A MACROECONOMIC APPROACH TO FOREIGN DIRECT INVESTMENT

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I. *Introduction*

One of the most serious omissions in the study of foreign direct investment or the operation of multinational corporations to date is in the area of macroeconomic theory. For an individual firm the objective of maximizing its profits and/or enlarging its market share through widening territorial horizons towards global logistics is well justified from a microeconomic point of view. However, foreign direct investment has produced a conflict of interests with national objectives in both investing and host countries alike, since national (macro) economic objectives remain paramount under circumstances where national populations, by and large, laborers, cannot practically and institutionally, move internationally with ease. Resolution of this conflict so that foreign direct investment may contribute harmoniously both to investing and recipient country development, requires a new macroeconomic approach to the problem.[1]

In this paper, an attempt is made to identify the characteristics of two different types of foreign direct investment: trade-oriented (the Japanese type) and anti-trade-oriented (the American type) (Section II).

It will be shown in section III that comparative profitabilities in trade-oriented foreign direct investment conform to the direction of potential comparative costs and, therefore, complement each other. In other words, foreign direct investment going from a comparatively disadvantageous industry in the investing country (which is a potentially comparatively advantageous industry in the host country) will harmoniously promote an upgrading of industrial structure on both sides and thus accelerate trade between the two countries.

In comparison, American-type foreign direct investment does not conform to this com-

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[1] The following remarks by Harry Johnson are suggestive: "the essence of direct foreign investment is the transmission to the "host" country of a "package" of capital, managerial skill, and technical knowledge. The major issues posed for theory are the reasons why the transmission of such a "package" of capital and knowledge is more profitable than the alternative of transmitting either the capital or the knowledge or both separately, and what the welfare implications are for the "home" and the "host" countries respectively. Along with the first issue goes the important empirical question of which industries are likely to be characterized by direct foreign investment and which are not. Economic theory offers two approaches to these questions, that of the theory of industrial organization and that of traditional trade theory. These approaches must be used as complements, since the former is microeconomic in character whereas the latter stresses the requirements of general macroeconomic equilibrium." Harry Johnson, "Survey of the Issues," in Peter Drysdale, ed., *Direct Foreign Investment in Asia and the Pacific*, Australian National University Press, Canberra, 1972, p. 2.

parative profitabilities formula, mainly due to the dualistic structure of the American economy——the dichotomy between the new, oligopolistic industries and the traditional, price competitive industries. This type of foreign direct investment is anti-trade oriented and results in balance of payments difficulties, the export of jobs, the prevention of structural adjustment, and trade protectionism.

Thus, in Section IV, a new approach to foreign direct investment policy is formulated and its relationship to trade policy made clear.

II. *Trade-oriented* vs. *Anti-trade Oriented Foreign Direct Investment*

It is usual to classify the motives for foreign direct investment into resource-oriented, labor-oriented, and market-oriented investment. First, *natural resource-oriented* investment is obviously trade-oriented or trade-generating for it results from the investing country's desire to increase imports of its comparatively disadvantageously produced or domestically unavailable commodities, and causes growth in vertical specialization between producers of manufactures and primary products. However, there is the problem that integrated production and marketing are monopolized or oligopolized by big multinationals in oil, copper, and other resource goods, leaving smaller benefits to those countries endowed with natural resources.

Second, the *labor-oriented* investment is also trade-oriented or trade-reorganizing. As wages in the advanced investing country become dearer year by year relative to capital and as new products which are usually more capital and knowledge intensive than traditional goods are created one after another, it becomes profitable and rational for the advanced country to contract its own traditional, labor-intensive industries and transfer the location of production to low-wage countries where cheaper labor-costs prevail. Thus, corresponding to a dynamic change in comparative advantage, such foreign investment assists the reorganization of the international division of labor and harmonious trade growth between labor scarce and labor abundant countries. It should be noted, however, that such foreign direct investment may transfer either traditional labor intensive industries which are well standardized, or new goods which utilize cheap-labor intensively from the advanced to the low-wage country. It should also be noted that the labor-oriented investment aims at establishing an export-base, rather than import-substitution, and the development of exports to the investing country as well as third markets.

Third, *market-oriented* investment can be sub-divided into two categories. Foreign direct investment induced by trade barriers in the host country is mostly trade-oriented but in a different way from the trade-oriented investment mentioned above. In this case, heavier tariffs on final products, for example, lead to the substitution of exports of final products for the export of parts and components, intermediate materials, machinery, equipment and technology necessary to the production of final goods from the investing country. This type of foreign direct investment meets the recipient country's interest in promoting import-substituting activity, not necessarily intended to be competitive in the international market, and therefore results in some waste of resources because of the degree of protection provided to the final goods production. But, if import-substitution industry grows successfully towards export-orientation, then, foreign direct investment of this type turns out

to be labor-oriented investment. Therefore, there is no essential difference between labor-oriented and *trade-barrier-induced* investment except in so far as one aims at world-wide markets and one is confined to protected domestic markets.

Fourth, there is another type of market-oriented investment which may be called *oligopolistic* foreign direct investment. This is typically found in American investment in new manufacturing product industries in recent decades, as will be seen presently, and is anti-trade-oriented.

Finally, it is probably better to add a fifth type of foreign direct investment: that is the *internationalization of production and marketing* through vertical and horizontal integration of big multinational enterprises. Whether this is anti-trade-oriented or not depends upon whether the main activity comprises oligopolistic investment or not.

Although there are commitments to a substantial increase in the 'official' component in Japan's total aid, foreign investments will play a more significant role in assisting the economic development of developing countries. At the end of 1969, Japan's total foreign investments abroad (including advanced countries) amounted to $2,690 million (Table 1). Total investments will rise to $11,500 million by 1975 and $27,000 million by 1980[2] and the outflow in those years will be around $2,000 million and $3,500 million respectively. Of this, $1,900 million will be directed to Asia and this will account for 20 per cent of the total foreign investment flow to this area. By 1980, there will be an accumulated Japanese investment in Asia of around $7,000 million. These rapid increases in Japan's investments may well arouse Asian nationalism against Japanese domination.

TABLE 1. BALANCE OF JAPAN'S DIRECT OVERSEAS INVESTMENTS BY INDUSTRY

($ U.S. MILLION AND PER CENT)

	Balance of Investments		Percent of Total	
	1969	1980	1969	1980
Resource-oriented	1,092	13,881	40.7	50.8
Labor- and Market-oriented	620	7,148	23.1	26.2
Finance and Services	969	6,280	36.2	23.0
Total	2,683	27,309	100.0	100.0

Notes: Resource-oriented——Agriculture, fishery, forestry
Labor- and market-oriented——Foodstuffs, texiles, chemicals, iron, non-ferrous metals, machinery, electrical machinery, transport machinery and construction
Finance and services——Commerce, finance and insurance.

Source: Japan Economic Research Center, *Japan's Economy in 1980 in the Global Context*, March 1972, p. 50.

Direct foreign investment, that is, the transmission to the host country of a package of capital, managerial skill, and technical knowledge, is a potent agent of economic transformation and development. A large increase in Japanese direct investment in developing countries, in so far as it is welcomed by them, will contribute significantly to the development of their natural resources, their agricultural production and their processing industries, on

[2] Japan Economic Research Center, *Japan's Economy in 1980 in the Global Context*, Tokyo, March 1972, pp. 45-51.

the one hand, and, on the other, to transferring, from Japan to developing countries those manufacturing industries suitable to each developing country.

