracy rate still stood at 78 percent in 1953. The number of enrollment in colleges & universities increased by 23.4 percent per annum in 1945-52, and yet the enrollment as percentage of corresponding age groups amounted to mere 3.1 percent in 1953 (see Kim, 1990: 146, and McGinn, et al., 1980: 5-6).

In 1953, the share of manufacturing value-added in Korea's GNP amounted to only 9.0 percent. As late as in 1963, the share of manufacturing in total employment and GNP amounted to 7.9 percent and 14.7 percent, respectively. Hence Mason, et al. (1980: 250) could not but state that "[d]espite the relatively rapid growth of manufactured output after 1953, Korea, on international comparison, had a manufacturing sector smaller than the average for countries of similar per capita income and a volume of exports very much smaller."

The so-called "Japanese colonial heritage," i.e., the introduction to Korean people of modern technology and management as well as modern social-overhead capital facilities, seems to have been no much better than that in, say, India, Indonesia or Vietnam that were inherited from the colonial rule of British, Dutch and French, respectively. The so-called "growth-potential" (in the form of human capital, in particular) left behind by the Japanese at the end of the Second World War was no much better than those left behind in the more than a hundred underdeveloped countries by the Western colonial powers. (Cf. Mason, et al., 1980: 2-6.) The handful heavy industries and electrical power plants that emerged during the colonial period and the important mineral deposits were mostly located in the northern part of Korea. The southern part was dominated by agriculture and the manufacturing activities of a few light consumption goods. The Korean economy, which was initially designed as a colonial economy dependent on Japan and then further crippled by the separation of the North from the South in 1945, found itself fully engaged in the reconstruction work in the wake of the Korean War (1950-53). Korea in the 1950s, with less than $750 of per capita GNP (in 1989 dollar prices) and more than two-thirds of the entire population engaged in the primary sector, possessed all the familiar characteristics of an extremely underdeveloped economy.

Japan designed Taiwan as a major supply base of foodstuffs. Until 1936, industrialization in Taiwan was non-existent. The Japanese industrialization of Taiwan after 1937 represented the appearance of aluminum plants, metal-refining plants, cement plants, small scale fertilizer plants and alcohol production as a by-product of sugar refining. Basic consumer goods, including textiles, were imported from Japan. Ginsburg (1952) states: "At the close of the War the economic structure of the island was near collapse. The 20,000 Japanese agricultural technicians had gone, fertilizers were scarce . . . One of the key problems in Taiwan today is the replacement of Japanese technicians with Chinese [from mainland]. Unfortunately, relatively few of the mainlanders possess the necessary technical skills, and those who do too often have been trained for top-echelon rather than middle-echelon jobs."

In Taiwan, the illiteracy rate among the population over 6 years of age amounted to 55 percent in 1946 (see Hou, 1988: 8).[1] According to the Household Registration data, the average number of years of schooling for all persons aged 15 years and over was only 2.8 years in 1946-50 (see Hou and Chang, 1981: 486). As of 1952, three years after the relocation of Kuomintang government (accompanied by 1.5 million refugees) to the Taiwan island, only 1.4 percent and 8.8 percent of the population over 6 years of age were either attending or had completed the college-university education and secondary education, respectively, and the illiteracy rate still amounted to 42 percent (see CIECD, 1973: 7).[2] In 1954, the enrollment rate by school-age population group amounted to 91 percent for the primary level (6-11 years of age group) but for the secondary level (12-17 years), it amounted to only 22.4 percent for male and 9.7 percent for female and, for the tertiary level (18-24 years), it amounted to mere 1.9 percent for male and 0.3 percent for female.

In Tawian, the prewar production level is believed to have been restored during the years 1948-51 (see Liang & Liang, 1981: 314). And yet, the share of manufacturing in Taiwan's total employment and NNP in 1952 amounted to 12.4 percent and 10.8 percent, respectively, which became to amount 14.1

[1]Literacy rate was 21.3 percent in 1940.

[2]The ratios increased to 1.8 percent and 11.2 percent, respectively, in 1958 and to 9.4 percent and 42.6 percent, respectively, in 1986. Data from CEPD (1987: 7).

percent and 15.5 percent in 1958. Hence Galenson (1981: 70) asserts that "Taiwan began its development march from an initial condition that was not superior to those of many less developed countries."

Both in Korea and Taiwan, however, there were rapid improvements in the overall level of education in the 1950s, and consequently both countries became to have relatively well-educated labor force by the time they commenced the export-oriented growth. In Korea, the enrollment as percentage of corresponding age group expanded from 60 percent to 86 percent for the elementary school, from 21 percent to 33 percent for junior high school, from 12 percent to 20 percent for senior high school and from 3.1 percent to 6.4 percent for colleges & universities during 1953-60.[3] The illiteracy rate fell from 78 percent to 28 percent during the same period. In Taiwan, the enrollment rate increased from 91 percent to 95 percent for the elementary school, from 22.4 percent to 33.9 percent and from 9.7 percent to 16.6 percent for male and female, respectively, for the secondary school, and from 1.9 percent to 4.0 percent and from 0.3 percent to 0.9 percent for male and female, respectively, for the tertiary school during 1954-58.[4] Furthermore, in Korea, owing to the Korean War, almost entire able-bodied male population fit to serve the military duties had to go through basic military training and serve several years in the modern military establishment. Many economists believe that such regimental experiences of disciplined life must have been conducive in facilitating the transformation of traditional farm labor into modern factory workers. The extraordinary size of military establishment maintained in Taiwan must also have produced similar effects.

