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General Trading Companies: Their Role in Technology Transfer and Industrialization

It may seem strange to readers from industrially advanced countries to find that general trading companies are included in the range of this project. The memory of what role they played in the Japanese experience in technology transfer, transformation, and development has faded. Perhaps this is one reason their inclusion appears curious. Nevertheless, few would deny the significance of general trading companies in the development of natural resources, imports for development, and exports of plant manufacturing systems. In fact, trading companies were the leading sector for technology transfer. They were an especially important intermediary for the importation of technology. This function has not changed, but it is easily overlooked because of the strong impression that the past 30 years of exporting technology has left.

A simple example is the cotton-spinning machine, which was in the vanguard of Japanese industrialization. The number of imported spinning machines was greatly increased in 1892, and at the time, Mitsui and Co., a general trading firm, acquired 80 per cent of its total imports from the British concern Platt Brothers. It is a remarkable example of discernment and capability for a company to select Platt Brothers, a first-rank manufacturer, in the days when Japan was under a great deal of outside pressure to abide by the needs and wishes of the Western powers.

Mitsui and Co. provided personnel with special technological knowledge and played an important role in collecting information and acting as an intermediary in the import of machines and equipment. It imported not only machines but also raw cotton from China for processing and eventual export as yarn. Later, it imported raw cotton from India and the United States to increase the competitive power of its cotton products. The company thus became known as the "organizer of industrialization."

The industrialist Kaneko Naokichi (1868–1944), aiming to establish industrially based trade, transformed a small sugar importer, Suzuki Shoten, into a trading firm that was, for a time, comparable with Mitsui and Co.[66] He played the role of "organizer of industrialization" more effectively than Mitsui. Kaneko, who possessed an eagerness to establish factories so strong that he was called "the chimney man," was a maverick, daring and successful, but responsible for some spectacular failures too, and now he attracts the interest mainly only of scholars of the history of management. Nevertheless, the companies Kaneko started have grown into the present-day Teijin, Kobe Steel, Ishikawajima Heavy Industries (IHI), Mitsui Toatsu, Mitsubishi Rayon, Nissan Chemical, Nihon Kayaku, and Dainippon Seito, well-known firms even outside Japan.[67]

The preceding discussion pertains to the Meiji and Taisho periods, the age of light industrialization. In the period of heavy and chemical industries, Mitsubishi Corporation became dominant. This company established, as direct subsidiary companies for the import of technology, Mitsubishi of Germany Corp. (1920) and Mitsubishi of France Corp. (1924). The following illustrates how important were the roles these two companies played in the importation of technology from the advanced countries and in the gathering of information.

These two subsidiary companies were crucial intermediaries between the Mitsubishi group in Japan and the various European companies. For example, by 1937, Mitsubishi Shipbuilding and Mitsubishi Heavy Industries had, between them, purchased about 30 patent rights and manufacturing licences; the arrangements and negotiations for these purchases had been undertaken by the two subsidiaries. Likewise, Mitsubishi Electric concluded a technology co-operation contract with Westinghouse, giving Mitsubishi the selling rights and allowing it to "develop the market." In the chemical industry, where the Mitsubishi group was weak, the European subsidiary companies purchased the manufacturing licences for electrolyte cells, gas generators, and calcinating furnaces from first-rate machine manufacturers. The same was true of iron manufacturing equipment, machine tools, aircraft, and weapons.

Although Mitsubishi's imported technology was exclusively intended for the formation of heavy and chemical industries for the Mitsubishi *zaibatsu*, "it provided, insofar as it did not compete with the group companies' interests, technology and information to military manufacturers and other group companies and developed a new market; in this way, it played the role of organizer for the development of the heavy and chemical industries in the Japanese economy."[68] In the process of achieving heavy and chemical industrialization on a minimum or most-appropriate scale to meet national needs, the trading firm as an organizer, as a storehouse of detailed information and economic rationalism, was indispensable. No other organization could have fulfilled this role.

The general trading companies evolved in accordance with the development of Japanese industry and technology, undergoing changes in their role, activities, and priorities, and success as well as set-backs, and this will likely not change in the future.

In sum, Mitsui and Co. was the pioneer in importing machines; Suzuki

Shoten was a courageous forerunner in plant system imports; and Mitsubishi Corp. led the heavy and chemical industries.

Since Japan entered international trade as a late comer, such related businesses as marine transportation, insurance, and foreign exchange, which had been in the hands of foreigners, were underdeveloped. Under these circumstances, the general trading companies had accepted from the beginning as self-evident that "in terms of management concepts, the national interest (industrial autonomy) should be the determining factor, and in terms of management strategy, diversification should be the governing principle" (Katsura 1977).