Japan has endeavoured to invest in developing countries with the object of securing increased imports of primary products which are vitally important for her economy. This is called " development assistance for import." It was first directed (and is still being directed in increasing amounts) towards natural resource development projects such as oil, natural gas, iron ore, coal, copper, bauxite, and other metals. Wood and timber also have high priority. The benefits of such development assistance are limited, however, to those countries where abundant natural resources are available, and the employment and training effects are small in so far as the goods are exported in the form of raw materials. If we can extend our development investment for import to agricultural products, benefits will be spread more widely in developing areas. Thailand's successful development of exports to Japan of maize is a good example. Since February 1970, the Asian Trade Development Corporation has been providing subsidies to development assistance for import, with regard to various agricultural products produced in the wider Asian area. The government is also considering whether to provide low interest rate foreign exchange loans to those enterprises which venture to develop new natural resource deposits.

Japan's direct investment for creating manufacturing capacity in developing countries is important and plays a harmonious role for both sides provided appropriate manufacturing industries are selected. The industries to be chosen should be those in which Japan is losing comparative advantage while developing countries are gaining it (or are expected to gain it). Such industries should preferably be export-oriented, not merely serving the benefit of the economically privileged classes in recipient countries.

Thus, Japanese foreign investment has to date been "trade-oriented." It was aimed at complementing Japan's comparative advantage position. The major part of investment was directed towards natural resource development in which the Japanese economy is comparatively disadvantaged.[3] Even investment in manufacturing has been confined either to such traditional industries as textiles, clothing and processing of steel in which Japan has been losing its comparative advantage, or the assembly of motor vehicles, production of parts and components of radios and other electronic machines in which cheaper labor costs in Southeast Asian countries are achieved and the Japanese firms can increase exports,[4] substituting for exports of final products, exports of machinery and equipment for the factory and technological know-how.[5] In this sense, Japanese foreign direct investment

[3] See an excellent explanation of Japan's direct foreign investment in Koichi Hamada, "Japanese Investment Abroad," Peter Drysdale, ed., *Direct Foreign Investment in Asia and the Pacific*, Australian National University, 1972. According to a MITI report, in an accumulated total foreign investment of $3,596 m. between 1951-70, mining accounts for 31.4 per cent, or $1,127 m.; manufacturing accounts for 26.99 per cent, or $963 m.; commerce accounts for 10.3 per cent, or $370 m.; and others (that is, agriculture and forestry, fisheries, construction, finance and insurance) accounts for 31.4 per cent, or $1,126 m. (See Appendix Table 1.)

[4] Again according to the same MITI report, in a total accumulated foreign investment in manufacturing industries of $963 m. between 1951 and 70, pulp and wood (this belongs rather to natural-resource-oriented) accounts for 22.1 per cent; textiles 19.7 per cent; steel and metals 14.3 per cent; transport machinery 10.6 per cent; electric appliances 7.4 per cent; other machinery 7.0 per cent; foodstuffs 6.3 per cent; chemicals 6.2 per cent; and others 6.4 per cent (See Appendix Table 1).

[5] According to the Second Questionnaire Survey undertaken by the Export-Import Bank of Japan, 90 per cent of manufacturing firms abroad with Japanese direct investment uses the Japanese technology, 86 per cent of them imports the Japanese machinery and equipment and their imports of Japanese raw materials and intermediate goods account for 58 per cent.

is quite complementary to changes in its comparative advantage position.

A substantial proportion of Japanese foreign direct investments in manufacturing is undertaken by small and medium sized firms and on a smaller scale than by American firms[6] which transferred technology suitable to local factor proportions with larger employment and training effects than those characteristic of 'enclave' investments. Joint ventures have been preferred to wholly-owned subsidiaries.

Suppose that a textile industry which is losing comparative advantage in Japan moves away from Japan through increased direct investment in developing countries. This will promote structural adjustment in Japan and open wider markets for developimg country products. If other advanced countries do the same markets for developing country products will become very large. The Japanese textile industry has a long experience of excellent management and technology which is more suitable to developing countries than that of America or Europe. When abundant relatively cheap labor is combined with this in developing countries, the joint venture products will certainly succeed in international competition.

The point is that it is better for Japan, as she has done, to transfer out of those industries in which she is losing her comparative advantage, and to invest in developing countries which are gaining a comparative advantage in the same industries. In other words, foreign direct investment to developing countries should be, as Japan's has been, ' trade-oriented," that is, aimed at complementing and strengthening comparative advantage in investing and receiving countries respectively.

In Asia, the success of free trade and investment zones in Kaoshiung, in Taiwan, and the development of a similar area at the Jurong Industrial Estate, Singapore, as well as the successful industrialization in Korea and Hong Kong is impressive. These demonstrate the need for step-by-step transfer of manufacturing industries from advanced to developing countries.

Foreign direct investment, in harmony with changes in comparative advantage, will accelerate structural adjustment in Japan, and lead to a contraction of traditional industries of the labor-intensive type. It is in the mother company's interests to make invested activity prosperous by opening markets both in Japan and other advanced countries even through taking advantage of general preferences provided only for developing country products. The mother company's marketing facilities are indispensable for the new entry of developing country products to advanced country markets. Foreign direct investments for Japanese small and medium scale firms, which played a major part of past manufacturing investments, are a promising outlet for their survival and a great accelerator to internal structural adjustment.

In contrast to Japan, it seems to me that the United States has transferred abroad those industries which ranked in the top of her comparative advantage and has thus brought about balance of payments difficulties, unemployment and then need for protection of her remaining industries.

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[6] As regards Japanese accumulated foreign direct investment by the end of 1969, the four largest investment projects were; Arabian Oil in the neutral zone between Kuwait and Saudi Arabia, Minus Steel in Brazil, pulp industry in Alaska and oil extracting in North Sumatra. If these are taken separately, the average amount of investment per unit is $1.7——1.8 m. in mining, $0.5——0.6 m. in manufacturing, and $0.32 m. in commerce and others.

Typical American-type foreign direct investment is well characterized by Raymond Vernon and Stephen Hymer.

The concern of Vernon and others[7] was to explain how a new product is invented and manufactured on a large scale in leading industrial countries. Exports of this product grow in so far as a " technological gap " exists between the product-developing country and foreign countries. Foreign producers imitate the new technology and follow suit. Then exports slow down and through direct investment an attempt is made to secure foreign markets. When the technology is standardized and widely disseminated and the limit of scale economies is reached, trade based on wage costs, or factor proportions, starts and the country turns to import this product from abroad.

According to Vernon, " the U.S. trade position in manufactured goods is based heavily on a comparative advantage in the generation of innovations, rather than on the more conventional notion of relatively cheap capital " and " the big post-war increase in U.S. overseas investment in manufacturing subsidiaries has come about mainly in the kind of industry that would be expected to have participated in such a process: industries associated with innovation and with oligopoly. It explains why so much of the investment is found in the chemical industries, the machinery industries, the transportation industries, and the scientific instrument industries."[8] They are " highly innovative and strongly oligopolistic," and " multinational enterprises are found principally in industries that devote a relatively high proportion of their resources to research and advertising and that tend to be dominated by very large firms."[9]

It should be noted that the product-cycle or industrial organization approach to foreign direct investment is essentially micro-economic and deals with one commodity, partial equilibrium analysis. The approach suggests that, once low labor cost becomes beneficial to the firm, the whole industry had better invest in the lower wage country. According to comparative advantage theory *à la* Heckscher-Ohlin, only less capital and knowledge intensive industry profitably invests abroad. There must be some special reason why new industries of the more capital and knowledge intensive type move abroad through foreign direct investment from America.

A similar view is seen in Stephen Hymer. After noting the association of multinational corporations with a few large firms, in oligopolistic industries——industries with special characteristics (heavy industry rather than light, i.e., in industries characterized by large firms, high capital intensity, advanced technology, differentiated products, etc.)——Hymer points out three factors which determine whether an industry invests abroad or not: "firstly, there must be some kind of barrier to entry in the industry (technological, economies of scale, differentiated products) so that local firms cannot compete with profits below a level which compensates the multinational corporation for the extra costs of operating in a foreign country and integrating geographically dispersed operation; secondly, it must be advantageous to produce locally rather than export from a single production center

[7] For example, Raymond Vernon, "International Investment and International Trade in the Product Cycle," *Quarterly Journal of Economics*, May 1966; G.E. Hufbauer, *Synthetic Materials and the Theory of International Trade*, Duckworth, London, 1966.