3. THE INEVITABILITY OF EXPORT PROMOTION

After 1950, both Korea and Taiwan depended heavily on the U.S. grant-in aid to finance their imports: about 42 to 47 percent of Taiwan's commodity

[3]The enrollment rate further incresed to 103 percent by 1970 for the elementary school. In 1986, the enrollment rate for the junior high school reached 99 percent, that for the senior high school reached 83 percent and that for colleges & universities reached 25.5 percent. The illiteracy rate became so insignificant after the mid-1970s that the government ceased to collect data on it (see Kim, 1990: 147, Table 1).

[4]The enrollment rates by school-age population group increased, for the primary level, to 100 percent in 1978; for the secondary level, to 78.7 percent for male and 73.8 percent for female in 1978; and for the tertiary level, to 13.5 percent for male and 9.3 percent for female in 1978. Data from Statistical Yearbook of the ROC: 1979, Directorate General of Budget, Accounting & Statistics, Executive Yuan, ROC.

imports during 1953-56 and about 82 to 85 percent of Korea's commodity imports during 1956-58 were financed by the U.S. aid. Foreign capital inflow occurred only after 1961 in Taiwan and Korea.

Although the Taiwan's First Four-Year Economic Reconstruction Program for the attainment of economic independence (FFYP: 1953-56) envisaged U.S. aid through 1956 in decreasing annual amounts, the Program was in fact well supported by the U.S. aid. The ROC Taiwan government put into effect the Agricultural Four Year Plan in the late 1953 in conjunction with the FFYP in order to promote the agricultural import substitution and to increase their exports, "thus building up foreign exchange with which to buy the most needed products" (U.S. DC, 1959: 15).

With the beginning of the more ambitious Second Four-Year Economic Reconstruction Program (SFYP: 1957-60), however, the absolute magnitude of U.S. grant-in aid to Taiwan indeed started to decline (which eventually came to an end in 1968), accentuating the problem of chronic foreign exchange shortages. Although the Program itself envisaged a drastic cut in U.S. aid (i.e., expected the U.S. aid in 1960 to be about 45 percent of the 1956 level), and although Taiwan ended up having received large amount of U.S. aid which was more than it anticipated, it is still true that at the very moment when the need for foreign exchange to finance long-term economic development plan began to expand, the supply of U.S. aid to Taiwan began to decrease (see U.S. DC, 1959: 15-16). As a result, while the FFYP included only "improvement in balance of payments" in its list of major plan targets, the SFFP added "export promotion" in the list (see Li and Yeh, 1981: 174). The export target presented in the SFYP was, however, rather modest: exports would increase by 41 percent above the 1956 level (i.e., from $130 millon in 1956 to $182.5 million in 1960). Even this modest target was not achieved: exports increased only by 34 percent during 1956-60. The main objective of the SFYP was merely to achieve a self-supporting economic unit through industrialization, with the agricultural development serving as a basis.

According to Li and Yeh (1981: 170-171), "[b]y the time the Third Plan [1961-65], which incorporated the Nineteen-Point Program of Economic and Financial Reform as well as the Statute for the Encouragement of Investment of 1960, was under preparation, the eventual phasing-out of the U.S. economic aid program had become a matter of time . . ." On the other hand, in Korea, the U.S. aid reached its peak in 1957 and then its absolute magnitude started to decline rapidly thereafter. In the midst of such a declining trend, the newly established military government in Korea launched the ambitious First Five-Year Plan (FFYP: 1962-66) in 1962.

The ROC Taiwan government envisaged relatively declining traditional exports such as sugar and rice (to markets established through pre-war trade relationships such as Japan) and somewhat broadened export base involving pineapples, tea, bananas, aluminum, petroleum, cement and cotton textiles. The FFYP of Korean government also envisaged an expanded share of manufactures in total commodity exports from 15 percent in 1960 to 22 percent in 1966. Apparently both the Korean government and the ROC Taiwan government keenly recognized the need to enhance the earnings of foreign exchange but, at the beginning, neither of them seems to have conceived the expansion in foreign exchange earnings through the single-minded promotion of labor-intensive manufactures exports. The fact that Taiwan was the second-most densely populated country in the world and Korea the third-most did not particularly attract the attention of policy-makers in these countries. Both governments simply promoted exports in general, but due to the obvious limitation in the export potential of primary goods the benefits of various export promotion measures ultimately fell mostly upon the labor-intensive manufacturing activities.[5]

In the 1950s, no one ever heard about the so-called "outward-looking" "export-oriented" growth strategies. The familiar slogans were such as "balanced growth" or "unablanced growth." Little (1979: 474) summarizes: "Almost all development economists were then emphasizing industrialization through protection, the necessity of controlling imports, the price mechanism in general, and the dangers of relying on trade with the imperialist powers." In order to relieve the problem of serious foreign exchange shortages, the governments of Korea and Taiwan began to promote the foreign-exchange-earning activities through export promotion and then somewhat unexpectedly they saw the expansion of the exports of labor-intensive manufactures. The miraculous achievement of these governments was the fact that they were capable of recongnizing immediately that the growth through export promotion of labor-intensive manufactures was the best possible growth strategy for them and, most importantly, they put all-out efforts in pursuing the strategy ever since.[6]

