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ECONOMIC PROGRESS IN SOUTH KOREA AND TAIWAN: LESSONS FOR THE PHILIPPINES

by

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PREFACE AND ACKNOWLEDGEMENT

The recent impressive progress of Taiwan and South Korea is known only to a limited number of economists and citizens in the Philippines and perhaps in many parts of Southeast Asia and the world. Less understood are the policy changes which were responsible for this progress. These two economies are attracting worldwide attention from experts because of their recent success.

The following study cannot hope to be comprehensive nor deeply analytical. While my principal object in writing it is to emphasize what may be learned by the Philippines from these two countries, I hope other readers with a different perspective will find it useful nevertheless.

Although I have in recent years been following the developments of Taiwan and South Korea, this study is a direct result of a recent brief trip in September, 1969 to these two countries. Among those who were helpful by discussing with me or furnishing me materials are: A. Chet Tack Augh (Bank of Korea), Kim Kwang Suk (USOM, Korea), Cheng-shun Chen (Taiwan National University), M.S. Shih (Council for International Economic Cooperation and Development {CIECD}), K.T. Tsui (CIECD), T.H. Lee (Joint Commission on Rural Reconstruction {JCRR}), Y.T. Wang (JCRR), T.C. Liu (Tax Reform Commission, Taiwan and Cornell University), Alex Sianson (Philippine commercial attaché, Seoul) and Philippine Ambassador B. Tirona and his staff in Seoul. A recent trip to Jakarta fortunately enabled me to discuss with David C. Cole, who has been a close observer of the South Korean economy.

In South Korea, Al Cappola helped me immensely in making my appointments. In Taiwan, I can never repay the solicitous help of my former student, Cheng-shun Chen, who supplied me with numerous materials and who arranged many useful appointments.

I have relied extensively on the Bank of Korea, Statistical Abstract for Korea 1969 (Seoul, 1969), the CIECD Statistical Abstract of Taiwan (Taipei, 1969) and the (Philippine) Central Bank Statistical Bulletin (1968, Manila) for the country statistics. I have also benefited from readings of Taiwan's economy found in the useful periodical, Industry of Free China and of the Korean economy from the Annual Reviews of the Korean Economy by the Bank of Korea.

I am grateful to the Rockefeller Foundation for a research grant, which included travel to these two countries and to the University of Wisconsin and the University of the Philippines Program in Development Economics for part of the travel support.

Lastly, I wish to thank once again the loyal sister secretaries, Rosalita and Leyte Centeno, for helping me in preparing this study.

G.P.S.

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I. INTRODUCTION

Among the many countries and regions of Asia, one can imagine different conditions of economic resource endowments and still observe the possibility of rapid economic progress.

If a country had practically no land but had enormous supplies of labor, economic progress can be made to proceed rapidly with the use of policies which take full advantage of the abundant labor input. This is best exemplified by the rapid economic progress of Hongkong in the post-second world war, especially the 1950's.

If a country had relatively large land areas but had no other major economic resource except abundant supplies of labor, economic progress can be also rapid. The most important model of this kind in the early 20th century is the Japanese economy, which has demonstrated how rapid economic development can be achieved under these resource conditions. Two emerging successful cases of impressive economic progress in the 1960's and the next decade are South Korea and Taiwan.

If a country had a large land area, rich natural resources and abundant labor supply, there is therefore no economic reason why the rate of economic progress can be anywhere less than the performance of the last two models of these economies. Among the Asian countries that fall under this grouping, the Philippines, Indonesia, Thailand, Burma, India, Pakistan, and many more can be cited. (It is, of course, debatable whether

these countries have the same relative resource endowments. For instance, India, Pakistan, Thailand have been described by others as relatively resource poor.) The cases of recent economic success among these countries are sparse -- at least certainly not to the extent of the success of any one of the countries cited earlier.

Are there lessons that may be learned by these countries from the Taiwan-South Korea-Hongkong-Japan model? What are the key policy instruments which have created a difference in relative achievements among these countries?

More limited objective of this paper. This paper is primarily designed to assess the success of the South Korea and Taiwan cases in the context of parallel developments and policies in the Philippines. It will be most surprising if the comparisons in this limited context were not of general applicability to many other less developed countries.

Let us begin with a caution. Modern economists recognize that promoting economic progress has many noneconomic dimensions. By relating them to issues of social and national importance, the economist does service in accentuating the relevant issues. I hope that this paper aids in sharpening the economic policies necessary to achieve rapid economic progress in the Philippines.

II. SOME POINTS FOR COMPARISON

It would be useful to begin with a discussion of relative economic performance and other points for economic comparison.

Recent growth rates. Taiwan and South Korea have rates of growth of real gross national product over the last decade of around 10 per cent per year. In the last seven years their growth rates have been far above any other economies of Asia. South Korea's recorded real growth rates for 1968 was 13.3 per cent.

The Philippines could accomplish only half -- even less than half -- these feats in recent years. The accomplishments of Taiwan and Korea have been paced by the development of industries. In both cases, industries are not only import substituting but, more emphatically so, many are export-oriented. The rapid expansion of industries have now created complementary demand for investments in other industries feeding on to the new industries -- in roads, in power and communications, and in new port facilities, in shipping and shipbuilding. In short, they have laid out infrastructure investments to give heavy support to the industrial programs.

Export-led industrial growth. Industrial exports have led these rates of growth. In the last seven years, Taiwan's exports expanded by about 20 per cent per year and Korea's from 20 to 30 per cent per year. If we contrast these to the growth of exports of the Philippines (about 10 per cent per year, caused largely by the export growth immediately after 1962), the comparison is depressing. One might add (of course) that

when compared with still other Asian countries, the Philippine export performance has not been really that bad. What makes this performance unimpressive is the inability of the Philippines to get any industrial exports going, while these two countries have relied mainly on industrial exports for their trade expansion.

Relatively advanced agriculture. In addition, South Korea and Taiwan have given support to agricultural development. Before the recent expansion of their economies had occurred, both countries had already achieved relatively highly developed agricultural sectors. They had licked a major problem of raising agricultural productivity, thereby assuring that a release of agriculturally dependent labor to industry could be achieved smoothly. Although Taiwan's agriculture is relatively more advanced than that of Korea in terms of diversity and use of land, their agricultural sectors rank well above the level of development of other less developed countries, especially in terms of land productivity measures.