[8] Raymond Vernon, "The Economic Consequence of U.S. Foreign Direct Investment," *United States International Economic Policy in an Interdependent World, Papers I*, Washington, D.C., July 1971, pp. 930-937.

[9] Raymond Vernon, *ibid.*, p. 930.

(this depends upon tariffs, the size of the market, and the threat of local competition); and, thirdly, the firm must find it more profitable to exploit the foreign advantage through direct investment rather than licensing. Hence a technological lead is not a sufficient explanation of foreign investment. One must also explain why the technology is not sold like other commodities. The answer usually lies in the marketing characteristics of the advantage, that is, the difficulty of extracting full quasi-rent where markets are imperfect."[10]

Hymer comes to the striking conclusion that " on the assumption that the internationalized sector grows at 8 per cent and the non-internationalized sector at 4 per cent, international production will account for 50 per cent of the total world production by the year 2005 and 80 per cent by the year 2040."[11]

Thus, the American economy is split into a dualistic structure:
(a) innovative and oligopolistic industries, or, in brief, new industries, and
(b) traditional industries (textiles, steel, agriculture, and so on) which are price-competitive and stagnant.

The genuine product cycles and foreign direct investments take place successively only within the innovative and oligopolistic industry group. Foreign direct investments from these new industries which ranked at the top of American comparative advantage are " anti-trade-oriented " or involve foreign direct investments which work against the structure of comparative advantage. Those new industries should strenghten exports of their products if they were conscious of national economic interests, but actually they set up foreign subsidiaries, cutting off their own comparative advantage and inducing increased imports of those products from abroad where they invest. Both the loss of foreign markets and reverse imports later on result in balance of payments difficulties and the "export of job opportunities."

It may be true, as many researchers[12] claim, that the new industry sector contributes on balance to foreign exchange earnings, due to increased exports of intermediate goods and equipment, the return flow of earnings from past investment, and the like. It should be stressed, however, that if they had been conscious of national economic interests, by refraining from foreign investment and strengthening export promotion those new industries would have earned greater export surpluses and covered import surpluses in other sectors.

If American foreign manufacturing investment was " trade-oriented," rather than new industries-oriented it would be welcomed by developing countries and accelerate the reorganization of North-South trade, as in the case of Japan's investment.[13]

Moreover, since innovation and foreign direct investment cycles are confined to the new

[10] Stephen Hymer, "United States Investment Abroad," Peter Drysdale, ed., *Direct Foreign Investment in Asia and the Pacific, ANU,* 1972, p. 41.

[11] *Ibid.*, p. 29.

[12] For example, see, Emergency Committee for American Trade, *The Role of the Multinational Corporation in the United States and World Economies*, February 1972.

[13] An American labor union researcher states that "U.S. based multinational operations may adversely affect host countries as well as the U.S. The balanced economic and social development of developing economies, for example, is not necessarily promoted by the establishment of electronic subsidiary plants, with high productivity and low wage——with production for export from countries that urgently require basic educational, health and housing facilities, as well as balanced growth of domestic investment and consumer markets." Nat Goldfinger, "A Labor View of Foreign Investment and Trade Issues," *United States International Economic Policy in an Interdependent World, Papers I,* Washington, D.C., July 1971, p. 927.

oligopolistic industry sector, the inflow of resources from the traditional sector is restricted and structural adjustment hindered. An increased labor force was available for employment in traditional industries but traditional industries have been losing their comparative advantage. In consequence, there has been a rise in protectionistic attitudes. Thus the American economy has fallen into a vicious circle due to foreign direct investment of the anti-trade-oriented type.

III. *A Model of Comparative Investment Profitabilities*

Comparative advantage between two countries or between one country vis-à-vis the rest of the world changes mainly due to differential rates of growth in factor endowments, as the Hechscher-Ohlin theorem and the Rybczynski theorem show. Foreign direct investment is trade-oriented, or more exactly trade-reorganization-oriented, if it transfers a package of capital, technology and managerial skill from an industry which has a comparative disadvantage in the investing country to the recipient country, in which it develops a comparative advantage, helps the reorganization of the international division of labor and trade between them, and upgrades the industrial structure of both countries. The point is that foreign direct investment must work in a complementary fashion with changes in the pattern of comparative advantage. On the other hand, if foreign direct investment moves out from an industry in which there is a comparative advantage in the investing country, it prevents mutual upgrading of the industrial structure and blocks the reorganization of international trade. This is foreign direct investment of anti-trade-reorganization-oriented type.

In order to make clear the difference of the two types of foreign investment, let us first construct a model of comparative investment profitabilities for trade-oriented or Japanese-type foreign direct investment.

It should be noted that trade-oriented foreign direct investment works only in a competitive world in which standardized commodities are produced and trade and competitiveness is determined by traditional comparative advantage theory *à la* Ricardian theory or Heckscher-Ohlin theory. In other words, it is not a problem in " technological-gap trade " but in " low-wage trade " in the product-cycle.

To understand the determinants of direct investment, it may be useful to set out the following production function:

$$Q=f(L,\ K,\ T,\ M),$$

where Q denotes the output produced, L and K labor and capital, T technology used and M managerial skills or organizational technique.[14] Foreign direct investments transfer the package of K, T and M, but it is assumed that endowment of K, besides L, is not affected for international investment is *marginal* to total capital formation both in the investing and receiving countries. Technology and management used in country A (advanced industrialized country or Japan) are supposed to be superior to those in country D (developing country) before the foreign direct investment from country A to D takes place, but the foreign direct investment makes it possible for country D to use the same superior technology and management. This is possible becuase the technology and management are not specific

[14] Cf. Bo Södersten, *International Economics*, Macmillan, 1970, pp. 453-55 on production function.

but general factors which we assume are transferable either in package or separately between countries on a competitive basis.

Thus, the comparative advantage structure before the foreign direct investment takes place is like that represented in Table 2 in which the costs of the two countries are shown in a common monetary unit (say, the dollar) converted by exchange rate. Country D produces more expensively than country A both X-goods (traditional labor intensive goods, say, textiles) and Y-goods (new capital-knowledge intensive goods, say, computers) because of its inferiority or lack of technology and management as compared with country A.[15] However, country A has a comparative advantage in Y-industry whilst country D has (potential) comparative advantage in X-industry: or $\frac{P_{XA}}{P_{YA}}/\frac{P_{XD}}{P_{YD}}=\frac{100}{100}/\frac{150}{300}=2>1$, where P denotes production cost or price. This comparative advantage pattern results from the assumption that country A has a larger amount of K compared to country D $\left(\text{that is, } \frac{K_A}{L_A}>\frac{K_D}{L_D}\right)$ while X-goods are more labor intensive than Y-goods in both countries alike $\left(\text{that is, } \frac{K_{XA}}{L_{XA}}<\frac{K_{YA}}{L_{YA}} \text{ and } \frac{K_{XD}}{L_{XD}}<\frac{K_{YD}}{L_{YD}}\right)$ according to the Heckscher-Ohlin theorem.