[5]According to Tsiang (1984: 306): "Taiwan's sugar export were practically fixed for her by the international sugar agreement that allotted world market share annually for each participating sugar-producing country. Her rice export went exclusively to Japan, and the quantity and price were fixed each year by direct negotiation between the two governments. Thus these two major exports [which constituted 78 percent of Taiwan's commodity exports in 1957] were confronted with literally zero demand elasticity with respect to the exchange rates." Hence it used to be believed that (Tsiang, 1985: 35) "devaluation would greatly worsen the terms of trade and exacerbate domestic inflation by imparting a strong cost-push to the price level."

4. INSTITUTIONALIZING THE EXPORT-ORIENTED REGIME

Compared with most other developing countries, both Korea and Taiwan were blessed by having been subject to less insurmountable socio-political obstacles against institutionalizing incentive schemes to promote export activities. By the early 1950s, both countries had already eliminated the tradition-bound landlord class through successful land reforms. Both had experienced an import-substitution-oriented regime, but their experiences were not long enough to generate extremely powerful vested interest groups entrenched in the import-substituting activities geared to the captive domestic markets.

Although the policy to promote import-substitution has never discontinued in Taiwan, and the average nominal tariff rate for all importable items amounted to 55.7 percent as late as in 1974 (see Hou, 1988: 10-11), the ROC Taiwan government could institutionalize the bulk of export promotion system by the early 1960s. In July 1955, the Regulations for Rebate of Taxes on Export Products provided the rebates of import duty, defense surtax and the commodity tax levied on export products and on raw materials used in export production activities. In 1956, manufacturers could retain up to 80 percent of the foreign exchange they earned from exports and use them on the imports of raw materials needed to produce export products.[7] In 1957, a liberal and flexible export loan program was introduced (at an interest of 0.99 percent per month for a maxmum term of 1 year) in order to promote the exports of agricultural, industrial and handicraft products. The multiple

[6]Compared to Korea, Taiwan was relatively better endowed with the exportable agricultural resources such as sugar, rice, tea, banana, and citronella oil and was also in a better position to earn substantial foreign exchange through the exports of processed agricultural products such as canned pineapple. Hence the export drive of the ROC Taiwan government seems to have been relatively less vigorous than those of the Korean government. The share of manufactures exports in Taiwan's total commodity exports increased from 8 percent to 43 percent over the 4 year period of 1958-61, but in Korea it jumped from 15 percent to 46 percent in two year period of 1962-63.

[7]This measure was abolished in 1958 because the export producers could freely import necessary raw materials and furthermore the new exchange rate applied to exports became very favorable. In 1958, the rate for export exchange settlements became the basic official rate of NT$24.58 plus the official posted rate for the exchange settlement certificate (ESC) of NT$11.05 per US$1 which could be disposed of in the open market at higher rates. After 1959, the ESC issued by the monetary authority was freely negotiable at the market and could be used for various permissible import items.

exchange rate were gradually unified at a more realistic level, ultimately settling at the rate of NT$40 per US$1 in June 1961. Both in Korea and Taiwan, the extremely overvalued domestic currency in the 1950s had discouraged exports and necessitated severe quantitative import control that encouraged import-substituting activities (more than offsetting the impact of overvalued domestic currency on imports). The unified realistic exchange rate in the 1960s, however, not only encouraged expansion of non-traditional exports but also reduced the need for extreme quantitative import controls. See also Tsiang (1984: 306-307).

The Third Four-Year Plan (1961-65) of Taiwan introduced the Nineteen-Point Economic Financial Reform that aimed to provide preferential treatment to investment activities, to unify exchange rates, to reduce import control and to encourage export expansion (see Kuo, Ranis & Fei, 1981: 74). The Statute for Encouragment of Investment was enacted on September 10, 1960 in pursuant to the nineteen-point reform measures. The Statute provided new firms or old firms undertaking expansion (of 30 percent or more in production capacity), which conform to the Statute's criteria, a five-year exemption from corporate income taxes or accelerated depreciation allowance at the choice of the firm.[8] The new industrial establishments eligible under the Statute were also exempted from import duties on machinery and equipment imported for their own use, and corporation profit reinvested for productive purposes was deductible from taxable income (see Yu and Chen, 1981: 284 and Balassa, 1981: 417). According to Kuo, Rains & Fei (1981: 76), the average rate of tax reduction & refunds on income tax, stamp tax, customs duties and commodity tax increased from 1.5 percent in 1955 to about 12 percent in 1960-61, about 23 percent in 1962-65 and to about 30 percent in 1965-70.[9]

Export activities were exempted from business and related stamp taxes. Manufacturing and mining firms that exported more than 50 percent of their outputs could deduct 2 percent of total export earnings from taxable income and the tax rate itself was reduced by 10 percent. (This income tax reduction scheme was abolished in 1970.) Exporters could retain their foreign exchange earnings for the importation of raw materials and machinery and could sell such import rights to other firms. (This system was also terminated

[8]The maximum rate of business income tax for such firms would not exceed 18 percent (compared to 32.5 percent for ordinary firms). See Kuo, Rains & Fei (1981: 75). Since 1977, the start of the period of tax exemption could be postponed by up to three years (see Balassa, 1981: 417).