For instance, Taiwan's yield per hectare in the production of palay is 4,182 kilograms; for Korea, it is 4,300 kilograms. For the same crop, the Philippines has only 1,350 kilograms yield per hectare of land. A comparison of Taiwan's yield per hectare for sugar with the Philippines puts the latter in bad light in terms of one of her prime agricultural exports. Taiwan's yield of 84,310 kilograms is almost twice as much of the Philippines' yield of 45,600, even though sugar agriculture in the Philippines is by far the most advanced agriculture in the country (perhaps with

the exception of the new plantation economies for pineapples and bananas).[1]

Per capita income levels. In terms of measures of per capita income levels, it may be said that at the beginning of the middle 1950's the Philippines was far ahead of Korea and Taiwan. But there is now clear indication that Taiwan has really outstripped the Philippines in per capita income terms. In the 1950's the average annual per capita growth rate of real income in Taiwan was in the vicinity of 4 per cent; in Korea, 3 per cent. In the 1960's especially after 1964, per capita growth rates have been in the vicinity of 7 to 8 per cent per year for Taiwan and South Korea.

Prognostication on relative growth rates. At their present stages of development, the Philippines is far ahead of Korea in terms of per capita income. However, if the rates of growth of real per capita income of South Korea grows continuously at her recent rate of performance and the Philippines is unable to raise her 3½ per cent per year, it will be soon -- perhaps within 7 years -- that Korea will equal Philippine per capita income levels, as Taiwan had already accomplished in the early 1960's.[2] South Korea and Taiwan will double their per capita incomes

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[1]One reason for this difference in sugar productivity is that while the Philippines has been expanding sugar hectarage -- thereby utilizing less productive land, Taiwan's sugar fields have remained essentially in the suitable lands. The direction of her resources have gradually shifted to other areas of activity other than sugar agriculture.

[2]Compound interest arithmetic should help here. If we simply placed the (rough) per capita incomes of South Korea at US$150 and of the Philippines at US$200, within seven years, the Philippines and South Korea will both have per capita incomes of almost US$255. At 7½ per cent growth per year, compound interest growth doubles the base year income within 10 years; at 3½ per cent, doubling of base year income takes 20 years.

in 10 years and the Philippines in 20 years, at the current per capita income growth rates.

Inflation and price stabilization. A point of similarity between South Korea and Taiwan is that these two countries had experienced severe inflation in the early 1950's. These two countries had a series of devaluations during these periods.

Taiwan licked the problem of rapid inflation in the late early 1960's, just about the time of Philippine decontrol. The rapid growth of the economy, the expansion of her foreign exchange resources, the absorption of excess labor in the farm, and growth of productivity in the agricultural sector have all contributed to the stabilization of prices in Taiwan.

South Korea is still suffering from a high rate of inflation. She is still making major readjustments in price policies. But at the rate her exports have been growing and barring any political problem, she will be able to restore price stability like Taiwan. External equilibrium is an important requisite of domestic price stabilization.

Political given. Political leadership in both countries is of the one-man rule variety -- Chiang Kai-Shek in Taiwan and Park Chung-Hee in South Korea. Perhaps, because both Koreans and Chinese have not had any political alternatives, their activities have been in recent years drawn largely into economic growth. One might also argue that the relative stability of these regimes have accounted for the consistency of major economic policies.

This political given might be considered by many as the important difference between the Philippines and these two countries. On the other hand, it may be hopefully advanced that a democracy like the Philippines can and should be able to achieve the requisite policies, with some amount of political persuasion among its leaders. Moreover, one reason why the reforms in these two countries have found little attention in the Philippines is that the weight of thinking on these problems for many years, even by technical economists, had been at the opposite end of the argument until perhaps recently. In any case, the requisite economic policies have not found any major exponents.

Role of American aid. Both countries have been heavy recipients of American economic aid. Taiwan's rehabilitation after the Communist take-over in mainland China (1949) and the rehabilitation of Korea from the devastations of the Korean war (1950-1954) naturally required heavy doses of American aid.

The amount of aid from 1951-60 for Taiwan was US$1,029.8 million. From 1961-68 total aid gradually diminished. South Korea's aid was US$1,546.8 million for the 1954-1960. During 1961-68, US aid likewise diminished, as in the case of Taiwan.

It would seem that these two countries put American aid where it counts substantially. The following quotation could apply to South Korea as well, although it is an evaluation by Chinese officials in Taiwan about the way they have exploited foreign aid:

> "... During the period of the first three four-year economic development plans (1953-1964), U.S. aid had been instrumental in the postwar stabilization of the economy and subsequently in the implementation of development projects. On the average, one third of the capital formation had come from this source each year. The role of U.S. aid had been especially crucial in the early stage of Taiwan's economic development. Before inflation had been arrested, domestic savings were still low, and private capital hesitated to come forward. Because of its concessional terms (low interest and long maturities) the judicious use of U.S. aid effectively helped mobilize domestic savings and channel them into industrial development through the requirement of matching funds and selection of projects for U.S. aid financing."[3]

Of course, American non-economic aid spending (largely military) which are not recorded above, have immeasurably increased the invisibles of these countries, the Philippines included.

Confident optimism. There is now confident optimism both in South Korea and Taiwan. Success breeds optimism and optimism, when properly handled as the Koreans and the Chinese in Taiwan are currently handling their economies, leads to further success.

This optimism contrasts very well with the critical appraisals of Philippine economic performance among Filipinos. For instance, I have come to believe that given a restructuring of economic policies along guidelines suggested in my other studies would enable the country to perform at least as well as the South Koreans and Taiwanese. And yet the

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[3] K. [redacted] Li and W.A. Yeh, "Public Policy and Economic Development on Taiwan," Council for International Economic Cooperation and Development (April 1969), p. 20.

Philippines has not because these policies are as yet absent.

Taiwan's economy has been moving fast. Yet this is not seen immediately by a visitor in Taipei, the capital city. Only recently can one truly discern the changes in Taipei's physical make up. Recent improvements in all roads and facilities (which struck me as three-time visitor in this city over a period of 13 years) look impressive, an observation one would not make two or three years ago. Commercial construction in Taipei, not so noticeable as late as 1966 and 1967 (my previous visit) is now so obvious. The road system of the city is much improved. And, surprise of all surprises, the telephone systems in Taipei and Seoul, at least, are probably as good as any in the industrial world. This is a big contrast to Manila's.