TABLE 2. COMPARATIVE COSTS BEFORE DIRECT INVESTMENTS

	Country A	Country D
X-goods	$ 100	$ 150
Y-goods	$ 100	$ 300

TABLE 3. COMPARATIVE COSTS WHEN DIRECT INVESTMENTS HAVE TAKEN PLACE IN BOTH INDUSTRIES

	Country A	Country D
X-goods	$ 100	$ 90
Y-goods	$ 100	$ 180

TABLE 4. COMPARATIVE PROFIT-RATES FOR COUNTRY A

	Domestic investment	Foreign direct investment
X-industry	x_d 10%	x_f 12%
Y-industry	y_d 10%	y_f 5%

TABLE 5. COMPARATIVE COSTS WHEN DIRECT INVESTMENTS HAVE TAKEN PLACE ONLY IN X-INDUSTRY

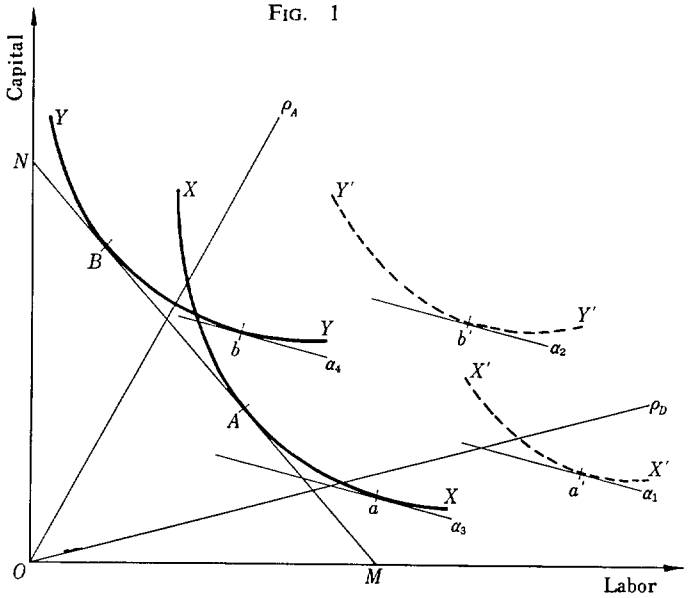
	Country A	Country D
X-goods	$ 100	$ 90
Y-goods	$ 100	$ 300

[15] It is implicitly assumed that there is, besides X-and Y-industries, a third sector in which country D has comparative advantage.

TABLE 6. COMPARATIVE PROFIT-RATES FOR COUNTRY P

	Domestic investment		Foreign direct investment	
X-industry	X_d	5%	X_f	12%
Y-industry	Y_d	10%	Y_f	15%

FIG. 1



The situation may be illustrated well by Fig. 1, where XX and YY are the isoquants for the two sectors in country A and $X'X'$ and $Y'Y'$ those in country D, before foreign direct investment takes place. In country A, the factor endowment ratio, $\frac{K_A}{L_A}$, is shown by ρ_A, the factor price ratio by MN, the equilibrium production points at A and B, and the costs of the two goods are 1:1. In country D, before the foreign direct investment, the factor endowment ratio, $\frac{K_D}{L_D}$, is shown by ρ_D, the factor price ratio by a's, the equilibrium production points at a' and b', and the cost of X-goods is lower than Y-goods.

Now, if direct investments take place and T and M are transferred from country A to D, the production function in country D becomes the same as in country A which is shown by the isoquants XX and YY. However, due to the lower capital endowment and higher capital price ratio in country D, the equilibrium production points would be at a and b, leaving the product price ratio higher for Y-goods. The new comparative costs when direct investment takes place in both industries may be shown as Table 3 in which production costs of both goods in country D are reduced by 40 per cent as compared with Table 2 (although the degree of cost reduction may vary somewhat in the two industries, the variation must not be so big as to make the new comparative advantage pattern reverse so far as to make the X-industry more labor intensive than the Y-industry) and the cost of X-

goods in country D is lowered so that country D's X-goods industry becomes competitive in international market. To reach that situation, it takes some time for learning the production process, training labor, and realizing economics of scale as Akamatsu's catching-up product cycle theory clearly shows.[16]

Recently Professor Vernon's " product cycle " theory has become well known, but in Japan Dr. Akamatsu, Professor Emeritus of Hitotsubashi University, propounded a " *catching-up product cycle* " theory as early as the mid-1930s. He originally called it " the wild flying geese pattern " (*Ganko Keitai*) of industrial development in developing countries since the time-series curve for imports of a particular product is followed by that of domestic production and later by that of exports, and they form a pattern like " flying wild geese in orderly ranks forming an inverse V, just as airplanes fly in formation."[17]

In a developing, or catching-up country, the product cycle starts from the importation of the new product with some superior quality. " Imports reconnoiter and map out the country's demand," and once increased demand approaches the domestic production threshold, domestic production can be started economically.[18] A learning process follows and is assisted by the importation of technological know-how and/or foreign direct investment. The expansion of production then leads to the exploitation of economies of scale, increases in productivity, improvements in quality, and reductions in costs. This involves an import-substitution process. But as domestic costs reach the international competitive cost threshold, foreign markets are developed, the scale of production is extended further, and costs are reduced again. Thus, the expansion of exports that is originally made possible by the growth of domestic demand, in its turn, provides a stimulus to industrial development. In sum, it may be appropriate to call such successive development of imports——domestic production——exports the catching-up product cycle. It should be noted that such a product cycle takes place only for standardized, not new, products and in developing, not leading, industrial countries.

Now, what would be expected profit rates for the investing country A ? The profit-rate from domestic investment for X- and Y-industries, x_d and y_d respectively, is assumed to be the same, say 10 per cent, in country A where free competition is assumed to prevail (see Table 4). The profit rate from direct investment to country D's X-industry, x_f, would be higher than x_d, say, 12 per cent, for X-industry in country D produces at lower cost than in the investing country and becomes competitive in international market, thus retaining a greater profit margin. By contrast, Y-industry in country D remains, even if foreign direct investment is taking place, at a comparative disadvantage and uncompetitive in the international market, and the foreign direct investment yields no or small profits compared with domestic investment, y_d, and foreign investment in X-industry, x_f, under strong protection by the recipient country. In Table 4, y_f, the profit rate from direct investment in

[16] Kaname Akamatsu, "A Historical Pattern of Economic Growth in Developing Countries," *The Developing Economies* (The Institute of Asian Economic Affairs, Tokyo), March-August 1962. See also *ditto*, "A Theory of Unbalanced Growth in the World Economy," *Weltwirtschaftliches Archiv*, Band 86 Heft 2, 1961. This theory is widely recognized by now, for example, in Benjamin Higgins, *Economic Development; Problems, Principles, and Policies*, rev. ed., Norton, New York, 1969, pp. 623-624; Miyohei Shinohara, *Growth and Cycles in the Japanese Economic Development*, Kinokuniya, Tokyo, 1962, pp. 57-58.

[17] Kaname Akamatsu, "A Historical Pattern of Economic Growth," *ibid.*, p. 11.

[18] Albert O. Hirschman, *The Strategy of Economic Development*, Yale University Press, New Haven, 1958, p. 121.

country D's Y-industry is thus assumed to be 5 per cent.

Obviously country A would be better off if it increased investment in the Y-industry at home and in X-industry abroad. This can be seen by examining (a) the absolute profit rate differential between home and foreign investment for each industry or (b) comparative investment profitabilities, that is, $\frac{x_f}{y_f} / \frac{x_d}{y_d} = \frac{12}{5} / \frac{10}{10} = 2.4 > 1$.[19]

The core of our argument for trade-oriented foreign direct investment is that foreign direct investment should follow the direction indicated by comparative investment profitabilities which in turn are a reflection of comparative advantage under competitive conditions. Thus, foreign direct investment is not only complementary with trade but also an accelerator in reorganizing trade patterns in the direction of potential and dynamic comparative advantage. This harmonious function of foreign direct investment is revealed in the fact that, because of comparative investment profitabilities, direct investment from country A actually takes place only in X-industry in country D, and results in the new comparative cost pattern shown in Table 5. Table 5 reflects the fact that the comparative cost differential is widened due to foreign direct investment, as compared with Table 2, transforming the X-industry in country D from a potentially advantageous to a strongly competitive exportable industry. Due to such dynamic change in the pattern of comparative advantage, country A is forced and willing to promote structural adjustment to contract investment in and the production of X-goods, which becomes an import industry, and to shift its resources towards foreign direct investment and domestic investment in the Y-industry as well, the comparative advantage of which is strengthened as shown in Table 5. Thus, this type of trade-oriented direct investment will bring about an upgrading of industrial structure both in recipient and investing countries alike.