[9]The rate of reduction on income tax alone increased from 2.4 percent in 1961 to 21.5 percent in 1962 but then the rate fell to the level of about 15 percent after 1969.

in 1970.) Special low interest loans were provided to finance the import of raw materials and other export-related production activities.[10] Manufacturers' associations financed direct subsidies to export in such industries as cotton spinning, iron & steel, rubber products, woolen fabrics, paper products and monosodium glutamate (see Liang and Liang, 1981: 328). Economic and commercial counselor officies were established in several foreign countries, and the China Productivity Center was established. Government also provided such export promotion facilities as export inspection, technical and trade consultation services, and market research. That is, the government started to give special efforts to the exploration of new export products, including the processed agricultural products. According to Kuo (1988: 41): "The response of industry toward export expansion in the early 1960s was still slow. In 1965, the Statute [for the Encouragement of Investment] was revised and its scope was expanded. The Kaoshung Export Processing Zone was set up . . . . Development strategy at this time became entirely export-oriented." See also Ho (1978: 187-198).

According to Kuo and Fei (1985: 56-57), Taiwan had maintained fairly high real interest rates during 1952-70, but the high rates of profit induced high rates of domestic investments, i.e., the average real interest rate decreased from about 21 percent in 1951-53 to about 10-12 percent in 1954-65 and then to 8-9 percent in 1966-70 while the rate of profit in manufacturing steadily rose from about 9 percent in 1951-53 to about 16 percent in 1954-56, to about 28 percent in 1957-62 and then to about 35 percent in 1963-70.[11] The real interest rates were high but not so excessively high as to discourage investment activities.

After 1958, tariffs on imports were reduced and the controls on foreign

[10]Balassa (1981: 403) notes that in Taiwan "[W]hile short-term preferential [export] credits have long been provided, they are not granted automatically as in the case of Korea . . . . [U]nder current regulations export credits could amount to one-fifth of the exports of the previous 12 months. . . [I]n November 1977 the actual ratio was only 2.9 percent . . . compares with a ratio of 12.3 percent in Korea (cf. Kuo, Rains & Fei, 1981: 79-81) . . . . The amount available for medium-term export credit is also limited in Taiwan, and export credits with a maturity of over 5 years will be provided only after the establishment of the proposed Export-Import Bank." In Korea, the short-term export credits began to be provided only with collateral since the late 1970s.

[11]Until 1964, Taiwan's unemployment rate exceeded 6 percent and real wages did not rise significantly. Furthermore, the decentralized industrialization enabled the utilization of part-time farmers and young female workers at low costs. According to Kuo and Fei (1985: 58), these factors contributed greatly to the increased profitability in 1952-70.

exchange allocation became less strict. According to Liang and Liang (1981: 325), the ratio of net customs revenues to imports was reduced from about 42 percent in 1955 to about 28 percent in 1960 (the gross rate, which include those rebated to exporters, was reduced from about 43 percent to about 32 percent). The quota on permissible imports was abolished. According to Yu and Chen (1981: 287), the "restrictions on the import of raw materials and, to only a slightly lesser extent, on the import of machinery equipment were very substantially eased as of 1958 for manufacturers who wanted to export." According to Ho (1978: 198), the post-1958 reform, by changing the critical price relationship, made it more profitable for domestic producers to export, i.e., "producing for export has become . . . more profitable than producing for the domestic market."[12]

After the early 1960s, the Korean government not only maintained a realistic unified exchange rate, but also mobilized fully the preferential tax system, preferential subsidy system and administrative support system in order to reward those who contributed to the export expansion (see Hong, 1979). In Korea, the subsidies mostly took the form of rationing the low (often negative) real interest rate domestic and foreign bank loans to selected activities and firms. Furthermore, the relative rates of return on import-substituting activities in Korea were significantly lowered by the reduced overall quantitative import restrictions (see Hong, 1989). The imports of materials directly required for export production activities were set free from virtually any kind of government restrictions (until the early 1970s): as far as export activities were concerned, Korea had maintained a free import regime.

Mason, et al. (1980: 262) characterizes the approach of Korean government in pursuing export-oriented growth strategy as follows: "Government policy is also highly pragmatic in the sense that it shows no hesitation in devising means most appropriate to the end in view without significant ideological bias. The result is a balance between market forces and direct government intervention and between government ownership and reliance on private entrepreneurship. Where the market works, fine; where it does not, the government is quick to intervene. Policy is not only pragmatic but particularistic in the sense that the activities of a single firm may form the object of government intervention."