III. AGGREGATE INDUSTRIAL AND COUNTRY DIRECTION OF CROSS-SECTION OF EXPORTS

The optimism of these two countries is largely reflected in the way the industrialization programs are being pursued. Industrialization has been helped by promoting further import substitution into highly linked domestic manufactures and by causing these industries to tap foreign markets early in their industrial histories.

South Korea's deputy prime minister, who is also the Minister of the Economic Planning Board, has enunciated an "export-first guideline" for industrialization in accordance with the government's motto, "nation-building by increasing exports".[4] To the South Koreans, this is not an empty motto, as this would still seem to be at present (1969) in the Philippines. As we shall show later, export incentives policies have made South Korea and Taiwan two havens for new enterprises which aim at making a crack at the international market.

Taiwan's recent statistics are instructive. In 1954, at about the end of the Korean war, Taiwan's exports were US$133 million and the Philippines US$400 million. By 1960 Taiwan exports were US$218 million while Philippine exports were US$560 million. By 1968, Taiwan's exports were US$842 million and the Philippines had almost the same value.

A distinction of the exports by broad industrial groups is more useful. In 1950, only 7.9 per cent of Taiwan's exports were industrial in character; by 1960 industrial exports were 33.9 per cent of total; and

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[4] See the Korea Trade and Investment, July 1969, vol. 1, no. 1, a publication of the KOTRA (the Korea Trade Promotion Corporation), p. 11.

by 1968 these exports accounted for 66 per cent of total exports. In contrast, the Philippines has relied largely for over 90 per cent of its total exports on the traditional postwar exports of sugar (partly industrial), logs and lumber, copra, processed pineapples, and minerals.

South Korea's rapid export expansion is only as recent as the 1960's. In 1961, exports were only close to US$41 million. Not until after 1964 when major reforms in foreign exchange liberalization were undertaken had exports really begun showing strength. In 1968 the exports were more than 10 times as much as 1961, that is, US$455 million. This is one of the most impressive export expansions ever achieved by any country, although, of course, we might qualify that exports began at really very low levels. The industrial exports of South Korea have moved from 15 per cent of total exports in 1961 to 74.2 per cent by 1968.[5]

The US economy as initial market. An important feature of the growth of industrial exports of these two countries is that this expansion is paced by penetration principally into the United States economy as the major market. In 1954, exports of Taiwan to the U.S. was 4.8 per cent and to Japan 53.9 per cent of total exports. By 1965, these percentages of total were 18.1 per cent to the U.S. and 31.1 per cent to Japan; by 1968, 30.9 per cent to the U.S. and 18.2 per cent to Japan.

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[5]These industrial export data may not be comparable with the data for Taiwan. To arrive at Korea's industrial exports, I aggregated chemicals, manufactured goods classified by material, machinery and transport equipment, and manufactured articles together.

In the case of South Korea, export statistics beginning in 1965 are available in detail. The share of the U.S. market increased from 32.2 per cent in 1965 to more than 50 per cent by 1968. In contrast, Japan's share was 51.7 per cent in 1965 and became only 21.9 per cent in 1968. Given the rapid expansion of Korean exports, these data also mean that trade with Japan has also increased, although the products of most new industries have gone to the U.S.

The expanding trade of Taiwan and South Korea with the United States confirms the failure of the Philippines to take clear advantage of the United States market (under the Bell Trade Act and the Laurel-Langley Agreement) during the time when bilateral preferential trade agreement was in its most advantageous form for the Philippines.[6] Without the weapon of the advantageous preferential trade agreements that the Philippines had in the Laurel-Langley treaty, South Korea and Taiwan have demonstrated they can reap a wide margin of economic success in industrialization by exploiting export possibilities with the United States. In doing so, they have raised their industrial efforts, expanded employment opportunities for their citizens far beyond what mere import substitution industries could offer, since all the new exports are relatively labor intensive industries.

The rapid penetration of Korean and Taiwanese exports into the well

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[6] A recent study of non-traditional Philippine exports to the U.S. market confirms all these points. See M. Orbeta, "Philippine Minor Exports to the United States, 1961-1967," master's thesis, Department of Economics, University of the Philippines, August 1969. See also my "Inventory of Philippine Exports, 1961-1967," Discussion Paper 69-5 (February 5, 1969), Institute of Economic Development & Research, University of the Philippines, where I make a strong statement on this point.

United States market will not, and should not, end there. The danger of dependence on a single market is too well known to be elaborated on. From the standpoint of export strategy, concentrated sales to United States buyers is a wise one at the beginning. The US economy is the largest single economy in the world today and importers buy relatively large lots of export goods. Because the US has a single tariff policy, a small country (and small exporters) would cope only with one set of rules and regulations covering commercial relations. The large market offered by the American economy serves as the initial penetration point to all other trading national economies. The growing popularity of Taiwan goods in Hongkong and in the Philippines as well as the rest of Southeast Asia is a clear indication of directions undertaken to move the next stage of penetration into other markets. As we have already stressed, early success oftentimes leads to further success. After one market, then the next!

The activities of Korea and Taiwan in trade promotion should be models for the Philippines to adopt. These two countries have paid particular attention to export promotion by encouraging the early attainment of exportabilities of certain products for the world market. It is an important rule in economics that in a competitive world, the most efficient firms are the ones that are able to expand fast. Efficient firms are able to reap the major rewards offered by efficiency itself, which are in terms of profits. The impact of expansion of efficient industries is of great consequence to national economic development since their viability assures continued growth.

IV. INDUSTRY-SPECIFIC CROSS-SECTION OF EXPORTS

A cross-section of the industrial composition of exports of Taiwan and South Korea is desirable.

Taiwan. The rapid change in the structure of Taiwan's exports is best examined by its industrial composition. In 1953, sugar accounted for 69.4 per cent of Taiwan's present exports with a value of US$90 million. The importance of sugar has since declined because of the rise of other agricultural crops (competition with other more advantageous commercial crops for land) and partly because of the growth of internal demand. By 1960, sugar consisted only of 42.7 per cent of total exports. In 1968, sugar had only a value of US$50.5, accounting for 6 per cent of total exports.