Though the establishment and development of links among industrial sectors is an urgent issue in the developing countries, the subject of general trading companies was, we found, among the areas that attracted the biggest concern. It is well known that in the newly industrialized countries of both Asia and Latin America, the governments have carried out measures to promote general trading firms. In the United States, even, some members of Congress have drafted legislation to promote export trading companies.

The great number of Japanese general trading companies, their large volume of trade, and the lack of similar enterprises in the rest of the world have made them conspicuous.

Recent sales-volume reports of Mitsubishi Corp. puts it at number one among Japanese companies and among the top five companies in the world, including manufacturers. In July 1980, an American economics magazine ranked it second in sales volume to Royal Dutch Shell among the 125 companies whose headquarters are outside the United States.[69] Even if US enterprises are included, only Exxon and General Motors surpass Mitsubishi.

The breakdown of Mitsubishi sales in 1980 was domestic transactions 43.6 per cent, foreign trade 56.4 per cent.[70] Foreign trade can be further broken down into imports 32.8 per cent, exports 17.3 per cent, and transactions between foreign countries 6.3 per cent. The company reported a sales volume of US$46 billion and has 63 offices in Japan (the head office, 2 major branch offices, 19 minor branch offices, 29 local offices, 3 offices of resident representatives, and 9 special project sites) and 142 offices overseas (12 branches, 69 offices of resident representatives, and 28 local enterprises and their 33 branches).

In 1980, the firm had 9,682 employees (of which 3,710 were female). Including the 2,544 employees dispatched to other domestic companies in the Mitsubishi network and the 3,099 to companies overseas, the gross number of company employees amounted to 15,325. From these figures, the per captia annual sales amount was Y787 million (at the yen-dollar conversion rate for the same year).

Although there are annual fluctuations, Mitsubishi's biggest item is fuel (such as petroleum and LNG), which characteristically accounts for approximately 30 per cent of total transactions. Next to fuel are metals and machines, which occupy more than 20 per cent; food and animal feed, more than 10 per cent; then chemical products, textiles, and materials, less than 10 per cent. This composition of sales has continued unchanged for several years. The dependence on foreign trade has averaged around 60 per cent.

At Mitsui and Co., metals account for more than 25 per cent, petroleum and gas 20 per cent, machines less than 20 per cent, food about 15 per cent, chemical products more than 10 per cent, and textiles 4 to 5 per cent; the dependence on foreign trade has been about 60 per cent. A comparison of these two companies makes apparent the differences in sales areas. At Sumitomo Corporation, metals and machines account for 60 per cent, fuel more than 25 per cent, and construction about 10 per cent; the dependence on foreign trade is about 50 per cent. Despite such low dependence on foreign trade, Sumitomo's profitability is said to equal Mitsubishi's.[71]

As is clear from the above, each company has its own comparatively advantageous business sectors. This reflects the particular technological stock and potential of the companies affiliated with each of these trading firms. This is especially evident with Sumitomo Corporation, the number five trading firm, which entered the trading business as late as 1952. The reason it has established a footing so rapidly is that it has been strong in metals, machines, and construction, and it has a large network of production and processing of various materials created through the development of a complex of technology linkages based on the metal- and coal-mining industries, in which various technologies have been integrated and are active.

Since the mid-1960s, the trading firms have been actively recruiting new employees from among graduates mainly from university science and engineering departments. In one company, this type of employee totals more than 20 per cent of the 2,000-strong labour force. This tendency seems certain to continue.

Origins and Functions of General Trading Companies

The general trading companies engage in foreign trade (export and import) and deal with every kind of good, from instant Chinese noodles to nuclear reactors, in staggering numbers of transactions. Today, nine major general trading companies operate in Japan, handling about 50 per cent of all exports and imports (47.4 per cent of exports, 58.6 per cent of imports).

The nine are Mitsubishi Corp.; Mitsui and Co.; C. Itoh; Marubeni; Sumitomo Corp.; Nissho-Iwai; Toyo Menka; Kanematsu-Gosho; and Nichimen Jitsugyo. Of these, Marubeni, C. Itoh, Nichimen Jitsugyo, Toyo Menka, and Gosho constituted the five big cotton-importing companies based in the Kansai area; they specialized in importing raw cotton and exporting cotton yarn and clothes before World War II. The heavy and chemical industries developed after the war, and as they had no experience in foreign trade, the trading companies have become the conduits for the export of heavy and chemical industrial products and the core around which groups of manufacturers have been organized. Nissho-Iwai was established by the merger of

Nissho (formerly Nihon Shoji, which was affiliated with Suzuki Shoten) and Iwai Shoten (a trading firm specializing in iron and steel).