Let us turn to examine foreign direct investments of the American type or anti-trade-oriented type. It is supposed that the pattern of comparative advantage between country P (say a pioneer country like USA) and country D is the same as in Table 2. Even with such a pattern of comparative advantage, comparative profit rates for country P would be like Table 6. The reason is, first, that due to the dualistic structure of the economy separating the new oligopolistic sector, Y, from the traditional competitive sector, X, the profit rate from domestic investment is not the same in the two sectors but low in the latter, say 5%, and high in the former, say 10%. Second, since the X-industry is assumed to operate under competitive conditions not only in domestic market but throughout the world, its foreign direct investment, if it takes place, is able to obtain the same profit rate, X_f being 12%, as country A's foreign direct investment. Third, the profit rate from foreign direct investment in the Y-industry, that is, Y_f, ought to be lower (or even negative) than in domestic investment if the industry were under competitive system, but it is assumed to

[19] The *comparative* formula is useful in the same way as comparative advantage is, since the decision as to whether home or foreign investment should be undertaken takes place without considering such overall adjustments as changes in the exchange rate, inflation and deflation, etc., in both countries.

If the investing country revalues its currency and the recipient country devalues its currency both in terms of a common unit, the dollar, both X- and Y-goods become dearer in country A and cheaper in country D than shown in Table 3, making the profit rate from domestic investment in both industries proportionately smaller and that from foreign direct investment larger than shown in Table 4; but this will not change at all the comparative investment profitabilities. The above illustrates the fact that an overvalued exchange rate stimulates foreign direct investment in general, whilst an undervalued exchange rate promotes domestic investment and exports.

be 15%, higher than in domestic investment and highest in the comparative profitabilities without any relationship to comparative advantages. This results from such entirely different causes as technological advantage, production differentiation, superior marketing, etc. any of which represents some monopolistic element as explained in the previous section.[20] In this case, the package of capital, technology and managerial skill transferred from country P to country D is not a general factor but a factor specific to that monopolistic firm.

Now, in the anti-trade-oriented type, foreign direct investment takes place in Y-industry, the new oligopolistic industry and top in the rank of comparative advantage in order to realize the higher profit rate, 15%, than that in domestic investment, 10%, for the sake of the company's profit maximization ahead of oligopolistic competitors. This has its rationale from a microeconomic point of view but not from a macroeconomic point of view.

First, though it is interesting but inessential to our argument, in terms of comparative profitabilities, that is, $\frac{Y_f}{X_f} / \frac{Y_d}{X_d} = \frac{15}{12} / \frac{10}{5} = \frac{5}{8} < 1$, foreign direct investment in Y-industry is *comparatively* less advantageous than that in X-industry. Thus, the latter is more advantageous for the national economy as a whole, since foreign direct investment in X-industry increases the profit rate by 7 per cent (i.e., $X_f - X_d$) which is larger than 5 per cent (i.e., $Y_f - Y_d$) in Y-industry.

Second, if foreign direct investment takes place in the Y-industry and it is successful from the point of view of the firm, production abroad becomes competitive and cheaper than in investing country, resulting in reverse-imports. This means that foreign direct investment of this type reverses the investing country's comparative advantage.

Third, it is true that new products are successively created and new product cycles take place one after the other in America. Multinational corporations grow bigger and maintain monopolistic or oligopolistic gains. But, it is also true that the creation of new products becomes smaller whilst the spread of new technology is fast and is accelerated by the foreign direct investment.[21] Thus, the American economy will lose its comparative advantage in new products (the Y-industry in our model) sooner or later and has lost it in traditional manufacturing industry (X-industry in our model) for a different reason. In the long run this brings about difficulties in exporting and thus the balance of payments for the USA. Where are laborers to be employed ? They should be employed in the new industry sector. However in actuality the new industry sector does not offer many job opportunities, rather the reverse, because of foreign direct investment. Therefore, the labor force has to be absorbed in traditional, comparatively disadvantaged industries and the service sector, requiring strong protection. This blocks needed structural adjustments in the economy.

What the American economy needs most is, first, to have its dualistic structure broken

[20] "American direct investment cannot be explained simply in terms of better access to capital, better entrepreneurship, better technology or higher profits abroad...Analysis of oligopolistic bargaining strategy is however helpful; it is not unusual for leading oligopolists to establish inroads into their competitor's home territory to strengthen their position." Hymer, *Ibid.*, p. 41. Such global oilgopolistic strategy is the main reason why US multinationals have a strong preference for the wholly-owned subsidiary. (See, *ibid.*, p. 44).

[21] "Its (United States) great strength in innovation and organization cannot be denied. But a striking feature of recent decade is the narrowing of lead-times and the shortening of the product cycle. Direct foreign investment provides one way of meeting this challenge." Hymer, *ibid.*, p. 44. Also see, Raymond Vernon, "Future of the Multinational Enterprise," Charles P. Kindleberger, ed., *The International Corporation*, The M.I.T. Press, 1970, pp. 386-87.

into an entirely competitive system, to allow the traditional sector's resources to move freely into new growth sectors and the reorganization of industrial structure and realization of equal profitability between industries. From the point of view of world resource utilization and welfare, foreign direct investment by monopolistic or oligopolistic multinational firms involves distortions and is not desirable.

Second, it would be better if even the USA invested abroad in traditional manufacturing industries such as textiles, steel, shipbuilding, etc., and agriculture such as cotton growing for they represent her comparative disadvantage industries. It is incomprehensible that many economists take it for granted that those industries are not suitable for foreign direct investment[22] for they are a promising line of foreign direct investment for Japan and, perhaps a few decades ago, were for the United Kingdom.[23] Thus, not all the foreign direct investment results in the " export of jobs "[24] but the anti-trade-oriented type does.

IV. *Trade Policy* vs. *Direct Investment Policy*

Should free trade policy be a basic rule to follow and the role of foreign direct investment be subordinate to it *or* should it be the reverse ? This may be the most important question to be decided in considering the relationship between trade and foreign direct investment policy. It seems to me that the former should be taken as a basic policy attitude.

The decisions and performance of U.S.-based multinationals may be rational and, perhaps wise, in terms of the firm for its profit-maximization. But investment of an anti-trade-oriented type is in conflict with national-economic development as explained above. Labor is still immobile internationally and, therefore, economic development and welfare should be considered in terms of national economy.

Foreign direct investment should be trade-oriented and since this is most beneficial for both sides, this type of investment should be encouraged so as to accelerate the reorganization of North-South trade.

International trade theory aims at clarifying rational national-economic development and mutual prosperity of trading nations when international factor movements are absent.

[22] "Their (multinational enterprises) prominence will be more evident in the advanced technological sectors and in the industries that are reliant on raw materials that are subject to oligopoly control. Multinational enterprises will be less evident with respect to the more mature and standardized products. Indeed, mature industries that are now dominated by multinational enterprises, such as consumer electronics and cigarettes, could very well become more nationally oriented in their ownership and structure." Vernon, *ibid.*, p. 389.

[23] Dunning's studies, for example, show that the foreign direct investment of the United Kingdom has long been the trade-oriented type. He makes an interesting comment on British investments; "there is probably too much U.K. investment overseas in traditional-type industries and not enough investment at home in the newer technologically based industries." John H. Dunning, *Studies in International Investment*, George Allen & Unwin, London, 1970, p. 91. Perhaps, a proportionate increase in investment of both types is desirable.