Throughout the 1960s and 1970s, the Korean government had rewarded

[12]Ho (1978: 197) notes that "[a]t first, administrative complexities and continued government control over foreign exchange and imports reduced the effectiveness of these export incentives. However, since 1962 additional reforms and further relaxation of controls have made the export incentives progressively more effective."

individual entrepreneurs with preferential tax treatments and subsidized credit rationing mostly in proportion to their export performance. As a measure of each entrepreneur's contribution to national economic growth, the gross export value may have been an economically much less sensible index than the net export value (value-added) and may have unduly encouraged the dependence of Korea's export production activities on imported inputs.[13] And yet, the index had the advantage of simplicity. Maximizing the receipt of government subsidies implied maximizing the gross export performance. With such a clear-cut simple performance test, it was relatively easy for every entrepreneur to fully mobilize energies and ingenuities to achieve the goal (see Hong, 1990b). As a result, ever since 1962, the actual export performance has always exceeded the planned export target in Korea.

Within the Taiwan government, there were conflicts between the conservative group that wanted to pursue a state-oriented economy and the liberal group that wanted to pursue a market-oriented economy. Little (1979: 475) states that "the whole Chinese tradition was against laissez-faire and free trade . . . . [m]oreover most high officials and ministers had been in government during World War II and were accustomed to controls . . ." Since the mainlanders had to appease the native Taiwanese in economic affairs, however, the government chose a market-oriented economy with, as a compromise, government ownership of some important industries. According to Little (1979: 475), the intention of the Taiwan government "was not to create laissez-faire conditions for the whole industry, let alone the whole economy. They created a kind of dual economy in which exports, but only exports, could be manufactured under virtually free trade conditions --a policy soon copied by Korea."

Hou (1988: 19) on the one hand states that "since the [Taiwan's] export-promotion policies were by and large directed to all industries without special favor to any particularly selected or targeted industries, entrepreneurs were essentially left alone to develop those industries whose products they could sell profitably in foreign markets," and then also states that (ibid.: 26) "Taiwan has always had an import-substitution policy. The basic philosophy underlying this policy or strategy is that an economy will undergo certain stages of development, and at each stage there are certain key industries [such as integrated steel mill, large shipyard, and petrochemical plants] which through various linkages will bring about development of the entire economy. This strategy also assumes that government officials know what those key

[13] The import content of exports amounted to about 40 percent in Korea and about 58 percent in Taiwan. See Scitovsky (1985) and Hong (1989).

industries are and what policy measures should be adopted to develop those industries. The import substitution policy adopted in Taiwan embodied all the above elements." The Statute for Encouragement of Investment granted incentives only to firms producing iron & steel, aluminum, copper, petro-chemicals, nonelectrical machinery, transport equipment, processed food, pulp & paper, rubber processing, various nonmetallic minerals, textiles, prefabricated housing units and several miscellaneous items. The granting of incentives to firms appearing on this *positive list* has been further subject to limitations on minimum capacity, amount invested, manufacturing process or decisions by the Ministry of Economic Affairs that has enhanced the scope of government discretionary action (see Balassa, 1981: 417).[14]

The Korean government has always maintained sector-specific import-substitution policies, and yet the export-promotion policies were, as in Taiwan, not so conspicuously sector specific until the mid-1970s when it began targeting actively various selected export industries. After the mid-1970s, the Korean government granted various tax exemptions and channeled low interest domestic or foreign bank loans to the hand-picked entrepreneurs, mostly the big business groups, who undertook those investment projects selected for them by the government. When the projects failed, the government had to assume the responsibility of repaying the bank loans. The Korean government had extensively socialized the investment risk for the selected entrepreneurs, and such an arrangement invigorated the *animal spirit* of the big business groups, inducing them to indulge in aggressive expansion through the *fail-safe* government-sponsored investment activities. With alarming number of failure cases, however, this targeting-cum-risk-socialization practice of the Korean government has become very much reduced by the 1980s. Though much less conspicuous, however, the Taiwan government has also practiced targeting practices by promoting selected strategic industries through 5-year income tax holidays, tax-exempt retained earnings, maximum ceiling of 20 percent business income tax on key capital and technology intensive enterprises, tariff exemption on machinery imports,

[14]The Statute was revised more than a dozen times by 1980, updating the categories and criteria of strategic productive enterprises for special encouragement. In 1980, the statute stated its objective as: (1) to encourage those investments fostering the improvement of commodity quality, the diversification of exports, and the enhancement of value-added exports; (2) to up-grade industrial structure through the development of technology- and capital-intensive industries, and (3) to encourage both the opening-up and the efficient utilization of major natural resources (see Yu and Chen, 1981: 284). After 1977, selected firms could retain profits up to 100 percent (see Balassa, 1981: 419).

low interest loans and accelerated depreciation allowances.

According to Gold (1986: 87), "Taiwan did not develop a laissez-faire, free-market economy; the state retained multiple controls and only granted what seemed like free-market activities within strict bounds," and "[t]here was a lot more going on than *getting the prices right*." Both in Korea and Taiwan, however, the government has refrained from excessive direct controls of economic activities and allowed the market forces to function, admittedly within bounds, so that the energies of the workers and entrepreneurs could be fully mobilized for export-oriented activities. The merit of competitive market mechanism has been, if not fully, well exploited as to sustain the dynamism of both economies throughout the 1960s, 1970s and 1980s. There were numerous government failure cases, but as a whole and in a relative sense, the government has mostly tried to make up the (supposed) market failure cases. Both in Korea and Taiwan, the government regulations of economic activities and the inter-firm competition have been combined into a discretion-cum-competition market system. The necessity of external competition at international market helped preventing the system from degenerating into the rent-seeking one and maintaining the dynamism of each economy (see Hong, 1990b).