In a look back at the initial stage of industrialization, we find three lineages of trading firms:

1. Those that were incorporated into *zaibatsu*: Mitsui and Co., Mitsubishi Corp., Furukawa Shoji, Kuhara Shoji, and Daito Bussan (Nomura-affiliated). Furukawa and Kuhara went bankrupt during the recession after World War I, and Daito was dissolved in 1920.
2. Those around which a *zaibatsu* was formed: Okura (Okura-gumi), Asano (Asano Shoten), Suzuki (Suzuki Shoten), Morimura (Morimura-gumi), and Iwai (Iwai Shoten).
3. *Zaibatsu* that had no general trading firm: Sumitomo and Yasuda.

Unlike Mitsui and Mitsubishi of group (1), which had their own financial institutions based on their metal and coal-mine operations, the companies in group (2) invested their profits in diverse undertakings, which resulted in the formation of *zaibatsu*, and in the process, the trading firms themselves were transformed into general trading firms (Morikawa 1976).

Nakagawa makes the following observations based on an internationally comparative examination of Japan's general trading companies.[72] Keenly aware of the close interdependence among various industrial sectors, entrepreneurs in Meiji Japan had to make decisions from the perspective of the national economy, beyond the interests of private enterprise, and thus undertook widely organized entrepreneurial activities. The most representative were the general trading companies.

Although trading firms in Europe and the United States were specialized in transactions of specific goods in specific areas, the conditions in Japan were quite different. To compete with these strong enterprises controlling world trade, Japanese trading companies had to start as strong, large-scale enterprises from the beginning.

Secondly, foreign exchange, marine insurance and transportation were well developed in the advanced countries, but not in Japan. The underdevelopment of these auxiliary businesses for foreign trade was an impediment, and so Japanese trading companies had to undertake these responsibilities. To support such activities, the trading companies required a large volume of trade; however, at its initial stage of industrialization, Japan lacked commodities for foreign trade in such volume. The companies were thus compelled to deal in a great number of goods in small quantities to increase volume.

Thirdly, there was a close relationship between the formation of general trading companies and the formation of *zaibatsu*. Each *zaibatsu* made its trading company sell the products *zaibatsu* companies manufactured, which resulted in a transformation of trading houses into general trading companies. On the other hand, some general trading companies moved into the manufacturing industries or established subcontractors there to secure products for transaction, as a result of which the general trading firms grew into *zaibatsu*.[73]

Nakagawa's analysis has relevance for the problems of foreign trade that Japan, as a late comer, had to experience and that the newly industrialized countries now face.

The Japanese Society of Management History made the development of general trading companies the theme for its 1972 convention, which covered not only Mitsui and Co., traditionally the leading subject, but also other trading firms, such as Mitsubishi Corp., Suzuki Shoten, and Iwai Shoten. At this convention, an expert on foreign trade theory pointed out that, even though the old *zaibatsu* have revived as business groups since the war, each grouping of enterprises is now centred round a bank; the Fuyo (Fuji Bank) group, Sanwa group, and Daiichi Kangin group are examples.[74] Where the trading firm, bank, and manufacturers belonging to the same group co-operate fully, the trading companies perform the functions of planning and overall co-ordination.

Moreover, in the process of establishing heavy industry and with growing internationalization, the general trading company diversified the range of commodities it handled. When development projects appeared, the trading company was able to integrate a variety of related goods and industrial sectors, acting as an organizer of industries. Related to this, the trading company has taken on the functions of developer of resources and of collector and analyser of information.

He pointed out further that, during the period of rapid economic growth, when the banks had abundant funds and were careful in their selection of companies for financing under the thriving demands for funds, the trading company, with its credit potential, created intercompany credits and played the role of buffer between the banks and manufacturers. (In this sense, its function is similar to that of the merchant banks in Great Britain.)[75]

Finally, with the ability to raise funds, the trading company increased credit between companies and expanded investment and financing to create a network of mainstay companies and make them its subsidiaries.

While these functions existed before the war, with the increase in the number of general trading companies since World War II, the functions of organizer and information gatherer have come to be more strongly and consciously applied by the trading companies.

At this meeting, Yamamura Kozo, of the University of Washington, Seattle, USA, approached the issue of general trading companies from the viewpoint of economic theory, and reasoned that they (1) decrease the risks caused by the fluctuation of demand in domestic and overseas transactions and by foreign exchange fluctuations; (2) make use of economies of scale; (3) raise the productivity of human and material resources and save the cost of distribution; and (4) enable the effective use of capital and the contribution to social savings.