The new export industries that have replaced sugar are textiles (US$183 million in value), which accounted for 21.8 per cent of total exports in 1968; metals and machinery, 17.3 per cent; lumber and timber products, ~~2.9~~ 4.2 per cent; plywood, 6.6 per cent; canned mushroom and canned asparagus spears which both accounted for 7.5 per cent of total exports. The category of other exports accounts for 14.9 per cent.

As Table 1 indicates, the rapid changes in the export composition are quite dramatic. In 1953, sugar, rice, canned pineapple, tea, bananas, citronella oil and coal, all primary products, accounted for 92 per cent of Taiwan's exports. By 1960, the same products accounted for 62.2 per cent of total exports, but in 1968 all of them represented only

Table 1. VALUE OF PRINCIPAL EXPORTS OF TAIWAN BY COMMODITIES
(Value in million US dollars)

Commodities	1953		1960		1968	
	Value	Per Cent Distribution	Value	Per Cent Distribution	Value	Per Cent Distribution
Total	129.79		174.20		841.78	
Sugar	90.26	69.53	74.40	42.71	50.52	6.00
Rice	11.35	8.74	4.32	2.48	13.93	1.65
Textile products	-	-	21.30	12.23	183.06	21.75
Canned Pineapple	2.61	2.01	8.49	4.87	18.97	2.25
Tea	6.84	5.27	6.34	3.64	11.68	1.39
Banana	3.41	2.63	7.14	4.10	57.16	6.79
Metals and Machinery	1.03	0.79	9.36	5.37	145.64	17.30
Chemicals	0.40	0.31	7.24	4.16	24.67	2.93
Lumber, Timber & Products	0.32	0.25	2.99	1.72	35.68	4.24
Plywood	0.01	0.01	2.67	1.53	55.38	6.58
Citronella Oil	2.21	1.70	3.45	1.98	1.72	0.20
Coal	2.91	2.24	4.13	2.37	-	-
Cement	1.02	0.79	1.13	0.65	16.34	1.94
Building Materials	-	-	1.17	0.67	6.95	0.83
Salt	1.67	1.28	2.46	1.41	0.10	0.01
Paper & Pulp	0.18	0.14	2.51	1.44	6.81	0.81
Canned Mushroom	-	-	0.15	0.09	30.70	3.65
Canned Asparagus Spears	-	-	-	-	33.11	3.93
Other Agricultural Products	1.85	1.43	8.11	4.65	23.23	2.76
Others	3.74	2.88	6.83	3.93	126.14	14.99
Total		100.00		100.00		100.00

Source: CIECD, Taiwan Statistical Data Book.

18.3 per cent. Of course, as some agricultural products have subsided in importance, new processed agricultural products have appeared. Canned mushroom and asparagus are the outstanding examples.

The impressive growth of the industrial exports speak for themselves. Textile products were not tabulated in 1953 (obviously because they were either insignificant or nonexistent). In 1960, textile exports amounted to US$21.3 million. In 1968, this became US$183.1 million -- an eight-fold increase. Metals and machinery exports were only about US$1.03 million in 1953. In 1968, this was US$145.6 million -- a one hundred forty-one-fold increase. Plywood exports rose from almost nothing in 1953 to US$55.4 million in 1968. Considering the recent directions of new industrial undertakings in Taiwan, the heavier industries will begin to show themselves as new sources of export revenues.

South Korea. In 1960 exports of chemicals by Korea was only US$.4 million; by 1968 this was US$3.1 million. Manufactured goods classified by materials were US$3.9 million in 1960 and US$143.6 million by 1968. Machinery and transport equipment from almost nothing compared to US$24.5 million in 1968, and miscellaneous manufactured products from almost nothing to US$167 million in 1968. All these are indeed impressive rates of expansion (Table 2).

The manufactured goods classified by material was dominated by the expansion (a) of wood and cork manufactures, which consist of plywood and veneer, and (b) of textile yarn fabrics, made-up articles and related products.

Table 2. SOUTH KOREAN EXPORTS BY COMMODITY GROUP AND COMMODITY
(Value in thousand U.S. dollars)

SITC Code	Commodity	1965		1968	
		Value	Per Cent Distribution	Value	Per Cent Distribution
	Total	175,082		455,401	
03	Fish and fish preparations	17,838	10.19	25,791	5.66
26	Textile fibres (not manufactured into yarn, thread or fabrics) and their waste	7,716	4.41	20,023	4.40
2612	Waste silk	625	0.36	1,334	0.29
2613	Raw silk	6,794	3.88	17,954	3.94
6	Manufactured goods classified chiefly by materials	66,414	37.93	143,599	31.53
63	Wood and cork manufactures (excluding furniture)	18,227	10.41	65,919	14.48
6312.111 ∿ 129	Veneer sheets	18,030	10.30	65,590	14.40
65	Textile yarn, fabrics, made-up articles and related products	26,336	15.04	61,233	13.45
6532	Woolen fabrics, woven (including fabrics of fine hair)	2,228	1.27	4,519	0.99
6535	Fabrics, woven of synthetic fibres	2,507	1.43	16,653	3.66
69	Manufactures of metal, n.e.s.	2,169	1.24	9,699	2.13
7	Machinery and transport equipment	5,501	3.14	24,464	5.37
72	Electrical machinery, apparatus and appliances	1,909	1.09	18,933	4.16
7231	Insulated wire and cable	39	0.02	102	0.02
7242	Radio broadcast receivers	1,401	0.31	2,974	0.65
7291	Batteries and accumulators	98	0.14	41	0.01
7292	Electric lamps	113	0.12	648	0.14
73	Transport equipment	1,095	0.62	1,370	0.30
8	Miscellaneous manufactured articles	34,487	19.70	167,006	36.67
84	Clothing	20,713	11.83	112,232	24.64
8411.1	Men's and boys' outer garments, knitted or crocheted	4,173	2.38	9,026	1.98
8411.2	Women's, girls' and infants' outer garments, not knitted or crocheted	2,128	1.22	4,369	0.96

SITC Code	Commodity	1965		1968	
		Value	Per Cent Distribution	Value	Per Cent Distribution
8411.3	Men's and boys' under garments, not knitted or crocheted	6,762	3.86	27,791	6.10
8414	Clothing and accessories, knitted or crocheted	5,575	3.18	51,962	11.41
85	Footwear	4,151	2.37	11,044	2.42
89	Miscellaneous manufactured articles, n.e.s.	8,937	5.10	40,934	8.99
8999.4	Human hair, dressed or otherwise worked, and similar articles	4,267	2.44	368	0.08
8999.5	Wigs, false beard, etc.	2,344	1.34	35,092	7.71

Source: Bank of Korea, Economic Statistics Yearbook 1969.