Tsiang (1984: 318) summarizes the mechanism of "economic takeoff" in Taiwan as follows: "The relative stability of prices and the fairly attractive interest rates for savings deposits restored and stimulated the traditional thrifty habit of the Chinese people . . . . additional tax measures such as exempting from personal income tax the interest income from saving and time deposits with maturity terms of two years or more, and exempting from corporation income tax profits that were plowed back for investment . . . . rapidly enlarged inflow of voluntary savings, which provided noninflationary financing for the domestic investment opportunities created by the new export-encouragement policies."

Most importantly, the ROC Taiwan government, just like the Korean government, has severely suppressed the labor-union activities, and hence has been able to maintain perfectly competitive labor markets and market clearing wage rate. Until very recently, neither in Korea nor in Taiwan the trade union movements were allowed to negate the competitive advantage of abundant labor supply and cheap labor.[15]

[15]In Korea, the entrepreneurs have been able to maintain a system of long work hours by instituting low base wage rates and high extra rates for the overtime work.

5. FINANCIAL SYSTEMS AND ALLOCATION OF INVESTMENT FUNDS

Ever since the early 1950s, the financial system in Taiwan (including the postal savings system) apparently has successfully performed the task of maximal savings mobilization, but achieved questionable performance in allocative-efficiency, i.e., in allocation of loanable funds.[16] Since the early 1980s, the financial system in Korea has also begun to perform the task of maximal savings mobilization.[17] Just like in Taiwan, however, Korea's financial systems by itself can not claim to have maintained a high allocative efficiency.

Most of the full service domestic banks in Taiwan have been managed by the government and hence have been bound by all kinds of laws and regulations and vulnerable to the interventions of government authorities and interest groups. The big three state-owned banks control nearly 50 percent of deposits, enjoying a three percentage point spread between the interest rates applied on deposits and loans. Both in Korea and Taiwan, financial institutions have been tightly controlled, or one may rather say, directly managed by the government. There have been two important differences between Korea and Taiwan, however: (1) Korea maintained real interest rates below minus 5

[16]The interest income earned from deposits longer than 2 years was tax-exempt until 1981. After 1981, interest income up to NT$0.36 million per year was exempt from income tax. As for interest income from the curb market, no tax is paid at all. See Hou (1988: 17). More than 90 percent of postal savings in Taiwan had to be redeposited with the Central Bank whose absolute magnitude, by the end of the 1970s, exceeded the total outstanding amount of rediscount and refinancing facilities extended to the financial intermediaries by the Central Bank.

[17]In Japan, the savings/GNP ratio became to be close to or exceed 30 percent level after the beginning of the 1960s; in Taiwan, after the early 1970s; and in Korea after the early 1980s. The usual econometric analyses fail to explain satisfactorily such high and rising savings rate in terms of the conventional variables such as real interest rate, level of income, growth rate of income, distribution of income or inflation rate and hence let economists seek answers in culture and tradition, absence of full-fledged social security system, bonus system, undeveloped capital markets, expensive housing costs, social instability, and so on. (See Sun and Liang 1981: 403-425). Though one often finds a negative relationship between interest rates and savings in conventional econometric approaches, we may still be able to contend that, within a steady-state framework, if Korea had maintained a positive real interest rate regime since the early 1950s, Korea could also have experienced such high saving regime characterized with a rapid progress in financial deepening and monetization as in Taiwan by the early 1970s.

percent per annum on average until 1982, while Taiwan has maintained real interest rates higher than (plus) 5 percent per annum on average on bank deposits and loans since the early 1950s, and (2) the Korean government has very much concentrated the bank loans to big private business groups, while the Taiwan government, though favorably financing the government-owned corporations, has not "intentionally" concentrated bank loans to big business groups.

The high interest policy in Taiwan has apparently encouraged the use of more labor-intensive method in production activities than in Korea. According to Scitovsky (1985), the policy has also contributed to Taiwan's egalitarian income distribution: ". . . the typical lender is a small saver, the typical borrower is the corporation, often the large corporation, so that high interest rates favor the low income saver and limit the profits of business enterprise . . . . [a]nother advantage is that it [high interest rate] limits profits which restrains the rate at which the size of the individual enterprise grows." In neither country, however, the real interest rates have been market-clearing ones which could equate the demand for and supply of loanable funds, although the rates of implicit subsidies associated with credit rationing have been much smaller in Taiwan than in Korea.

Not only in Korea, but also in Taiwan, the relative share of deposits and loans of the (government-managed) commercial banks has been declining while the share of other private non-monetary financial institutions such as investment and trust companies or life insurance companies have been steadily increasing. Since the late 1970s, the curb market lending activities in Korea have rapidly merged into the activities of non-bank financial institutions such as investment and trust companies. This has significantly reduced the risk element associated with the lending activities in informal sectors and has resulted in such a rapid expansion in the activities of those private non-bank financial institutions. Taiwan has shown a rather slow rate of expansion in the share of assets owned by "Other Financial Institutions" if we exclude the postal savings systems. The curb market in Taiwan never seems withering: during 1964-86, the curb market provided about 37 percent of funds for private enterprises and its share has been rather expanding in the 1980s.[18]