Yamamura concluded that the realization of economies of scale in the multifunctional general trading companies had saved a huge amount of money and provided the trading companies with the ability to undertake big risks.[76]

Economic analyses of this kind can be persuasive. However, they do not treat the evils resulting from the growth of a trading company into a gigantic general trading company. Mitsubishi Corp., whose male staff used to be referred to as "Mitsubishi gentlemen," had the following incident take place. In 1980, Hokusho, a trading company that specialized in fish products, went bankrupt after buying herring roe at a very high price. Mitsubishi, which did business with this company, was severely criticized by the press for its alleged coercive role in the transaction. Though Mitsubishi explained the circumstances, the president admitted at a news conference in 1980 that, because Hokusho had laid too great an importance on its responsibility to supply the processors, "the company digressed from the principle of market price and did not pay sufficient attention to the end users."

In the period of confusion caused by the oil crisis of 1973, the general trading companies were criticized for their land dealings, stock speculation, and cornering of foods that caused prices to sky-rocket. In 1976, the dirty business of the trading companies involved in the Lockheed scandal was revealed. These evils were evils of general trading firms that have become large and oligopolistic.

In 1974, the Fair Trade Commission, in charge of administering the Anti-Monopoly Act, published a survey report on general trading companies and proposed to establish measures to restrict unfair trading and holding of stocks in other companies. In the following year, a second report was published in which it was proposed to limit bank financing in large amounts. While the Japanese Trade Association, representing the general trading companies, attempted to justify existing trade practices, this new monitoring by the government represented an important turning point for the general trading companies.

During this time too, many analyses and studies were made of the general trading companies. It was determined that, unlike the banks and securities companies of the same tertiary industry, "there is no specific legislation controlling the general trading companies, and there is no such inspection of the general trading companies as that for the banks and securities companies for the protection of depositors and investors."[77] The problem is one of protection of end users.

In the 1970s, the issue of the practices of the general trading firms came to include political and social dimensions. Before that, however, in the 1960s, many predicted a decline of the trading companies. An article by Misonoi Hitoshi was representative of this.[78] By the 1960s, he explains, direct exports by manufacturers had developed, and in the domestic market there had arisen a demand to modernize distribution and thereby eliminate the intermediary profiteering. The development of transport and communications has lowered relatively the merit of the trading company's information-resource function. In addition, diversification of operation and further expansion by the trading companies has increased their expenses and lowered profits.

In the mid-1960s, bankruptcy and forced reorganization were widespread among general trading firms; and yet, despite these problems, there were voices insisting on the need for the trading companies in the light of their changed roles and function in the area of investment and financing in new industrial sectors. At the same time, there was strong criticism from the public in the mid-1970s.[79]

In the 1980s, there has been the opinion in several quarters that the general trading companies are playing a vital role in third world development.

Is the General Trading Company Peculiar to Japan?

Many scholars have argued that general trading companies do not exist in other countries. Such an opinion is evident in Nakagawa's analysis of the general trading company described in the preceding.

Yonekawa Shin'ichi (1983), contrarily, contends that trading firms are a necessary condition in any country for sending as many products as possible to as many markets as possible. He argues that the historical conditions under which general trading companies have not developed in Europe and the United States were peculiar. He claims that he has discovered what could be called general trading companies in Great Britain and in the United States. Yonekawa's argument has opened up a new dimension of the question of the general trading company.

The cases he discovered in Great Britain were the Gibbs Company and the Gasley Company. Both were engaged in foreign trade as their major business; their other activities included marine transportation, insurance, mining, manufacturing, and farming, and they had offices all over the world. The American case was the Anderson Clay Company, which developed from a trading house for raw cotton into a diversified industrial concern.

Arguments of this kind provide good material for further dialogue and studies of any factors that may have inhibited the development of general trading companies in Asian, Latin American, and African countries.

It has been emphasized that the early separation between ownership and management and the recruitment of competent personnel from among university graduates have enabled general trading companies to expand, a notion subscribed to by many scholars. This approach to management differed from that of family-run businesses in the West, where families engaged in related businesses often co-operated for mutual gain.

In the course of the work of this project, it has become apparent that trading firms in other countries could develop into general trading companies under the conditions detailed by our collaborators.