Processing export industries in garments as well as electrical and metallic industries, which are dependent largely on cheap labor, are the key to many of the new exports. The new machinery industries that are beginning to appear in Korea's export list are sewing machines, pumps, radios, lamps, broadcast receivers, transport equipment, sanitary plumbing, travel goods and clothing. Clothing accounts for about 2/3 of miscellaneous exports. Footwear exports have also gone up tremendously, no doubt because of the military boots for the Vietnam war that Korean footwear-makers have been supplying. They are now also beginning to export spectacles. The miscellaneous manufactures which account for US$40 million is dominated by the wig making industries. By any means, most of these exports of Korea -- as well as Taiwan -- could very well have been Philippine exports, since many of these industries were set up first in the Philippines in the 1950's when South Korea was still suffering from the throes of war reconstruction.

Undue dependence on exports? One may ask whether the development of exports in Korea and Taiwan may have subjected these economies to an undue amount of economic dependence on exports. Certainly this is true at present.

But the world economy upon which their exports depend has been undergoing an impressive rate of growth in the last decade. Technological progress in the industrial economies have facilitated their interests in new products. More traditionally known products, particularly traditional consumer goods which require relatively labor-intensive processes, have become fairly expensive for these industrial countries to produce because

of rising wages and the competition for resources offered by the growth of new, sophisticated industries heavily dependent on space age technology. Among these economies, there is a real choice between continuing to produce consumer goods which are cheaply produced elsewhere or importing them. In any case, despite protective policies, the availability of cheaper resources for the production of these consumer industrial goods in low-wage countries have enabled these latter countries to penetrate even unusually heavy tariff barriers, e.g., in textiles. With growing labor scarcity and the rise in the wage income of American, European, and Japanese laborers, labor-intensive industries will be pushed out from the industry-mix of these advanced economies. These labor-intensive industries are being captured by the more dynamic less developed countries like Taiwan and South Korea.

To show the increasing resilience of the export sectors, it will suffice to report some statistics computed from the South Korean input-output statistics. Table 3 shows the ratios of exports of the sector to the value added created directly and indirectly for every unit of final demand. The industries which have become fairly significant exports of South Korea are marked with asterisks. Sectors with fairly high export ratios to value added within the sector are similarly those which have shown great performance in the export sector (as confirmed by the asterisks).

The ratio of exports to value added need not mean the fraction of value-added which finds itself expressed as exports. The exports may include the value of other materials used in the process of manufactures.

Table 3. RATIO OF EXPORTS TO VALUE-ADDED IN SECTORS, SOUTH KOREA

Sector	1960	1966
Average	0.048	0.114
1. Rice, barley and wheat	0.112	0.008
2. Other agriculture	0.040	0.014
3. Forestry	0.008	-
*4. Fishery	0.216	0.143
5. Coal	0.034	0.027
6. Other minerals	0.463	0.554
*7. Processed foods	0.084	0.242
* 8. Beverages	(	0.031
	(0.020	
9. Tobacco	(	0.148
10. Fibre spinning	0.084	0.369
*11. Textile fabrics	0.110	0.573
*12. Finished textile products	0.081	0.605
*13. Lumber & plywood	0.047	1.759
*14. Wood products and furniture	0.287	0.114
15. Paper products	0.018	0.051
16. Printing and publishing	0.028	0.029
*17. Leather and leather products	0.044	0.138
18. Rubber products	0.030	0.654
*19. Basic chemicals	(-	0.099
	(0.245	
20. Other chemical products	(0.039	0.005
21. Chemical fertilizer	-	-
22. Petroleum products	-	0.215
23. Coal products	-	-
	(0.029	
*24. Glass, clay, cement & stone products	(	0.132
	(0.067	
25. Iron & steel	0.527	0.026
*26. Steel products	0.119	0.698
27. Non-ferrous metals & primary products	0.142	0.529
*28. Finished metal products	0.022	0.383
29. Non-electrical machinery	0.042	0.241
*30. Electrical machinery	0.741	0.315
31. Transport equipment	0.130	0.052
*32. Miscellaneous manufacturing	0.170	0.748
33. Building & maintenance	0.102	-
34. Other construction	0.055	0.168
35. Electricity	0.104	0.058
36. Banking, insurance & real estates	0.005	0.002

Sector	1960	1966
37. Water & sanitary services	(0.078	0.052
38. Communication	(	0.006
39. Transportation and storage	0.134	0.213
40. Trade	0.047	0.047
41. Other services	0.016	0.034
42. Scrap	0.001	0.060

Source: Computed from input-output statistics for South Korea. See Bank of Korea, Economic Statistics Yearbook 1969. (Tables 175 and 183).

For instance, lumber and plywood seemed to have shown relatively much higher values of exports compared to the total value added within the industry. This is due to the high cost of the imported raw materials relative to all processing costs undertaken within the economy. But it is interesting to note the relatively high ratios for miscellaneous manufacturing (which is largely clothing and garment-making), of textile fabrics and finished textile produots. These are the forerunners of South Korea's industrial exports. They are also undoubtedly labor-intensive, thus indicating their high employment impact on industry.

Taken in this light, the export dependence of the Korean economy certainly has numerous socially and economically beneficial effects, not the least of which is the opening of large employment opportunities in industry.

Moreover, new income streams originating from wage earners and industrialists in the export industries have increased the demand for consumer goods in the domestic markets. These consumer goods are either traditional products or new import substitutes. Import substituting consumer durables -- electric fans, refrigerators, and many other domestically produced consumer items produced by the industrial sector -- are now found in local stores in substantial quantities in Taiwan and in Korea.

The rapid transfer of labor to industry has not caused agricultural production to decline in view of continuing productivity growth in the agricultural sector. Taiwan's agricultural sector is supplying largely all the agricultural needs of the growing economy.