[24] "The decisions of executives of U.S.-based multinationals to transfer American technology, for example, or to export American job opportunities may be rational and, perhaps wise, decisions, in terms of the firm. But the interests of the U.S., as a nation and of the American people are not identical with the interests of the multi-national firm. The responsibility of the U.S. government is to the American people——and not to U.S. based multi-national companies, without regard to the possibly adverse impacts of their decisions on American workers and communities." Nat Goldfinger, "A Labor View of Foreign Investment and Trade Issues," *op. cit.*, p. 927.

The Heckscher-Ohlin-Samuelson theorem proves the possibility of international factor-price equilization, although under strict assumptions, without international factor movements. The international movement of capital, technological and managerial knowledge in which some country is lacking or lagging, is desirable to complement and facilitate the process of international factor-price equalization and thus national-economic development. It should be subordinate to, but not master of, the international trade and trade policy.

Unfortunately, however, recent developments in the actual world seem to have been quite the reverse. Stephen Hymer warns:

" Multinational corporations, because of their favorable position (large size, wide horizons and proximity to new technology) and the favorable environment (the initial large gold reserves of the United States, the formation of the Common Market, the small size of foreign investment), were in the vanguard of the revolution in world economic structure. The next round is likely to be characterised by increased emphasis on politics rather than economics and a much less free hand for business. The conflict is not so much between nationalism and internationalism, as the supporters of the multinational corporations like to put it; or between corporations and nation states, as others prefer; but between groups of people within corporations and nation states struggling over who decides what and who gets what——that is, between large corporations over their share of the world market, between big business which is internationally mobile and business and labor which are not, between the middle classes of different countries over managerial positions, between high-wage labor in one country and low-wage labor in another, and between excluded groups in each country and their elites in that country."[25]

" During the next ten years, the challenge of European and Japanese firms to American corporations will increase the maneuverability of the third world. But increasingly as firms interpenetrate each others markets and develop global outlooks, competition will turn to collusion as dominant firms of the center present a united front."[26]

These mean the spread of dualistic structure of American economy between the traditional, price competitive sector and the new, oligopolistic sector into the entire world economy. International prices are eroded and twisted by the cost reducing advantages of economies of scale, marginal costing, product differentiation, intra-corporation pricing, tax-havens, oligopolistic competition, etc., all of which belongs to major characteristics of big multinationals, and, therefore, there is considerable disillusionment with the relevance of the free trade theory and policy, requiring " the political economy of the second best."[27]

How can foreign direct investment or the activities of multinationals be subordinated to and what kind of contribution can it make to international trade growth? There are three aspects of foreign direct investment of the activities of multinational corporations to be evaluated: 1) the complementation of capital, technological and managerial know-

[25] Stephen Hymer, "United States Investment Abroad," *op.cit.*, pp. 30-31.

[26] Stephen Hymer, "The United States Multinational Corporations and Japanese Competition in the Pacific," a paper presented for *Conferencia del Pacifica*, Vina del Mar, Chile, Sept. 27—Oct. 3, 1970. Also see, Louis Turner, *Invisible Empire: Multinational Companies and the Modern World*, London, 1970.

[27] Helen Hughes, "Trade and Industrialization Policies; the Political Economy of the Second Best," a paper presented for the Fifth Pacific Trade and Development Conference, Jan. 9-13, 1973, at the Japan Economic Research Center.

ledge which are in shortage in the recipient economy; 2) the monopolistic element, and 3) the internationalization of production and marketing for utilizing various kinds of economies of scale.

To complement capital, technological and managerial knowledge which are in shortage in the recipient economy is a genuine function of foreign direct investment and "a potent agent of economic transformation and development, not only in the more laggard 'developed' countries but also in the developing countries of the world."[28] However, it usually involves monopolistic elements since it is undertaken by big, monopolistic or oligopolistic multinational corporations particularly in the case of American type investments.[29]

The monopolistic or oligopolistic nature of multinationals, internal as well as global, should be rectified, for it results in a wastage of world resources. Therefore, to promote the genuine role of foreign direct investment but to reduce and/or eliminate the monopolistic element should be a major object of investment policy and this conforms to free trade policy. A new role for and form of foreign direct investment should be encouraged[30] in order to maximize its benefits especially in respect of investment in developing countries.

(1) The most important policy is what kind of industry should be gradually transferred from advanced countries and transplanted in developing countries appropriate to the stage of the latters' economic development. Foreign companies invest according to private profitability without any consideration of the entire range of (potential) comparative costs, national economic development plans and priorities in the recipient country.

Hence, there are many accusations against anti-trade-oriented or American type investment but few in principle against the trade-oriented or Japanese type investment, although there are complaints about the performance and behavior of Japanese firms abroad. Therefore, investors should ensure in consultation with the competent authorities that the investment fits satisfactorily into the economic and social development plans and priorities of the host country.[31] It is not necessary for the U.S.A. to control and reduce the direct investment outflow in general but to select appropriate industries in each recipient economy. Unless this is done by the USA, a selective control of direct investment inflow by the host country is inevitable and reasonable from the viewpoint of national-economic development.

(2) Instead of a package of capital, technology and managerial skill, the transfer of only parts of the package may be considered, if the recipient country desires, through loan-*cum*-management contracts or by transfer of technology through licensing arrange-

[28] Harry G. Johnson, "The Multinational Corporation as a Development Agent," *Columbia Journal of World Business*, May-June 1970, p. 1.

[29] "The multinational producing enterprise has been acclaimed as an agent of development and has been condemned as a weapon of exploitation."

"Conflict between the multinational enterprise and the host government may derive from four sources: from the fact that it is *private* and hence may clash with the social and national goals; that it is *large* and oligopolistic and hence possesses market and bargaining power which may be used against the interest of the host country; that it is *foreign*, particularly if it is American, and hence may be serving the national interests of a foreign nation; and that it is *'western'* and hence may transfer inappropriate knowhow, technology or management practices, or products designed with characteristics not needed in less-developed countries." Paul Streeten, "Costs and Benefits of Multinational Enterprises in Less-developed Countries," John Dunning, ed., *The Multinational Enterprises*, George Allen & Unwin, 1971, p. 240 and p. 251.

[30] This was discussed intensively at the Chile Conference. See, H.W. Arndt, "Economic Cooperation in the Pacific: A Summing Up," a paper presented to Conferencia del Pacifico, Vina del Mar, Chile, from 27 September to 3 October, 1970. Also, in Paul Streeten, *ibid.*, pp. 251-54.

[31] International Chamber of Commerce, *Guidelines for International Investments*, Nov. 1972.

ments rather than direct investment. This may be desired because the package deal is the source of extra monopolistic profits, on the one hand, and, on the other, wider spill-over effects for genuine national-economic development are derived from an unpackaged transfer even it takes a somewhat longer time and is less efficient than a package transfer.

Technological know-how should genuinely be a public-good provided that there is enough incentive for innovation,[32] and should not be the source of monopolistic or oligopolistic gains.

Agricultural technology is improved by public institutions and made available to developing country's farmers free of charge or even with training aid. Why should not the same be done in manufacturing industry ? Some special consideration should be given for technology transfer to developing countries.

(3) From the same reasoning, joint ventures with local capital are preferable to wholly-owned subsidiaries. It may be most desirable to establish multinational joint ventures in which each advanced country provides either capital or different technology and managerial knowledge according as its advantage.

(4) It is also better to transplant technology suitable to local factor proportions rather than sophisticated technology through small and medium scale enterprises not big 'enclave' type enterprises, which are usually under more competitive system. In this sense, Japanese type investment is more suitable investment to developing countries.