In concrete terms, here are the basic conditions for transformation into a general trading company:

- A business administration that fits the socio-economic and historical conditions of a nation, and a rational, flexible organizational structure (Maeda 1990);
- Keen, well-developed managerial, organizational abilities to cover a wide

range of business activities, from the import of raw materials to processing, quality check, and marketing of finished products. (Suzuki 1990);

- An establishment of a world-wide sphere of activity through a network of branches in various countries, the development of local enterprises or joint ventures to engage in export from or import to the home country, in multi-foreign trade, in technology transfer, in the development of natural resources, and in local production (Kawabe 1990);
- An accumulation of experience through economic development and international relations and the formation of a broad perspective and adaptability (Sakamoto 1990).

Even if the general trading company was established first outside Japan, its soft technology (management) was not transplanted from overseas but formed in Japan under international pressure.

To illustrate, first, there was the trade at the foreign concessions. This was the trade version of the unequal treaties with the Western powers. With financial control in the hands of foreign banks and a monopoly on sea routes by foreign steamship companies, foreign merchants monopolized commercial rights, and Japanese merchants were thus excluded from foreign trade. In addition, there was an arrangement such that, after concluding a sales contract, based on samples, sold items were delivered to the buyer, where they were inspected and measured. A rather high customs charge, called the inspection and measurement fee, had to be paid (this was in force until 1910). When the market situation worsened, contracts were broken by the foreign companies with no offer of compensation.

At the beginning of the Meiji period, the price of exported cotton yarn was beaten down to half or a third its price on the international market, and various taxes, transportation expenses, and handling charges were imposed, all of which meant a big profit for the foreign merchant and a heavy burden on the Japanese. For these reasons, the "recovery of commercial rights" and "direct exports" were the catchwords for Japanese traders, producers, and merchants at the places of production.

In 1881, there was an incident at a warehouse for raw silk in Yokohama. Big traders such as Mitsui and Mitsubishi and bankers such as Shibusawa Eiichi established a warehouse for raw silk. The idea was to secure raw silk for export from scattered small producers, providing them with financing for production, after which the foreign traders were to purchase the silk from these brokers with cash, who, in turn, would complete payments to the producers. The foreign traders rejected this system, and the two sides were in a deadlock for three months. Finally, a lack of funds caused by the accumulating inventory made it impossible for the brokers to finance the producers, and the warehouse was forced to close.

Yokohama Specie Bank, established in 1881, provided credit in exchange for export goods, such as tea and raw silk, that served as security. The government lent a huge amount of money to the bank from the national treasury to encourage direct exports. But the exports stagnated, and some large trading firms went bankrupt. In those days, direct exports could not grow because the trading firms did not have sufficient funds, the banking system had not developed, and the export-supporting businesses were owned by foreigners.

From around 1887, the development of factory production in the spinning industry brought on the need to import a great volume of raw cotton, for which a raw-cotton merchant in Osaka established an importing company. This company, called Naigai Men Kaisha, was consigned by the spinners association to import cotton from China, and it began to bring in Shanghai cotton in 1890. This was the beginning of direct imports. More than 30 years had passed since the opening of the ports in 1858. Two years later, the company contracted with the Tata Company for the importation of Bombay cotton. Another company started to import Indian cotton and Egyptian cotton, and also American cotton, in 1896.

These trading firms soon began to export cotton yarn and clothes to China and became general trading textile firms. This was the birth of the big five cotton traders in the Kansai area. Thus, Japanese trading companies developed with the importers of raw cotton in the vanguard. Likewise, industrial capital was accumulated first in the spinning industry.

In 1876, at the government's request, Mitsui established a trading house for direct foreign trade. But this company imported only woolen cloth for the army and exported only rice, which was delivered to London by a Mitsubishi vessel (the first instance of direct export by use of a Japanese vessel). As it was difficult for Mitsui to purchase and sell in a short period, transactions were conducted with the credit of a trading house that R. Z. Arwin opened in London under his own name; Arwin was an adviser for a company established by Inoue Kaoru, a concern that later was taken over by Mitsui.

In the same year, in concert with government policy, Mitsui acquired a monopoly in marketing coal produced at the government-operated Miike mine (which was later sold to Mitsui) and exported it to Shanghai, Tientsin, Hong Kong, and Singapore. The dual structure of Japanese foreign trade, that is, imports from Europe and America and exports to Asia, started also around 1876 and continued for 90 years, with an interruption during World War II. As I have pointed out elsewhere in this book, coal, especially coal for coke making, and raw cotton became important import items to satisfy the demands generated by the development of industrialization. At the same time, Japan supplied raw materials to nations with processing industries that depended on such raw materials. The trading firms, as the intermediaries in or organizers of both the buying and selling, have become diversified and mammoth..