V. FOREIGN INVESTMENTS

Policies on foreign investment are fundamental to the recent progress of South Korea and Taiwan. As we shall see later however, these policies cannot alone account for the recent progress of these two economies. What these policies provided was complementary support to other economic policies.

The foreign investment laws of South Korea and Taiwan are very liberal. There are liberal tax advantages, largely tax holidays from personal income, corporation, and property taxes as well as tax-exemptions on technological assistance contracts. There is guaranteed and, subject to certain conditions, unlimited remittance of profits, interest, and dividends. There are no restrictions on the nature of equity ownership by enterprises, although the two governments consciously attempt to promote joint ventures.

Technological assistance contracts are of interest to the Philippines. So far as I know, there seem to be no restrictions on market expansions in these technological contracts, as many of the new products with technological assistance by foreign companies have demonstrated their potentials by breaking into foreign markets. The basic difference apparently between Taiwan's and South Korea's policies with those of the Philippines is that the latter is prone to adopt "brand names" as part of the technological assistance. The Koreans and Chinese are more keen on process technological assistance, which gives them more market flexibility with regards to their output. Thus, Korean and Taiwanese companies, whether they export or sell only to their own markets, tend to market their own brands rather than use "foreign brands". This is perhaps one key to their

export success and their growing confidence in their import substitution activities.

Taiwan's and South Korea's foreign investment policies are complemented by policies that do not make import substituting investments overattractive with respect to exports. Early in the history of Philippines industrialization, in the 1950's, the attractiveness of import-substituting industries made possible by a mix of exchange control, industrial, and credit policies, and the lack of any appropriate incentives for export-oriented activities has clearly made import substituting industries of greatest profit possibilities to businessmen. So, foreign investments moved largely into import substitution.

In the case of Taiwan and South Korea, the clear advantages of specializing in export activities by foreign investors are well stressed. Certain market institutions also clearly define the areas of activities not open to foreigners. In Korea and Taiwan, there are restrictions in domestic industries which are not open to foreigners, perhaps more so than in the Philippines. Their petroleum industries are government-owned or partly-owned. Their tobacco monopolies have closed cigarette manufacturing to foreigners as well as to their private citizens. (Incidentally, it is in cigarette manufactures which enabled Harry Stonehill, of recent notoriety in the Philippines, to earn his first millions). Despite these restrictions, foreign investments into these two countries have flowed in at relatively impressive rates.

The foreign companies that have been attracted to South Korea

and Taiwan cover a wide variety of fields. The areas of manufacturing are fairly extensive -- in textiles, plywood, chemicals and in many skill- and labor-intensive enterprises in the metallic as well as in electrical industries. It can be said without exaggeration that the growing optimism about the industrial future of South Korea and Taiwan is partly due to the unceasing ability of these countries to attract new foreign investments.

Let us review briefly the justification for foreign investments. Capital can only be accumulated through a process of saving which can be internally generated by raising the rate of saving at the expense of consumption or externally generated by bringing in foreign capital. In open economies, again, like the Philippines, Taiwan, and South Korea, the requirements for new machinery (not domestically produced) immediately has a foreign exchange impact, whether or not the saving which finances machinery importation is internally generated or not. The adverse foreign exchange impact would be weaker if export industries were able to earn the required foreign exchange. This could also be offset by bringing in foreign capital. At the same time, the inflow adds to domestic foreign capital formation.

Successful invitation of foreign investments and the reinvestment by these companies of part of their profits depend on the anticipated or current climate of prosperity.[7] South Korea and Taiwan have

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[7] On the observed repatriation of profits by foreign investment companies in the Philippines, which has plagued current discussions of Philippine foreign investment policy, see my "Two Proposals for Expanding Industrial Exports Through Central Bank Action, Without Legislation,"

eventually taken full advantage of this phenomenon. They have combined very well the policy of economic liberalism to attract investors, cautiously coupled with restrictive policies where they count.

The most substantial foreign capital that has moved into direct investments in South Korea and Taiwan is American by nationality. Japan comes a close second as the source of direct investments in recent years. Further growth of the industrial economies like the United States and Japan will continue to cause a movement of labor-intensive industries to places where large labor supplies exist to take advantage of cheap industrial labor, especially as wage rates (processing costs) move up in the original investor's countries. Of the total investments of US$107 million committed to South Korea since 1962, about 65 per cent is American and 23 per cent Japanese (Table 4). Most foreign direct investments in South Korea have gone into manufacturing (80 per cent of total). These investments are dominated by investments in fertilizers, textiles, electronics, petrochemicals, steel, and cement and glass (Table 5). Most investments are joint ventures (Table 6).

In Taiwan, the role of overseas Chinese investment is important. Special attractions for overseas Chinese to move into Taiwan have yielded a positive response. They constitute about one-third of total foreign direct investments sources (Table 7).

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section on "capital flight," Discussion Paper 68-4 (February 5, 1968), Institute of Economic Development & Research, University of the Philippines. See also my "Foreign Investments and Economic Incentives," Discussion Paper 68-15 (April 22, 1968), Institute of Economic Development & Research, University of the Philippines.

Table 4. FOREIGN DIRECT INVESTMENTS BY SOURCE IN KOREA, BASED ON GOVERNMENT APPROVALS
(In US$ million)

As of March 31, 1969

Year	U.S.	Japan	Total
1962	2.12	-	2.12
1963	5.14	-	5.44
1964	0.31	-	0.76
1965	21.04	1.20	22.28
1966	3.31	0.85	4.58
1967	21.75	2.38	24.80
1968	12.07	14.82	32.48
1969 (Jan.-May)	3.59	5.58	15.07
Total	69.33	24.83	107.52
Per Cent of Total	64.48	23.09	

Source: Korea Exchange Bank, Monthly Review, Vol. III, No. 7, July 1969.