The fact that business firms and individuals are still willing to pay higher cost to get curb loans in both Korea and Taiwan implies that there still exists subsidized credit rationing. This also implies that, for the politically less influencial businessmen, the real (effective) cost of borrowing from the

[18]See also Kuo, Ranis & Fei (1981: 80).

organized financial institutions, taking into account the compensatory deposit or collateral, must be much higher than the official nominal cost. The government-operated commercial banks still maintain monopolistic powers, and the activities of secondary non-bank financial institutions are still very much restricted by the government both in Korea and Taiwan. In Taiwan, in spite of the interest rate liberalization (on deposits) enforced after January 1986, one could only observe widening differences between lending rates and deposit rates. Indeed, only a liberalization on interest rates (on bank deposits) without accompanying liberalization in the financial sector in general does not seem to activate the "market principle." Taiwan's financial system needs modernization and rationalization. And yet, in Taiwan, the theoretically desirable financial policies are not implemented because the process of decision making and implimentations are hampered by vested interest and corruption.[19] Similar arguments should also be applied to Korea's backward financial system (see Hong 1986 & 1987).

In terms of secondary-market trading, the bond markets barely exist in both Korea and Taiwan. In Korea, the direct financing has tremendously increased during 1987-89 and the market value of stock outstanding became equivalent to about 60 percent of GNP in 1989. Although Korean entrepreneurs has recently been actively raising investment funds from capital markets, most of them still hesitate to go public, being afraid of losing their traditional control of firms. In Taiwan, the equity market was set up to provide a legal place to trade shares of state-owned companies. The government still imposes stiff regulatory controls on firms issuing shares and the entrepreneurs still hesitate to raise investment funds from capital markets. The stockmarket is full of retail investors pursuing speculative short-term capital gains in a casino-like atmosphere.

[19]Tsiang (1981: 265) states that: "If it is felt that the banks should play a bigger role in financing the industrial investments, the obvious thing to do is to set them free to compete for the big pool of total available savings and to permit freer entry into the financial intermediation, rather than to supply the banks with more reserve money in order to let them expand the money supply." Tsiang (1981: 268) continues: "It seems to me, therefore, a big political mistake that the Central Bank was recently (1980) put directly under the jurisdiction of the cabinet and subject to the constant surveillance by the legislature. There is clearly a danger that from now on monetary and foreign exchange policies will be determined largely by popular clamor rather than by expert opinion. Powerful vested interest groups that control the mass media and have a strong lobby in the legislature would inevitably distort the monetary policy in their own favor."

6. EVALUATING THE RELATIVE PERFORMANCE OF KOREA AND TAIWAN

Both Korea and Taiwan pursued the export-oriented growth strategies with all kind of policy measures which, in hindsight, were not always the best possible ones. Many economists, however, think that the set of policies adopted by the Korean government must be deemed to have been less efficient or less desirable than that adopted by the ROC Taiwan government because Korea had to suffer chronic inflations that amounted to nearly 20 percent per annum on average until 1982, underutilized domestic savings potential, cumulating external debts, worsening (or non-improving) distributive equity, and concentration of economic power in the hands of a small number of big business groups. Both in Korea and Taiwan, the export-oriented growth generated massive new employment and rapid increases in real wage rates (in Taiwan, since the early 1960s and in Korea, since the late 1960s) that contributed to the improvement of the overall distributional equity. In Korea, however, the deliberate concentration of economic powers in the hands of a small number of big business groups as well as the extremely preferential tax treatments that had been provided for the non-labor non-entrepreneurial incomes (such as the incomes associated with the transactions of real estates or financial assets) inflicted seriously adverse impact on distributional equity. In Korea, the income shares of upper 20 percent class and lower 40 percent class were 44 percent and 18 percent, respectively in 1985, while those in Taiwan amounted to 38 percent and 22, respectively in 1987 (see CEPD, 1989 and EPB, 1988).[20]

By establishing large number of industrial parks that supply infrastructure facilities and land and buildings on rental basis, the ROC Taiwan government has encouraged many people with entrepreneurial talent to establish themselves as independent businessmen. In Korea, the existence of government-supported large firms made it more difficult and expensive for small new comers to enter the market. Taiwan government has also actively encouraged the decentralization of industrial activities which enabled Taiwan to maintain a more labor-intensive growth pattern than Korea, minimizing the

[20]As Hou (1988: 20) notes: “A particular feature of export expansion in Taiwan is that small and medium enterprises (roughly with employees of less than 100) have played an important role in developing foreign markets. For the period from 1978 to 1985, export earnings of small and medium enterprises constituted about 65% of total export earning of Taiwan. The ratio was probably much higher in the early years.” In Korea, the share of small and medium enterprises in total export earnings has constituted less than 40 percent.

cost of excessive urbanization and achieving a more equitable distribution of income (see Ranis, 1979: 222-223 and Hong, 1987).[21]