(5) Priority should be put on investment in industries that have wide spill-over effects in technology transfer, labor-training, employment, and external economies, and on industries that benefit mass consumption by ordinary people rather than consumption by privileged classes.

(6) In the field of natural resource developments, developing countries have strong nationalistic fears against foreign extraction and they sometimes nationalize such enterprises. Therefore, new forms and new codes of behavior should be devised particularly for this type of foreign investment. Import-linked investments and production-sharing methods, as have been adopted by Japan, may be recommended.

The development of natural resources, including timber, in developing countries is not only highly risky but also expensive for private enterprise since it has to provide infrastructure related to the natural resource development, such as roads, railways, harbors and towns, which are usaully provided by the host government in advanced countries. A close combination of private investment and official development assistance should be considered so that the latter accommodates needed infrastructure, making private investment more attractive. Otherwise, natural resource development in advanced countries will go ahead and that in developing countries may be delayed. Also, a risk-insurance system should be introduced by governments or some international organization.

The establishment of facilities for the processsing of natural resources within the developing countries where they are extracted, is desirable from the point of view of both developing countries and Japan. But it is not necessarily economical. More careful case by case study is required.

(7) A progressive transfer of ownership may be necessary if the genuine objective of foreign direct investment is not a permanent source of monopolistic profit but the

[32] Harry G. Johnson, "The Efficiency and Welfare Implications of the International Corporation," Charles P. Kindleberger, ed., *International Corporation, op. cit.*, p. 36.

complementation of deficient factors in the recipient country. Equity may be gradually transformed into loan capital. Precontracted nationalization, phasing-out, and other divestment methods should examined seriously.[33]

(8) One aim of the above is to make foreign investment more suitable and less expensive for the national-economic development of developing countries. The other aim should be to promote the reorganization and growth of North-South trade. Here, all the policies of advanced countries for increasing the exports of manufactured goods from developing countries should be so accommodated as to promote structural change on both sides and the harmonious development of North-South trade. Thus, an integrated aid, investment *cum* preference, structural adjustment policy is required.[34]

From the point of view of international trade policy in relation to investment policy, it is most essential to liberalize all the tariff and non-tariff barriers to trade, making present potential comparative costs. First, because of the existence of trade barriers, much foreign direct investment has as its motive the object of getting behind trade barriers and obtaining extra profits from protection. To put it more generally, because of market imperfections accelerated by trade barriers, there is only stimulus to anti-trade-oriented direct investment and the desire of multinationals dominates and twists trade policy. Second, because of the trade barriers in advanced countries against exports from developing countries, true comparative costs are hidden, lowering profits from and thus hindering needed trade-oriented direct investment, as well as blocking the reorganization of North-South trade.

This leads to a comment on present American foreign economic policy. Many economists recognize that American comparative advantage lies only in agriculture and some of the new products which, however, rapidly lose their comparative advantage due to hasty foreign direct investment. America has to live on the return flow from past investment and therefore increased foreign investment is not only justifiable but most essential to the American balance of payments.[35] This seems to be a logical result of the American type foreign direct investment and its admission is defeatism. The USA seeks trade liberalization of foreign countries but she has to increase her own protection for traditional industries. Why does the USA not increase domestic, instead of foreign, investment in order to strengthen the competitiveness of some of the traditional industries and to create further new products which should be retained for export purposes? It is also a dilemma for the American economy that it welcomes foreign direct investment from Europe and Japan in order to increase employment. Japanese investment is only profitable in America in such industry as textiles which are heavily protected except in minor speciality industries. This further blocks the reorganization of North-South trade.

Finally, how should the so-called internationalization of production and marketing which consists of the fifth category of foreign direct investment[36] be evaluated ? The global

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[33] Albert O. Hirschman, *How to Divest in Latin America and Why*? Essays in International Finance, No. 76, Nov. 1969, Princeton University.

[34] See Kiyoshi Kojima, "Reorganisation of North-South Trade: Japan's Foreign Economic Policy for the 1970s," *Hitotsubashi Journal of Economics*, February 1973.

[35] See, for example, C. Fred Bergsten, "Crisis in U.S. Trade Policy," *Foreign Affairs*, July 1972, and L.B. Krause, "The U.S. Economy and International Trade," a paper presented for the Fifth Pacific Trade and Development Conference, Jan. 9-13, 1973 at the Japan Economic Research Center.

[36] Even Vernon points out a need to build another model besides his product cycle sequence. Raymond Vernon, *Sovereignty at Bay, The Multinational Spread of U.S. Enterprises*, Basic Books Inc., 1971, pp. 107-112.

logistics of big multinationals are a rational means of maximizing economies of scale in production, in the case of the vertical integration of the firm and, pecuniary economies in the case of horizontal integration or conglomerate. This is a technical rationality which should be encouraged as far as it does not accompany monopolistic behavior, although "the multinational corporation reveals the power of size and the danger of leaving it uncontrolled."[37]

International trade theory has been mainly concerned with the division of labor between firms, coordinated by markets whilst multinationals realize the division of labor within firms, coordinated by entrepreneurs.[38] The latter is particularly useful and efficient to promote horizontal trade between parts and components each of which is produced in different country with the economies of scale greater than minimum optimum.[39] The trouble with this kind of horizontal trade is the difficulty of reaching agreement on specialization between countries.[40] This difficulty is easily overcome in the multinational corporation since agreed specialization is made by the central decision making of the firm. However, a rational specialization programme is made possible only in a free trade area where there are no trade barriers and no fear of increased barriers exists. Certainly, monopolistic behavior should be strictly controlled and this may be feasible if the integrated market is so wide that many enterprises in each industry have to compete with each other.

Alternatively, as far as new manufactured goods are concerned, horizontal trade mainly among advanced countries should be promoted instead of direct investment. Innovation of new goods is required for the reorganization of and new dynamism in the international division of labor, while innovative human resources are relatively scarce in the world as a whole. It might be desirable for advanced countries to arrange an agreement to specialize in the line of innovation in which each country concentrates its effort. Assurance of specialization and accompanying economies of scale will promote liberalization of trade in these commodities. They might also be able to spare innovative human resources to create technology which is more suitable to deveolping countries.

If all advanced countries liberalize imports of new goods and exporting countries make serious efforts at exporting, mutual trade in these goods among advanced countries will certainly expand and there is no need to undertake foreign direct investment. If firms still dare to undertake direct investment, it is because monopolistic profits are anticipated and they should not be allowed.

Such agreed international specialization in the innovative activities may be the only solution for avoiding the vicious circle resulting from American type foreign direct investment.

In conclusion, it is worth stressing that foreign direct investment and the activities of multinationals should be trade-oriented and subordinated to free trade policy so as to

[37] Stephen Hymer, "The Efficiency (Contradictions) of Multinational Corporations," *American Economic Review*, May 1970, p. 448.

[38] Stephen Hymer, *ibid.*, p. 441.

[39] I have in mind such logistical structure as "Ford was making fender steel in Holland for car production in the rest of Europe and tractor components in Germany and motors for compact models in Britain to be used in U.S. assembly plants." Raymond Vernon, *ibid.*, pp. 107-108. This kind of specialization is applicable and beneficial to developing countries.

[40] See Kiyoshi Kojima, "Towards a Theory of Agreed Specialization: The Economics of Intergration," in W.A. Eltis, M. FG. Scott, and N.N. Wolfe, eds., *Essays in Honour of Sir Roy Harrod*, Oxford 1970 (reprinted in *Japan and a Pacific Free Trade Area*, Macmillan, London, 1971, Chapter 2.)

contribute to the reorganization of the international division of labor and the growth of trade between advanced and developing countries and among industrialized countries alike. A code of behavior of international investments[41] should be thought out along this line.