Table 5. FOREIGN DIRECT INVESTMENT IN KOREA, BY INDUSTRY
(In million U.S. Dollars)

As of May 31, 1969

Sector	Projects	Amount	Distribution Ratio (%)
Primary	12	2.03	1.9
Agriculture	10	1.43	1.3
Fisheries	2	0.60	0.6
Secondary	98	86.73	80.6
Pulp & paper	2	2.29	2.1
Textiles	15	11.57	10.8
Cement & glass	5	3.87	3.6
Fertilizer	5	22.60	21.0
Petroleum	3	7.68	7.1
Petrochemicals	6	10.63	9.9
Steel & Metals	8	5.38	5.0
Electronics	17	11.84	11.0
Machinery	7	2.45	2.3
Others	30	8.43	7.8
Tertiary	13	18.76	17.5
Power Generation	1	5.00	4.7
Construction	6	10.97	10.2
Storage & Transportation	4	2.03	1.9
Others	2	0.76	0.7
Total	123	107.52	100.0

Source: Korea Exchange Bank, Monthly Review, Vol. III, No. 7, July 1969.

Table 6. SHARE RATIO OF FOREIGN DIRECT INVESTMENT IN SOUTH KOREA
(In Thousands of U.S. Dollars)

As of March 31, 1969

Share of Ratio	Projects	Amount	Distribution Ratio (%)
100% Foreign Ownership	23	15,902	16.3
Over 50% Foreign Ownership	26	12,187	12.5
50% Foreign Ownership	24	48,941	50.1
Under 50% Foreign Ownership	44	20,605	21.1
Total	117	97,635	100.0

Source: Korea Exchange Bank, Monthly Review, Vol. III, No. 7, July 1969.

Table 7. PRIVATE FOREIGN & OVERSEAS CHINESE INVESTMENTS IN TAIWAN -- BY YEAR
(Million US dollars)

	Total Amount	Per Cent of Overseas Chinese capital to Total	Per Cent of Other Foreign Capital to Total
Total	344.54	34.70	65.30
1952	1.07	100.00	0
1953	3.70	44.76	55.24
1954	2.19	5.84	94.16
1955	4.46	0.78	99.22
1956	3.63	72.23	27.77
1957	1.62	97.04	2.96
1958	2.52	55.68	44.32
1959	0.96	84.97	15.03
1960	17.45	7.98	92.02
1961	14.30	58.31	41.69
1962	5.74	29.59	70.41
1963	19.67	46.13	53.87
1964	21.61	45.09	54.91
1965	44.23	20.56	79.44
1966	34.10	29.94	70.06
1967	63.48	33.52	66.48
1968	103.80	37.97	62.03

Source: CIECD, Taiwan Statistical Data Book 1969.

Private foreign (non-Chinese) investments have concentrated largely in manufacturing -- chemicals, non-metallic products, and textiles -- all of which already account for 86.5 per cent of non-Chinese foreign investments. On the other hand, overseas Chinese capital has gone into housing and hotels, food processing, textiles, chemicals, and other service industries.(Table 8).

Table 8. PRIVATE FOREIGN & OVERSEAS CHINESE INVESTMENT IN TAIWAN -- BY INDUSTRY
Based on Government Approvals
(Million US dollars)

Industry	Overseas Chinese		Private Foreign	
	Amount	Per Cent Distribution	Amount	Per Cent Distribution
Total	119.56		224.99	
Agricultural Processing	3.30	2.76	1.86	0.83
Mining	0.51	0.43	0.17	0.08
Electricity	0.21	0.18	1.88	0.84
Food Processing	18.57	15.53	5.24	2.33
Textile	17.53	14.66	22.36	9.94
Paper	5.97	4.99	1.81	0.80
Chemicals	13.49	11.28	68.93	30.64
Non-Metal Products	8.48	7.09	101.24	45.00
Transportation	6.47	5.41	2.90	1.29
Housing & Hotels	24.32	20.35	10.14	4.50
Banking	3.02	2.52	0.31	0.14
Foreign Trade	0.22	0.18	0.50	0.22
Others	13.82	11.56	3.68	1.63
		100.00		100.00

Source: CIECD, Taiwan Statistical Data Book 1969.

VI. INTEREST RATE POLICIES

Of great relevance to general economic policy applied to all underdeveloped countries is the interest rate policy adopted by Taiwan and, later on, by South Korea. Here is a model of rational pricing for a major economic resource, which proves the old economic wisdom about the role of prices in resource allocation.

Applied initially as an anti-inflationary control instrument, Taiwan gradually utilized interest rates to allocate resources into preferred areas of investment. There has been a gradual reduction of interest rates in Taiwan, even when we only take account of the years beginning with 1956.[8] Rates of interest per month of the lendings of the Bank of Taiwan (which acted like a central bank before the creation of the Central Bank of China early this decade) was 1.50 per cent up to 1959. In 1961, the rate of interest ranged between 1.50-1.83 per month; later the limits were lowered to 1.20-1.68 per month. Current rates of interest charged by the Central Bank of China for its advances is 1.11 per month (or 13.3 per cent per annum).

But the loans for selected industries were given at preferential interest rates. Taiwan has utilized a relatively more uniform interest rate policy. The only exception (a major one, however) is the preferential treatment given to exports. The rates of interest on advances to

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[8] In 1950, Bank of Taiwan rates of interest to banks per month ranged from 6.0 to 3.0 per cent; discount rates were 1.95 to 1.65 per cent of the Bank of Taiwan. See Republic of China Taiwan Financial Statistics Monthly, Economic Research Department, 1969.

banks against secured loans by the Central Bank of China ranged from 1.35 per cent to 1.11 per cent per month (in the current rate since May 10, 1969). On the other hand, the preferences for exports have been much lower. The interest rates for loans have exceeded the rates of interest for export by almost 2.4 times in 1962. This has gradually reduced to 1.97 times (twice as much times as present).

To attract savings, Taiwan allowed the rates of savings deposits including time deposits to remain high. In the mid-1950's, per month interest rates on time deposits was 1.6 per cent per month for one year deposits for those involving loan agreements and 1.8 per cent per month for those without loan agreements. In 1959, one-year savings deposits rated 1.42 per cent per month while 3-year deposits 1.75 per cent per month. The current rates are more low and their spread depending on time terms more narrow -- 0.81 per cent per month for one-year savings deposits and 0.84 per cent per month for three years.