Recently, however, the policies adopted by Taiwan government began to be criticized because of their apparent failure to promote large enterprises based on legitimate scale economies and their failure to properly utilize the vast available investment funds (i.e., domestic savings) for investment in domestic production activities. The absence of large scale entrerprises in Taiwan becomes very conspicuous when one makes comparison with Korea or Japan. If Korea has sacrificed efficiency by excessively promoting large-scale business groups, Taiwan can be regarded to have sacrificed efficiency by failing to generate large enterprises on the basis of legitimate scale economies. The financial system of Taiwan could support a few large scale government-owned enterprises, but it seems to have failed to extend adequate support for the export-oriented large private enterprises.[22] Banks in Taiwan make loans on the basis of excessively conversative principles, mostly requiring real estate as collateral and hence often being accused of mimicking pawnshop. That is, Taiwan's financial system has been capable of mobilizing large domestic savings but has not been capable of adequately channelling the savings into investment activities characterized with substantial scale economies. On the other hand, Taiwan has had trade account surpluses every year since 1971 except 1974 and 1975. Before 1981, the trade-surplus/GNP ratio was around 4 to 5 percent (except in 1972 and 1978 when it reached around 8 percent level). Since 1981, the magnitude of trade surplus expanded rapidly reaching 22.5 percent in 1986 and 21.5 in 1987.[23] As of 1988, it still

[21]By the mid-1970s, about two-thirds of average farm household income in Taiwan came from non-farm activities. That is, farming in Taiwan became small-scale part-time activities with little hope for attaining international competitiveness in productivity. Scitovsky (1985) notes that "[t]he proportion of workers employed in manufacturing who lived in rural areas as part of farm households and commuted daily on a seasonal or full-time basis grew steadily and constituted over half of the work force by mid-1960s."

[22]Balassa (1981: 399) notes that "[p]ublic enterprises generally have first claim on investment credit . . . Also, large private firms manufacturing [highly physical capital intensive] intermediate products [which sell mostly in the protected domestic market] have greater access to credit than the generally smaller firms producing machinery and equipment."

[23]Balassa (1981: 413) argues that "generally, it is not desirable to run a current account surplus that involves the outflow of capital from a capital-poor country to capital-rich countries. With the social marginal productivity of capital estimated at 15 percent. . . Taiwan can borrow at a rate only slightly above LIBOR that hardly exceeds zero in real terms. . ."

amounted to 11.6 percent of GNP. The fact that a large proportion of domestic savings have not been utilized for domestic investment purposes while most small firms still have to depend on curb loans implies that Taiwan's financial system has failed to provide low-cost investment funds to all capable entrepreneurs even in the midst of the excessive abundance of loanable funds.

Taiwan has maintained substantial export surpluses since the late 1970s, and yet the foreign exchange rate policy has been determined by the vested interest groups which have firmly established themselves in the course of export-oriented growth path. The artificially determined exchange rates have been generating artificial profits to vested export producers. Even with such enormous current account surpluses, the Taiwan government had resisted appreciation of the NT dollar until 1986, and some are still arguing for a devaluation of the New Taiwan dollar. In spite of the huge current account surpluses, the relative size of public investment in Taiwan has declined, the real interest rates were not allowed to decline significantly to stimulate investments (for the fear of inflation associated with trade surplus), and tariff and non-tariff barriers have stayed essentially unchanged until very recently.

Although both Korea and Taiwan have backward financial intermediation system with low allocative efficiency, some people speculate that Korean economy will maintain more dynamism because of the presence of the large-scale firms which are in a better position to undertake expensive R & D activities, whereas Taiwan's economy is dominated by small enterprises which have limited absorptive capability of available investment funds.

The painful experience of ultra-hyper-inflation in pre-War mainland seems to have made a lasting mental impact on the top decision makers of ROC Taiwan government as to maintain ultra-conservative attitude on monetary and fiscal policies. By the 1980s, the lack of proper public investments on SOC facilities have resulted in extreme traffic conjestions on highways, city centers and port facilities, deteriorating education and housing facilities, inadequate power supply and overall deterioration in the conditions for everyday living and general production activities. Belatedly, the ROC Taiwan government has decided in 1991 to invest $303 billion for SOC facilities (consisting of 779 projects) over the coming 6 year period. These investment activities are expected to help Taiwan significantly replace the role of Hong Kong after 1997.

On the other hand, the Korean government has also minimized government expenditures on SOC facilities in the 1980s in order to pull down the annual inflation rates to the level of Taiwan's. This anti-inflation policy was successful but only at the cost of deteriorating SOC facilities that has become to constitute the most visible bottleneck for sustained growth of Korean economy by the early 1990s.

Until the late 1980s, the Korean entrepreneurs were free from labor disputes because the authoritarian Korean government had always been ready to intervene on behalf of the entrepreneurs. With the progress in democratization in Korea, however, the government could not but maintain a more neutral stance while the labor union movement became militant and more systematic. At the present time, nobody can be sure whether the Korea's labor unions would become more like the U.S.-European ones or more like the Japanese ones. The recent aggressive labor movements have seriously been damaging the international competitiveness of Korean industries. Depending on how the labor movement develops, the future course of Korea's growth will be markedly different. Taiwan has yet to go a long way to achieve constitutional democracy. As a result, Taiwan is still free from any kind of serious labor disputes, but no one is sure how long the peaceful facade can last. Taiwan economy, however, is dominated by family style small and medium sized firms and hence workers harbor little sense of grievance that is likely to arise from regimental oppression within privately-owned gigantic company groups. One might, therefore, foresee little possibility of Taiwan's workers to imitate the militant behavior of Korean workers.

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