Appendix Table-1 Japanese Private Investment Abroad

(1) Industrial Classification

Fiscal year / Industries	'51-'57		'58		'59		'60		'61		'62		'63	
	No.	Acct.	No.	Acct.	No.	Acct.	No.	Acct.	No.	Acct.	No.	Acct.	No.	Acct.
Food Stuffs	5	712	1	83	10	4,339	12	1,562	13	2,988	4	2,619	10	6,706
Textile	11	10,698	3	1,873	5	3,422	9	10,980	7	6,317	9	2,803	16	7,655
Pulp & wooden	3	15,556	1	22,693	0	10,598	1	1,397	0	300	0	300	2	9,037
Chemical	4	157	1	95	3	122	8	736	2	298	7	927	16	3,330
Iron & Metal	2	1,878	0	2,133	3	3,787	3	2,571	4	27,157	3	616	11	2,897
Machinery	6	6,423	1	991	4	2,220	4	1,176	3	642	3	1,045	8	10,241
Electric Appliances	1	24	4	117	3	189	3	495	8	1,308	9	2,235	5	294
Transport Machinery			4	13,288	1	15	1	2,405	3	3,052	5	8,838	2	3,810
Others	10	1,311	8	1,154	5	654	7	6,555	2	2,119	7	1,368	14	3,141
Sub-Total	42	36,759	23	42,427	34	25,346	48	27,877	42	44,181	47	20,756	84	47,111
Agriculture-Forestry	7	1,319	0	250	0	538	3	1,149	0	300	6	1,633	3	1,919
Fisheries	12	1,463	2	234	5	429	7	2,130	6	1,082	5	961	2	484
Mining	25	17,176	5	13,148	4	11,510	10	44,630	5	104,086	12	34,366	3	25,534
Sub-Total	44	19,958	7	13,632	9	12,477	20	47,908	11	105,468	23	36,961	8	27,937
Construction									1	12	3	938	4	4,497
Commerce	231	13,120	25	4,216	51	10,930	59	11,716	45	5,142	66	14,148	88	13,505
Finance-Insurance	10	4,289	4	1,843	5	1,769	2	2,654	3	3,458	6	4,517	8	6,651
Others	40	4,428	19	2,520	24	2,535	22	2,570	31	6,546	34	22,106	31	26,275
Sub-Total	281	21,837	48	8,579	80	15,234	83	16,940	80	15,158	109	41,709	131	50,929
Total	367	78,554	78	64,640	123	53,062	151	92,729	133	164,811	179	99,425	223	125,977

(2) Regional Classification

Fiscal year / Regions	'51-'57		'58		'59		'60		'61		'62		'63	
	No.	Acct.	No.	Acct.	No.	Acct.	No.	Acct.	No.	Acct.	No.	Acct.	No.	Acct.
North America	101	26,681	9	27,503	34	20,354	36	13,236	27	13,822	39	16,370	50	51,227
Latin America	77	26,034	35	23,204	31	12,802	31	22,383	28	39,218	33	29,016	41	21,192
Asia	132	23,771	23	2,879	45	9,277	64	18,855	48	28,384	75	24,047	83	26,284
Middle East	6	242	3	10,818	1	9,125	1	36,015	3	77,889	1	23,896	1	14,671
Europe	40	1,310	5	159	6	925	11	1,005	20	5,171	19	3,340	33	4,335
Africa					1	95	2	434	5	287	3	392	9	5,997
Oceania	11	515	3	77	5	484	6	801	2	39	9	2,364	6	1,671
Total	367	78,552	78	64,640	123	53,062	150	92,729	133	164,811	179	99,425	223	125,977

Source: Japanese Private Investment Abroad; The Summary of Third Questionnaire Survey, The Export-Import Bank of Japan, October, 1972.

'64		'65		'66		'67		'68		'69		'70		Cumulative total	
No.	Acct.	No.	Acct.	No.	Acct.	No.	Acct.	No.	Acct.	No.	Acct.	No.	Acct.	No.	Acct.
2	3,568	10	3,583	5	1,618	12	6,877	7	6,233	14	4,167	30	15,785	135	60,841
19	13,504	16	5,549	15	11,270	20	16,664	31	15,120	52	34,040	46	49,898	259	189,798
2	10,347	1	3,937	5	36,419	4	2,360	5	17,280	6	3,315	14	78,815	44	212,354
5	631	20	4,178	12	9,104	16	3,345	17	4,956	24	6,286	40	25,467	175	59,632
8	15,494	5	4,432	6	6,013	9	19,724	9	3,878	23	38,241	13	9,110	99	137,926
6	1,142	3	3,185	6	3,074	19	6,954	19	5,141	19	9,373	37	15,629	138	67,236
7	1,862	14	2,744	20	5,102	21	6,096	29	6,579	39	21,960	43	21,885	206	70,890
7	5,858	3	20,571	5	14,106	5	11,996	1	4,311	2	11,430	4	2,850	43	102,530
8	3,529	9	1,378	23	2,978	19	3,484	53	5,175	50	6,892	77	21,754	292	61,492
64	55,935	81	49,557	97	89,684	125	77,500	171	68,668	229	135,705	304	241,193	1,391	962,699
2	670	6	7,216	2	4,834	8	5,665	16	10,625	23	12,009	18	9,566	94	57,693
3	659	4	1,317	10	1,050	10	2,518	6	1,533	8	4,904	16	8,453	96	27,218
4	20,916	12	33,664	17	72,147	14	58,625	15	158,681	31	297,301	38	234,955	195	1,126,743
9	22,245	22	42,197	29	78,032	32	66,809	37	170,840	62	314,216	72	252,974	385	1,211,654
3	3,797	1	8,228	2	6,269	2	1,330	1	725	5	7,004	10	5,003	32	37,805
79	11,206	68	23,050	88	19,559	115	48,018	124	119,358	200	54,995	253	54,141	1,492	403,105
7	14,513	6	29,596	9	20,865	3	46,045	13	49,769	9	43,821	30	92,099	115	321,889
31	12,591	31	4,112	28	12,598	29	35,166	38	147,813	63	111,840	99	268,038	520	659,137
120	42,107	106	64,986	127	59,292	149	130,561	176	317,663	277	217,659	392	419,281	2,159	1,421,935
193	120,291	209	156,739	253	227,008	306	274,867	384	557,174	568	667,579	768	913,449	3,935	3,596,306

(In thousand of U.S. Dollars)

'64		'65		'66		'67		'68		'69		'70		Cumulative total	
No.	Acct.	No.	Acct.	No.	Acct.	No.	Acct.	No.	Acct.	No.	Acct.	No.	Acct.	No.	Acct.
34	27,360	53	44,119	70	108,610	65	56,867	82	184,992	139	129,283	173	191,552	912	911,976
47	44,213	48	58,932	32	54,414	34	40,671	39	39,950	53	100,523	56	46,121	585	558,673
79	30,358	74	35,346	108	28,912	165	97,075	197	79,716	286	199,119	367	175,725	1,746	779,745
0	11,539	0	11,420	4	24,836	2	19,866	2	28,137	3	37,868	6	27,790	33	334,113
20	3.862	18	4,656	17	2,066	21	30,814	39	151,148	42	93,506	107	335,537	398	638,434
10	2,004	10	1,799	8	4,099	5	2,327	6	42,663	16	18,473	23	13,877	98	92,447
3	954	6	466	14	4,072	14	27,248	19	30,570	29	88,808	36	122,848	163	280,918
173	120,291	209	156,739	253	227,008	306	274,867	384	557,174	568	667,579	768	913,449	3,935	3,596,306

[41] Cf. *The Pacific Basin Charter on International Investments*, PBEC, May 19, 1972 and *Guidelines for International Investment*, International Chamber of Commerce, 29 Nov. 1972. The Japan Chamber of Commerce has also issued independently a similar charter.