These interest rates are naturally lower than lending rates for commercial transactions, and still much lower compared to the prevailing interest rates in the unorganized money markets. (Table 9 shows the differential rates of interest per month on different time deposit instruments from 1959-1969.) On the whole, there has been a reduction of interest rates since earlier years, but when compared to Philippine interest rates, Taiwan's current interest rates are still higher. The current rate on one year time deposits is about 10 per cent, while the rate for time deposits of two years is about 10.8 per cent. Between 1959-61, the rates

Table 9. MONTHLY INTEREST RATES ON TIME (SAVINGS) DEPOSITS IN TAIWAN

Effective Date of Change	Fixed Savings		
	1 Year	2 Years	3 Years
January 5, 1959	1.42	1.580	1.75
March 1, 1961	1.42	1.460	1.50
June 21	1.20	1.230	1.26
August 8, 1962	1.11	1.125	1.14
July 1, 1963	1.00	1.000	1.00
March 1, 1964	0.90	0.900	0.90
February 14, 1966	0.84	0.840	0.84
May 6, 1967	0.81	0.810	0.81
September 30, 1968	0.81	0.810	0.81
May 10, 1969	0.81	0.840	0.84

Source: The Republic of China Taiwan Financial Statistics Monthly (July 1969), p. 73.

of savings deposits was 1.42 per cent per month or 17.14 per cent per year. The reductions of interest rates in recent years is an indication of the growing confidence of the Taiwan economy.[9]

In South Korea, interest rate reform moved boldly in 1965. Whereas interest rates between 1961-64 on time deposits were only about 15 per cent per year, the rates of interest as a result of this policy change were raised by the Bank of Korea to a ceiling 2.5 per cent per month on time deposits (as much as 30 per cent per year). These may be shockingly high interest rates; when corrected by the change in prices (on the average about 10 per cent per year), interest rates amounted to about 20 per cent.

Commercial interest rates are high. Interest rates on loans and discounts by the Bank of Korea were raised by 20 per cent to 24 per cent by 1964-1965. The rate for 1968 is 26 per cent. Under these conditions, commercial bank rates can only be higher.

While the interest rates in savings are very high, the government has followed a very low interest rate policy with respect to industrial and agricultural borrowings by private enterprises. The Korean Reconstruction Bank rates of interest for medium and long term loans are at 10 to 11 per cent, but for operational funds (working capital), it is 18 per cent. Agricultural interest rates lent by banks are also low. But for exports,

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[9]The rates of interest in the unorganized market has also fallen from as much as 41 per cent per month in 1949, highly inflationary, to 3.9 per cent per month in 1960. At present, this is estimated to be at 2.4 per cent per month, which is still a very high rate.

interest rates are indeed very low. We have pointed out that Taiwan has utilized a differential rate for exports. The rates for export loans are so much lower in Korea compared to Taiwan. (This can be seen in Table 10). Thus, the other major reason for the tremendous push for export promotion undertaken by Korea, in addition to foreign investment policies, is the response to interest rate policies. As we shall see later, interest rate subsidies have probably played the major correcting mechanism for the exchange rate imbalance and for the disadvantages of exporting.

Savers response to high interest rates. The interest rate policies in Taiwan and Korea have definitely led to a high rate of saving response from the households as well as from other institutional savers. Few studies are available on this important point, but preliminary evidence is indicative of the strength of the response among savers to the high interest rate policy.[10]

Some comparison of monetary asset growth. Some analysis of the growth of household savings is highly desirable at this point. Table 11 summarizes the shifts in the composition of the economy's monetary assets among Taiwan, South Korea, and the Philippines. The growth of demand deposits, money in circulation, and time and savings deposits are compared as indexes. The discussion centers mainly on the volumes of monetary asset holdings at their actual values. (However, to allow the reader to

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[10]See Kwang Suk Kim, "An Appraisal of the High Interest Rate Strategy of Korea" (unpublished paper, Williams College). I am grateful to Mr. Kim for giving me a copy of his very valuable paper.

Table 10. INTEREST RATES ON LOANS AND DISCOUNTS OF THE BANK OF KOREA

Effective from -	Discounts on bills		Loans for Export Trade	Agriculture, Fishery & Members Project Funds
	Grade A	Grade B		
1961. 11. 16	10.22		10.22	5.48
11. 29	10.22		10.22	4.38
1962. 7. 3	10.22		8.40	4.38
12. 1	10.22		5.48	4.38
1963. 5. 17	10.22		4.38	4.38
1964. 3. 16	3) 10.50	3) 11.50	3) 10.50	3) 12.50
6. 8	10.50	11.50	3.50	5.50
1965. 11. 16	21.00		3.50	8.00
12. 1	28.00		5) 3.50	8.00
1968. 3. 1	21.00		5) 3.50	8.00
10. 1	23.00		7) 3.50	8.00

Source: The Bank of Korea, Economic Statistics Yearbook 1969, p. 90.

Table 11. MONETARY INDICATORS FOR KOREA, TAIWAN, PHILIPPINES COMPARING DEMAND DEPOSITS, CASH IN CIRCULATION AND TIME & SAVINGS DEPOSITS (1961=100)

Year	Taiwan			Korea			Philippines		
	DD	C	TSD	DD	C	TSD	DD	C	TSD
A. Actual Values (1961=100)									
1964	191.0	169.0	207.2	133.4	150.0	250.9	132.4	126.2	171.4
1965	218.6	187.9	240.4	186.4	190.5	537.2	135.4	141.3	179.2
1966	255.1	214.0	323.4	232.6	258.3	1,217.3	156.3	147.0	228.8
1967	321.9	271.9	395.4	351.7	347.0	2,219.1	173.3	167.3	282.4
1968	363.3	305.9	449.7	383.0	493.1	4,409.6	171.1	161.7	285.8
1969	364.3	308.2	470.1						
B. Deflated by Wholesale Price Index (1961=100)									
1964	170.4	150.8	185.0	75.1	84.5	141.3	109.7	104.6	142.0
1965	203.0	174.5	223.2	95.7	97.8	275.9	110.1	114.9	145.7
1966	234.5	196.7	297.2	109.8	122.0	574.7	121.4	114.2	177.8
1967	287.2	242.6	352.7	155.4	153.3	980.6	128.8	124.4	210.0
1968	318.1	267.6	393.4	157.4	202.6	1,811.7	124.1	117.3	207.3
Actual Base Value	Million NT$			Million wons			Million pesos		
	4,612	3,076	6,398	17,751	16,600	5,896	1,170	1,050	1,389

DD = demand deposits

C = cash in circulation

TSD = time and savings deposits